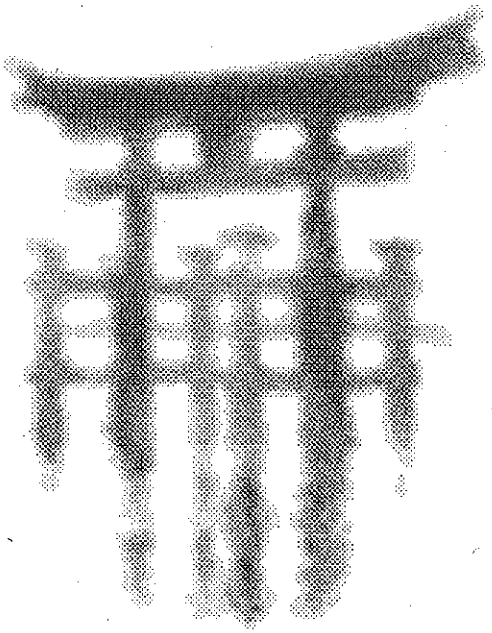
PACIFIC
INTELLECTUAL PROPERTY ASSOCIATION
太平洋知的財産協会

The Twenty-Seventh International Congress

International Conference Center

HIROSHIMA

October 9 - 11, 1996



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1996

TABLE OF CONTENTS

COMMITTEE NO. 1

1-1A Cost Comparisons of EPO Filing vs. National Filing 1
1-2J Drafting Claims under the Japanese Patent Laws 8
1-3J Total Patent Cost (Panel) 66
1-4A Re-engineering the Application Writing Process to Improve Efficiency 90
1-5A Current Problems in U.S. Patent Law, Random Reflections 105
1-6J Computerized File Wrapper Storing 111
1-7A U.S. Attorney-Client Privilege for Foreign Patent Agents 154
1-8J Trademarks on the Internet 169

COMMITTEE NO.2

2-1J Intellectual Property Issues Involving the Internet 184
2-2A Software License Agreements 202
2-3J Checkpoints in a Contract with a Venture Business 214
2-4A Comparison of Licensing Technology and Buying a Small Technology Company 230

COMMITTEE NO.3

3-1J A Study on Translation Cost for Foreign Application 252
3-2J A Study of Patent Cases on Claim Interpretation in Korea and China 273
3-3A Update on Proposed U.S. Legislation 293
3-4A New European Community Trademark System 315
3-5J A Study on the WIPO Draft of Patent Law Treaty 384

COMMITTEE NO.4

4-1J Cost of Patent Right Infringement Litigation in Japan (Panel) 397
4-2J Patent Infringement Actions for Suing Damages - Recent Cases in Japan 423
4-3J Cost Effectiveness in Patent Litigation (Panel) 442
4-4A The Affect of Markman on the Cost of Patent Litigation 453

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4-4A E.Blocker(U.S.Philips)

Program

Tuesday, October 8, 1996

5:00 - 8:00 pm **REGISTRATION** at the Front Entrance Lobby (1st floor) of RIHGA Royal Hotel, Hiroshima

6:30 - 9:00 pm **GRAND RECEPTION**
"Royal Hall", RIHGA Royal Hotel, Hiroshima

Wednesday, October 9, 1996

9:00 - 9:10 a.m. **REGISTRATION** at the lobby in front of Conference Hall "Himawari"
International Conference Center, Hiroshima

9:10 -10:40 a.m. **OPENING CEREMONIES**
Call to Order T. Sawai
9:10 - 9:20 a.m. Welcome - K. Kamisugi
Report on 1995 Activities - C. E. Larson
9:20 - 9:40 a.m. Keynote Address
S. Koda, Honorary Chairperson
President, Mitsui Petrochemical Industries, Ltd.
9:40 - 10:00 a.m. Guest Address
H. Arai
Commissioner, Japanese Patent Office
10:00 - 10:20 a.m. Guest Address
M. Hashimoto
President, Japan Intellectual Property Association

10:20 - 10:40 a.m. Presentation of PIPA Award to K. Murayama

10:40 - 11:00 a.m. **COFFEE BREAK**

11:00 - 12:00 a.m. **Presentations by USPTO and JPO**
J. R. Lynch, Comptroller, U.S.P.T.O.
T. Ohgiya, General Administration and Policy Planning Department, J.P.O.

12:00 - 1:00 p.m. **LUNCH** at Conference Room "Ran"
International Conference Center, Hiroshima

1:00 - 3:40 p.m. **JOINT PANEL DISCUSSION <Total Patent Cost>**

1:00- 2:30 p.m. **Filing and Maintenance Costs** (Committee No.1)

J.R.Lynch, A.J.Spiegel, J. Haken, L.Welch, H.E.Cole, K. Jimbo,
T. Kitakaze, Y.Kimura, N. Kokaji, M. Kondo

- including, *Cost Comparisons of EPO Filing vs. National Filing* by H.E. Cole
Drafting Claims under the Japanese Patent Laws by T. Watanabe
Total Patent Cost by K. Tamura

2:30 - 3:40 p.m. **Translation Costs** (Committee No.3)

F.T.Boehm, H. Kobayashi, N. Mori, H.Tamada, Y. Toda, M.Yamamura

- including, *A Study on Translation Cost for Foreign Application* by Japanese speakers

3:40 - 4:00 p.m. **COFFEE BREAK**

4:00 - 5:20 p.m. **REPORT OF COMMITTEE NO.1**

Makoto Inabayashi and Harold E. Cole, Chairpersons

4:00 - 4:20 p.m. *Re-engineering the Application Writing Process to Improve Efficiency*
J. J. Hawley

4:20 - 4:40 p.m. *Current Problems in U.S. Patent Law Random Reflections*
G. Samuels

4:40 - 5:00 p.m. *Computerized File Wrapper Storing*
K. Shimoda

5:00 - 5:20 p.m. *U.S. Attorney-Client Privilege for Foreign Patent Agents*
J. Haken

Thursday, October 10, 1996

9:10 - 10:40 a.m. **JOINT PANEL DISCUSSION OF COMMITTEE NO.4**

Litigation Costs

Hironori Kitamura and David Fifield, Chairpersons

D.Fifield, E.Blocker, B.C.Cadenhead, G.H. Korfhage, T.P. Strobaugh, H.Kitamura, T. Koyama

- including, *Cost of Patent Right Infringement Litigation in Japan* by N. Nanao
Patent Infringement Actions for Suing Damages
- Recent Cases in Japan by M.Miyanaga
Cost Effectiveness in Patent Litigation by N. Ichihashi
The Affect of Markman on the Cost of Patent Litigation by E. Blocker

10:40 - 11:00 a.m. **COFFEE BREAK**

11:00 - 12:20 a.m. **REPORT OF COMMITTEE NO.3**

Mitsuo Taniguchi and Frederick T. Boehm, Chairpersons

11:00 - 11:20 a.m. *A Study of Patent Cases on Claim Interpretation in Korea and China*
H. Homma, T. Bekku

11:20 - 11:40 a.m. *Update on Proposed U.S. Legislation*
F. T. Boehm

11:40 - 12:00 p.m. *New European Community Trademark System*
D. Wood

12:00 - 12:20 p.m. *A Study on WIPO Draft of Patent Law Treaty*
M. Urayama

12:30 - 10:00 p.m. **SOCIAL OUTING**

Visit to Miyajima Island and Kintai Bridge, followed by Cocktail and Dinner at the Iwakuni Kokusai Kanko Hotel, overlooking the Bridge

Buses leave from the parking space to the south of the Peace Memorial Museum.
Participants are requested to get on buses directly from the International Conference Center.

10:00 p.m. Arrive at RIHGA Royal Hotel, Hiroshima

Friday, October 11, 1996

9:10 - 10:30 a.m. **JOINT PANEL DISCUSSION**
Intellectual Property Issues Involving the Internet (Committees No.2 and No.1)

H.L.Deffebach,III, P. Carmichael, J.E.Haken,
K.Okamoto, S.Kitano, H.Ogasawara, S.Tsugaru, M.Ueda,

- including, *Intellectual Property Issues Involving the Internet* by S.Kitano
Trademarks on the Internet by E. Mizuno

10:30 - 10:50 a.m. **COFFEE BREAK**

10:50 - 11:50 a.m. **REPORT OF COMMITTEE NO.2**
Kiyohide Okamoto and H. L. Deffebach,III, Chairpersons

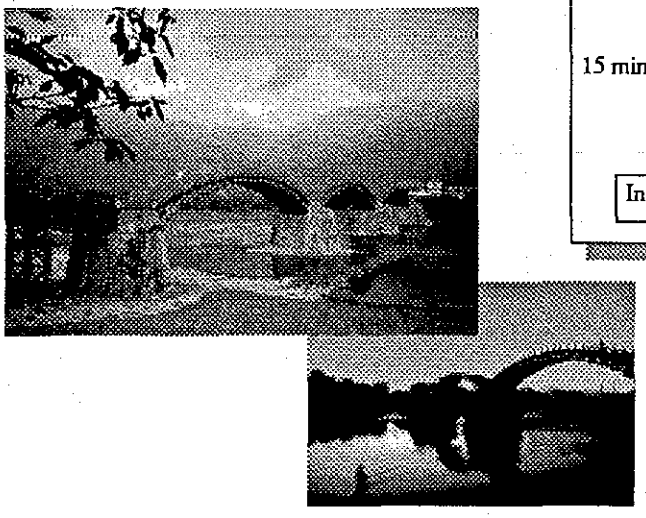
10:50 - 11:10 a.m. *Software License Agreements*
H. L. Deffebach, III

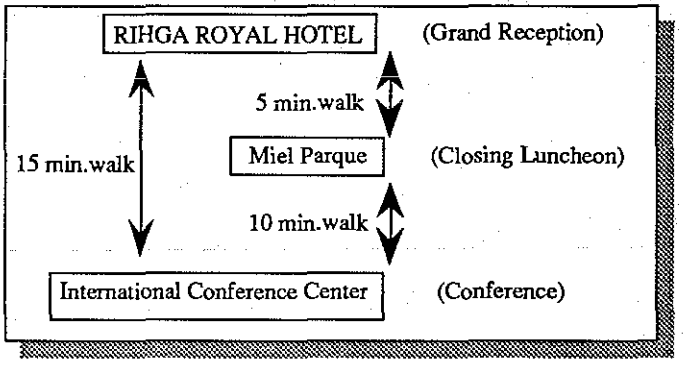
11:10 - 11:30 a.m. *Checkpoints in a Contract with a VentureBusiness*
K.Sato

11:30 - 11:50 a.m. *A Comparison of Licensing Technology and Buying a Small Technology Company*
P. S. Ruhr

12:10 - 1:40 p.m. **LUNCHEON and CLOSING CEREMONY**
at the Miel Parque, Hiroshima 3rd Floor, Heisei-no-Ma

1:00 - 1:40 p.m. Closing Remarks - C.E. Larson, T. Tetsuka





C o v e r : Silhouette of a Torii Gate of Itsukushima Shrine in Miyajima Island
Second Cover: Views of Kintai Bridge (17 Century Wooden Bridge in Iwakuni)

Design: Ryosuke Kami

Friday, October 11, 1996

9:10 - 10:30 a.m. JOINT PANEL DISCUSSION
Intellectual Property Issues Involving the Internet (Committees No.2 and No.1)

H.L.Deffebach,III, P. Carmichael, J.E.Halsen,
K.Okamoto, S.Kitano, H.Ogawa-wara, S.Tsugaru, M.Ueda,

- including, Intellectual Property Issues Involving the Internet by S.Kitano
Trademarks on the Internet by K. Mizuno

10:30 - 10:50 a.m. COFFEE BREAK

10:50 - 11:50 a.m. REPORT OF COMMITTEE NO.2
Kiyohide Okamoto and H. L. Deffebach,III, Chairpersons

10:50 - 11:10 a.m. Software License Agreements
H. L. Deffebach, III

11:10 - 11:30 a.m. Cheaperlets is a Contract with a Employer/Business
K.Sato

11:30 - 11:50 a.m. A Comparison of Licensing Technology and Buying a Small Technology Company
P. S. Ruhr

12:10 - 1:40 p.m. LUNCHEON and CLOSING CEREMONY
at the Miel Pasque, Hiroshima 3rd Floor, Heisei-no-Ma

1:00 - 1:40 p.m. Closing Remarks - C.E. Larson, T. Tezuka

Cover : Silhouette of a Torii Gate of Itsukushima Shrine in Miyajima Island
Second Cover: Views of Kintai Bridge (17 Cents.) Wooden Bridge in Iwakuni)

Design Ryosuke Kisui

(1) Title: **COST COMPARISON OF EPO FILING VS. NATIONAL FILING**

(2) Date: October 9, 1996

(3) Source: a) Source: PIPA

b) Group: U.S.

c) Committee: No. 1

(4) Author: Harold E. Cole, Eastman Kodak Co.

(5) Abstract: Strategies for reducing countries designated in the EPO are presented. Significant savings can also be achieved by filing nationally in large market European countries.

COST COMPARISON OF EPO FILING VS. NATIONAL FILING

EPO FILING

At last year's PIPA Conference, Mr. Berrier from the General Electric Company presented an excellent paper on global patent costs and why they must be reduced. The total cost, cradle-to-grave, for EPO filing of a standard application designating all EPO Countries is $134,401. In order to reduce this amount, several strategies can be developed according to particular industries.

A) MANUFACTURING STRATEGY

FILE IN ONLY THOSE EPO COUNTRIES WHERE YOU AND/OR YOUR COMPETITORS HAVE MANUFACTURING CAPABILITY

- By selecting only certain countries, significantly reduction in overall patent costs could be achieved.
- The protection given to a patentee to exclude others from making the invention in countries where manufacturing is to take place is believed to be sufficient to protect the patentee's interests.
- If patents are obtained in the European countries where manufacturing is to take place, then patents in other European countries are superfluous.

B) MARKETING STRATEGY

FILE IN ONLY THOSE EPO COUNTRIES WHICH HAVE THE LARGEST MARKETS

According to Mr. Berrier, an EPO filing designating France, Germany, Italy, Netherlands and the United Kingdom costs $66,205, which includes $12,012 for the EP filing and prosecution. This compares to $22,522 for Japan and $14,370 for the U.S. This is summarized in the following Table:

EPO (all)	EPO*	Japan	U.S.
$134,401	$66,205	$22,522	$14,370

*designating FR, DE, IT, NL and GB

The above five designated countries ranked according to population are as follows:

Country	Population (Millions)
Germany	80
United Kingdom	58
Italy	58
France	57
Netherlands	15

The above five designated countries ranked according to 1992 GDP are as follows:

Country	1992 GDP (Billions)
Germany	1,331
France	1,000
Italy	965
United Kingdom	915
Netherlands	249

However, the above five designated countries ranked according to maintenance fees and total patent costs are as follows:

Country	Maintenance Fees	Total Patent Costs
Italy	11,885	14,515
Germany	13,873	14,361
Netherlands	11,552	13,323
France	5,960	6,160
United Kingdom	5,115	5,744

It can be seen that the Netherlands is completely out of line with total patent costs when compared to its population and GDP. Italy is also out of line for the same reasons, when compared to France and the United Kingdom.

- Thus another filing strategy based on market size and total patent costs is to limit EPO filing to Germany, France and the United Kingdom.
- Generally speaking, for a product to be successful in Europe, there would have to be sales in those three countries.

- Generally, it would not be practical for someone to market a product in the other European countries and exclude Germany, France and the UK.
- Having patents in three of the largest European markets will enable the patentee to basically cover Europe.

NATIONAL FILING

Consideration should also be given to filing nationally in the European countries of interest instead of EPO filing. The following information was prepared by Mr. Ronald Nunney, Kodak's Patent Director in the United Kingdom. He compares the cost of filing in the EPO versus filing nationally in Great Britain, France and Germany for a 30 page specification, 6000 words, with 12 claims.

Comparison of Euro and National fees for US-Based applications (in US $)

30 Page specification (6000 words)

Patent Office	Filing fee for US based filing	Excess claims fee (for 12 claims)	Full text Translation (6000w) Increased by 3% for 5 years	Search fee	3 desig. fees (3 EP countries)	Exam-ination fee †	Grant fee	Euro filing time charge (no review)	Euro * attorney time charge (prosec-ution & grant)	Excess pages (6000 words)	Printing fee	Maint. fee (to end of 4th year)
EPO (3 desigs.) In DM	600	160	N/A (not	1900	1050	2800	1400					1550
In US $	$422	$113	applicable)	$1,338	$739	$1,971	$986	$55	$1,870			$1,091
Great Britain In £	25		N/A	130		130						
In US $	$38			$195		$195		$55	$1,496			
France In FF	365	115	6470	4500							560	640
In US $	$61	$19	$1,074	$747				$55	$1,122		$93	$106
Germany In DM	100		1526	200		400	150					200
In US $	$70		$1,074	$141		$282	$106	$55	$1,496			$141

† DE Exam fee reduced to 250DM if prior search carried out.

† Examination very light in France.

Assumptions:

1. Support time prior to filing is 1 hour assuming no review. In cases with drawings translation often required. This would be extra.
2. Attorney time for EP prosecution is 10 hrs (2 Official Communications)
3. Attorney time for GB prosecution is 8 hrs
4. Attorney time for FR prosecution is 6 hrs
5. Attorney time for DE prosecution assumed 8 hours but deferred examination is the preferred route and only comes up 7 years on.
6. The figures for 4 & 5 countries assumed to be 4xaverage of DE/FR/GB.

Filing, translation, etc. in Nat Patent Office (GB)	German Trans-lation (6000w)	Filing translation, etc. in Nat Patent Office (DE)	French trans-lation (6000w)	Filing translation, etc. in Nat Patent Office (FR)	Official Fees	Attorney & Translator Fees	TOTAL	
£35 $53	$900	250 $155	$900	FF220 $37	$6,904	$3,725	$10,629	EP
					$428	$1,551	$1,979	GB
					$1,026	$2,251	$3,277	FR
					$739	$2,625	$3,365	DE

Multiplier to convert to $
1.5 $ TO £
0.166 FF to $
0.704 DM to $

TOTAL EURO versus 3 NATIONAL 6000 words long

EURO	
Official fees	Attorney time
$6,904	$3,725
TOTAL	$10,629

3 NATIONAL	
Official fees	Attorney time
$2,193	$6,427
TOTAL	$8,620

4 NATIONAL	
Official fees	Attorney time
$2,923	$8,570
TOTAL	$11,493

It is seen that the total cost for filing in the EPO designating Great Britain, France and Germany is about 20% more expensive than filing nationally in those countries. Thus, a considerable savings could be utilized by going the national route rather than the EPO designating these three countries.

THE "FORGET FRANCE" STRATEGY

Another option to consider is to file nationally only in the United Kingdom and Germany and eliminate France. This has the advantage of having only one prosecution in English right away. The prosecution in Germany can be delayed for seven years.

The total cost for filing the application in the EPO is seen to be $10,629. If filing were to take place nationally only in Great Britain and Germany, the cost would be only $5,344. Thus a savings of 50% can be achieved by this strategy. If after seven years it is decided to drop the prosecution in Germany, then the savings would be even higher.

I hope the above information will be useful in deciding on filing strategies in Europe to reduce costs. Also, a change in filing patterns by enough companies over a period of time may force some of the countries whose patent costs are out of line to reduce their patent costs.

g:\corres\pipa

(1) Title : Drafting Claims under the Japanese Patent Laws

(2) Date : October, 1996 (27th International Conference in Hiroshima)

(3) Source : 1) Source: PIPA
2) Group: Japan
3) Committee: #1

(4) Authors :

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Tomita Koji	TEC Corporation
Tanisawa Yasuhisa	NEC Corporation
Watanabe Takahiro	Hitachi,Ltd.
Kitagawa Toshio	Mitsubishi Heavy Industries
Nakatsuru Kazutaka	Mitsubish Electric Corporation
Takizawa Masahiro	Lion Corporation
Ishijima Hisashi	Ricoh Company ,Ltd.

(5) Key words : Japanese Patent Law § 17bis; § 17quater; § 36 and 37
U.S.Patent Law § 112 and 121
Patent Cooperation Treaty Art. 3 and Regulations Art. 13

Table of Contents

1: Theme " Drafting Claims under the Japanese Patent laws"

2: Introduction

3: Current practice of claim drafting Japan in compliance with law amendments

3-1: An outline of amend act of 1987, 1993 and 1994 affecting claim drafting

3-1-1: Amendment of 1987

3-1-2: Amendment of 1993

3-1-3: Amendment of 1994

3-2: means-plus-function claim

3-2-1: means-plus-function claim in Japan

3-2-2: Comparison of Japan and US

4: Notice to be taken when filing a US application from Japan

4-1: Comparison in unity of invention of Japan, US and PCT

4-2: Comparison in practice regarding unity of invention of Japan and US (Analysis of an actual case of US application filed from Japan)

4-2-1: Explanation of Data

4-2-2: Analysis of Data

4-2-3: Reasons for requiring restriction

4-2-4: Completion in terms of quality of US patent specification

5: Notice to be taken when filing a Japanese application from US

5-1: Comparison in number of claims and cost(application fee, + annuities) of Japan and US

5-2: Difference in Claims Construction between Japan and US

5-2-1: Difference in judicial system and procedures to amend claims after registration in Japan and US

5-2-2: Difference in claim construction due to functional expression between Japan and US

5-3: Notice of claim drafting for Japanese Patent Applications(Case Study)

6: Conclusion

6-1: Notice to be taken in filing a US application from Japan

6-2: Notice to be taken in filing a Japanese application from US

7: Bibliography

1: Theme: Drafting Claims under the Japanese Patent laws

2: Introduction

In recent years, Japanese and US Patent Offices have made agreements in view of international harmonization regarding patent system through TRIPs Agreement in Uruguay Round of GATT and Japan-US Trade Framework Negotiations, as a result of which Japanese Patent Law has been amended for a few times.

On the other hand, economic aspect of intellectual properties, especially the cost management thereof, is drawing more and more attention.

Based on this situation, this paper studies practical idea for claim drafting in view of obtaining and maintaining a patent with effective rights. In concrete, we summarize the part of amendments to Japanese Patent Law which affect drafting of effective claims while considering following two issues relating to cost management.

① Comparison of practice in Japan, US and PCT(Patent Cooperation Treaty) regarding unity of invention

② Comparison of official fee in Japan and US for application and maintenance of a patent

3: Current practice of claim drafting in Japan in compliance with law amendments

3-1: An outline of amend act of 1987, 1993 and 1994 affecting claim drafting

Table 3-1 shows the amended parts of Japanese Patent Law during last decade(which took place in 1987, 1993, and 1994) that are supposed to affect claim drafting.

Table 3-1

Amend Act	Effective Date	Major Amended Part
Amendment of 1987	January 1, 1988	① Understanding of an invention ② Revised system of multiple claims
Amendment of 1993	January 1, 1994	① Restriction of amendment to application
Amendment of 1994	January 1, 1995	① Alleviation of description requirement for patent claim(s) and specification

These amendments are outlined as follows.

3-1-1: Amendment of 1987

3-1-1-1: The purport of amendment

The amendment of 1987 took place to meet following demands;

① a revised of stating scope of claim which allows multilateral expression that covers, without omission, advanced and complicated technological innovation

② extension of definition of unity of invention

③ international harmonization

3-1-1-2 Understanding of invention (§ 36)

It had been provided in the Patent Law before the amendment of 1987 that "only such matters that are essential to the construction of the invention specified in the detailed explanation of the invention" be stated in the patent claim(s). It suggested that in principle the claimed invention was understood based on the matters stated as essential for the patent claim(s) as well as in consideration of the description in the detailed explanation of the invention. That is, the invention to be stated in patent claim(s) was treated as such that could be understood objectively through the disclosure in the detailed explanation of the invention.

Then the amendment of 1987 provided that "only such matters that are essential to the invention for which a patent is sought" be stated in the patent claim(s)[§ 36(iv)]. It meant that as to the invention described in the detailed explanation of invention the applicant could determine to which invention, in terms of categories, independent/dependent concept and others, he/she would seek for a patent and he/she could state the scope of protection to be sought in the patent claim(s).

And the invention was understood based on the matters stated in the patent claim(s). It was suggested that even though the detailed explanation and drawings were considered, claimed invention must not be understood apart from the description in the patent claim(s).

3-1-1-3: Extension of unity of invention and revised system of multiple claims (§ 36, 37)

Section 37 was amended drastically so the scope of inventions to be

contained in a single application as follows;

① As to the same category

While relationship with specified invention must have been "same in substantial part and in ends" before amendment, it was amended to "same in industrial applicability and the problem to be solved." or "same in industrial applicability and substantial part."[§ 37(i) (ii)]

② As to different categories

In addition to "specified invention relating to a product," the amendment added "inventions of process of using the product" and "inventions of process used for handling the product."[§ 37(iii)].

③ To leave the possibility of prompt extension of unity of invention in the future, a new item such as "inventions having a relationship as provided for in Cabinet Order" was provided[§ 37(v)].

The scope of inventions that may be contained in a single application was thus extended to a large degree.

Furthermore, more comprehensive applications became available as a synergy with "extension of unity of invention" since one invention could be stated in multiple claims under the provision of § 36(6) which read "it shall not preclude the statements of the patent claim(s) to be such that an invention claimed in one claim is the same as an invention claimed in another claim." As the result, the scope of inventions that may be contained in a single application got to surpass the level of US and Europe.

However, since it was provided in § 36(4)(ii) that the statement of patent claim(s) be "only such matters that are essential to the construction of the invention," the freedom of expression in patent claim(s) was regarded restricted when compared with that of US and Europe where functional and operational description was accepted.

3-1-2: Amendment of 1993

3-1-2-1: The purport of amendment

The amendment of 1993 took place to meet following demands;

① Request of prompt protection of the product obtained from technological development

② Needs for international harmonization

3-1-2-2: Restriction of amendments to application [§17(2) et al]

Amendment to application had conventionally been restricted because of the provision to say "amendments to change the substantiality is unacceptable."

The amendment of 1993 provided that any amendment relating to specification or drawings shall be "rejected" if it added a new matter that "a skilled person cannot directly draw from original specification or drawings."

Especially, an amendment after final notification of rejection was limited to cancellation or restriction of claim(s)[§17bis (2)(3)and(4) and practical guideline for amendment]/

3-1-3: Amendment of 1994

3-1-3-1: The purport of amendment

The amendment of 1993 took place to meet following demands;

① Acceptance of functional and/or operational claim

② Respect for claim description

③ International harmonization

3-1-3-2: Alleviation of description requirement of patent claim(s) and specification [§36]

Since conventional description of patent claim(s) was required to be "only such matters that are essential to the construction of the invention," functional and/or operational description was not clearly admitted as a matter of law.

Then the amendment of 1994 provided that "all matters that an applicant for a patent considers necessary in defining an invention" be stated in the patent claim(s). It was also provided that the statements of patent claim(s) must "clearly describe the invention for which a patent is sought" and that "each patent claim must be concisely stated." As a result, functional and/or operational expression has been widely admitted as well as the freedom of expression for patent claim(s) caught up to the same level of that in US and Europe.

This amendment might incur the difference in construction of claims with functional and/or operational expression between Japan and US, which we go into detail later in "3-2: Means-plus-function claim."

3-2: Means-plus-function claim

3-2-1: Means-plus-function claim in Japan

3-2-1-1: Reasons to admit in Japan

It should be noted in view of the purport of amendments that description of an invention of a product specified by its operation, function, features, process, application, use and others may not itself be taken as inappropriate as far as the invention can be understood clearly.

Accordingly, a means-plus-function claim in a US application may be admitted in Japan.

However, the description of an invention of a product specified by such elements may be regarded as imperfect pursuant to § 36(6)(ii) if the invention cannot be defined clearly based on the level of the art at the time of application being filed. In concrete, an application which fall within either of five types specified in Table 3-2-1 shall be regarded imperfect under this provision. The description specified by these elements especially tends to be obscure in outlining the invention as a result of which the "clarity" required by this provision could be risked.

Table 3-2-1

Type	Feature of the Type	Example
1	Unclear description of patent claim itself makes the claimed invention obscure.	The description contains mis-statements and unclear expression for which it is inappropriate as Japanese language and the invention is thus regarded as obscure.
2	Technical defects in specifying the invention prevents the invention from being correctly defined and thus regarded as obscure.	The statement contains technically incorrect description such that the sum of ingredients goes over 100%.
3	Outline of invention as a technical concept(i.e. the scope of matters covered by the concept) is not clear.	The numerical definition is such that only minimum and maximum figures are described. The base of comparison and extent is vague(ex."far bigger").

4	The category to which the invention belongs is not clear or specified category does not seem appropriate for the invention.	"process and device to ....." "the anticancer effect of chemical compound A"
5	The elements by which the invention is specified are stated in the form of selections which do not have similar feature or function to each other.	"certain parts or a device that the parts are incorporated" "transmitter or receiver that has certain power source"

3-2-1-2: Determination of novelty and inventive step

When the description of patent claim is clear, claimed invention will be admitted in accordance with the description. Accordingly, when there is a description in which an invention is specified by working, function, character, or feature, the patent claim is construed as covering everything that produces such working and function or as covering everything that has such character or feature, base on which novelty and inventive step shall be determined comparing with cited and prior inventions.

Accordingly, cited and prior arts shall contain not only corresponding structure, material or workings to the means for attaining specific function described in the specification and its equivalents but also everything that have such working, function, character and feature.

3-2-1-3: Construction of technological scope

Technological scope shall be determined on the description of patent claim(s) based on the construction of terms used in the claim(s) of which meaning is given in consideration with the description and drawings of specification other than claim(s). Therefore, a means-plus-function claim may be construed not limited to the corresponding structure, material or working to the means to attain specific function described in the specification and its equivalents.

3-2-2: Comparison of Japan and US

3-2-2-1: Requirement of description

It is assumed that there is virtually no discrepancy between Japan and US and that a means-plus-function claim in a US application that is now

filed within a Japanese application shall be accepted as far as the "clarity" is secured.

3-2-2-2: Standard to determine novelty and inventive step

In Japan, patentability shall be determined with reference to everything that produces specific working or function and that has such character or feature.

In US, on the other hand, it had been regarded that any or all of those which attains such function described in the means-plus-function claim(i.e. the same standard as current Japan). But now, after In re Donaldson decision delivered by CAFC, the implementing guideline of USPTO published in the Official Gazette of May 17, 1994 provides that "pursuant to the 6th paragraph of section 112 of Patent Law, USPTO shall construe that it is restricted to construction, material or working specified in the specification and its equivalent."

Accordingly, it can be said that the standard for determining patentability of a means-plus-function claim is higher in Japan than in US.

3-2-2-3: Broadness of technical scope

The technical scope of a means-plus-function claim in a US patent is restricted to, pursuant to the provision of 6th paragraph of section 112, means or manufacturing process to attain specific function is restricted to corresponding structure, material or working described in the specification and its equivalent. In Japan, on the other hand, there is no corresponding law or provision because of which the technical scope of a means-plus-function claim is supposed to be construed broader than in US.

4. Notice to be taken when filing a US application from Japan

4-1: Comparison in unity of invention of Japan, US and PCT

Table 4-1 shows the definition of unity of invention by Japanese and US patent laws and PCT. In Japan § 37 of Patent Law provides unity of invention. In US, the examination standard for Restriction Requirement is specified in MPEP 806.05. As to PCT, Rule 13 provides unity of invention.

In table 4-1, the standards for unity of invention in Japan, PCT and US are listed in that order from left to right. It also attempts to compare them in light of six types in which the categories of inventions contained in a

single application is same(type 1) or different(type2~6). Among different categories, we compared by "process for manufacturing a product and the manufacturing device (type2)," "product and its manufacturing process (type 3)," "product and its use (type 4)," and "product and its use and manufacturing process(type 5)." The number for the types is given from top to down simply for convenience.

This order followed that of MPEP in US because of which (iv) and (iii) of section 37 of Japanese Patent Law are listed in opposite order.

In table 4-2, Venn diagrams are employed to visually understand the relationship of three systems regarding unity of invention. It appears that Japan demands in any type(1~6) less requirement of unity of invention than in US. It can be said that the Japanese requirement is generally the same as that of PCT except that an application which meets (1)and (2) of section 37 in Japan may not overcome PCT's requirement of Rule 13 if the categories are the same(type 1). On the contrary, even if an application meets PCT's requirement of invention, unity of invention may not be recognized in Japan if (1) and (2) of section 37 are not met. Further, in type 6, an application which meets (1) or (2) of section 37 as well as (3) or (4) and multiple related inventions are specified, such related inventions may not interrelate to each other. In this case, it goes against the requirement of unity of invention of PCT. Consequently, there may be some discrepancy in requirement of unity of invention.

To go back to 4-1, when comparing Japan and US, as to relationship of subcombination and combination, Restriction Requirement may be ordered if the subcombination itself has patentability and applicability by itself. In this case, the requirement for unity of invention is not met, which relates that the requirement is tougher than that of Japan. In this case, again, Generic Claim can be made which can be an application if the Generic Claim has patentability.

To see type 3 as an example of different categories, when, for example, considering "product and its manufacturing apparatus" in US, the unity of invention shall be met when the product can be manufactured only by the manufacturing device as well as when the manufacturing device is competent only for manufacturing the product. In Japan, this "only" requirement is not imposed which makes it difficult for an applicant to overcome the requirement of unity of invention in US. As to different

categories, it is possible in the US to contain in a single application through Linking Claim.



Table 4-1 Comparison of Requirement of Unity of Invention in Japan, US and PCT

	Type	Japan				PCT		US	
		Requirement of unity of invention			§ 37	Unity of invention	Rule	Examination guideline for questions of restriction requirement	MPEP Sec.
Single Category	1	Where there are two or more inventions, they may be the subject of a patent application in the same request provided that these	when compared with the specified inventions,	the inventions are the same in terms of the industrial applicability and the problem to be solved	(i)	An international application shall relate to one invention only or a group of inventions so linked as to form a single general inventive concept	13.1	Relative to an application containing combination claim and subcombination claim, restriction shall not be required if patentability resides in the subcombination claim and the combination claim does not contain novelty that the subcombination claim lacks (Requirement for unity of invention is met).	705(e); 806.05(a)(b)
		inventions are of an invention claimed in one claim (hereinafter referred to as "the specified invention") and of another or other inventions having the relationship as indicated below with respect to such specified invention.	when compared with the specified inventions,	the inventions are the same in terms of industrial applicability and the substantial part of the features stated in the claim	(ii)			However, if combination claim and subcombination claim have patentability respectively (i.e. where patentability does not solely resides in the subcombination claim), if the subcombination has utility by itself, or in other and different relations, restriction shall be allowable (Requirement for unity of invention is not met).	806.05(c)
								Requirement can be met in the case of Generic Claim.	809.03

	Type	Japan				PCT		US	
		Requirement of unity of invention			§ 37	Unity of invention	Rule	Examination guideline for questions of restriction requirement	MPEP Sec.
Various Categories	2		where the specified invention relates to a process,	inventions of machines, instruments, equipment or other things used for handling the product	(iv)	An international application shall relate to one invention only or a group of inventions so linked as to form a single general inventive concept	13.1	Relative to inventions regarding apparatus and process practiced by the apparatus, if the process as claimed can be practiced by another materially different apparatus or by hand, or if the apparatus as claimed can be used to practice another and materially different process, restriction shall be allowable (Requirement for unity of invention is not met). If claimed process can be practiced only by means of claimed apparatus and if claimed apparatus is applicable only to claimed process, requirement for unity of invention shall be met.	806.05

	Type	Japan				PCT		US	
		Requirement of unity of invention			§ 37	Unity of invention	Rule	Examination guideline for questions of restriction requirement	MPEP Sec.
Various Categories	3		where the specified invention relates to a product,	inventions of process of manufacturing the product or inventions of machine, instruments, equipment or other things used for manufacturing the product	(iii)			Relative to inventions regarding apparatus (or process practiced by the apparatus) and the resultant product, (a) if the product as claimed can be made by another and materially different process; or (b) if the process as claimed is not an obvious process of making the product; and if the process as claimed can be used to make other and different products, restriction shall be allowable(Requirement for unity of invention is not met). (If claimed product is make only by claimed process and if claimed process makes claimed product only, requirement for unity of invention shall be met).	806.05(f)

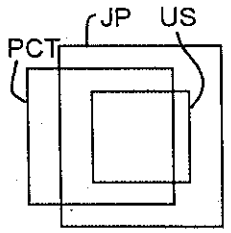
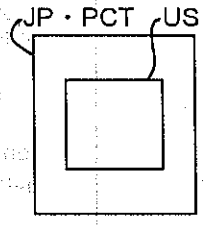
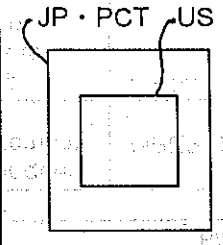
	Type	Japan				PCT		US	
		Requirement of unity of invention			§ 37	Unity of invention	Rule	Examination guideline for questions of restriction requirement	MPEP Sec.
Various Categories	4			inventions of process of using the product, inventions of process used for handling the product, inventions of products solely utilizing the specific properties of the product or inventions of things used for handling the product				Relative to claim(s) regarding product and process of using the product, if the process for using as claimed can be practices with another materially different product, or if the product as claimed can be used in a materially different process, restriction shall be allowable (Requirement for unity of invention is not met).	806.05(h)

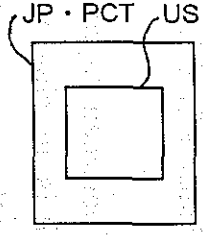
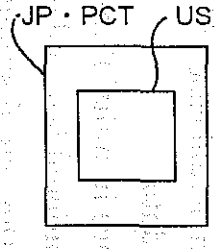
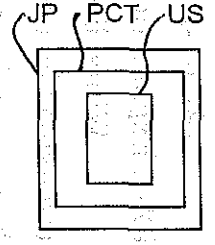
	Type	Japan				PCT		US	
		Requirement of unity of invention			§ 37	Unity of invention	Rule	Examination guideline for questions of restriction requirement	MPEP Sec.
Various Categories	5			type 3+4				Three set claim: Relative to an application containing claims to a product, claims to a process of using the product, and claims to a process of making the product, restriction shall be allowable (Requirement for unity of invention is not met). (a) If the product is distinct from the process of making the product, restriction as to the three categories (product, process of use, and process of making) is allowable. (b) However, if the claim to the product is rejected, unity of invention shall be examined automatically with regard to process of use and process of making.	806.05(i); 37 C.F.R. §1.141(b)(h)

	Type	Japan		PCT		US	
		Requirement of unity of invention	§ 37	Unity of invention	Rule	Examination guideline for questions of restriction requirement	MPEP Sec.
Various Categories	6	Such inventions having a relationship provided in Cabinet Order pursuant to §37 (v) of Patent Law shall be those having relationship, as provided in (iii) and (iv) of the same section, with the invention stated in the claim where inventions having such relationship as provided in (i) and (ii) of the same section with the specified invention as provided in the same section is stated in patent claim(s)	(v) Patent Implementing Act §1bis			In the case where a linking claim is made as a means to extend the scope of unity of invention. There are following three types of linking claims; 1) process of making product linked to process and product claims; 2) "means" for practicing a process 3) product linked to a process of making and a process of using	809.03

Table 4-2

Comparison of Requirement of Unity of Invention

<table>
<tr><th></th><th>Type</th><th>Japan
Unity of Invention
(§ 37)</th><th>PCT
Unity of Invention
(Rule 13)</th><th colspan="2">US
Examination Guideline for Question of Restriction Requirement</th><th>Interrelationship</th></tr>
<tr><td rowspan="2">Single Category</td><td rowspan="2">1</td><td>satisfaction of requirement provided in (i) or (ii)</td><td rowspan="2">formation of a single general inventive concept</td><td colspan="2">restriction not allowable pursuant to 806.05(a),(b) or (c)</td><td rowspan="2"></td></tr>
<tr><td>(i) nor (ii) is not satisfied because of being virtually same or difference in category</td><td>where a generic claim is made</td><td>if subcombination contains patentability and utility by itself</td></tr>
<tr><td rowspan="2">Various Categories</td><td>2</td><td>satisfaction of requirement provided in (v)</td><td>formation of a single general inventive concept</td><td colspan="2">restriction not allowable pursuant to 806.05(e)</td><td rowspan="2"></td></tr>
<tr><td>where a linking claim is made</td><td>(a) if claimed process can be practiced by means of a materially different apparatus
(b) if claimed apparatus can be used to another process</td></tr>
<tr><td></td><td>3</td><td>satisfaction of requirement provided in (iii)</td><td>formation of a single general inventive concept</td><td colspan="2">restriction not allowable pursuant to 806.05(e)</td><td rowspan="2"></td></tr>
<tr><td></td><td>where a linking claim is made</td><td>(a) if claimed product can be made through a materially materially different process
(b) if claimed process can be used to make another product</td></tr>
</table>

	Type	Japan Unity of Invention (§ 37)	PCT Unity of Invention (Rule 13)	US Examination Guideline for Question of Restriction Requirement		Interrelationship
Various Categories	4	satisfaction of requirement provided in (iii)	formation of a single general inventive concept	restriction not allowable pursuant to 806.05(h)		
				where a linking claim is made	(a) if claimed process can be used to make a materially different product (b) if claimed product is applicable to the use of other process	
	5	satisfaction of requirement provided in (iii)	formation of a single general inventive concept	restriction not allowable pursuant to 806.05(i)		
				where a linking claim is made	(a) if claimed product is distinct from claimed process to make the product (b) where claimed product is rejected, remained claims will be automatically restricted to process of use and process of making	
	6	satisfaction of requirement provided in (v) and Patent Implementing Act § 1bis	formation of a single general inventive concept	where a linking claim is made	possible subject of restriction requirement	

4-2: Comparison in practice regarding unity of invention of Japan and US
(Analysis of an actual case of US application filed from Japan)

4-2-1: Explanation of data

While difference in unity of invention between Japan and US can be understood by each national law and/or rule, it is not clear what feature lies thereunder. To grasp the actual situation in both countries, we collected US applications original of which are filed in Japan and collected such data as whether restriction was required regarding such US applications, reasons therefor and other matters. Subject US applications were classified according to the filing date (1985~1987, 1989~1990, and from 1991) of original Japanese applications (hereinafter referred to as "corresponding Japanese application").

(1) Conditions for Sampling

Subject US applications were picked up at random from US applications filed by the companies which members of this working group belong to.

Total 174 cases were collected (52 US applications of which correspoindg Japanese applications filed from 1985 to 1987, before implementation of revised system of multiple claims, 66 US applications of which corresponding Japanese applications filed from 1989 to 1990, after implementation of revised system of multiple claims and 66 cases as to corresponding Japanese applications filed since 1991.) The collected cases were studied regarding items described in (2).

(2) Outline of collected data

The study items were; average number of entire claims of US applications at the time of being filed (hereinafter referred to as "number of claims"); average number of independent claims at the time of being filed (hereinafter referred to as "number of independent claims"), number of dependent claims at the time of being filed (hereinafter referred to as "number of dependent claims"), average number of pages for detailed explanation of invention in US patent publication (hereinafter referred to as "number of pages") average number of drawings at the time of a patent being registered (hereinafter referred to as "number of drawings"), average number of domestic combination which shows the number of US applications that

claimed Japanese priority at the time of US applications being filed (hereinafter referred to as "number of domestic combinations"); and whether or not each US application were ordered for restriction requirement.

Furthermore, we studied the applications that were and were not required for restriction by the average number of entire claims, independent claims, dependent claims, drawings, pages in patent publication and number of domestic combination.

Table 4-3

Filing year in Japan	entire claims	independent claims	dependent claims	whole pages	drawings	domestic combination	restriction requirement	no restriction requirement
1985~1987	10.8	2.3	8.5	5.8	11.1	2.4	5	47
1989~1990	11.1	2.5	8.7	5.7	12.6	2.0	11	55
1991~	18.3	4.8	13.5	7.8	17.3	2.9	13	43
Average since 1989	14.4	3.5	10.9	6.6	14.7	2.4	24	98

restriction requirement	oval clams	independent claims	dependent claims	overall pages	drawings	domestic combination	restriction requirement	no restriction requirement
made	25.3	7.9	17.4	10.3	23.3	4.0	29	
not made	10.9	2.2	8.7	5.6	11.7	2.1		145

It appears from this data that the average figures of each item, except for domestic combination, have been raised after implementation of revised system of multiple claims.

Figures of each item also show considerable rise as to applications to

which restriction was required when compared with those which was not required for restriction.

It is assumed from the rise of numbers of restriction requirement that revised system of multiple claims is utilized in Japanese applications though a big change cannot be seen in number of domestic combination before and after implementation of revised system of multiple claims.

4-2-2: Analysis of Data

(1) Transition of number of restriction requirement

We obtained the ratio of number of applications that restriction were required to number of subject US applications of each term of which result is shown in Fig.4-1.

It was 9.6% as to US applications of which corresponding Japanese applications had been filed between 1985 and 1987, 16.7% as to those between 1989 and 1990, 23.2% as to those in and after 1991, which shows the rising trend of recent years of restriction requirement from USPTO.

And as to US applications of which original applications had been filed in Japan between 1989~1990 and those in and after 1991, the rate of restriction requirements is about the double the average figure of whole US applications.

In 1987, so-called revised system of multiple claims was introduced and the scope of unity of invention has been extended.

While it was 9.6% as described that the US applications of which original Japanese applications had been filed before this introduction(1985~1987) that restriction were required, the figure jumped almost twice to 19.7% as to those after introduction of revised system of multiple claims. This rise may be partly explained by the fact that the scope of unity of invention admitted in Japan is broader after introduction of improved multiple clams than that admitted in US.

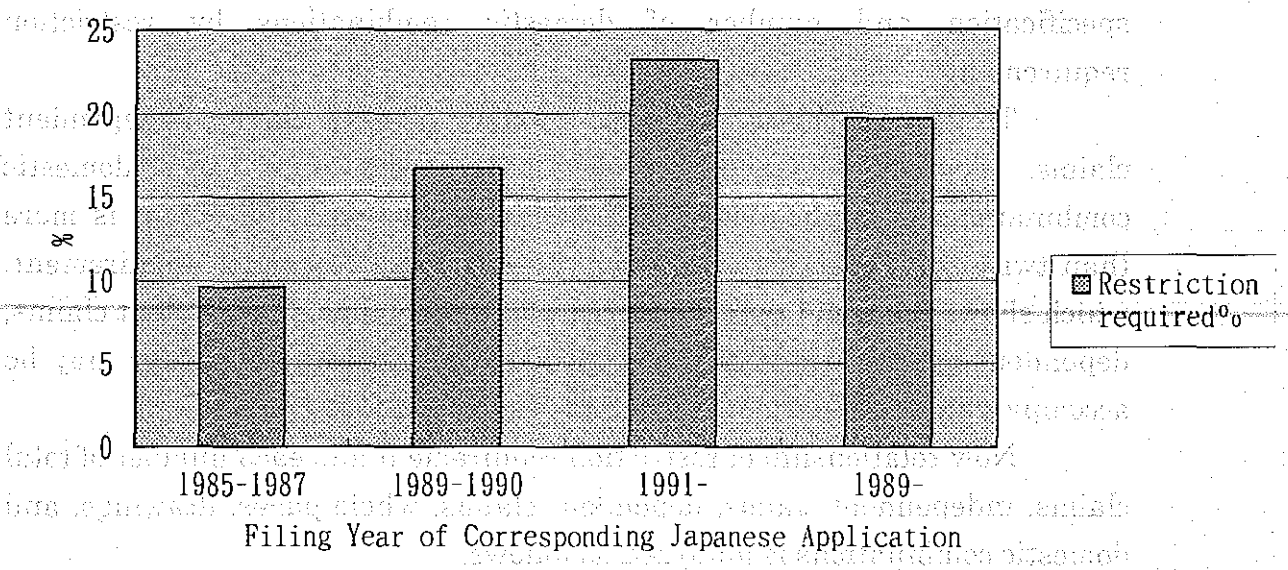


Fig.4-1 Transition in Number of Restriction requirements by Application Year in Japan

(2) Comparison of Applications with and without Restriction requirement

We compared the number of total claims, independent claims, dependent claims, whole pages, drawings, and domestic combinations as to applications which made restriction requirement and those which did not. The result is shown in Fig.4-2.

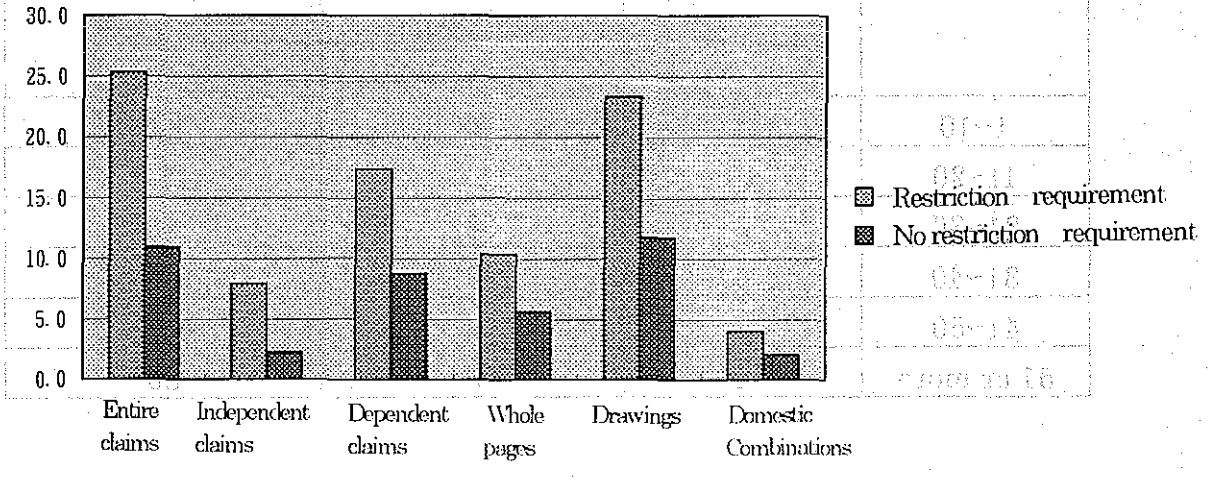


Fig. 4-2 Number of claims, whole pages and drawings of US patent specification and number of domestic combinations by restriction requirement

The figure shows that each number of total claims, independent claims, dependent claims, whole pages, drawings, and domestic combinations of applications which made restriction requirement is more than twice than that of those which did not make restriction requirement, which shows the trend that the increase in total claims, independent claims, dependent claims, whole pages, drawings, and domestic drawings may be accompanied by increase in restriction requirements.

Now relationship of restriction requirement and each number of total claims, independent claims, dependent claims, whole pages, drawings, and domestic combinations is analyzed as follows.

(3) Relationship of number of claims and restriction requirements

We studied the relationship of number of claims(total claims, independent claims and dependent claims) and restriction requests of which result is shown in the table below. Relationship with number of total claims, independent claims and dependent claims are shown respectively in graphical chart of Figs.4-3, 4-4 and 4-5

Relationship of Number of Total claims and Restriction requirement

Number of Total claims	Restriction requirement	Number of Applications with and without restriction requirement	Ratio of Restriction requirements (%)
1~10	8	93	8.6
11~20	10	57	17.5
21~30	2	8	25
31~40	3	8	37.5
41~50	2	3	66.7
51 or more	4	5	80

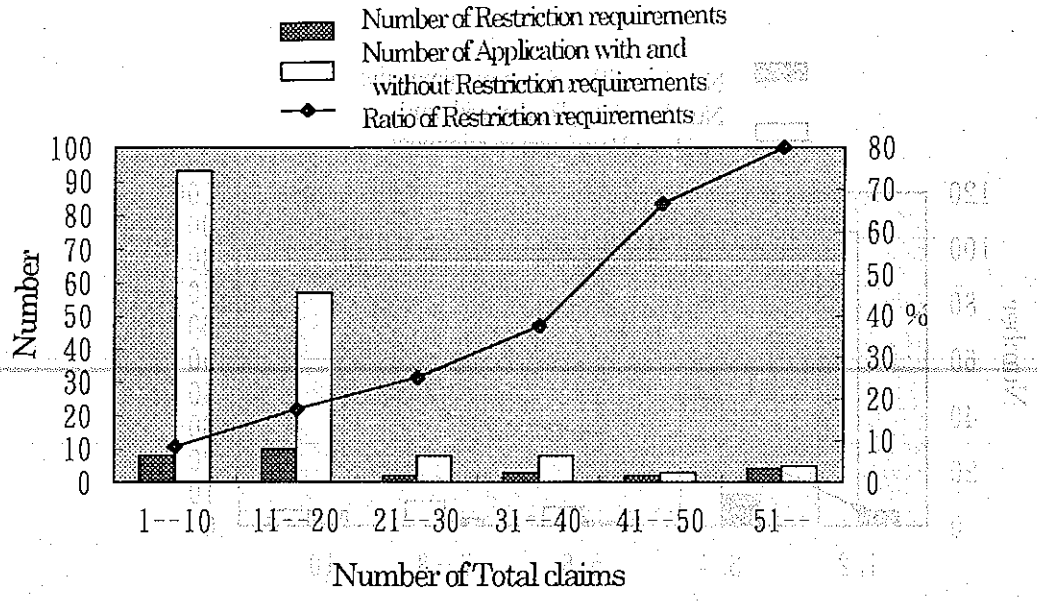


Fig. 4-3 Relationship of Number of Total claims and Restriction requirement

Relationship of Number of Independent Claims and Restriction requirement

Number of Independent Claims	Restriction requirement	Number of Applications with and without restriction requirement	Ratio of Restriction requirement (%)
1,2	6	106	5.7
3,4	12	46	26.1
5,6	2	7	28.6
7,8	3	9	33.3
10 or more	6	6	100

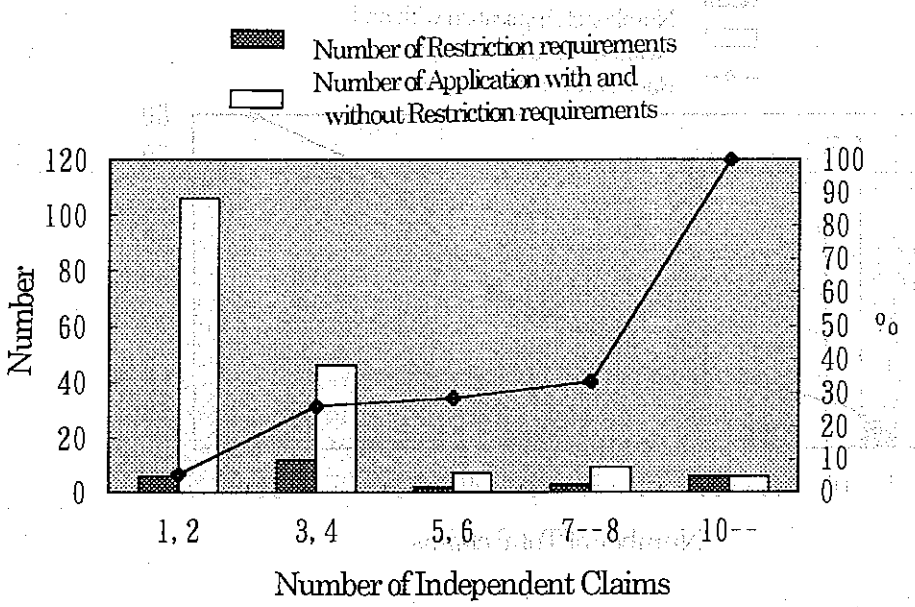


Fig. 4-4 Relationship of Number of Independent Claims and Restriction

Relationship of Number of Dependent Claims and Restriction requirement

Number of Dependent Claims	Restriction requirement	Number of Applications with and without restriction requirement	Ratio of restriction requirement (%)
0 ~ 5	6	70	5.6
6 ~ 10	7	52	13.5
11 ~ 20	8	36	22.2
21 ~ 30	2	5	40
31 ~ 40	3	6	50
41 or more	3	6	60

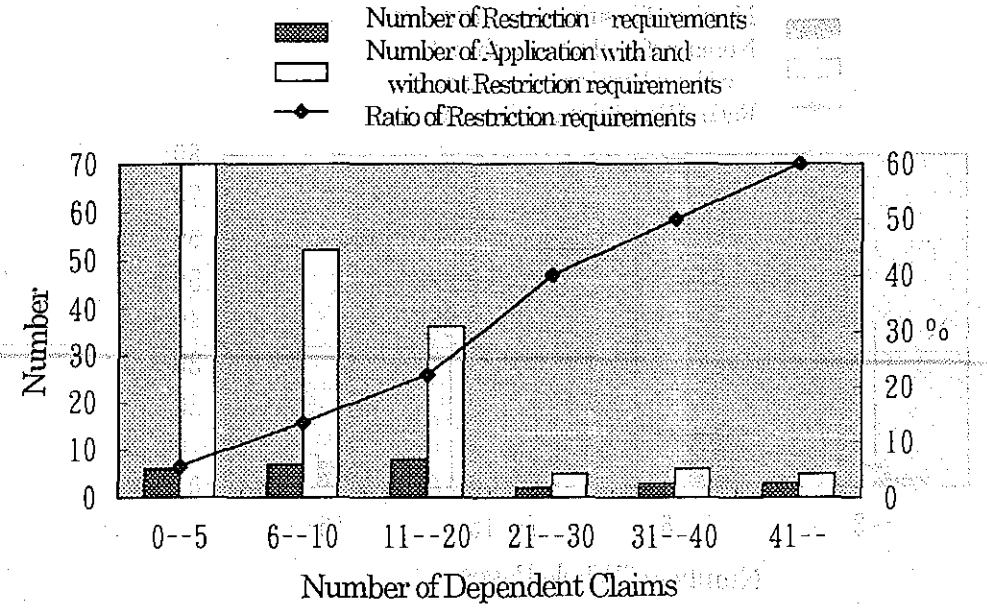


Fig. 4-5 Relationship of Number of Dependent Claims and Restriction requirement

As the increase in number of claims, independent claims and dependent claims at the time of US patent application, number of restriction requirements also rises, which seems to show that an application with more claims is more likely to be ordered for restriction.

It is especially remarkable that the result of this search showed that 100% of applications with 10 or more claims were ordered for restriction.

(4) Comparison of Number of Pages and Restriction requirement

Here the relationship of number of pages and restriction requirement is studied of which result is shown in following table as well as in a graphical chart in Fig. 4-6.

Number of Whole Pages	Restriction requirement	Number of Applications with and without restriction requirement	Ratio of Restriction requirement (%)
~3	2	40	5
4~6	9	79	11.4
7~15	12	47	25.5
16~	6	8	75

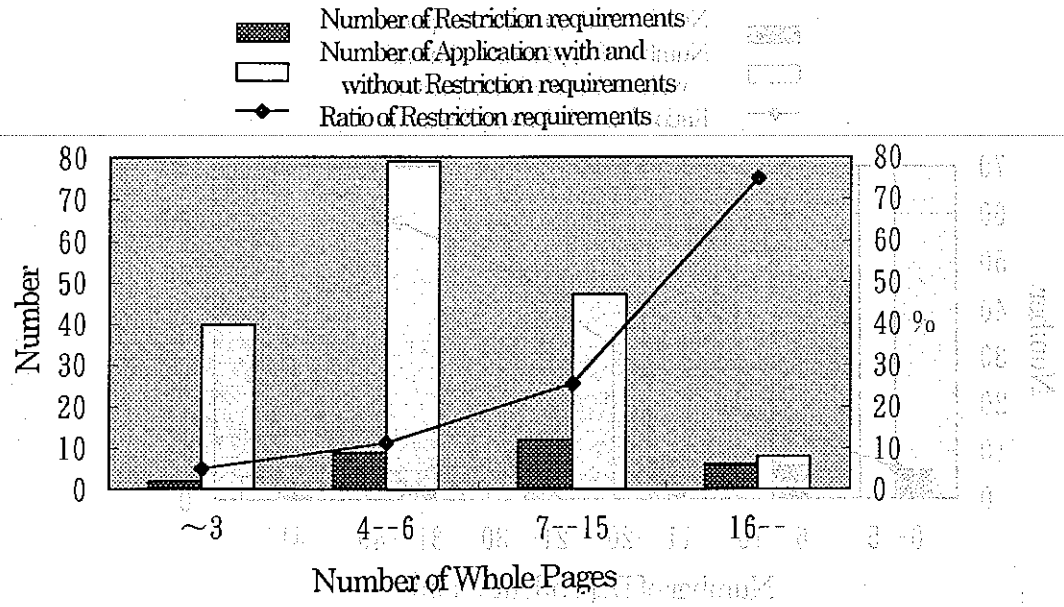


Fig. 4-6 Relationship of Number of Whole Pages and Restriction requirements

It is suggested that an application with more claims are more likely to be allowed for restriction from the fact that the number of restriction requirements rises as that of whole pages increases.

(5) Relationship of Number of Drawings and Restriction requirements

We herein studied the relationship of number of drawings and restriction requirements of which result is shown in following table as well as in a graphical chart, Fig. 4-7.

	Restriction requirement	Number of Applications with and without restriction requirement	Ratio of restriction requirement (%)
0	3	22	13.6
1~5	2	26	7.7
6~10	4	45	8.9
11~20	6	47	12.8
21 or more	14	34	41.2

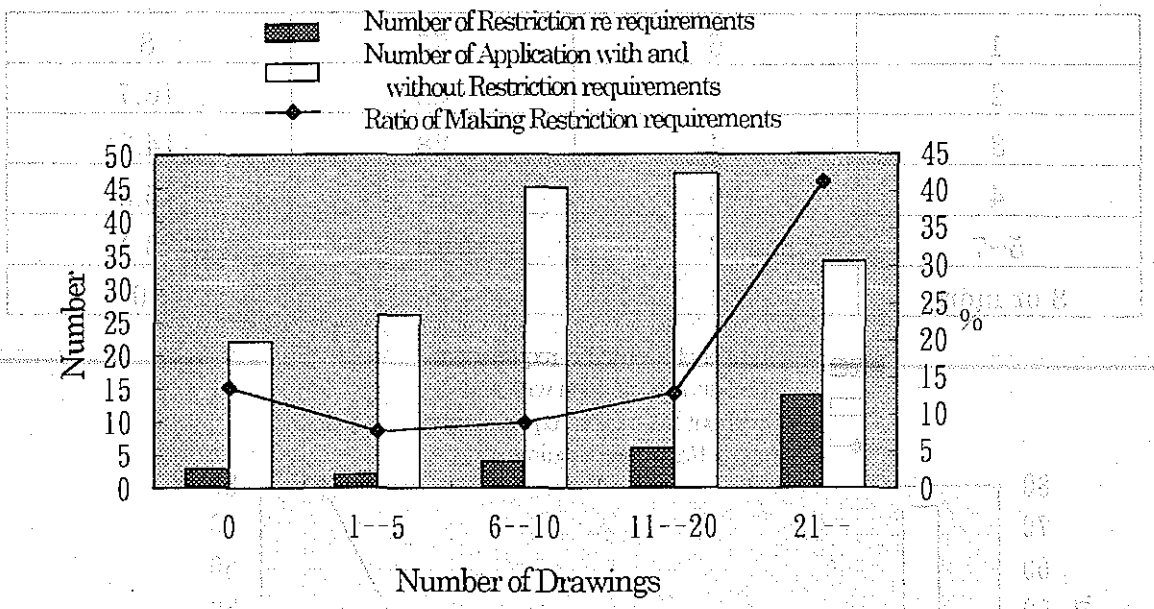


Fig. 4-7 Relationship of Number of Drawings and Restriction requirements

While it can be said that there is a trend that the rise in number of drawings is accompanied by the increase of restriction requirements, it cannot be said that there is direct relationship between the two figures. It seems that the number of drawings is not so closely related with the restriction requirements as number of claims and pages which is suggested by the search result that the ratio of restriction requirements to applications with 21 or more drawings remains as low as 41.2%.

(6) Relationship of Domestic Combination and Restriction requirements

The relationship of number of domestic combination and restriction requirements is studied, of which result is shown in following table as well as in a graphical chart, Fig.4-8.

Number of Domestic Combinations	Restriction requirement	Number of Applications with and without restriction requirement	Ratio of Restriction requirement (%)

1	6	75	8
2	7	42	16.7
3	4	28	14.3
4	5	11	45.5
5~7	3	13	23.1
8 or more	4	5	80

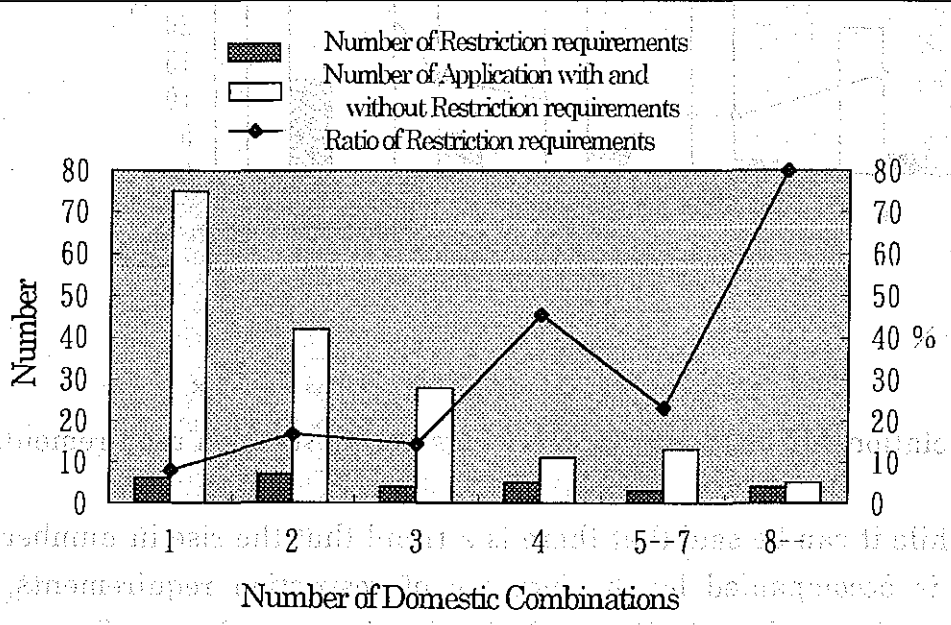


Fig. 4-8. Relationship of Number of Domestic Combinations and Restriction requirements

The increase in number of restriction requirements remains low when the number of domestic combinations is within 7. Rather, number of restriction requirements when there are 5 ~ 7 domestic combinations are half the number when there are 4 domestic combinations. As to applications with 8 or more domestic combinations, restriction is allowed to 4 out of 5 US applications(80%). The number of domestic combinations to which application the restriction requirements was ordered was 8,10,13, and 15, respectively.

It cannot be said, therefore, that there is mutual relationship between the number of domestic combination and that of restriction requirements except in the case that the number of domestic combinations is excessively high.

4-2-3: Reasons for Restriction Requirements

Among subject applications of this search, number of cases that restriction requirements were ordered is shown by classified reason and proportion to the whole cases as to the 22 applications in Table 4-4 where the classified types correspond those in Table 4-1.

Table 4-4

Type	Classified Reasons	Number of Cases	Proportion (%)
1	Combination/Subcombination	7	32
2	Apparatus/Process practiced by claimed apparatus	2	9
3	Apparatus(or process practiced by claimed apparatus)/product	4	18
4	Product/Process of Using the product	3	14
5	Three Set Claim (Product/Process of Use/Process of Making)	1	4
6	Where Link Claim is made as a means to extend scope of unity of invention	0	0
-	Reasons Unidentified	5	23

The most common reasons for restriction requirement is type 1, or "combination and subcombination" followed by type 3 or "apparatus(or process practiced by claimed apparatus and product" and type 4 or "product and process of using the product." The reasons why most restriction requirements were ordered because of such reasons did not become clear from our study of this time. However, it can be said that the number of applications itself is large which include these types of claims as well as that the gap between Japan and US is larger in the requirement for unity of invention. In the case of type 3, for instance, while "product and process of making it" shall meet requirement of unity of invention in Japan, it could be subject of restriction requirement in such cases as "claimed product can be made by materially different process" for which attention should be paid in filing US applications from Japan.

There are five cases for which reasons cannot be classified to any of the six types such as "specific drawing (or working example) should be

selected from multiple drawings (or working examples)" and "number of inventions cannot be determined because multiple independent claims and multiple drawings are contained." They are the requirements that do not exist in Japan.

4-2-4 Completion in terms of quality of US patent specification

Fig. 4-9 shows the transition of number of total claims, independent claims, dependent claims, whole pages and drawings in the specification of US patent application as well as number of domestic combinations by filing year.

As to number of claims, number of total claims, independent claims and dependent claims is all on the rise. The interesting part is that while there is virtually no change immediately before (1985~1987) and after(1989~1990) the amendment of 1987 which introduced revised system of multiple claims, the number jumped three years after the introduction(1991). It is also true of number of whole pages and drawings if not that drastically. As to number of domestic combination, the number remains as low as 2 ~ 3 cases.

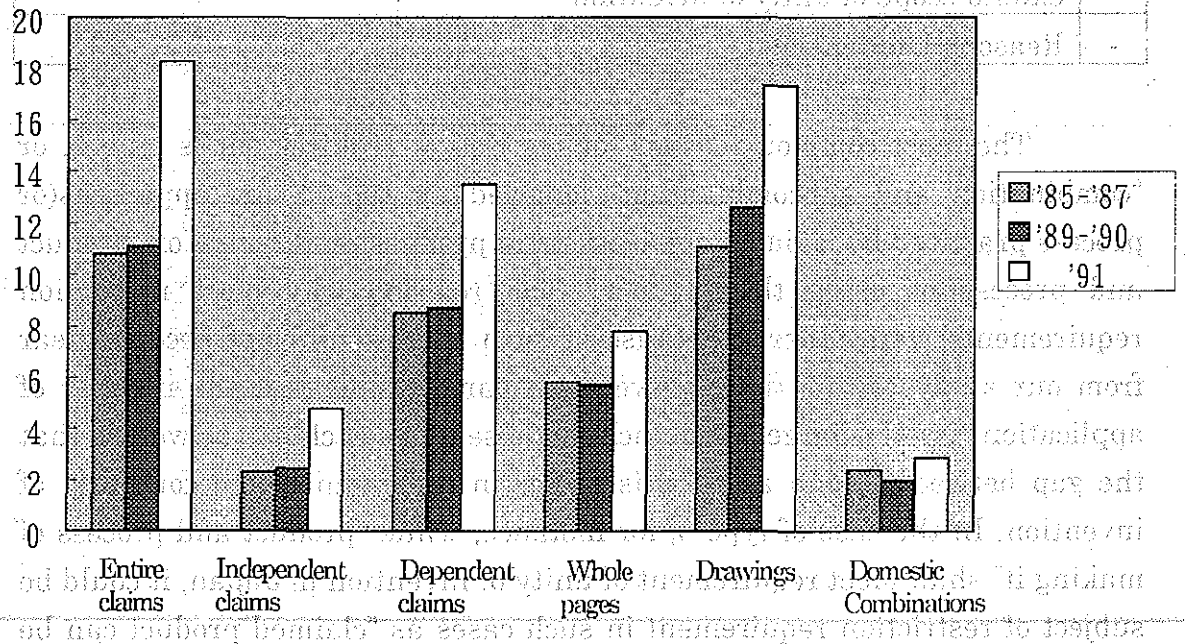


Fig.4-9 Transition of number of claims, pages and drawings in the specifications of US patent application and number of domestic combination

It is assumed to be because of increase in claims of original Japanese applications or in supplemental matters for preparing US application that the number of claims, pages, drawings rises while number of domestic combination stays low. In any reasons, it can be said that the contents of US patent applications are getting more completed. As to number of claims, the trend has become conspicuous in US applications when three years have passed since the introduction of revised system of multiple claims.

It can be said that the fact that number of domestic combinations still remains as small as 2~3 cases even after three years from introduction of improved multiple claims shows that improved multiple clams have not been fully utilized as a means to prepare a specification that is competent to file abroad without domestic combination.

5: Notice to be taken when filing a Japanese application from US

5-1: Comparison in number of patent claims and cost(official fee; application fee + annuities) in Japan and US

Fig. 5-1 shows the comparison of patent cost (official fee; application fee annuities) in Japan and US

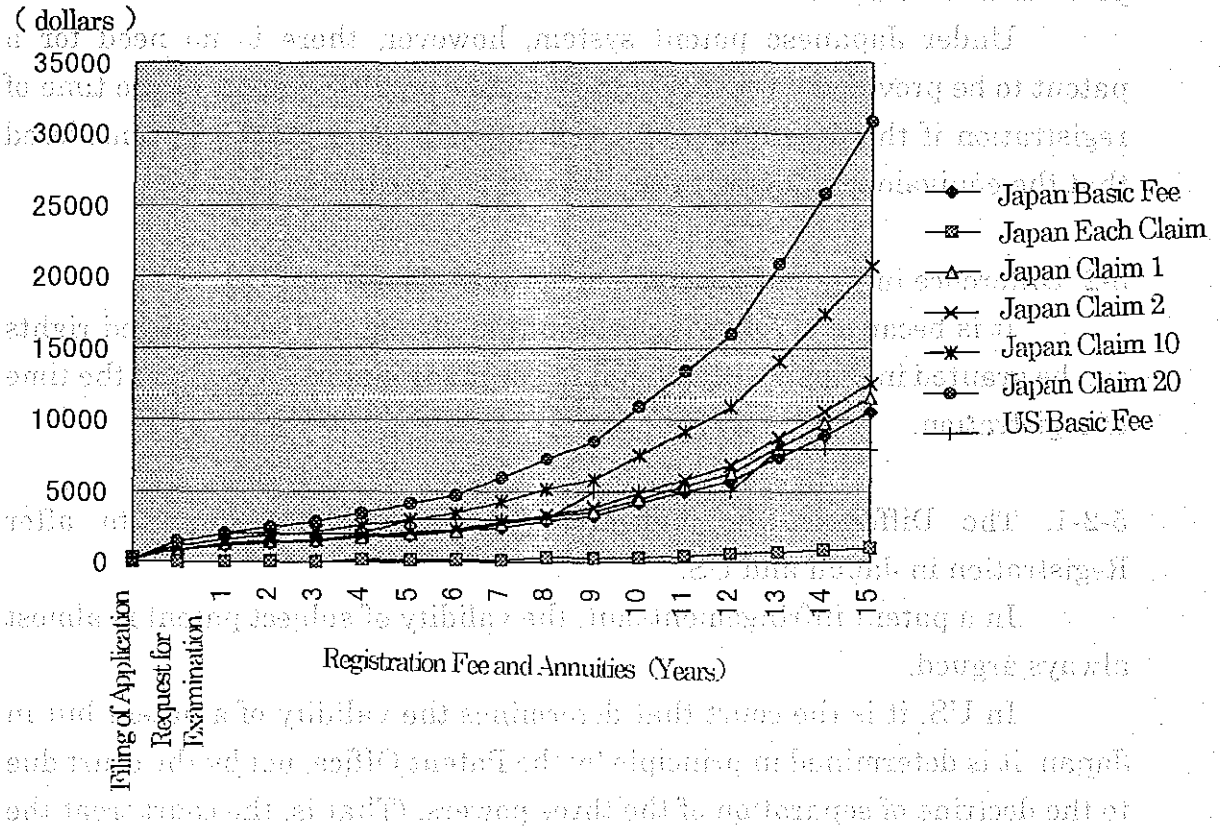


Fig. 5-1 Comparison of Patent Cost in Japan and US

As seen from figure above, there is not a great gap between Japan and US in patent cost from filing of application until registration. Even after registration, there is not much difference if the number of claim(s) is one or two.

However, the Japanese annuity system is distinctive, which is obvious from the figure above, in that the additional fee is simply added according to the number of claims. For instance, if a patent containing 1, 10 or 20 claims, the official fee containing annuities of 15 years should be widely ranged from some 1million yen ($10,000), 2 million yen ($20,000) to 3 million yen ($30,000).

The patent cost for one Japanese patent can thus be twice and treble by the number of claims included therein.

Accordingly, when filing Japanese application from US, it is quite important in terms of cost to reduce the number of claims, not just filing the same application as the original US application.

It could be worried, on the other hand, that the rights referred from the Japanese patent with such fewer claims could be weak and the scope of protection could be narrowed.

Under Japanese patent system, however, there is no need for a patent to be provided with such a lot of claims as a US patent at the time of registration if the description of specification is clear. And it is considered that the equivalent rights with the US will be granted.

5-2: Difference in Claim Construction between Japan and US

It is because of following reason that strong and wide-ranged rights can be granted in Japan without making as many claims as in US at the time of registration.

5-2-1: The Difference in judiciary systems and procedures to after Registration in Japan and US.

In a patent infringement suit, the validity of subject patent is almost always argued.

In US, it is the court that determines the validity of a patent but in Japan, it is determined in principle by the Patent Office, not by the court due to the doctrine of separation of the three powers. (That is, the court treat the

case on the assumption that the patent is valid.)

As to correction of claims after registration, on the other hand, procedures are handled by the Patent Office both in Japan and US.

In US, therefore, since the patentee cannot correct patent claims against the allegation of offensive party in the suit that the patent in question is invalid(though a reissue patent can be granted in US as a result of correction of claims after registration, the patentee cannot maintain the suit because original rights shall be abandoned in the procedure for a reissue patent.), not only such claims with functional expression but also claims with definite mode that are difficult to be revoked are required at the time of registration.

In Japan, on the other hand, the allegation of invalidation of a patent shall be treated by the Patent Office in the invalidation procedure (§ 123 et al) in which the patentee will be granted an opportunity to correct the claims (§ 134(2)). The cost for this correction procedure is far cheaper (49,500 yen + 5,500 yen + n yen (n = number of claims to be corrected)) than annuities, dependent claims with such definite mode are not necessarily required in principle if broad claims with functional expression are secured. Correction at the time of invalidation procedures being filed(accordingly such specification and drawings to meet this correction requirement shall be satisfactory.

5-2-2: Difference in Claim Construction due to Functional Expression between Japan and US.

As a result of amendments of 1994, claims with functional expression became available in Japan. In US, claims with functional expression are construed within the description of specification and its equivalents pursuant to § 112(6) of US Patent Law and In re Donaldson decision.

In the case of Japan, on the other hand, following issues have to be noted;

① There is no provision in Japanese Patent Law that corresponds with § 112(6) of US Patent Law.

② According to the Supreme Court decision on March 8, 1991(so-called "Lipase decision"*1) and § 70 of Patent Law which was amended in 1994 to comply with the decision, it is established within the Patent Office as a guideline for examining such claims that "while it is allowable in principle to

consider the description of specification and drawings to clarify the meaning of the terms, it shall not be allowable, if technical matter described in the claims can be in itself grasped clearly, that such consideration be made to further restrict the meaning."

Based on such backgrounds, it is assumed that the claims with functional expression shall be normally construed broader in Japan than in US.

Accordingly, rights referred from claims with functional expression cover only the description of specification and its equivalents and does not cover such matters that have not been recognized at the time of application being filed.

In Japan, on the contrary, since claims consisting of functional expression are regarded as covering subject technical fields if only the technical matters are clear, dependent claims made merely to clarify the claims with functional expression based on the description of specification are regarded not necessarily needed.

However, in compliance with the restriction of amendments(§ 17) provided in the amendments of 1993, it is necessary to state in detail in the specification and drawings the definite structure to attain such function and its operation and effect to be prepared for such events that the court determined the description of technical matters in the claim not clear and correction as described above.

It will be an effective measure, therefore, for obtaining a broader rights with lower cost to reduce the total number of claims by setting claims with functional expression which is in general supposed to be given a broader right as the main claim while leaving the dependent concepts that may define and clarify such claim described merely in specification and drawings.

5-3 Notices of claim drafting for Japanese Patent Applications (Case Study)

For further explanations, a concrete claim drafting for Japanese Patent Application will be studied using a case which was actually filed in Japanese based on US Patent Application.

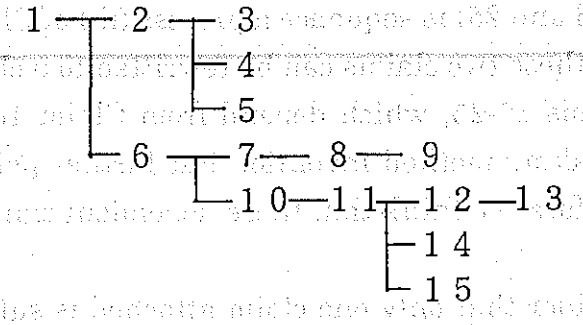
Case: Japanese Patent Publication No. Heisei. 5-26248 (USP 4,775,593)

In this case, a company of US filed a Japanese Patent Application

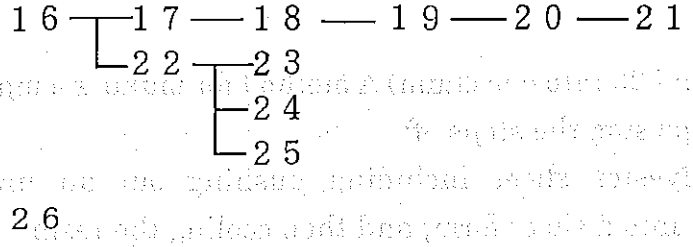
with claiming a priority which was based on a US Patent Application. Each of Japanese and US Patent Applications had twenty six (26) claims, which was issued.

A claim tree of the twenty six claims issued in Japan is shown below:

1. A magnetic recording material (Claims 1- 15)



2. A method for making a magnetic recording material (Claims 16 -26)



This case has twenty six (26) patented claims on two categories: a magnetic recording material (Product: Claims 1-15); and a method for making the same (Process For Making: Claims 16-25 and 26). The patented claims comprises: three (3) independent claims (Claims 1, 6 and 26); and twenty three (23) dependent claims (Claims 2-15 and 17-25). Assuming that the Japanese Patent is maintained for 15 years after its issuance, an amount of maintenance annuity fee is calculated on 3,518,700 yen (about 35,187 dollars).

Now we consider necessity of the patented twenty six claims under Japanese Law described above. First, with respect to the magnetic recording material inventions (Claims 1-15):

(1) These inventions are directed to a certain primer coating, which is cited as an element (ii) in Claim 1, and patentability of the dependent claims are taken into consideration referring to the prior art disclosed in the specification. Accordingly, we think Claims 1 and 7-9 are necessary.

(2) Furthermore, Claims 7-9 restrict Claim 1 to merely embody an

element of Claim 1 (an unsaturated fatty acid). It is easy to obtain these claims in correction procedures, as required in later days.
In the view point, we think that only Claim 1 is sufficient for a magnetic recording material at the time of issuance.

Next, claims of methods for making a magnetic recording material (Claims 16-25 and 26) will be studied. Since only difference between the independent claims (Claims 16 and 25) is sequence a process (iii) of Claim 16 and a process (ii) of Claim 26, these two claims can be rewritten to a claim as attached. Furthermore, Claims 17-25, which depend from Claim 16, does not clarify the point of the making method invention but further point out the product invention. Therefore, we think that these dependent claims are not necessary.

Consequently, we consider that only one claim attached is sufficient for a method for making a magnetic recording material at the time of issuance.

(Rewritten Claims 16 and 26 into one claim) A method for making a magnetic recording material comprising the steps of:

(i) making a polyester sheet including pushing out an unstable polyester resin into a sheet form, and then cooling the resin;

(ii) making an one-axis oriented polyester film including orienting the polyester sheet in the longitudinal direction;

(iii) making an two-axis oriented polyester film including orienting the one-axis oriented polyester film;

(iv) heat-setting the two-axis oriented polyester film;

(v) after the step (iv), applying a ferromagnetic coating on the film, wherein the ferromagnetic coating comprising,

(a) a solvent selected from tetrahydrofuran, methyl ethyl ketone, methyl isobutyl ketone, and cyclohexanone,

(b) ferromagnetic particles, and

(c) pre-polymer;

(vi) providing a coating comprising ferromagnetic particles dispersing in a polymeric binder by bridging the pre-polymer; and

(vii) between the steps (i) and (ii), or the steps (ii) and (iii), applying a water soluble salt prepared from a PET adhesion-promoting primer having 10 to 18 carbon atoms on the polyester sheet or the one-axis

oriented polyester sheet.

In this case, we conclude that two claims are necessary at the time of issuance, that is one is of the magnetic recording material and the other is of a method for making the magnetic recording material. With respect to other claims, it is sufficient to give disclosures in the specification and drawings in order to satisfy conditions required on the correction appeal procedure in later days.

An amount of maintenance annuity fee for these two claims, if patented, may be estimated 1,149,900 yen (11,499 dollars) for 15 years. That saves 2,368,800 yen (23,688 dollars) comparing to maintaining twenty six claims. We may say that the scopes of protection between two are not substantially different.

By the way, generally speaking, an application which is primary filed in US and secondary filed in Japan fully provides with dependent claims similar to the present case, but it is not frequent that an application which has plural priorities using wide unity of an application in Japan. Not only the unity of application is wide, but also the claim fee is calculated irrespective of independent and dependent claims. Accordingly, plural related inventions which have to be independently filed in US is filed in an application in Japan so that the fee to obtain Japanese Patent can be reduced, we guess.

In US, additional fees are required for multiple dependent claims (multi-link claims). No multiple dependent claim which depends from another multiple dependent claim is permitted in US On the contrary, no fee is required for multiple dependent claims and multiple dependent claims depending from another multiple dependent claims in Japan. We think that to positively use these types of claim can get broad rights with low costs. For example, in this case, Claim 4 is rather rewritten such that Claim 4 depend from both Claims 2 and 3.

*1 Lipase decision (No. S 60(Gyo Tsu)3, Supreme Court, 03/08/91)

The decision clarified the meaning of specification in determining the technical scope of a claim.

"The subject matter of claimed invention should be found based on the claim unless any special situation arises.

Consideration of description in the specification will be proper only when there is special circumstances such as the technical meaning of the claim cannot be understood directly or clearly or it is obvious at a glance that the description is misstated in view of description in the specification."

6: Conclusion

As a result of examining the claim drafting with a view to obtaining and maintaining effective patent rights, this study has clarified the notices of filing applications to each countries. We thereunder state the details.

6-1: Notices to be taken filing US application from Japan

The fact that the definition of unity of invention is different between Japan and US. As indicated in Table 4-1 and 4-2, the definition of unity of invention is narrower in US and there are additional requirements. Consequently, the more applicant pursues to make a comprehensive application as to unity of invention as practiced in Japan, the more restriction requirement is ordered as a result of which divisional application needs to be filed. It means that the additional fees that have been paid for the claims under examination(claims other than independent claim 3 and dependent claim 17) are wasted and another expenditure will be imposed in accordance with the number of divisional applications. This, in view of cost, is a material problem. Check the claims in actual US applications regarding following items.

(1) Whether there are too many claims

An application with more claims is more likely to be required restriction. This study especially showed that an application with more than 10 independent claims is ordered for restriction requirement without fail. Better to consider some of too many independent claims be transformed to dependent claims with the consideration of the balance of independent claims and dependent claims.

(2) In the case an application contains combination claim and subcombination claim, finding of patentability in both claims is necessary. Whether or not there is patentability and utility in both claims. If there is, the application can be subject of restriction requirement.

(3) In the case of an application relating to different categories, whether or

not it is applicable to materially different matter. If it is, the application can be subject of restriction requirement.

(4) An invention relating to § 37(5) of Japanese Patent Law does not meet not only US but also PCT requirement for unity of invention.

(5) Whether the application is too long

The more pages an application contains, the more likely restriction requirement be ordered. It is important that the description is concise and clear solely containing essential matters.

6-2: Notices to be taken filing Japanese application from US

The fact that the number of claims is directly reflected to the patent cost. It should be also noted that claims for dependent concept are not necessarily needed if claims for superior concept are described clearly enough. In view of effective patent maintenance and management, an application with fewer claims is more desirable. Based on these viewpoints, check the claims of actual Japanese patent applications regarding following items;

(1) Whether or not the claims are unnecessarily many

Remember again that claims for dependent concept are not necessary if claims for superior concept are stated. Necessary measures can be taken later in the correction procedure if description regarding actual mode is made fully and clearly in the specification and drawings.

(2) Whether or not multi-link claim or multiple dependent claim citing multi-link claim is available

It is effective in reducing the number of claims and saving patent cost. Appropriate care should be taken, however, since too much utilization may prevent the understanding of invention and cause any trouble.

(3) Whether a related group of inventions is made up in one application

The scope allowable for unity of invention is relatively broad. It will be very effective to save the cost if making the most of this feature since the cost will largely be saved to half or third as the number of combination rises. An overwhelming effect can be drawn by the decrease in number of claims.

(4) Whether means-plus-function claim or functional/operational description has been considered

This type of claim is construed broader than in US and will be very advantageous if the rights are actually granted.

We have thus concluded the notices by the country of application being filed. While there could be other notices regarding practical claim drafting, we will be happy if this study is referred to as one of the bases for determination in currently acclaimed economic assessment of intellectual properties.

7. Bibliography

(1) The Outhne and Practice of 1986 Act to Amend Part of Patent and Other Laws (April 1995, Japanese Patent Office)

(2) Unity of Invention, Material No.188 (April 1991, Japan Patent Association)

(3) Partly Amendment of Patent and Other Laws, Material No.151 (January 1988, Japan Patent Association)

(4) Takayoshi Nijima, Transition of Practice of Section 36, Amendment, Division and Unity of Invention (February , 1996)

⑲日本国特許庁(JP)　⑪特許出願公告

⑫特許公報(B2)　平5−26248

⑤Int.Cl.⁵	識別記号	庁内整理番号	㉔㊹公告 平成5年(1993)4月15日
G 11 B 5/704		7303−5D	
5/842	Z	7303−5D	

請求項の数 26 (全8頁)

㊺発明の名称　優れた剥離強度を持つ可撓性磁気記録媒体

㉑特　願　昭63−140665　　㊺公　開　昭63−313319
㉒出　願　昭63(1988)6月9日　　㊸昭63(1988)12月21日
優先権主張　㉜1987年6月9日㉝米国(US)㉛59995

1

㊼特許請求の範囲

1　(i)　配向したポリエステルフイルム、
(ii)　炭素数10〜18をもつ不飽和脂肪酸の水溶性アルカリ金属塩を含み該フイルムの少なくとも一方の側に付与されたプライマーコーテイング、および
(iii)　重合体バインダー中に分散させた強磁性体粒子からなり、該プライマーコーテイング上に付与された強磁性体コーテイング、
を含んでなることを特徴とする優れた剥離強度を持つ磁気記録媒体。

2　該強磁性体粒子が酸化第二鉄、二酸化クロム及びバリウムフエライトから選ばれた粉末からなる請求項1記載の磁性記録媒体。

3　該磁性体粒子が酸化第二鉄粒子からなる請求項2記載の磁気記録媒体。

4　該酸化第2鉄粒子がその表面にコバルトを吸着したものである請求項2記載の磁気記録媒体。

5　該強磁性体粒子が二酸化クロムからなる請求項2記載の磁気記録媒体。

6　該配向したポリエステルフイルムが二軸配向したポリエチレンテレフタレートフイルムである請求項1記載の磁気記録媒体。

2

7　該不飽和脂肪酸がオレイン酸、パルミトール酸、リシノール酸、ペトロセリン酸及びラウリン酸から選ばれたものである請求項6記載の磁気記録媒体。

8　該不飽和脂肪酸がオレイン酸である請求項7記載の磁気記録媒体。

9　該プライマーコーテイングがオレイン酸ナトリウムからなる請求項8記載の磁気記録媒体。

10　該重合体バインダーがポリウレタン／ポリエステルブロツク共重合体からなる請求項6記載の磁気記録媒体。

11　該ポリウレタン／ポリエステルブロツク共重合体が
(A)　加水分解安定性を持つ二官能性アルコールと、アジピン酸、アゼライン酸、1，12−ドデカン二酸及びそれらの混合物から選ばれたジカルボン酸との反応生成物であり50〜250のヒドロキシル数を持つヒドロキシル−末端ポリエステルと、
(B)　1，4−ブタンジオール、1，3−ブタンジオール、1，5−ペンタンジオール、1，6−ヘキサンジオール及び2，5−ヘキサンジオールから選ばれた第1級又は第2級アルコールか

らなる鎖伸長剤、但し該ポリエステルと鎖伸長剤の合計のヒドロキシル数は130～300である、と、

(C) 芳香族ジイソシアネート

との反応生成物（但し(A)，(B)，(C)の割合はポリウレタンセグメントの量が37～40重量%でポリエステルセグメントの分子量が500～1500をもつ強磁性コーテイングを生ずるように選ばれるものとする）であり、該強磁性体粒子が二酸化クロム粒子からなり、且つ該粒子が該強磁性コーテイングの重量当り90～88%の範囲で存在する請求項１０記載の磁気記録媒体。

１２　該２官能性アルコールが１，４－シクロヘキサンジメタノールである請求項１１記載の磁気記録媒体。

１３　該鎖伸長剤が、１，４－ブタンジオールである請求項１２記載の磁気記録媒体。

１４　該芳香族ジイソシアネートが４，４－メチレンービスー（１，４－フエニレン）ジイソシアネートである請求項１１記載の磁気記録媒体。

１５　重合体バインダー中に分散させた非強磁性体粒子からなるバツクコート層を有する請求項１１記載の磁気記録媒体。

１６　(i) 無定形のポリエステル樹脂をシート状に押出し次いで該樹脂を冷却してポリエステルシートをつくり、

(ii) 次いで該ポリエステルシートを長手方向に配向して一軸配向ポリエステルシートをつくり、

(iii) 炭素数10～18を持つ不飽和脂肪酸の水溶性アルカリ金属塩を含む水溶液を該シートに塗布し、

(iv) 次いで該一軸配向ポリエステルフイルムを横方向に配向して二軸配向ポリエステルフイルムをつくり、

(v) 該二軸配向ポリエステルフイルムをヒートセットし、

(vi) 次いで

(a) テトラヒドロフラン、メチルエチルケトン、メチルイソブチルケトン及びシクロヘキサノンから選ばれた溶媒、

(b) 強磁性体粒子、

(c) プレポリマー

からなる強磁性体コーテイング組成物を該フイルム上に塗布し、

(vii) 該プレポリマーを架橋させて重合体バインダー中に分散した強磁性体粒子からなるコーテイングを生ぜしめる、

ことを特徴とする磁気記録媒体の製法。

１７　工程(ii)の後に且つ工程(iii)の前に該フイルムシートをコロナ放電処理に共する請求項１６記載の方法。

１８　該配向したポリエステルフイルムが二軸配向ポリエチレンテレフタレートである請求項１７記載の方法。

１９　該水溶液の塗布によつてつくられたプライマーコーテイングが乾燥重量基準で約$1\times10^{-3}\times2\times10\times^{-5}$lbs／平方インチの重量で存在する請求項１８記載の方法。

２０　該プライマーコーテイングがオレイン酸のアルカリ金属塩からなる請求項１９記載の方法。

２１　該プライマーコーテイングがオレイン酸ナトリウムからなる請求項２０記載の方法。

２２　該プレポリマーが

(A) 加水分解安定性のある二官能性アルコールとジカルボン酸との反応生成物であるヒドロキシル末端ポリエステル、

(B) 鎖伸長剤、及び

(C) 芳香族ジイソシアネート

からなる請求項１６記載の方法。

２３　該二官能性アルコールが１，４－シクロヘキサンジメタノールである請求項２２記載の方法。

２４　該鎖伸長剤が１，４－ブタンジオールである請求項２２記載の方法。

２５　該芳香族ジイソシアネートが４，４－メチレンービスー（１，４－フエニレン）ジイソシアネートである請求項２２記載の方法。

２６　(i) 無定形のポリエステル樹脂をシート状に押出し次いで該樹脂を、冷均してポリエステルシートをつくり、

(ii) 炭素数10～18を持つ不飽和脂肪酸の水溶性アルカリ金属塩を含む水溶液を該シートに塗布し、

(iii) 次いで該ポリエステルシートを長手方向に配向して一軸配向ポリエステルシートをつくり、

(iv) 次いで該一軸配向ポリエステルフイルムを横方向に配向して二軸配向ポリエステルフイルムをつくり、

(v) 該二軸配向ポリエステルフイルムをヒートセットし、

(vi) 次いで

(a) テトラヒドロフラン、メチルエチルケトン、メチルイソブチルケトン及びシクロヘキサノンから選ばれた溶媒、

(b) 強磁性体粒子、

(c) プレポリマー

からなる強磁性体コーテイング組成物を該フイルム上に塗布し、

(vii) 該プレポリマーを架橋させて重合体バインダー中に分散した強磁性体粒子からなるコーテイングを生ぜしめる、

ことを特徴とする磁気記録媒体の製法。

発明の詳細な説明

（産業上の利用分野）

本発明は磁性層を塗布したポリエステル基材からなる可撓性磁気記録媒体に関する。より詳しくは本発明は重合体バインダー中に分散した強磁性体粒子からなるコーテイング組成物を塗布する前に接着促進プライマー層を塗布したポリエステルフイルムに関する。

（従来技術）

オーデイオ、ビデオ、コンピューターテープ等の可撓性磁気記録媒体は、通常、二軸配向ポリエステルフイルムに酸化鉄、二酸化クロム粒子等の強磁性体粒子の溶液と、テトラヒドロフラン、メチルエチルケトン、メチルイソブチルケトン又はシクロヘキサノン等の強溶媒にとかしたポリウレタンバインダープレポリマーを塗布してつくられている。強溶媒は通常ポリエステル表面の強磁性体コーテイングに対する親和性を増すために用いられている。この溶媒は通常ポリウレタンプレポリマーを乾燥する間に除かれる。

通常「磁気テープ」と総称する可撓性磁気記録媒体の製造につかわれるバインダーはポリウレタン、ポリビニル類及びポリウレタン／ポリビニルグラフト共重合体である。他の重合体も最適の硬度、可撓性、接着性をうるために加えられうる。また潤滑剤、分散剤、架橋剤（硬化剤）もコーテイング組成物中に通常加えられる。

磁気テープは厳正な物理的、化学的及び磁気的性質をもつことが要求される。要求される物理的性質には許容される摩擦係数、高い弾性率と引張強度、すぐれた摩耗抵抗性が含まれる。重合体バインダーはポリエステル基材に接着する必要があり強磁性体粒子と化学的に相溶性にして長期間安定である必要がある。最後に磁気テープは高いデータ貯蔵容量をもつ必要がある。

近年磁気テープ製造者は垂直記録、デイジタル記録やトラック幅の減少等の記録フオーマット技術の進歩に適応するため可撓性磁気記録媒体の情報密度の増加や全体の品質向上を指向している。彼らはポリエステル基材の改良、とりわけ機械的性質にすぐれ、表面がより平滑で強磁性体コーテイングに対する接着性にすぐれたより薄いフイルムの提供を求めている。またより微細な粒子とより高い圧縮性（コエアシビテイ）をもつより薄く滑かな強磁性体コーテイングの開発も要求されている。

この開発努力の一部としてザ・アメリカンナショナル・スタンダード・インスチチユート（ANSI）はテープ基材に対するコーテイング接着の米国基準を発表した（ANSIプロジエクト#488、第３集、1985.4.19）。この提案された基準は強磁性体コーテイングがテープ基材から剥離するに要する強度としてテープ幅の0.12N／㎝（0.69lbs／インチ）以上を要求している。少くとも１の磁気テープ製造者が0.69lbs／インチ以上の剥離強度を示す磁気テープをつくつているが、市販されているかなりの磁気テープはこのANSI基準を満していない。

接着性向上への対処としてはフイルムに強磁性体コーテイングを塗布する前にフイルム表面をコロナ放電処理するものがある。この方法は可撓性磁気記録媒体をつくる際に用いるのと同様の揮発性溶媒の存在下に高電圧電気機器を用いるため火災や爆発の危険があり好ましくない。

別の方法はポリエステルフイルムと強磁性体コーテイングの間に接着剤又はプライマー層を介在させる方法である。たとえば米国特許3215554はプライマー層として塩化ビニリデン／アクリロニトリル共重合体を開示し、また米国特許3387995はテレフタル酸とイソフタル酸とエチレングリコールのポリ縮合体を開示している。米国特許3661874はエポキシ化したポリブタジエンのアミン化反応生成物の使用が接着性を高めることを開示している。最後に、米国特許4210703はカチオ

ン重合したエポキシ樹脂が接着性を改良しまた磁気テープの製造で用いた強溶媒によるポリエステル基材からの低分子量オリゴマーの抽出を防ぐことを開示している。

（発明の開示）

本発明は

(i) 配向したポリエステルフイルム、

(ii) 炭素数10～18をもつ不飽和脂肪酸の水溶性アルカリ金属塩を含み該フイルムの少なくとも一方の側に付与されたプライマーコーテイング、および

(iii) 重合体バインダー中に分散させた強磁性体粒子からなり、該プライマーコーテイング上に付与された強磁性体コーテイング、

を含んでなることを特徴とする優れた剥離強度を持つ磁気記録媒体に関する。

好ましい態様において、本発明は

(i) 二軸配向ポリエチレンテレフタレートフイルム、

(ii) オレイン酸の水溶性塩を含み該フイルムの少なくとも一方の側に付与されたプライマーコーテイング、

(iii) (A)加水分解安定性のある二官能性アルコールとジカルボン酸との反応生成物であるヒドロキシル末端ポリエステル、(B)鎖伸長剤、及び(C)芳香族ジイソシアネートの反応生成物である熱可塑性ポリウレタン／ポリエステルバインダー（ここで(A)，(B)，(C)の割合は、分子量約60000以上のポリウレタン含量が37～40重量%でポリエステルセグメントの分子量が約500～1500であるポリエステル／ポリウレタンを生ずるように選択される）中に分散させた二酸化クロム粒子からなり該プライマーコーテイング上に塗布された強磁性体コーテイング

からなる優れた剥離強度を持つ可撓性磁気記録媒体に関する。

本発明で用いられる好ましい配向ポリエステルフイルムはポリエチレンテレフタレートからつくられたものである。もちろんエチレングリコール、ブタンジオール又はその混合物のようなグリコールとテレフタル酸又はテレフタル酸と他のジカルボン酸（たとえばイソフタル酸、ジフエニン酸、セバシン酸又はそれらのポリエステル形成性均等物）との混合物との重縮合で得た結晶化可能なポリエステル等からつくられたフイルムも同様に用いうる。ポリエステルは好ましくはかかる樹脂からつくられたフイルムの加工性向上用の非強磁性無機粒子を含有する。かかるポリエステルは米国特許3821156及び3884870に開示された方法で好ましくつくられる。このフイルムは周知の手段と周知の装置を用いてつくられうる。

たとえば粒子充填ポリエステルを溶融し、研磨した回転キヤストドラム上に無定形シートに押出してポリエステルのキヤストシートをつくる。ついでこのフイルムを、一軸配合フイルムの場合には、押出方向（機械方向）又は押出方向と垂直方向（横方向）に一軸延伸する。二軸配向フイルムは長さ方向と横方向の両方向に延伸してつくられる。キヤストシートの第一延伸工程はこれら2つの直角方向のいづれかになされる。フイルムに強度とタフネスを付与するために用いる延伸倍率は1又は両方向に最初のキヤストシート寸法の約3.0～約5.0倍が好ましい。より好ましい延伸倍率はキヤストポリエステルシートの最初の寸法の約3.2～4.2倍である。延伸操作は約二次転移温度からポリマーが軟化又は溶融する温度より低い温度の範囲である。

所望により、延伸後、ポリエステルフイルムを結晶化するに必要な時間フイルムを熱処理する。結晶化はフイルムに安定性と優れた引張り特性を付与する。ポリエチレンテレフタレートを熱処理する場合は、約190℃～240℃、より好ましくは約215℃～235℃の範囲で熱処理することが好ましい。

本発明のアルカリ金属塩プライマーコーテイングはフイルム製造の次の3段階の1つでインラインで水溶液として塗布しうる。その段階とは、たとえば米国特許1411564に開示されているような、無定形シートのキヤストと第1段延伸の間の予備ドロー段階、たとえば米国特許4214035に開示されているような、一軸延伸後であるが二軸延伸前であるインタードロー段階、又は二軸延伸後でフイルムの巻取り前のポストドロー段階である。通常延伸又は最終コンデイショニング段階の前又はその間に付与される熱は水又は他の揮発分を蒸発するに十分なものであり、それによつてプライマーコーテイングは乾燥する。但しコーテイングがかかる加熱工程後に塗布された場合は別途の加熱

工程が必要である。

一の好ましい態様においては、フイルムを一軸延伸して後、二軸延伸する前にプライマーコーテイングを塗布する。より好ましい態様では、ポリエステルフイルムを塗布前に長さ方向にまず延伸する。この好ましい態様では、長さ方向に延伸後公知の適宜の手段によつてフイルムへの塗布を行なう。たとえばローラーコーテイング、スプレーコーテイング、スロツトコーテイング、含浸コーテイング等が用いられる。好ましい態様では、グラビアローラーコーテイングによつて塗布する。また一軸延伸したフイルムを塗布処理する前に、米国特許3520959，3820929、及び4028032に開示されているようにコロナ放電装置によつて電気コロナ放電処理する。コロナ放電処理によりポリエステルフイルム表面の疎水性が減少しポリエステルフイルム表面へのプライマーコーテイングの接着性を一層改良する。

上記したように、炭素数約10～18をもつ不飽和脂肪酸の水溶性アルカリ金属塩はPETフイルムに対する接着促進プライマー層としての効果を示す。「水溶性」なる語はその塩が室温で通常の水道水に、水100cc当り少なくとも0.4g、より好ましくは水100cc当り2.0g以上溶けるべきであることを意味する。好ましい水溶性塩にはオレイン酸、パルミトール酸（palmitoleicacid)、リシノール酸及びペトロセリン酸（petroselinic acid）のナトリウム又はカリウム塩がある。オレイン酸ナトリウムとオレイン酸カリウムが最も好ましい。

PETプライマーコーテイングとして用いる塩はまた配向したポリエステルの乾燥やヒートセット中にみられる200℃以上の温度において比較的熱安定性を示す必要がある。熱安定性及び水溶性にすぐれ、入手容易である点でオレイン酸ナトリウム（シス−9−オクタデセン酸のナトリウム塩）は特に好ましい水溶性塩である。

上記したように、本発明のプライマーコーテイングは水溶液として、また固体濃度約0.2～15重量%、好ましくは約0.3～6重量%で、基材のポリエステルフイルムに塗布される。好ましい固体濃度は最終乾燥コーテイング重量がフイルム表面1平方フイート当り約1×10^{-8}～2×10^{-5}lbsになるような濃度である。より好ましくは1平方フイート当り約2×10^{-7}～7×10^{-6}lbsであり、中心的なものは1平方フイート当り9.6×10^{-7}lbsである。

本発明のコーテイングはフイルムの一方又は両方の面に塗布されるか、又は一方の面に塗布し他方の面は、米国特許4214035に開示されているように、熱硬化性アクリル又はメタクリル樹脂等の異なるコーテイングが塗布される。またある場合にはフイルム表面に既に存在する異なるプライマーコーテイングの上に塗布することもできる。たとえば米国特許3819773に開示されている熱硬化性アクリルコーテイングの上に塗布することができる。

本発明の水溶液は本質的に上記に定義した塩からなりその接着促進作用を損なうような他の成分、たとえば粒状物質や、上記塩が乳化剤や分散剤として少量存在するような態様における重合体成分は含有しない。しかし「本質的になる」なる用語は水溶性染料、pH調節剤等の他の少量の水溶性成分の存在を排除するものではない。好ましくはこの水溶液は水（脱イオン水又は水道水等）と約2.0重量%～約10重量%の上記水溶性塩の2者からなる。

上記したように、このプライマーを塗布したポリエステルフイルム上に強磁性体コーテイング組成物を塗布して本発明の可撓性磁気記録媒体をうる。

強磁性体コーテイング組成物は強磁性体粒子と、テトラヒドロフラン、メチルエチルケトン、メチルイソブチルケトン又はシクロヘキサノン等の強溶媒にとかしたプレポリマーとからなる。テトラヒドロフランとシクロヘキサノンの混合物が特に好ましい。

強磁性体粒子は強磁性体コーテイングをつくるのに通常用いられている適宜の強磁性体粒子でよい。かかる粒子には針状$\gamma-Fe_2O_3$、コバルトをドープ又は吸着した針状$\gamma-Fe_2O_3$、二酸化クロム及びバリウムフエライト（$BaO\cdot6Fe_2O_3$）等がある。

重合体バインダーに分散させた強磁性二酸化クロム粒子が特に好ましい。二酸化クロム粒子は、たとえば水の存在やヒドロキシルやアミンのような易酸化性官能基の存在によつて起こる還元性分解に対し安定化してあるものでも安定化してない

ものでもよい。米国特許3512930及び3529930に開示されているような安定化した粒子がより好ましい。

通常磁気テープ製造者は磁気性能を最大にするようなるべく多くの二酸化クロムを付与したがる。しかし過剰の二酸化クロムは摩耗抵抗を下げ酸化物の脱落（オキサイドシエド）をもたらし、それに伴ない強磁性体粒子が磁気テープからテープ処理装置の表面上に移ったりする。オキサイドシエドはエラー率を高めまたテープ処理装置をいためる。

本発明の好ましい強磁性体コーテイングは二酸化クロムを70〜90重量%、より好ましくは80〜90重量%含有する。好ましいポリウレタンバインダーを用いる場合の二酸化クロムの最適量は約84%である。

ポリエステル基材に強磁性体粒子を保持するために通常の可撓性磁気記録媒体で用いられている適宜のバインダー系を本発明でも用いることができる。上記したように、市販のバインダー系は通常ポリウレタン、ポリビニル、及びポリウレタンとポリビニルのブレンドもしくは共重合体からなる。

ポリエステルーポリウレタン（熱可塑性エラストマータイプ）は可撓性磁気記録媒体用バインダーとして広く用いられている。これらは化学的に異なる単位のセグメント又はブロックからなる。比較的軟質のポリウレタンセグメントはエステル結合単位の繰返しシリーズからなりそれ自体単鎖長重合体である。ポリエステルセグメントは二官能性カルボン酸と二官能性アルコールとの反応でつくられ末端は実質上アルコール基となる。ポリエステルセグメントは通常500〜4000の分子量を持つ。これは4又は5のエステル単位から20のエステル単位からなる鎖に相当する。この軟質ポリエステルセグメントの長さが増すと一般にバインダーの弾性が増す。一般に重合体バインダーの低温特性及び弾性特性を決めるのはポリエステルーポリウレタンのポリエステル部分である。

ポリエステルーポリウレタンバインダーの他の成分は比較的硬質のポリウレタンセグメントである。この部分は軟質ポリエステルセグメントが示す化学的及び機械的挙動とは顕著に異なる挙動を示す。一般に、ポリウレタンセグメントは200℃近くの融点をもつ硬質でリジツドな重合体である。このポリウレタンは通常、4，4′−ジフエニルメタンジイソシアネート（MDI）のような二官能性芳香族ジイソシアネートを1，4−ブタンジオールのような二官能性アルコールとの反応でつくられる。ポリウレタンは溶媒系の磁気媒体コーテイングに用いるポリエステルーポリウレタンの場合は通常非常に短い鎖長をもつ。これはテトラヒドロフランやメチルイソブチルケトン等の磁気テープコーテイングの製造に通常用いられる溶媒にポリウレタンが特に可溶ではないことによる。またポリウレタンセグメントの長さが増すと硬度、モジユラス及び流動温度が増し、弾性とタフネスが減ずる。可撓性磁気テープではバインダーが磁気記録の要求に合うように種々の性質をバランスさせることが求められる。

好ましいポリエステル／ポリウレタンバインダーはR・Bradshawの米国特許4525424（1985.6.25）「ポリエステルポリウレタンバインダーと二酸化クロム顔料を有する可撓性磁気記録媒体」に開示されており、本発明でもそれらが用いられうる。上記米国特許に開示されているようにこのポリエステル／ポリウレタンバインダーは

(A) 加水分解安定性を持つ二官能性アルコール、好ましくは1，4−シクロヘキサンジメタノール、とアジピン酸、アゼライン酸、1，12−ドデカンジオン酸及び（好ましくは）それらの混合物から選ばれたジカルボン酸との反応生成物であり約50〜250のヒドロキシル数を示すヒドロキシルー末端ポリエステルと

(B) 1，4−ブタンジオール、1，3−ブタンジオール、1，5−ペンタンジオール、1，6−ヘキサンジオール及び2，5−ヘキサンジオールから選ばれた第1級又は第2級アルコール、好ましくは1，4−ブタンジオールと1，6−ヘキサンジオールの混合物からなる鎖伸長剤、但し該ポリエステルと鎖伸長剤の合計のヒドロキシル数は約130〜300である、と、

(C) 芳香族ジイソシアネート好ましくは4，4′−ジフエニルメタンジイソシアネート

との反応生成物（但し(A)，(B)，(C)の割合はポリウレタンセグメントの量が約37〜40重量%であるポリエステルポリウレタンを生ずる量である）である。

上記の「ヒドロキシル数」は試料1グラムのヒドロキシル含量に相当する水酸化カリウムのミリグラム数である。一般にこの試験はASTM D1957−86に記載されており、当業者にとつて周知である。また熱可塑性ポリウレタン組成物に関する米国特許4284750号にはこのヒドロキシル数の測定に関する記述がなされている。

またその分子量は60000以上が好ましく、そのなかのポリエステルセグメントの分子量は約500〜1500が好ましい。ポリエステルセグメントの分子量が500より小さいと二酸化クロム充填コーティングが硬くなり製造が困難になる。ポリエステルセグメントの分子量が1500より大きいとコーティングが軟かくなり形状変化等が起り平滑化しやすくなる。これはテープの摩擦性能を低下する。ジオール鎖伸長剤(B)はポリウレタンセグメントの可撓性を改善する。またジオール鎖伸長剤は脆性を増加することなしに高濃度の二酸化クロム粒子をバインダーに付与することを可能とする。

強磁性体コーテイング組成物は公知の方法でプライマーを塗布したポリエステルフイルムに塗布できる。次いでフイルムを磁界に供することによつて二酸化クロム粒子が配向される。次いでフイルムを乾燥して強溶媒を除き、カレンダー掛けして平坦なコーテイング表面とする。カレンダー操作は二酸化クロム粒子の磁気配向に影響しない。次いでプレポリマーを架橋し、フイルムを所望の幅にスリツトし、研磨、洗浄する。かくしてつくられた可撓性磁気記録媒体はリールに巻かれたカートリツジに装着されてコンピユータ装置の最終用途に供されうる。

重合体バインダーは分散剤、潤滑剤、静電剤、殺菌剤等の、強磁性体コーテイング組成物に通常用いられる添加剤等を適宜含有しうる。たとえば米国特許3649541には二酸化クロム系の強磁性体コーテイングでの使用に適する潤滑剤が例示されている。

本発明の可撓性磁気記録媒体はその機械的性能を向上させるために反対面に「バツクコート」を塗布してもよい。かかるバツクコートの例としては二酸化クロムの代りにカーボンブラック等の導電性非強磁性粒子を含有させた上記と同じバインダー系がある。

磁気テープの剥離強度は、(a)テープ基材に強磁性コーテイングを塗布する前に接着促進コーテイングを塗布してあるかどうか、(b)用いた重合体バインダーは何か、(c)架橋度、(d)強磁性体コーテイング層、(e)二酸化クロム粒子／バインダー比、及び(f)溶媒効果などの因子によつて異なるが、それぞれのバインダー系においては架橋度が接着性に影響する最も大きな因子である。強磁性体コーテイングが過度に架橋されるとバインダーはもろく接着性は低下する。架橋度が低すぎるとバインダーがよく凝集せず高すぎる摩擦係数を示すことになる。

本発明のプライマーコーテイングはすべての他の要因が一定であるとした場合それぞれの磁気テープの剥離強度を顕著に向上させるのである。

（実施例）

以下に実施例に基づいて本発明を例証するが、これらは例示であつて本発明を制限するものではない。

例　1

プライマーを塗布したポリエステル基材を持つ可撓性記録媒体の製造

米国特許3821156に開示されたと同時に、二酸化ケイ素粒子と炭酸カルシウム粒子を含むポリエチレンテレフタレートをスロツトダイを通して役25℃に維持したキヤストドラム上に押しだしキヤストシートをつくつた。このキヤストシートを約80℃に維持しながら延伸比約3.5：1で長さ方向に延伸した。この長さ方向に延伸したフイルムを通常の方法でコロナ放電処理し、次に溶解したオレイン酸ナトリウムを0.75重量%を含む水溶液をリバースグラビアコーテイングによつて該延伸シート1000平方フイート当り0.5ウエット1bsの湿潤塗布量塗布した。

このコロナ処理した一軸延伸塗布フイルムを約100℃で乾燥した。次いでこのフイルムを延伸比3.9：1で横方向に延伸して二軸延伸フイルムとした。この二軸延伸フイルムを最高温度230℃でヒートセツトしてからロール状に巻き取つた。コーテイングの乾燥重量はフイルム1平方フイート当り9.6×10^{-7}1bsだつた。基材PETフイルムの厚さは約0.00092インチだつた。上記方法でつくつたプライマー塗布、粒子充填ポリエステルフイルムを磁気テープ製造者に送つた。磁気テープ製造者は上記で好ましいとして示したポリエステル−

15

ポリウレタンバインダーに二酸化クロムを分散させた強磁性体コーテイングを上記のフライマー塗布ポリエステルフイルムに塗布した。かくして製造した541フイート長の磁気テープをIBM3480テープハンドリング系用にデザインされたテープカートリツジに装着した。

例　2

可撓性磁気記録テープの剥離強度の評価

磁気テープ製造者から受けとつた前記「3480テープカートリツジ」2個を開け、その可撓性記録媒体（即ち磁気テープ）をとり出した。各テープを15インチ長のサンプルに切断した。

この磁気テープの剥離強度を各テープの強磁性体コーテイングに1本のラインを引き、15インチ長のサンプルの1端を平坦面をもつ金属板にテープと金属板間に「Permacel P−941」と同じ両面接着テープをはさむようにしてとりつけた。サンプルテープの自由端と金属／テープ積層物の

16

各々を10インチの初期ジョー分離間隔のインストロンモデルTM−4テスターの対向するジョーにとりつけた。ジョーが分離するとき引いた線から始まつて180°の角度においてテープが金属板から剥されるようにした。上記感圧接着テープからテープを剥離するに要した平均の力を表1に示す。

表　1

プライマー塗布ポリエステルフイルムの剥離強度

サンプルNo.	剥離強度（lb／インチ）
サンプル1	0.84
サンプル2	0.98

表1に示す剥離強度値はANSI基準である0.69lbs／インチをはるかにこえるものである。本発明のプライマー塗布ポリエステルフイルムに強磁性体コーテイングを塗布したテープ製造者の報告によればプライマー層を設けない場合の同一テープの剥離強度はANSI基準よりはるかに低い0.30lbs／インチだつた。

United States Patent [19]

[11] Patent Number: 4,775,593

[45] Date of Patent: Oct. 4, 1988

[54] FLEXIBLE MAGNETIC RECORDING MEDIA HAVING SUPERIOR PEEL STRENGTH

[21] Appl. No.: 59,995

[22] Filed: Jun. 9, 1987

[51] Int. Cl.[4] G11B 5/702; G11B 5/704

[52] U.S. Cl. 428/411.1; 427/39; 427/128; 427/129; 427/130; 427/131; 428/425.9; 428/480; 428/694; 428/900; 428/910

[58] Field of Search 427/131, 130, 129, 128, 427/39, 132; 428/695, 694, 340, 425.9, 411.1, 480, 910, 330; 360/134–136

[56] References Cited

U.S. PATENT DOCUMENTS

3,215,554	11/1965	Loots	428/510
3,387,995	6/1968	Senkpiel	428/900
3,512,930	5/1970	Bottjer	427/128
4,183,976	1/1980	Yamada	427/130
4,210,703	7/1980	Scantlin	428/900
4,214,035	7/1980	Herberger	427/40
4,428,974	1/1984	Okita	427/130
4,439,479	3/1984	Kanai	428/692
4,486,483	12/1984	Caines	428/341
4,525,424	6/1985	Bradshaw	427/128
4,666,769	5/1987	Miyata	428/323

OTHER PUBLICATIONS

Charles M. Hansen; "The Three Dimensional Solubility Parameter—Key to Paint Component Affinities: I. Solvents, Plasticizers, Polymers, and Resins", Journal of Paint Technology, vol. 80, #505, Feb. 1967; pp. 104–117.

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[57] ABSTRACT

A flexible magnetic recording media having superior peel strength is disclosed. The magnetic recording media comprises a primer coated polyester film which has been overcoated with a coating comprising ferromagnetic particles dispersed in a polymeric binder. The primer coating is preferably sodium oleate which has been in-line coated onto polyethylene terephthalate film. The ferromagnetic particles are preferably chromium dioxide particles. The polymeric binder is preferably a polyurethane reaction product of (A) a hydrolytically stable difunctional alcohol, (B) a chain extender, and (C) an aromatic diisocyanate.

26 Claims, No Drawings

FLEXIBLE MAGNETIC RECORDING MEDIA HAVING SUPERIOR PEEL STRENGTH

BACKGROUND OF THE INVENTION

This invention relates to flexible magnetic recording media which comprise a polyester substrate which has been coated with a magnetizable layer. More particularly, the present invention relates to a polyester film which has been coated with an adhesion-promoting primer layer prior to being coated with a coating composition comprising ferromagnetic particles dispersed within a polymeric binder.

Flexible magnetic recording media, such as audio, video, and computer tape, is typically manufactured by coating biaxially oriented polyester film with a solution of ferromagnetic particles, such as iron oxide or chromium oxide particles, and a polyurethane binder prepolymer which has been dissolved in a strong solvent such as tetrahydrofuran, methylethylketone, methylisobutylketone, or cyclohexanone. A strong solvent is typically used in order to render the polyester surface more receptive to the ferromagnetic coating. The solvent is typically removed during drying of the polyurethane pre-polymer.

The binders typically employed to manufacture flexible magnetic recording media, commonly referred to as "magnetic tape", are polyurethanes, polyvinyls, and polyurethane/polyvinyl graft copolymers. Other polymeric additives may be included to achieve the optimum hardness, flexibility and adhesion. In addition, lubricants, dispersants, and curing agents are typically included in the coating formulation.

Magnetic tape must possess exacting physical, chemical and magnetic properties. Physical requirements include an acceptable coefficient of friction, high modulus of elasticity and tensile strength, and good abrasion resistance. The polymeric binder must be adherent to the polyester substrate, be chemically compatible with the ferromagnetic particles, and exhibit long-term stability. Finally, the magnetic tape must have a high data storage capacity.

In recent years magnetic tape manufacturers have sought to increase the information density and overall quality of flexible magnetic recording media in order to accommodate recent improvements in recording format technology such as perpendicular recording, digital recording and decreasing track width. Manufacturers have demanded improvements in polyester substrates, particularly thinner films with enhanced mechanical properties, smoother surfaces and better adhesion to the ferromagnetic coating. The industry has also sought to develop thinner, smoother ferromagnetic coatings which incorporate smaller particles and which possess higher coercivity.

As part of this development effort, the American National Standard Institute ("ANSI") has issued a proposed American National Standard for coating adhesion to the tape substrate (ANSI Project #488, Third Draft, April 19, 1985). The proposed standard requires that the force required to peel a ferromagnetic coating from the tape substrate be greater or equal to 0.12N/mm (0.69 lbs/inch) of tape width. Although at least one magnetic tape manufacturer has produced magnetic tape which exhibits a peel strength greater than 0.69 lbs/inch, several commercially available magnetic tapes cannot meet this proposed ANSI standard.

One approach to ehhance adhesion is to subject the film surface to an electric corona discharge treatment prior to coating the film with the ferromagnetic coating. This approach is not favored due to the fire and explosion hazards associated with the use of high voltage electrical equipment in the presence of volatile organic solvents such as those employed in the production of flexible magnetic recording media.

Another approach has been to interpose an adhesive or primer layer between the polyester film and the ferromagnetic coating. For example, U.S. Pat. No. 3,215,554 discloses vinylidene chloride/acrylonitrile copolymers as a primer layer, while U.S. Pat. No. 3,387,995 suggests a polycondensate of terephthalic acid, isophthalic acid and ethylene glycol. U.S. Pat. No. 3,661,874 teaches the use of an aminized reaction product of an epoxidized polybutadiene will enhance adhesion. Finally, U.S. Pat. No. 4,210,703 discloses a cationically polymerized epoxy resin which improves adhesion and also prevents extraction of low molecular weight oligomers from the polyester substrate by the strong solvents employed in magnetic tape manufacture.

BRIEF SUMMARY OF THE INVENTION

The present invention relates to a flexible magnetic recording media which exhibits superior peel strength and which comprises

(i) an oriented polyester film;

(ii) a primer coating on at least one side of said film consisting essentially of a water-soluble alkali metal salt of an unsaturated fatty acid having from 10 to 18 carbon atoms;

(iii) a ferromagnetic coating applied over said primer coating, said ferromagnetic coating comprising ferromagnetic particles dispersed in a polymeric binder;

said primer coating being present at a weight effective to improve the adhesion of said ferromagnetic coating to said film.

In a preferred embodiment, the present invention relates to a high density computer tape having superior peel strength which comprises

(i) biaxially oriented polyethylene terephthalate film;

(ii) a primer coating on at least one side of said film consisting essentially of a water-soluble salt of oleic acid;

(iii) a ferromagnetic coating applied over said primer coating, said ferromagnetic coating comprising chromium dioxide particles dispersed in a thermoplastic polyurethane/polyester binder which is a reaction product of (A) a hydroxyl-terminated polyester which itself is a reaction product of a hydrolytically stable difunctional alcohol, (B) a chain extender, and (C) an aromatic diisocyanate such that the proportions of (A), (B) and (C) are selected to produce a polyester/polyurethane having a polyurethane content in the range of 37 to 40 percent by weight, of a molecular weight above 60,000 with the polyester segment molecular weight being in the range of about 500 to 1500.

In yet another aspect, the present invention relates to a magnetic recording media which is produced by the process comprising

(i) extruding a substantially amorphous polyester resin in sheet-like form and subsequently cooling said resin to form cast polyester sheet,

(ii) subsequently orienting said polyester sheet in the longitudinal direction, thereby forming monoaxially oriented polyester film,

(iii) coating said sheet with an aqueous solution consisting essentially of a water-soluble alkali metal salt of an unsaturated fatty acid having from 10 to 18 carbon atoms;

(iv) subsequently orienting said monoaxially oriented polyester film in the tranverse direction thereby forming biaxially oriented polyester film,

(v) heatsetting said biaxially oriented polyester film,

(vi) subsequently overcoating said polyester film with ferromagnetic coating composition comprising

(a) a solvent selected from the group consisting of tetrahydrofuran, methylethylketone, methylisobutylketone, and cyclohexanone,

(b) ferromagnetic particles,

(c) a pre-polymer,

(vii) curing said pre-polymer to produce a ferromagnetic coating comprising ferromagnetic particles dispersed in a polymeric binder.

DETAILED DESCRIPTION OF THE INVENTION

The preferred oriented polyester film for the purposes of this invention is made from polyethylene terephthalate, although the invention is equally applicable to film prepared from a crystallizable polyester resulting from the polycondensation of a glycol such as ethylene glycol or butanediol and mixtures thereof with terephthalic acid or mixtures of terephthalic acid and other dicarboxylic acids such as isophthalic acid, diphenic acid and sebacic acid, or their polyester forming equivalents. The polyester preferably contains non-ferromagnetic inorganic particles which improve the processibility of films made from such resin. Such polyesters may be conveniently prepared as disclosed in U.S. Pat. Nos. 3,821,156 and 3,884,870. The film may be produced by conventional techniques using well known apparatus.

For example, the particle-filled polyester is melted and extruded as an amorphous sheet onto a polished revolving casting drum to form a cast sheet of polymer. Thereafter, the film is axially stretched in one direction, either in the direction of extrusion ("machine direction") or perpendicular to the direction of extrusion ("transverse direction") in the case of monoaxially oriented film. Biaxially oriented film is stretched in both the longitudinal and transverse directions. The first stretching step of the cast sheet may be in either of these two orthogonal directions. The amount of stretching employed to impart strength and toughness to the film can range from about 3.0 to about 5.0 times the original cast sheet dimension in one or both directions. Preferably, the amount of stretching is in the range of from about 3.2 to 4.2 times the original dimension of the cast polyester sheet. The stretching operations are performed at temperatures in the range of from about the second order transition temperature to below the temperature at which the polymer softens and melts.

Where desired, the film is heat treated, after stretching, for a period of time necessary to crystallize the polyester film. Crystallization imparts stability and good tensile properties to the film. When polyethylene terephthalate is heat treated, it is subjected to a temperature in the range of between about 190° C. and 240° C. and, more preferably, in the range from about and 235° C.

The alkali metal salt primer coating of this invention may be applied as an aqueous solution in-line at one of three stages during the film manufacture: the pre-draw stage at the point between the casting of the amorphous sheet and the first stretch such as disclosed, for example, in British Pat. No. 1,411,564; the inter-draw stage subsequent to the uniaxial drawing but prior to biaxial stretching such as disclosed, for example, in U.S. Pat. No. 4,214,035; or the post draw stage subsequent to biaxial stretching, but prior to winding the film. Normally, the heat applied to the film prior to or during the stretching or final conditioning stages is sufficient to evaporate the water and other volatiles and thereby dry the primer coating, although a separate drying step would be required if the coating were applied subsequent to such heating steps.

In one preferred embodiment, the primer coating is applied after the film is uniaxially stretched, that is, after the film is stretched in one direction, but before the film is stretched in the orthogonal direction. In a still more preferred embodiment, the polyester film is first stretched in the longitudinal direction prior to coating. In this preferred embodiment, after longitudinal stretching, the film is coated by any of the well known techniques employed in the art. For example, coating may be performed by roller coating, spray coating, slot coating or immersion coating. In a preferred embodiment, the polyester film is coated by means of gravure roller coating. Also, the uniaxially drawn film may be subjected to an electric corona discharge by a corona discharge apparatus prior to coating as is disclosed in U.S. Pat. Nos. 3,520,959; 3,820,929; and 4,028,032. The corona discharge treatment decreases the hydrophobic character of the polyester film surface, which permits the aqueous coating to more easily wet the surface and thus improve the adhesion of the primer coating to the polyester film surface.

As indicated above, water-soluble alkali metal salts of unsaturated fatty acids having from about 10 to 18 carbon atoms are effective as adhesion promoting primer layers for PET film. By the term "water soluble" it is meant that the salts should be soluble in ordinary tap water at room temperature at concentrations of at least 0.4 g. per 100 cc water, more preferably at concentration in excess of 2.0 g. per 100 cc of water. Suitable water-soluble salts include the sodium or potassium salts of oleic, palmitoleic, ricinoleic and petroselinic acids. Sodium oleate and potassium oleate are preferred.

The salts used as PET primer coatings must also exhibit relative heat stability at temperatures in excess of 200° C. which are typically encountered during the drying and heat setting of oriented polyester film. Because of high heat stability, good water solubility and commercial availability, sodium oleate (sodium salt of cis-9-octadecenoic acid) is the preferred water soluble salt for the purposes of this invention.

As indicated above, the primer coating of the present invention is applied to the base polyester film as an aqueous solution and at a solids concentration within the range of about 0.2 to 15% by weight, preferably about 0.3 to 6% by weight. The preferred solids level is such as to yield a final dry coating weight of about 1×10^{-8} to 2×10^{-5} lbs: per square foot of film surface. Preferably, the range is from about 2×10^{-7} to 7×10^{-6} lbs per square foot, with 9.6×10^{-7} lbs. per square foot being the target weight.

The coating of this invention may be applied to one or both sides of the film, or it may be applied to one side

and a different coating such as a thermosetting acrylic or methacrylic applied to the opposite side, such as taught in U.S. Pat. No. 4,214,035. The coating may also in some cases be applied over a different primer coating to which it will adhere and which is already present on the surface of the film, such as a thermosetting acrylic coating as described in U.S. Pat. No. 3,819,773.

The aqueous solution consists essentially of the above defined acid salt and does not include other ingredients which would detract from the adhesion promoting characteristics thereof, such as particulate material, or polymeric ingredients in which the salt might be present in minor amounts as an emulsifier or dispersing agent. The term "consisting essentially of" is not intended however to exclude the presence of minor amounts of other water soluble ingredients such as water soluble dyes, pH regulating agents, and the like. Preferably, the aqueous solution consists of water (de-ionized or tap) and from about greater than 0.2% to about 10% by weight of one or more of the above defined acid salts.

The primer coated polyester film which forms a part of the present invention is disclosed in R. Caines, "Polyester Film Primed With Organic Acid Salts," U.S. Pat. No. 4,486,483, the disclosure of which is hereby incorporated by reference in its entirety.

As summarized above, a ferromagnetic coating composition is applied over the primer coated polyester film to produce the flexible magnetic recording media of the present invention. The ferromagnetic coating composition comprises ferromagnetic particles and a prepolymer dissolved in a strong solvent such as tetrahydrofuran, methylethylketone, methylisobutylketone or cyclohexanone. Mixtures of tetrahydrofuran and cyclohexanone are preferred.

The ferromagnetic particles may be any of the magnetic particles typically employed to produce ferromagnetic coatings. Such particles include acicular γ-Fe_2O_3, acicular γ-Fe_2O_3 which has either been doped or adsorbed with cobalt, chromium dioxide, and barium ferrite ($BaO.6Fe_2O_3$).

The practice of the preferred embodiment requires the use of ferromagnetic chromium dioxide particles dispersed in the polymeric binder. The chromium dioxide particles may be either stabilized or unstabilized against the effects of reductive degradation, as caused, for example, by the presence of water and certain easily oxidizable functional groups, such as hydroxyl or amine. Stabilized particles, such as those disclosed in U.S. Pat. Nos. 3,512,930 and 3,529,930, are preferred.

Generally, magnetic tape manufacturers desire chromium dioxide loadings as high as possible to maximize magnetic performance. However, an excessive amount of chromium dioxide may result in a low abrasion resistance and "oxide shed" whereby the ferromagnetic particles are abraded from the magnetic tape onto the surfaces of the tape handling equipment. Oxide shed will result in a high error rate and also foul the tape handling equipment.

The ferromagnetic coating of the present invention may contain from 70 to 90 weight percent of chromium dioxide particles, preferably from 80 to 90 weight percent. When the preferred polyurethane binder is employed the optimum chromium dioxide loading is about 84 percent.

Any conventional binder system which is typically employed in flexible magnetic recording media to anchor the ferromagnetic particles to the polyester substrate may be employed in the present invention. As stated above, commercial binder systems generally comprise polyurethanes, polyvinyls, and blends or copolymers of polyurethanes and polyvinyls.

Polyester-polyurethanes (a type of thermoplastic elastomer) are widely used as binders for flexible magnetic recording media. These materials are composed of segments or blocks of chemically different units. The relatively soft polyester segment is composed of a repeating series of ester-linked units, and is itself a short-chain-length polymer. The polyester segments are formed by the reaction of a difunctional carboxylic acid with difunctional alcohol, such that the ester is terminated substantially with alcohol groups. The polyester segment typically has a molecular weight of from 500 to 4000, corresponding to chains composed of from four or five ester units, to as many as twenty. The effect of an increase in the length of the relatively soft polyester segment is generally an increase in the elasticity of the binder. In general, it is the polyester portion of the polyester-polyurethane that determines the low temperature and the elastomeric properties of the polymeric binder.

The other component in the polyester-polyurethane binder is the relatively hard polyurethane segment. This portion possesses a markedly different chemical and mechanical behavior from that exhibited by the relatively soft polyester segments. In general, the polyurethane segment is a hard, rigid polymer with a melting point near 200° C. The polyurethane is usually prepared from a difunctional aromatic diisocyanate, such as 4,4'-diphenylmethane diisocyanate (MDI), which is reacted with a difunctional alcohol, such as 1,4-butanediol. The polyurethane usually has a very short chain length in the case of polyester-polyurethane elastomers used in solvent-based magnetic media coatings, because the polyurethane is not particularly soluble in the solvents commonly used in the manufacture of magnetic-tape coatings, such as tetrahydrofuran and methylisobutylketone. In addition, increasing the size of the polyurethane segments has been found to increase hardness, modulus, and flow temperature, at the expense of elasticity and toughness. For flexible magnetic recording tape, a balance of properties is sought so that the binder can be adapted to the requirements of magnetic recording.

A preferred polyester/polyurethane binder is disclosed in R. Bradshaw, "Flexible Magnetic Recording Media Having A Polyester Polyurethane Binder And Chromium Dioxide Pigment," U.S. Pat. No. 4,525,424 (June 25, 1985) the disclosure of which is expressly incorporated herein by reference. This patent discloses a polyurethane binder which is a reaction product of

(A) a hydroxyl-terminated polyester, which itself is a reaction product of a hydrolytically stable difunctional alcohol, preferably 1,4-cyclohexanedimethanol, and a dicarboxylic acid selected from the group consisting of adipic, azelaic and 1,12-dodecanedioic acid, and preferably a mixture thereof, such that the polyester exhibits a hydroxyl number of about 50 to about 250;

(B) a diol chain extender (selected from the group consisting of 1,4-butanediol; 1,3-butanediol; 1,5-pentanediol; 1,6-hexandiol; and 2,5-hexandiol, and preferably mixtures of 1,4-butanediol and 1,6-hexanediol), in order that the hydroxyl number of the polyester and the chain extender together is about 130 to about 300; and

(C) an aromatic diisocyanate such as 4,4'-diphenylmethane diisocyanate.

In addition, the constituents (A), (B) and (C) must be employed in a proportion to yield a polyurethane having a polyurethane segment content in the range of about 37 to 40 percent by weight.

Further, it is preferred that the molecular weight of the polyurethane be above 60,000; and that the molecular weight of the polyurethane's polyester segment be in the range of about 500 to 1500. If the molecular weight of the relatively soft polyester segment is much lower than 500, the chromium dioxide-filled coating will become too hard, and manufacturing processes may become difficult. If the molecular weight of the polyester segment is much higher than 1500, the coating may become too soft, and topographic changes, leading to smoothing, tends to occur. This has been found to degrade the frictional performance of the tape. The diol chain extender (B) improves the flexibility of the relatively hard polyurethane segment. In addition, the diol chain extender permits loading the binder with a high concentration of chromium dioxide particles without a prohibitive increase in brittleness.

The ferromagnetic coating composition may be applied to the primer coated polyester film by any of the conventional techniques employed in the art. The chromium dioxide particles are then oriented by subjecting the film to a magnetic field. The film is then dried to remove the strong solvent and subsequently calendered to produce a smooth coating surface. The calendering operation does not affect the magnetic orientation of the chromium dioxide particles. The pre-polymer is then ured, and the film is slit to the desired width, burnished, and cleaned. The flexible magnetic recording tape produced thereby may be wound upon a reel or loaded into a cartridge for ultimate use in computer equipment.

The polymeric binder may optionally include additives commonly employed in ferromagnetic coating compositions, such as dispersing agents, lubricants, antistatic agents, and fungicides. U.S. Pat. No. 3,649,541 contains an exemplary discussion of lubricants suitable for use in chromium dioxide-based ferromagnetic coatings.

The flexible magnetic recording media of the present invention may be optionally coated on its opposite surface with a "backcoat" to improve the mechanical performance of the media. Such backcoats may comprise the same binder system as the ferromagnetic coating, with a conductive, non-ferromagnetic particle, such as carbon black, in place of the chromium dioxide.

The peel strength adhesion of a given magnetic tape will depend upon a variety of factors including (a) whether an adhesion promoting coating has been applied to the tape substrate prior to coating it with the ferromagnetic coating, (b) the specific polymeric binder employed, (c) the degree of cure, (d) ferromagnetic coating thickness, (e) chromium dioxide particle/binder ratio and (f) solvent effects. Within a given binder system, the degree of cure is the most critical factor affecting adhesion. If the ferromagnetic coating composition is excessively crosslinked the binder becomes brittle and adhesion is poor. If the degree of cure is too low, the binder fails cohesively and may exhibit an unacceptably high coefficient of friction.

The Applicants believe that the primer coating of this invention will substantially improve the peel strength adhesion of a given magnetic tape, assuming that all other variables are held constant.

EXAMPLES

The following Examples illustrate the practice and advantages of specific embodiments of the present invention. In no event should these specie embodiments of the generic invention be construed as limiting the scope of the claims.

EXAMPLE I

Preparation of Flexible Recording Media Having a Primer Coated Polyester Film Substrate

Polyethylene terephthalate polymer containing silicon dioxide and calcium carbonate particles, as disclosed in U.S. Pat. No. 3,821,156 was melted and extruded through a slot die onto a casting drum maintained at a temperature of about 25° C. The melt froze to form a cast sheet. The cast sheet was longitudinally stretched at a draw ratio of approximately 3.5:1 while being maintained at a temperature of about 80° C.

The longitudinally drawn film was corona treated in conventional manner and subsequently coated with an aqueous solution containing 0.75% by weight of dissolved sodium oleate by reverse gravure coating with a nominal wet coating weight of 0.5 wet lbs./1000 ft^2 of forward drawn sheet.

The corona treated, logitudinally drawn, coated film was dried at a temperature of about 100° C. Thereafter, the film was stretched in the transverse direction at a draw ratio of 3.9:1 to produce a biaxially drawn film. The biaxially drawn film was heat set at a maximum temperature of 230° C., and wound into the form of a roll or cylinder. The nominal dry weight of the coating was 9.6×10^{-7} lbs. per square foot of film. The thickness of the base PET film was about 0.00092 inches.

Several rolls of the primer-coated, particle-filled polyester film produced according to the method illustrated above were sent to a magnetic tape manufacturer. The tape manufacturer coated over the primer-coated polyester film with a ferromagnetic coating comprising chromium dioxide particles dispersed within a polymeric binder believed to be the preferred polyester-polyurethane described above. 541 foot lengths of the magnetic tape so prepared was loaded into tape cartridges designed for use with the IBM 3480 tape handling system. Thirty such "3480 tape cartridges" were returned to the Applicants for evaluation.

EXAMPLE II

Peel Strength Evaluation of Flexible Magnetic Recording Media

Two of the "3480 tape cartridges" received from the magnetic tape manufacturer were opened and the flexible recording media (ie. magnetic tape) housed therein was removed. Fifteen inch samples of each tape were measured and cut.

The peel strength of the magnetic tape was evaluated by scribing a line through the ferromagnetic coating of each tape sample and attaching one end of the 15 inch long samples to a smooth metal plate by means of a two-side-coated adhesive tape equivalent to Permacel P-941 between the tape and the metal plate. The free end of the sample tape and the metal/tape laminate were each clamped to the opposing jaws of an Instron Model TM-4 tester with an initial jaw separation of 10 inches, such that as the jaws were separated the tape

was peeled from the plate at an angle of 180° beginning at the scribe line. The jaw separation rate was set at a nominal 10 inch/minute. The average force required to peel the tape from the pressure-sensitive adhesive tape is reported in Table I.

TABLE I

PEEL STRENGTH VALUES OF PRIMER COATED POLYESTER TAPES

Sample No.	Peel Strength (lb/in)
Sample 1	0.84
Sample 2	0.98

The peel strength values reported in TABLE I above exceed the proposed ANSI standard of 0.69 lbs/inch. The tape manufacturer who coated the Applicants' primed polyester film reported that magnetic tape manufactured using an unprimed polyester film sample exhibited a peel strength of 0.30 lbs/inch, well below the ANSI standard.

We claim:

1. A magnetic recording media having superior peel strength comprising

(i) an oriented polyester film,

(ii) a primer coating on at least one side of said film consisting essentially of a water-soluble alkali metal salt of an unsaturated fatty acid having from 10 to 18 carbon atoms,

(iii) a ferromagnetic coating applied over said primer coating, said ferromagnetic coating comprising ferromagnetic particles dispersed in a polymeric binder;

said primer coating being present at a weight effective to improve the adhesion of said ferromagnetic coating to said film.

2. The magnetic recording media of claim 1 wherein said ferromagnetic particles are selected from the group consisting of ferric oxide, chromium dioxide, and barium ferrite.

3. The magentic recording media of claim 2 wherein said ferromagnetic particles comprise ferric oxide.

4. The magnetic recording media of claim 3 wherein said ferric oxide particles additionally have cobalt adsorbed onto their surface.

5. The magnetic recording media of claim 2 wherein said ferromagnetic particles comprise chromium dioxide.

6. The magnetic recording media of claim 1 wherein said oriented polyester film is biaxially oriented polyethylene terephthalate film.

7. The magnetic recording media of claim 6 wherein said unsaturated fatty acid is selected from the group consisting of oleic, palmitoleic, ricinoleic, and petroselinic.

8. The magnetic recording media of claim 7 wherein said unsaturated fatty acid is oleic acid.

9. The magnetic recording media of claim 8 wherein said primer coating consists essentially of sodium oleate.

10. The magnetic recording media of claim 6 wherein said polymeric binder comprises a polyurethane/-polyester block copolymer.

11. The magnetic recording media of claim 10 wherein said polyurethane/polyester block copolymer is the reaction product of

(A) a hydroxyl-terminated polyester, which itself is a reaction product of a difunctional alcohol having hydrolytic stability, and a dicarboxylic acid selected from the group consisting of adipic acid, azelaic acid, 1,12-dodecanedioic acid, and mixtures thereof, said polyester having a hydroxyl number of about 50 to 250;

(B) a chain extender comprising a primary or a secondary alcohol selected from the group consisting of 1,4-butanediol; 1,3-butanediol; 1,5-pentanediol; 1,6-hexandiol; and 2,5-hexandiol, the resultant hydroxyl number of said polyester and chain extender being about 130 to 300; and

(C) an aromatic diisocyanate;

wherein the relative proportions of (A), (B) and (C) are selected to produce a ferromagnetic coating having a polyurethane segment content in the range of about 37 to 40 percent by weight, and a polyester segment molecular weight in the range of about 500 to 1500, wherein said ferromagnetic particles comprise chromium dioxide particles, and wherein said particles are present in the range of from 80 to 88% by weight of said ferrmmagnetic coating.

12. The magnetic recording media of claim 11 wherein said difunctional alcohol is 1,4-cyclohexanedimethanol.

13. The magnetic recording media of claim 12 wherein said chain extender is 1,4-butanediol.

14. The magnetic recording media of claim 11 wherein said aromatic diisocyanate is 4,4-methylene-bis-(1,4-phenylene) diisocyanate.

15. The magnetic recording media of claim 11 further having a backcoat layer comprising non-ferromagnetic particles dispersed in a polymeric binder.

16. A magnetic recording media produced by the process comprising

(i) extruding a substantially amorphous polyester resin in sheet-like form and subsequently cooling said resin to form cast polyester sheet,

(ii) subsequently orienting said polyester sheet in the longitudinal direction, thereby forming monoaxially oriented polyester film,

(iii) coating said sheet with an aqueous solution consisting essentially of a water-soluble alkali metal salt of an unsaturated fatty acid having from 10 to 18 carbon atoms;

(iv) subsequently orienting said monoaxially oriented polyester film in the transverse direction, thereby forming biaxially oriented polyester film,

(v) heatsetting said biaxially oriented polyester film,

(vi) subsequently overcoating said polyester film with a ferromagnetic coating composition comprising

(a) a solvent selected from the group consisting of tetrahydrofuran, methylethylketone, methylisobutylketone, and cyclohexanone,

(b) ferromagnetic particles,

(c) a pre-polymer,

(vii) curing said pre-polymer to produce a coating comprising ferromagnetic particles dispersed in a polymeric binder.

17. The film of claim 16 wherein said film is subjected to a corona discharge treatment prior to the application of said aqueous solution.

18. The film of claim 17 wherein said oriented polyester film is biaxially oriented polyethylene terephthalate film.

19. The film of claim 18 wherein the primer coating produced by application of said aqueous solution is present at a weight within the range of about 1×10^{-8} to 2×10^{-5} lbs per square foot of film surface on a dry weight basis.

20. The film of claim 19 wherein said primer coating consists essentially of an alkali metal salt of oleic acid.

21. The film of claim 20 wherein said primer coating consists essentially of sodium oleate.

22. The magnetic recording media of claim 16 wherein said prepolymer comprises (A) a hydroxyl-terminated polyester which itself is a reaction product of a hydrolytically stable difunctional alcohol, (B) a chain extender, and (C) an aromatic diisocyanate.

23. The magnetic recording media of claim 22 wherein said difunctional alcohol is 1,4-cyclohexanedimethanol.

24. The magnetic recording media of claim 22 wherein said chain extender is 1,4-butanediol.

25. The magnetic recording media of claim 22 wherein said aromatic diisocyanate is 4,4-methylene-bis-(1,4-phenylene) diisocyanate.

26. A magnetic recording media produced by the process comprising

(i) extruding a substantially amorphous polyester resin in sheet-like form and subsequently cooling said resin to form cast polyester sheet,

(ii) coating said sheet with an aqueous solution consisting essentially of a water-soluble alkali metal salt of an unsaturated fatty acid having from 10 to 18 carbon atoms;

(iii) subsequently orienting said polyester sheet in the longitudinal direction, thereby forming monoaxially oriented polyester film,

(iv) subsequently orienting said monoaxially oriented polyester film in the transverse direction, thereby forming biaxially oriented polyester film,

(v) heatsetting said biaxially oriented polyester film,

(vi) subsequently overcoating said polyester film with a ferromagnetic coating composition comprising

(a) a solvent selected from the group consisting of tetrahydrofuran, methylethylketone, methylisobutylketone, and cyclohexanone,

(b) ferromagnetic particles,

(c) a pre-polymer,

(vii) curing said pre-polymer to produce a coating comprising ferromagnetic particles dispersed in a polymeric binder.

* * * * *

(1) Title:

Total Patent Costs (Filing and Maintenance Costs)

(2) Date:

October, 1996 (The 27th General Meeting in Hiroshima)

(3) Source:

1) Source: PIPA
2) Group: Japan
3) Committee: #1

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(5) Keywords:

costs, unity of invention, maintenance fee

(6) Provisions of Laws: None.

(7) Summary:

We made an estimate of the total costs of obtaining and maintainig patents in Japan, the U.S. and the EPO, and

made a comparison among them. Based on such estimate, we also studied measures to reduce patent costs. The summary of these studies is as follows:

1) The total costs in the EPO are higher than those in the U.S. and Japan.

2) Maintenance fees after issue in the EPO and Japan accounts for more than half of the total costs.

3) The difference in agent fees in the EPO is negligibly small in amount among German agents, French agents and British agents.

4) One of the factors of the high costs of the EPO is high translation cost.

5) It is possible to reduce the total EPO costs to the level of the total USPTO costs, by working out the strategy of a patent application taking into consideration of the scope of "the unity of invention".

Based on this study and finding, we are scheduled to have a panel discussion on the total patent costs at the coming General Meeting.

1. Preface

With the progress of the globalization of company activities, it is becoming a more important corporate strategy nowadays to acquire patents actively in many of the foreign countries. Recently the so-called harmonization of patent system of each country in the world has been under way especially after the successful conclusion of TRIPs Agreement. Thus the advanced worldwide patent system is likely to be realized in future.

Under these circumstances, Mr. Berrier of GE made the presentation of a thesis on the necessity of reducing worldwide patent costs at the 26th PIPA General Meeting in San Francisco last October, and this aroused the great interest of the member companies of PIPA in the total patent costs over again.

We tried to make an estimate of the total patent costs in which each member company is highly interested, and sought to make a proposal on this issue after analyzing the current problems involved.

2. Estimation of Total Patent Costs

Mr. Berrier reported the costs estimated relating to the patent applications by American applicants to the Japanese Patent Office (hereinafter called JPO) and EPO. In the same way, we estimated first the total patent costs applied for by the Japanese applicants to the USPTO or the EPO, and made a comparison between Mr. Berrier's estimates and ours. Our study showed the same result as Mr. Berrier's finding and supported his report: that is, with respect to total patent costs, the patent costs in the U.S. were lowest in amount, followed by Japan and the EPO with the designation of five countries (Germany, England. France, Italy, and Holland) showed highest in amount.

2-1. Assumed Preconditions

The assumed preconditions for our estimates are shown in Table 1.

As shown in item 4 of the Table 1 the application to the USPTO and to the EPO is assumed by way of the channel from a Japanese agent to a local agent. In fact, this assumption corresponds with the practice of Japanese companies.

2-2. Result of Estimates

Figure 1 shows the total patent costs aggregating the individual application to Germany, France, England, Italy and Holland, and the total costs in the case of EPO application designating these 5 countries (the EPC route). As regards the EPC route, the total costs were compared among the cases via German agent, via British agent and via French agent, in order to verify the difference in the cost of agents of those countries. Further, Figure 1 shows the total patent costs in the case of a patent application to Japan and the U.S.. You will find that the total costs of EPO application designating above 5 countries are lower than the aggregate costs of the individual application to the above 5 countries in Europe. This advantage is deemed to have derived from so-called harmonization by EPC Treaty. However, the total costs in the EPC route are still far more expensive than the total costs in Japan or the U.S.. No significant difference was found in cost among the agents of those European countries.

Looking at the Figure 1, you will also understand that the maintenance fees after the issue of a patent exceeds half of the total costs.

The Figure 1 shows the same trend of the estimated costs as pointed out by Mr. Berrier, regardless of the difference of the assumed preconditions.

Figure 2 shows the total patent costs per application in the case of a patent application to Germany, France, England, Italy and Holland respectively.

Figure 3 shows the agent fees and the official fees paid from fiking to issue in the U.S., Japan and the EPO. You will find that in the EPO, both agent fees and official fees are more expensive than corresponding the fees in Japan and the U.S..

Figure 4 shows the breakdown of agent fees into that of Japanese agents and the local agents, and a further breakdown into translation fees and other fees.

Exclusive of translation fees, the difference in the agent fees (commission) in Japan, the U.S. and the EPO is not large, and the high agent fees in the EPO is found to be caused by expensive translation fees.

Figure 5 shows the curves of the cumulative costs of maintenance fees. Since the U.S. maintenance fees for the 4 years from 5th year to 8th year from grant ($990) is due and payable 3 years and half after the original grant, this four year fee was allocated equally to each year ($247.5 each to 5th through 8th year), so as to enable us to compare the U.S. maintenance fees with the fees of other countries.

There is a wide variety in the amount of annual maintenance fees among countries, and the rate of increase of the fees is classified into the following patterns:

Type A: the payment is initially low but grows in geometric progression with the lapse of time (Japan and Germany).

Type B: the payment is high initially and thereafter remains almost constant (Holland).

Type C: the payment is initially low and thereafter increases by almost same amount (the U.S. and France).

3. Measures to Reduce Costs

On the basis of the above cost analysis, Çóe studied measures to reduce patent costs as follows.

3-1. Patent Application Strategy Taking "Unity of Invention" into Account

Our cost estimate showed the same result as pointed out by Mr. Berrier that the total patent costs in Japan or the EPO, especially the costs in the EPO are higher than the costs in the U.S., but there is a good possibility that the costs in Japan and the EPO will be reduced.

We must bear in mind that since our cost estimate is based on the cost per one application, it is subject to change depending on the scope of an invention to be covered by one application filed with the relevant patent office (that is, the scope of "the unity of invention", or "the unity of application" in Japanese usage). As far as the scope of "the unity of invention" is concerned, the scope allowed by the JPO and the EPO is deemed to be wider than that allowed by the USPTO.

Table 2 illustrates conceptually the scope of "the unity of invention" deemed to be allowed by the JPO, EPO and the USPTO with respect to the inventions "in the same category".

In Japan, in the case where there are multiple inventions "in the same category", they may be covered by one application provided that these inventions are the same in industrial applicability and in "the problems to be solved", or are the same in industrial applicability and in "the substantial part of the features" indispensable for the constitution of the invention. As for the EPO, the groups of inventions that are related to each other so as to form "a single general inventive concept" may be covered by a single application. Therefore, while the inventions in the form of so-called "combination / subcombination" can not be dealt with under "the unity of invention" by the

USPTO unless the specified requirements are satisfied, they may be deemed well within the scope of "the unity of invention" by the JPO and the EPO. Further, the scope of "the unity of invention" allowable in Japan seems to be wider to some extent than that allowed by the EPO, since in Japan "a single general inventive concept" is not examined as long as the inventions are the same in "the problems to be solved" and in "the substantial features" of the inventions.

Table 3 illustrates conceptually the scope of "the unity of invention" deemed to be allowed by the JPO, EPO and the USPTO with respect to the inventions "in the different categories". In the case of the inventions "in the different categories", where the inventions relate to products, the inventions of process of manufacturing the product, the inventions of process of using the product or the inventions of machines or other things used for manufacturing the product are deemed to satisfy the requirements of "the unity of invention" by JPO and EPO. And where the invention relates to process, the inventions of process and the inventions of machines and other things used directly in the working of the invention are also deemed to satisfy the requirements of "the unity of invention" by JPO and EPO. Further, in Japan, for example, where the invention of an improvement on the specified invention of the product satisfies the requirements of "the unity of invention" in the case of the inventions "in the same category" as shown in Table 2, the invention of process of manufacturing the improved product falls within the scope of "the unity of invention", thus, all of the three inventions, that is, the specified invention of the product, the invention of the improved product and the invention of process of manufacturing the improved product may be covered by a single application.

On the other hand, in the U.S. it would be difficult in practice to cover by one application the multiple

inventions that the scope of search by examiners are different .

Considering the difference in the scope of "the unity of invention", it is considered possible for us to reduce the costs of an application to the EPO to the U.S. level by working out an appropriate measure for such a foreign application: for instance, in the technical field where the multiple inventions can be united, three inventions could be covered by one application to the EPO, while three separate applications are required in the U.S..

In this respect, an example is shown in the attached Table 4. "Invention 1" represents the invention of "a hollow cellulose fiber having specific structure and function ", "Invention 2" represents the invention of " a fluid dialysis apparatus containing a hollow cellulose fiber in Invention 1", and "Invention 3" represents the invention of "the process of manufacturing the hollow cellulose fiber in Invention 1". In Japan, it is possible to cover these three inventions by a single application, since these three inventions come under Article 37 (iii) of the Patent Law of Japan, and satisfy the requirements of "the unity of invention".

As for the application to the EPO in this case, the application was granted to a single application, though the examiner pointed out that the "Invention 1" should be referred to in the claims. By contrast, in the U.S. the examiner entered a "restriction requirement" and it was necessary to file divisional applications to obtain the issuance of a patent for each invention.

Figure 6 shows the total costs in Japan, the U.S. and the EPO in this example. The assumed preconditions are the same as in the Table 1 except that the number of claims were changed to 9. As seen in this example, it is possible to reduce the patent costs in Japan and the EPO by covering by a single application those multiple inventions which are

not allowed to be united under the unity of invention in the U.S..

3-2 Reduction of Claims in Number in Case of Application to Japan

When we observe specifications in the applications filed by the U.S. applicants, we notice many patent claims which appear to be unnecessary from the viewpoint of the Japanese patent system and practice. In Japan, the reduction of claims in the scope of the invention is allowed to overcome an objection or a trial for invalidation as long as it does not include a new matter, and the effect of the claim reduction retroacts to the date of the application. The idea of intervening right as seen in the U.S. is not adopted in Japan

Figure 7 shows the cumulative amount of maintenance fees in Japan. In the case of 10 claims, the cumulative amount of maintenance fees for 16 years is about one million yen larger than that in the case of 2 claims. In Japan if we cut one claim, we can save 10% of the maintenance fees and 3% of examination fees .

3-3 Maintenance Fee after Issuance

In Japan, maintenance fees after issue accounts for more than half of the total patent costs. Therefore, saving the maintenance fees is most effective in the reduction of the total costs.

As mentioned before, in any country the maintenance fees increases in amount with the elapse of time, but the growth rates are classified into the following three patterns:

Type A: the payment is initially low but grows in geometric progression with the lapse of time (Japan and Germany).

Type B: the payment is high initially and thereafter remains almost constant (Holland).

Type C: the payment is initially low and thereafter increases by almost same amount (U.S. and France).

It may be worthwhile to consider this fact in relation to the timely review of the necessity to maintain the patents. It would be effective in saving necessary manhour and cost if we set up adequate intervals to review whether the maintenance of the patent is necessary on a country basis. To be concrete, It would be advisable to lengthen the interval to review the annuity payment during the period where the annuity payment is low in amount, and to shorten the interval to review during such a period that the payment is high in amount. Table 5 shows the advisable interval to review the payment. In the case of Type A, it is desirable to prolong the interval to review the payment in an early period of the patent term, and to shorten the interval to review in the later period of the patent term. This measure would enable us to save necessary manhour to review the payment and to reduce the total cost of maintenance fees by avoiding unnecessary payment.

Some of the European countries adopt the system ("license of right") that a discount in the payment is afforded to a patentee in the case where the license of the patent is declared by him (for instance, 50% discount applicable in Germany, England, Italy and Spain; 40% discount applicable in France). Therefore, it is possible to reduce the maintenance fees by half by utilizing this benefit in those countries. Figure 8 shows the total costs of maintenance fees paid from the fifth year after filing until the expiration of the patent term, assuming that the patent is registered 4 years after filing.

This discount system ("license of right") is deemed to be quite reasonable in that in return for making the patent widely available to the public the maintenance fees discount is afforded to the patentee as benefit. However,

the exclusive right of the patent right seems to be diluted at the same time under this system.

4. Conclusion

We will have a discussion about the utilizing "the unity of invention" and "the license of right" for measures to reduce costs at the General Meeting.

We have reported the results of our survey on the total patent costs. However, while we are proceeding with the study, a question came upon us as to whether the lower the total costs of patents are, the more they are beneficial to us.

If the total patent costs reach such a level that companies do not any more feel it burdensome, each company would tend to file an application for a patent with respect to all the results of its research and development without conducting a technological evaluation on the invention. As a result, there would be a flood of patent applications (many of which are rather hairsplitting) in the world, the examination of the applications would be delayed to a large extent, and the wholesome and normal corporate activities are hampered by the trivial patents which teem in the world.

Therefore, we think that the total patent costs should be high enough to such extent as to motivate companies to evaluate the invention for the purpose of determining whether they should file a patent application in respect of each invention.

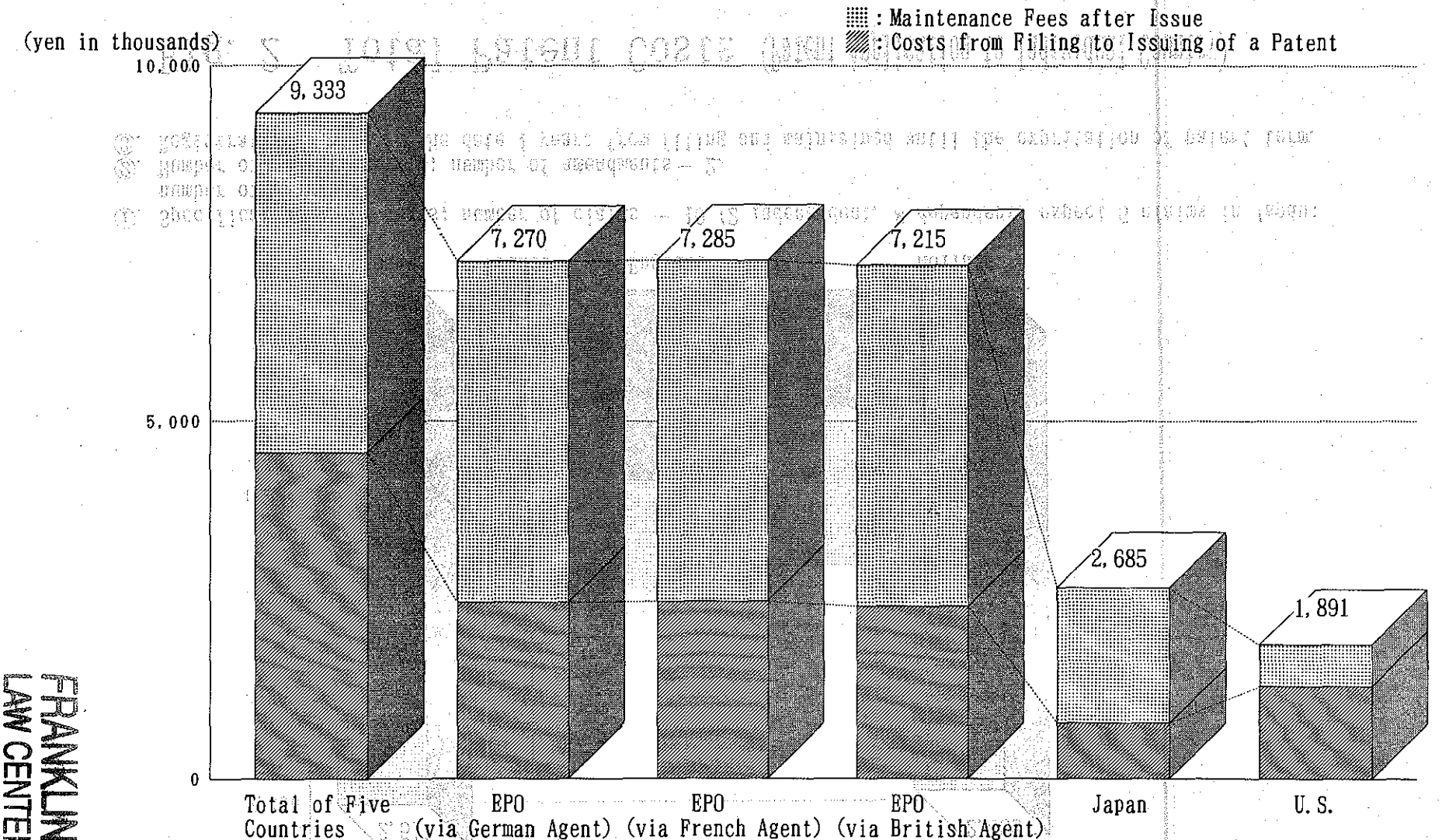
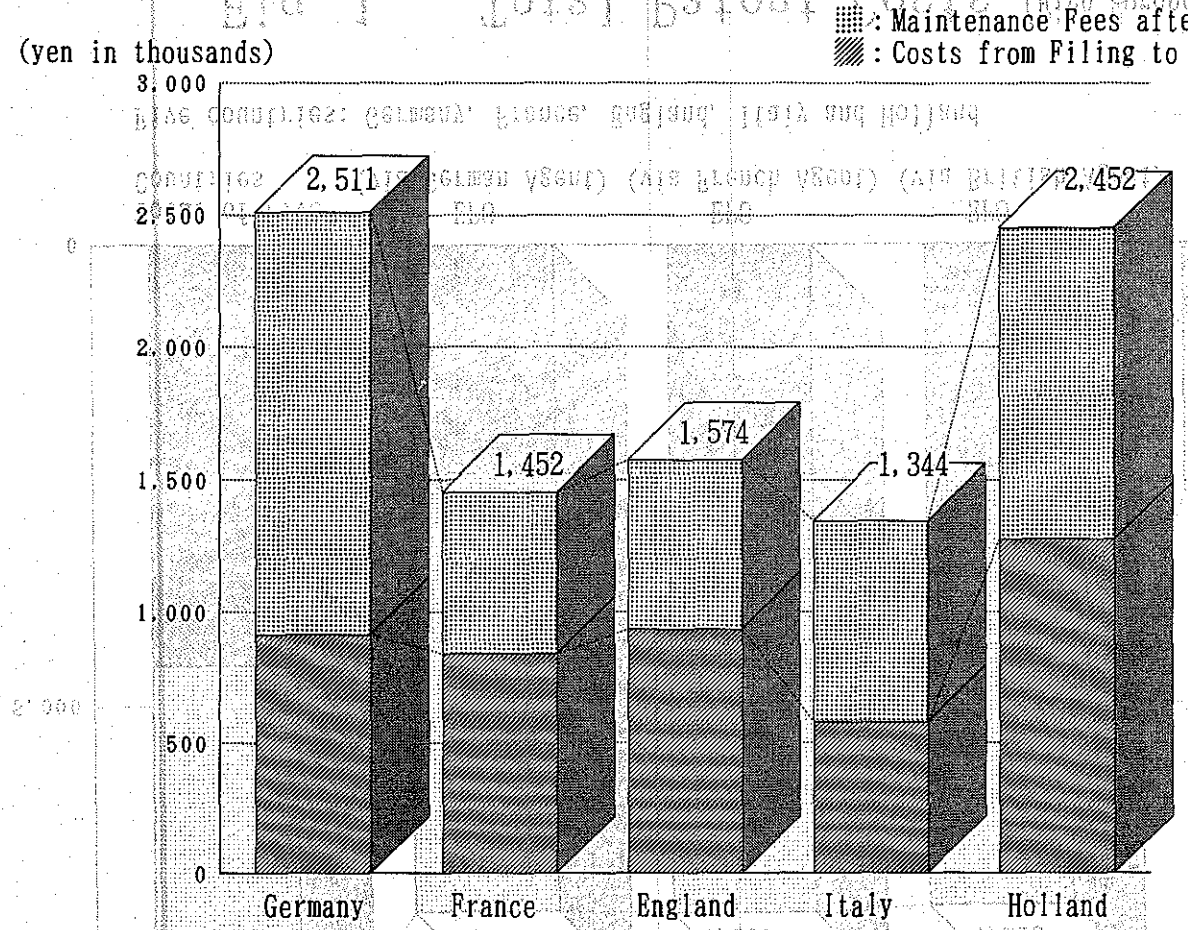


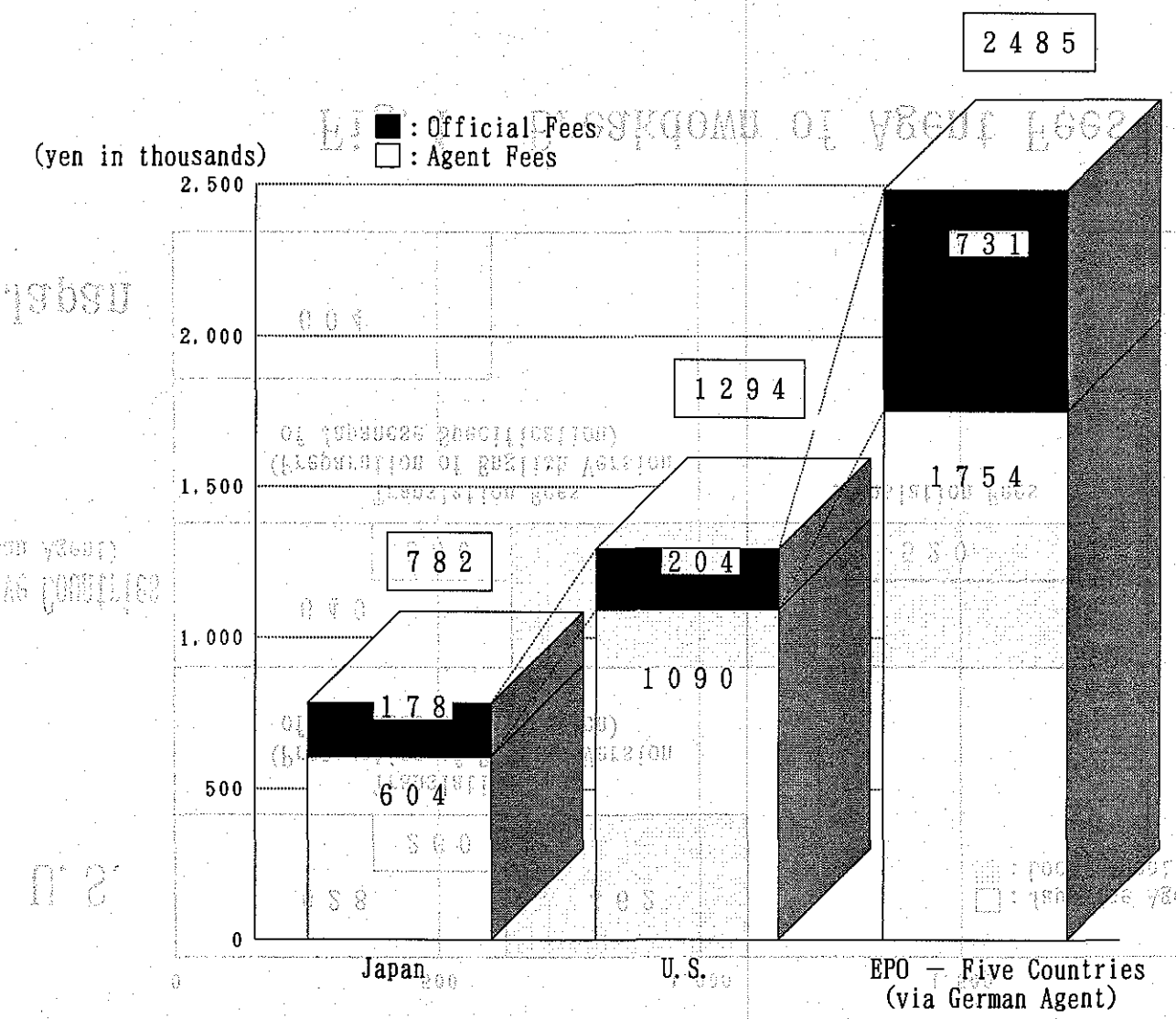
Fig. 1 Total Patent Costs (Five European Countries)

FRANKLIN PIERCE
LAW CENTER LIBRARY
CONCORD, N.H.



① Specification — 20 pages; number of claims — 10 (2 independent, 8 dependent) expect 5 claims in Japan; number of drawings— 2.
② Number of rejection — 2; number of amendments— 2.
③ Registration - made at the date 4 years from filing and maintained until the expritation of patent term.

Fig. 2 Total Patent Costs (Patent Application to Individual Country)



Breakdown of Costs from Filing to Issue
(Agent Fees and Official Fees)

Fig. 3

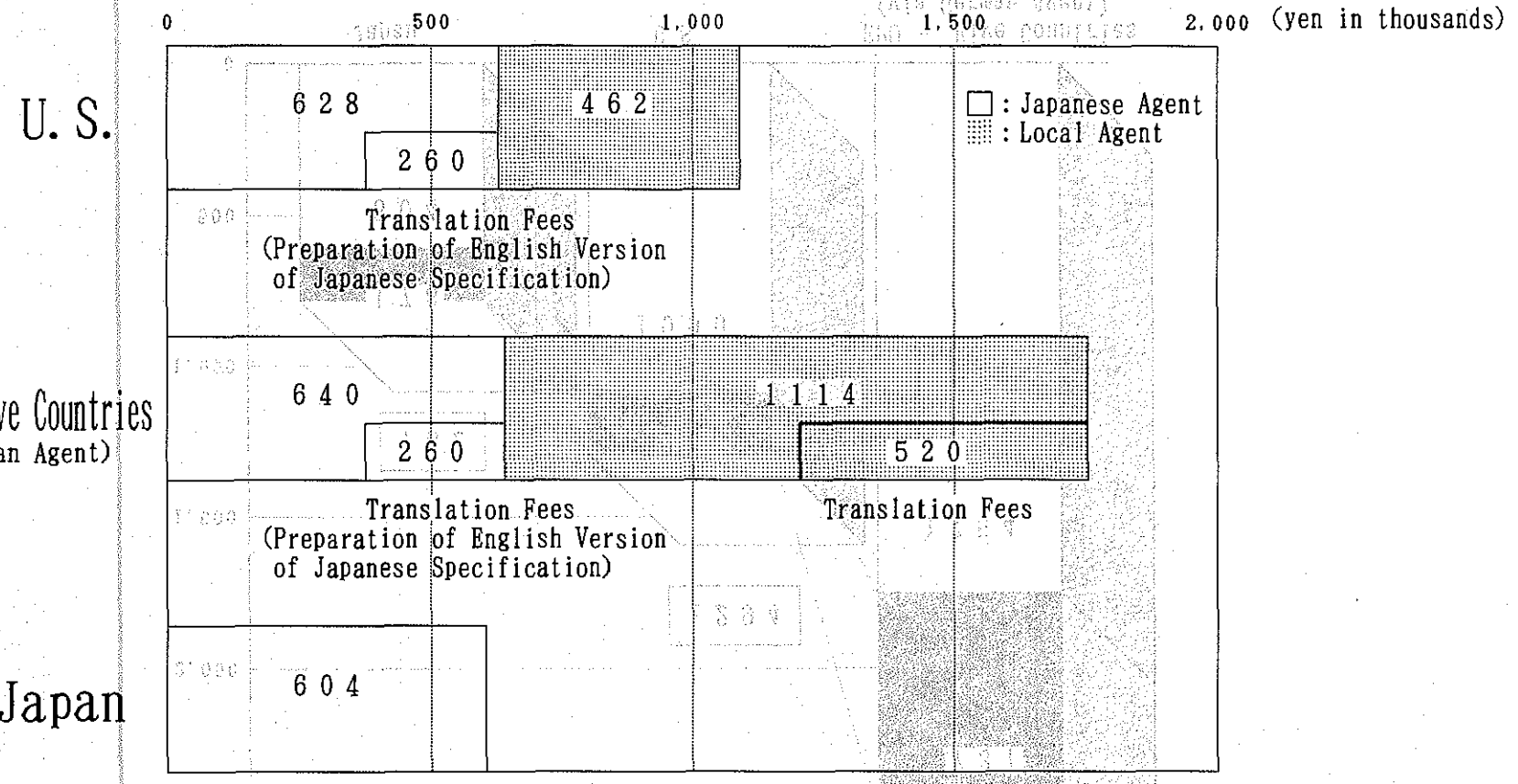
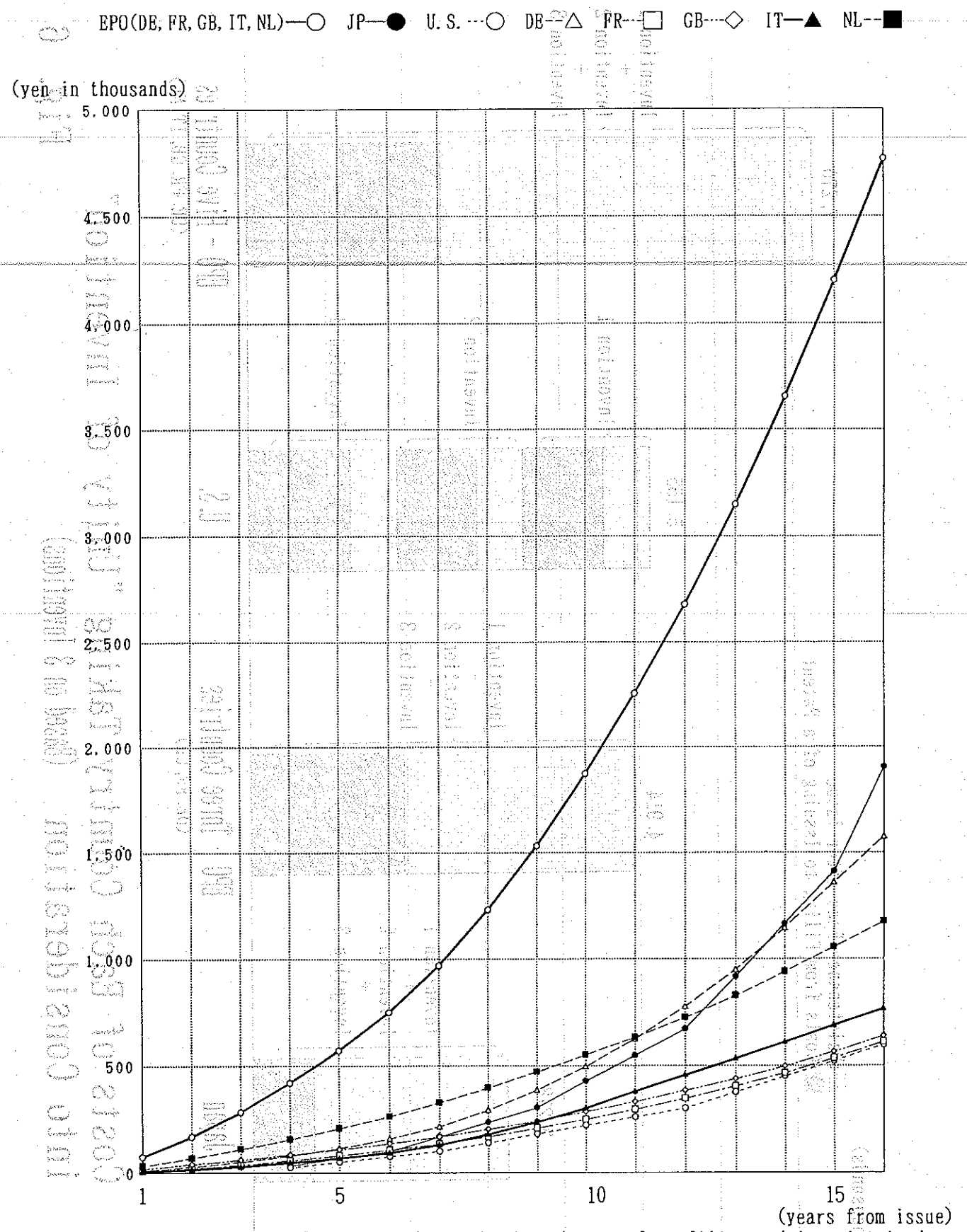
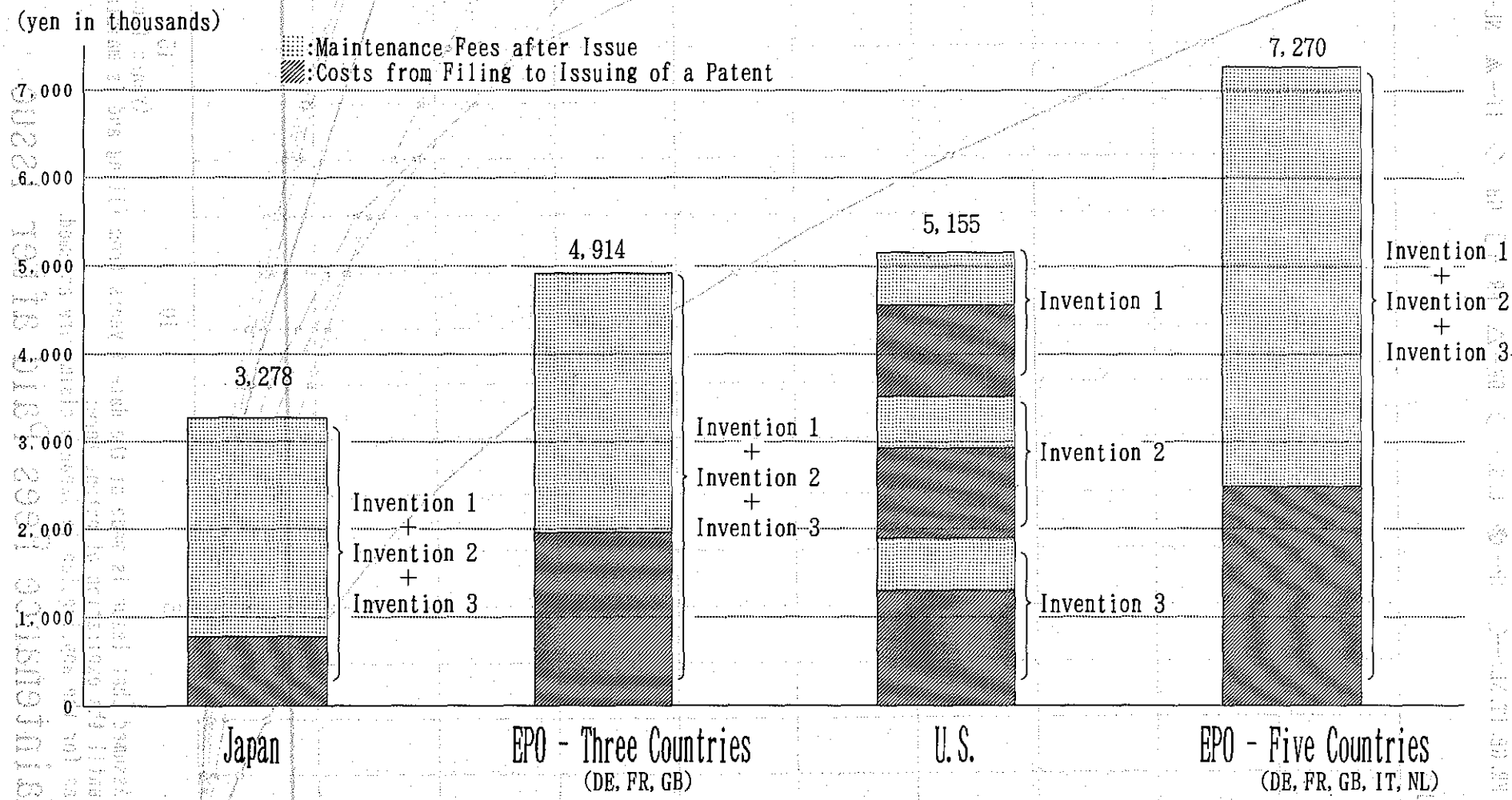


Fig. 4 Breakdown of Agent Fees



Note: Assumed that Issue is made at the date 4 years from filing and is maintained until the expiration of patent term;
as for the application in Japan 5 claims are assumed.

Fig.5 Maintenance Fees Paid after Issue



Costs of Each Country Taking "Unity of Invention" into Consideration (Based on 3 Inventions)

Fig. 6

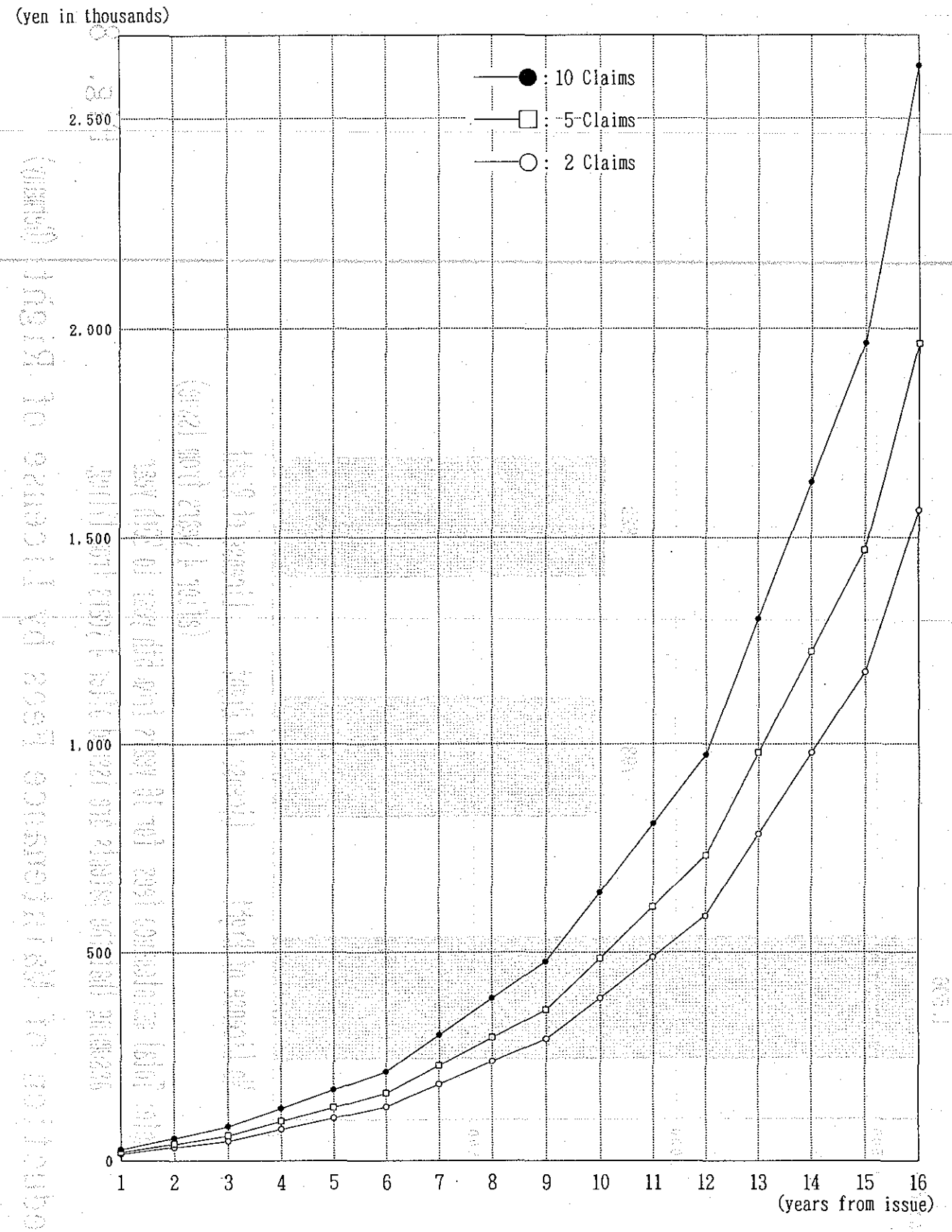
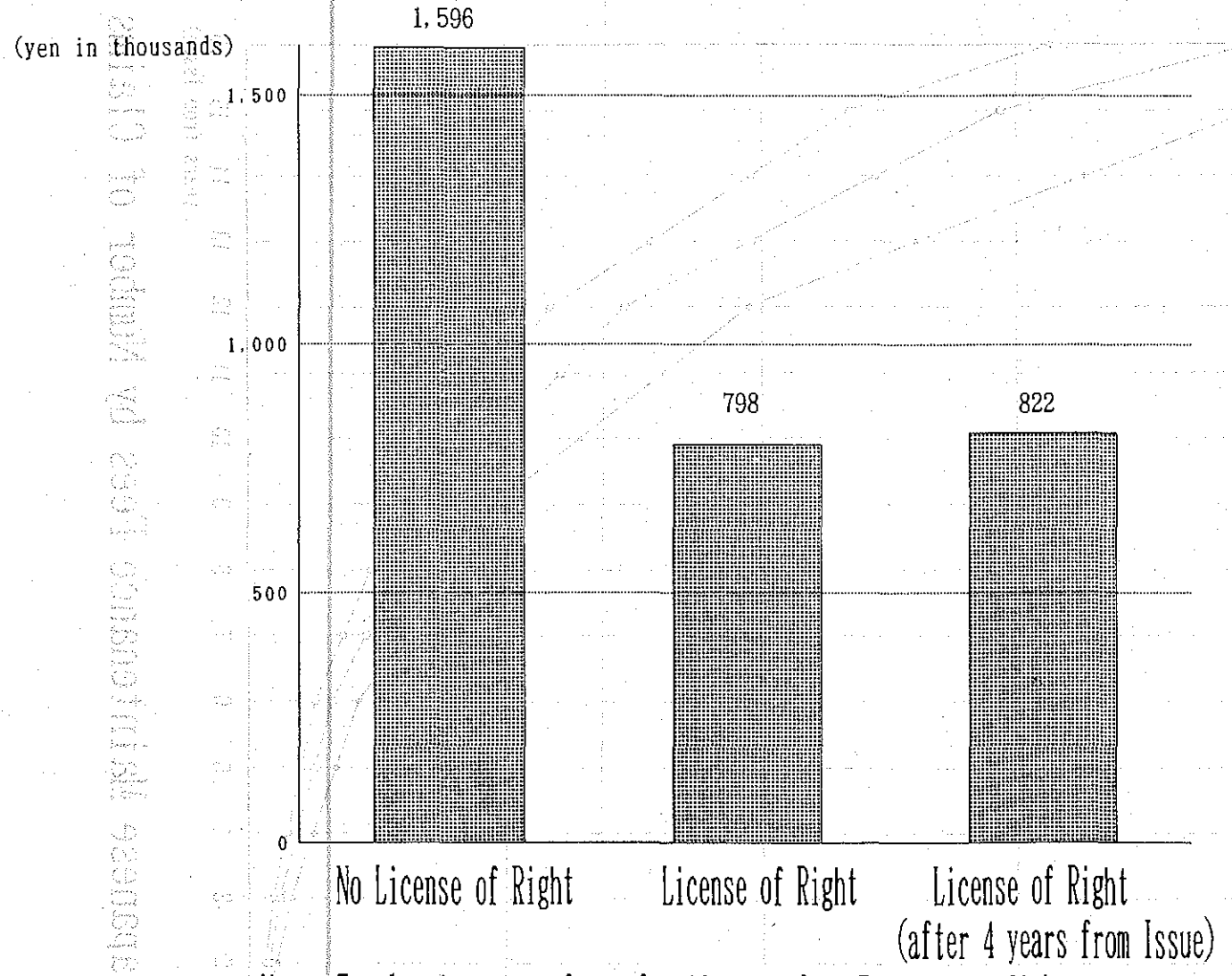


Fig. 7 Japanese Maintenance Fees by Number of Claims



Note: Total maintenance fees for 16 years from 5th year to 20th year assuming that the patents are issued after 4 years from filing.

Fig. 8

Reduction of Maintenance Fees by License of Right (Germany)

Table.1 Assumed Preconditions of Cost Estimate

1. Specification; 20 pages , 10 claims (2 indepedent, 8 dependent), 2 drowings, provided that an application to JPO cover 5 claims (according to JPO's report, the average number of claims is 4.7.)
2. Two rejections and two amendments assumed.
3. The issue of patents is assumed to be made after 4 years from filing and to be maintained until the expiration of the patent term.
4. Applications to the U.S. PTO and to the EPO are assumed to be filed via Japanese agents and local agents.
5. Currency Exchange Rates;
   $1 = ¥100 £1 = ¥165 DM1 = ¥72 FF1 = ¥20
   1(Itarian) Lila = ¥0.071 1(Dutch) Guilder = ¥65
6. Agent fees and translation fees are the average costs of agents with which the companies of our working group member have business relationship.

Table. 2

Comparsion of " Unity of invention " among Countries – Part 1

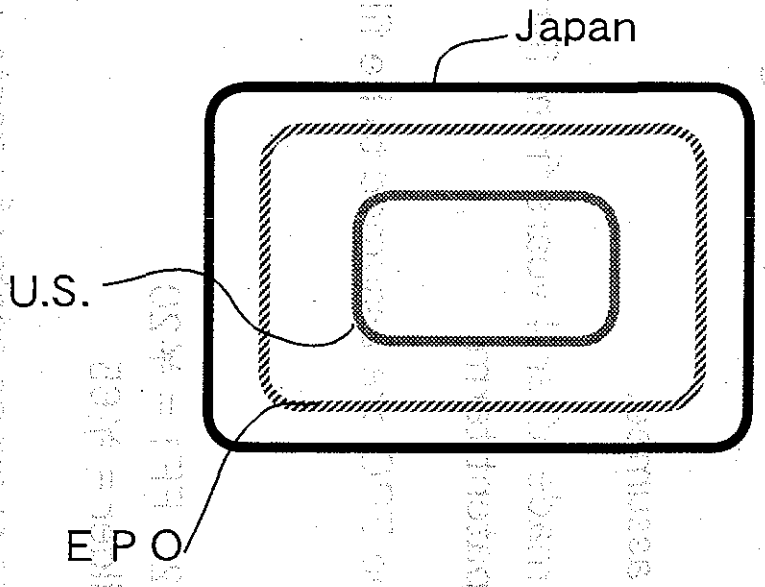
Japan ; Section 37 , Japanese Patent Low

EPO ; Articles 82 , European Patent Convention and Rule 30 thereof

U.S. ; Articles 112 and 121, U.S. Patent Law , and Rule 1.141 – 1.146 , MPEP 705, 806.5, 809.3

Same Category

1 Same Industrial Applicability & Same " Problems to Be Solved "



2 Same Industrial Applicability & Same " Substantial Features " of Invention

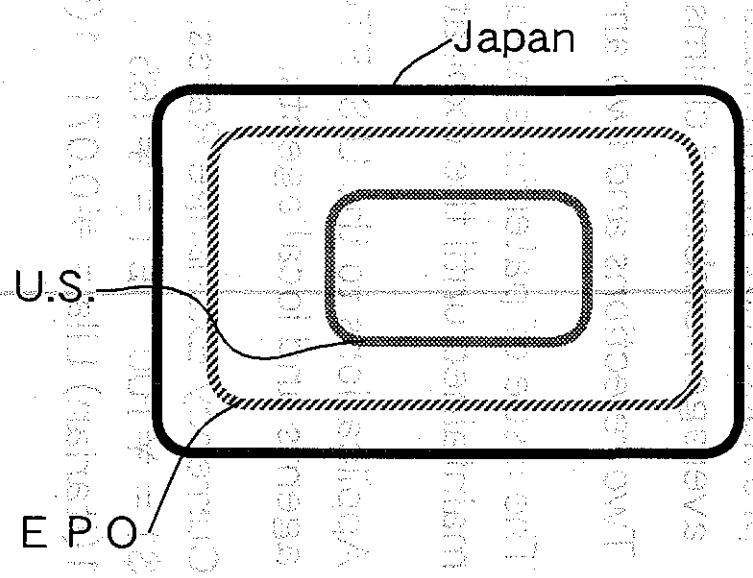
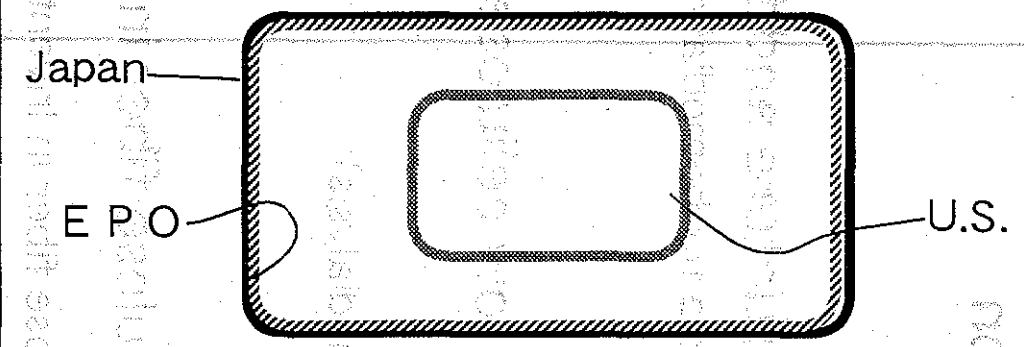


Table. 3

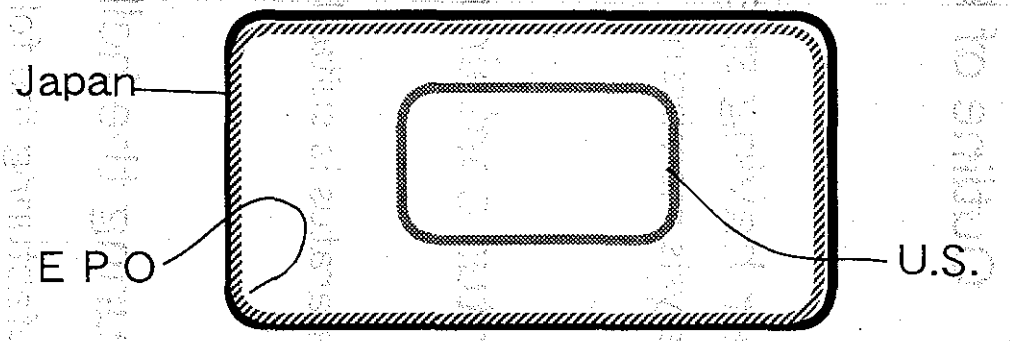
Comparsion of " Unity of invention " among Countries – Part 2

Different Category

3	Invention on a product and on process of manufacturing or using the product, on manufacturing facilities or on utilisation



4	Invention of process and of devices used directly in the working of the invention



5	Unity between Inventions having above 1 or 2 relationship and Inventions having above 3 or 4 relationship

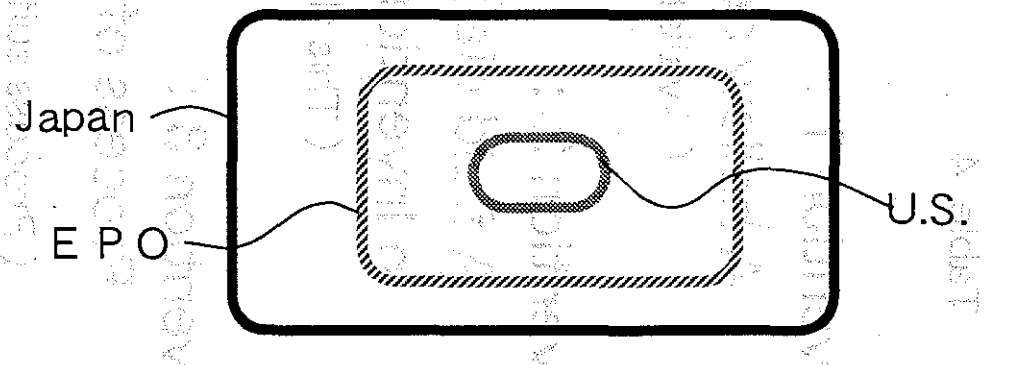


Table. 4

Outline of Invention

Invention 1 :

A hollow cellulose fiber having specific structure and function

(Available for fluid dialysis membrane and suitable for homodialysis)

Invention 2 :

A fluid dialysis apparatus containing a hollow cellulose fiber in Invention 1

(This fluid dialysis apparatus is suitable for homodialysis)

Invention 3 :

Process of manufacturing the hollow cellulose fiber in Invention 1

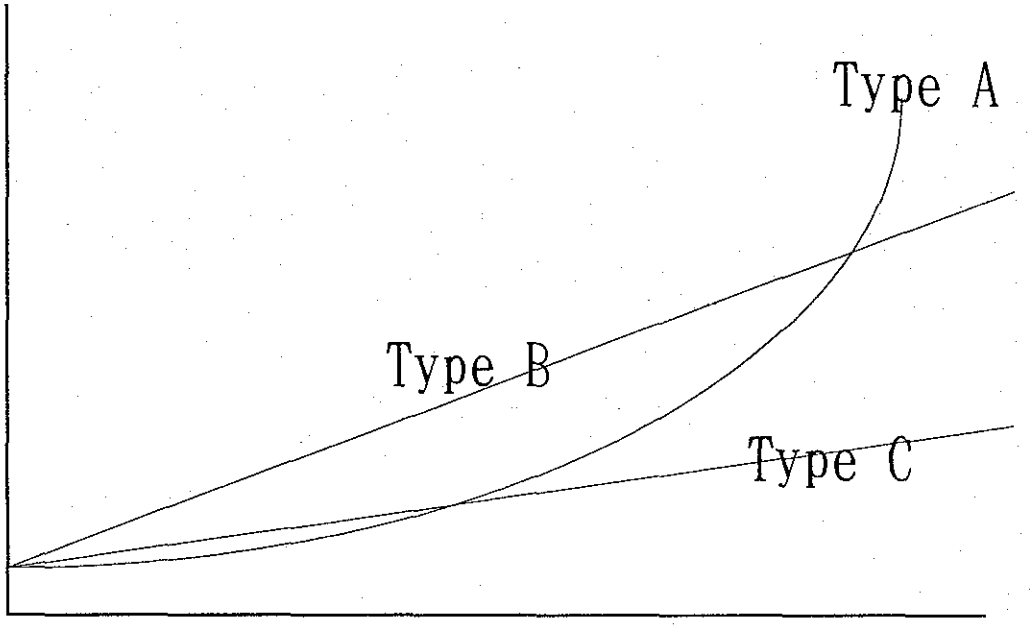
(Process suitable for manufacturing the follow cellulose fiber in Invention 1)

(The hollow cellulose fiber in Invention 1 may be manufactured by other processes)

Table 5

Interval of Reviewing Patent Maintenance Fees

	Patent Term		
	Initial Period	Middle Priod	Late Period
Type A	Long Interval	Medium Interval	Short Interval
Type B	Medium Interval	Medium Interval	Short Interval
Type C	Long Interval	Long Interval	Medium Interval



(1) Title: **RE-ENGINEERING THE APPLICATION WRITING PROCESS TO IMPROVE EFFICIENCY**

(2) Date: October 9, 1996

(3) Source:

a) Source: PIPA

b) Group: U.S.

c) Committee: No. 1

(4) Author: J. Jeffrey Hawley, Eastman Kodak Co.

(5) Abstract: A new process for application drafting which eliminates queues and interruptions. The new process not only reduces cycle time for application preparation, but also results in an increase in productivity.

There are basic functions that are performed by the Patent Departments of most companies. One function is to provide advice on the potential infringement of the patents of others. Another function is to negotiate and write the necessary patent licenses that might be needed to allow the company the freedom to operate. Importantly, the Patent Department has the privilege of protecting the intellectual property that is created through research by preparing and filing patent applications.

At Kodak, we began several years ago to increase our rate of filing. Public records will show that Kodak has been in the top 10 of U.S. patentees for many years and in the top five if you consider only U.S. companies. Even last year, after several divestitures, Kodak was 9th overall and third among U.S. companies. Clearly, patent procurement is very important to us and is ingrained in corporate culture. This importance was certainly not diminished by our new CEO, George Fisher, formerly of Motorola and before that a patentee with Bell Laboratories. Patent procurement is so important that our patent department managers are docket carrying attorneys. One of our attorney managers has averaged over 20 applications per year for as long as anyone can remember.

Like everyone else, it was not long ago that we embarked on the survey wagon. We surveyed the clients, the research managers, and quite frankly were not surprised to find that they felt that it took too long

to file a patent application. The Patent Department had gone from being seen as discouraging patent filing to actively encouraging filing in the mid to late eighties but it still took way too long to complete the process. From the time that we received the first patent disclosure to the time that the patent application was finally filed, it often took more than a year. We estimated that it was taking about another year, on average, for an invention to be submitted for consideration. In our benchmarking with other companies, this was not unusual.

This is clearly too long in the current world environment. Not only were the research managers and the inventors frustrated and unhappy with the time that it was taking but we were risking valuable patent rights. The United States is essentially the only "first-to-invent" country in the world. It is difficult to go to a research manager and explain that they will get the patent in the United States but not Europe and Japan. If we lose the race, to have freedom in Europe and Japan, we will have to negotiate with someone who was faster to the Patent Office. So... for a variety of reasons, we needed to make dramatic improvements.

In 1994, our internal data suggested that it was taking about 480 days from the time of invention to the time of patent application filing. A substantial portion of this period was after the disclosure had been submitted to the patent department. In the 4th quarter of 1995, after our reengineering program earlier in the year, the time from invention to filing was about 280 days with the median time spent in the Patent

Department just 43 days. Even the 280 days from invention to filing is a little misleading since there were still a few old inventions that were finally cleared out in the 4th quarter.

How did we do this? Did we actually make an improvement or is it all just smoke and mirrors?

While there is some softness in these numbers as in any numbers, there certainly has been a dramatic change. There has been a dramatic change in the department and there has been a dramatic change in the inventor community. Is all of the change for the better? Perhaps not, but overall, the department is much more productive and our attorney-inventor partnership has deepened. We filed a lot of applications in 1995. We eliminated an enormous backlog of pending potential inventions and now face other difficult problems.

How did we do this? This kind of change has to take place at the top. Individual attorneys or groups had tried for many years to work directly with inventors to improve the process. It was only when our Chief Patent Counsel and top research managers made reengineering a priority that it really began to happen. The entire process was facilitated by a group within Kodak that specialized in reengineering.

The credit for working off the backlog and implementing the process with the inventor goes to a very talented and dedicated staff. Many attorneys filed more cases in 1995 than they had ever filed in any other year, myself included. Change is never easy but it became increasingly clear that this change was going to happen.

One of the things that was already in place when we started was a strong commitment to an "attorney- inventor partnership". Several years ago, we developed a one day training program that is taught by attorneys to inventors. A crucial piece of this training is actually having groups of inventors sit together and write a claim to a simple invention. It is amazing what barriers to understanding are broken down by this process. The inventor gets a deeper understanding for the need to avoid claim limitations and correspondingly, the need for adequate supporting description for broad claims. This program was given to over 2000 potential inventors and, as it turned out, was essential to our reengineering effort.

The analysis for the new system began with estimates of how long things take. A very conservative estimate of the time that it takes to prepare a patent application, after the invention is completed, is at most 10 working days. Actually, the actual working time is probably substantially less, particularly where the inventor is familiar with the process and the attorney has experience in the art. Assume that the attorney works for about five days and the inventor's work takes five days. Even using this 10 working day estimate, you have to ask yourself, why does it take more than a year to get 10 days worth of work done? The answer, our analysis suggested, was handoffs, interruptions and queues.

Handoffs: The inventor writes up what is believed to be a description of the invention and hands that off to the departmental

secretary. That is handed off to the technical manager who in some companies might wait till a committee meeting for a judgment on whether to submit it for patent consideration. The disclosure is handed off to the attorney who hands it off to the searcher. The searcher hands it back to the attorney who schedules a meeting with the inventor. Draft applications and comments are handed back and forth, the attorney's secretary involved along the way, until the application is completed or everyone is sick of it.

Interruptions: These come in many flavors. Say I read an invention disclosure and send it off to be searched. It may come back a month later and it is unlikely that I will remember all of the details, so... I have to read it again. I spend a morning on an application and send it off to the inventor for review, it comes back a month later and I have to read it again. Another flavor: I am writing a particularly long claim and the phone rings. Twenty minutes later, I have to reread the claim to get back into it.

Queues: It used to be that I was not really comfortable unless I had about 15-20 invention disclosures sitting in the drawer. With all of the handoffs, and all of the stages that an application went through, that was a comfortable workload. There are queues all over the place... with the inventor, the attorney, the secretary and particularly the searcher.

If we were to meet our goals for no more than a 2 month turn around in the Patent Department, it became clear that something needed to be done about the first queue, searching. The typical service time or a

search would use up a substantial amount of the total time. The more we discussed it with research management, the more it became apparent that it was important for the inventors to have a thorough understanding of the art... whether or not they ever made an invention that resulted in a patent application. We got buy-in from research management that the inventor would be responsible for having a knowledge of the art. If they made what they thought to be an invention and did not know the art, it was to be their responsibility to find out what it was. However, more and more, inventors are encouraged to understand the literature, particularly the patent literature, before they attack the problem at hand. For our company, this is clearly a paradigm shift.

Another important feature of the process is that there is clear responsibility for driving the process forward at all times during the process. No longer do we have the situation where one party says they were just waiting for something from the other. From the making of the invention to the filing, the attorney and the inventors work together as partners. But.. until all of the work is done to get to the point where there is an "attorney ready" disclosure on a patentable invention, including the search, the process is driven by the inventor. After that point, up to filing, the process is the responsibility of the attorney. The metrics are kept the same way. The inventor is encouraged to have the first part of the process completed in 60 days. From that point, the attorney is expected to have the application filed in another 60 days. What used to

take about 2 years or more, is now supposed to take no more than 4 months.

Another feature of the Kodak system that differs from many is the decision making process. Several years ago, we got away from a typical decision by committee system and have gone to a system where all decisions are made by a "Technical Director". This is usually a middle level research manager or higher who makes all of the patent decisions for a particular portfolio. The inventor still needs to have the approval of the Technical Director to engage the system but the Technical Director does not need to wait for some kind of patent meeting.

A significant event in the process is a "patentability meeting". Designed to take less than an hour, this meeting is not unlike a doctor's appointment. The inventor(s) will make an appointment with the assigned attorney and come in to chat. Some Technical Directors want to have something written at this point. However, what they need is a paragraph or two so that they can make a decision on whether this is something that the company should pursue. Usually, the inventor has done little if any writing at this point. At the patentability meeting, the inventor will describe the invention and the discussion will turn to the problem to be solved and the prior art. It is usually not necessary for the attorney to know anything about the invention beforehand. With experienced inventors and attorneys who are experienced in the art, the usual result of this meeting is a draft of a patent claim. Other times, it becomes apparent that more experimental work is necessary or that that

the inventor really does not appreciate the extent of the art. If the invention is not ready at this point, it does not enter the Patent Department system. The inventor is given guidance about what to do next, if anything, and sets up a new patentability meeting when ready. If the conclusion is that the invention is not patentable, then nothing further happens except perhaps, defensive publication.

If it is apparent during the meeting that the time is ripe for a patent application, then the responsibility for moving the process forward shifts to the attorney. From a record keeping perspective, the invention is given a docket number when the responsibility shifts. One thing that the clerical staff likes is that the inventor typically stops with the secretary on the way out of the patentability meeting and the docket is opened on-the-spot. The secretary gets all of the information needed for all of the formal papers and can enter this into our database without having to chase down that information.

There is typically an agreement about who does what from that point forward. While everyone works a little differently, I tell my inventors that all I really want for them to do is: 1) write up the working examples, including any tables that might be needed and 2) point me to where I might find descriptions of critical components. Often, many components are described in other Kodak patents and since the inventors are aware of these patents, this is not a particular problem.

This process is not overly burdensome on the inventors. I can speak for the chemical inventors. They are very comfortable with

writing examples. They do this for internal technical reports and for outside papers and they find little difference in writing up the working examples for the patent. I might also ask the inventor to prepare the chemical structures that are needed. This again is something with which they are comfortable.

Another characteristic feature of the way that many of our attorneys are now working is that the actual application is drafted together with the inventors. At the patentability meeting, after seeing what needs to be done to get ready, I will schedule a half day with the inventor to work on the application. I started out scheduling a full day. However, writing a patent application can be tedious and a half a day is enough to get well along without getting on each others nerves. Before the time for the application drafting session arrives, my secretary sets up the application document to our standard format and collects all of the materials from the inventor and me. The working examples from the inventor are placed in the document; the disclosure from related Kodak applications or elsewhere that have been identified; as well as anything else that might be helpful. All of this is made available in electronic form so that it is easily incorporated. As noted, we have a standard application format so that once disclosure has been created and proofread, it can be easily reused and modified.

During the first application drafting session the inventor and the attorney can concentrate on creating the crucial background of the invention or the story for patentabilty. The rest of the disclosure is

worked over and added to as needed. Issues regarding specific language are worked on as the application is prepared. Sometimes disputes among inventors about various aspects are discussed and settled. Holes in the disclosure are identified and discussed. Agreement regarding the next step is quickly reached.

Around the Department, we have several typing attorneys. Many have computer configurations where their office has multiple monitors so that everyone can see what is happening in the document. If the attorney is not comfortable typing, the secretary can join the group. We even have an "application drafting room" with dual monitors and plenty of room for everyone to sit around and contribute. As you walk around our department these days, the site of teams of people huddled around monitors is not unusual. The next nuance is to provide not just two monitors but two active keyboards and two active pointing devices as well. The drafting of the application will indeed become an interactive team effort.

Working together in this way eliminates two of the problems that were discovered when we analyzed the old process. There are fewer handoffs. The inventor and the attorney can discuss the problems as the application is being created. The inventors are not sitting in their office trying to guess what the attorney wants and the attorney is not sitting in his office trying to figure out what the inventor means. In my opinion, working out wording as it appears on the screen is far superior to passing drafts and comments back and forth. The second problem virtually

eliminated is that there are few if any interruptions. If the phone rings, I am in a meeting and will get back to the caller. The team concentrates on the application and only the application for the duration of the session.

Usually, an application can be written in about two of these sessions. If the application is particularly complicated, then more sessions might be needed. If the invention is particularly simple or closely related to an earlier invention, then the application can be signed and filed at the end of the day.

As noted, it usually takes about two sessions. Not quite everything is tied down in the typical first session. Besides, it is usually a good idea to review everything away from the heat of the battle. One recent improvement that I have tried is to give the inventor a disk containing the application on it at the end of the session. Using the same word processing software, the inventor can revise the application using the "revision marking" function. We can then easily review the revisions when we get together again very quickly and easily.

Have there been problems?... Of course. There is some evidence that submissions are down. Speculation is that some inventors simply have not engaged the new system. Some inventors believe that the requirement that they know the prior art and be responsible for getting any search done is yet another burden in their lives. Kodak is no different from most companies in that we are trying to do more with less.

It is hard to argue with the proposition that it is good to know the art regardless of whether you ever make an invention or not. A part of the problem is that the inventors do not really have any readily available mechanism for finding the necessary art. We are continuing to work through this problem. A related problem is that the work for our internal searches is drying up. We will have to transition our internal searchers into more of a teaching and helping role. The personal application drafting meetings with the inventors have worked out so well that I have encouraged inventors to make appointments with our patent searchers to do one-on-one searches in real time. I think that the searches are at least as good if not much better and the inventors and searchers understand each other and the technology better.

One problem that has been encountered is some instances is that the inventors disagree. The application drafting session can disintegrate into arguments over particular concepts and whether or not they are valid technically. There is no apparent solution to this problem but if you suspect that it might arise, you can suggest that you work with a "lead" inventor and have the other review the draft.

Anther problem is in record keeping. There is no formal way to keep track of inventions that are in progress but not yet ready for application drafting. Losing the security blanket of knowing that there is a full pipeline is disconcerting for attorneys used to a big backlog. Technical managers find it more difficult to know what is going on since there is not a printout of work in progress from the Patent Department.

As noted, the responsibility for moving the matter forward shifts when the invention is ready for application drafting. This however, is somewhat at the discretion of the attorney. They decide what is "ready" and they control the access to the docketing step. Since they will held responsible for the cycle time from docketing to filing, there will be some incentive to say that something is ready later rather than sooner. So far, the attorneys have seemed to be fair about this and their professionalism has shone through.

Another problem is tying to operate department which has little or not backlog. Our attorneys write upwards of 20 cases per year. With a desired two month turn around time, you can not have more than about 4 in process at any one time and preferably fewer. Thus, we see the ebbs and flows of the invention process more clearly than we did before and need to be able to shift work around more than ever before. We have not yet gotten to the point of the bank teller approach where the next invention that comes in goes to the next available attorney. However, we certainly have become more aware of variations in rates of submission.

People sometimes ask if quality suffers in this apparent rush to file. In my experience, it does not. We spend about the same amount of time on an application. The time spent is just not spread out over a long period. The cooperative application drafting process results in a better understanding of all aspects of the application for both the attorney and the inventor. Concentrating on an application in one or two sessions, I

believe, results in a more coherent product with fewer internal inconsistencies.

The present status is that the process is working well. We have not yet re surveyed technical management but I am confident that when we do, there will be little complaint with cycle time. Many of the managers that I have spoken with as well as many of the inventors have clearly noted the change in environment and attitude. Do the inventors like the new system? Those that have engaged the system fully have good things to say about it. They find that they do not have to provide an elaborate disclosure and this they like. Many inventors have even found that they have learned something by becoming much more familiar with the patent literature.

We have more work to do. While our ability to use previously created disclosure has improved greatly, more work can be done there. We need to make it even easier for the inventors to use the system. More particularly, we need to make it easier to get the results of a search. All-in-all however, we have made great progress and are pleased with the results of the process so far.

ABSTRACT OF PAPER

Current Problems in U.S. Patent Law - Random Reflections

by Gary A. Samuels

This paper covers a diverse number of areas currently causing problems for U.S. practitioners, ranging from status of provisionals, role of juries, costs, breadth of claims, etc.

CURRENT PROBLEMS IN U.S. PATENT LAW
RANDOM REFLECTIONS

by Gary A. Samuels

W. L. Gore & Associates, Inc.

Prepared for PIPA Meeting, Hiroshima, October 1996

I. Status of Provisional Applications

A question has been raised concerning whether countries outside the U.S. will give effect to the filing date of U.S. provisional applications. This question arises because the Paris Convention in one article says that a filing date will be accorded an application that can mature into a patent. Inasmuch a U.S. provisional cannot directly mature into a patent, some patent professionals take the position that a U.S. provisional application cannot be used for a priority filing date.

However, other provisions of the Paris Convention state in effect that a nation using provisionals can make its own determination by which other nations will be guided. Several Patent Offices have indicated that a U.S. provisional application should be given status under the Convention. The President of the EPO, after consulting with European National Offices, has stated that "There are no compelling reasons that initiate against accepting U.S. provisional applications as priority-conferring..." The British Patent Office has said the same thing.

What concerns many of us, however, is that these Offices have indicated that their position is not the final word on the matter and that it is up to the Courts in each country to decide the issue. Thus, the issue of priority-granting status of U.S. provisional applications is not settled and is not likely to be settled until a court case comes along in a country outside the U.S. Inasmuch provisional applications are so new, no court case is likely to come along for a number of years. Suppose for example a U.S. provisional application is filed, a year later a

PCT case is filed which is nationalized in Japan 1 l/2 years after that. Suppose also that full 7-year term for requesting examination is used by Application. All in all, it could be 10-15 years from now before it becomes settled whether Japan will give Paris Convention priority to U.S. provisionals. A better alternative would be for the U.S. to change its rules to allow for a provisional application to mature into a patent.

II. Use of Juries

Use of juries in patent cases has long been criticized because of the complexity of technology and the complexity of patent law. But nothing much has been done in the way of eliminating use of juries, except for some slight use of alternative proceedings like mediation or arbitration.

However, in the recent Markman decision, the U.S. Supreme Court in affirming the CAFC held that it is up to the courts to interpret literal claim language. Thus, use of juries for this purpose is eliminated. But there remains a case before the Supreme Court in which the issue is "what is the role of juries in deciding the scope and applicability of the doctrine of equivalents." The CAFC has decided that that is a question for the jury. But to be consistent, the Supreme Court should, I believe, find that the question is for the courts to decide.

There are practical problems in having a judge interpret literal claim language. For example, when should the District Court Judge interpret claim language? Should the judge hold a hearing before the trial begins? Should the judge wait until the issue comes up during trial and then interrupt the trial to hold a hearing? Should the judge defer until jury instructions? Should expert witnesses testify as to claim interpretation? These are issues that U.S. Court system is currently struggling to resolve.

III. The Doctrine of Equivalents

At present there is a very great uncertainty among patent practitioners as to the extent a court or jury should apply the doctrine. Does one apply the function/way/result test? Does one consider the extent of wrongdoing or misappropriation? Does one consider how substantial are the differences between the patent claim and the accused device? Should there be a doctrine of equivalents at all? It is hoped that in the Hilton-Davis case presently before the Supreme Court, the court will answer these questions and add some degree of certainty in this area of law.

IV. Patentability of Process of Making or of Using New (Patentable) Compositions

While the Ochiai and Brouwer CAFC decisions seemingly have settled this issue by saying that when a record is devoid of any reference containing a suggestion or motivation to select new reactants or to obtain a new product, the process claims are patentable despite the process step or steps themselves being well known. However, the CAFC took pains to say that no general rule should govern these situations. Thus, it cannot be said that such process claims are now automatically patentable, except in the biotech area.

V. Litigation Costs

Everyone agrees that U.S. litigation costs are out of hand. Roger Smith, recently retired Chief Counsel for IBM, has said court litigation costs range from 5 to 10 million dollars.

But no one seems to be able to do anything about it. Numerous proposals have been made, e.g., voluntary disclosure, mandatory mediation, streamlined litigation, limited discovery, sequential time limits, the rocket docket. Despite all the talk, there seems to be little concensus on what should be done, and very little concerted effort in doing anything.

VI. Explosion of Art - Computer Searching

Consider that:

The USPTO is looking for new space for documents and Examiners.

The EPO not too long ago expanded into a second building and says it still needs space.

The Japanese Patent Office's recently-built building is over crowded.

Why should these three entities continue to expand and duplicate facilities, when anyone can set down in front of a computer and virtually duplicate the searching that these three do? It would seem the day is coming when any one of us, sitting at home can be a Patent Examiner. Is technology rendering obsolete huge edifices dedicated to patent examining? Are the costs of these three huge edifices justified any longer, especially when the three increasingly are duplicating each others work?

Despite the recent set back to harmonization (which was due in large part to the unwillingness of the new Clinton administration to proceed), I believe the need for a unified worldwide patent system is becoming more and more apparent. Economics alone will eventually force the issue.

VII. Breadth of Claims - Section 112

U.S. Examiners far too frequently allow claims that are broader than the description of the invention. For example, suppose an invention is made involving use of a fatty acid and it is apparent that acetic acid has too short a chain to work in the invention. Yet Applicant's generic claim calls for simply "organic acid." Too frequently, such claims are unchallenged by the

USPTO. When the patent issues, the rest of us are forced to expend time, effort and money to deal with a claim that never should have been issued.

Furthermore, this claim will stand for the next 17 or 20 years to prevent anyone from experimenting or using an improvement.

A sub-issue in this respect is why should a discoverer of a new use of a patented product be prevented from exploiting his new use until the patent on the product expires?

VIII. Taxation on Innovation

Each year the U.S. Congress takes a portion of the fees paid by users of the USPTO. This, of course, is nothing more than a tax on innovation. As this sum of money increases each year, at some point some inventors especially small individual inventors are bound to "give up" and not use the system. Thus, despite much talk about protecting the individual inventor, the U.S. Congress is apparently trying to eliminate the small inventor from the system.

A number of years ago, the U.S. Supreme Court had to decide the relationship between trade secrets and patents. One argument weighing in that decision was that the use of the patent system should be encouraged and should not be denigrated by elevation of the status of trade secrets. But, there do not seem to be many proponents and defenders of the patent system in Congress today. The confiscation of monies paid by users of the U.S. Patent Office will become a growing problem.

(1) Subject: Management of Electronics Data Storage of File Wrappers

(2) Date: October 1996 (27th General Meeting at Hiroshima)

(3) Committee: Japan Section, 1st Committee

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(5) Key word: File Wrapper, Computerization (sometimes use as Electronic System), and Paperless

(6) Summary:

In Japan, to deal with a large number of patent application the Japanese Patent Office established an on-line system for filing applications, notices, etc. to promote smooth and quick handling and prosecution. In order to cope with these approaches, each company also proceeded to computerize or setting on-line system for filing patent application. On the other hand, a wave of internet communication system originated in the United States, drives not only an individual but also companies in our country into such circumstances that the information net-work system must be deliberately proceeded. Under such circumstances, computerization for file wrapper, etc. is under consideration.

In this paper, after recognizing how the computerization for file wrapper in each company is proceeded, several typical features thereof are induced, followed by discussing merits and demerits of each feature. Furthermore, a prospective problems in the computerization for the file wrapper are also studied.

As the results of questionnaire obtained from twenty-four companies belonging to Pacific Intellectual Property Association, 1st Committee, we found that a form of the computerization in each company is not always equal. As a point to be account, saving space, cost, work efficiency, man-machine interface, security, information, and evidential power and the like, may be included. However, these points have factors as positively or

negatively affective to the computerization for file wrapper, in combination. For this reason, a form of the computerization to be applied in each company is varied depending on a policy of the company for file wrapper regarding what positive factor is regarded as the most important, or how negative factor may be overcome.

Contents

1. Preface
2. Administration of file wrapper hitherto
3. Present situation
   3-1 File wrapper Storing Media in view of a number of application
   3-2 A State of computerization in view of difference in document
4. A trigger for computerization
   4-1 Computerized filing application
   (1) Paperless plan
   (2) Proceeding through on-line system
   (3) Dispatch through on-line system
   (4) On-line peruse, etc.
   4-2 Development of LAN
5. Point for considering in computerization
   5-1 Saving space
   5-2 Cost
   5-3 Making efficiency in works
   5-4 Man-machine interface
   5-5 Security
   5-6 Administration of information
   5-7 Evidential power
6. Form
   6-1 Typical form in view of system side
   (1) Computerization form in patent section
   (2) Computerization form from inventor site
   6-2 Typical form in view of practice in work
   (1) Coexisting type
   (2) Disposal type (Considering save space)
   (3) Compromised type
7. Problem in feature
   7-1 Computerization for letter of assignment
   (1) Evidential power in micro-film
   (2) Evidential power in electronic information media
   7-2 Computerization of laboratory note (Inventor's note)
   (1) Form of computerization for laboratory note
   (2) Evidential power of laboratory note

(3) Evidential power of electronic sign

8. Conclusion

1. Preface

Since, nowadays, an information administration with an electron media was progressed, the information concerning patent application is supposed to be computerized.

The Japanese Patent Office is attempted to improve in efficiency in prosecution works for the patent information, and is established an electronic filing system for patent and utility model so that anyone maybe utilized the patent information, prior to other countries in the world. That is, the Japanese Patent Office reviews and revises laws by establishes " law related to the special case for formalities concerning industrial properties", and starts to accept the electronic application from December 1st, 1990. Further, a system of electronic dispatching is introduced on 1993 as V 2, resulting in appearing the whole aspects towards an improvement in handling efficiency for works. Said system is not still spread widely, regardless of the fact that some of the companies have already adopted. (According to the questionnaire investigation conducted by Japan Patent Association, Paperless Committee on September 1993, various problems accompanied with the computerization, are proposed.)

Now, the 1st Committee of the Pacific Intellectual Properties Association conducts an investigation concerning the computerization of the file wrapper in company as a main object, and after confirming the present situations, the Committee investigates some typical forms, and studies problems to be caused in future.

It is noted that no paper is published in considering computerization of file wrapper in companies so far, and the present paper is to be of certain help in studying future computerization for the companies.

2. Administration of file wrapper hitherto

The documents related to management for filing application, request for examination, and intermediate works, have been kept in file wrapper in a form of paper. The documents, which are enclosed in the file wrapper, are various depending on companies and are seemed to include followings: Application paper, original draft written by the inventor, letter of

assignment, additional materials, memorandum written by technical person in charge, instruction for patent attorney's office, correspondence to and from the patent attorney, specification, drawing , power of attorney, letter of request for examination, search report before requesting examination, letter of official action, cited reference, corresponding record to and from developing section, corresponding report to and from Examiner, written opinion, written amendment, letter of request for appeal, notice of the appeal number, notice of registration and payment for resisting and maintenance fee (copy).

Each document stated above is filed in the file wrapper as occasionally and is never abolished until the file wrapper will be finally destroyed. Accordingly, a volume of the file wrapper will become larger, and larger storing space may be required for the company maintaining a large number of the application. Thus, many companies store the file wrapper in the form of micro film after the registration or abandonment of the application. Fig.1 shows the conventional administration of the file wrapper

3. Present situation

The questionnaire investigation related to the computerization for file wrapper is conducted for twenty-seven companies who belong to Japan Pacific Intellectual Properties Associate, 1st Committee. The results of twenty-four companies answered are analyzed in present status of administration of file wrapper. From the questionnaire, the results of four companies, who are advanced in the computerization, are further analyzed in detail, and their opinions are asked concerning a contrive point in computerization, difficult point, company's policy, etc.

The contents of the questionnaire are shown on the attached sheet 1. From various documents enclosed in the file wrapper, main documents, which include application paper, original draft written by the inventor, letter of assignment, specification, drawing, search report before request examination, official action, cited reference, written opinion and Letter of amendment, are selectively extracted, and are inquired for a time of computerization and storing media. A kind of the storing media is classified into paper, floppy disc, micro film, magnetic tape, photo disc and hard disc.

As regarding the file wrapper abroad, it is distinguished whether it may be handled in the same manner as of the domestic application or not. The term "state computerized" used herein means the state using absolutely no paper, whereas the term "state not computerized" means that the information is stored in paper form, exclusively.

3-1 File wrapper storing media in view of number of application

On reviewing a breakdown of the company answered for the questionnaire, three companies hold file wrapper of less than 100, six companies hold 100 or more and less than 5,000, five companies hold 5,000 or more and less than 10,000, and nine companies hold 10,000 or more. A state of the computerization may be briefly classified into three types, which include a case storing in a paper form, a case storing in paper form with coexisting in other form, and a case storing in, so-called, computerized form, in which absolutely no document stores in paper form.

Among twenty-four companies, some of companies, which store file wrapper of 100 or more and less than 1,000, occasionally use of a floppy disc, however, stores only in paper form, without storing even in micro-film. In the company which stores those of 1,000 or more and less than 5,000, some of them do not computerize at all, whereas many of them store in micro-film, as well as in photo disc. In the company which stores the file wrapper of 5,000 or more and less than 10,000, all of them store partially in hard disc or in photo disc. Among nine companies which store file wrapper of 10,000 or more, two companies have completed computerization, three companies are in planing computerization, and rest of four companies are partly computerized.

From the results of the investigation, the company which files more applications, proceeds computerization. In a field of electric machine and parts thereof, which files application of more than 10,000, the computerization has already adopted or is scheduled to complete shortly. The tendency is considered that a number of the applications is so large and the company is familiar with hard wear for computerization.

3-2 A state of computerization in view of difference in document

Fig.2 shows a state of computerization with respect to individual document to be stored, wherein a number of the company, which adopts the computerization, shows in percent (%) with respect to individual document, based on twenty-four companies as 100. In the Fig.2 which shows the computerized percent at each step of the prosecutions, numerals shown on abscissa mean a time for prosecution, in which 1 is a time for proposal, 2 for filing application, 3 for filing examination, 4 for receiving office action, 5 for filing appeal, 6 for registration (allowance), and 7 for abandon. A black frame shows an absolutely computerized state, with using no paper; a slant lined frame shows a state in which both paper and other media are coexisted; a white frame shows a state storing in a form of paper; and a vertical stripe frame shows a state abandoned, existed nothing.

Documents which show the highest computerization percent are specification and drawing, and both show the same states. In view of the time series, the computerization percent shows the highest at numeral 6 of the registration, and thereafter reduces due to abandonment in part.

At any stage between 1 of proposal and 7 of abandonment, the assignment is stored as photo disc in two companies, as micro film in five companies , and rest of the companies store as paper until final stage. Among the two companies who store the assignment in a form of photo disc, one company also stores in paper form. Thus, a few of the company is found to computerize a document, which requires evidence (that is seal), together with other documents. That is to say, from the results above, it is also supposed that a computerized percent for the documents which require affidavit, such as power of attorney, letter of assignment, letter of license agreement, letter of abandonment, notice of seal replacement, letter of withdrawal application, etc. is as low as in the letter of assignment.

Besides these, almost of a search report before requesting examination, and cited reference, are not computerized in advance of the time of registration 6. "The search report before requesting examination" herein is a related patent, literature, etc. existed between the filing date and the request for the examination, and "the cited reference" herein is patent, literature, etc. which may be used as a proof for final rejection issued by the Japanese Patent Office. Since these documents are cited literature which are perusal at the Patent Office, laboratory and searching system, and are numerous, it is considered to be not required for storing as in computerized

form.

4. A trigger for the computerization

4-1 Computerized filing application

(1) Paperless plan

Japanese Patent Office (hereinafter referred to as JPO) promotes paperless plan from fiscal year of 1984 with aiming at shortening the examination period of time, expanding and fulfilling service for the industrial properties information, enhancing efficiency for managing works and promoting international cooperation. The object of the plan is to provide computerization for proceedings in patent application ,and in registration of patent right. The paperless system is capable of further promoting to utilize the industrial property information by publishing official gazette written in CD-ROM with utilizing electronic data prepared by the system. Fig.3 shows whole image of the paperless system at present.

Concretely, since December 1990, an application for filing patent and utility model becomes acceptable through on-line system (FD is also acceptable), in addition to conventional proceeding with a document in form of paper (V1 system). On the other hand, as regarding a notice issued by JPO, a dispatch through the on-line system becomes also available since July 1993 (V2 system).

(2) Proceeding through on-line system

The proceeding by on-line system is made through a computerized filing terminal, which corresponds to in JPO, through public line of "Integrated Service Digital Network (ISDN)" or "Digital Data Exchange Services (DDX-P)". In the proceeding by the on-line system, a filing document may be formalized by operating the terminal for filing patent, according to an instruction shown on a display, and is transmitted to JPO. Since almost of the terminal for filing the patent provides a function for checking the document, an error in the form may reduced. For the sake of confirmation, a proof of the contents received in the JPO or a return message of receipt with a filing number, can be received.

(3) Dispatch through on-line system

The document to be dispatched through the on-line system is held in a dispatching file in JPO for 10 days. During said period, the dispatch may be received by accessing a computer in JPO using the filing terminal. If such a access (request for dispatching)is not made, a document printed on the paper may be sent through mail service in the same manner as before.

The documents to be dispatched through the on-line system are as follows:

(From Formality Section)

1. Letter of disposal 2. Order letter of amendment 3. Disposal for invalid application 4. Letter of disposal for invalid application (registration) 5. Disposal for invalid prosecution 6. Notice 7. Order letter for submission of material 8. Order for succeeding 9. Notice for returning sample 10. Notice for invalid claiming convention priority 11. Other notice 12. Notice for election of patent administrator 13. Notice for continuing prosecution 14. Notice for requesting full copy of family registration 15. Notice for submitting printed publication 16. Notice for evaluating technique of Utility Model

(From Examination Section)

1. Office action (Notice of rejection) 2. Allowance for patent 3. Allowance for registration 4. Final rejection 5. Decision for unacceptable amendment 6. Notice 7. Order letter

(4) On-line peruse, etc.

Through the electronic filing terminal the application document filed with the JPO and the registration ledger can be perused. In more detailed, among the patent and utility model applications filed after December 1, 1990, as regarding a matter recorded in the file of JPO and a matter recorded in a part prepared by magnetic tape within the patent registration ledger, the application after publishing laid-open publication may be perused by anybody and those before the laid-open publication may be perused only by the applicant and representatives thereof.

Similarly, a request for issuing or proofing the evidence may be made through electronic filing terminal, however, the letter of the issuance or the letter of proof cannot be issued through the on-line system. These documents are to be received according to the designated method (at

window of JPO or through mail service)

(Refer to "Paperless System" published by JPO . URL address (http://WWW.jpo-miti.go.jp/patent/3h/356.htm))

4-2. Development of LAN

As an object for activating distribution of the internal information, simplifying and making certainty of internal proposal and proceeding for approval and saving an amount of paper used, by utilizing the electronic mail system, many of the companies are constructing internal LAN system. As for the patent application document, regardless of the fact that a security is demanded in certain level because of high secret, the computerization is promoted to make efficient and prompt proceeding with riding on a wave of office automation.

5. Point for considering in computerization

5-1. Saving space

Almost of the large company maintains a head office including section of an intellectual property inside the large city. However, a territory per se. in Japan is essentially small, and especially in a center of the large city, an area inclusive of working space occupied by one company is restricted. As a matter of course, some company stores file wrapper in a place, such as in plant located at country side, subsidiary company, storage company, etc. In such a case, depending on manner how to access the information, a confirmation of the contents in the file wrapper will sometimes become difficult. Under the circumstances, the computerization for the file wrapper is especially effective. Because, if the file wrapper of the original document, is stored at the country side, a problem for accessing the file wrapper information can be settled.

The electronic filing terminal, per se, sometimes occupies large spaces, thereby suppressing working spaces, however, these problems is not considered as serious, provided that at present, office automation system is progressed and improved and effective utilization of working environment

can be made, for example, by setting each terminal on individual desk.

5-2. Cost

As discussed above, an expensive price of the area, together with the problems due to narrow land space, become significant burden to the company. For instances, a price for highly advanced commerce area in Tokyo is about ¥ 18 millions/m2 (in 1995), which is considerably higher than ¥ 2 millions/m2 in New York, U.S. On the other hand, in the case where it is stored at the country side, away from the center of the large city, difficulty in accessing file wrapper information may become problem, as above. The reduction of the storage space for file wrapper due to proceeding computerization, results in a remarkable merit, particularly in a center part of the large city, where the cost of the area is significantly expensive.

Further, on proceeding the computerization, an increment of cost for facility, such as hardware, software, etc., causes problem. If a large system including automation system for administration service is introduced, a certainty in procedure, and safety in administration are able to be improved, whereas the cost is considerably increased. In general, the system available for functions including patent administration, search for prior art and administration of computerized file wrapper, costs around from several million to several ten million yen. Besides these, running cost, personal expenses, etc. are required. Accordingly, in the company filing a large number of applications, expenses for accessing to file wrapper information and storing thereof are liable to arise problems. A merit of the computerization is thought to be large, however, a relative study on a balance between an object for the computerization and cost should be made.

Furthermore, since the electronic filing terminal is made under the specific JPO specification, someone points out that the terminal cannot be linked with other office automation (OA) machine, but such a disarrangement is seemed to be settled by, for example, unification of protocol, in future.

5-3. Making efficiency in works

One of the merits for adopting electronic media (digital information) is that processing thereof is rather easy. Thus, it is greatly expected that the amendment of the specification and preparation of the documents, such as application claiming domestic priority, etc. can be made with ease, thereby saving a time for preparing the specification and making efficiency in works therefor.

In this connection, by utilizing the patent administration system inclusive of the electronic filing, it is possible to make efficiency in formality works, such as certain check of formality, reducing works for administrating revenue stamp, and tally impression, and discarding issue of power of attorney. Provided that LAN system inter company will be used, transmission and receipt of the specification copy can be made, thereby being capable of saving works, such as transmitting the document between the patent section and inventor, and the like.

On the other hand, in the case of adopting " a partial computerization" by way of paper in part, such that a proposal from the developing site is received in the form of paper, an operation for converting information from paper to electronic media, may be required. Thus, a person in charge of conversion is required with additional expenses, if a conversion works will rely on the other company. Further, an additional time (several days to several months) is required for conversion works, resulting in sometimes causing so-called time-lag, and causing inconvenience such that technical person in charge cannot use the information promptly. These problems, however, may be overcome by adopting the computerization at an entrance of the information source, that is ,at the site of the inventor.

5-4. Man-machine interface

As discussed herein above, it is significant feature of the electronic information that random access of the information can be made with ease. Thus, an on-line peruse of the file wrapper becomes available even at a remote plant by completing a cooperative communication with LAN system. But, since there is a limit in a display and showing rate thereof, it is difficult to simultaneously access to plural information, as before. For instances, in the case where a study is carried out by comparing plural related applications, or a study on the relation between plural rights, plural

sheets of the document or plural file wrappers are sometimes required to be overviewed. In such a case, the paper form information is rather convenience.

Under the circumstances, the electronic information is able to be printed out on paper, however, an amount of the paper is increased, resulting in going against a trend of "conservation of natural source". The Examiner of JPO is seemed to use 2 sets of displays in examination of the application. Other than such an Examiner's approach, the plural comparison may be made by practicing OA operation, or by combination use of the electronic media and conventional file wrapper, as disclosed below.

In the present stage, however, the stored document in the form of image data, is afraid to be hardly recognized due to a poor resolution of scanner, which cannot help expecting improvement of hardware.

5-5. Security

The electronic (digital) information may be easily duplicated, and is able to keep safely and confidentially by the duplication of the electronic information, etc. Since the media is liable to become impossible to access whole data, due to partial damage, a distinctive and special attention is essentially required in storing thereof, in a different manner from of the conventional file wrapper and a backup duplication. By conducting a periodical verification with a data base of out side, such as those prepared by JAPIO, an omission of the administrated data may be omitted. Such outside data base may be researched through the on-line system, and can be utilized as it is, provided that the administrated data is computerized. Since anybody is able to be received by way of CD-ROM or through the terminal, the paperless plan in JPO can be effectively utilized.

5-6. Administration of information

Almost of the data enclosed in the file wrapper can be uniformly administered. Since an error derived from a conventional personal works may be reduced, provided that the system is perfect, potential troubles, such as loss or missing of the file wrapper may be prevented.

5-7. Evidential power

At present, since there is no decisive judicial precedent regarding evidential efficiency of the electronic media, some of the documents are preferably stored in the form of paper, in order to secure an evidential power. Said documents include, for example, a letter of conveyance, original draft written by the inventor, etc.

According to the revision of the United States Patent Law on January 1, 1996, a proof of a date for invention in Japan can become being considered. But, in order to enjoy said new practice, a laboratory notebook of the inventor (herein simply referred to as " laboratory note ") satisfied specific conditions is required. In the case where there is such a document as being unavailable in computerization, the stored document cannot be simply unified. Regarding these cases, they are discussed in the following paragraphs, and are expected to set legalization, to form a guide-line and concrete law interpretation.

Hitherto, the matters to be considered on introducing the computerization, are discussed, however, these discussed matter should be varied depending on the conditions of each company. The computerized form is thought to become clear by clarifying "what is the object to establish the computerization by said company". Herein below an example form of computerization are shown in consideration of the merit and demerit above.

6. Form

As shown on Fig.4, each point to be considered in computerization has those affected positively and negatively in combination. The points affected positively are reduction of storing space ((1)-a.), reduction of area cost ((2)-a.), making works effective, ease of forming ((3)-a.), ease of accessing file wrapper ((4)-a.), and unified administration of information ((6)-a.).

The points affected negatively are increase of occupied space by terminal ((1)-b.), increase of facility cost ((2)-b.), burden for converting works, delay in starting utilization ((3)-b.), lack of man-machine interface in studying ((4)-b.), loss and damage of data ((5)-b.), and poor evidential

power ((7)-b.).

Under the circumstances, the form of computerization and form of working practice, which are to be established, are seemed to be related to points " what is the object (positive point) of the computerization" and "how overcome the negative point caused in the computerization"

In the followings, examples of typical forms in view of the system side and of the working practice are shown and are studied on a relation with company's policy, who adopts said form, and on merit and demerit of the form.

6-1. Typical form in view of system side

As for the typical form in view of system side, there are two types of computerization form in patent section, and computerization form from inventor site.

These forms are distinguished depending on the site where the computerization is made.

(1) Computerization form in patent section (Fig.5)

1) Summary

In the patent section, an application paper from invention group and a file wrapper administration system which works for storing document, such as inventor's original draft, etc. in the form of photo disc are newly provided. Since said file wrapper administration system is connected to internal LAN system, together with a patent administration system, a prior art searching system and an electronic filing system, from the access terminal, which is set up in the patent section, an access can be made to the documents electronically stored, or other data.

The documents such as application paper, etc. from the inventor's site to the patent section is transmitted through internal mail service in the form of paper or FD. An exchange of these documents between the patent section to patent attorney's office is made through common mail service in the form of paper or FD as it is.

In the patent section, the documents such as application paper, is electronically recorded with a scanner, which is communicated to the file wrapper administration system to be stored electronically.

As for selecting standard for memory media in storing, for the documents which are required to be accessed frequently, a hard disc is used to make high speed access works, whereas for the documents accessed seldom, a photo disc which may be accessed slowly, is used to store a large amount of data with smaller number of the disc sheet. Concrete selection of recording disc concerning what document is stored in any disc, is intimately related to a working form which is discussed herein below.

Working on the stored document are carried out by displaying on a screen face on the access terminal, or with a paper base obtained from printer or facsimile machine.

2) Relation with a policy of the company

In a company who has main object for reducing a storing space of the file wrapper ((1)-a), a company who has an object for making efficiency of service ((6)-a), and a company who has an object for unifying administration of the information by computerizing the file wrapper ((6)-a), it is an effective system to suppress cost and enjoy the minimum merit, as well.

3) Merit

The access to the stored document by the member in the patent section becomes easy.

A processing electronic information, such as domestic priority right is with ease in relating to make efficiency of works.

By contacting with other electronic filing system and prior art searching system, a patent administration system makes complete.

4) Demerit

To carry out computerization works for the document (reading scanner) in the patent section, new personal disposition and a reconsideration of the works are required. ((3)-b)

Sometimes require additional time before becoming available for utilizing electronic information. ((3)-b)

Inventor's originals, drawings, etc. show in low resolution due to image storing. ((4)-b)

Vanishing and destroy of the data due to accident, etc. will be caused. ((5)-b) Accordingly, it is seemed that a resolution in the system aspect by duplicating the system, and a resolution in service working by coexisting with the file wrapper are to be required.

Depending on the stored documents, there is lack of evidential power. ((7)-b) Accordingly, it is seemed that as for the letter of assignment, a resolution in service working by storing in form of paper and by establishing sever electronic administration system are to be required.

(2) Computerization form from inventor site (Fig.6)

1) Summary

Inside the patent section the system is almost the same as disclosed in Fig.5, but, between the patent section and inventor's site it is communicated with internal LAN system. An electronic converting facility in the patent section is unnecessary.

The inventor electronically transmits electronic document, such as inventor's original, etc. which is electronically prepared by personal computer, etc., to the patent section through internal LAN system. The patent section temporary stores the document received in patent administration system, and automatically assigns receiving number. Each person in charge in the patent section is able to access to patent administration system from individual access terminal and to read the contents of the electronic document accepted

Exchange of the document between patent section and patent attorney's office is made through ISDN line.

From the inventor site access may be made through internal LAN system not only to prior searching system and patent administration system in the patent section, but also to the stored document in file wrapper administration system.

2) Relation with company policy

In a company who has main object for completing patent information administration system ((6)-a) , a company who has an object for making efficiency of works accompanied with a reduction of electronic converting works, and company who has object for progressing internal computerization by establishing easy access to the document from any place ((4)-a) ,etc. it is a system form which may be maximally enjoyed electronic merit.

3) Merit

Computerization works in the patent section becomes unnecessary, thereby being capable of expecting reduction of labor cost.

Since the document has been computerized at a time for acceptance, an available time for utilizing electronically stored document becomes quicker.

A transmission to the patent attorney's office becomes easier.

The inventor at remote place becomes possible to access data in the patent section.

A request for filing application to the patent section becomes easier.

Since an acceptance is automatically available by the patent administration system, an accepting personal may be omitted.

There is no problem for resolution of the inventor's original.

4) Demerit

Since no information is available except electronic information, a man-machine interface, such as study time for requirement of application, intermediate review, etc. are lacked ((4)-b) Under the circumstances, a solution in service working such that a paper envelope is prepared on demand, etc. is thought to be required.

There is a problem of hindrance and safety in transmission of electronic mail. ((5)-b) Particularly, an order to the patent attorney's office through ISDN is seemed to have a problem at present.

Construction of internal LAN system becomes indispensable, resulting in bearing expense. ((2)-b)

A fear for missing and damage of data due to accident, etc. ((5)-b), a lack of evidential power ((7)-b), are the same as above.

6-2. Typical form in view of practice in work

The typical form in consideration of service work has 3 types, i.e. coexisting type, disposal type and compromised type.

A study of the invention is mainly made at (a)time for deciding file of the application, (b) time for reviewing the application specification before filing with the Patent Office, (c) time for deciding request for examination, and (d) time for intermediate studying. These forms are distinguished each other depending on what kind of power is applied.

(1) Coexisting type (Fig.7)

1) Summary

This type is the case where all paper in file wrapper is stored at least

between (a) time for deciding file of the application, and (d) time for intermediate studying, disclosed above. That is, this case is of fully coexisting with a conventional paper type file wrapper, and a reconsideration due to introducing computerization system is able to be confined to the minimum.

The electronic storing is made by electronically holding all documents, regardless of kind thereof to maintain unified administration. On the other hand, paper in the file wrapper is remained until registration , thereby maintaining efficiency maximally for working at a time for reviewing the contents of invention.

Since frequency in access to the file wrapper system becomes remarkably lower, repair and utility for internal LAN system are unnecessary, and a hard disc which is slow in access rate may be used as a recording media.

2) Relation with company's policy

This type is preferable for the company who is intended to overcome the negative factors, which are caused due to introduction of the electronic storing system, such that lack of man-machine interface at a time for study ((4)-b) ,fear for missing and damaging data due to computerization ((5)-b) , and anxiety in evidential power ((7)-b) ,from service working. In particular, the work already established may be employed as it is, thereby easily introducing thereof.

However, this type is not suited to the company who has an object reducing storing spaces ((1)-a) .

3) Merit

Since paper type file wrapper is remained until the time of registration, an interpolation may be freely made. By referring to the interpolated part, etc. ,the previous discussing matter may also be confirmed.

If an application concerning the important technique, such as enforced engineering is to be perused for deciding the request for examination, the paper type file wrapper is more convenient.

Since the paper type file wrapper is remained in combination, this type of the form is more economically secured with safe and confidence, comparing with a duplication of the system per se .

Even after registration, an important letter such as letter of assignment,

letter of negotiation, etc., may be conveniently used, since these documents are stored in paper form.

Reconsideration of the service works may be minimized and the service operation hitherto may be practically applied

4) Demerit

Storing space cannot be reduced.

In the case where paper type file wrapper is discarded, an access to electronic administration may be required. However, a trouble, by which said document cannot be accessed, may be caused that sometimes an operation method is not familiar with a person in charge, since the access works have not been made frequently so far, and the operator is not always present, even if the operator is to be appointed.

(2) Disposal type (Considering save space) (Fig.8)

1) Summary

At each specific time (a) to (d) defined above, this type is to output the document electronically stored onto paper, and said document is discarded after completing study thereon. Thus, the storing space for said paper type file wrapper makes unnecessary. that is, in consideration of the man-machine interface at the studying point, the document is to output at the time for studying. This is the form which is the most similar to paperless system in office ,and contributes to reduce the storing space in the patent section mostly.

In this working form, any paper type file wrapper is not prepared at all times for studying a necessity of the solicited application, for checking application specification, for requesting examination, and for checking at intermediate. Accordingly, printing out of the electronically stored document is necessary on demand.

Since an access to the electronic storing system becomes frequently, a memory disc for the electronic storing system is preferably hard disc which is with ease in access. In this connection a working personal for forming paper type file wrapper by printing out is to be required. Further, repair and utility of internal LAN facility is also required.

2) Relation with company policy

The disposal type is preferable for the company who has an main object for reducing storing space ((1)-a). However, since this type causes

lack of man-machine interface at study ((4)-b) , rising paper cost ((2)-a) , and poor evidential power ((7)-b) , it is unacceptable working form for the company who takes serial view of these features above.

3) Merit

The storing space can be largely reduced.

Since no paper type file wrapper is present, handling and arrangement of the file become completely unnecessary.

4) Demerit

Remarkable reconsideration in the overall service works are required.

Amount of paper used is increased resulting in rising cost. ((2)-b) Accordingly, a solution in service working is seemed to be required such that unnecessary paper does not print out as possible, and study is made by showing record on terminal display.

Since printing output is made whenever contents of application is studied, time and laborer are consumed. ((3)-b)

Interpolated document at the previous study cannot utilize at a next study . ((4)-b)

Accordingly, it is considered that the interpolated document at previous study is to be computerized.

(3) Compromised type (Fig.9)

1) Summary

This type is to check the contents in a form of paper at a time for deciding filing application (a), and time for checking before filing application with patent office (b), followed by discarding thereof, and thereafter, only required document which is electronically stored is output onto paper (d). The paper type file wrapper is stored until registration. That is , this is an intermediate type between coexisting type (1) and disposal type (2) above, and is intended to adjust the reduction of the storing space with man-machine interface on studying.

Normally, since among the application filed with the patent office, those which are requested for examination and receive office action, are considerably restricted, this type contributes reduction of storing space and reduction of labor cost for preparing paper type file wrapper.

Since an access to the electronic storing system becomes often before intermediate time, quickly accessible media, such as hard disc, etc. is

preferred as a recording media for electronic storing system.

2) Relation with company policy

This is of preferable form for the company who takes serious view of both reduction of storing space (1)-a , and maintenance of man-machine interface at a time for studying ((4)-b).

3) Merit

Since the paper type file wrapper is prepared only for the application which receives office action, a preparation work for paper type file wrapper may be reduced comparing with those of the old type (in which paper type file wrapper is prepared for all application filed with Patent Office).

Provided that the request for examination will be filed at the 7th year from the filing date, storing space of paper type file wrapper required at least for 7 year can be reduced.

The document studied at the intermediate time is able to put in the file wrapper, and may be utilized for studying on next rejection.

4) Demerit

A person in charge of administration for printing output to prepare the paper type file wrapper at intermediate time is required, and a reconsideration in service works , for example, which document will be output for printing, and the like, is required.

7. Problem in feature

7-1. Computerization for letter of assignment

Discard for original letter of assignment after computerization, and forming the letter of assignment in computerized base, are required to be considered for evidential power in a court.

Followings are discussed separately in cases of micro-film and electronic information media.

(1) Evidential power of micro-film

At present, micro-film is said to have sufficient evidential power (possibility for accepting approval as evidence), and in a practical business, a film per se., is recognized as document, and a process for taking of the evidence is carried out by submitting the documental evidence.

However, in order to enhance evidential power of micro-film, legal conditions (a) to (e) below are thought to be satisfied. Said conditions are (a) proof for surely existing original at a time for taking photograph,(b) proof for correctly copying thereof from said original, (c) proof for preparing thereof in accordance with ruled process, (d) proof for no doubt in storing condition thereof, and (e) notarized exemplification. (Refer to Micro-film Guide by Tsutomu Yoshida, Nihon Micro-film Shashin Kyokai).

Accordingly, in order to satisfy five conditions (a) to (e) above, sever preparation and administration system of the micro-film are to be settled.

(2) Evidential power of electronic information media (optical disc etc.)

Different from the micro-film, there is a problem in legal approach how carries out a process for proofing evidence. In court decision of Osaka High Court on March 6,1978, Suit of Tanakawa Karyoku, concerning an order of submission for document is requested regarding magnetic tape for computer; it says that the magnetic tape can be the evidence.

According to said decision, electronic recording media are original, document printed out is full copy, and in the process for proofing evidence, the document printed out is required to be submitted by attaching with the electronic information.

A formal evidential power sometimes requires proofing that, for example, electronic recording media is inputted by computer having standard function, in a process of conventional service, during rational period from a time for starting the matter to be described, or proof that an input , administration, etc. of computer is made impartially. On the other hand, when an identity of electronic recording media and document printed out (in other words, substantial evidential power)is disputed, the judge will order consultation of a record in electronic recording media and an examination of witness who made printing out, is taken place. (Chushaku Minjisoshoho (7) by Tokushige Yoshimura, Yuhikaku; Jurist No.1028 "Shin shu shoko no Shoko shirabe" by tomoro Kasuga .)

The evidential power of assignment electronically stored may be referred to the judicial precedent above.

1) Letter of assignment in paper form

Since provided that it is stored in a form of image data, read out by scanner is considered to be the same as by photographing micro-film, and on the document printed out there appears sign or seal, the conditions (a) to

(e) for micro-film above are considered to be applicable as they are.

That is, as for the condition (a), a letter of certificate certified by the person who recognizes said original being true, may be recorded together with the assignment into one sheet as image data. As for the condition (b), a responsible observer is attended to ask him certifying "being correctly copied", and writing to the effect, followed by signing and sealing on the recording certificate. Said recording certificate is recorded onto one sheet together with a letter of assignment as an image data. As for the condition (c), said electronic recording media is to be prepared according to a rule of electronic media recording in a process of daily works. As for the condition (d), a scheme for prohibiting write into from outside systematically.

On the other hand, when it is stored in character data, the paper type letter of assignment is strictly an original, and the character data inputted is mere one type of the memorandum. Accordingly, a document prepared by printing out of the character data has little possibility in accepting evidential power.

(2) Letter of assignment prepared in a form of electronic information media

When the inventor inputs his sign electronically, a problem may be caused whether said electronic sign may be said of the assignee, i.e., inventor, or not. That is, whether a declaration of intention for the assignment by the assignee may be acceptably recognized from said electronic sign. Further, another problem is seemed to be caused whether the document printed out may be identical with the electronic information media.

The later is seemed to be in accordance with judicial precedent above, whereas the former cannot help expecting a solution by future technical and legal rearrangement accompanied with an improvement in electronics commerce, digital cashing service, and the like.

As studied above, even though a content recorded on the electronic recording media may be submitted as an evidence in a cite of court, a considerably sever record, settlement of administration organization, and rearrangement of the system are to be required. For the company arming at making effectiveness in works by the introduction of computerization, these requirements are seemed to give him negative advantage.

Accordingly, at present it is thought to be simple and safe approach

for storing the letter of assignment in a form of paper, as it is.

7-2. Computerization of laboratory note

A novelty of the patent filed with the U.S. Patent Office from Japan with claiming priority of Paris convention, can be retracted as far as the priority date, so far. However, on January 1, 1996, Section 104 of the U.S. Patent Law is revised that the novelty can become being retracted further to the date of the invention by filing an affidavit under Rule 131. By said revision, in order to prove the date of the invention as an evidence, many of companies started to keep laboratory note in our country.

However, a storing space for laboratory note is seemed to be largely expanded in future. Said storing space surely becomes larger than those for the application file wrapper.

Under the circumstances, in the most of the companies, it is thought that the laboratory note will be stored in a computerized form. In such a case, it is of great interest how (1) a form of the computerization, (2) evidential power of the computerized laboratory note, and (3) electronic sign which is required on the laboratory note, and for which confirmation by the third party is provided, are treated.

(1) Form of computerization for laboratory note

1) Semi-computerized type

A preparation of the laboratory note is made in written form as conventional, and on storing thereof, photo disc, micro-film, etc. are used. This type takes serious view of space.

2) Complete computerized type

A preparation itself is made by computer terminal, and a storing administration is also made in a lump. In such a system electronic sign is required for the confirmation by the third party.

3) Others

Basically, the computerization 1), 2) are considered, but an intermediate type which is arranged these, is also considered.

(2) Evidential power of laboratory note

Since a precedent deals in the U.S. Patent Office cannot find so far regarding whether the computerized laboratory note may have an evidential power for sufficiently proofing a date of the invention or date for

reduction to practice of the invention, a final decision must be expected for case study in future. Of course , it is true to not consider that the laboratory note has lack of evidential power.

However, at present, on practicing the computerized laboratory note, at least an effort for enhancing the evidential power is required.

In order to rise the evidential power of the computerized laboratory note, it is thought to be studied comparing with conditions for proving the date of the invention, which is required for a paper type laboratory note.

The paper type laboratory note satisfies at least the following conditions to secure the evidential power; a. being of book type (loose leaf type is not preferable), b. describing date, c. written in ink (not in pencil), d. no space remained, and e. being signed by the inventor and witness.

Among these conditions, conditions a. to d. is to prove that the content of the laboratory note cannot amend nor rewrite afterwards, and condition e. is to mainly prove that the content is true and not willful false statements. Accordingly, in the laboratory note, it is the minimum requirement to fulfill these two requirements for proving the date of the invention.

1) No willful fails of contents in computerized laboratory note

The sign by the inventor alone is not sufficient for proving that a content of the computerized laboratory note is true and not willful false. (Price v Symsek, 26 USPQ 1031, 1036 (Fed. Cir. 1993). Thus, a sign by the third party (witness) is generally required. In the case of the complete computerization type, the sign will be electronically made, which is discussed in following paragraph.

2) Content of computerized laboratory note is of no changeable afterwards

a) Input of date is preferable by automatic system. At any rate in order to exhibit that a program can be neither revised nor arranged, a submission of program is understood as indispensable. On the other hand, when the paper type laboratory note is stored in a micro-film in semi-computerized type, a trouble is not particularly caused since the micro-film is understood as same as a document, provided that the requirement discussed in 7-1.(1) is fulfilled.

b) When the laboratory note is stored and administered in complete

computerized type, the content of the laboratory note is secured so that the content should never be changed during the storage.

c) A proposal to advance evidential power for the laboratory note in terms of a date which is inputted by fair third party organization, electronic sign and computerized laboratory note per se. are also proposed. (The electric notebook by Howard M. Kanare, American Chemical Society, Washington D.C. (1985)). However, a study on various points such as keeping secret, etc. is necessary.

(3) Evidential power of electronic sign

1) For adopting the laboratory note as an evidence, the sign is to be specified as written by the person himself (for example, establishment pass word, or introduction of audio recognition system). And after signing by a person himself, a system must be the one such that a content is maintained without any change. (For example, a system in which inputted content is protected)

2) In the United States, electronic sign is used partially in commercial business, and is gradually expanded to be approved by local law in each states. (AIPPI Japan, U.S. Intellectual Property Seminar, Internet and Intellectual Property (1996.5.10)

As discussed above, under the present situation where precedent cannot be found, the laboratory note is also preferably stored as article in a form of document, in view of evidential power.

As such, it is the present status that a computerization for letter of assignment and laboratory note are to be understood as being negative.

However, it is nearly no doubt that in future a computerization of the documents will be proceeded more and more, and a problems caused thereby is to be technically overcome and is expected to be solved by revision in Law.

8. Conclusion

As discussed hitherto, in the present paper, several typical computerization forms of the file wrapper system are considered in relation to a policy of companies for computerization, but the consideration in view of the other feature may also be made. In particular, since a form of the

computerization for each company is so complicated and widely varied, it is not believed that all opinions in the companies are collected and studied. On the other hand, according to an improvement in electronic engineering and in establishment of new law, etc., a new computerization form which is different from those existed, is thought to be created.

We hope that the present paper is to be of certain help in studying future computerization for the companies.

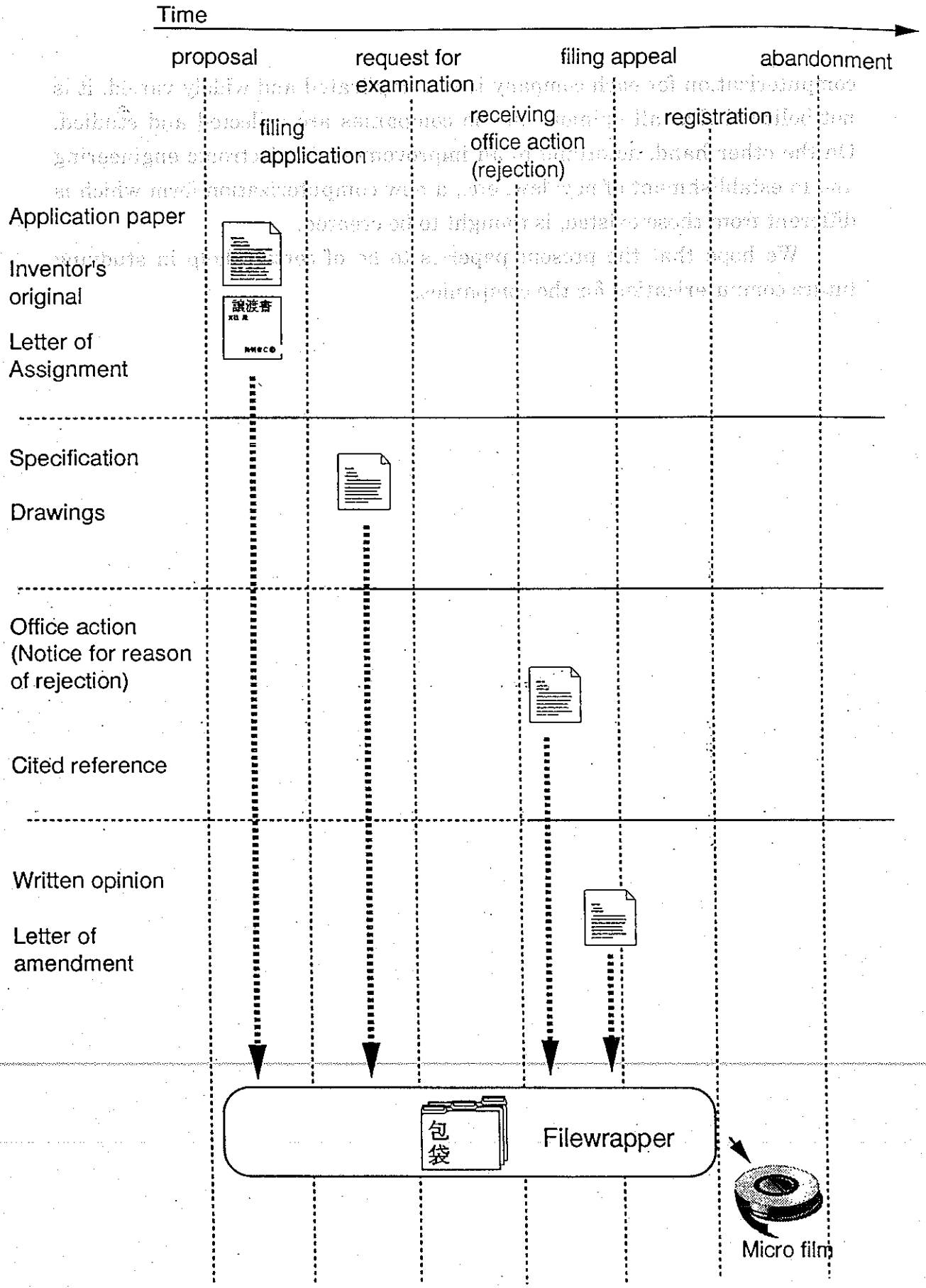
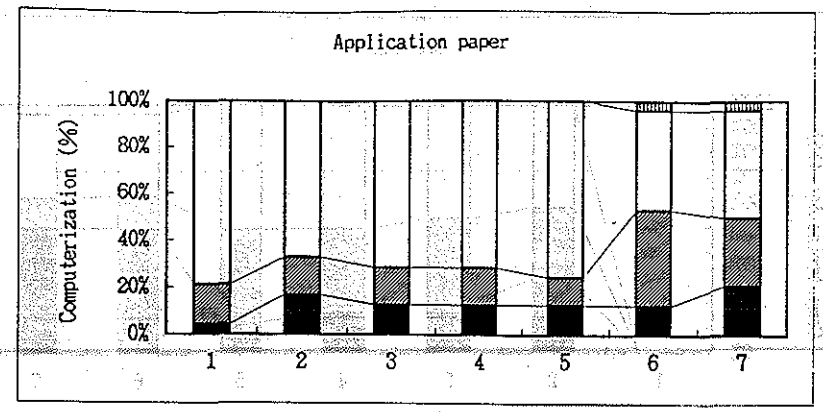
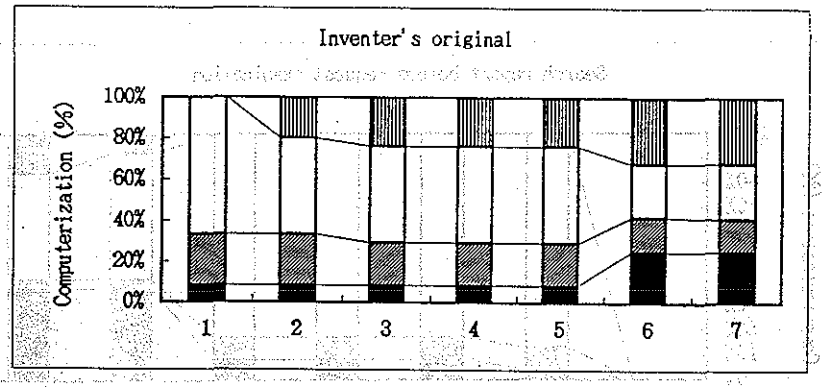
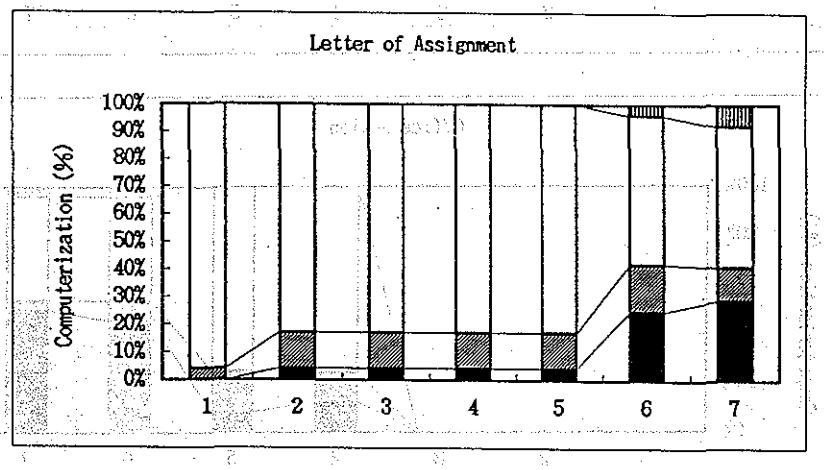


Fig.1 Conventional administration for filewrapper


Application paper
Computerization (%)
100%
80%
60%
40%
20%
0%
1
2
3
4
5
6
7


Inventer's original
Computerization (%)
100%
80%
60%
40%
20%
0%
1
2
3
4
5
6
7


Letter of Assignment
Computerization (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7

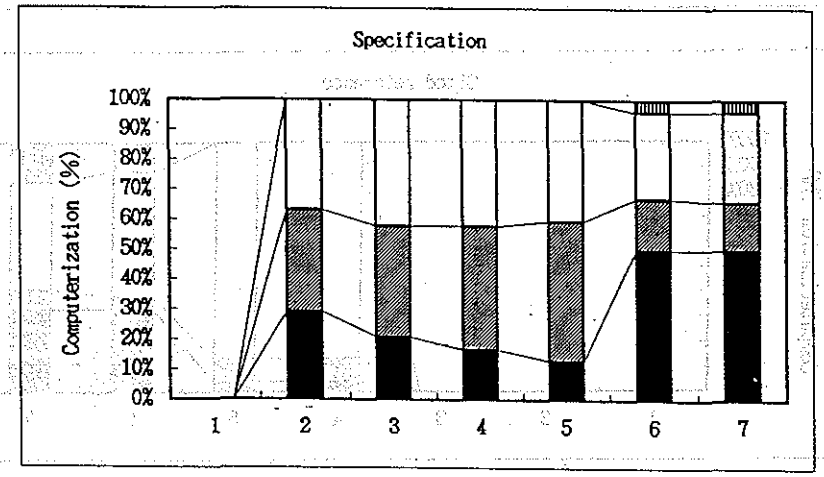
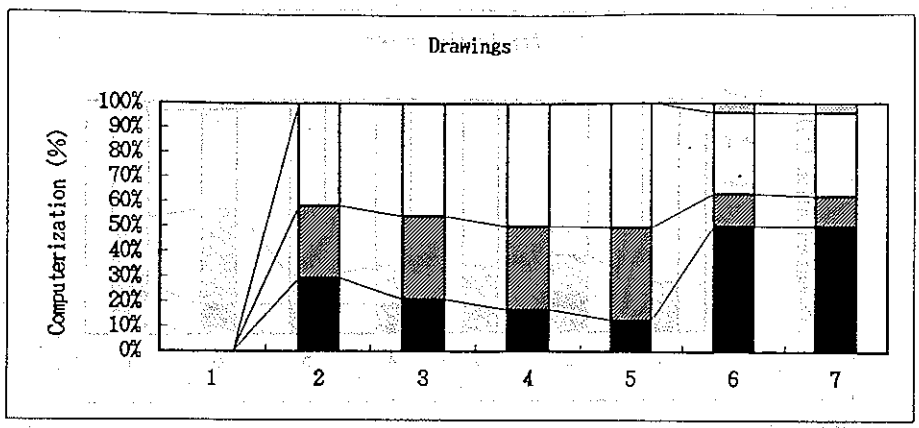
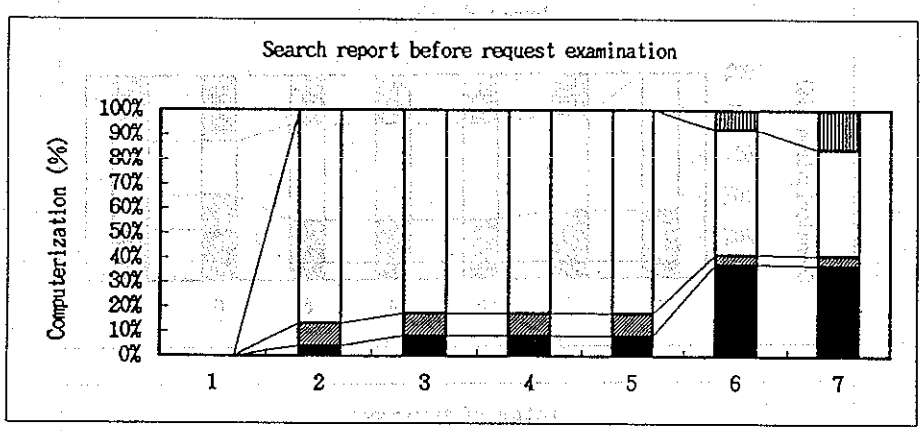
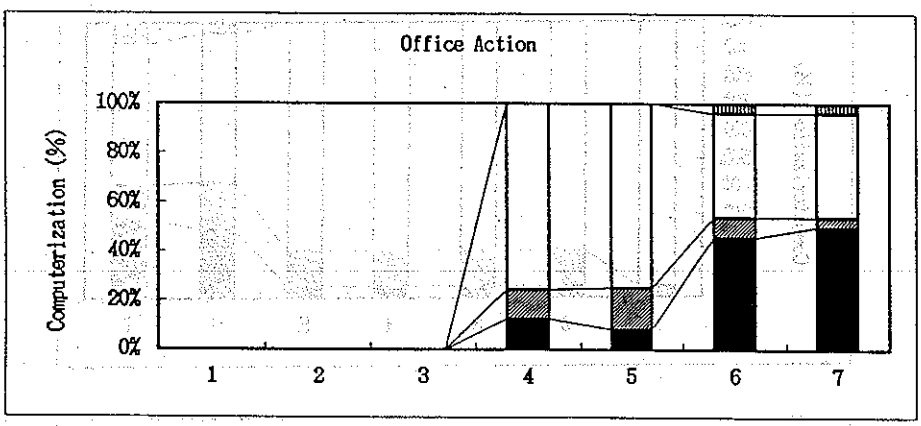

Specification
Computerization (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7

Fig. 2


Drawings
Computerization (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7


Search report before request examination
Computerization (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7


Office Action
Computerization (%)
100%
80%
60%
40%
20%
0%
1
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6
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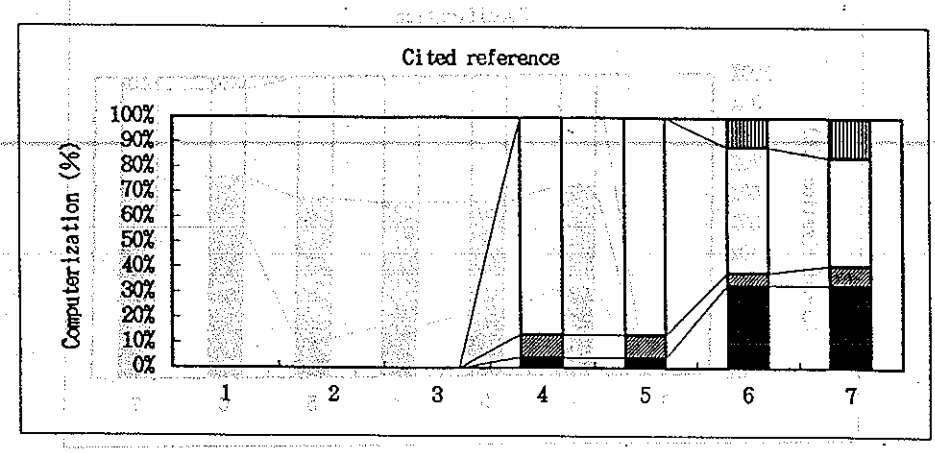
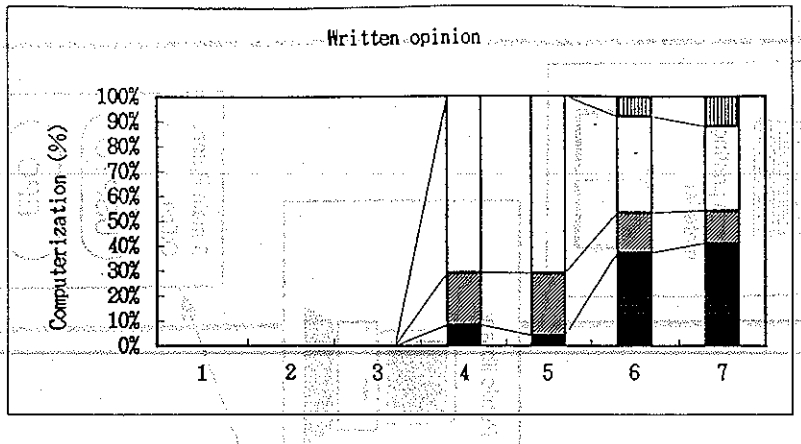

Cited reference
Computerization (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7

Fig. 2


Written opinion
Computerization (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1
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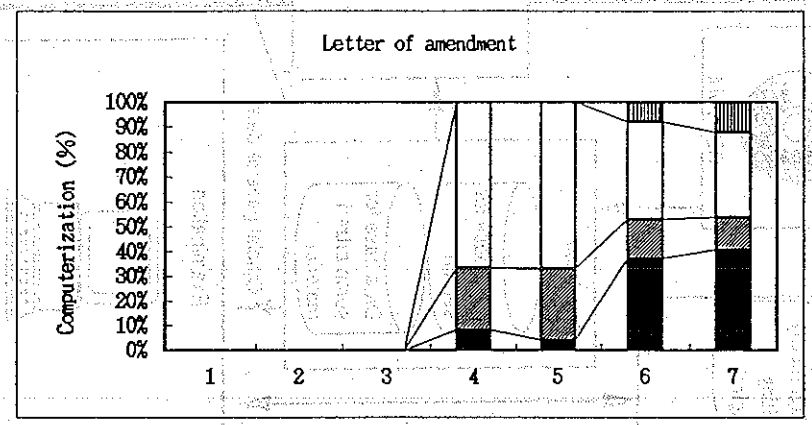

Letter of amendment
Computerization (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
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Fig. 2

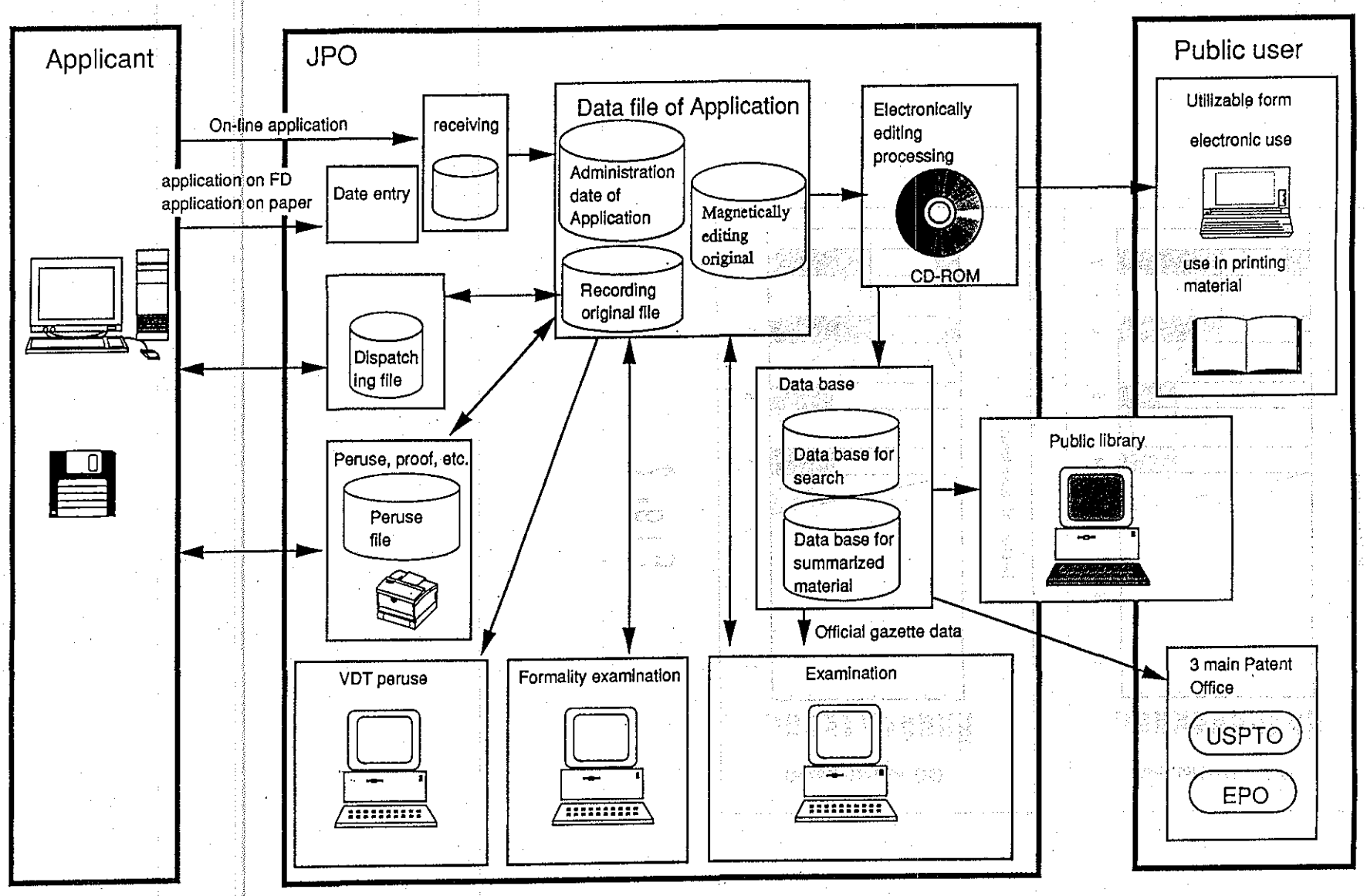


Fig. 3 Whole image of the paperless system
(Reffer to Home Page by JPO)

4. A trigger for computerization

5. Point for considering in computerization

Historical background, Environment, Circumstances

- No room for filewrapper administration space (increasing storing site ⇨ and number of application)
- Reducing number of person ⇨
- Introducing V1, V2 ⇨
- Development of LAN

	a (factor positively acted)	b (factor negatively acted)
(1) Space	Storing space of filewrapper can be reduced.	Computerized storing system suppresses onto working space.
(2) Cost	Resulting in decreasing land price doe to reduction of space.	Depending on a system form to be introduced, a facility cost may be raised.
(3) Making efficiency in works	Processing and utilization, which is capable of reducing work for preparing paper type filewrapper can be easily made.	Problem on conversion. Problem for available time.
(4) Man-machine interface	Access to storing document can be made from any place.	Lack of man-machine interface in studying.
(5) Security		Necessity of duplication.
(6) Administration of information	Unified administration of information becomes possible. Perfection in patent information system can be attained in combination with other system.	
(7) Evidential power		Doubt for evidential power. Process for making system to enhance the evidential power is too complicated.

※ point

① What is an object (positive factor) of said to proceed computerization of filewrapper information ?

② How to overcome negative factor ?

6. Form

6 — 1 Typical form in view of system side

(1) Computerization form in patent section

(2) Computerization form from inventor site

6 — 2 Typical form in view of practice in work

(1) Coexistence type

(2) Disposal type

(3) Compromise type

Fig. 4

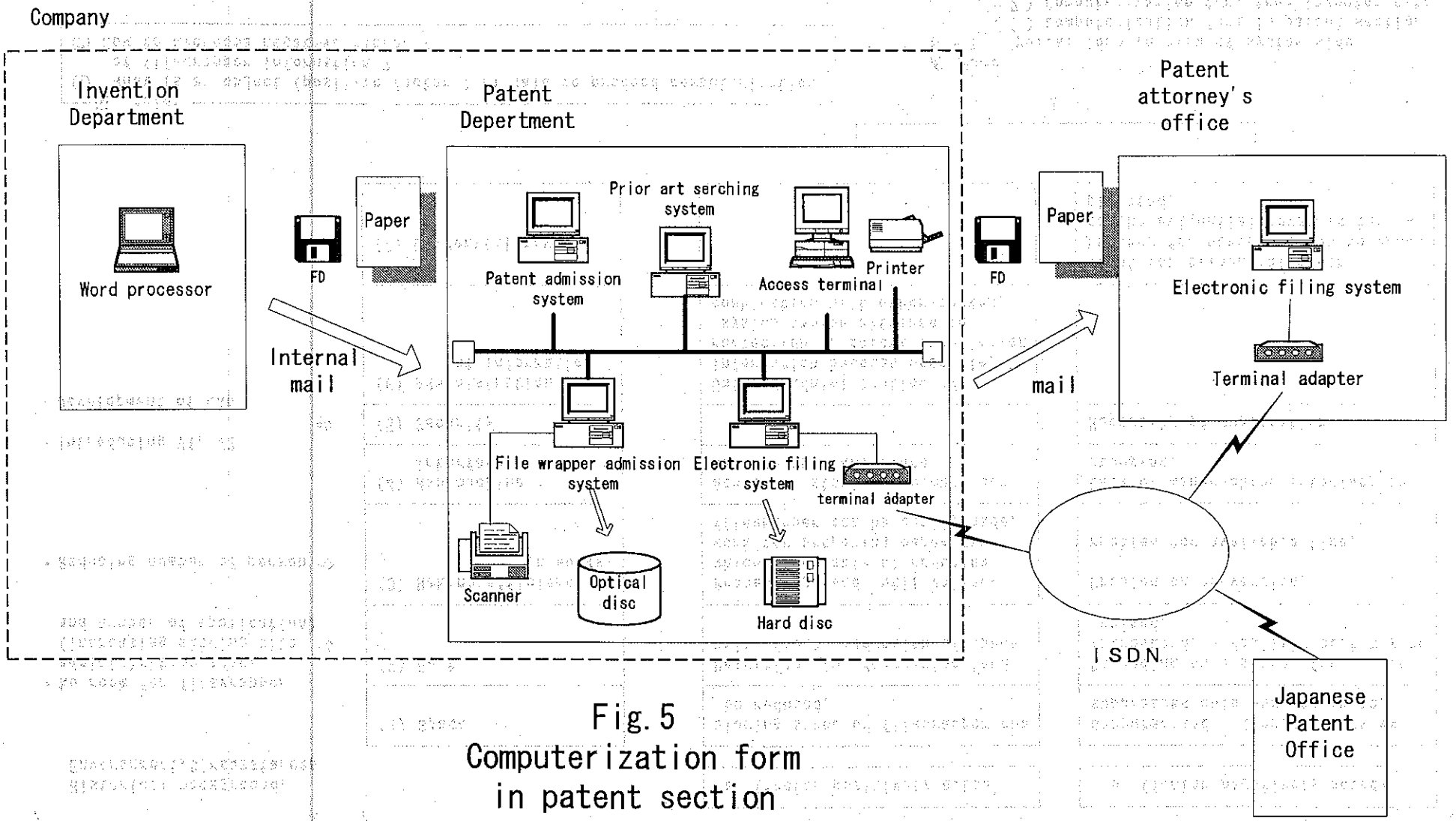


Fig. 5
Computerization form
in patent section

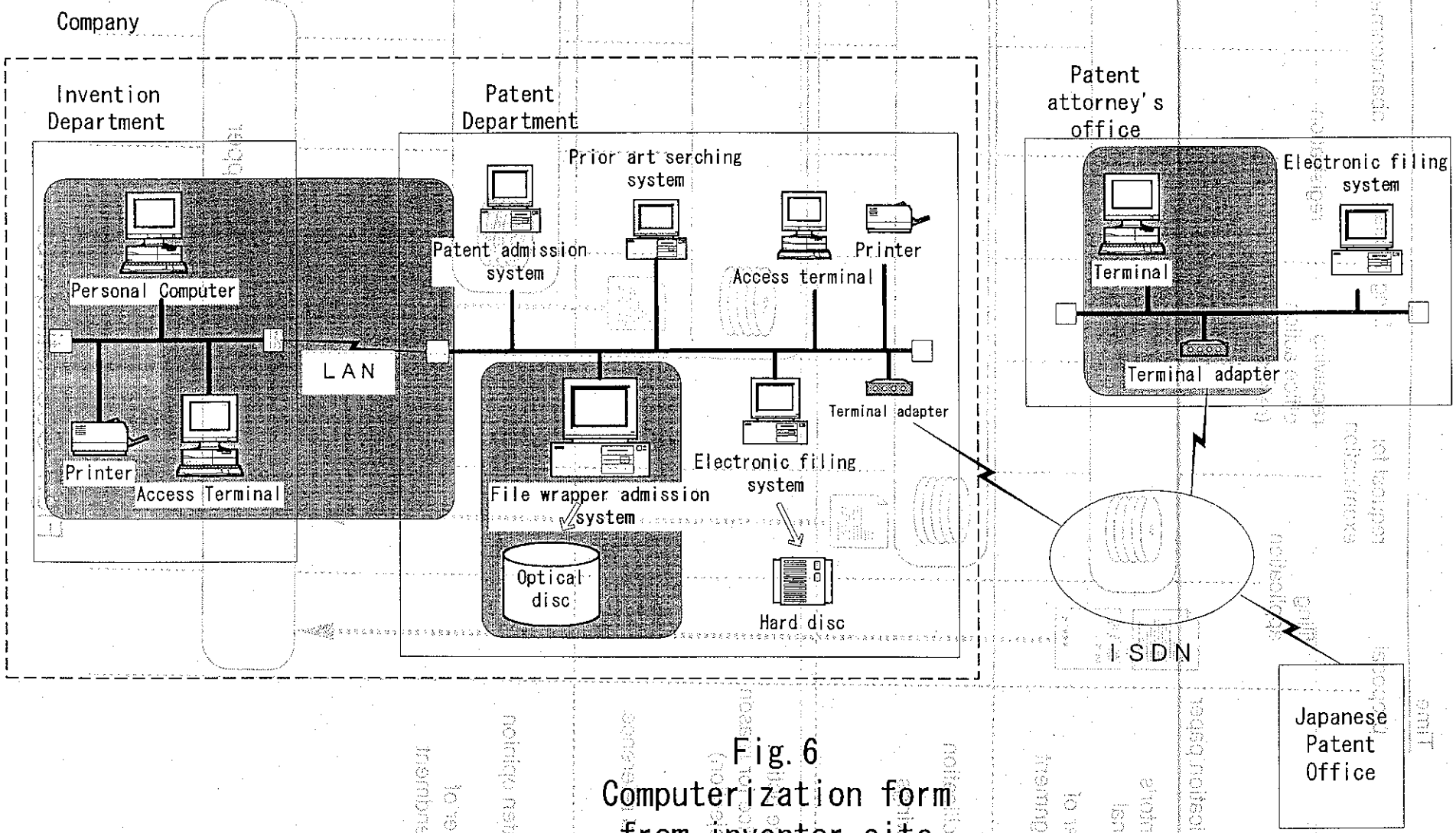


Fig. 6
Computerization form from inventor site

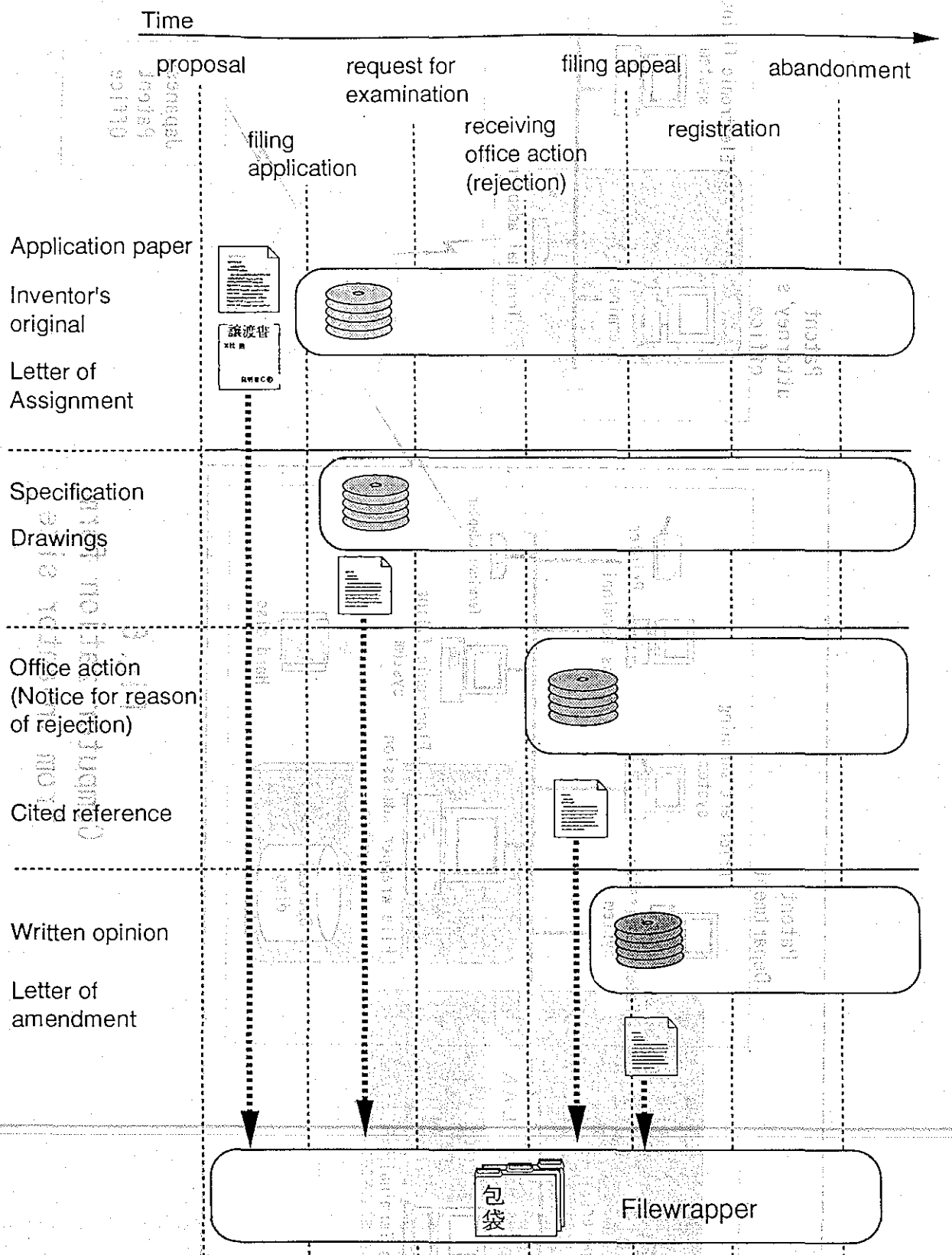


Fig.7 Coexisting type

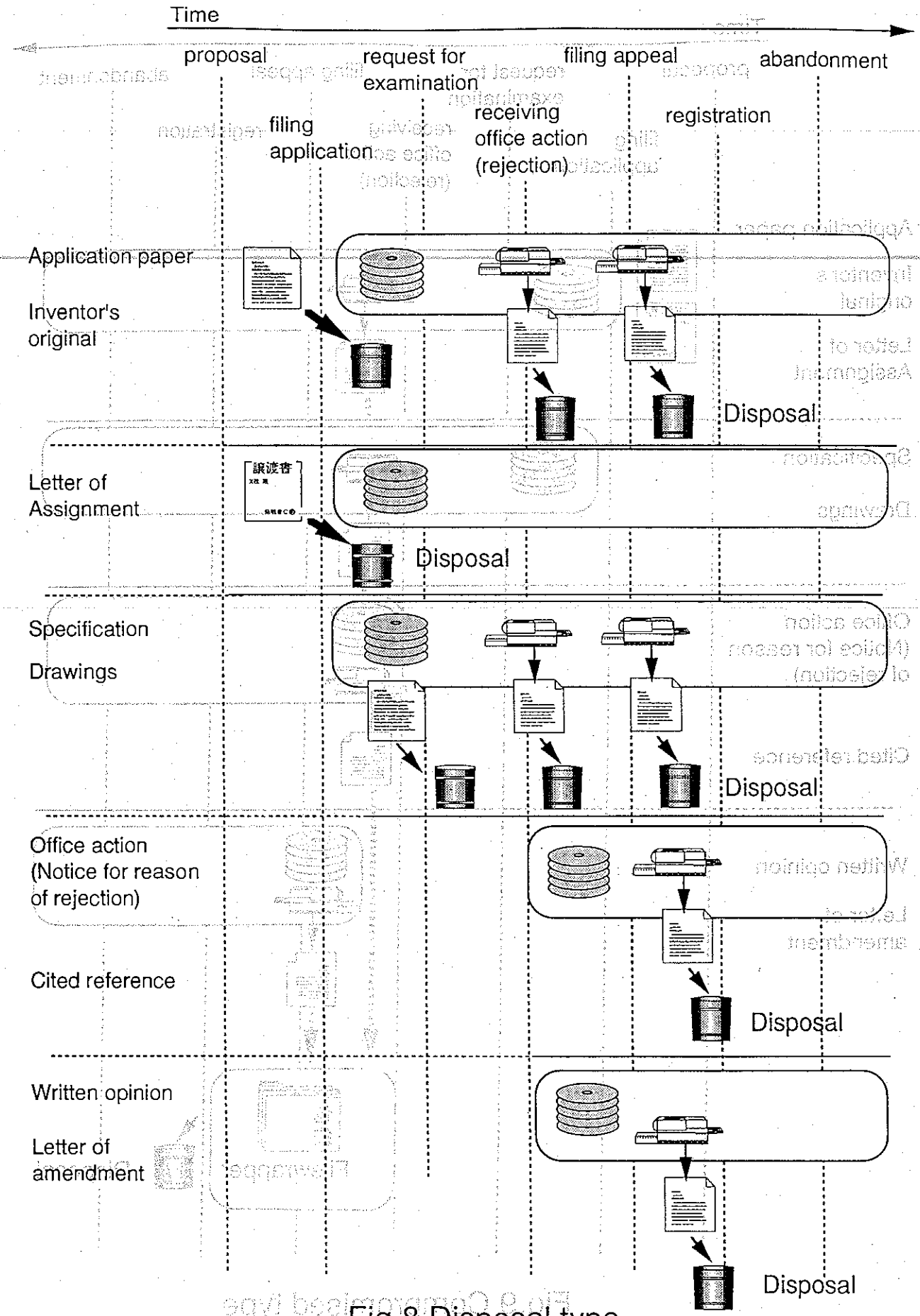


Fig.8 Disposal type

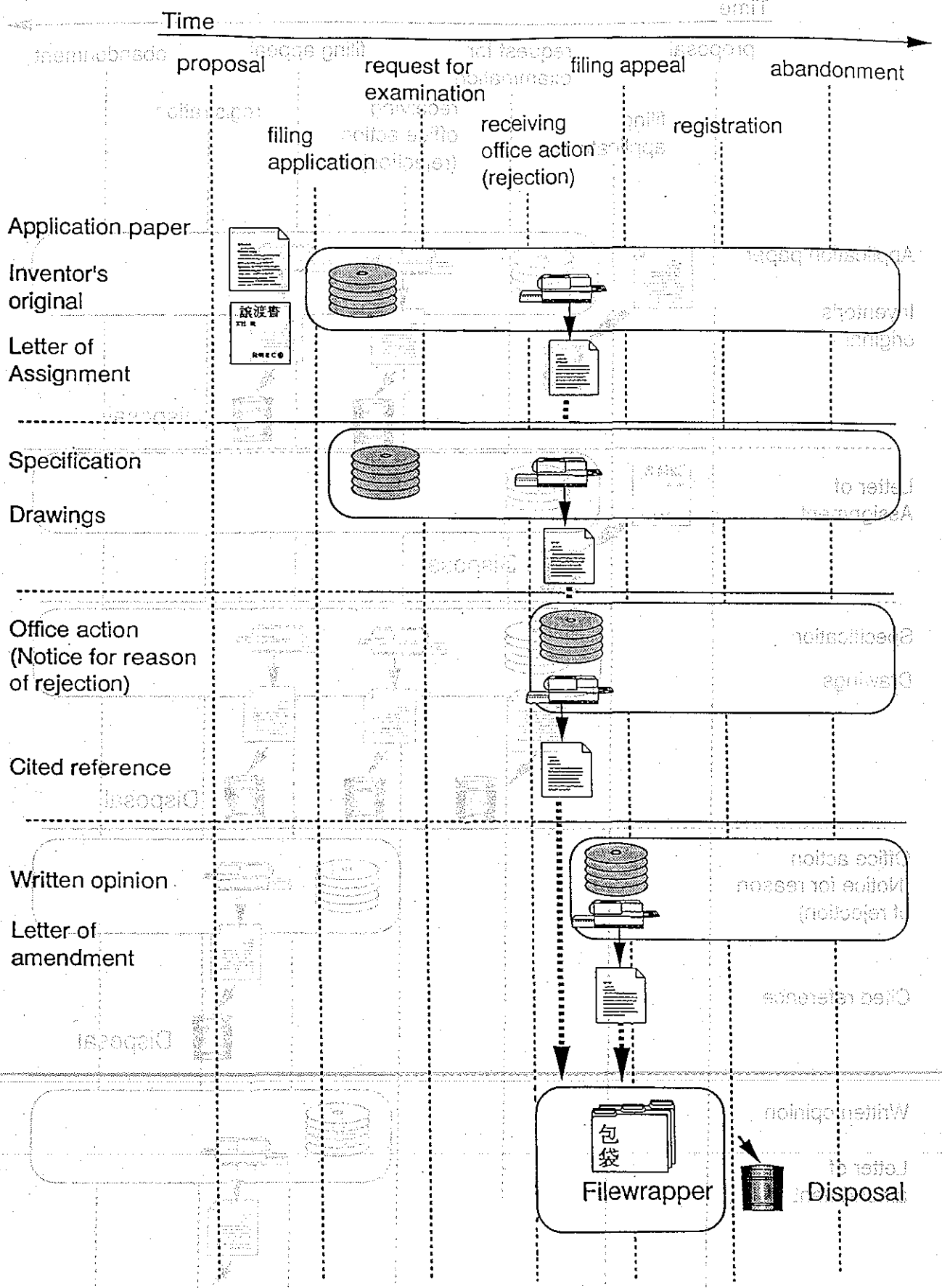


Fig.9 Compromised type

Attachment (Questionnaire Form)

1 Answered

Company ( ) Section ( )

Name ( ) Phone ( )

2 File wrapper Information

(1) At present, among file wrapper of the domestic application, how many file wrapper is stored in a paper form ?

a) Less than 100 b) 100 or more, less than 1000

c) 1000 or more, less than 5,000

d) 5,000 or more, less than 10,000

e) 10,000 or more.

(2) Storing Place ?

a) In Pat. Sec. b) In own area, inclusive of subsidiary

c) Commission company d) Other ( )

(3) After registration, how long information (including file wrapper) is stored ?

a) No limitation b) With limitation; ( )years

(4) At present, among file wrapper of foreign application,

how many file wrapper is stored in a paper form ?

a) Less than 100 b) 100 or more, less than 1000

c) 1000 or more, less than 5000

d) 5000 or more, less than 10,000

e) 10,000 or more

3 Management of file wrapper of domestic application

(1) Please show the present state.

a) No proceeding computerization, and no plan in future.

b) No computerization at present, but plans thereof.

From about ( )year, ( )month

c) Computerized part of document or part of process.

From about ( )year, ( )month

d) All computerized. From ( )year, ( )month

(2) For the company answered a) or b) in (1) above, please answer reason, if it is not introduced yet.

( )

Followings are for the company who answered c) or d) in (1) above.

(3) From what step an information was computerized ?

Please write a stored media in each step on a Table attached, identified with numerals. If plural media were stored, please write plural numerals.

(4) If any document other than mentioned in the Table attached, are stored as an information, please write a name of the document, and stored media onto the Table.

(5) Is file wrapper of the foreign application different from the above in its handling ?

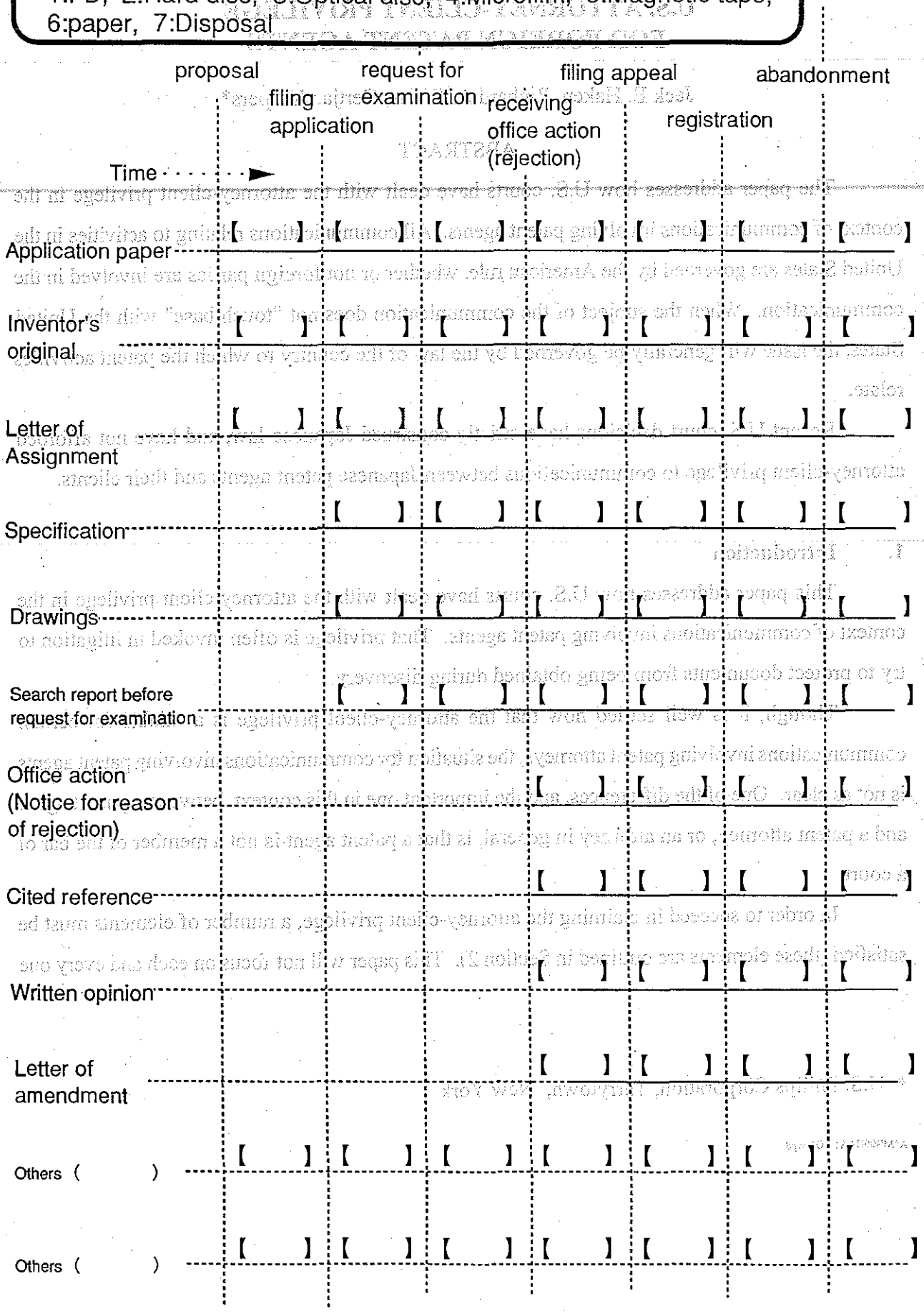
a) Almost the same as of the domestic one.

b) Computerization is not so proceeded as of the domestic one.

c) Others.

Thank you for your kind cooperation.

Form for storage
1:FD, 2:Hard disc, 3:Optical disc, 4:Microfilm, 5:Magnetic tape, 6:paper, 7:Disposal



U.S. ATTORNEY-CLIENT PRIVILEGE FOR FOREIGN PATENT AGENTS

Jack E. Haken, Richard A. Weiss, Gertjan Kuipers*

ABSTRACT

The paper addresses how U.S. courts have dealt with the attorney-client privilege in the context of communications involving patent agents. All communications relating to activities in the United States are governed by the American rule, whether or not foreign parties are involved in the communication. When the subject of the communication does not "touch base" with the United States, the issue will generally be governed by the law of the country to which the patent activities relate.

Recent U.S. court decisions have strictly construed Japanese law, and have not afforded attorney-client privilege to communications between Japanese patent agents and their clients.

1. Introduction

This paper addresses how U.S. courts have dealt with the attorney-client privilege in the context of communications involving patent agents. That privilege is often invoked in litigation to try to protect documents from being obtained during discovery.

Though, it is well settled now that the attorney-client privilege is available for certain communications involving patent attorneys, the situation for communications involving patent agents is not as clear. One of the differences, and the important one in this context, between a patent agent and a patent attorney, or an attorney in general, is that a patent agent is not a member of the bar of a court.

In order to succeed in claiming the attorney-client privilege, a number of elements must be satisfied (these elements are outlined in Section 2). This paper will not focus on each and every one

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of those elements. Rather, it will be assumed that most requirements are satisfied, and the privilege would exist if the communication was made or received by an attorney. Whether the privilege would also exist if a patent agent was involved in the communication will be the subject of Section 3. In that section the "member of the bar of a court, or his subordinate" element will be discussed and applied to patent agents in a number of different situations.

2. The Attorney-Client Privilege

The attorney-client privilege encourages complete disclosure of information between an attorney and a client to further the interest of justice.[1] This is achieved by preventing disclosure to third parties of confidential client communications made to an attorney by a client seeking legal advice.[2]

While the attorney-client privilege serves a very important purpose, courts are aware that it may nevertheless be an obstacle to the investigation of the truth. Accordingly, the attorney-client privilege is applied strictly.[3] The party asserting the attorney-client privilege has the burden of establishing the following traditional elements:

> (1) the asserted holder of the privilege is or sought to become a client; (2) the person to whom the communication was made (a) is a member of the bar of a court, or his subordinate and (b) in connection with this communication is acting as a lawyer; (3) the communication relates to a fact of which the attorney was informed (a) by his client without the presence of strangers (c) for the purpose of securing primarily (i) an opinion of law or (ii) legal services or (iii) assistance in some legal proceeding, and not (d) for the purpose of committing a crime or tort; and (4) the privilege has been claimed and (b) not waived by the client.[4]

A simple declaration stating that the privilege applied is not enough, and a failure by the asserting

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[1] Upjohn Co. v. United States, 449 U.S. 383, 389 (1981).

[2] Burroughs Welcome Co. v. Barr Laboratories, Inc., 25 USPQ2d 1274, 1275 (E.D. N.C. 1992).

[3] In re Ampicillin Antitrust Litigation, 202 USPQ 134, 137 (D. D.C. 1978); Burroughs, 25 USPQ2d at 1275.

[4] United States v. United Shoe Machinery Corp., 85 USPQ 5, 6 (D. Mass. 1950).

party to prove any of the above elements may result in a denial of the privilege.

Though a detailed discussion of all of the elements is outside the scope of this paper, it is clear from the elements listed above that communications between an attorney and a client "must be made both 1) with the intent that they be confidential and 2) in connection with a request for legal advice."[5] Accordingly, courts have identified the following types of patent law related documents as not being protected by the attorney-client privilege:

> 1) Client authorizations to file applications and take other steps necessary to obtain registration;
> 2) Papers submitted to the Patent Office;
> 3) Compendiums of filing fees and requirements in the United States and foreign countries for various types of applications;
> 4) Resumes of applications filed and registrations obtained or rejected (including dates and file or registration numbers);
> 5) Technical information communicated to the attorney but not calling for a legal opinion or interpretation and meant primarily for aid in completing patent applications;
> 6) Business advice such as that related to product marketing;
> 7) Communication whose confidentiality [the client] has waived;
> 8) Communications which pass through an attorney who acts only as a conduit for a third party;
> 9) Transmittal letters or acknowledgement of receipt letters devoid of legal advice or requests for such advice and disclosing no privileged matters[; and]
> 10) Patent disclosures, draft applications, technical non-legal material related to the final patent, or studies of the prior art.[6]

Courts, however, have also made clear that the attorney-client privilege could be available to certain other types of documents, including "prior art searches and discussions and documents related to the prior art if they contain or reflect communications made in connection with requests for legal advice or legal opinion as to patentability" and "drafts of replies and responses prepared in response to questions or decisions of a patent examiner."[7]

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[5] Burroughs, 25 USPQ2d at 1276.

[6] Id. (citations omitted).

[7] Id. (citations omitted).

In the rest of this paper, it will be assumed that the attorney-client privilege would apply to a specific communication if it was made by an attorney. Accordingly, the applicability of the attorney-client privilege hinges only on the fact that a patent agent, rather than a registered attorney, was involved in the communication.

As opposed to registered attorneys, patent agents are not "members of the bar of a court." Though this is one of the traditional requirements of the attorney-client privilege, some courts take a more liberal approach. For example, in In re Ampicillin, the fact that a patent agent was not a member of the bar of a court, did not quickly dispose of the issue of whether the attorney-client privilege was applicable. The court In re Ampicillin held that the attorney-client privilege is available for patent agents in the role of an "attorney" in certain instances.[8]

This and other holdings will be discussed in the following section on the applicability of the attorney-client privilege to communications involving patent agents.

3. Application of the Attorney-Client Privilege to Patent Agents

The attorney-client privilege basically involves two parties, i.e., the "attorney" and the "client". Patent agents can either acta as the "attorney" or the "client". For patent agents that are involved in the communication from the side of the "attorney", the traditional "member of the bar of a court, or his subordinate" requirement becomes relevant. Accordingly, the main focus in the analysis of the case law will be directed towards patent agents in this position.

The analysis of the case law will be divided between cases in which U.S. privilege law will apply, and cases in which foreign privilege law has an impact. This influence of a foreign privilege law is based on the federal common law principle[9] of comity. This principle holds that while no law has of its own force any effect outside the territory of the state or nation from which its authority is

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[8]In re Ampicillin, 202 USPQ at 143.

[9]Since patent infringement cases are of a federal nature, federal common law principles will apply. See Chubb Integrated Systems Ltd. v. Nat'l Bank of Washington, 224 USPQ 1003, 1010 (D. D.C. 1984); Willemijn Houdstermaatschappij v. Apollo Computer, 13 USPQ2d 1001, 1012 (D. Del. 1989).

derived, foreign laws may, within certain limits be given effect.[10] One of the main principles of comity is that comity will not extend to foreign law or rights based thereon if it opposes settled public polity of the forum nation.[11] Thus, since "the United States has a strong interest in regulating activities that involve its own patent laws, all communications relating to patent activities in the United States will be governed by the American rule,"[12] i.e., the federal discovery rules will govern communications "touching base" with the United States in a patent infringement action,[13] whether foreign or domestic parties are involved in the communication.

In cases involving "communications with foreign patent agents as to applications for foreign patents,"[14] however, the "introduction of the foreign elements creates a whole new set of variables."[15] For example, in the United States there is no inhibition against the lawyer's direct handling of the application with the United States Patent Office without involving a patent agent, while for the prosecution of an application in some foreign countries such representation is not possible. The difference between communications with United States patent agents about application for United States patents and communications with foreign patent agents as to applications for foreign patents is meaningful, as is evidenced by a statement to that extent by the court in Mendenhall.[16] The communications with foreign patent agents as to foreign patent applications will normally be governed by the law of the country to which the patent activities relate.[17]

When a patent agent is in the role of the "client", applicability of the attorney-client privilege

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[10]In re Ampicillin, 202 USPQ at 144.

[11]Duplan Corp. v. Deering Milliken, Inc., 184 USPQ 775, 788 (D. S.C. 1974).

[12]In re Ampicillin, 202 USPQ at 144.

[13]Duplan, 184 USPQ at 788.

[14]Mendenhall v. Barber-Greene Co., 217 USPQ 787, 788 (N.D. Ill. 1982).

[15]Id. n.4.

[16]Id.

[17]In re Ampicillin, 202 USPQ at 143; See also Burroughs, 25 USPQ2d at 1282.

is no different than for any other client.

3.1 Communications Involving U.S. Patent Agents, and Communications on Subject Matter Touching Base With the U.S.

Communications involving U.S. patent agents acting as "attorneys", or communications involving U.S. or foreign patent agents on matters that touch base with the U.S., will be governed by the United States attorney-client privilege law.[18]

3.1.1 Patent Agents in the Position of the "Attorney"

Applicability of the attorney-client privilege to communications in which a patent agent acts as an "attorney", is split along two lines, as is indicated in many cases.[19]

The first line follows the rule that "no communication from patent agents, whether American or foreign, are subject to an attorney-client privilege in the United States."[20] The reasoning for such a rule is given by the court in Benckiser:[21]

> [t]he acknowledged purpose of the attorney-client privilege is to facilitate our advisary system of litigation by encouraging full disclosure to one who may someday represent his client in such litigation before the courts. While the lawyer's oath and code of ethics, which are also required of patent agents, provide an added reason for the client's trust, they are not the source of the privilege. In light of the general trend to limit such independent privileges to the essential requirements of their purpose, the attorney-client privilege has not been extended to non-attorney practitioners who engage in administrative representation short of actual litigation in the courts.[22]

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[18]Unlike the law of other countries, such as the United Kingdom, on this subject, the American rule is governed by case law rather than by statute. See for example, In re Ampicillin, 202 USPQ at 144.

[19]In re Ampicillin, 202 USPQ at 144; Chubb, 224 USPQ at 1011; Stryker, 24 USPQ2d at 1680.

[20]Duplan, 184 USPQ at 788.

[21]Joh. A. Benckiser G.m.b.H. v. Hygrade Food Products, 149 USPQ 28 (D. N.J. 1966).

[22]Benckiser, 149 USPQ at 30.

Accordingly, under the first line of cases, even though a patent agent is licensed to practice before the Patent Office, he/she is not licensed to practice before any state or federal court, and thereby does not fulfill the "member of the bar of a court" requirement as laid down in United Shoe.[23] this rule has, however not been adopted by all courts.[24]

Other courts, such as the court in In re Ampicillin court, have adopted a second rule. The second rule is that "the attorney-client privilege must be available to communications of registered patents agents."[25] The reasoning for such a rule is given by the court in In re Ampicillin:

> the denial of the attorney-client privilege to patent agent communications ... would result in significantly unequal treatment of patent agents and patent attorneys. Congress, in creating the Patent Office, has expressly permitted both patent attorneys and patent agents to practice before that office. The registered patent agent is required to have full and working knowledge of the law of patents and is even regulated by the same standards, including the Code of Professional Responsibility, as are applied to attorneys in all courts. Thus, in appearance and in fact, the registered patent agent stands on the same footing as an attorney in proceedings before the Patent Office. Therefore, under the congressional scheme, a client may freely choose between a patent attorney and a patent agent for representation in those proceedings. That freedom of selection, protected by the Supreme Court in Sperry, however, be substantially impaired if as basic a protection as the attorney-client privilege were afforded to communications involving patent attorneys but not to those involving patent agents. As a result, in order not to frustrate the congressional scheme, the attorney-client privilege must be available to communications of registered patent agents.[26]

The availability of the attorney-client privilege to patent agents under the second rule is restricted to those patent agents that are registered with the Patent Office.

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[23]See for example: Joh. A Benckiser G.m.b.H. v. Hygrade Food Products, 149 USPQ 28 (D. N.J. 1966). Duplan Corp. v. Deering Milliken, Inc., 184 USPQ 775 (D. S.C. 1974), Status Time Corp. v. Sharp Electronics Corp., 217 USPQ 438 (S.D. N.Y. 1982), Burroughs Welcome Co. v. Barr Laboratories, Inc., 25 USPQ2d 1274 (E.D. N.C. 1992), Detection Systems, Inc. v. Pittway Corp., 220 USPQ 716 (W.D. N.Y. 1982), Rayette-Faberge, Inc. v. John Oster Manufacturing Co., 163 USPQ 373 (E.D. Wis. 1969), United States v. United Shoe Machinery Corp., 85 USPQ 4 (D. Mass. 1950).

[24]See for example Willemijn, 13 USPQ2d at 1014, n.25.

[25]In re Ampicillin, 202 USPQ at 146. This rule was already present in Vernitron Medical Products, Inc. v. Baxter Laboratories, Inc. 186 USPQ 324, 325 (D. N.J. 1975).

[26]In re Ampicillin, 202 USPQ at 145-146.

The court in In re Ampicillin acknowledged that there undoubtedly "are patent agents who meet all the registration requirements, but have not actually registered."[27] Nevertheless, it found it "necessary to limit the holding to these [patent] agents who have registered."[28] That limitation seems to result from the balance struck between two principles: limiting the scope of the privilege on the one hand so as to encourage discovery, and the congressional intent to have registered patent agents and attorneys treated equally on the other hand.[29] A second reason for the registered patent agents' limitation is that it will ensure that patent agents will be subject to professional and ethical standards set by the Patent Office.[30] Furthermore, the court believed that that limitation set forth "a clearly defined test so that all parties will know beforehand whether the privilege is available."[31]

The Ampicillin rule has been followed by some courts.[32] According to some, the Ampicillin rule is the prevailing view today.[33] However, several courts do follow the Bencklser rule.

In addition, some courts have just mentioned the split in the case law, and have side stepped the issue, sometimes explicitly stating that they expressed no opinion as to what is the right view or rule.[34] The choice of rule could, for example, be avoided if the patent agent could be qualified as a "subordinate of a member of the bar of a court." Patent agents in this situation work at the direction of, and under the supervision of the attorney,[35] and are called agents or subordinates of the

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[27]Id. at 146, n. 30.

[28]Id.

[29]Id.

[30]Id.

[31]Id.

[32]See for example: Stryker Corp. v. Intermedics Orthopedics Inc., 24 USPQ2d 1676, 1680 (E.D. N.Y. 1992).

[33]Pretty, L.H., *Where the Veil Against Discovery in patent litigation falls*, 76 JPTOS 71-72 (1994).

[34]Mendenhall, 217 USPQ at 788 n.4; Chubb, 224 USPQ at 1011.

[35]Hercules, 196 USPQ at 408; See also Congoleum Industries, Inc. v. G.A.F. Corporation, 164 USPQ 376 (E.D. Pa. 1969).

attorney. Both inside patent agents[36], i.e., those patent agents working in the patent department of a corporation, as well as outside patent agents[37], i.e., those patent agents working on an independent basis, could be in this position. Hence, when a patent agent, even an outside patent agents, is acting as an agent of an attorney, communications with those patent agents can be protected by the attorney-client privilege on the basis that they are agents of the attorney.[38]

3.1.2 Patent Agents Acting as the "Client"

The applicability of the attorney-client privilege to communications involving patent agents in the role of the "client" is no different than for communications involving any other client. Some analysis will be directed, however, to patent agents in this role, since it illustrates the way courts have dealt with the issue of attorney-client privilege in the context of patent agents.

When discussing patent agents acting as the "client", that discussion should be divided between inside, and outside patent agents.

Inside patent agents are employees of the corporation, and may therefore be part of the "corporate client". The exact requirements and specifications with respect to the corporate employees covered by this term were laid down by the Court in Upjohn.[39] For corporate employees to be part of the corporate client with respect certain communications, "[t]he communications [must] concern matters within the scope of employees' corporate duties, and the employees themselves [must be] sufficiently aware that they [are] being questioned in order that the corporation can obtain legal advice."[40]

Outside patent agents normally handle patent matters on an independent basis, and are

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[36]See for example Hercules, 196 USPQ at 408.

[37]See for example Willemiin, 13 USPQ2d at 1013.

[38]Willemijn, 13 USPQ2d at 1013.

[39]Upjohn Co. v. United States, 449 U.S. 383 (1981)

[40]Id. at 394.

typically not employees of the corporation. The court in Foseco,[41] however, extended the attorney-client privilege to communications between an outside patent agent and an attorney with the use of a "constructive employee" theory. According to this theory, the communications between a British patent agent, that was acting on behalf of a British corporation, and a U.S. patent counsel were protected by attorney-client privilege, since "these communications [were] in essence communications between the client and the client's attorney."[42] The Foseco court found that "[t]he British patent agent acted at the direction and control of the [British corporation].[43] The court in Chubb, however, rejected this reasoning and stated that "[outside] patent agents are not employees of the corporation. Typically, [an outside] patent agent is akin to an independent contractor, as opposed to an employee."[44] Though the Chubb court held that the patent agent at issue was not an employee, the wording seems to leave some room for the situation in which the outside patent agent is not the "typical" outside patent agent.[45]

3.2 Foreign Patent Agents Involved in Communications Not Touching Base With the U.S.

This section will focus on communications involving foreign patent agents on subject matter not touching base with the U.S.[46] Many of those communications involve aid in the prosecution of patent applications before a foreign patent office. In addition to a client and a foreign patent agent, an attorney, for example, the attorney that handled the case in the U.S., could be involved in the communication. This involvement of the attorney could either be on the side of the client or on the

[41] Foseco International Ltd. v. Fireline, Inc., 218 USPQ 157 (N.D. Ohio 1982).

[42] Id. at 160.

[43] Id.

[44] Chubb, 224 USPQ at 1011.

[45] The Chubb court found that they had "no facts (other than plaintiff's label of him) from which to conclude that Mr. Coles was otherwise than the typical [outside] patent agent." Chubb, 224 USPQ at 1011.

[46] Communications involving foreign patent agents on subject matter which touches base with the U.S. are governed by the law as outlined in Section 3.1.

side of the foreign patent agent. The foreign patent agent typically has the role of the "attorney". The court in Stryker, set out the way courts have "grappled with the issue"[47] of the attorney-client privilege in the above mentioned situations. The first rule mentioned by the Stryker court was that:

> [if] the communication is actually between the client and the foreign patent agent, and the attorney merely serves as a conduit for the information, the communication is not privileged unless under foreign law communications between patent agents and clients are privileged. Similarly, if the communication is actually between the attorney and the foreign patent office, and the foreign patent agent merely serves as a conduit, the communication is not privileged unless direct communication between the attorney and the foreign patent office is confidential.[48]

The exceptions to this rule, though given in Stryker, are best described by the language of the court in the case that laid down this first rule, the Mendenhall court. This court stated that:

> All the analysis shifts dramatically if the communication between lawyer and foreign agent is "substantive" - if it is not simply meant to be passed along to the foreign patent office as part of the client's application. In that event there are two possibilities:
>
> 1) If the foreign patent agent is primarily a functionary, with the real lawyering being done by the United States lawyer, the communication is like that between a lawyer and any non-lawyer who serves under the lawyer's supervision. It therefore makes no difference whether the patent agent himself is generally covered by a privilege, any more than is required of an investigator under parallel circumstances.
>
> (2) If the patent agent is also engaged in the substantive lawyering process however (because of knowledge of the foreign law), the communications between United States lawyer and foreign patent agent are between two professionals, if that is in fact the situation presented by the present case, each is treated by his own country as a subject of the privilege. Hence, the posture is no different from what would obtain if co-counsel in the United States were to correspond with each other

[47]Chubb, 224 USPQ at 1011.

[48]Stryker, 24 USPQ2d at 1680.

on substantive legal matters: clearly privileged.[49]

The Mendenhall[50] rule was clearly written for situations involving correspondence on matters not touching base with the U.S. According to the court in In re Ampicillin, in such situations "the United States has no such strong interest,...so that deference will be given to the [foreign] rule."[51] The shift analysis in the case of "substantive" communications, mentioned by the Mendenhall court seems to involve, at least in part, a switch to the U.S. attorney-client privilege rule.

The possibility of the foreign patent agent being treated as a co-counsel of the U.S. attorney was, however, not found in the above analysis under Section 3.1.1 of the cases in which the U.S. attorney-client privilege rule was held applicable. This could be a consequence of the fact that to be treated as a co-counselor, the patent agent should be a subject of the privilege in his own country, an issue that is still questionable in the U.S. (as was outlined in Section 3.1.1).

Most courts, however, have taken an approach which differs from that taken by the Mendenhall court in situations involving communications from or to foreign patent agents on subject matter not touching base with the U.S. For example, the court in Willemijn[52] used Mendenhall rule for communications touching base with the U.S.,[53] but held that for communications involving a foreign patent agent on matters not touching base with the U.S. "comity require[d] that they be given the same attorney-client privilege that they would be given abroad."[54] Under this rule, "[i]f the communication does not 'touch base' with the United States, a court will look to the law of the foreign jurisdiction to determine whether a privilege would protect that communication in the foreign

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[49]Mendenhall, 217 USPQ AT 789.

[50]The rule was formulated and followed by the Northern District of Illinois.

[51]In re Ampicillin, 202 USPQ at 144.

[52]Willemijn, 13 USPQ2d 1001

[53]Id. at 1014.

[54]Id.

country."[55] The relevant foreign law, i.e., the law a court would look at in these situations, is the law of the country to which the patent activities relate.[56]

At least one court that followed this second rule has done so involuntarily. The Stryker court, after having recited the two different rules discussed above, found itself "constrained under the relevant case law to determine whether the communication would be privileged under the relevant foreign law,"[57] since the communication did not touch base with the U.S. In a footnote, however, the Stryker court expressed its own view, and stated that "U.S. law pertaining to the attorney-client privilege should apply to the instant case even though the communications between the domestic patent attorney and the foreign patent agent did not "touch base" with the United States."[58] By applying the American rule, the communication would be privileged on the basis that the foreign patent agent was acting as an agent of the U.S. attorney. This approach was already mentioned in the Mendenhall case.

3.2.1 Specific Examples - Japanese Patent Agents

U.S. courts have found that the law of several countries, among them the U.K.[59], Sweden[60], Germany[61], France[62], and Canada[63], acknowledge the existence of attorney-client privilege with regard to communications involving patent agents.

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[55]Stryker, 24 USPQ2d at 1680.

[56]In re Ampicillin, 202 USPQ at 143.

[57]Stryker, 24 USPQ2d at 1681.

[58]Id. n.4.

[59]Detection Systems, 220 USPQ at 718; Mendenhall, 217 USPQ at 788.

[60]Willemijn Houdstermaatschappij BV v. Apollo Computer, 13 USPQ2d 1001 at 1053 (D. Del 1989).

[61]Id.

[62]Baxter Travenol Laboratories, Inv. v. Abbott Laboratories, 1987 U.S. Dist. LEXIS 10300 (N.D. Ill. June 17, 1987).

[63]Mendenhall

In contrast, however, a series of recent cases[64] have held that U.S. attorney-client privilege does not apply to communications between a Japanese patent agent and his client. Although Article 281 of the Japanese Code of Civil Procedure[65] provides that witnesses may refuse to testify as to facts which he obtained in the exercise of professional duties as a patent agent, "nothing in the statute extends to the patent agent's client or to documents prepared in connection with the patent agent's advice."[66]

3.3 Conclusion

The case law is split on the issue of whether a patent agent can be considered an attorney for the application of the attorney client-privilege in communications involving U.S. patent agents or on subject matter touching base with the U.S. In fact, there are two lines of cases. The first line holds that patent agents are not attorneys for the application of the attorney-client privilege, while the second line holds that the attorney-client privilege could apply if the patent agent is registered with the Patent Office. There is, however, agreement in the case law that both inside and outside patent agents can be considered, when working at the direction of or under the supervision of an attorney, a subordinate of an attorney. In those cases, communications involving those patent agents can be protected under the attorney-client privilege.

For inside patent agents who act as the client, there is general agreement that they can be part of the "corporate client". While outside patent agents can be subordinates of an attorney in appropriate circumstances, whether they can be considered employees of the corporation for the attorney-client privilege is less clear. At least one case holds that outside patent agents can be

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[64] Alpex Computer v. Nintendo Co. Ltd, (S.D. N.Y. 1992) 1992 U.S. Dist. LEXIS 3129; Bayer AG and Miles, Inc. v. Barr Laboratories, 33 USPQ2d 1655, (S.D. N.Y. 1994); Santrade, Ltd. and Sandvik Special Metals Corporation v. General Electric Corp., 27 USPQ2d 1446 (E.D. N.Car. 1993)

[65] " Article 281 (Right to Refuse to Testify). A witness may refuse to testify in the following cases: ... (2) In case a ... patent attorney ... is questioned regarding the facts which came to his knowledge in the course of performance of his duties and which should be kept secret".

[66] Alpex

considered employees of the corporation, while another case holds that the typical outside patent agent cannot be in that position. "While this distinction may [in some cases] appear formalistic, it is a significant one for purposes of determining whether the privilege applies to the communications."[67]

Communications involving foreign patent agents relating to foreign patent activities are governed by two different rules. The first rule applies the law of the country to which the patent activities relate to determine whether a privilege would apply to those communications. The second rule, which can be considered a refinement of the first rule, takes into account the role played by the foreign patent agent. This second rule introduces a U.S. attorney and discusses the situation in which a foreign patent agent is either an agent or a co-counselor of the U.S. attorney. For this last role, i.e., the foreign patent agent as a co-counselor, the foreign patent agent has to be treated as a subject of the attorney-client privilege in the foreign country.

[67]Chubb, 224 USPQ at 1011.

Title: Trademarks on the Internet

Date: October, 1996 (27th General Meeting in Hiroshima)

Source: 1 PIPA
2 Japan
3 Committee #1

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Statutory provisions: Trademark Law, Article 2, Articles 36; Civil Law, Article719; Rules for the Application of Laws, Article 11; Paris Convention, Article 6; US Trademark Law, Article 1118; Unfair Competition Prevention Law, Federal Dilution Act (USA)

Abstract: "The use of Internet services involve many potential problems because of a lack of established rules authorized by official organizations, while the Internet has a high degree of freedom in use. This report reviews the problems and noteworthy points that occur when companies use trademarks on the Internet, by focusing on trademark territoriality in the Internet's international arena. The status of the confusion between domain names and trademark rights is also covered, with reference to cases currently under dispute, and those that have been resolved, in the US".

Contents

1. Introduction

2. Use and Infringement of a Trademark
   (1)Use of Trademarks
   (2) Responsibility of a Provider

3. Territorial Issue
   (1) Infringement of Trademarks Abroad
   (2) Measures to be Taken by Enterprises

4. Domain Names
   (1) Domain Names
   (2) Problems Involved in the Registration of Domain Names
   (3) Settling the Situation
   (4) Domain Name and Trademark
   (5) Necessity for Drastic Measures
   (6) What Companies Should Do

5. Conclusion

1. Introduction

The spread of personal computers is bringing about a rapid increase in the use of the Internet. Japanese enterprises are studying the merits and demerits of the Internet from various angles to explore its use as a business tool. The Internet has, however, only a short history in Japan. Its legal aspects, including those relating to intellectual property rights, are, among others, yet to be studied.

Various legal problems have already begun to arise in the United States where it has a longer history. This paper is intended to point out problems which a company may face upon commercial use of the Internet.

2.Use and Infringement of a Trademark

(1)Use of Trademarks

How do trademarks appear on the Internet? Here, we would like to pick up trademark / symbols appearing on the display.

<doinain name>

Access to a desired server is gained by inputting the corresponding URL (Uniform Resource Locator) (e.g.: http://www. pipa. co. jp). The "pipa. co. jp" (domain name) in the URL is a symbol for distinguishing the server to which access is desired.

As domain name is an expression which symbolizes the supplier of information, its use may constitute infringement if there is a trademark right which covers the content of information given on the site.

<home page>

If the site is intended for the furnishing of services, or the sale of goods, it is likely that its name may be concluded as trademark use.

< Sentence, phrase, decorative figure, sound, etc. in the site>

Sentences, phrases or decorative figures are used for introducing goods or services. If any of them serves as a symbol for indicating the source of goods or services, it is likely to infringe trademark right.

< Symbol attached to goods themselves>

The symbol attached to goods themselves have a function of indicating the source of the goods. Its use may in the majority of the cases constitute the infringement of trademark right.

It is not easy to conclude that the display of a trademark, or other symbol on the Internet amounts to its use. However, the display may be considered as the use of the trademark if it is employed for the sale of goods, or the furnishing of services. In Japan, an advertisement by television is interpreted as being an "advertisement" under the provisions of paragraph 7 of Section 3 of Article 2 of the Trademark Law, and a similar interpretation may apply to any display on the Internet.

Concerning letters or figures which are not attached to the goods themselves, but employed in an image display for advertising the goods, it is important to check whether they are used in a way serving to indicate the source of the goods. You would also have to be aware of words which are considered as being a common name within the country. There are chances that the word is a registered as trademark in other countries.

(2) Responsibility of a Provider

A provider is a person or company that provides services for connecting a personal computer to the Internet, sometimes managing bulletin board system (BBS). In such a case, we wonder if the provider is legally responsible for any infringement of a trademark that may occur on the network.

It is usually impossible for the provider to make a detailed check of the contents of information displayed by the member. However in the United States, there are some judicial precedents concerning copyright, which approved responsibility of the provider under limited conditions for an infringement by a third party[1]. In Japan, the Civil Law has provisions covering a joint tort, and it is, therefore, likely that, even if a provider himself may not infringe a trademark right, he may have to assume joint responsibility as a network operator. It may also be easier for the trademark owner to accuse the provider.

Under these circumstances, it will be necessary to examine the following points to specify the role of a provider. If the provider has been in a position to become aware of any infringing act, assist the infringing act, whether the provider has any right and ability to direct and supervise the infringer, if the provider receives economical benefit from the act, and so on.

[1] Playboy Enterprises, Inc. v. Frena (839 F.Supp.1361,1378(N.D.Cal.1995))
Sega Enters. v. MAPHIA (837 F.Supp.679,(N.D.Cal 1994))

3. Territorial Issue

It is a basic principle of the Paris Convention that a intellectual property right is granted in each country and is effective only within that country, and it is, therefore, possible that there may exist many different owners of the right to the same trademark in the world. On the other hand, the Internet has no territorial boundary. There is, therefore, likelihood that information may flow into countries with no trademark right, causing confusion with the goods or services supplied by a third party.

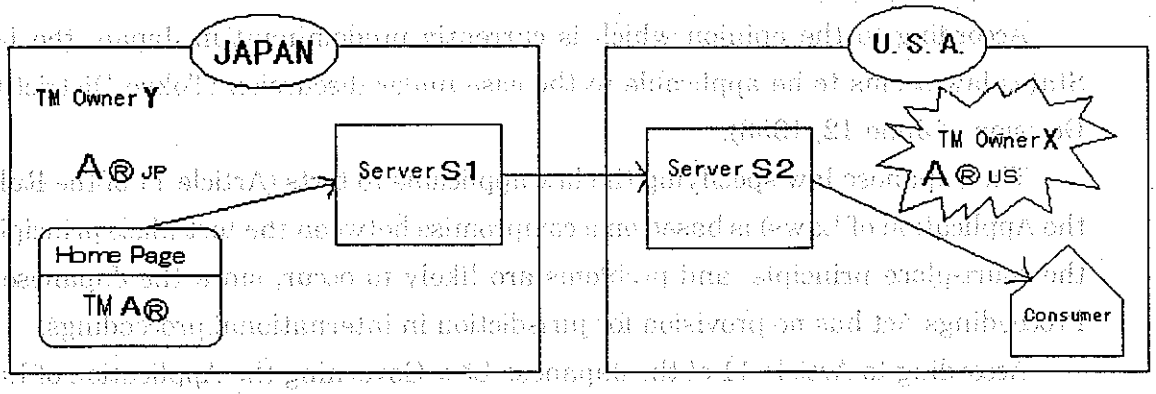
(1) Infringement of Trademarks Abroad

It is not yet clear what problems may arise from the outflow of a trademark abroad through the Internet, since no specific case is known as yet[2]. The following is, therefore, a statement of several problems which can be assumed to arise from the international nature of the Internet and the local nature of a trademark.

<Premises>

- The Japanese company Y is the owner of a Japanese trademark registration "A", appearing in the site.
- The United States company X is the owner of a United States trademark registration "A".
- * Trademark "A" is not well-known either in Japan or in the United States.
- The Japanese company Y opens a home page with server S1 in Japan.

→ User in the United States gains access.



[2] Recently, a court decision has been made on "Playmen" Internet site in Italy, available for U.S. computer users. (Playboy Enterprises Inc. v. Chuckleberry Publishing Inc., DC SNY, 79 CIV 3525(SAS), June 19, 1996)
See "BNA's PATENT, TRADEMARK & COPYRIGHT JOURNAL" Bureau of National Affairs, Inc.(vol.52, No.1286)

[1] Does infringement exist in the United States?

In the case as described above, an infringement of the trademark right is likely to exist in the United States, since the display of the trademark maybe considered as its use, the trademark A is not well-known, and the trademark right is governed by the territorial principle. However, in the actual case, a discussion as to whether the site's flow to the U.S. was apt to the Japanese company's transmission , or to the U.S. users access, will be inevitable.

[2] The applicable law and court jurisdiction

While the infringement has occurred in the United States, the infringer has its address in Japan. Where and with which country's law can the owner X of the United States trademark right take action?

According to the private international law, the most adequate law that is applicable to the matter is chosen. This is done by determining, (1) the nature of the matter and (2) its connecting points. To determine the nature of the matter, the matter in question is broken down into the individual legal issues, and studied. In this case, the matter to be decided is whether the appearance of the trademark on the display in the United States could be considered as the advertisement of the goods, proposal of a contract for the sale of the goods, etc.

The connecting points are established by specifying the elements for finding out the place with the closest relation to the issue (e.g., the country where the trademark right was granted, the country and address of the injuring party, the place where the illegal act was done, the place where the damage was produced, and the country and address of the injured party).

According to the opinion which is currently predominant in Japan, the United States law seems to be applicable in the case under discussion (Tokyo District Court Decision of June 12, 1953).

The Japanese law specifying the law applicable to torts (Article 11 of the Rules for the Application of Laws) is based on a compromise between the tort-place principle and the court-place principle, and problems are likely to occur, since the Japanese Civil Proceedings Act has no provision for jurisdiction in international proceedings.

According to Article 11 of the Japanese Law Governing the Application of Laws,

- The existence of a claim brought about by a tort and its effect shall be interpreted in accordance with the law of the place where the cause thereof shall have occurred. (Section 1: the tort-place principle)
- The provisions of Section 1 shall not apply to any act that shall have

We think that the Japanese company can reduce the substantial illegality of its act if it defends itself by showing its lawful use of the trademark clearly by following ways.

- Placing a statement that the trademark is registered in Japan, and by clarifying that it has no intention of infringing any right in other countries. Or if it says in its site that it will not sell goods in specific country (i.e. the United States).
- If the site is prepared in Japanese, it will be an objective support for the presumption that the Japanese company has no intention of infringing any trademark right in the United States. It will also be unlikely to arouse any confusion between the two marks. (Except when it is a site intended for Japanese people in the United States).

Also, as mentioned before, a discussion as to whether the site's flow to the U.S. was apt to the Japanese company's transmission , or to the U.S. users access, will be inevitable.

Anyhow, everybody is always likely to infringe a trademark right in any country where he has no trademark registered, insofar as trademark registrations are based on the territorial principle. People handling trademark business in each enterprise are required to study possible measure against such infringement.

(2) Measures to be Taken by Enterprises

The following is a statement of some measures which can now be taken against the risks which may arise from the use of a trademark in the Internet:

In the first place, it is advisable to pick up countries for business purposes and secure the right to use trademarks at least in those countries. It is also advisable to secure a trademark right in each principal country, or in each country having a high spread of personal computers. However, these measures have the drawback of incurring a large amount of costs.

In the second place, it is advisable for each enterprise to name in its site the countries where it intends to do business, while stating clearly that it does not intend to do business in any other country. In this connection, there will be no alternative but to give up doing business in any country where it is difficult to obtain trademark registration.

In the third place, it is advisable for each enterprise to show clearly in its site the country, or countries where it has a registered trademark, or the right to use a registered trademark, and to declare its lawful use of the trademark, though a difficult problem may still remain about the measure to be taken for any country where no

such right is available.

Although all of these measures may be taken to show the lawful use of a trademark, none of them is a drastically effective solution which enables the safe use of a trademark through the Internet, since it is impossible to avoid completely the infringement of a trademark right in a foreign country.

4. Domain Names

In the United States, a large number of cases involving domain names are already in dispute[3], and are drawing attention to the necessity for some measures including the preparation of new rules, but in Japan, no such case is known as yet. Accordingly, the following discussion is directed mainly to the cases in the United States for analyzing the present situation and predicting the possible tendency in the future.

(1) Domain Names

The domain name is a name assigned to a server connected to the Internet, designating the site (or address) on the Internet. One who wants to access to a particular organization, relies mainly upon its domain name for assuming its activity.

More specifically, a domain name consists of its proper name, a code indicating the nature of the organization and its country code, as shown by an underline below. Its use requires registration with an appropriate association.

(U.S.) http://www. pipa. org
domain name

pipa = organization name
org = organization code
* The country code is not shown.

(Japan) http://www. pipa. or. jp/daiichi
domain name

pipa = organization name
or = organization code
jp = country code

[3] For list of the disputes, see "WHAT'S IN A NAME?" (- Introduction to Domain Name Disputes) by J.Agmon, S.Halpern & D.Pauker (http://www.law.georgetown.edu/lc/internic/recent/rec1.html)

The registration and administration of the domain names are done separately from one region to another. Under the authorization of IANA (Internet Assigned Number Authority), in the United States, Inter NIC[4], which is a subsidiary of Network Solutions Inc., is doing the job, and in Japan, JP NIC[5] is doing the job. JP NIC is not directly connected with Inter NIC, and is working independently.

A user wishing for his own domain name applies for its registration with InterNIC, JP NIC, etc. In response to the application, these associations investigate the prior registrations and register if not priory registered. Though domain names must be registered, applicants can choose and use any further file names as desired without having them registered.

(2) Problems Involved in the Registration of Domain Names

In the United States, the number of applications for registration of domain names has shown a sharp increase with the increasing use of the Internet. The number of the registered domain names has been doubled in the first half of this year, and amounts to about 460,000 as of June, 1996[6]. In Japan, however, the number of the registrations is only about 9,000 as of July, 1996[7], even though it is showing an explosive increase. This surprising difference in number is not only due to the difference between the two countries in the extent of spread of the Internet, but also appears to be due to the difference in system. In the United States, the companies or organizations have their own servers and therefore their own domain names. On the other hand, many organizations in Japan still rely upon the servers owned by providers, and do not have their own domain names. In any such event, the name of the company, or organization will be the file name following the domain name, and need not be registered. Moreover, JP NIC makes it a rule to assign only one domain to each company.

Inter NIC or JP NIC, as a rule, observe the "first come, first served" principle, and assign a particular domain name to the first applicant. As a result, conflicts often arise between domain names and trademarks or service marks. Although these problems have occurred mainly in the United States, it is apparent that Japan will

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[4] Inter NIC (http://rs.internic.net)

[5] JPNIC (http://www.nic.ad.jp)

[6] InterNIC news, Registeration Services Performance Measures for June 1996 (http://rs.internic.net/nic-support/nicnews/stats.html)

[7] The number of the assignment by JPNIC has doubled since Jan., 1996. (ftp://ftp.nic.ad.jp/pub/jpnic-pub/stat/Allocated_Domains)

also see an increase of disputes involving domain names with an increase in the use of the Internet and the registration of domain names.

The following is a summary of three principal points at issue as derived from cases in dispute in the United States:

[1] Domain name registered with the intention of unfair competition

- Kaplan Review vs. Princeton Review (dispute between competing companies) -

Princeton Review Management Corporation had registered their domain name "kaplan. com" made by using a part of the name of their competitor, Stanley H. Kaplan Educational Center. It sent information slandering Kaplan to anybody who had accessed to the site, considering the domain name as that of Kaplan. The two companies arrived at a compromise, and Kaplan Review acquired the right to use the domain name.

It is possible to register domain names with a malicious intent, and there are a number of cases in which the users of domain names are in dispute with the owners of trademark or other rights. Well-known trademarks not registered as domain names are likely to be the objects of such malicious registration as domain names.

[2] Dispute between lawful owners of trademarks

- Uzi Nissan (computer shop) vs. Nissan (automobile manufacturer) -

While Uzi Nissan had registered *nissan. com* earlier than Nissan, automobile manufacturer, did, Nissan is afraid that Uzi Nissan may have intended to benefit from the name of Nissan Motor. Uzi Nissan having their name registered with the State Department of Justice asserts that they have been using the name *Nissan* since a long time before Nissan started to use it.[8]

In the event that a single trademark is the subject of plural registrations in respect of dissimilar goods, only one of the companies is allowed to use the trademark as their domain name.

[3] Registration of similar domain names

- "micros0ft.com" vs "microsoft.com"-

A company named Zero Micro Software had *micros0ft. com* (having the numeral 0 in the place of o in soft) registered as their domain name, and was demanded by Microsoft having a registered domain name *microsoft. com*, to discontinue its use.

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[8] See "IPR" (Vol.10 No.4, p.185) NGB Corporation (Japanese text)

Domain names will be registered if it is not "identical" to the names already registered. Similarities are not concerned. Moreover, a user not accustomed to domain names is likely to get confused, since domain names with the same proper name are registered with different organization or country code.

(3) Settling the Situation

[1] Action of NSI

In order to cope with the problem of confusion between a domain name and a trademark as discussed above, NSI revised the "Domain Dispute Resolution Policy Statement" (July, 1995) and published "Domain Name Dispute Policy Statement" (November, 1995)[9]. The new policy reconfirms that NSI is free from any responsibility concerning the disputes, and at the same time, provides chance for the owner of the registered trademark to suspend the use of the domain name until the juridical decision.

According to the new policy, the owner of a registered trademark which is "identical" to a domain name has the right to raise objection. However, a number of problems are pointed out; for example, only registered trademarks are effective for the objection (use under the common law is not considered), only "identical" trademarks can be used for objection (no possible confusion, as between kodak and codak, is taken into consideration), and there are no consideration paid to the standard of "distinctiveness" which differs between countries (a trademark not registered in the U.S. as lacking distinctiveness, may be objected to by one having the same trademark registered in another country).[10]

Concerning the assignment of domain names, NSI is obviously in a muddle. Despite their declaration of having no responsibility, there are number of cases where NSI is involved in lawsuits. While there are already stories of further revision of the Policy[11], there is no doubt that a drastic measure concerning the assigning system is necessary.

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9 Domain Name Dispute Policy Statement
(ftp://rs.internic.net/policy/internic/internic-domain-4.txt)

10 Furthermore, there are questions as to whether InterNIC have authority to reallocate property. See "Is the InterNIC's Dispute Policy Unconstitutional?" by Mikki Barry (http://wwww.mids.org/legal/dispute.html)

11 There has been a further revision of the Policy, effective Sep.9,1996.
"Domain Name Dispute Policy (Rev 02)"
(http://rs.internic.net/domain-info/internic-domain-6.html)

[2] The USPTO Guideline

The new policy by NSI which puts weight on trademark registeration identical to domain names highly increased the number of trademark application of domain names. In February, 1996, the USPTO published a guideline concerning the registration of domain name as a trademark[12]. However, as you could tell from the fact that the specimen issue had been very carefully discussed, this does not immediately mean that the USPTO regards ordinary use of domain names (as a part of the URL) as a trademark.[13]

When filing a domain name as a trademark, it is important to carefully study the services for which a registered name will be used, to express them in adequate terms, and to file the application in the appropriate class.

[3] JPNIC:

JPNIC, which is in charge of assigning domain names which ends with the country code "jp", is of the standpoint that they assign domain names merely as a sign, and have not yet published any policy concerning domain name and trademark. In Japan, the increasing use of the Internet is beginning to arouse strong interests in domain names. Demands for the abolition of "one domain per organization" system and the assignment of "brand" domains and "event" domain are becoming strong. As of August, 1996, JPNIC is gathering opinions in order to explore new domain structure[14]. A discussion between Trademark specialists and JPNIC would be inevitable before the situation becomes serious.

(4) Domain Name and Trademark

A domain name is a set of alphabetical letters for making IP addresses easier to memorize, expected to serve merely as an address. However, the set of letters usually consists a word. While arguments are still pending as to whether a domain name should be considered as a trademark, a company can definitely not allow their trademark to be used as others domain name. Trademark Act, the Prevention of Unfair Competition Act, or the Federal Dilution Act (of the United States), depending

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12 USPTO "Registeration of Domain Names in the Trademark Office", "Classification of Computer Services and Associated Policy in the Trademark Office" (Feb.12,1996)

13 For associated information, see Thomson & Thomson " ClienT & Times" (Aug, Oct, 1995 - "Internet Domain Names and the USPTO. An Interview" (http://www.thomson-thomson.com/netscape/docs/articles/217e_1c2.html) (http://www.thomson-thomson.com/netscape/docs/articles/216a_1c2.html)

14 JPNIC domain-talk(http://www.nic.ad.jp/jpnic/hottopics/domain-talk.txt)

on the case could be considered to be used on suspending the use of the domain name.

[1] Situation in the United States:

Although there are number of disputes, many of them have been settled out of court or are still pending. Thus the issue have not reached the conclusion as to whether domain name is a trademark.

On January 11, 1996, The Federal Dilution Act took effect, and as of June, 1996, there are already cases demanding the suspension of use, and furthermore, court decisions relying upon the Act for suspending the use of the domain name[15]. It can be expected that the Act will be commonly be applied for the protection of famous trademarks.

In April, 1996, a preliminary injunction was issued for the first time to suspend the use of a domain name confusingly similar to a federally registered trademark[16]. However, under the Trademark Act, an infringement exists only when there is a confusion of the source of goods or services. Accordingly, if service or goods concerned in the site bearing the domain name, differ from those of the trademark registration, an infringement may not be likely to exist, as is the case between two trademarks.

It appears that in the United States, domain names are more likely to be considered as a trademark because of the precedent as to concerning "telephone mnemonics" as trademarks[17].

[2] Situation in Japan:

The Prevention of Unfair Competition Act will be effective when a famous trademark is used as a domain name. However, it is not clear as to whether a domain name could be considered as a trademark under the Trademark Law.

A domain name is a sign used for contacting a particular entity, as a telephone number is. However, the sign usually constitutes some word or other. It is easy to imagine a personnel jumping from site to site, to assume the source of information from the domain name. Accordingly, there are opinion that a domain name do function

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[15] ex.1 / candyland.com case : Hasbro, Inc. v. Internet Entertainment Group, Ltd. (No.C96-130WD(W.D.Wash.Feb.9,1996)), For associated information, see "Famous Trademarks" by Jonathan Rosenor (http://www.cyberlaw.com/cylw0296.html)
ex.2 / avon.com case : See, "Antidilution Trademark Law Gets First Court Case" by Information Law Alert (http://www.infolawalert.com/stories/020996b.html)

[16] See "Federal Judge Issues Landmark Ruling of Cyber Infringement" by Crosby, Heafey, Roach & May (http://www.chrm.com/anounce/Cyber.html)

[17] For further information on tel.mnemonics & TMs, see "Trademarks along the Infobahn" by Dan. L. Burk (http://www.urich.edu/~jolt/v1i1/burk.html)

as a trademark, especially when a service is provided on the site.

On the other hand, it is also necessary to note that JPNIC now assigns only one domain name per organization, a part that differs from the practice of InterNIC. A domain name is a one and only address that an entity could have. As long as "brand" domains are not considered, it seems that the ordinary designation of the manufacturer or seller of goods, does not amount to the use of a trademark.

In either event, however, nobody obviously wants their trademark (esp. "Fanciful marks") to be used by others as their domain name. There have not been any disputes, nor have been any substantial argument heard about "Trademark / Domain Name" issue in Japan yet[18]. However, it can easily be imagined that the rapid grow of the domain name registration would bring about many disputes in the near future.

(5) Necessity for Drastic Measures

There are many proposals given for overcoming the situation. Among the largest is to add additional information in the domain name (ex. Goods classification, territorial division etc.)[19]. This revision will enable more people to have the domain names which they desire. However, it can easily be imagined that an owner of a well-known trademark will not allow the mark to be included in others' domain name in whatever way. Although there are a great many problems to be solved before the present situation can be overcome, prompt measures are desired to be able to use a domain name under stable right. We look forward to the establishment of a worldwide rule.[20]

(6) What Companies Should Do

For those who do not have a domain name, check the existing domain names and register your domain name immediately[21]. It is desirable to keep a regular watch on the similar domain names.

An assigning organization exists in each area, independently assigning domain names by simply adding the two-letter country code. Therefore, it is extremely difficult

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[18] Several cases have been introduced. (Asahi Shinbun Weekly "AERA" Aug.5, 1996/p26)

[19] For an example of this idea, see "The Problem and Criteria for Solution" in/by the same site/authors as [3] (http://www.law.georgetown.edu/lc/internic/prob1.html#introduction)

[20] For further information on proposals concerning new system, see "Trademarks on the Internet" by David W. Maher (http://aldea.com/cix/maher.html)

[21] Checking pre-assigned domain names :
InterNic (http://www.internic.net/wp/whois.html)
JPNIC (http://www.nic.ad.jp/cgi-bin/whois_gate)

to keep control of domain names on a worldwide basis. However, there are worldwide famous trademark owners that have started registering their company names / trademarks as domain names, all around the world. Also recently, there are firms that provide domain name search / watching services[22].

Internet will allow big chance on business. It is a matter of serious concern for any enterprise to be unable to use their own trademark as their domain name. Concerning domain names, the discussion have just begun. It is recommended to keep your eye on the further discussion, and as for now, to register your company name or brand name as a domain name, at least in InterNIC and JPNIC.

5. Conclusion

While the Internet has a high degree of freedom in use, it bears variety of problems since there aren't any established rules authorized by official organization. The domain name issue or the trademark's territorial issue may be counted as one of the problems. Each enterprise would have to defend themselves by considering and taking the necessary measures.

However, the efforts which can be made by each individual enterprise have their own limit. Thus, we hope that in order to enable safe use of the trademarks in the ever-growing world of the Internet, a new worldwide policy be established under the direction of an international organization, as soon as possible.

[22] It is recommended to make a TM search, especially before registering a "com.domain" -i.e. domains assigned by InterNic.

* All URLs in the footnotes are of August, 1996.

(1) Title:

Intellectual Property Issues Involving the Internet

(2) Date :

October, 1996 (The 27th General Meeting at Hiroshima)

(3) Source:

1) Source: PIPA
2) Group: Japan
3) Committee: #2

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(5) Keywords:

Internet, right of reproduction, right of transmission through wire, private use, license, work of a program, offer for sale, public knowledge, shrink-wrap, and adhesion contract.

(6) Relevant laws: Patent Law and Copyright Law

(7) Summary:

As a result of the rapid spread of the Internets, there has recently been a rapid increase of the Internet population in Japan, too, including an increasing number of people buying personal computers to use Internet services

at home. With an spread of the Internet at home, a wide variety of digitalized goods and works have come to be offered for sale through the Internet. This new business can be expected to keep growing, since it enables the consumers to get a wide variety of things whenever they want, while the suppliers can obtain a large number of potential customers. Under these circumstances, however, it is feared that no sufficient protection of intellectual property may be obtained under the existing laws which did not anticipate the present situation when they were enacted. It is an object of this paper to examine a number of problems arising from the use of the Internet and provide a first step for any further argument in the matter. This paper will not only deal with the matter of copyrighted work on the Internet which is already under active discussion, but will also refer to matters on which discussion has just begun, such as a patent for a software product distributed through the Internet and a system patent utilizing the Internet.

(8) Contents:

1. Preface (Outline of an Internet)
2. Transmission and Receiving of a Work on the Internet
3. Distribution of Software Programs through the Internet and the Enforcement of Patent Rights
4. Other Problems Concerning Intellectual Property
5. Conclusion

1. Preface (Outline of an Internet)

The rapid development of networks is one of the characteristic aspects of modern society. There are a variety of networks including a small network formed by connecting personal computers or work stations within a single place of work (LAN *i), networks formed by connecting such networks (WAN *ii), commercial networks for personal computer communications (*iii), and networks formed by scientific organizations, such as universities. These networks have basically been managed independently of one another despite their difference in scale, and the interconnection of networks has been only in limited cases.

Nowadays, however, there exist a very wide range of interconnections of networks as a result of the development of the Internet, as a network providing connection between networks. The Internet was born as a military network in the United States in the 1960's, but has made a rapid progress as a result of the application of its technology to scientific and commercial use.

A wide variety of kinds of information are circulated in large quantities through the Internet every day. An increase of companies providing services for connection with an ordinary telephone circuit at a low cost has facilitated the transmission of information not only by enterprises, but also by individuals. The Internet is becoming a site for any substantial commercial distribution comparable to a commercial transaction for tangible goods owing to a rapid improvement in the technique for the coding of information to maintain the security of an electronic transaction on the network. For example, it is no longer uncommon for an individual to copy (or download) in his personal computer at home an application software recorded (or uploaded) in the host computer (or server) of a software maker connected to the Internet, and pay for it with a credit card.

With the progress in the digitalization of information and the formation of borderless networks, however, an infringement for the right of the owner of information has become more likely to occur, apparently because there does not substantially exist any regulation for controlling the Internet. In this connection, measures have already been studied in the United States as reported in the White Paper (*iv), or in the EU as reported in the Green Paper (*v), and it is obviously necessary to study in Japan, too, the possibility of protection of rights under the existing laws concerning intellectual property.

2. Transmission and Receiving of a Work on the Internet

(1) Relevant Articles of the Japanese Copyright Law

In Article 2 of the Japanese Copyright Law, "reproduction" is defined as "making a tangible copy by printing, photographing, copying, sound or picture recording, or any other method". The storage of information in the internal storage unit of a computer by the execution of a program is interpreted as not being reproduction if it is a momentary and transient one. Article 2 of the same Law also defines "transmission through wire" as "transmission of electric communication through wire which is intended for direct reception by the public". According to this definition, the act of sending a literary, scientific, artistic or musical work not to the public, but to a small number of specific people can be interpreted as not being "transmission through wire". According to Article 30 of the same Law, it is allowable to reproduce a computer program "if its reproduction is intended for private use, or for use at home, or to a likewise limited extent", and according to Article 47 bis, the owner of a work of a program is "allowed to reproduce or translate the work to the extent considered necessary

for his own use of the work in an electronic computer". These provisions which allow reproduction for private use, or by the owner of a reproduction of a work of a program restrict the rights of the relevant copyright owner.

(2) The Internet and Interpretation of the Japanese Copyright Law

We would like to consider several specific examples of acts of sending or receiving a work through the Internet and state our interpretation of each act under the Copyright Law.

(a) Act of reading and digitalizing a work, such as a photograph, by a scanner, etc.:

We think that the act amounts to reproduction, and infringes a copyright if it is done without the permission of its owner.

(b) Act of uploading a work in a bulletin board of a personal computer communication network:

We think that the act amounts to reproduction as a permanent storage in a server, and infringes a copyright if it is done without permission; and

we also think that the storage of the work in the server amounts to transmission through wire, since it enables any of many and unspecified persons to gain access to the work, and that it infringes a copyright if it is done without permission.

(c) Act of gaining access to a server and having a work displayed on a screen without downloading it in a hard disk, or the like:

We think that it is a temporary storage and does not amount to reproduction.

(d) Act of running a link (*vi) to another person's paper:

We think that it merely gives information on the location of the paper in the network, and does not amount to its reproduction.

(e) Any of the above acts done for private use:

We do not think that any such act done for the private use of the work infringes its copyright, as it does not require any permission of the copyright owner.

(3) Consideration of New Framework for the Internet and Copyright

Although the foregoing interpretation may be correct under the existing Copyright Law, it has been pointed out that the provisions of the existing Copyright Law are not comprehensive enough to cope with any problem that may arise in each individual case from the use of Internet services, and many people are exploring a new framework for the protection of copyright in an environment characterized by computer networks. As a matter of fact, it is not necessarily clear whether the right of reproduction, or transmission through wire under he Copyright Law is applicable to an act of storing a program in the magnetic disk device of a computer, or an act of sending a digital work through the Internet.

-Japan-

The Japanese Agency for Cultural Affairs published a "Report on the Results of Studies by the Working Group of the Subcommittee on Multimedia of the Council on Copyright" in February, 1995 as an attempt to explore such a framework. This report includes some "possible solutions" in connection with the economical rights of an author, as stated below. (Note that these are "possible" solutions, and are not the conclusions of the Council. The report also

says that there would be many other solutions as well as these possible solutions.)

(a)Right of reproduction:

The definition of the term "reproduction" should be amended to clearly include any temporary storage in an electronic form.(Note:The report pointed out that the above amendment of definition of "reproduction" would drastically change the current concept and would substantially form "a use right", which is not allowed under the Copyright Law. It also pointed out that restriction of copyright in order to avoid interference with normal use of a work would eventually water down the amendment of the Copyright Law. The report says that careful consideration is necessary on this issue. Further, with respect to the development of use of a work without reproducing it continuously, the report refers to the possibility of expanding broadcast/ transmission right and newly forming displaying right. These solutions do not need expansion of the definition of reproduce and may be more appropriate, the report says.)

(b)Right on broadcast and transmission:

The definition of "broadcast" should be changed. Upper concept of "transmission" which cover both wireless transmission and transmission through wire should be established and transmission for the purpose of simultaneous reception should be "broadcast" and broadcast right in Article 23 should be changed to "transmission right"; or regardless of wireless or through wire and simultaneous or non-simultaneous reception, an electric communication for the purpose of direct reception by the public, should be defined as "transmission" and broadcast right and transmission through wire right in Article 23 should be changed to "transmission right";

or the definition of "transmission through wire" should be changed so that it also covers transmission to the public in the same facility.

(c)Right on an act of "displaying":

With respect to the exhibition right of a work of art and photograph in Article 25, the conditions of "by original work" and "being unpublished (for photograph)" should be deleted;

or apart from the right of exhibition, the "right of displaying" or "screening" should be given to the author of, as a rule, any and all work (and at least any artistic, photographic or figurative work) to enable him to perform the visual presentation of a picture representing the work to the public by a technical device (including the reproduction of a recorded work and the showing of a transmitted work on a screen).

(d)Reproduction for private use:

The provisions for restricting copyright with respect to the right of reproduction for private use should not apply to any act of reproducing a reproduced work by a digital system;

or the provisions for restricting copyright with respect to the right of reproduction for private use should not apply to any act of reproducing a work which has protection for impermissible copying and are reproduced by a technical device which decodes or avoids those protection;

or the provisions for restricting copyright with respect to the right of reproduction for private use should not apply to any act of producing a work of program and data base (or only program).

It appears that the solutions as cited above may be desirable for protecting the rights of a copyright owner in the Internet age.

-United States-

In the United States, the White Paper published in September, 1995 includes an advice to the effect that "the Copyright Act should be so amended as to state clearly that the definition of "distribution" includes transmission, so that it may be clear that an act of distributing a reproduction of a work to the public by transmission is the subject of an exclusive right." This is certainly another way to strengthen the protection of a copyright owner.

-Necessity of Harmonization-

The rights to reproduce a digitalized work in a network and transmit it through wire, and the restriction thereof are, however, the matters which will seriously affect both an owner of a copyright and a user of a copyrighted work. It is a highly risky thing to, for example, take an easy step of expanding the right of reproduction which has until now been interpreted based on the circulation of a tangible work. It will be necessary to make a new law, while maintaining a good balance between the protection of rights of a copyright owner and the promotion of use of his work. It is also necessary to achieve the harmonization of copyright laws of all the countries concerned, since the Internets enable the circulation of a digitalized work across the borders. WIPO has already agreed to make international rules for protecting copyrights covering information, sounds and pictures which are sent through the Internet, or other electronic network, and it is repeating arguments in order to adopt a protocol at the end of December, 1996 for revising the Bern Convention and adding digital information circulating through an electronic network as an object for protection.

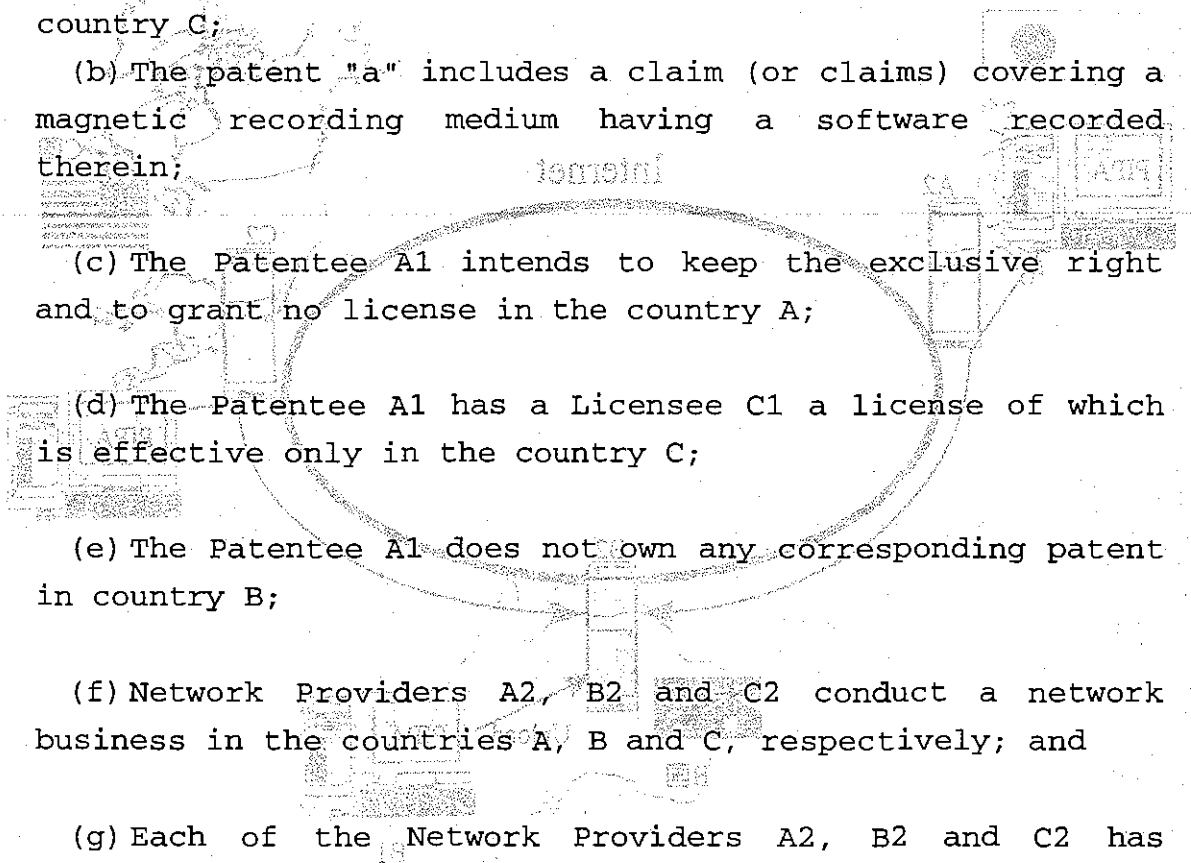
3. Distribution of Software Programs through the Internet and the Enforcement of Patent Rights

A commercial transaction through the Internet will porbably create a variety of problems, since the Internet world has no border. The following is a discussion of problems which may arise from the distribution of a software program through the Internet which is covered by a certain software patent under the current Patent Law:

(1) Facts:

(a) A patentee A1 owns a patent "a" covering a software in country A and a corresponding patent "a'" in another country C;

(b) The patent "a" includes a claim (or claims) covering a magnetic recording medium having a software recorded therein;



(c) The Patentee A1 intends to keep the exclusive right and to grant no license in the country A;

(d) The Patentee A1 has a Licensee C1 a license of which is effective only in the country C;

(e) The Patentee A1 does not own any corresponding patent in country B;

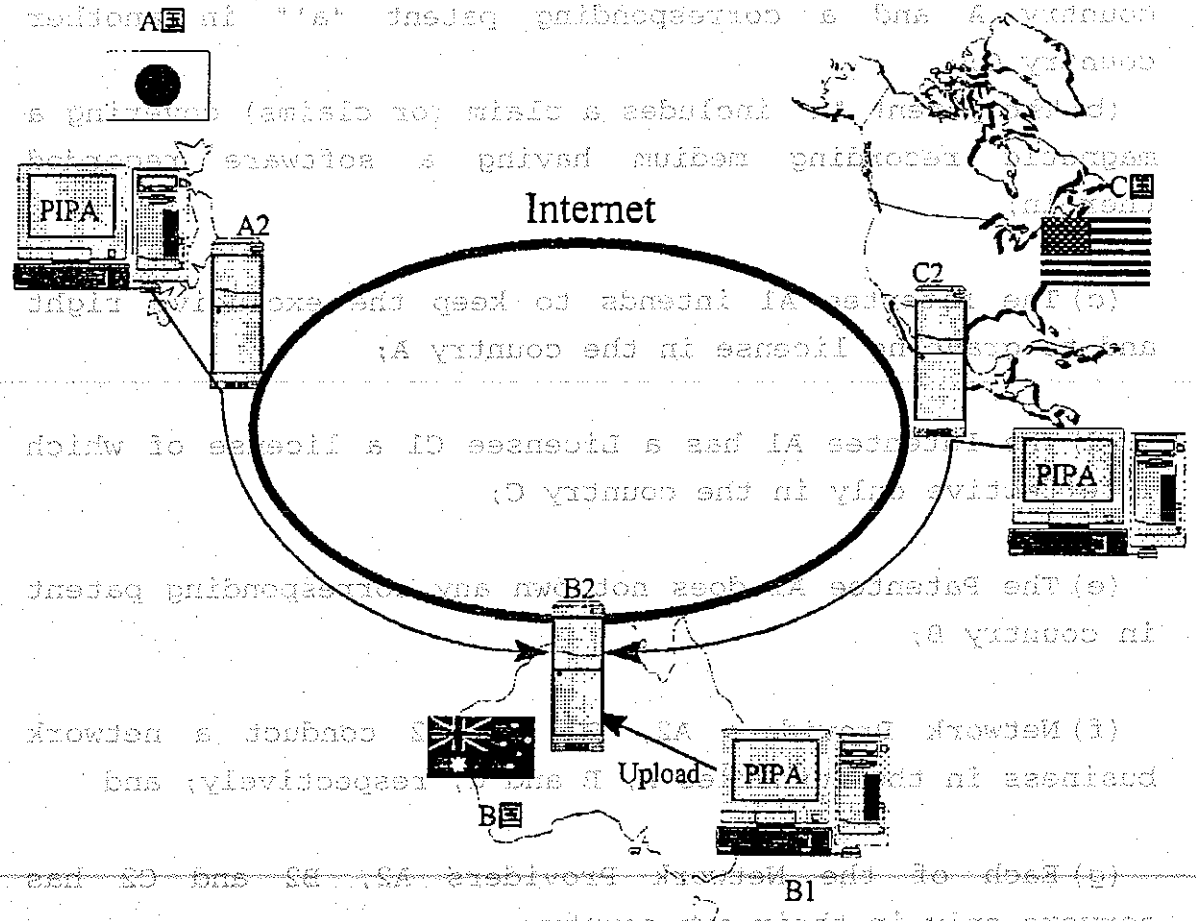
(f) Network Providers A2, B2 and C2 conduct a network business in the countries A, B and C, respectively; and

(g) Each of the Network Providers A2, B2 and C2 has servers only in their own country.

Under these circumstances,

(a) A person B1 living in the country B has started to sell a software covered by the patents "a" and "a'" by uploading it on the Internet in the country B through the Network Provider B2; and

(b) The Licensee C1 has also started to sell a software using the patents "a" and "a'" by uploading it on the Internet in the country C.



(2) Acts of Infringer B1:

(a) Act by B1 of uploading the software in country B:

The act of B1 in country B does not constitute any infringement in Country B, insofar as no relevant patent exists in the country B. It may, however, be possible to say that the act of B1 amounts to an "offer for sale" in countries A and C, insofar as B1 is aware that the users of the networks in those countries see the uploaded software. The Patentee A will, however, have substantial difficulties under the existing laws to rely upon the patents in country A or C for having B1 stop its act in country B unless B has no place of business in country A or C, insofar as B1 uploads the software only to the server in country B.

(b) Act by a user of having the software displayed on the screen of his personal computer:

The act by a user of seeing it does not constitute any infringement.

(c) Act by B1 of selling a software to people living in country A or C through the Internet:

It is a controversial question whether the act of selling the software of B1 should be considered as having been conducted in country B, or in country A or C. B1 would say that the sale of the software has been conducted in country B, and that its user has imported it into country A or C, while the patentee A1 would say that the act of sale has been conducted in country A or C.

This is a difficult question. It may be correct to conclude that the act of sale has been conducted in country B if the user has gained access directly to the server in country B. It is, however, possible that the software may have been transferred from the server in country B to the server in country A or C, and stored in the latter. In such a case, it may be correct to conclude that the act of

sale has been conducted in country A or C. If it is concluded that the act of sale has been conducted in country A or C, it may be correct to consider that the act of B1 infringes the relevant patent.

In the event that the act of selling the software has been conducted in country B, it will be possible for the patentee to assert his right against the user in country A or C, insofar as the user has conducted an act of importing the software. As a matter of fact, however, it will be difficult for the patentee to assert his right on any such occasion, since it would be difficult for him to identify persons who have purchased the software through the Internet. In the event that a user purchases the software for private use and uses it for private purposes, his act cannot be considered as infringing the patent in a country having a legal system similar to that of Japan.

(d) Act of Network Providers:

The software uploaded by B is stored in the server of the Network Provider. If the server is located in the country where any patent exists, therefore, it will be possible to assert its patent right to the Network Provider. In the instant case, if the software is stored in the server of the Network Provider A2 or C2, it will be possible to accuse the Network Provider A2 or C2 as an infringer. It may also be possible for the patentee to accuse the Network Provider A2 or C2 in the country where his patent exists, on the ground that the Network Provider is offering for sale the software infringing the patent.

(3) Act of Licensee C1:

The act by C1 of selling the software in country A through the Internet can be considered as giving rise to problems similar to those resulting from the act of B1 as discussed above, since C1 has the license granted only for country C. If country A is Japan, however, there is every

likelihood in view of the court decision in the BBS case (*vii) that the act of C1 may be considered as a parallel import of genuine goods, and as not infringing the patent in country A. It will, thus, be very difficult to maintain a licensing strategy on a country to country basis as long as a software patent is concerned.

4. Other Problems Concerning Intellectual Property

(1) Patent infringement on the Internet:

The progress of network technology has made it possible to use the Internet like a LAN and start a variety of new businesses. This is a situation which was never anticipated when the existing laws were made, and which will no doubt give rise to various problems in the future.

We would like to consider by way of example the patent of Citibank relating to electronic money (*viii) which was widely reported in newspapers in the beginning of this year.

This patent relates to "an electronic monetary system for implementing electronic money payment as an alternative medium of economic exchange to cash, checks, credit and debit cards, and electronic funds transfer" according to the Background of the Invention in the patent publication. The invention as defined by claim 1 is characterized by keeping a record of transfer of electronic money through a process of its circulation from one place to another after its issuance by a bank, so that it may be possible to trace the route of its circulation. The invention makes it possible to have the issuing bank guarantee the monetary value of the electronic money, and detect any forgery or wrongful act in the process of its circulation.

As this patent claims the circulation of electronic money through a network, however, there is every likelihood of the scattering in a plurality of countries of the essential elements of the invention, i.e., an "issuing bank

having an on-line accounting system", a "money generator module" for generating electronic money, a "teller module" for receiving and disbursing electronic money, and a "transaction module" for performing on-line transactions. If such is the case, it is not within a single country that the invention is practiced, but no infringement can occur. Thus, we can see a limitation arising from the territorial principle on which the grant of any patent in each country is based.

(2) Use as prior art:

The next question is whether or not a document published through the Internet can be considered as prior art, i.e., a prior knowledge or use, or a printed publication. A document published through the Internet without having any particular limitation imposed on access to it can be considered as public knowledge, since it is understood that public knowledge requirement merely requires that the information in question be public available. But what about electronically stored documents on the Internet at some point in time, but are then later deleted? Even such a document will, however, be considered as public knowledge if it is possible to prove the existence of the document on the Internet at some point in time (though it may be difficult to do so).

As the Internet connects computers throughout the world, another question is whether or not any and all documents published through the Internet can be considered as public knowledge "in this country". For example, no matter who may access the documents in a home page in a server at a South American country, it is a difficult question to decide whether or not the documents will be considered actually as public knowledge in Japan.

Still another question is whether or not electronic documents on the Internet can be considered as printed publications. In Japan, the term "printed publications"

are understood as meaning documents, drawings or like media reproduced for the transmission of information, for the purpose of open to the public by distribution. Any document on the Internet is usually accessible within the day of its uploading, and can, of course, be printed. There is, however, little discussion about this matter as yet, but it will be necessary to watch its development in the future.

(3) License agreement on the Internet:

At present, some softwares are distributed through the Internet.

Referring, for example, to a certain software, a person who want to download it, first displaying a license agreement, and must click on an "acceptance" icon to download the software. Another software also display a license agreement before downloading. And this agreement contains a provision that an act of downloading the software shall be regarded as a consent to the agreement. According to still another case, a license agreement need not be displayed for downloading a software, but is to be displayed before downloading the software, but is to be displayed before the downloaded software is installed, and it is impossible to install without displaying the agreement and clicking an "acceptance" icon.

While these cases and particularly the former two are license agreements on the Internet. They do not substantially differ in form from a shrink-wrap agreement as employed widely for a packaged software, and may be considered as a kind of adhesion contract. As there are, however, a lot of discussion for and against a shrink-wrap agreement, it will be necessary to have a lot of discussion about a license agreement on the Internet to reach a proper conclusion.

5. Conclusion

As discussed above, the existing laws concerning intellectual property and differing from one country to another are incapable of solving not a few problems of intellectual property that may arise in connection with a borderless computer network, such as the Internet. Accordingly, it is necessary to consider measures based on new concepts, including the making of new laws, in order to ensure the efficient protection and use of information and the sound development of networks. More specifically, we do hope that WIPO, etc. will make a proper international convention, while each individual country makes proper national laws.

*i: Local Area Network. A network formed by connecting computers in a single building, or site with a private circuit for communications.

*ii: Wide Area Network. A network formed by connecting a plurality of LAN'n located in distant places from one another.

*iii: A network which enables services, such as electronic mail, bulletin board and conference, to be available by a personal computer at home, or the like on an on-line basis through a circuit for communications. For example, NIFTY-Serve and PC-VAN in Japan, or AmericaOnline and CompuServe in the United States.

*iv: Final Report "Intellectual Property and the National Information Infrastructure" of September, 1995.

*v: Intermediate Report "GREEN PAPER - Copyright and Related Rights in the Information Society" of July, 1995.

*vi: A "link is run" when, for example, A (a person) opens a home page in his server A and writes there the address (network name, password, etc.) for access to a B's (another person's) paper in his server B, so that a third person C who wants to read the B's paper may be able to gain access to the server B and read the paper by clicking the address for access in the A's home page in the server A with a mouse.

*vii: Tokyo High Court decision of March 23, 1995 in Case No. (ne) 3272 of 1994.

*viii: Japanese Patent Publication No. Hei 7-111723 entitled "Electronic Currency System" (dated November 29, 1995).

SOFTWARE LICENSE AGREEMENTS

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Table of Contents

I. **Type of Software Agreements**

A. Agreements for the Sale Of Finished Software to End Users

B. Software Development Agreements

II. **Sale of Finished Software**

A. License Terms

B. Shrink Wrap Agreements

III. **Software Development Agreements**

A. Ownership -- Assignment, Joint Ownership or License

B. License Grant for Development

C. Term -- perpetual, revocable

D. Debugging, Modifications, and Further Enhancements

E. Distribution Rights and Restrictions

F. Warranties and Indemnification

G. Royalties

H. Multimedia

Disclaimer: This presentation involves only the views of the author and in no way represents the views of Harris Corporation. This paper is not intended to serve as legal advice.

I. Type of Software Agreements

Agreements for the transfer of rights in software vary widely. Such agreements range from simple licenses to use a piece of software on a single computer for a defined purpose and number of years to a complex agreement to jointly create, market and sell a new to the world piece of software.

For purposes of clarifying issues in this paper, software agreements have been broadly broken into two categories. It is easy to define these two categories if one imagines the role of an attorney at a large software development and marketing corporation, hereinafter called "Publisher." From this perspective two general types of agreements are common. First, there are agreements for the sale of finished software to end users. This type of agreement is very common among mass-marketed application programs. Such agreements are typically not customized and often take the form of shrink-wrap licenses. These agreements usually heavily favor the licensor, but are sometimes rejected by U.S. courts for various reasons that will be discussed. Little, if any, alteration of the software is contemplated by the purchaser.

The second broad category of software agreements are software development agreements. Software development agreements are agreements transferring rights in software wherein the Publisher and Developer agree to create, modify or alter software. In other words, the Developer is expected to be more than just an end user who runs the software. Software development agreements are very complex and must be intensely customized to suit the often competing needs of the Publisher and Developer.

II. Sale of Finished Software

The sale of finished software to end users represents the most common form of licensed software and represents the vast majority of software sales in the U.S. Broadly stated, the most common and significant aspect of this type of sale is that the user's license is restricted to using and executing the object code only. In other words, the user is not entitled to modify the object code or to obtain or utilize the source code for the purchased software.

A. License Terms

The typical license granted to an end-user of mass marketed software is narrow in scope -- the end user only receives the right to use the software with no rights or obligations regarding modifying, transferring or enhancing the software. As a practical matter without the source code it is difficult for a user to alter the program or make derivative versions of the program.[1] The Publisher is solely responsible for handling any bugs in the program and for issuing updates. A common license to end users is non-exclusive, non-transferable and will usually allow the user to "install and execute the program on __ computer(s) owned or leased by the purchaser."[2] The

[1] However, when the software is primarily data, such as a telephone directory, access to the object code necessarily provides access to the most valuable part of the software--the data.

[2] Such a license might be:
"Licensor grants to the licensee the right to install, use and execute the Software on one computer (i.e., with one CPU) that licensee owns or leases [at the designated location]. Licensee may not network the Software or otherwise use it on more than one computer or computer terminal at the same time. Licensee may not rent or lease the

license might further allow the making of a back-up copy of the program (per U.S. Copyright Law). The license may enable the user to transfer the program from one computer to another, provided that the program is never simultaneously used in more than one computer, or alternatively, the purchaser may obtain a license to use unlimited copies of the program at a designated location.[3]

Typically, the Publisher retains all title to the software and the end user receives only the above described license for limited use. The Publisher will commonly indemnify the end user for any allegations of infringement and for failure of the software to perform as specified up to the price of the software.

The above structure works for end users interested only in executing the software for its intended purpose. However, when the end user is, for example, a large corporation buying a fairly unique piece of software, such as a Computer Aided Design system, the corporation will typically desire to have some ability to modify the program to tailor it to certain unique needs. The corporation may also need to obtain training from the Publisher so that it understands exactly what is being purchased. Unlike mass-marketed software that has commonly accepted minimum standards of performance, compatibility, and functionality, large user specific pieces of software are more likely to be non-standard.

When the software is non-standard, fairly unique, may require user modifications and is very expensive, it is time to consider the detailed license terms discussed at Section III of this paper titled Software Development Agreements. Such agreements raise concerns simply not addressable in a standard license discussion.

B. Shrink Wrap Agreements

Perhaps more than any specific license terms in an end user agreement, the most significant issue facing mass marketers of software is enforceability of such agreements in the courts. More specifically, will a court uphold the terms of a contract included with the software in the form of either a shrink wrap agreement or an agreement downloaded with the software over the Internet? In Step Saver Data System, Inc. v. Wyse Technology,[4] software was purchased over the telephone, a purchase order was then sent and another essentially identical purchase order was returned to the purchaser. Subsequent to the above, the software was sent to the purchaser in a box and the license agreement at issue was on the box cover. The court found the shrink-wrap

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Software, but may transfer the Software and accompanying written materials on a permanent basis provided that licensee retains no copies and the recipient agrees to the terms of this Agreement. Licensee may not reverse engineer, decompile, or disassemble the Software. Licensee may not use, copy, modify, transcribe, or transfer the Software or any copy in whole or in part except as expressly provided in this license. All rights not expressly granted are reserved by the Licensor."
Computer Software Agreements, S10-8; Ridley, C. H.; Quittmeyer, P.C.; and Matuszeski, J. (1993).

[3] A site license should contemplate a license to use the Software on computers at ___ [sites defined geographically and by computer system]. The license may also contemplate that the user can not use the program on more computers (CPUs) than the number of licensed copies of the Software delivered to user. See Legal Care for Your Software, Remer, D.; Dunaway, R. (1995). The Publisher may want to reserve the right to audit the end user's use of the Software to make sure the terms of the site license are not violated.

[4] 939 F.2d 91 (3d Cir. 1991) (the user had to press a key signifying acceptance of the license).

license unenforceable as a matter of law because acceptance of the goods was not conditioned on acceptance of the license. Rather, the contract was formed when the order was accepted and was never modified to include the license.

One recent Seventh Circuit case found that a shrink-wrap agreement inside a box containing the software is valid and enforceable because, before the user could utilize the software, the license was shown to the user and the program would not let the user proceed without indicating acceptance of the license terms.[5] Thus, the final contract between the Publisher and seller was acknowledged by the user's action.

Regardless of whether software is distributed over the internet or over the counter, the Publisher should design the software to display the license on the user's screen upon first use. The software should thereafter be usable only if the user accepts the license, such as by clicking on a "yes" button. The Publisher must offer to take back the software and refund the users' money if the terms of the license are unacceptable. If the sale is over the counter, in addition to the above, the Publisher should put the terms of the license agreement on any purchase orders and on the outside of the box containing the software.

III. Software Development Agreements

Software development agreements come in many forms. These agreements may take the shape of small projects to modify an existing program for internal use in a corporation or they may be large projects to develop "new to the world" finished software for a Publisher to market and sell, such as a multimedia game. In either case, the principal desires of the parties are the same. Specifically, the Publisher buys the created software or software services and wants to make sure that a complete operational piece of software is delivered on time by the Developer. The Developer wants to ensure that the parameters of its obligations are well defined and that, once the software is delivered, the Publisher adequately markets and sells the product. All the expected obligations and results of both the Developer and the Publisher need to be put down in an agreement so that each party knows what the contract covers.

Thus, when drafting a software development agreement, a task of primary importance is defining that which is being licensed, often called defining the "deliverable goods." The most common manner for describing software is by the use of exhibits that list what the Developer will provide. The exhibits may include actual object code or definitions thereof, list files, functionally describe what the software will do,[6] list all associated documentation that will be provided with the software, and completely describe the Developer's support obligations for debugging, modifications and future enhancements. Only by objectively defining the parties' expectations for what product and services will be provided when, and at what cost, can both parties ensure that fundamental misunderstandings do not occur.[7]

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[5] ProCD Inc. v. Zeidenberg, 39 U.S.P.Q.2d 1161 (7th Cir. 1996).

[6] If a complete manual exists, the program can be described as "performing all the functions and having all the features detailed in the _____ manual."

[7] One should specify when and where the software will be delivered, and a bonus for early delivery or a penalty for late delivery may be appropriate.

For example, the parties should agree in writing that the delivered software will have minimal operational characteristics that may be defined. The agreement may state that the software is compatible with, and will operate with certain types of machines (i.e., IBM compatible or Macintosh), and other software (i.e., which operating systems, spreadsheets, etc.). Specific functions that must be performed and any obligations to perform training should also be called out in detail. Further, the conditions for accepting or rejecting deliverables, and time to correct rejected deliverables, should be defined. It is only after the parties completely understand and define what is to be developed that a solid software license agreement can be drafted.

A. Ownership -- Assignment, Joint Ownership or License

Some Publishers used to assume that if a work is commissioned, then all copyrights in the work belong to the Publisher under the work for hire doctrine. However, case law indicates that such trust in the work for hire doctrine is misplaced.[8] Not only does the work for hire doctrine leave the question of copyright ownership unsettled, it also does not resolve issues such as trade secret or patent rights in the software.

Therefore, a Publisher desiring ownership of the software needs to explicitly obtain ownership of the software from the Developer in the agreement. This assignment can replace a license grant (Section IIIB below) or be in addition to a license grant. For example, the Publisher may want the original work assigned by the Developer and may want a license to software indirectly developed as a result of the commission but outside the assignment terms. A sample assignment/work-for-hire clause follows:

> The Software has been specially ordered, commissioned and paid for by Publisher. Developer agrees that the Software is a "work made for hire" for copyright purposes, with all copyrights in the Software owned by the Publisher. To the extent that the Software does not qualify as a work made for hire under applicable law, and to the extent that the Software includes material subject to copyright, patent, trade secret, or other proprietary right or protection, Developer hereby assigns to Publisher all right title and interest in and to the Software, including, but not limited to, all rights in and to any inventions and designs embodied in the Software or developed in the course of Developer's creation of the Software.[9]

The Developer will typically want a grant back license to the software so that enhancements, modifications, or derivatives can be produced, and to ensure that modules from the program can be re-used in non-competitive programs. Given the proper non-competition clause, the Publisher will probably not object to such a grant back.

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[8] Community for Creative Non-Violence et al. v. Reid, 490 U.S. 730 (S. Ct. 1989). Absent a written agreement acknowledging ownership in the Publisher, the courts look to whether the Developer is acting more as an independent contractor or an employee (i.e, supervision, taxes removed from wages, etc.) to determine ownership of the work.

[9] Van Arsdale, Cory H., Microsoft Corp., "Software Development Issues", Presentation to AIPLA Licensing Committee, 25 January 1996.

If the Publisher does not receive full ownership via an assignment, joint ownership is possible. A joint ownership clause is as follows:

> Publisher and Developer each shall have an undivided, joint ownership interest in (i) the Software; and (ii) any derivative technology of the Software created by either party during the term of development and maintenance under this Agreement. Neither party shall be obligated to pay the other royalties or other consideration, nor account to the other for any royalties or other consideration it may receive, for any licenses, assignment, distribution or other disposition of the Software, or any derivative technology thereof. Any derivative technology made after completion of development and maintenance under this Agreement shall be owned exclusively by the creator of such derivative technology.[10]

With joint ownership, the Publisher should obtain the source code to ensure that it can practically utilize and modify the software. Depending on who ultimately ends up as the owner, or if joint ownership is decided upon, a "tie-breaker clause" on rights not specifically allocated would be "all rights not specifically granted herein are reserved by the (Developer or Publisher)."

B. License Grant for Development

If the Developer is to retain ownership of the software, then a license to the Publisher is required. The Developer and Publisher will typically want the license to be worldwide. This may not be practical if the Publisher is unable to sell the product in a certain region or the Developer does not want the product sold in certain markets.

Presented below are several licenses of different scope. First, a license from a powerful software design, manufacturing and publishing house that wants full rights to copy, modify, use and sell the software may be:

> Developer hereby grants to Publisher a non-exclusive, perpetual, irrevocable, royalty-free, fully paid up, worldwide right and license to: (i) use, copy, edit, format, modify, translate and create derivative technology[11] of the source and object code versions of the Software; (ii) reproduce, license, rent, lease or otherwise distribute, and have reproduced, licensed, rented, leased or otherwise distributed, to and by third parties, source and/or object code versions of the Software, and any derivative technology thereof; and (iii) grant the rights set forth in this Section in the Software to third parties, including the right to license such rights to further third parties.

[10] Id.

[11] Derivative technology may be broadly defined to include any intellectual property rights created during development of the software. Derivative technology should include all such rights in any version of the originally defined software, including but not limited to a derivative version of copyrightable material such as a translation, including a translation into other computer languages, portation, correction, upgrade, modification, compilation, abridgment or other form in which the software is adapted or transformed.

Such a license is often perceived as over-reaching because the Publisher has such broad rights to the source and object code. However, if the Developer is compensated for any modified or enhanced version of the software that is created and sold by the Publisher, or third parties licensed by the Publisher, such fears should be abated. For a broad license like the above, the Developer may desire to have a clarification of title clause. The clarification of title clause states that except as expressly licensed to the Publisher, the Developer retains all right, title and interest in the Software.

Alternatively, the Developer may have finished software that the Publisher does not need to or can not modify or enhance. In this case, an alternative, narrower license would be:

> The Developer hereby grants to Publisher, for the duration of the agreement, a world-wide, exclusive[12] license to market, distribute, reproduce, import, export, rent, lease, offer to sell and sell copies of the Software, and to sub-license others to market, offer to sell, and sell copies of the Software for use on all existing or yet to be developed computers.[13]

The above licenses captures the limited scope of rights to be transferred to the Publisher not interested in modifying the software. Especially when using a license such as the above, the parties need to make sure the specification describing the finished software is detailed and complete. Otherwise, the Publisher could be in the position of having paid for software that does not work and which the Publisher does not have the right to modify, or the Developer may be asked to perform uncompensated work that may be outside the scope of the original agreement.

C. Term -- Perpetual or Revocable

The term of software development agreements can be set at a date certain which can vary depending upon the relationship between the parties and the useful life of the products. Typically, upon such termination of the Agreement, all rights in the software revert to the Developer.

The Developer and Publisher may have the agreement terminate automatically if certain sales goals are not met. This protects the Developer in case he perceives that the Publisher is inadequately marketing the software to reach obtainable sales goals. Similarly, the Publisher may want to terminate its obligations to promote the sale of software that is a poor product. Of course, the Publisher will want to reserve the right upon termination to deplete its inventory.

Certain large Publishers may not agree to any obligation to market or sell the software. Such a refusal certainly means that the Developer needs to retain the right to terminate if certain sales goals are not met, grant only a short-term license or needs to make the license non-exclusive.

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[12] See Section E below regarding exclusivity.

[13] If the Software contains multimedia aspects then the above language may be generalized to the right to distribute work for use on "any device now known or later developed." An example where this modification to the license might be especially desirable is when software is run from a mainframe and transmitted to the user's television.

D. Debugging, Modifications, and Further Enhancements

Commonly, the Developer will fix bugs at no cost to the Publisher, but updates, modifications, derivatives and further developments are paid for by the Publisher.[14] Typically, if an uncorrected error is deemed to substantively effect the marketability of the software, the agreement may be terminated by the Publisher. Thus, it is very important to satisfactorily define what is the deliverable software and what is "derivative technology," so later disputes over payment obligations for debugging deliverables versus creating enhancements are eliminated.

Turning now to enhancements, the agreement might also call for the Developer to supply the existing code plus new development or, alternatively, a license to the Publisher to make changes. Incentives for the Developer to supply the enhancements can be provided in at least two ways. The Developer can be paid a set rate per hour for work performed in providing the enhancements. In this case, the agreement needs to explicitly call out the extent of Developers efforts in developing the code, compensation paid the Developer for the new code, and recourse for the Publisher if the Developer fails to create the new code. However, this may raise concerns about the Developers availability and ability to produce the enhancements at some unforeseen date in the future. A better choice is to allow the Developer to make enhancements at no charge to the Publisher, and to obligate the Publisher to include the changes in new versions of the program.[15] The Developer will presumably benefit from increased royalties on sales of the program due to the enhancements.

If the Publisher is to create enhancements, then the question becomes for what purposes can the existing code be modified. If the Publisher is covering the expense of making modifications, it is common that the enhancements may be made for any reason "consistent with improving the marketability or salability of the program." Alternatively, the Developer may be given first chance to modify the program (for no charge), and upon failure to make the enhancements the Publisher can make the changes and charge a certain rate per hour against future royalties owed the Developer based on sales of the enhanced program.

For new code development the Publisher either needs a license to make changes or an obligation from the Developer for future development. Unless the Publisher is very confident that the software is operationally perfect, will require no enhancements or that the Developer will make all needed modifications, the Publisher may want a narrow right to make derivative works. Such a right may be limited to certain purposes, such as debugging the software. A license to the Publisher for creating "derivative works" may grant "an exclusive, personal, non-transferable, non-assignable license to use, modify and develop derivative works for the purposes in Exhibit __, and to reproduce, license, sublicense, distribute, sell and offer to sell object code version of any derivative works created by the Publisher pursuant to this Section."

[14] If Developer has reason to know errors exist, or if Publisher notifies Developer of errors, Developer shall use best efforts to correct the errors, or inform Publisher that errors can not be corrected, within _____ (amount of time).

[15] Such a clause might read "the Developer may provide any program enhancements that improve the marketability or salability of the program. If the enhancements significantly improve the marketability or salability of the program, Publisher shall include them in new versions of the Program within _____ time." Marketability and salability of the program may be left generically defined or may be defined in terms of improved program performance, new uses, or other more specific ways.

No matter the scope of the license, the license given by the Developer should transfer rights in patents and trade secrets used in future enhancements of the software to the Publisher. Both parties are well advised to agree whether the license covers material or technology created as enhancements, improvements or derivatives of the original software, and includes copyrighted material, patented or patentable material, and material that is protected as a trade secret or is derived from trade secrets. Otherwise, if the relationship between the parties becomes troubled or is severed, then ownership of intellectual property may be confusing and add to the instability.

Answers to many of the above questions about who is responsible for bugs, modifications, and future enhancements will generally resolve the question of whether the Publisher gets source code or only object code. If the Publisher only wants the right to market and sell finished software, receiving only object code is acceptable. However, if the Publisher will debug or modify the software then it is appropriate that the Publisher receives the source code. Because possession of source code is such a sensitive issue, many practitioners employ a source code escrow agreement that will release the source code to Publisher only upon the occurrence of some release event (i.e., breach by Developer or failure to make enhancements). However, such agreements are preferably a last resort. Defining release events often proves tricky because it is difficult to agree on what could go wrong and, at the time it is going wrong, agree that the release event has occurred. Further, by the time the parties agree that a release event has occurred (if they ever do), the market window for the software has probably passed. Therefore, from the Publisher's perspective, the best approach is if you need the source code, negotiate up front to get it and limit your rights to modify or enhance the code to situations analogous to release events. In this manner, the Publisher has the code and can be working on a solution while the issue of whether a release event has occurred is resolved. The Developer can still enforce its rights, including an injunction, if the Publisher fails to prove that the release event occurred.

Finally, it may be in the interest of both parties to sign a non-competition clause bounded by the scope of the software creation. Because reproduction of software is so easy, such a non-competition clause may satisfactorily protect both the Developer and the Publisher from creations by the other of "knock-off" products.

E. Distribution Rights and Restrictions

Depending on the size of the Publisher and the Developer's own abilities or other contracts, distribution rights may be given for marketing and sales to end users, distributors, and OEMs, or any combination of the above. This is a practical matter and the terms of the license can be modified to narrow or broaden the scope of the distribution rights as needed.

Many large Publishers will want any language that could be perceived as creating an exclusive relationship removed from the contract. This will help prevent allegations of fraud and willful breach of contract that sometimes arise from large company/small company ventures.[16]

[16] Except as provided in Section ___ (Confidentiality) nothing in this Agreement will be construed as restricting Developer's ability to acquire, license, develop, manufacture or distribute for itself, or have others acquire, license, develop, manufacture or distribute for Developer, similar technology performing the same or similar functions as the technology contemplated by this Agreement, or to market and distribute such similar technology in addition to, or in lieu of, the technology contemplated by this Agreement. "Software Development Issues", Van Arsdale.

The Publisher should have the right to sublicense software for the purpose of granting site licenses. The terms and conditions of the site license may be defined or the parties may agree to not unreasonably withhold consent for site licenses over some minimum size. Further, because royalties may be on a per copy basis and site licenses may not be structured so that a per copy analysis is possible, and because site licenses are less expensive than per copy retail sales of software, the parties should agree up front on royalty terms on such licenses.

F. Warranties and Indemnification

When the Publisher is an owner of the Software, the Publisher will typically want the ability to control intellectual property rights. For example, the Publisher may wish to control (and pay for) filing of patent applications and any litigation resulting from the exercise of those rights. Alternatively, the Publisher may prefer to retain the software (source code) as a trade secret rather than file for patents. In such a situation, the Developer will want a disclaimer as to intellectual property claims against the Software, and as is set forth in the associate footnote, may wish to disclaim all warranties, except perhaps copyright infringement.[17]

On the other hand, when the Developer owns the software and is simply licensing the Publisher, the above disclaimer is inappropriate. In this case, the Publisher will try to obtain a complete warranty that the Software: (i) is original to the Developer and does not infringe any copyright, patent, trade secret, or other property right held by any third party, (ii) was/will be created by employees of the Developer within the scope of their employment and under an obligation to assign all property rights (including inventions) to the Developer, or that any independent contractors are under written obligations to assign all rights in the software to the Publisher, and (iii) shall be of a high grade quality.

Regardless of whether the Publisher or Developer owns the software, the Publisher will want to ensure that the Developer (i) has not previously granted any rights in the software to third parties, and (ii) that the Developer has the full right to make the assignments/grants in the agreement.

The question of indemnification arises when assessing liability for the software. For example, if the Publisher has sole ownership of the software the Developer will likely want reimbursement for payments made or losses suffered which are based on a court ruling or agreed upon settlement.[18] To avoid any confusion as to the issue, the Developer will probably want the ability to retain independent counsel at its own expense.

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[17] Sample clause:

The Software is provided to Publisher as is without warranty of any kind. The entire risk as to the results and performance of the Software is assumed by Publisher. Developer disclaims all warranties, either express or implied, including but not limited to, the implied warranties of merchantibility, fitness for a particular purpose and noninfringement, with respect to the Software.

Id.

[18] Standard terms for such indemnification would cover any costs, damages and fees reasonably incurred, including but not limited to attorneys' fees and the fees of other professionals.

Alternatively, if the Developer retains ownership in the software, the Publisher may want indemnification, such as the following:

> Should the Software or portion thereof be held to constitute an infringement and use as contemplated by this Agreement be enjoined or be threatened to be enjoined, Developer shall notify Publisher and immediately at Developer's expense: (i) procure for Publisher the right to continue use of the Software as licensed; or (ii) replace or modify the Software with a version that is non-infringing, provided that the replacement or modified version meets the Specifications to Publisher's satisfaction. If (i) or (ii) are not available to Developer, in addition to any damages or expenses reimbursed under Section ___ (Indemnity), Developer shall refund to Publisher all amounts paid to Developer by Publisher under this Agreement.

The Publisher may also want a clause that obligates the Developer to defend any claim or action brought against the Publisher that, if true, would constitute a breach of the warranty granted by Developer. Conversely, the Developer will want to reject liability if the software is modified or altered, or used in a manner not intended or authorized by the Publisher.

In any event, the party controlling the software and the litigation will want the other party to: (i) provide reasonable notice of any claims adverse to Developer's or Publisher's interest in the software, (ii) hire (and pay for) mutually acceptable counsel to defend claims, and (iii) assist in the defense of any claims in any reasonable manner, including providing information, assistance and authority. Further, each party will want a clause ensuring that they are not bound by any settlement agreement not signed by the party.

G. Royalties

This is the issue most interesting to the business people but perhaps least interesting from a legal perspective. Royalties or fees can be put into many forms, such as development fees paid on a schedule for achieving milestones, paid up royalties, or royalties based on sales. The sum and type of royalties can be shaped to almost any form based on strengths and needs of the respective parties. Again, however, if a paid up royalty or development fees are to be made, the specification must clearly describe exactly what work is required to obtain what payment. If royalties are to be paid based on net sales, define whether free demonstration copies qualify as sold and determine what is deducted from net sales by the deduction of "allowances" from sales. For example, does the cost of attending a trade show to promote the program get deducted from net sales as an allowance? The parties should agree on this beforehand, and may want to set an upper limit on expenses.

H. Multimedia

If the software being developed contains multimedia, the Publisher has additional licensing concerns. Specifically, if still pictures, moving images, music and other works are to be incorporated into the developed software, the Publisher needs to obtain the right to make

derivative works of the software. Furthermore, if characters or personas are to be used in the multimedia application, the Publisher needs to ensure that the right to use the character or persona has been acquired.[19]

The licensing of all the above types of works raises questions as to the right to alter the original work. For example, when one receives the right to incorporate music into a piece of multimedia software, is the right to combine that music with still or moving images also granted? The answer is generally no because the Publisher will typically want to edit and synchronize the music to match the visual images. Therefore, when music is licensed, one must also consider the need for a synchronization license and the right to create derivative works. Such a license allows the synchronization of music and video, whereas a simple mechanical license only to replay of the song will not cover the creation of a derivative work that emerges from the combination of music and video. Likewise, the Publisher may desire the right to alter image, for example, by cropping still images, splicing moving pictures, or colorizing black and white movies. Such ability to modify the work may be the only way for a Publisher to modify the original work into a form usable in the multimedia application. However, such broad rights also cause Developers (i.e., artists, photographers) concern because the Publisher may modify or alter the work in a manner that diminishes the value of the work or contradicts the artist's vision of the work.

A skilled clearance specialist will enable the Publisher to obtain all the necessary rights without overpaying to obtain rights not needed to complete the project. Such concerns make multimedia licensing an extraordinarily complex problem that demands strict attention to the acquisition of rights from all appropriate parties.

From the above it can be seen that software license agreements come in many forms. The practitioner must first understand all the business and technical aspects of the transactions. Using the broad categorizations and the issues described above, in conjunction with such business and technical understanding, a good software license agreement can then be formed.

[19] This right of reuse or right of publicity is standard. The Screen Actors Guild or American Federation of Television and Radio Artists can be contacted to locate the agents for such personalities.

(1) Title:

Check points in a Contract with a Venture Business

(2) Date:

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(6) Summary:

This paper focuses on transactions with venture businesses which in these days have drawn much attention. As international competition becomes more and more intensified, venture companies with fresh and unique ideas and technologies are regarded by financial institutions as pioneers to exploit new business and as promising investments. Through transactions with such venture companies, established companies may obtain access to their advanced technologies. The venture companies,

in return, have access to funds, personnel and goods, which they generally lack, from established companies. Such transactions thus bring benefits to both sides. When making contracts with venture companies, however, one needs to be careful about their instability. This paper points out, from a practical point of view, risks in transactions and important issues to be aware when making contracts with venture companies. It covers the legal system to back up such businesses, ways to access intellectual property owned by venture companies, and the difference between supporting systems of Japan and USA.

Check points in a Contract with a Venture Business

1. Preface

A number of transactions with venture businesses (hereinafter "VB") such as technology transfer and joint R&D is on the rise. To established companies that seek new growing businesses, the activities of VB, which are focused on new technologies and fields larger companies cannot reach, are worthy of notice or sometimes essential to them. To VB, on the other hand, transactions with established companies may raise their credibility and provide various supports. The possibility is higher, though, that unexpected trouble may happen in implementing the contracts involving VB when compared with those among established companies. Then what points should we note in making contracts to avoid such trouble? This paper proposes measures in view of preventive legal practice and practical business considerations.

2. VB and its Circumstances in Japan

(1) Circumstances for VB

Today activities of VB and venture capitals(VC), which provide funds to VB, are often covered by newspapers and other media. This is the result of rising interests in VB and VC by government and established companies. The VC funds are actually growing and large-scale investment partnerships based on VC are actively formed, while companies to invest in VC are also growing both in number and fields. The subject of such investments are those VB whose activities are recognized by the government and established companies, and whose importance is expected to rise in the future in such fields as electronics, biotechnology and new materials. While Japan had its so-called "venture boom" in the early 1970's and mid-1980's, many VB at that time went bankrupt because they could not keep up with the change in economic trends and the circumstances were not conducive for developing VB. Currently, however, VB are expected to achieve

greater results in the field of new technology. There are good reasons for these higher expectations. The industries are trying to exploit new business opportunities either individually or jointly with other companies to survive such circumstances as: the increased speed of technological innovation, progress of the information society, stagnate domestic economy due to a decline of competitiveness of existing industries and the growth of competitive power of the other Asian countries, and shift of manufacturing facilities of domestic industries overseas. The government also regards creation of a new industry as a critical issue for the further growth of Japanese economy while financial institutions are in needs of exploiting new investment opportunities.

VB, on the other hand, have limited power to carry out all of their ideas on their own. Because they generally have less funds and credibility than established companies to develop a new market with a new technology, they are often forced to cooperate with larger or powerful companies to run a business or obtain investments from VC and other firms. While it seems that there has not been enough financial and managerial support for VB in Japan, various support systems have recently been provided and many VC have been launched under the circumstance. As to official supports, there have been following measures:

(a) Deregulation of rules to make it easier for VB to register on the over-the-counter stock market (launch of "special over-the-counter market");

(b) The maximum debt guaranteed by the Industrial Infrastructure Organizing Fund under Special Act for Promoting Specific New Business, was increased;

(c) Support from the Japanese Small and Medium Enterprises Agency

Furthermore, intellectual property is now accepted as

collateral for financing. Last year, the Ministry of International Trade and Industry(MITI) issued a report on ways to assess intellectual property as collateral. We shall note, however, that there is still much to be done both in terms of system and substantiality when compared with the United States. In the United States a number of VC, investors called angels, and other individuals who support VB from management side, have raised the number of VB. It is assumed that these investors are willing to evaluate and invest in the inventions of individual inventors or VB more actively than the investors in Japan, because in the United States greater value is placed on the ability of the individual. On the other hand, in Japan, advanced and new technologies are expected to be developed by big companies because of their size and it may be because of the Japanese culture which puts organizational power higher than individual ability. This may be one of the reasons that, until recently there have been low expectations for the VB's technologies. VB may have advantages in the field of specialized technologies in which larger companies do not develop because it is too characteristic to handle for their size. If VB and established companies cooperate in their businesses, VB, having skills in such specialized fields, may bring benefits by technologically complementing larger companies. On the other hand VB can rely on financial aids and other resources of larger companies. For these reasons, relationships between larger companies and VB are often created. It is possible that, in the future, VB will play a greater role in the fields of new and advanced technologies through further support of official and private sectors.

(2) What are VB?

How can we define VB? In this paper, we focus on such VB whose specialty is in its technological power and thus define it as follows;

"A pioneering small or medium-sized start-up company with potential to create public needs using new technologies

and ideas and transforming them into a business." In this paper, we mainly focus on contracts with software companies, and we believe such cases can be applied to other business fields.

3. Transactions with VB

(1) Essentiality of Contracts

With what goal and in what way do transactions between VB and established companies take place? We consider this question from both VB's and established companies' point of view mainly focusing on software business.

1) From VB's Point of View

As defined in the proceeding section, the main activities of VB are to launch and promote new businesses based on its new technology and ideas. However, there is no guarantee that excellent technology will immediately be accepted by the market. Without effective promotion, sales may be low.

Before the business of new technology can fully develop, it is necessary to improve the technology to comply with the peculiarity of the market, as well as promote it and prepare mass production system in anticipation of market demand. VB, which lack strong financial power and credibility, may find it difficult to execute all these matters on their own. A review of VB which have failed in the past, reveals that some of them exhausted their funds due to poor sales despite excessive investment in mass production facilities and personnel engaged in R&D. Though it is a matter of course that investment in a new business accompanies certain risk, it is quite possible that even a single failure that established companies can withstand may cause VB to go bankrupt. To avoid such risks, it seems that VB expect following benefits from cooperating with established companies;

(a) Improvement of Technology

To transform certain new technology to "a commercial technology," it is necessary to improve the technology to fit to users' needs and develop application technology. Established companies which run businesses in various fields may have a

broad information regarding application and market for the technology than VB does. Costs for market research and R&D may thus be reduced.

(b) Promotion Effect

The fact that established companies employ a VB's technology may in some way raise its credibility by being recognized as commercially useful and thus makes it easier to sell the technology to other customers.

(c) Manufacturing and Sales Support

If the new product is implemented in the form of software product, then preparation of mass production line may not cost a lot. However, when the new technology constitutes a combination of software with certain hardware, it may require vast amount of money to prepare mass production line and distribution channels. Therefore, VB may expect manufacturing and sales support through existing facilities and sales networks owned by established companies. This is particularly true when VB takes voluminous orders before competitor enter the market. Customers are more likely to purchase the new products from established companies because established companies guarantee a stable supply and warranties.

(d) Stable Income

If the established company is a purchaser as well as a partner, it will be a big customer and thus a stable source of income for VB. Because advanced technologies are subject to the trends of the time, VB must continue R&D. Sales to the established companies are a stable source of funds for such R&D.

2) From Established Companies' Point of View

Then what merits can established companies draw from transactions with VB? Apparently they expect such as "new idea for new products" and "specialized technologies that only certain VB may have."

(a) Unique and Advanced Technology

Some of VB are engaged in R&D in a very advanced fields that established companies can hardly reach. Established

companies may want to use such technologies to distinguish their products from those of competitors' and to add new functions and/or performance to their products through which it attempts to exploit new business.

(b) Defacto-Standard Technology

It is not rare in the high-tech fields, especially those relating to software, that a technology of a specific VB has been regarded as the defacto standard. In such cases, transaction with the VB is essential because virtually any products not using the VB technology cannot enter the market.

(c) Demands of Customers

Some customers order certain products incorporating specific VB technology. If it is essential to take the order, transaction with the VB is inevitable.

(2) Form of Transaction

The real ability of VB is in its innovative technology. The form of transactions between VB and established companies varies as purchasing contact, R&D consignment contract, joint R&D agreement and license agreement. Generally speaking, however, it seems that most cases are such that VB provide technologies and established companies provide funds and mass production technology. This type of transaction involves the following contracts;

1) Contracts Relating to Defacto Technology

In the case of technology that has been commercialized, the VBs often have good experience in transactions and likely has prepared certain model forms of a purchasing contract and license agreement. As to products which need customization, R&D consignment contract may be executed.

2) Contracts Relating to Advanced Technologies

As to advanced technologies, the R&D consigning agreement

or joint R&D agreement will first be concluded for the commercialization of the technology, then a purchasing agreement or license agreement will follow.

Among these contracts, the purchasing contract may not be very different from that generally concluded with ordinary small-sized companies since in most cases it is concluded where the new technology has already been commercialized in the form of hardware (where a software itself is the subject products, the contract should be end-user-license rather than purchasing). The peculiar features of contracts with VBs may be displayed more in license agreements in which the technology itself is treated as products, and in joint R&D and R&D consignment contracts, which are concluded at a very crude development stage of the new technology.

4. Anticipated Risk and Check Points in a Contract

(1) Company Research in Advance of Transaction

1) Company Credibility

VB are generally small so that it can make quick decisions and run its business and conduct R&D without restrictions. The management, however, is often unstable because of its size and inexperience.

It is necessary, therefore, to conduct a credibility search before not only obtaining a license but especially before making R&D contracts.

2) Assessment of Technologies Owned by the VB

When licensing know-how from VB and making contracts regarding joint R&D and/or R&D consignment with VB, the assessment of VB's technologies is essential. This is because investment may not be fully recouped if such technologies are assessed beyond its real value.

This technology assessment is not necessarily easy. These days, however, there is a trend especially in the financial world (and VC industry) to find collateral for investment in VB's proprietary technologies such as patents and copyrights*1. Financial institutions have also started offering assessment

services of VB's technologies as part of VB supporting business*2. These trends give an expectation that properties such as copyrights, patents and utility models that are regarded easier to assess, will be the primary focus when assessing VB's proprietary technology.

(2) Anticipated Risk and Issues to Be Noted in Making Contracts

1) When Obtaining License from VB

(a) Bankruptcy of VB

If VB as the licensor goes bankrupt, the license can be lost in the course of liquidation process.

This happens when the trustee in bankruptcy rejects under the authorization of the court, execution of executory contracts which existed at the time of declaration of bankruptcy. It may put the licensee in a serious situation if the business based on the license has been already promoted.

(i) Measures in USA

In the United States, this risk has long been discussed and Intellectual Property Licenses in Bankruptcy (Pub L. No.100-506 §1, 102 statute 2538, 1988 U.S. Code Cong. & Admin.) was implemented in October of 1988 as an amendment of Bankruptcy Reform Act of 1978 (11 U.S.C §365). According to this amended law, even though a license agreement regarding intellectual properties is nullified as an executory contract in the course of liquidation, the licensee is entitled to choose either to terminate the Agreement and make a claim for damages or to preserve the agreement and the rights of licensee in intellectual property-related agreements are legally protected.

It can be said that, where the licensor is an American VB and the license agreement is governed by the US laws, the rights obtained by the licensee will be protected to some extent. The amended law, however, may not be applied to a license agreement which is governed by Japanese law. It is advised that such agreement be designed to be governed by US law to enjoy the benefits of this amended provision.

While the amended law as described above protects licensee's rights while permitting nullification/termination of executory contracts by the trustee in bankruptcy, it is not aimed to prevent nullification itself. If the licensee wishes to prevent such nullification itself, therefore, certain measures must be taken so it will not be deemed as an executory contract. To this end, measures may be taken such as breaking up the license clauses into separate contracts that cover i.e., the grant and payment of royalties separately *3.

In transactions relating to software, the escrow system has been established in the United States which aims to prevent such situation that licensees (usually software users) cannot continue with maintenance and other matters because of bankruptcy of the licensor*4. In this system, licensor or licensee deposits source code of subject software program with an escrow agent before entering into transactions. And in case the licensor goes bankrupt or is merged or acquired, or if any accident should happen to the licensor, the deposited source code will be disclosed to the licensee if prescribed conditions are met.

When obtaining a software license from American or European VB, therefore, you should consider taking advantage of this escrow system to preserve the rights, even after the bankruptcy of VB, to maintain the software under your control.

(ii) Measures in Japan

In Japan, on the other hand, there is no system to protect licensee's rights under intellectual property license agreements at the time of licensor's bankruptcy. Subject rights given by the license agreement may be disposed of to a third party in the course of liquidation unless the license obtained by the licensee is legally protected through registration with a relevant authority. This is because Art. 59 of Japanese Bankruptcy Act provides that it is the discretion of the trustee in bankruptcy to determine whether the contract be continuously effective or nullified.

Accordingly, where the subject matter of the license is either patent, utility model, design, trademark or mask work registration of the license will be an effective measure to preserve obtained rights when the licensor goes bankrupt. Such registration may not be common for normal license agreements but should be reconsidered in the case of license from VB.

However, the risk should be recognized in the case of copyright license agreements where there is registration system for assignment but not for license, or where the registration system, if any, does not automatically grant protection as a matter of law. It should be noted that the registration system itself does not exist for a license agreement relating to pending patent applications and know-how.

Furthermore, even if such registration grants protection against a third party, it needs to be noted that there still remains the possibility that the license agreement be nullified by the trustee in bankruptcy as an executory contract. As a licensee, therefore, it is wise to insert an article into the license agreements which guarantees that the licensee can preserve its rights after the bankruptcy of licensor. This will help draw favorable results from the negotiations with the trustee. While there has been no precedent case in this field, it is worth incorporating such articles since it could be too risky for the licensee to leave his/her rights totally dependent upon the trustee's discretion.*5

(b) Confirmation of the Ownership of the Rights subject to the License Agreement

In obtaining a license from VB, the ownership of subject rights of the license should be identified. This is because, the subject rights of VB could already be pledged or assignable collateral already set therefor.*6

As assignable collateral subject rights, such as patents, are assigned to the creditor until the debtor pays off his/her debt. While this measure may accompany risk of the creditor

reassigning the rights to another party, some reports, state that it is more widely used than establishing a pledge because of its relatively simple procedures and low cost*7.

It should be also noted that rights for pending patent application cannot be in pledge while assignable collateral can be established therefor*8. In this case, both parties execute assignable collateral agreements.

Accordingly, when making license agreements with VB, it will be necessary to check the following: (i) prior to entering into the license, the assignment record of the subject intellectual property (as to copyrights for software program, the record of "transfer due to execution of assignable collateral" can be identified at Software Information Center), and (ii) during the term of the license, that the subject rights are not in pledge or assignable collateral. If licensee fails to check such records, and the rights granted under the license are already established as collateral and owned by a third party, a problem may arise where the licensee cannot assert its rights under the license if the collateral right is executed and the rights are transferred.

2) When VB becomes the Partner of R&D

The biggest risk anticipated in consigning or jointly conducting R&D with VB is the inability to recoup its investment because of bankruptcy of VB, retirement or headhunting of "a key person (R&D engineer)" and withdrawal from relevant business. Other events may also hinder, at a critical level, R&D activities.

Those who choose to have VB as a R&D partner are supposed to put more priority on the benefit expected from using VB's proprietary technology than such risk.

At the same time, it seems almost impossible to totally prevent such event if in fact you chose VB as a partner. It is most important for those who have VB as a partner to contain the damage at the minimum stage by checking the progress of R&D and activities of engineers, collecting information and

perceive the symptom of such event at the earliest possible stage. To this end, the following items should be noted:

(a) Article Providing Obligation to Report Any Trouble

The contract should provide that when any event happened or is expected to happen that is likely to impede the execution of joint R&D and/or R&D consignment, the VB must report the fact, irrespective of whoever is responsible for such event, to the other party. This will help identify the trouble as early as possible and to minimize the damage before it goes too far.

(b) Share of Cost and Confirmation of Products

When established companies consign R&D to VB while it bears the cost, it goes without saying that the contract provides for payment on the supply of the products. However, the VB, because of its financial situation, may demand a start-up fee. In this case, the contract should contain a clause to disperse the risk by making the payment in installments as well as to confirm the results of R&D on each payment.

(c) Cancellation Clause

Despite the early expectations, some VB may not be able to develop the planned products because of insufficiant technologies and other reasons. It seems, therefore, that the contract should contain an article by which the consignor of R&D can cancel the contract of its own free will.

(d) Ownership of the R&D Product and Its Use

Since it is usually expected that VB wants to preserve their ownership over the technology resulting from R&D because the technology is a main concern of them, it should be fully considered that the contract guarantee the establish company's right to use such technology in their own business.

(e) Warranty Clause

As to various warranty clauses, the established companies should recognize that VB are in fact not competent to bear the responsibilities under such clauses even though the contract provides that it bears the entire responsibility.

5. Conclusion

While we have discussed the issues to be noted in making contracts with VB, it remains to be seen in Japan how VB will develop in the future under circumstances which are becoming more and more favorable to them. It is true that at this moment, issues that arise as a result of unexpected events happening to VB, are dealt with on a case by case basis since the legal measures against such situations have not been sufficiently established. However, as transactions with VB increase, we hope that the law relating to such transactions will develop and more stable relationships between VB and its business partners will be created.

[Bibliography]

*1 "Recent Trend of Technology Assessment in Supporting Venture Companies," *Intellectual Property Forum;* Vol. 25, Spring 1996, pp.18~27

*2 Such service is provided by Technology Assessment Center under Japan Association for Promoting Industrial Technology which is an extra-departmental body of MITI and other major software distributing companies. Tokyo Chamber of Commerce and Industry in cooperation with the Technology Assessment Center has also started this service with lower charge since July of 1996. (Nikkei Shinbun, 1996/05.29)

*3 License Committee, "License Agreement and Bankruptcy," *Intellectual Property Management;* Vol. 46, No.2, 1996

*4 See "Study on Escrow System for Computer Software," Software Information Center, March, 1994.

*5 Masahiko Amemiya, "Patent License Agreement"

*6 As to actual cases of financing on intellectual property as collateral, see ibid. *Intellectual Property Forum;* Vol. 25, Spring 1996, p.24

*7 "Study on Intellectual Property as Financial Item,"

Institute for Intellectual Property, April 1994
*8 1956/09/24 Tokyo District Court, Civil Case Series; Vol. 7, No.9, p.2593

A Comparison of Licensing Technology and Buying a Small Technology Company

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11 OCTOBER, 1996

Basic Assumptions Concerning Small Company

- **Relatively small company in terms of capital, number of employees, sales, etc.**
- **Significant portion of value of Small Company is in its technology**
- **Employees are also owners**
- **Key technical/business knowledge is possessed by small number of employee/owners**

Basic Assumptions Concerning Acquiring Company

- **Has significantly more assets than Small Company**
- **Has its own established research and development structure**
- **Technology is a key factor in Acquiring Company's success**

LICENSING

Advantages and Disadvantages

Licensing Advantages:

- Possible less initial investment
- Less risk of liability for past actions of Small Company
- Greater flexibility in type of license - technology, patent, copyright, trademark, software
- Exclusive or non-exclusive
- Easier to disengage
- No need to integrate people, systems into Acquiring Company
- Less regulatory concerns

  Anti competition
  Foreign ownership

Licensing Disadvantages:

- **Lack of knowledge of past of Small Company**

  Ownership of technology

  Infringement issues

  Other liability issues

- **Different cost structure and asset base of Small Company**

  Any warranties or indemnities concerning freedom to practice, validity of patents, efficacy of technology, etc. are limited by the assets of small company

  Value of technology may be distorted by differences in cost structure between Small Company and Acquiring Company

Licensing Disadvantages:

- **Availability of Key Employees**

  Significant possibility of competition if key employees leave Small Company

  Possible problems with technology transfer if key employees leave Small Company

- **Competition**

Licensing Disadvantages:

- **Implementation of the technology**

Channels to market

Adaptation of technology to fit available facilities

May need access to key employees

Time to implement may be slowed

Licensing Most Advantageous When:

- **Technology is reasonably developed and independent of Small Company personnel**

  For example, rights under existing patent

- **Technology closely related to existing technology of Acquiring Company**

  Little technology transfer assistance needed

Buying Small Company

Advantages and Disadvantages

Buying Small Company -- Advantages

- **Due Diligence**

  Provides access to information which permits better determination of value and risks

- **Competition**

  Since technology is owned, no question of competition from Small Company or subsequent licensees

Buying Small Company -- Advantages

- **Keeping the Small Company**

  Can continue to operate as a small company

  Keep key employees (at least for a certain minimum period)

  Keep existing management in place

  Maintain production facilities, product stream, distribution channels, existing customer base, distributors, etc.

Buying Small Company -- Disadvantages

- **Liability for past activities of Small Company**
- **Larger initial investment**
- **More time to negotiate acquisition**

Buying Small Company -- Disadvantages

- **Difficulties in merging two separate entities**

  Manufacturing, R&D operations or other functions may have differing standards

  Cultures of two entities may have difficulty in combining

  Changes in key personnel and/or key management

  Disruption caused by sale/purchase and resulting uncertainty

Buying Small Company Is Most Advantageous When:

- **Technology is primarily know-how or linked to key employees of Small Company**
- **Value of Technology is likely to be impacted by various issues subject to investigation in due diligence**
- **High risk of competition from licensor (including employees)**

License or Buy?

- **Additional factors**
  - **Type of technology**
    - **For example, software, chemical, pharmaceutical**
  - **Regulatory issues**
    - **Competition**
    - **Foreign ownership**
    - **Export control issues**

Buying Small Company

Due Diligence

Due Diligence -- What to Investigate

- **Ownership of technology**

  Secrecy, joint development or license agreements with third parties

  Is ownership of technology clear?

  Are confidentiality obligations owed to third parties?

  Are rights assignable?

  Has any third party (including government) financed any research?

  Have Intellectual Property rights been appropriately recorded?

Due Diligence -- What to Investigate

- **Patent rights**
  - **Prosecution history/limitations**
  - **Practice followed in documenting inventions**
  - **Existing art searches**

Due Diligence -- What to Investigate

- **Internal protection of Know-How**
  - **Employee agreements**
    - **Confidentiality and non-compete clauses**
  - **Security provisions relating to intellectual property**

Due Diligence -- What to investigate

- **Other areas not directly impacting intellectual property**
  - **Finance, environmental, human resources, contracts**

CONCLUSION

- **NO ABSOLUTE RULES**
- **CAREFUL ANALYSIS**
  - **TYPE OF TECHNOLOGY AND LEVEL OF DEVELOPMENT**
  - **HOW TECHNOLOGY FITS INTO ACQUIRING COMPANY**
  - **COMPATIBILITY OF SMALL COMPANY AND ACQUIRING COMPANY**
  - **STATUS OF SMALL COMPANY**
  - **STATUS OF ACQUIRING COMPANY**

(1) Title:

A Study on Translation Cost for Foreign Application

(2) Date:

October 1996 (The 27th International Congress in Hiroshima)

(3) Source:

1) Source: PIPA
2) Group: Japan
3) Committee: #3

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Japan Patent Law, Rules of Practice, Article 2; U.S. Patent Law, Rules of Practice §1.52; U.S. Patent Law §119, European Patent Convention, Articles 14, 65, 88; European Patent Convention, Implementing Regulations, Rule 38(4)

(7) Abstract:

At the 26th International Congress in San Francisco, Mr. E. F. Berrier—a member of the U.S. Group—presented a report wherein the main point is the fact that costs required by foreign applicants for patent application and maintenance are so much increasing as to become excessive burden on the applicants, therefore, reduction of such costs is needed. Since it is thought by us that we in the Japan Group are facing the exact same problem, for this report we decided to investigate the current situation concerning costs for foreign patent applications and maintenance from the standpoint of Japanese applicants.

Of foreign patent application costs, the 3rd Committee is in charge of issues concerning translation fees. First, we

investigated the current situation of the translation processes employed by Japanese applicants and fee payments therefor. As a result, we found that translation fees required for U.S. applications by Japanese applicants are roughly equivalent to translation fees required for Japanese applications by U.S. applicants, and that translation fees required for EPC applications were roughly equivalent for U.S. and Japanese applicants. However, these monetary amounts are fees paid out as part of a standardized process, and there is some leeway to reduce these fees as a result of company efforts.

We herein introduce some concrete proposals to reduce such fees. Also, there are some cases where a reduction in translation fees would result from a system reform or a relaxation of operational practices in the countries where application is being filed. We also report on some desires and suggestions regarding such legal systemic changes.

For Japanese applicants, the language barrier which they face when an application is filed in the U.S. and in Europe is a greater problem than it is for U.S. applicants. For example, we do not have sufficient ability to check texts translated into European languages per se. We will also discuss some problems peculiar to Japanese applicants.

§ I Preface

The member firms of the PIPA Japan Group, who may represent Japanese companies, are facing the need for globalization of business activities to respond to the overseas shift of production, advances in data communication methods, deregulation trends, a steadily high exchange rate of yen, and other contemporary issues. Accompanying those, globalization of intellectual property rights-related activities is also needed.

In this environment, the report presented by Mr. B. F. Berrier of the U.S. Group at last year's congress was worthy of attention. His report comprised an analysis of all of the costs, from application to rights maintenance, that a U.S. applicant faces when a patent application is filed in Japan or to the European Patent Office (EPO). Mr. Berrier pointed out that, currently, these costs are much too high, and that in order to rationally protect a company's developmental technologies from being imitated and infringed, there is a need to reduce patent costs.

The members of the Japan Group are substantially facing the same problems as U.S. Group members. For instance, Japan and America are ranked in the opponent country as the leading countries in the list of nationalities of non-resident applicant. When we see from the standpoint of the country receiving such applications, the largest number of foreign applicants in Japan are Americans, and the greatest number of application cases filed in the United States by foreign applicants are filed by Japanese applicants. Further, the largest and the next applicants in application number to the EPO from countries outside that region are the U.S. and Japan,

respectively. Moreover, the sum of these two countries account for nearly half of all of the applications filed to the EPO. This shows how important expenses are for filing in the United States Patent and Trademark Office and in the EPO by Japanese applicants. For reference, Table 1 shows filing statistics[1] in the years 1991-1993.

The 3rd Committee investigated the current amounts of expenses borne by Japanese applicants for translations, expenses which account for a large portion of patent costs. We will report herein our survey results, as well as present specific ideas and opinions concerning such things as ways an applicant can reduce costs through his or her own efforts, and what kinds of legal systemic or operational reforms are desired within countries to which applications are filed.

Since the language barrier facing Japanese applicants within EPC (European Patent Convention) nations is considerably larger than that faced by U.S. applicants, in some respects we have a greater desire to find ways of rationalizing issues regarding translation.

§2 Analysis of the Current Situation

The ratio between foreign applications and domestic applications differs according to which nation a patent applicant belongs. For Asian applicants such as Japanese and Koreans, the ratio of foreign applications to domestic applications is small, while this ratio is reversed in the major countries of Europe and the U.S. For example, although this ratio is roughly 0.4 for Japanese and Koreans, this ratio for U.S. and European applicants is around 4, namely there is a digit difference[2]. One cause of this is, substantially, that Japanese applicants must work to maintain domestic applications in response to competition within Japan, and thus they have little room for investing in foreign applications. Considering a patent application to EPC, another cause of this is the fact that Japanese and most other Asians can not use their native languages in performing filing and examination-related procedure while US applicants can do it in the native language, English. This condition may be felt as additional burden and invisible expense for Japanese when he files a foreign application.

The report presented by Mr. Berrier at the PIPA International Congress held in San Francisco in October 1995[3] (below, "the Berrier Report") contained a study on foreign patent application costs from the standpoint of a U.S. applicant; it was pointed out therein that the costs required for European patent acquisition was especially high. In the present report, we present the results and the analysis of a questionnaire-based survey of 24 of the PIPA Japan Group member companies regarding translation fees—which constitute a major portion of the costs related to foreign patent

[1] Japanese Patent Office Annual Report, Vols. 46, 47, 48 (FY 1993, FY 1994, FY 1995)

[2] Japanese Patent Office Annual Report, Vol. 47 (FY 1994). pp. 322-323

[3] "Global Patent Costs Must Be Reduced", proc. 26th International Congress, PIPA (1995), pp. 369-388

applications—from the standpoint of a Japanese applicant.We also analyze these results. In this questionnaire, the object of survey is the patent application was being filed in EPC countries and the United States.

In general, when a Japanese entity files a patent application in Europe or the United States, in America he files a direct application using the Paris convention, while in the major countries of Europe, it is common to file an application following the EPC route[1]. Therefore, in this report, we made a study regarding translations with the assumption that these two noted routes were used.

Tables 2-1 and 2-2 show the questionnaire results regarding representative translation unit costs. Table 2-1 shows the case where Japanese specification is translated into English on the assumption that US application and EPC application is to be made with the said English specification. Table 2-2 shows the case where registration procedure is took place at individual member countries after patent approval is given by EPO and then the English specification is translated into European language other than English (official language of member country). However, since the questionnaire was designed for a small number of the population, which was 24 firms, response in regard of some minority languages was small in number. Therefore, there is a possibility that such numbers shown in the tables may not represent general trends of Japan.

Table 2-1 shows that, when Japanese is to be translated into English, the unit price is quite different depending on where the translation is to be contracted out to. Especially it is notable that requesting a specifications translation to a Japanese patent law firm is relatively expensive. Fig. 1 shows the results of the question to the surveyed companies in regard to where (what type of organization) they request translations. We learned that even though it is relatively more expensive to do so, many Japanese companies ask Japanese patent law firms for translations. On the other hand, it is thought that the number of companies who ask Japanese translation company or use in-house translation are increasing year by year. It goes without saying that utilizing such methods is one way of decreasing translation costs. Only a few companies are requesting translations to U.S. patent law firms or to U.S. translation companies. Since there is no major difference in the unit price for translations between U.S. and Japanese translation companies, it is thought that Japanese translation companies are being selected for various practical reasons, such as the ease of arranging deadline and the ease of work-related communication.

Below, we will discuss the translation of specifications for those cases where registration is to be made at various European patent offices after a patent has been approved by the EPO; i.e., the translation of English into a European language other than English. Questionnaire results regarding where such translations are requested are shown in Fig. 2. In this questionnaire, plural responses were permitted. We can see from Fig. 2 that in most

cases, Japanese companies use local patent law firm which handled the EPC application procedures, or patent law firm in the specific designated country in consequence of their decision. When a comparison is made between translations into one of four languages other than English—German, French, Italian, or Dutch—and translations into a EPC member nation's official language that is other than these four languages, there were more companies who opted in the latter case to use local (in that country) offices or the office that handled the EPC application. Also, although their numbers were few, there were some companies which had requested translations to a U.S. translation company.

Fig. 1-2 shows the questionnaire results regarding translation unit prices for translations of English-language specifications into a European language other than English. These translation fees are unit prices for translations requested to a Japanese or U.S. translation company. Compared with the cost of translation from Japanese into English, translating from English into some languages, including Danish and Portuguese was relatively somewhat more expensive. Conversely, translation into Italian and Spanish, etc., were relatively less expensive. We also learned that there is a broad range of unit prices for each specific European language: the lowest were in the ¥10-¥20 range, while the highest were in the ¥80-¥90 range. Therefore, if a company makes a survey before requesting a translation, there is a possibility that translation costs can be significantly reduced.

We also performed a questionnaire-based study regarding typing fees for specifications, one of the costs related to translation. The results are shown in Table 1-3. Of the 24 companies surveyed, 15 of the companies had paid such typing fees to a Japanese patent law firm, and seven (7) companies had paid such fees to an foreign patent law firm. Just as with translation unit prices, there was also a broad range of typing unit costs; in particular, a comparison shows that Japanese patent law firms charge roughly two times the typing unit price charged by foreign patent law firms. In this nowadays of popularization of personal computers, word processors and other hardware and software, the fact that post-translation typing out of specifications still takes place may seem a remnant of a distant age. It is true that typing costs do substantially raise the price of translation unit costs.

Below we show the results of a computation of translation fees for a standard specification, based on the results discussed above. We defined "standard specification" to be equivalent to its definition in the Berrier Report—i.e., an English-language translation consisting of 20 pages, 10 claims and 2 drawings. In addition, we have considered a foreign-language specification as containing 280 words per page, plus bibliographic page containing roughly 400 words, consequently the document to be translated for filing thus contains around 6,000 words (the number of vocabulary words after translation). The translations fees for an application for filing of this type are as shown in Table 2. The typing costs shown in Table

1-3 are not included in the computation of the translation fees shown in Table 3.

Table 3-1 shows examples of computations of specification translation fees as based on representative translation unit prices of various translation facilities; here, it is assumed that the specification is for a U.S. application or that it is an English-language specification for an EPC application. Since there is a broad variation in translation unit prices according to where the translation is requested, these translation fees show considerable difference. We also learned that of the translation costs incurred by a Japanese applicant, the translation fees for the case where a translation is requested to a Japanese patent law firm are roughly equivalent to the translation fees required for a Japanese application as noted in the Berrier Report.

For those cases where a specification translation is performed as a requirement for moving the specification from the EPO post-patent approval stage to the filing stage within each country stage, translation fees were computed for the same three application patterns described in the Berrier Report. The results are shown in Table 3-2. Designated countries are shown in parenthesis ( ) using the abbreviation for the applied country[4]. As number of filing countries increases, number of languages to be translated into also increases in such a manner like 4, 5, up to 10 languages. The total costs of translation increases accordingly. It is learned that if one is to obtain rights in all of the EPC member nations, translation costs alone will reach US$19,745.

Fig. 3 is a compendium of the above-described results; it is comparable to Fig. 5 of the Berrier Report.

The questionnaire results regarding the general consensus regarding translation fees, which are described in the final part of this report, are shown in Fig. 4. Of the 22 responding companies, only seven (7) companies responded that they felt these costs were reasonable, while around two-thirds (14 companies) responded that they felt that translation fees were too high for translations into English or again into another European language. Another distinctive feature of these results is the fact that the number of companies responding that Japanese to English translation costs were high was greater than the number of companies responding that English to another European language costs were high.

§3 Translation Cost-Reduction Measures

The following is a discussion of various methods that are thought to be effective in reducing translation costs, which become a problem for a Japanese applicant when he wishes to make a foreign application (U.S. and/or EPC applications). Concretely, we will introduce the translation cost-reduction measures that companies have actually found to be effective as reported in responses to our questionnaires.

[4] Please refer to Table 3 for the application country abbreviations of EPC member nations as well as specification translation requirements and the languages of translation.

22 companies responded to our questionnaire with respect to their consciousness to the cost. 14 companies out of 22 felt that translation cost from Japanese into English or another European language is too expensive. (In Figure 4, total number of response is 25.) 24 companies responded to the question on cost-reduction measures. 10 of 24 companies responded that they were implementing, in certain forms, measures to reduce translation costs already. When the number of companies planning the implementation of cost-reduction plans are additionally counted, then the new total is 16 of 24 companies. Thus one can see that there is a high degree of consciousness among companies regarding the problem of translation costs. In contrast, 8 of the 24 companies responded that they had no intention of creating or implementing cost-reduction policies; more than half of them fear that a decline in the quality of translation would result by doing so.

The following Strategies 1-9 were stated as translation cost-reduction measures.

Perform Translations at Relatively Cheaper Translation Facilities (Measure 1)

As previously mentioned in §2 above, in general, Japanese patent law firms charge the highest prices for the preparation of English-language specifications. Then follow, in order from higher to lower, Japanese translation companies, U.S. translation companies, and U.S. patent law firms. However, in terms of translation quality, it is thought that it is safest to request translations to patent law firms, which should have a good understanding of inventions. Therefore, upon implementing this Measure 1, one must consider carefully the balance between cost and quality.

In-House Translations (Measure 2)

When we see the costs only from bill/payment basis, in-house translation, preparation of English specification within the own company, is apparently the most effective way to reduce the costs. The questionnaire results show that there are some companies actually prepare English specification by themselves. However, although no actual payment to outside facilities is observed, it is necessary to have someone with sufficient translation ability within the company, and to have increased work-load within the company for this.

Utilize English-language Specifications of Related Applications (Measure 3)

It is possible to reduce translation costs by referring to foreign application specifications or related documentation that have been created by one's own company in the past. In this way, the quotation, borrowing, and full-scale importation of text of already translated documentation can be used. It is thought that especially

when the translated text of priority certificates is prepared within the EPC application process, it is highly effective to utilize common portions in the EPC application itself.

Make the Specification Brief and Simple (Measure 4)

By making specifications as brief and simple as possible, it is possible to hold down the volume of translation required, and thereby to reduce translation costs. By trying to create the original Japanese language text as easily translatable as possible, it can be performed more effectively, especially in-house translation case, for example.

Setting Aside Enough Time for Translation Requests (Measure 5)

By carefully managing one's own schedule, one should create a translation schedule that allows plenty of time for translation in order not to require special "rush" translation fees. This is an effective way to reduce total translation costs after all when one requests foreign-language translations of specifications in consequence.

Utilize Machine Translations (Measure 6)

The use of machine translations is another way of reducing translation costs. Out of the 24 companies responding to the questionnaire, four (4) companies stated that they have used machine translations in the past. However, at the current level of technology, still there is a problem concerning the reliability of such translations; it appears that machine language translations are not at levels yet where they can be used sufficiently. Nevertheless, 10 of the 24 companies state that development of fully usable software in this field will be obtained in future, and they will positively consider the use of the machine-translation at that time.

On the other hand, reliability of English to another European language machine translations has greater reliability than Japanese to English translations has. Perhaps this is due to the similarity in linguistic structure between English and other European languages. Several European patent law firms are already using machine translations in this object, and it appears that such translations can be performed more cheaply than manual translations.

Strict Selection of Designated countries for EPC Application (Measure 7)

As for the costs related to the filing of translated document to each designated country following the approval of a patent by the EPC, by more carefully selecting the designated countries for the EPC patent, one can thereby hold down translation costs.

Filing Translated Document of Priority Certificates Only After a Patent Grant becomes Foreseeable (Measure 8)

In the case of EPC applications, the filing of document of the basic application on which priority is claimed, translated into one of the EPC official languages which is compulsory requested for priority certificates. However, since last year, it is now permissible to file this translated document after the communication under Rule 51(4) regarding the patent grant (although, this is possible only until the time of the response for Rule 51(6)). Therefore, rather than filing this documentation soon after the application is filed, by waiting until it appears that a patent grant becomes certain, one can cut useless translation costs.

The Use of PCT (Measure 9)

Japanese applicant can use PCT route for EPC application as well as US application. By using PCT applications, decisions regarding the filing countries can be postponed by a maximum of 30 months from the date of the claiming priority. This makes possible more appropriate selection referring to information obtained in the meantime.

It is our opinion that, of the above-described strategies, Measure 1 appears to be the most realistic and efficient. Especially as it is considered that the translation fees charged by Japanese patent law firms are, in general, relatively higher than those of other countries, by searching for a less expensive translation facility such as a translation company, etc., one can expect a substantial reduction of translation costs. However, upon introducing translation cost-cutting measures, it is necessary to sufficiently consider whether such policies might lead to a reduction of translation quality as well.

This concludes our study of strategies for reducing translation costs as seen from the standpoint of a Japanese applicants. Nevertheless, some of these cost-cutting strategies can also be applied to applications from the United States. For example, the issue of reducing costs for translated document filing at the time of EPC patent grants is one shared in common between Japan and the United States; therefore, it goes without saying that Measure 7 above is also applicable for applications from the United States. And for applications to Japan from America, as stated in Measure 1, there is a difference in costs according to what type of translation facility one selects. Thus, English-to-Japanese translations show similar trends to those described above. However, as stated above, since it is thought that in terms of quality, patent law firm translations can be considered the most reliable (however, one must note that some patent law firms subcontract their

assigned translations to translation companies), then it is important to consider both aspects—cost and quality—upon making a determination. Also, making specifications as brief and simple as possible (Measure 4), and ensuring that there is enough time for a translation when one makes a request (Measure 5), can also be applied as translation cost-reduction measures upon making an application to Japan from the United States.

§4 Proposals Regarding Systemic Changes to Reduce Translation Costs

In this section, we will focus on EPC, and present the results of our study concerning the possibility of creating a system whereby costs can be reduced for two areas: 1) the filing of translated document to designated countries at the time of a patent granting, and 2) the filing of translated document for priority certificates. We also used a questionnaire for this study to collect opinions regarding the above-listed two items; the responses were then referred to in our investigation.

As for 1) the filing of translated document to designated countries at the time of a patent granting, this is a stipulation of EPC Article 65. According to this stipulation, member countries can demand a translation of specifications for which a patent is intended to be granted. Of the 18 EPC member nations, with the exception of Luxembourg and Monaco, 16 countries require the filing of such translations. Therefore, if one designates all of the member countries, there is a need for translations in 10 languages other than the EPC procedural language (in most cases, English for applications from Japan). The following Proposals 1-6 are systemic reform proposals intending to reduce costs related to the filing of translated documentation to designated countries at the time of a patent granting.

Proposal 1: Complete abolishment of translation filings to each designated country.
Proposal 2: Filing translations in only the official EPC languages—i.e., German, English, and French.
Proposal 3: Translating only claims into the languages of each designated country.
Proposal 4: Filing translations only when rights are exercised.
Proposal 5: Filing translations only when a demand is made by a third party.
Proposal 6: Establishing public translation facilities within the EPO (to provide translations at cheaper rates than those charged by commercial-base translation facilities).

Actually, however, Proposal 1 is problematic in that it contradicts the concept that a patent right is an exclusive right granted as the compensation for the disclosure of an invention. Also, Proposals 4 and 5 involve some practical problems; for

example, to what organization or entity are such translations to be filed to, etc.

The most practical are Proposals 2 and 3, or a combination of Proposals 2 and 3. When we use the combination of 2 and 3, for example of application into a country whose official language is not English, German, or France, the applicant could file only a translation of the claim in her official language at the time of registration, while full text translation in one of the above EPC official procedure languages (in most cases, English for application from Japan) was filed. As for Proposal 3, since many member countries already grant so-called compensatory claim rights based on the filing of translated claims, there would be little sense of incongruity if such a proposal will be adopted.

However, these types of systemic reforms are issues to be dealt with by each EPC member nation. Most countries out of EPC, including Japan and the United States, require a translation into the official language of own country, if not at the time of application, then ultimately at some point during the process. It is feared that a request of such a proposal alone will be rejected, due to the fact that, in order to maintain their balance with the other countries. Member nations would not adopt this proposal unless there is similar concessions at the countries out of EPC.

As for 2) the filing of translated document for priority certificates, this is a stipulation of EPC Article 88 and Rule 38(4). Upon claiming priority rights, if the application used as the basis of those priority rights is not in an official EPC language, then the application that will become the basis for such rights must be translated into an official EPC language, and filed within the demanded time period (at the latest, this can be delayed until the response date stipulated in Rule 51(6)). However, in the case where the EPC application is a complete translation of the application that will become the basis for priority rights, it is stated in the Rule that if such a fact is declared, then there is no need to file a translation. Considering EPC applications from Japan, during the EPC application, since it often happens that there are changes made from the original application, or that a combined priority will be claimed, in many cases translated document is actually filed for a priority certificate. Further, the filing of translated documentation for these priority certificates is generally not a requirement for Americans, since English is the official language of the United States as well as an official EPC language; for Japanese applicants, however, this is an additional burden.

The following Proposals 1-3 are systemic reform proposals intending to reduce costs related to the filing of translated document for priority certificates.

Proposal 1: Complete abolishment of translation filings.
Proposal 2: Filing translations only when it is required by the EPO

as necessary for examination procedure.

Proposal 3: Filing translations only when rights are exercised.

Filing translated document for priority rights certificates entails different problems from those related to the above-discussed filing translated document to designated countries at the time of patent granting. This is not a issue concerning the legal system of each country, but rather it is an EPC issue. We believe that of the above-listed proposals, Proposal 2 is substantially fair and realistic. There has been some news concerning recent studies by the EPO regarding the reduction of EPC application-related costs; we strongly desire that the reform noted in Proposal 2 above be adopted.

§ Conclusion

In our investigation of the themes discussed herein, we first took the route from Mr. Berrier's report, and assumed the case of standard procedures for specifications of a standard length filed by Japanese applicants when an application is filed in the United States or the EPC. We then calculated the translation costs required for this assumption. Our results show that the translation costs for filings to the EPO or to each other's respective countries are roughly the same for Japanese and U.S. citizens. However, in these calculations, additions have not been made for those separate costs required for translations of application specifications that is the basis for priority right claims if there is. Noting that the costs in these cases will vary on a case-by-case basis, such computations were not made, especially considering that they were also not included in Mr. Berrier's report.

Nevertheless, this equivalency in costs borne by Japanese and U.S. applicants is apparently true. To make a real comparison, we believe that it is necessary to also consider the peculiar problems for Japanese applicants as described just below.

(1) Inventions for which applications are filed to the EPC from Japan are also, in most cases, applied for in the United States as well. Therefore, in either case, translations into English are required as part of a company's normal procedures.

(2) English is used in most cases as the procedural language of the EPC.

(3) Most translations into other European languages are translations from text that has already been translated into English. In most cases, direct translation is not made from the Japanese into these other European languages.

In other words, a consideration of actual conditions leads to the conclusion that costs for EPC applications are not substantially the same for Japanese and U.S. applicants, considering the fact that initial English-language translation costs must be added to cost calculations for EPC applications by Japanese applicants.

However, we believe that even with such calculations, there is sufficient grounds for the discussion on an equal basis of the problems faced in common by U.S. and Japanese applicants alike regarding costs for EPC applications as well as applications in each other's respective countries.

Further, the above-noted calculations are for "standard procedures" related to translations. In reality, we believe that the majority of applications fall into this pattern. In parallel, many applicants are seriously studying various cost-reduction measures, and many are already implementing such measures. In terms of actual costs, the careful selection of the translation route is the most effective. Through the responses to our questionnaire, we obtained this proposal as well as much other valuable information. In most cases, there is a need to combine methods of preventing a reduction in translation quality with cost-cutting strategies. We also received valuable opinions concerning this matter.

In terms of EPC application-related costs, even with the above-described calculated amounts alone, we can already see that such costs constitute a substantial burden for Japanese applicants. In actual practice, there are many cases where separate translations are required during priority right claim procedures and investigatory procedures. Japanese applicants are already pointing out the increased need to file applications in Southeast Asian nations, and they are questioning the efficiency of investments in EPC applications. If the situation continues in its current state, there is a considerable possibility that there will be a reduction in EPC applications from Japan. In terms of cost reduction, there are limits to what the applicant alone can do. We strongly hope the improvement of legal system and practice in consideration of patent costs to be borne by the applicants. We would like to request the EPC authorities and member nations to study the adoption of the proposals made by Japanese applicants that have been stated in this report. We believe that many of these proposals have sufficient worth to be mutually studied by both Japan and the United States, who are the major users of EPC system. However, we have a fear that the convenience for applicants outside EPC might lead to disadvantage to EPC member countries. We would like to have comments or views on our proposals from the US applicants with respect to reality, validity or preference or alternative to the proposals.

Table 1: Filing Statistics for U.S., Japan, and EPC patent application (1991-1993)

1-1 U.S. Patent Application Filings

Year	All application	by U.S. Applicants	by Japanese Applicants
1991	177,388	89,024 (50.19%)	38,609 (21.76%)
1992	187,291	94,017 (50.20%)	40,267 (21.50%)
1993	191,400	102,245 (53.42%)	36,650 (19.15%)

1-2 Japan Patent Application Filings

Year	All application	by Japanese Applicants	by U.S. Applicants
1991	369,396	335,933 (90.94%)	20,743 (5.62%)
1992	384,456	338,107 (87.90%)	22,325 (5.81%)
1993	380,035	332,460 (87.48%)	23,142 (6.09%)

1-3 EPC Patent Application Filings

Year	All application	by U.S. Applicants	by Japanese Applicants
1991	26,644	5,995 (22.50%)	4,840 (18.17%)
1992	56,966	16,682 (29.81%)	10,285 (18.06%)
1993	42,001	9,691 (23.07%)	9,593 (22.84%)

Table 2: Representative Translation Unit Costs
(Number of companies making an effective response: 24)

2-1 Japanese to English Translations

	Requested Entity	Average Unit Price (¥/word)	Range in Unit Price Between Translating Entities (¥/word)	Number of Cos. Responding※
Japanese to English	Japanese Patent Law Firm	48	30～70	21
	Japanese Translation Cos.	33	25～40	12
	U.S. Patent Law Firm	18	******	1
	U.S. Translation Cos.	30	******	2
	In-Company	******	******	8
	Others (European Trans. Cos.)	******	******	1

******Unknown or diffiicult to compute
※Plural Response Counted

2-2 English to Other European Language Translations

English to Other European Languages	European Attorney Office		U.S. Trans. Cos.	Number of Cos. Responding
	Ave. Trans. Unit Price (¥/word)	Range of Trans. Unit Price (¥/word)	Examples of Trans. Unit Prices (¥/word)	
to Germany	30	20～49	28	22
to French	32	24～35	28	
to Italian	23	17～35	*****	
to Ducth	31	22～54	*****	
to Spanish	26	*****	28	20
to Portuguese	53	41～64	*****	
to Swedish	43	29～67	*****	
to Danish	59	37～80	*****	
to Greek	30	14～40	*****	
to Finnish	35	20～57	40	

*****No response acquired

2-3 Typing Costs

	Number of Cos. Responding	Ave. Typing Unit Price (¥/page)	Range of Unit Price (¥/page)
Japanese Patent Law Firm	15	2050	800－5000
Foreign Patent Law Firm	7	1200	580－2100

Table 3: Examples of Translation Costs

3-1. Translation Costs of Specifications for U.S. Applications (Trans.: Japanese to English)

Trans. Entity	Representative Trans. Unit Price (¥/word)	Translation Cost (¥)	Translation Cost (US$)[*2]	Berrier Report[*1] (US$)
Japanese Patent Law Firm	48	288,000	2,618	3,000
Japanese Trans. Cost	33	198,000	1,800	
U.S. Patent Law Firm	18	108,000	982	
U.S. Trans. Cos.	30	180,000	1,636	

[*1]Cases where a U.S. applicant applies to Japan (translation company not specified)

[*2]At the assumed exchange rate ¥110 = U.S.$ 1

3-2 Translation Costs of Specifications within Each Stage of the EPC Process (Trans.: English to other European Languages)

Application Patterns		Trans. Languages	Representative Trans. Unit Price (¥/word)	Trans. Cost (¥) (Trans. Cost in US$[*2])	Berrier Report(US$)
(A)	Application to 5 Countries (UK,DE,FR,IT,NL)	German	30	696,000 (6,327)	7,043
		French	32		
		Italian	23		
		Dutch	31		
(B)	Application to Original 10 Countries ((A)+AT,BE,CH,LU,SE)	German	30	954,000 (8,673)	9,193
		French	32		
		Italian	23		
		Dutch	31		
		Swedish	43		
(C)	All EPC Member Coountries ((B)+LI,DK,ES,GR,IE,MC,PT,FI)	German	30	2,172,000 (19,745)	15,543[*3]
		French	32		
		Italian	23		
		Dutch	31		
		Swedish	43		
		Danish	59		
		Spanish	26		
		Greek	30		
		Portuguese	53		
		Finnish	35		

[*2]At the assumed exchange rate ¥110 = U.S.$ 1

[*3]Does not include FI.

Table 4 : EPC Member Countries and Translation Languages, etc.

Member Countries	Member Country Abbreviation	Obligatory Submission of Specifications Trans. ○ : Obligatory × : Not Obligatory	Language(s) of Trans.
United Kingdom	UK	○	English
Germany	DE	○	German
France	FR	○	French
Italy	IT	○	Italian
Netherlands	NL	○	Dutch
Austria	AT	○	German
Belgium	BE	○	Dutch, French
Switzerland	CH	○	German, French, Italian
Luxembourg	LU	×	—
Sweden	SE	○	Swedish
Liechtenstein	LI	○	German, French, Italian
Denmark	DK	○	Danish
Spain	ES	○	Spanish
Greece	GR	○	Greek
Ireland	IE	○	English
Monaco	MC	×	—
Portugal	PT	○	Portuguese
Finland	FI	○	Finnish

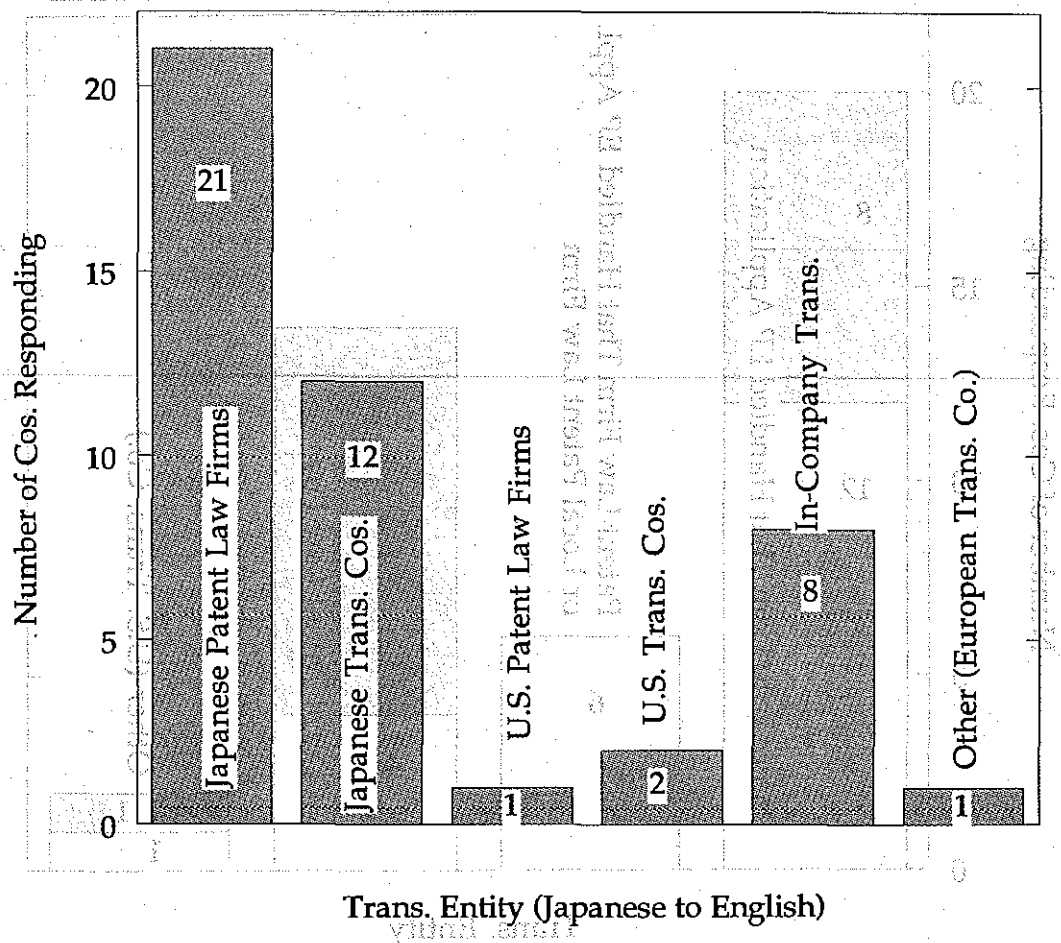


Fig. 1 Translation Entity (Japanese to English Translation)

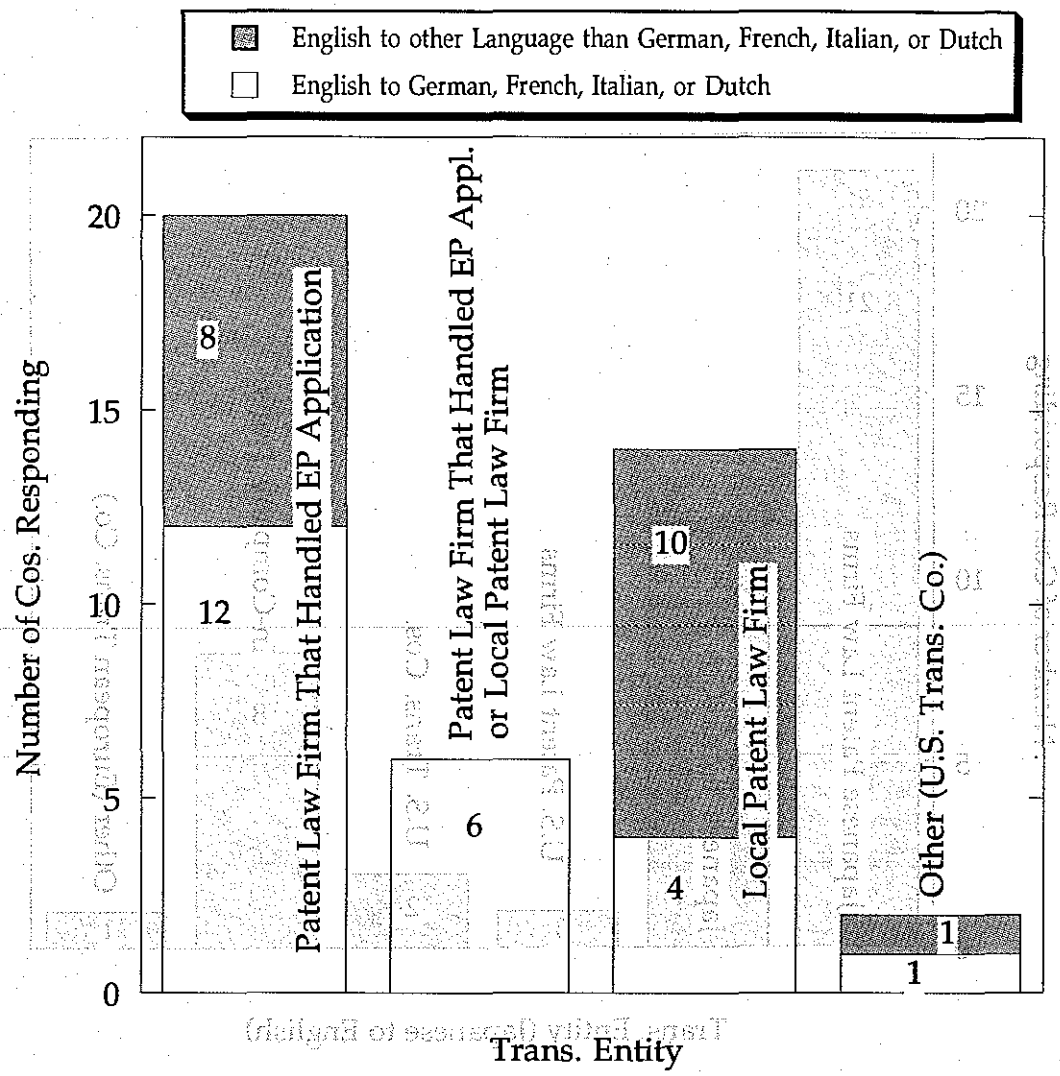


Fig. 2 Translation Entity (English to Other European Language)

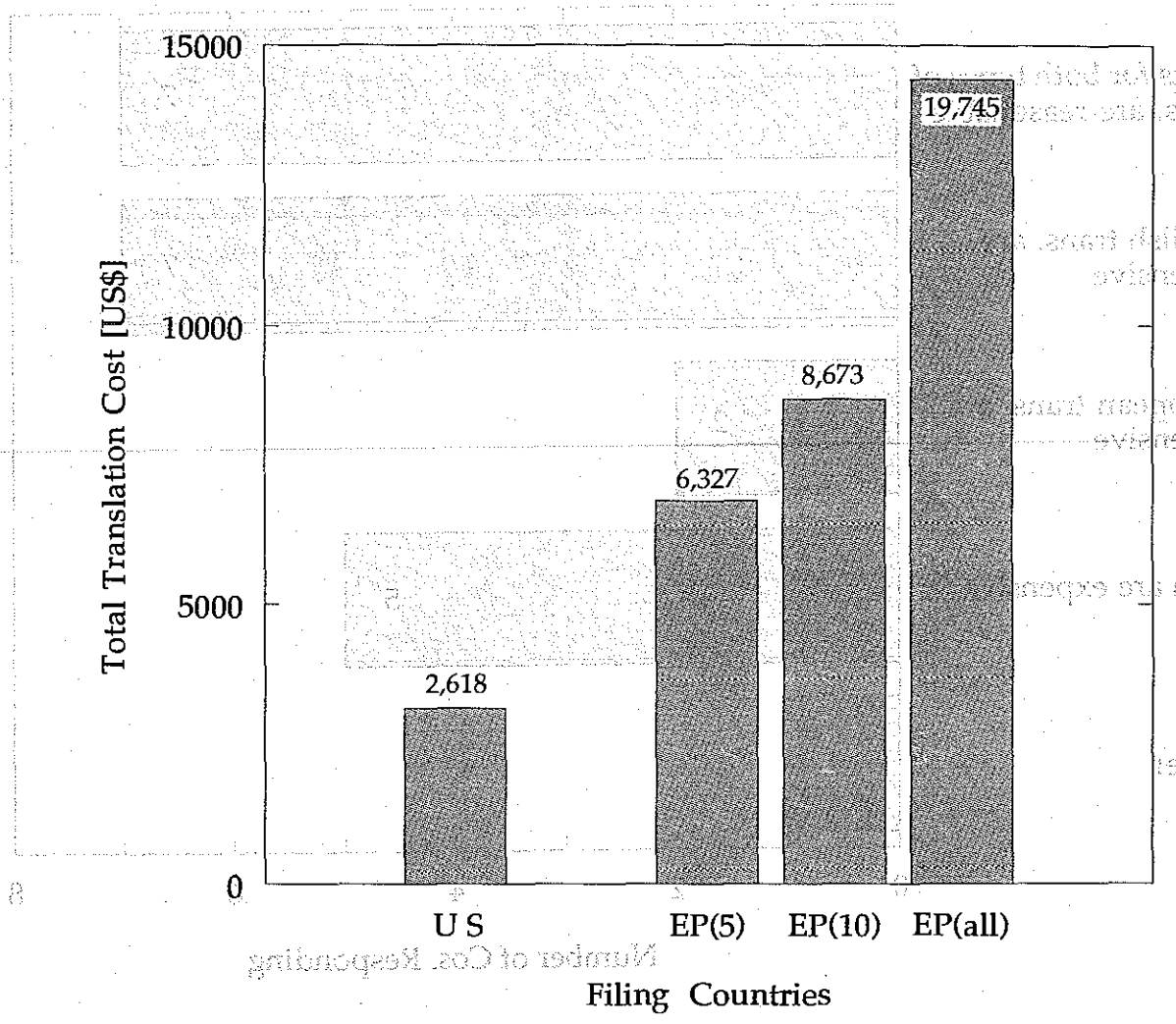


Fig. 3 Total Translation Cost

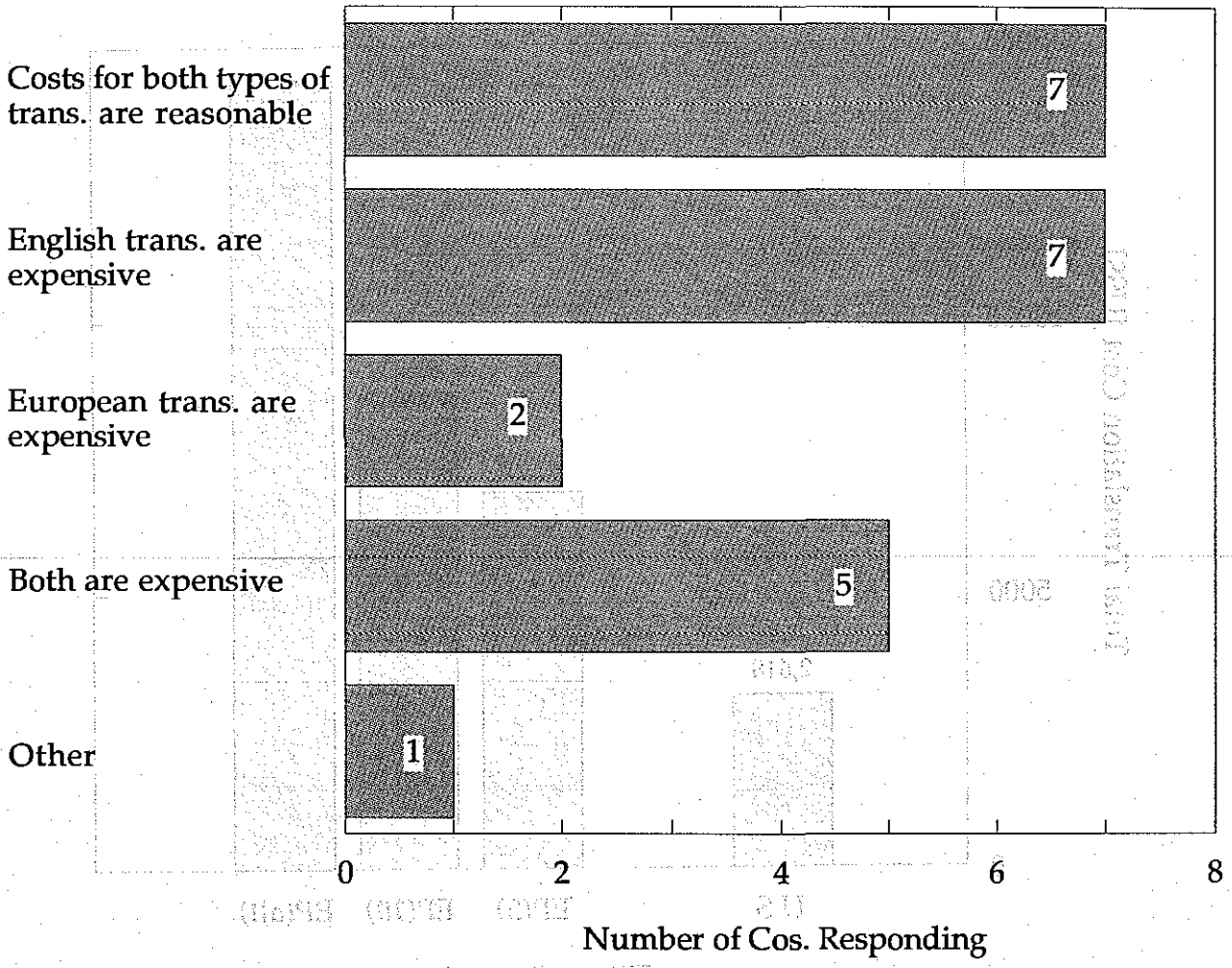


Fig. 4 Opinion concerning English and European Language Translation Costs

(1) Title:

A Study of Patent Cases on Claim Interpretation in Korea and China

(2) Date:

October, 1996 (The 27th International Congress in Hiroshima)

(3) Source:

1) Source: PIPA
2) Group: Japan
3) Committee: #3

(4) Authors:

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(5) Keywords:

Korea, China, Taiwan, Southeast Asia (Singapore, Thailand, Malaysia and Indonesia), Patent Cases, Interpretation of Patent Claim, Doctrine of Equivalents

(6) Provisions of Laws:

(7) Summary:

In order to survey the current interpretation of patent claims in Korea, China, Taiwan and Southeast Asian countries such as Singapore, Thailand, Malaysia and Indonesia, we collected patent cases and made a summary after analyzing them, and also prepared a table concerning the provisions of the patent law relating to the interpretation of patent claims in each country.

As for Korea, we collected information including recent cases from the local patent offices. Based on these recent relevant cases, we introduced the current trend of claim interpretation and the application of the doctrine of equivalents. We also noted the matters of consideration in connection with patent applications in Korea. We introduced three Chinese cases which were made available recently and analyzed the claim interpretation in these cases.

Since we could not obtain sufficient information from countries other than Korea and China, we had to summarize on the subjects within the scope of materials and information made available to us. We also referred to the available way of access to patent information especially in the above Southeast Asian countries.

I. Preface

At present Korea and Taiwan have made a rapid development in technology, and are getting closer to the advanced countries even in the fields of the most advanced technology. China and Southeast Asian countries have been considered as bases of industrial production as well as major markets of consumption by the advanced countries, and many of the American and European companies have made advancement into those areas these years. Especially, the Japanese companies, confronted with the rapid appreciation of Yen currency, have had to shift their production bases from the home country to China or the Southeast Asian countries to maintain the competitive power of their product. On the other hand, the countries of Southeast Asia themselves have been enthusiastic about introducing advanced technologies and foreign investments into their countries.

The Uruguay Round of GATT talks (the General Agreement on Tariffs and Trade) reached a substantial agreement at the end of 1993, and the final documents on the agreement were formally signed in 1994. All participated countries of the agreement also signed several individual agreements, including the so-called TRIPS Agreement. Ever since each member country has been trying to stipulate and amend its domestic laws so as to be consistent with each provision of the TRIPS Agreement. In these circumstances, Asian countries have been also striving to enact or amend their domestic laws as well towards this direction. It is expected that the uniform system of patent protection would be created in future.

At present, however, patent matters are practically handled by each country under its own legal system, and the protection of patent rights are not necessarily secured satisfactorily. Especially, since patent information of the Southeast Asian countries available in Japan are very limited, it is very difficult for the Japanese companies to work out appropriate strategies of intellectual property responding to the recent rapid business development in those countries.

Under such circumstances, the above-mentioned authors tried to collect and analyze patent litigation cases as the source of information, and studied the current situation of patent in those countries, focusing on the trend of claim interpretation.

II. Korea

1. Current Trend of Claim Interpretation

(1) The Korean Patent Law was amended in 1973, 1980 and in 1990 respectively. In principle, the scope of the patent rights is determined based on their effective patent law. We were, however, unable to find definite correlation between the amendments to the patent law and the decisions of the Supreme Court.

Even today "the detailed description of the invention" in the specification seems to be laid stress in interpretation of "the patent claims". As seen in the following decisions in the Supreme Court cases (***90Hu960*** and ***91Hu1809***) in 1991 and 1992, infringement is mostly determined by comparison of the embodiments with the accused product, and the broad interpretation of the claims has been consistently rejected.

1) Supreme Court Case ***90Hu960***
(decided 11.12.1991/patent)

The court held: the accused product brought about a remarkable functional result which is not found in the patented invention by using a material which is not described in the specification, therefore the accused product is different from the patented invention, even if the accused product is covered by the generic claim. This decision interpreted the scope of the claim as being limited to the scope of the description in the specification.

2) Supreme Court Case ***91Hu1809***
(decided 6.23.1992/patent)

The court held: it is a rule to determine the scope of the patent right on the basis of the patent claims, but as long as the claims alone are not sufficient to clarify the technical structure of the invention or to determine the technical scope of the invention, we must determine the scope of the patent right based on the specification as a whole, taking consideration of other portion such as "the detailed description of the invention" or the drawings as supplement. This is a decision exactly in accordance with the provision of the Patent Law. But this decision shows the view of the court that as far as the consideration of the other parts of the specification is concerned, the court does not allow it for the purpose of expanding the interpretation of the claims, but only for the purpose of limiting the scope of the claims.

Judging from the trend of claim interpretation shown in these cases, the Supreme Court seems to interpret the scope of the claim limitedly by reference to the description of the specification. The same result was obtained through a survey in the form of questionnaire to the patent agents in Korea.

(2) In spite of the above general trend, several decisions reflecting a new idea gradually came into being, as seen in the following example decided in 1993. Though this decision followed the same traditional way as that rejecting broad interpretations of the claim, the court definitely rejected a narrow interpretation limiting the scope of the claim without a justifiable reason.

3) Supreme Court Case ***90Hu1908***
(decided 10.12.1993/patent)

The court held: While the broad interpretation of the claim by taking consideration of the other descriptions in the specification is not permissible, the limited interpretation of the claim by reference to other descriptions in the specification is not also permissible, where the description of the claim by itself clearly defines the technical scope of the claim. This decision seems to preclude us from putting an excessively limited interpretation on the claims.

(3) A new idea to interpret the scope of the patent right broadly is also found in the recent court decisions in 1996. As shown in the following case, the court acknowledged to determine the scope of the right so as to include what a person of ordinary skill in the art can easily think about. This seems to substantially admit the broad interpretation of the scope of the patent right.

4) Supreme Court Case ***94Hu258***
(decided 2.9.1996/patent)

The court held: It is a general rule to determine the scope of the patent right on the basis of the claim, taking into account the description of the specification alone, but as an exception, it is permissible, in determining the scope of the patent right, to take consideration of the description of the specification, including what a person of ordinary skill in the art can very easily conceive of from the description of the specification itself.

This means that the court acknowledged to

determine the scope of the patent right, including more than the mere description of the specification.

Considering the history of claim interpretation in Korea, such new idea found in the recent decisions is rather the opinion of the minority, and cannot be said to be an established opinion. However, it would also be an undeniable fact that the interpretation of the patent claims in Korea is on the way of a gradual change while keeping the traditional way of thinking. Thus, it may be said that Korea is now entering the transitional period in the interpretation of patent claims.

(4) One of the features in determining infringement by the Korean Supreme Court is the emphasis laid on functional result of the product. In the Supreme Court case, ***92Hu575*** in 1993, the court remanded the case to a lower court due to the insufficient examination of functional result. In the Supreme Court case, ***92Hu1493*** in 1993, the court held that even in the case that the elements of the accused product are different in part from those of the patented invention, the accused product is to be found to be covered by the patented invention, if the major portion of the structure is identical and the product deteriorates in function as a result of the substitution of the element. This feature of the determination of infringement is also found in recent decisions, the representative example of which is shown as follows:

5) Supreme Court Case, ***94Hu142***
(decided 7.11.1995/patent)
The court held: in the case where there are some differences in the elements between the accused products and the patented invention, if the differences are a simple change in design, a simple addition, or a simple change in materials such that a person with ordinary skill in the

art can easily apply and the product does not demonstrate improved functional result, the accused product is deemed to be covered by the patented invention. It can be said that the court relied on the functional result to determine whether the minor differences in the elements as a result of a simple design change is within the scope of the patented invention.

2. Application of the doctrine of equivalents

Today the doctrine of equivalents is accepted as a rule to interpret the patent claims in Korea, but actual cases in which infringement was determined based on the application of this doctrine of equivalents was quite rare, even after the standards of interpreting the scope of patent protection was provided in the patent law.

In the following case (Supreme Court Case, ***72Hu42***) in 1973, the court adopted an idea to determine the substantial scope of the patent right, taking the nature and purpose of the patented invention into consideration.

6) Supreme Court Case, ***72Hu42***

(decided 7.10.1973/patent)

The court held: Although the description of the patent claims is the main basis to determine the scope of the patent right, the determination of the patent right should not be bound by these description only, but should be made after ascertaining the nature and purpose of the patented invention by reference to " the detailed description of the invention" and "the brief description of drawings" both combined as a whole.

It was thought that one of the reasons which precluded the broad interpretation of claims based on the doctrine of equivalents was the fact that the requirements for equivalents were not clearly established in Korea. In the Supreme Court Case, ***93Hu824*** in 1994, the court specified the following requirements for equivalents and determined infringement on this basis:

A. Possibility of element interchangeability.

B. Substantial identity of functional result.

C. Predictability by a person skilled in the art.

This was only case applying the requirements for equivalents, and the Korean patent agents regard the case as a noteworthy one. We would like to watch whether the application of the doctrine of equivalents would be established in Korea in future.

3. Considerations

As a result of our survey, we found that the general trend of the recent court decisions involving patent infringement do not make so much change as compared with the previous decisions even though there are several cases showing new ideas. The scope of claims in Korea is interpreted narrowly by being construed as being limited to the embodiments in the specification. On the other hand, it is also true there are several cases indicating new ideas of claim interpretation, as stated above. Therefore, before enforcing Korean patents, it is necessary to check the scope of the patent claims by consulting with local patent attorneys or agents familiar with the patent practices.

In filing patent applications in Korea, the following considerations would be recommended.

(1) In view of the decision in the above-mentioned case (***90Hu1908***) -- "the limited interpretation of the claim by reference to other descriptions in the specification is not also permissible, where the description of the claim by itself clearly defines the technical scope of the claim" -- it would

be important to describe the claims carefully so as to clarify the technical scope of the invention by itself, and to arrange the claims in the form of a hierarchy from a generic claim to specific claims.

(2) In order to cover the potential infringement even in the case of the narrow claim interpretation limiting to the embodiments in "the detailed description of the invention" in the specification, it would be advisable that a wide variety of embodiments and modifications shall be contained in the specification to support specific claims which cover the patented idea sufficiently. It may be useful as a measure to avoid the interpretation as being limited to "the embodiments of the invention" to prepare the drawings corresponding to a generic claim separately from the drawings corresponding to specific claims.

(3) In the process of the examination, the examiner might ask to introduce reference characters of the drawings into claims. Though there are no court decisions in which the scope of the patent right was determined based on the reference characters of drawings, it would be advisable not to use them in filing application, so that the scope of the right should not be determined by such reference characters.

III. China

We presume that many patent disputes are tried in China. However, the decisions are made at the administrative courts and the courts are not obligated to make their decisions to public. Therefore, it is not easy for us to obtain the information on these decisions.

This time we picked up three recent cases involving the interpretation of patent claims (including a case at a lower court) from the cases carried in "China Patents & Trade Marks" (a magazine published by China Patent Agent (Hongkong) Ltd., Hongkong China Patents & Trade Marks Magazine Co.)

1) Therapeutic Apparatus Case (China Patents & Trade Marks, 1995 No.3 pages 81-84)

Based on the principle of equity that it is not fair to vary the scope of the patent right depending on the skills of claiming, the court extended the scope of the patent right to the accused product incorporating the technical idea of the invention. In spite of the fact that the accused product lacked some limitations of claimed elements (including playback system), the court determined that the patent was infringed. But since this was a decision at a lower court, it cannot be said that such practice was commonly established.

2) Magnetic Mirror-type Direct Current Electric Arc Furnace Case (China Patents & Trade Marks, 1994 No.4 pages 79-84)

In spite of a partial reduction to practice of the claimed elements, the court judged as a direct infringement of entire patent right (electric furnace including the accused coil) rather than finding a contributory infringement. This is because, though the accused coil did not literally fall within the scope of the patent claim, the accused coil utilized the primary technical idea of the direct current electric furnace manufactured by the plaintiff.

3) Shen Color-changing Pen Case (China Patents & Trade Marks, 1994 No.28 pages 68-70)

The court held that "The product manufactured by the defendant, namely the multi-tip pen, had already been listed as prior art by the plaintiff and excluded from the scope of protection of his patents the way the nibs were

arranged was different from that of plaintiff's invention and was incapable of causing two nibs to come into contact with a piece of paper simultaneously so that the two colors would overlap, creating a new color." The court found the accused product to be non-infringement on the basis of the doctrine of estoppel.

As in the many other countries, the scope of the patent right is interpreted on the basis of the claims in China (Patent Law of China, Article 59(1)). And an infringement by the accused product seems to be affirmed only when the product includes all the elements described in the patent claims.

But it is notable that the court interpreted the scope of the patent rights broader than the literal scope of the claim as seen in the cases reported above. For instance, in the case of therapeutic apparatus, it was held that " Even in the case in which the accused product lacks an element in the patent claim, the accused product is still determined to be covered by the patent claim, in a case where this element is deemed not to be indispensable for the invention". This decision is quite different from "all element rule" in the United States.

In some of the recent patent cases in China the court seems to have determined the scope of the patent right broader than the scope allowable even under the doctrine of equivalents. The courts in China are likely to evaluate the technical idea from substantial viewpoint and use the identified technical idea as the basis of determining infringement. This may be said to be a quite unique practice compared with other countries. Therefore, we cannot deny such possibility that even if the third party believes its product is not covered by the patent claims, this product may be found by the court to have infringed the patent. Such practice is quite questionable in view of legal uncertainty and the possibility of arbitrary discretion by the courts.

IV. Taiwan

In Taiwan there are many patent lawsuits, but since most of the accused products are nothing but so-called dead copies of the original products, the interpretation of the claims could not be at issue in the course of court proceedings. We could not obtain any case relating to the interpretation of patent claims during our survey this time.

We obtained a guideline called "GUIDE OF CLAIM INTERPRETATION" (see the attached flow chart) issued by the Patent Office of Taiwan in March of 1996. This is an official guideline by the Patent Office in interpreting the patent claims and seems to be consistent with the practices in the United States.

According to this flow chart, the infringement determination starts with a check as to whether the accused product include all elements of the claims. If the answer to this question is negative, then it proceeds to the application of the doctrine of equivalents. With respect to the scope of equivalents, a determination is made based on the three factors of requirements for equivalents: the substantially same way, the substantially same function and the substantially same result. Even if literal infringement by the accused product is affirmative, it is not finalized as infringement but is subject to a further check of "the doctrine of equivalents in reverse". This "doctrine equivalents in reverse" seems to be applied to afford a remedy to the accused infringer in the case where an accused product employs a substantially different technical idea even if it includes literally all the elements of the claims. The details of the standards of the application of "the doctrine of equivalents in reverse" are not known but will be likely to be established through practices in future. This guideline is unique in that "the doctrine of equivalents in reverse" is inserted in the flow chart as a necessary consideration for the routine practice of infringement

determination. In addition, the application of the doctrine of estoppel is also stated in the flow. The estoppel ("file wrapper estoppel") precludes a patent owner from asserting a different opinion later with respect to the interpretation of the scope of ratent right from what he stated in the course of examination proceedings of the application.

V. Other Countries of Southeast Asia

We received answers to our questions in connection with our survey this time from the local patent agents in Thailand and Singapore. We found that in these countries there were patent lawsuits at the courts, but no cases were involved with the interpretation of the claims.

For instance, in Thailand most cases regarding intellectual property involve the issues of trademark and patent dispute cases are few. And the only decisions made public are those of cases tried by the supreme court, but no patent case was handled by the supreme court in the past. Therefore, there is no publicized case available relevant to interpretation of the claims in Thailand. To obtain a general patent information in Thailand, a magazine called "Thai Patent Act" published in Thailand is usuful.

The situation of patent cases in Singapore is almost the same as in Thailand. Only a few months over one year has passed since the enactment of Singapore patent law, and no patent case involving claim interpretation of the claims seems to have existed in Singapore. In reality, the courts in Singapore are considered to rely on the British precedents. Therefore, in interpreting claims, the British precedents are useful for reference purpose. As for information sources on patent in Singapore, "Patent Journal" is published quarterly by the Singapore Patent Office. This publication carries an information concerning patent applications and the activities of the Patent Office, and is offered for public perusal. In

addition, a magazine called "Managing Intellectual Property" is published monthly.

We did not receive answers in detail to our questions from Malaysia and Indonesia. In Indonesia two lawsuits were instituted for patent infringement recently, but the decisions did not refer to the interpretation of the claims.

VI. Comparison of Relevant Provisions of Patent Laws among Countries in Asia

"The Scope of Patent Right Protection" in various countries in Asia is shown as per the attached Appendix. The patent law in each country except Malaysia provides that the scope of patent right protection is determined on the basis of the patent claims. With respect to "the Doctrine of Equivalents", we cannot find any relevant provision in the patent laws except in Thailand patent law.

VII. Conclusion

From our survey this time, it is concluded that the current practice of interpreting the patent claims in Korea and China is largely different from such practice in Japan, U.S.A. and Europe. Therefore, in enforcing our patent rights, it would be very important for us to cooperate with the local patent attorneys and agents. Further, since the information on patent available to us in Japan is very little with respect to Taiwan and such Southeast Asian countries as Singapore, Thailand, Malaysia and Indonesia, it would be necessary for us to keep on collecting patent information from the local offices or the local corporations of each company in future as well.

In addition, the appropriate practice of the proper claim interpretation is also very important to enforce our patent rights together with the establishment of a proper protection system of the rights. In view of the above, we should pay attention to both the TRIPS agreement and the so-called

"Harmonization Treaty". When the TRIPS agreement to be administrated by the newly established WTO (the World Trade Organization) came into force, the individual member country of the WTO was required to establish a common framework of patent protection through the enactment and amendment of its domestic laws. On the other hand, however, the discussion of the Harmonization Treaty (draft) is now suspended. It is expected that next year the way of proceeding with this treaty is straightened out and the discussion thereof will be resumed on the right track. We sincerely hope that the new system of patent protection under WTO will work effectively and properly in future and that the Harmonization treaty will reach a substantial agreement successfully.

Bibliography:

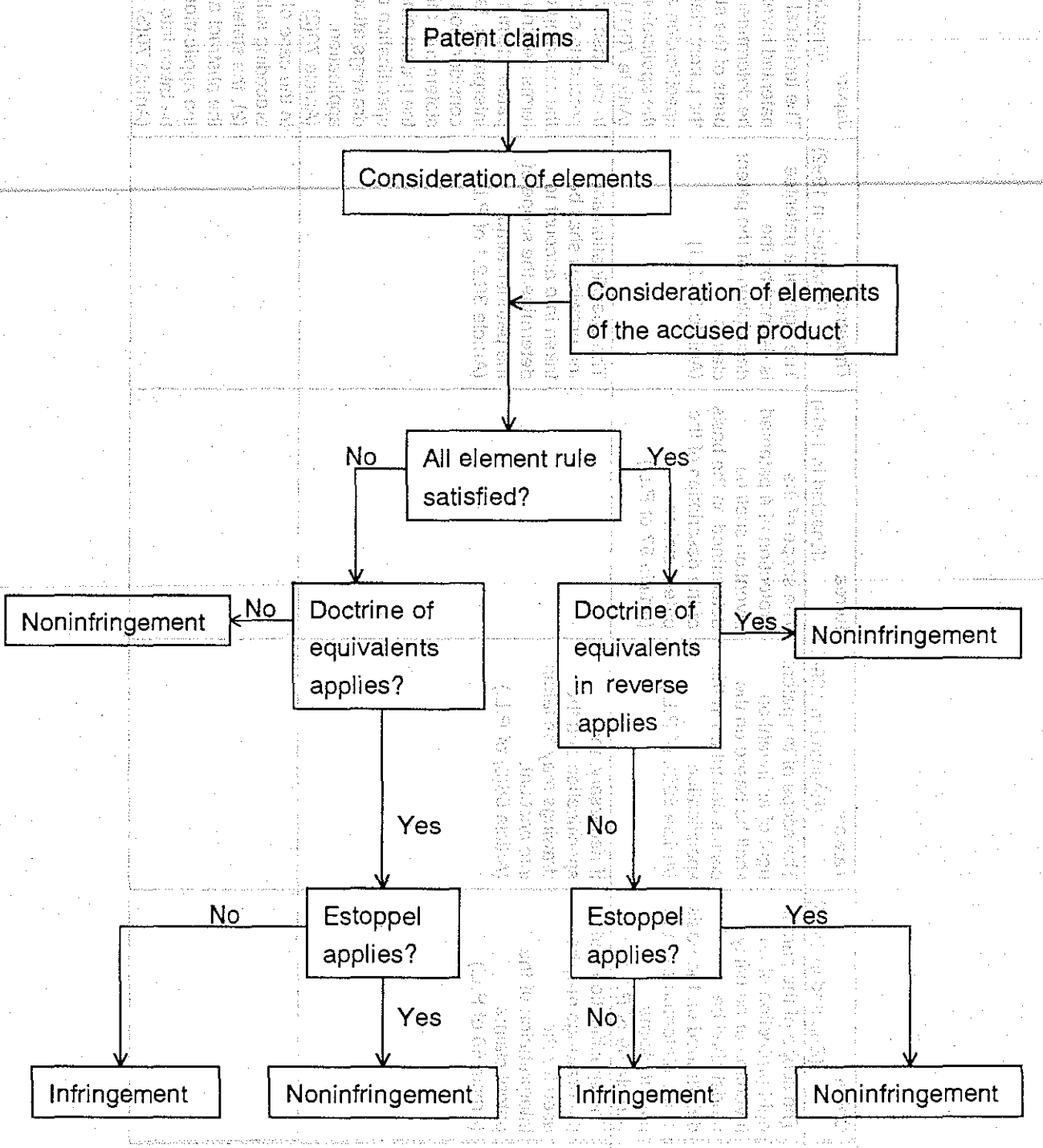
(1) C. Leon Kim, "Transition from central definition system to peripheral definition system in the Korean Patent Law", "Chizaikanri" Vol. 45, No.5, 1995

(2) Kwon TAE-BOK, "Interpretation of patent right in Korea", "Chizaikanri" Vol. 45, No.11, 1995

(3) "China Patents & TradeMarks", China Patent Agent (Hongkong) Ltd., Hongkong China Patents & Trade Marks Magazine Co.)

(4) "Provisions and considerations relating to enforcement of patent right in Asian countries (1) (2)", "Chizaikanri" Vol. 45, No.5, 1995, Vol. 45 No.6,1995

<Flow Chart of Patent Claim Interpretation in Taiwan>



Scope of Protection of Patent Right	China (Enacted in 1993)	Taiwan (Enacted in 1994)	Korea (Enacted in 1994)	Thailand (Enacted in 1992)	Japan (Enacted in 1996)
Claims	The scope of the patent right protection of an invention or an utility model shall be determined on the basis of the statements of the patent claims. (Article 59 of P.L.)	The scope of the patent right of an invention shall be based on the claims described in the specification. (Article 56(3) of P.L.)	The scope of the protection of a patented invention shall be determined on the basis of the description of the patent claims. (Article 97 of P.L.)	The right of a patentee is defined by the description of the patent claims. (Article 36.2.1)	The technical scope of a patented invention shall be determined on the basis of the statement of the patent claims in the specification attached to the application. (Article 70(1))
Specification and Drawings	The specification and the drawings may be used for the interpretation of the patent claims. (Article 59 of P.L.)	If necessary, the specification and the drawings may be taken into account. (Article 56(3) of P.L.)		The specification and the drawings shall be taken into account to determine the scope of the patent claims. (Article 36.2.1 of P.L.)	In the case of the preceding subsection, the meaning of the terms described in the patent claims shall be interpreted, taking consideration of the statements other than the patent claims in the specification and the drawings attached to the application. (Article 70(2) of P.L.)
Abstract					In the case of the preceding subsection (2), the stetements of the abstract attached to the application cannot be taken into account. (Article 70(3) of P.L.)

Scope of Protection of Patent Right	China (Enacted in 1993)	Taiwan (Enacted in 1994)	Korea (Enacted in 1994)	Thailand (Enacted in 1992)	Japan (Enacted in 1996)
Doctrine of Equivalents	No provision. But in practice, this doctrine seems to be adopted.	No provision. But this doctrine is described in the "Guide of Claim Interpretation".	No provision.	In the case that the products have the same characteristic, the same utility and the same result as the claimed product, as seen from the view of a person skilled in the relevant field or area, the protection of the patent right may be extended to such features of the products so as to be covered by the patent claims, even if those features are not described in the claims. (Article 36.2.2 of P.L.)	No provision.

Scope of Protection of Patent Right	Malaysia (Enacted in 1995)	Vietnam (Enacted in 1995)	Singapore (Enacted in 1996)	Indonesia (Enacted in 1991)
Claims	No provision.	The scope of the protection of a patented invention shall be determined by the patent claims. (Government Ordinance, Article 16)	No provision.	No provision.
Specification and Drawings		The explanation of an invention shall be used only for the purpose of the interpretation of the patent claims. (Government Ordinance, Article 16)		
Abstract				
Doctrine of Equivalents	No provision.	No provision.	No provision.	No provision.

UPDATE ON PROPOSED U.S. LEGISLATION

PIPA ANNUAL MEETING
HIROSHIMA, JAPAN

OCTOBER 10, 1996

Frederick T. Boehm
Assistant General Counsel
IBM Corporation

UPDATE ON PROPOSED U.S. IP LEGISLATION

1996 has been a very active year for new IP legislation in the U.S. and a number of IP bills are pending. As of the writing of this article these have not passed, but Congress will return to Washington on September 3 from its August recess and is expected to address many of the pending bills. However, lack of time and other important pending legislation may prevent many of them from being passed. Since this is the second session of the 104th Congress, any bills not actually passed before Congress adjourns in early October for the elections will automatically die and have to be reintroduced in the 105th Congress in January. This paper does not attempt to cover IP legislation that has been enacted into law during the 104th Congress but only deals with IP legislation that is currently still pending.

The following is a summary of important bills that affect intellectual property (IP).

PATENTS RELATED BILLS

H.R. 359/S. 284

H.R. 359 was introduced by Representative Rohrabacher on January 4, 1995 and has 203 co-sponsors. The Senate Counterpart, S. 284, was introduced by Senator Dole on January 26, 1995.

These bills will amend Section 154 of Title 35 of the United States Code to change the patent term so that it ends 17 years from the date of grant of the patent or 20 years from the earliest effective filing date on which the application was filed in the United States, whichever is later. The bills also open for inspection by the public, applications filed more than 60 months earlier.

Consequently, These bills would overturn the GATT Implementation Law enacted in December 1994, which had changed the patent term so that it ends no more than 20 years from the earliest effective filing date. This

GATT Implementation provision had gone beyond the strict requirements of GATT for the purpose of expressly preventing submarine patents. A submarine patent is obtained by an applicant legally manipulating the patent system to prevent it from issuing until many years after the original filing date. The 20 year term was also passed to implement a bilateral agreement with the Government of Japan. In exchange, Japan agreed to accept Japanese patent applications in the English language, with a translation to be submitted 2 months later, and to allow the correction of translation errors.

Rohrabacher's bill is strongly supported by the Small Inventor Organizations argue that many of America's most important inventions take longer than 3 years to move through the Patent and Trademark Office so that U.S. inventors are disadvantaged. It is opposed by a number of groups including the National Association of Manufacturers, American Electronics Association, Intellectual Property Owners, Business Software Alliance and Software Publishers Association. Their position is that if there is to be an amendment in this area, then it should be an amendment to permit patent term extensions tied directly to U.S. Patent Office delays

(they support the Morehead bill H.R. 3460 discussed below). There should not be compensation for applicant caused delays or an open-ended opportunity for selected applicants to delay patent issuance indefinitely.

In the first test of Rohrabacher's bill, the House Intellectual Property Subcommittee defeated it by a vote of 12 to 2 on May 15. The next day, Rohrabacher issued a statement criticizing H.R. 3460. Rohrabacher may attempt to substitute his bill for Title II of H.R. 3460 in Full Committee or on the floor of the House.

H.R. 3460 and S. 1961

Several patent related bills that were introduced earlier in the 104th Congress have been combined into what has become known as the omnibus patent bill. It has been introduced in the House by Rep.Carlos Moorhead (R-CA) on May 15, 1996 and in the Senate by Sen. Orrin Hatch (R-UT). Although nearly identical, S.1961 adds the U.S. Copyright Office to the Patent & Trademark Office government corporation and omits the House provisions that are directed at fraudulent invention promoters.

The next major subjects covered in these bills are:

Patent Term -- The bills extend the current 20-year term in the case of unusual administrative delays in the Patent and Trademark Office that are beyond the control of the patent applicant. The bills propose a so-called "objective time clock" for various PTO actions for determining the length of the extension. For example, if the PTO fails to issue the first office action within 14 months after filing, the patent term will be extended one day for every day that elapses until the first action is issued. Similarly, the PTO must respond to each communication by the applicant within four months, or the patent term will be extended by the amount of delay in excess of this period.

Publication of Patent Applications -- The bills provide for publication of most patent applications filed in the U.S. Patent and Trademark Office 18 months after the earliest effective filing date. Upon publication, the patent applicant is given a provisional right to a royalty from any party who practices the invention after the date of publication and before grant, so long as the party has received notice of the published application. An

exception to publication at 18 months is provided for applicants who are not filing outside the U.S. Such applications will not be published until three months after the first office action if that date is later than 18 months after the earliest effective filing date. The House bill limits this exception to applicants who are independent inventors.

Patent Prior User Rights -- The bills contain a somewhat narrower version of legislation proposed in the last Congress to provide a defense to patent infringement for a party who has commercialized a patented invention in the U.S. at least one year before the patent application filing date. In order to qualify for the defense, the party must practice the invention in good faith and have made serious preparations to do so in the U.S. prior to the effective date of the patent application.

Expanded Patent Reexamination -- The bills give third parties a greater opportunity for participation in reexamination in the PTO than the very limited rights they have under current law. A key feature is a right for third party requesters to appeal to the Board of Patent Appeals and Interferences and the Court of Appeals for the Federal Circuit. The bills

also include estoppel provisions designed to prevent duplicative litigation in patent rexamination proceedings and district court suits.

PTO Government Corporation -- The bills convert the U.S. Patent and Trademark Office to a government corporation, that would have greater operating and financial flexibility than the current PTO. Unlike some earlier proposals that separated the PTO from the Department of Commerce completely, the current bills preserve a link with Commerce by making the PTO corporation subject to policy direction from the Secretary of Commerce. The Senate bill also contains a controversial proposal to move the U.S. Copyright Office from the Library of Congress to the proposed corporation. This provision should result eventually in lower USPTO fees. (e.g., see H.R. 3814 below).

Protection From Invention Promoters -- The House bill adds a chapter to title 35 of the United States Code to require invention promotion companies to disclose information to their clients about their success rate in marketing inventions and mandates certain standard provisions in

contracts with clients. The Senate bill does not have any corresponding provisions.

The House Judiciary Sub Committee approved H.R. 3460 on June 11 even though it was vigorously opposed by Rohrabacher and his supporters. The hearing on S. 1961, originally scheduled for July 25, has been postponed until after the August recess. Most U.S. Intellectual property associations are urging the House and Senate to support having a vote on and passing omnibus patent reform legislation when Congress reconvenes on September 3. Thus, the bills are very much alive, but the time that remains is short and the main obstacle appears to be not Rohrabacher and other opponents, but competition from numerous non-IP bills that are awaiting action.

S 1277

The Senate Judiciary Committee approved on May 2, a bill (S 1277) designed to remove a loophole in the Uruguay Round Agreements Act that has allegedly given pharmaceutical companies windfall advantages over their generic competitors.

The Uruguay Round Agreements Act (URAA) changed the patent expiration date of 17 years from issue to 20 years from filing, effective June 8, 1995. For patents or applications filed before that date, Section 154(c)(1) creates transitional provisions to set the expiration date at the greater of 17 years from grant or 20 years from filing.

However, the remedy for infringements resulting from such an extension, under an amended Section 154(c)(2), is limited to "equitable remuneration," with no injunctions, damages, or attorneys' fees. This limitation applies to uses that were commenced, or for which a "substantial investment" was made, before June 8, 1995, and that became infringing because of the transitional provisions.

Although the remedy limitation in the URAA specifically overrides the general remedy sections of Title 35 (Section 283, 284 and 285), it fails to mention the special remedy provision at Section 271(e)(4). The effect of this disparity is that pharmaceutical patent owners, unlike other patentees, retain the full range of injunctions, damages and attorneys' fees under

Section 271(e)(4) against generic manufacturers during the URAA patent term extension. This disparity is corrected by S 1277.

H.R. 632/ S. 880

These bills were introduced by Representative Martin Frost on January 23, 1995 and by Senator Hutchinson (D-TX) in the Senate on 6/5/95.

The bill would amend 28 U.S.C. 1498 (a) to allow the recovery of the patent owner's costs, including reasonable fees for expert witnesses and attorneys, in pursuing patent infringement actions against the U.S. government if the owner is an independent inventor, a non-profit organization, or an entity that had no more than 500 employees at anytime during the 5-year period preceding the use or manufacture of the patented invention by or for the United States. Rep. Frost argues that independent inventors and small and medium sized companies should be recompensed for their enormous legal costs if then successfully sue the U.S. Government. The bill was passed by the House on 12/12/95 and has been included in the miscellaneous section of H.R. 3460.

H.R. 587

H.R. 587 - was introduced by Rep. Morehead on January 19, 1995.

The bill would require a per se holding of non-obviousness, at the election of the applicant, for claims to a "biotechnological process using or resulting in a composition of matter that is novel under Section 102 and non-obvious under subsection (a) of this section..."

Claims to the process and composition of matter must be either contained in the same application, or in separate applications having the same effective filing date, and the process and composition of matter must, at the time the process was invented, have been owned by the same person or have been subject to an obligation of assignment to the same person.

The bill requires that if the process and composition of matter claims issue in two separate patents, that they be set to expire on the same date as the composition of matter patent.

Finally, the bill amends Section 282 of Title 35 to clarify that if a composition of matter claim is held invalid and that claim was the basis of a determination of non-obviousness under Section 103(b) (1), then the process shall no longer be considered non-obvious solely on the basis of this section. The biotech industry argues that the bill would ease the issuance of patents in the biotech area. On the other hand, the Intellectual Property Owners argue that per se patentability will result in bad patents.

HR 3814 - Medical Procedures

The House on July 24 passed appropriations legislation (HR 3814) for the Patent and Trademark Office (see further discussion below) with an amendment that prohibits the agency from expending funds on the issuance of medical process patents. The amendment was offered by Rep. Greg Ganske (R-Iowa) and corresponds to a bill (HR 1127) that he introduced on the subject last year. Under the bill, the PTO would be barred from granting patent protection for new medical procedures except as a necessary component of a patentable medical device or machine.

A somewhat different Senate bill (S1334) was introduced last October by Sen. Bill Frist (R-Tenn). It would create an exception to infringement

liability for patients, physicians, other licensed health professionals and health care entities using patented medical techniques.

COPYRIGHT RELATED

HR 2441/S 1284

The Clinton Administration in 1993 established a task force to promote the development of a National Information Infrastructure (NII). It's aim was to make electronic information more widely available through a "highway" of highspeed networks. The NII working group's final report was issued last September and S 1284 and HR 2441 were quickly introduced in late September by Sen. Orrin Hatch (R-Utah) and Rep. Carlos Moorhead (R-Calif), to implement the NII working group's recommendations for copyright law reform.

The legislation would expand the current infringement exception for libraries at Sections 108(a), (b) and (c) of Title 17. It would allow libraries to prepare three copies of works in digital or facsimile format and authorize the making of a number of copies by libraries and archives for purposed of preservation.

A new Section 1201 under that chapter would prohibit the importation, manufacture, or distribution of any device or the provision of any service, to decode the encrypted portions of copyrighted works. Section 1202 would prohibit the dissemination of false, or altered "copyright management information." Finally, under Section 1203, the remedies for circumvention of copyright protection systems would include injunction, impoundment, actual or statutory damages, criminal penalties for tampering with copyright management information, including fines of up to $500,000 and/or imprisonment of up to five years.

The legislation would also amend Sections 101 and 106(3) of the Copyright Act to make clear that the right of public distribution applies to computer network transmissions of copyrighted copies and phonorecords.

H.R. 533

H.R. 533 was introduced by Representative Knollenberg on January 17, 1995. The bill would amend Section 117 of Title 17 to permit the "rightful possessor" (as compared to the "owner" in the present law) of a copy of a computer program to make or authorize another to make a

copy or adaptation of the computer program if such new copy or adaptation is made for archival purposes or is created as an essential step in the utilization of the computer program in conjunction with a machine and it is used in no other manner.

Representative Knollenberg argues that this legislation is necessary to permit independent computer service companies to service computers that use proprietary operating systems. The Ninth Circuit case MAI Systems Corp. v. Peak Computer Inc., 26 USPQ2d, 1458 (CA9 1993), held that a copyright infringement occurred when a service company loaded MAI licensed software into a computer's RAM in order to service the computer.

S.227

S. 227 - was introduced by Senator Hatch on January 13, 1995.

The bill would add a new paragraph (6) to 17 U.S.C. 106 creating an exclusive right "in the case of sound recordings, to perform the copyrighted work publicly by means of a digital transmission" if the sound recordings are performed publicly as part of a subscription transmission service.

Such subscription transmissions would be subject to statutory licensing under the section. Section 115 is also appropriately amended to allow phonorecord makers, operating under compulsory license, to distribute sound recordings by means of digital transmission.

Under current law, the owner of the copyright in a sound recording does not have a performance right. Thus, the performer of a sound recording has no right to compensation for the public performance of his work. In contrast, the owner of the copyright in the music or lyrics in the recording does currently have a right to compensation for a public performance.

H.R. 789

H.R. 789 - was introduced by Rep. Morehead on February 16, 1995.

The bill would amend of the Copyright Statute to increase the term of copyright from life on the author plus fifty years to a term of life of the author plus seventy years. The reason for proposing the increase in term is to obtain reciprocity for the works of U.S. citizens in Europe. European countries currently provide their citizens with a copyright term of life of the

author plus seventy years, but provide U.S. authors with the same term offered to European authors in the U.S..

TRADE SECRET RELATED

HR 3723/S 1556

The Senate Judiciary Committee on July 25 approved legislation (S 1556) that seeks to criminalize the theft of trade secrets. Like a bill (HR 3723) recently approved by a House subcommittee, the legislation would impose fines and prison sentences on individuals and corporations that engage in "economic espionage." This bill creates criminal penalties for the knowing misappropriation of "proprietary economic information" worth $100,000 or more, by any person acting "with intent to, or reason to believe that it will, injure any owner."

Punishment of individual offenders would include imprisonment of up to 10 years, and/or fines of up to $250,000 or twice the value of the proprietary information, whichever is greater. Offending corporations could be fined up to $10,000,000, or twice the value of the proprietary economic information, whichever is greater.

The bill also provides for forfeiture of property derived from or used in the offense. In addition, it permits the president to impose a ban of up to five years on imports or exports by any person convicted of violating the bill's prohibitions. Violations of those import/export sanctions could bring fines of five times the value of the goods or $100,000, whichever is greater, as well as seizure and forfeiture of the goods.

USPTO RELATED

H.R. 3814 - USPTO APPROPRIATIONS

On July 24, 1996 the House passed H.R. 3814 called the "Department of Commerce, Justice, and State, the Judiciary and Related Agencies Appropriations Act of 1997" and agreed to provisions siphoning off $54 million of patent fees the funding of unrelated activities. The Senate Appropriations Committee agreed to withhold the same amount in reporting H.R. 3814 to the Senate floor for a vote after the August recess. $54 million amounts to 8% of the total PTO budget for the next fiscal year and will seriously impact PTO operations and keep pressure on PTO fees. The USPTO is supported entirely by the fees it collects and this diversion of fees for general government purposes is, in effect, a $54 million tax on inventors.

NEW EUROPEAN COMMUNITY TRADE MARK SYSTEM

Council Regulation (EC) no. 40/94 and Rules no. 2868/95.

1. The Community Trade Mark Office (CTMO) opened for business in Alicante, Spain on 1st April 1996. Its formal name is "OHIM" (Office for the Harmonisation of the Internal Market [Trade Marks and Designs]).

2. The Office is multi-national being staffed by nationals of Member States throughout the European Union.

The president is Mr. Combaldieu (France) and the Vice Presidents are Mr. Casado (Spain) and Mr. von Mühlendahl (Germany).

3. The Community Trade Mark (CTM) System is a means for obtaining a single ("unitary") registration covering the entire European Union (EU) via a single application. Because it has a unitary character, it stands or falls as a single unit and it is not possible to have a Community registration covering only some of the Member States within the EU. It co-exists with existing national systems.

4. I remind you that the EU currently consists of the following 15 countries:-

Austria	Greece	Sweden
Belgium	Ireland	
Denmark	Italy	
Finland	Luxembourg	
France	Netherlands	
Germany	Portugal	
Great Britain	Spain	

Please note that Switzerland and Norway are not EU Members and are thus not covered by the CTM system.

5. It is possible to file a Community Trade Mark application for goods or services at the National (including Benelux) Registries or directly with the CTMO in Alicante.

6. A CTM may consist of any signs capable of being registered graphically, particularly words, including personal names, designs, letters, numerals, the shape of goods or their packaging, providing that such signs are capable of distinguishing the goods or services of one undertaking from those of other undertakings (Article 4).

7. Nationals of Paris Convention countries, such as those of the USA and Japan, may own a CTM. (Article 5).

8. No home registration or application is needed.

9. Priority of an earlier application can be claimed within six months (Article 29).

10. A CTM application can be filed by anyone and it is not necessary to appoint a European Representative for this purpose, although one must be subsequently appointed.

11. Applications can be filed in any of the 11 official languages of the EU, but a second language, which must be one of the 5 official languages of the CTMO, has to be designated on filing. These 5 official languages of the CTMO are English, French, German, Spanish and Italian.

12. After filing, the CTMO will carry out a search of the Community Register: Also the national registries, having been notified of the CTM by the CTMO, and except for France, Germany and Italy, will also carry out a search of their national registers. All these Search Reports will then be transmitted - supposedly within 3 months - to the applicant by the CTMO. (Search fees are included in the CTM application fee) (Article 39).

13. It is essential to realise that these Search Reports are for <u>information only</u> and the CTMO will <u>not</u> refuse to register an application on the basis of earlier confusingly similar national or CTM applications or registrations. It is up to the proprietor of the conflicting mark to file an opposition after publication of the application in the Community Trade Marks Bulletin.

14. Examination by the CTMO is for formal aspects only ("Absolute Grounds"), and the Office will refuse applications for, e.g. trade marks which are devoid of any distinctive character; trade marks which consist exclusively of signs or indications which may serve, in trade, to designate the kind, quality, quantity, intended purpose, value, geographical origin or time of production of the goods or of rendering the service, or other characteristics of the goods or service, and signs which consist exclusively of the shape of goods which is necessary to obtain a technical result. (Article 7).

15. When the application is accepted by the CTMO - and probably not many rejections under "Absolute Grounds" will be sustained - the details will be published in the Community Trade Marks Bulletin in all 11 official languages of the EU! (Article 40).

16. Within a period of 3 months following the publication of the application, Notice of opposition to the registration may be filed with the CTMO. It is essential to monitor the Bulletin (e.g. via a Watching Service) to ensure that no conflicting marks exist.

17. Oppositions ("Relative Grounds for Refusal") can in particular be based upon:-

(a) prior similar CTM or national (including Benelux) trade mark registrations and applications (providing their later registration).

For a successful opposition, essentially there has to be identity or similarity of the CTM to the earlier trade mark and identity or similarity of the goods or services so that there "exists a likelihood of confusion on the part of the public in the territory in which the earlier trade mark is registered; the likelihood of confusion includes the likelihood of association with the earlier trademark." (Article 8).

or (b) earlier national or CTM marks when the goods are <u>not</u> <u>similar</u> but where the mark has a "reputation in the Community" (or in a Member State). (Article 8).

A losing party in an Opposition can appeal to the Board of Appeals of the CTMO.

18. Oppositions can only be filed in one of the 5 official languages of the CTMO.

19. CTM Registrations last for 10 years from the date of filing, and may be renewed for further 10 year periods.

20. A CTM Registration can be assigned in writing for some or all of the goods or services for which it is registered and must be signed by the all the parties to the contract (Article 17).

21. A CTM Registration may be licensed for some or all of the goods for which it is registered and for the whole or part of the EU. A licence may be exclusive or non-exclusive.

22. A CTM may be revoked on application to the CTMO for 5 or more years non-use in the Community, starting from the registration date. Use in one Member State alone will probably be sufficient to defeat a revocation action. In opposition proceedings, the proprietor is entitled to ask the opponent to prove use of his conflicting mark if it has been registered for not less than 5 years. In the absence of proof, the opposition shall be rejected (unless there are proper reasons for the non-use).

23. If, for example, the opposition period is missed a request for a Declaration of Invalidity can be filed with the CTMO, or can be brought as a counterclaim in infringement proceedings - either on "Absolute Grounds" (see 14 above) or on any of the grounds justifying opposition (see 17 above).

24. Where the proprietor of a CTM or earlier national mark has acquiesced, for a period of 5 successive years, in the use of a later CTM in the EU while being aware of such use, he cannot object to the later CTM on the basis of his earlier trade mark (Article 53).

26. The "seniority" of earlier identical national marks registered in EU Member States can be claimed on or after the filing or registration of a CTM application. The owner of the resulting CTM then enjoys all the rights (including the priority) of his earlier national registrations, which can then be dropped saving the cost of many national renewal fees. At the moment the applicant for the CTM and the owner of the previous national registrations must be the same. (Article 34 and 35).

27. The owner of a CTM is entitled to prevent third parties not having his consent from using in the course of trade the same or similar mark for the same or similar goods "where there exists a likelihood of confusion on behalf of the public; the likelihood of confusion includes the likelihood of association" between the marks. (Article 9).

28. Once goods bearing the mark have been put on the market in one EU Member State by the proprietor or his licensee, then they may freely circulate within the EU unless the condition of the goods has been changed or impaired after they have been put on the market. (Article 13).

SUMMARY

The Community trademark system offers a way of obtaining EU-wide trade mark protection with a single application filed through a single office with one subsequent renewal fee. If no oppositions are lodged, or if any oppositions are rejected, it will offer a very cost-effective method of obtaining trade mark protection throughout the entire EU, not to mention the administrative savings in the applicants own office. Furthermore, use in a single member State of the EU is likely to be sufficient to defeat any application for non-use.

It should be noted that the CTMO has received far more applications than expected (probably about 40,000 by the time these slides are presented as against an estimate of 15,000 for the entire first year), and thus there may be significant delay in the hearing of any matters before the office - this remains to be seen.

THE COMMUNITY TRADE MARK (CTM) SYSTEM: COUNCIL REGULATION NO. 40/94 AND RULES NO. 2868/95.

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OPENING

The Community Trade Mark Office formally opened for business on 1st April 1996 in Alicante, Spain. The correct name of the Office is "OHIM": Office for the Harmonisation of the Internal Market (Trade Marks and Designs)" but "CTMO" seems more convenient!

PERSONNEL

The Office employs staff from Member States throughout the European Union. The President is Mr. J. Combaldieu (France), and Mr. A. Casado (Spain) and Mr. A. von Mühlendahl (Germany) are the Vice-Presidents. The head of examination is Mr. Vincent O'Reilly (Ireland).

INTRODUCTION

The principal feature of the Community Trade Mark (CTM) is that it stands or falls as a single unit. It has a unitary character and is not a bundle of national registrations as may be obtained via the Madrid Agreement or Protocol. A Community Trade Mark for goods or services may be obtained by a single filing (by a single applicant) for a registration covering the whole of the European Community. As such, it can only be registered, transferred, suspended, revoked or declared invalid for the whole of the Community. Existing national and Madrid trade mark registration systems will remain in place and the Community Trade Mark operates in tandem to these.

Thus a CTM covers 15 countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the U.K.

As a corollary, the unitary nature of the Community Trade Mark registration means that any single conflicting national registration could cause the whole application to fail. An applicant is then left with the option of converting the Community application to multiple national applications in those Member States where there are no conflict problems. These national applications, however, retain the filing date of the original Community Trade Mark application (and of any priority date, where claimed).

Unlike the Madrid system, no "home" application or registration is needed. Priority from an earlier national, Benelux or Madrid application can however be claimed within a 6-month period.

Companies from Paris Convention countries - e.g. the USA and Japan - may, for example, own CTM's.

WHAT IS A COMMUNITY TRADE MARK?

Any sign capable of being represented graphically, including words, designs (including 3-dimensional), letters, numerals, and the shape of goods or their packaging, provided such signs are capable of distinguishing the goods or services of one undertaking from those of other undertakings.

THE EFFECT OF A COMMUNITY TRADE MARK

The proprietor of a Community Trade Mark has exclusive rights to prevent third parties from using in the course of trade:

- any sign identical to the Community Trade Mark which relates to goods or services identical to those for which the Community Trade Mark is registered
- any sign where confusion by the public if likely to arise because it is identical/similar to the Community Trade Mark and the identicality/similarity of the goods covered by the Community Trade Mark and the sign; and
- any sign identical/similar to the Community Trade Mark relating to goods or services which are not similar to those for which the Community Trade Mark is registered, but where the latter has a reputation in the Community and where use of

the sign without due cause takes unfair advantage of, or is detrimental to, the distinctive character or the repute of the Community Trade Mark.

- The above rights will prevail from the date of publication of the registration. Although there is provision for compensation for infringement from the date of publication of the application, determination of such an issue may only be made after the registration is published.

However, the Community Trade Mark does not entitle its proprietor to prohibit a third party from using in the course of trade:

- its own name or address;
- indications of, inter alia, quality, geographical origin or other characteristics of the goods or services; and
- the Community Trade Mark to indicate the intended purpose of a product or service, in particular, as accessories or spare parts.

LICENSING

A CTM may be licensed exclusively or non-exclusively for some or all of the goods/services for which it is registered for all or part of the E.U.

EXHAUSTION OF RIGHTS

The Regulation recognises that the Community doctrine of exhaustion of rights will apply to the Community Trade Mark. Under this doctrine, an intellectual property right may not be relied upon against, for example, an importer, where the proprietor of that right has previously marketed the product in question in another Member State of the European Community or consented to such marketing. Thus, the rights conferred by a Community Trade Mark will be exhausted in relation to goods put on the Community market by the owner or with his consent. The proprietor remains, of course, able to oppose dealing in goods where their condition has been altered following initial marketing.

TERM OF REGISTRATION

A Community Trade Mark will be valid for ten years from the date of filing of the application and may be renewed for further periods of ten years.

APPLICATION AND OPPOSITION

Application for a Community Trade Mark may be filed at the Community Trade Mark office (CTMO - which is located in Spain), the Benelux trade mark office, or the national registry office of any Member State.

Importantly, the Community Trade Mark Office itself will not refuse applications on the basis of prior conflicting rights, but only on formal grounds, e.g. if the mark is solely descriptive of the product or service or refers solely to its geographic origin, character or quality. The onus is on the proprietor of existing prior rights to oppose a registration of a Community Trade Mark application on the ground of potential conflict. Consequently, it is incumbent on trade mark owners to monitor the Community Trade Marks Bulletin (first edition probably Sept. '96) - e.g. via a Watching Service - to ensure that their rights are not overtaken by Community Trade Mark registrations and that the opportunity to oppose is not missed.

It is possible to base an opposition on an earlier conflicting community, national, Benelux, Madrid or Madrid Protocol application or registration - assuming it is not invalid for 5 or more years non-use! Of course, the Madrid or Madrid Protocol marks must include an EU Member State. Non-registered distinctive marks may also be used as a basis for opposition, as may "well known" marks even where the goods are not similar.

As stated above, the Community examiner will only refuse to grant the application of its own motion on certain absolute grounds, such as lack of any distinctive character or where the mark has become generic. In view of these matters, Community Trade Mark applications are likely to result in a high number of oppositions. The Commission has estimated that 80% of all applications may be opposed!

Incidentally the Community Trade Marks Journal will publish applications in all of the 11 official languages of the Community!

That said, the Community Trade Mark Office will operate a search of its own Community Trade Mark Registry and will send the Search Report to the applicant. The CTMO will also inform the proprietors of earlier Community trade marks of any new conflicting application. Certain national registries will also product national search reports from their national register at the request of the CTMO : these will then be sent to the applicant by the CTMO. The filing fee takes into account these search costs. France, Germany and Italy will not however carry our searches of its own national registers for the CTMO. These Search Reports are simply for the applicants information and I stress that the CTMO will not use them as a basis for rejecting the CTM application on the grounds of confusing similarity to an existing national registration.

A proprietor or licensee of an earlier trade mark has three months following publication of a Community Trade Mark in the Community Trade Marks Bulletin to file an opposition. The losing party in an opposition may appeal to a Board of Appeal.

A CTM application which has been refused can be converted into separate national applications in all Community countries except those where the prior right or rights exist.

SENIORITY

When filing a CTM application, or within 2 months thereafter, or after registration, the "seniority" of earlier identical national registrations which include the same goods may be claimed, provided the applicant for the CTM and of the earlier national registrations is the same. The owner of the CTM may then enjoy all the rights given by the earlier national registrations, and the earlier national registrations can then be allowed to lapse with a significant saving in national renewal fees.

INVALIDITY (Registration was never valid) AND REVOCATION (Registration became invalid after registration)

Grounds include 5 years non-use from the date of registration, mark has become deceptive; and the registration was invalidly granted (e.g. bad faith of applicant, existence of an earlier conflicting mark).

[N.B. Bona fide use in a single Member State is probably sufficient to protect the CTM against cancellation throughout the whole Community].

An application for revocation or invalidity can be made to the CTMO or to a national Court on the basis of a counterclaim in infringement proceedings.

ACQUIESCENCE

If the proprietor of an earlier mark does not oppose or apply to revoke a CTM within 5 years of its use coming to his notice he will not thereafter be entitled to object.

JURISDICATION AND ENFORCEMENT

Although the nature and effect of a Community Trade Mark is prescribed by the Regulation, enforcement of rights arising from the mark (i.e. remedies) is a matter for national law. To that end, Member States must designate national courts of first and second instance ("Community Trademark Courts") which will have exclusive jurisdiction to deal with disputes concerning the infringement and validity of Community Trade Marks.

As for jurisdiction, the Regulation recognises that the provisions of the Convention on Jurisdiction and the Enforcement of Judgements in Civil and Commercial matters signed in Brussels in 1968 ("the 1968 Brussels Convention") will apply unless otherwise specified in the Regulation. As a general rule, an action should be brought in the Community Trade Mark Court of a Member State where:-

- the defendant is domiciled or, if he is not domiciled in any of the Member States, the Member State in which he has an establishment; failing that:-

- the Member State where the plaintiff is domiciled or if he is not domiciled in any of the member States, the Member State in which he has an establishment, and, failing that;
- the courts of the Member State where the Community Trade Mark office has its seat, that is, Spain.

Where an action is brought in accordance with these rules, then the Community Trade Mark Courts' jurisdiction will extend to acts which take place within any of the territories of the Member States. In particular, it may grant a Community-wide injunction. Infringement actions may also be brought in the courts of the Member State in which the infringement is either committed or threatened. In such cases, the Court will only have jurisdiction in respect of the territory of the Member State in which it is situated..

An individual may also apply to the Community Trade Mark office for revocation or a declaration of invalidity. The decisions of the various Divisions of the Community Trade Mark Office are subject to appeal to the Boards of Appeal. Decisions of the Boards of Appeal may in turn be challenged before the Court of First Instance of the European Court of Justice in Luxembourg on the same grounds for judicial review which apply to acts of other Community institutions.

COSTS

The costs of registering and maintaining Community Trade Mark applications should be significantly lower than the aggregate expense of a series of national applications. I remind you that 13 separate national applications are currently needed to cover the entire Community - the Benelux countries are covered by a single application. For example, the CTM application fee is ECU 975. ($1200, £800 or 135,000 Yen) for up to 3 classes with additional classes at 200 ECU ($250, £170 or 29,000 Yen). The registration fee is 1100 ECU ($1400; £900 or 152,000 Yen). Renewal fees are ECU 2500 ($3000, £2000 or 338,000 Yen) with additional classes at 500 ECU ($600, £400 or 67,000 Yen). The opposition fee will be 350 ECU ($450, £290 or 49,000 Yen). If we take into account a European trade mark law firm's fees for filing and registering a CTM, then if there are

no oppositions this should cost around £2500 ($3800 or 422,000 Yen) as against, say, £12,500 ($19,000 or 2,112,000 Yen) for a series of national applications.

If however the CTM is refused after opposition and appeal and has to be converted to a series of national applications - minus the country or countries where the conflicting mark exists - there will be no saving.

LANGUAGES

There are five official languages of the Community Trade Mark office : English, French, German, Spanish and Italian. All applications and proceedings can be conducted in one of these languages. Applications for a Community Trade Mark can, however, be filed in any of the 11 official EU languages and the Community Trade Mark office will arrange at its own cost for a translation into the Community Trade Mark office language nominated by the applicant as its second language. (a 2nd language must always be indicated on filing and this must be one of the five official languages of the Office). Opposition proceedings must be filed in an official language of the Office. If this is neither the language of filing nor the applicant's second nominated language, the opposing party will bear the cost of translation. The language into which the opposition is translated will become the language of the proceedings, unless the parties agree to a different official EU language.

INSPECTION OF FILES

Anyone may inspect the file of a published CTM application or registration.

PROCEEDINGS BEFORE THE OFFICE

These will normally be in writing and it is not expected that the Office will encourage oral proceedings in oppositions.

THE MADRID AGREEMENT AND PROTOCOL

These provide a system of obtaining an "international" registration via WIPO in Geneva based on a home registration or application. The U.S. is not, nor does at present propose to be, a member of these systems. In any event, if one files an international mark on the basis of a home application and this is subsequently restricted, the same restriction will

of necessity extend to the international mark. This could be a problem to U.S. applicants because the U.S.A. is a country which generally only permits registration for a narrow specification of goods or services.

It is however anticipated that Madrid Protocol applications will be able to designate a Community Trade Mark application in due course.

THE COMMUNITY PATENT SYSTEM

O.K. - You've all heard about Community Trade Mark Applications - what about a single unitary Community Patent?

This does not seem to be making much headway although the EU Council appears to be attempting to reactivate the process of ratification of the Agreement relating to Community Patents signed in 1989 and to speed up its entry into force.

NUMBER OF APPLICATIONS

The CTMO has been swamped by applications. I expect that by early October, when this presentation is given, they will have received more than 40,000 applications whereas they expected a maximum of 15,000 in the entire first year of operation!

Certainly this has meant a considerable delay in the issuance of filing receipts for applications filed directly with the Alicante office, and the Office is not expected to be able to carry our any searches of the Community Register before September 1996.

The largest percentage of applications is believed to come from the USA (about 35%) with Japan far behind (say 5%).

SUMMARY

In favour of a Community Trade Mark	Against a Community Trade Mark
If the mark does not encounter objections or substantial opposition proceedings, it is an extremely cost-effective way of achieving trade mark registration throughout the European Union. Only one application filed through one associate with one registration and one renewal fee is required, saving significant administration costs.	If substantial opposition proceedings are encountered, the costs may be high; if the application is refused, national applications can be made ("conversion") with the same priority as the Community Trade Mark Application but national filing costs will be incurred in addition to the wasted cost of the Community Trade Mark Application. Significant delay will also occur.
A Community Trade Mark will be a valuable right that is effective throughout the European Union and is readily enforceable in national courts throughout the European Union. Pan-European injunctions may be granted.	Because of the importance of Community Trade Marks, a large number of oppositions are anticipated.
Use of a trade mark in a single country of the European Union is likely to defeat an application for revocation on the ground of non-use even if the mark has not been used in all European Union countries. This is not the case with national registrations which must be used in each country.	If an opposition is successful, the proprietor will have to pay the Opponent's costs on a fixed scale.
A Community Trade Mark can claim "seniority" from earlier national registrations for the same mark for the same goods/services and so it will be possible to abandon these earlier national trade mark registrations in favour of a Community Trade Mark without loss of rights, thereby saving renewal fees and administration costs.	A prior national right in any one country in the European Union can lead to a Community Trade Mark Application being rejected in opposition proceedings, leaving the applicant with the expensive option of conversion to national applications minus the country or countries where the conflicting mark(s) already exist.
The CTM application fee includes the cost of Search Reports of the Community and National Registers (minus France, Germany and Italy), which will be sent to the applicant by the CTMO.	You can't ignore it! It is absolutely essential to monitor the Community Trade Marks Bulletin - e.g. via a Watching Service - for conflicting marks as the CTMO will <u>not</u> refuse an application on the basis of existing confusingly similar national rights without a formal opposition.
The USA is not a member of the Madrid Agreement or Madrid Protocol and thus the CTM system is the only way of obtaining European-wide protection via a single application.	

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Legislation

Contents

I *Acts whose publication is obligatory*

★ **Council Regulation (EC) No 40/94 of 20 December 1993 on the Community trade mark** 1

Acts whose titles are printed in light type are those relating to day-to-day management of agricultural matters, and are generally valid for a limited period.

The titles of all other Acts are printed in bold type and preceded by an asterisk.

I

(Acts whose publication is obligatory)

COUNCIL REGULATION (EC) No 40/94

of 20 December 1993

on the Community trade mark

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 235 thereof,

Having regard to the proposal from the Commission (1),

Having regard to the opinion of the European Parliament (2),

Having regard to the opinion of the Economic and Social Committee (3),

Whereas it is desirable to promote throughout the Community a harmonious development of economic activities and a continuous and balanced expansion by completing an internal market which functions properly and offers conditions which are similar to those obtaining in a national market; whereas in order to create a market of this kind and make it increasingly a single market, not only must be barriers to free movement of goods and services be removed and arrangements be instituted which ensure that competition is not distorted, but, in addition, legal conditions must be created which enable undertakings to adapt their activities to the scale of the Community, whether in manufacturing and distributing goods or in providing services; whereas for those purposes, trade marks enabling the products and services of undertakings to be distinguished by identical means throughout the entire Community, regardless of frontiers, should feature amongst the legal instruments which undertakings have at their disposal;

Whereas action by the Community would appear to be necessary for the purpose of attaining the Community's said objectives; whereas such action involves the creation of Community arrangements for trade marks whereby undertakings can by means of one procedural system obtain Community trade marks to which uniform protection is given and which produce their effects throughout the entire area of the Community; whereas the principle of the unitary character of the Community trade mark thus stated will apply unless otherwise provided for in this Regulation;

Whereas the barrier of territoriality of the rights conferred on proprietors of trade marks by the laws of the Member States cannot be removed by approximation of laws; whereas in order to open up unrestricted economic activity in the whole of the common market for the benefit of undertakings, trade marks need to be created which are governed by a uniform Community law directly applicable in all Member States;

Whereas since the Treaty has not provided the specific powers to establish such a legal instrument, Article 235 of the Treaty should be applied;

Whereas the Community law relating to trade marks nevertheless does not replace the laws of the Member States on trade marks; whereas it would not in fact appear to be justified to require undertakings to apply for registration of their trade marks as Community trade marks; whereas national trade marks continue to be necessary for those undertakings which do not want protection of their trade marks at Community level;

Whereas the rights in a Community trade mark may not be obtained otherwise than by registration, and registration is to be refused in particular if the trade mark is not distinctive, if it is unlawful or if it conflicts with earlier rights;

Whereas the protection afforded by a Community trade mark, the function of which is in particular to guarantee

(1) OJ No C 351, 31. 12. 1980, p. 1 and OJ No C 230, 31. 8. 1984, p. 1.
(2) OJ No C 307, 14. 11. 1983, p. 46 and OJ No C 280, 28. 10. 1991, p. 153.
(3) OJ No C 310, 30. 11. 1981, p. 22.

the trade mark as an indication of origin, is absolute in the case of identity between the mark and the sign and the goods or services; whereas the protection applies also in cases of similarity between the mark and the sign and the goods or services; whereas an interpretation should be given of the concept of similarity in relation to the likelihood of confusion; whereas the likelihood of confusion, the appreciation of which depends on numerous elements and, in particular, on the recognition of the trade mark on the market, the association which can be made with the used or registered sign, the degree of similarity between the trade mark and the sign and between the goods or services identified, constitutes the specific condition for such protection;

Whereas it follows from the principle of free flow of goods that the proprietor of a Community trade mark must not be entitled to prohibit its use by a third party in relation to goods which have been put into circulation in the Community, under the trade mark, by him or with his consent, save where there exist legitimate reasons for the proprietor to oppose further commercialization of the goods;

Whereas there is no justification for protecting Community trade marks or, as against them, any trade mark which has been registered before them, except where the trade marks are actually used;

Whereas a Community trade mark is to be regarded as an object of property which exists separately from the undertakings whose goods or services are designated by it; whereas accordingly, it must be capable of being transferred, subject to the overriding need to prevent the public being misled as a result of the transfer. It must also be capable of being charged as security in favour of a third party and of being the subject matter of licences;

Whereas administrative measures are necessary at Community level for implementing in relation to every trade mark the trade mark law created by this Regulation; whereas it is therefore essential, while retaining the Community's existing institutional structure and balance of powers, to establish an Office for Harmonization in the Internal Market (trade marks and designs) which is independent in relation to technical matters and has legal, administrative and financial autonomy; whereas to this end it is necessary and appropriate that it should be a body of the Community having legal personality and exercising the implementing powers which are conferred on it by this Regulation, and that it should operate within the framework of Community law without detracting from the competencies exercised by the Community institutions;

Whereas it is necessary to ensure that parties who are affected by decisions made by the Office are protected by the law in a manner which is suited to the special character of trade mark law; whereas to that end provision is made for an appeal to lie from decisions of the examiners and of the various divisions of the Office; whereas if the department whose decision is contested does not rectify its decision it is to remit the appeal to a Board of Appeal of the Office, which is to decide on it; whereas decisions of the Boards of Appeal are, in turn, amenable to actions before the Court of Justice of the European Communities, which has jurisdiction to annul or to alter the contested decision;

Whereas under Council Decision 88/591/ECSC, EEC, Euratom of 24 October 1988 establishing a Court of First Instance of the European Communities [1], as amended by Decision 93/350/Euratom, ECSC, EEC of 8 June 1993 [2], that Court shall exercise at the first instance the jurisdiction conferred on the Court of Justice by the Treaties establishing the Communities — with particular regard to appeals lodged under the second subparagraph of Article 173 of the EC Treaty — and by the acts adopted in implementation thereof, save as otherwise provided in an act setting up a body governed by Community law; whereas the jurisdiction which this Regulation confers on the Court of Justice to cancel and reform decisions of the appeal courts shall accordingly be exercised at the first instance by the Court in accordance with the above Decision;

Whereas in order to strengthen the protection of Community trade marks the Member States should designate, having regard to their own national system, as limited a number as possible of national courts of first and second instance having jurisdiction in matters of infringement and validity of Community trade marks;

Whereas decisions regarding the validity and infringement of Community trade marks must have effect and cover the entire area of the Community, as this is the only way of preventing inconsistent decisions on the part of the courts and the Office and of ensuring that the unitary character of Community trade marks is not undermined; whereas the rules contained in the Brussels Convention of Jurisdiction and the Enforcement of Judgments in Civil and Commercial Matters will apply to all actions at law relating to Community trade marks, save where this Regulation derogates from those rules;

Whereas contradictory judgments should be avoided in actions which involve the same acts and the same parties and which are brought on the basis of a Community trade mark and parallel national trade marks; whereas for this purpose, when the actions are brought in the same Member State, the way in which this is to be achieved is a matter for national procedural rules, which are not prejudiced by this Regulation, whilst when the actions are brought in different Member States, provisions modelled on the rules on *lis pendens* and

[1] OJ No L 319, 25. 11. 1988, p. 1 and corrigendum in OJ No L 241, 17. 8. 1989, p. 4.
[2] OJ No L 144, 16. 6. 1993, p. 21.

related actions of the abovementioned Brussels Convention appear appropriate;

Whereas in order to guarantee the full autonomy and independence of the Office, it is considered necessary to grant it an autonomous budget whose revenue comes principally from fees paid by the users of the system; whereas however, the Community budgetary procedure remains applicable as far as any subsidies chargeable to general budget of the European Communities are concerned; whereas moreover, the auditing of accounts should be undertaken by the Court of Auditors;

Whereas implementing measures are required for the Regulation's application, particularly as regards the adoption and amendment of fees regulations and an Implementing Regulation; whereas such measures should be adopted by the Commission, assisted by a Committee composed of representatives of the Member States, in accordance with the procedural rules laid down in Article 2, procedure III(b), of Council Decisions 87/373/EEC of 13 July 1987 laying down the procedures for the exercise of implementing powers conferred on the Commission (1),

HAS ADOPTED THIS REGULATION:

TITLE I

GENERAL PROVISIONS

Article 1

Community trade mark

1. A trade mark for goods or services which is registered in accordance with the conditions contained in this Regulation and in the manner herein provided is hereinafter referred to as a 'Community trade mark'.

2. A Community trade mark shall have a unitary character. It shall have equal effect throughout the Community: it shall not be registered, transferred or surrendered or be the subject of a decision revoking the rights of the proprietor or declaring it invalid, nor shall its use be prohibited, save in respect of the whole Community. This principle shall apply unless otherwise provided in this Regulation.

Article 2

Office

An Office for Harmonization in the Internal Market (trade marks and designs), hereinafter referred to as 'the Office', is hereby established.

Article 3

Capacity to act

For the purpose of implementing this Regulation, companies or firms and other legal bodies shall be regarded as legal persons if, under the terms of the law governing them, they have the capacity in their own name to have rights and obligations of all kinds, to make contracts or accomplish other legal acts and to sue and be sued.

TITLE II

THE LAW RELATING TO TRADE MARKS

SECTION 1

DEFINITION OF A COMMUNITY TRADE MARK OBTAINING A COMMUNITY TRADE MARK

Article 4

Signs of which a Community trade mark may consist

A Community trade mark may consist of any signs capable of being represented graphically, particularly words, including personal names, designs, letters, numerals, the shape of goods or of their packaging, provided that such signs are capable of distinguishing the goods or services of one undertaking from those of other undertakings.

Article 5

Persons who can be proprietors of Community trade marks

1. The following natural or legal pesons, including authorities established under public law, may be proprietors of Community trade marks:

(a) nationals of the Member States; or

(1) OJ No L 197, 18. 7. 1987, p. 33.

(b) nationals of other States which are parties to the Paris Convention for the protection of industrial property, hereinafter referred to as 'the Paris Convention'; or

(c) nationals of States which are not parties to the Paris Convention who are domiciled or have their seat or who have real and effective industrial or commercial establishments within the territory of the Community or of a State which is party to the Paris Convention; or

(d) nationals, other than those referred to under subparagraph (c), of any State which is not party to the Paris Convention and which, according to published findings, accords to nationals of all the Member States the same protection for trade marks as it accords to its own nationals and, if nationals of the Member States are required to prove registration in the country of origin, recognizes the registration of Community trade marks as such proof.

2. With respect to the application of paragraph 1, stateless persons as defined by Article 1 of the Convention relating to the Status of Stateless Persons signed at New York on 28 September 1954, and refugees as defined by Article 1 of the Convention relating to the Status of Refugees signed at Geneva on 28 July 1951 and modified by the Protocol relating to the Status of Refugees signed at New York on 31 January 1967, shall be regarded as nationals of the country in which they have their habitual residence.

3. Persons who are nationals of a State covered by paragraph 1 (d) must prove that the trade mark for which an application for a Community trade mark has been submitted is registered in the State of origin, unless, according to published findings, the trade marks of nationals of the Member States are registered in the State of origin in question without proof of prior registrarion as a Community trade mark or as a national trade mark in a Member State.

Article 6

Means whereby a Community trade mark is obtained

A Community trade mark shall be obtained by registration.

Article 7

Absolute grounds for refusal

1. The following shall not be registered:

(a) signs which do not conform to the requirements of Article 4;

(b) trade marks which are devoid of any distinctive character;

(c) trade marks which consist exclusively of signs or indications which may serve, in trade, to designate the kind, quality, quantity, intended purpose, value, geographical origin or the time of production of the goods or of rendering of the service, or other characteristics of the goods or service;

(d) trade marks which consist exclusively of signs or indications which have become customary in the current language or in the bona fide and established practices of the trade;

(e) signs which consist exclusively of:

(i) the shape which results from the nature of the goods themselves; or

(ii) the shape of goods which is necessary to obtain a technical result; or

(iii) the shape which gives substantial value to the goods;

(f) trade marks which are contrary to public policy or to accepted principles of morality;

(g) trade marks which are of such a nature as to deceive the public, for instance as to the nature, quality or geographical origin of the goods or service;

(h) trade marks which have not been authorized by the competent authorities and are to be refused pursuant to Article 6ter of the Paris Convention;

(i) trade marks which include badges, emblems or escutcheons other than those covered by Article 6ter of the Paris Convention and which are of particular public interest, unless the consent of the appropriate authorities to their registration has been given.

2. Paragraph 1 shall apply notwithstanding that the grounds of non-registrability obtain in only part of the Community.

3. Paragraph 1 (b), (c) and (d) shall not apply if the trade mark has become distinctive in relation to the goods or services for which registration is requested in consequence of the use which has been made of it.

Article 8

Relative grounds for refusal

1. Upon opposition by the proprietor of an earlier trade mark, the trade mark applied for shall not be registered:

(a) if it is identical with the earlier trade mark and the goods or services for which registration is applied for are identical with the goods or services for which the earlier trade mark is protected;

(b) if because of its identity with or similarity to the earlier trade mark and the identity or similarity of the goods or services covered by the trade marks there exists a likelihood of confusion on the part of the public in the territory in which the earlier trade mark is protected; the likelihood of confusion includes the likelihood of association with the earlier trade mark.

2. for the purposes of paragraph 1, 'Earlier trade marks' means:

(a) trade marks of the following kinds with a date of application for registration which is earlier than the date of application for registration of the Community trade mark, taking account, where appropriate, of the priorities claimed in respect of those trade marks:

(i) Community trade marks;

(ii) trade marks registered in a Member State, or, in the case of Belgium, the Netherlands or Luxembourg, at the Benelux Trade Mark Office;

(iii) trade marks registered under international arrangements which have effect in a Member State;

(b) applications for the trade marks referred to in subparagraph (a), subject to their registration;

(c) trade marks which, on the date of application for registration of the Community trade mark, or, where appropriate, of the priority claimed in respect of the application for registration of the Community trade mark, are well known in a Member State, in the sense in which the words 'well known' are used in Article 6 bis of the Paris Convention.

3. Upon opposition by the prorietor of the trade mark, a trade mark shall not be registered where an agent or representative of the proprietor of the trade mark applies for registration thereof in his own name without the proprietor's consent, unless the agent or representative justifies his action.

4. Upon opposition by the proprietor of a non-registered trade mark or of another sign used in the course of trade of more than mere local significance, the trade mark applied for shall not be registered where and to the extent that, pursuant to the law of the Member State governing that sign,

(a) rights to that sign were acquired prior to the date of application for registration of the Community trade mark, or the date of the priority claimed for the application for registration of the Community trade mark;

(b) that sign confers on its proprietor the right to prohibit the use of a subsequent trade mark.

5. Furthermore, upon opposition by the proprietor of an earlier trade mark within the meaning of paragraph 2, the trade mark applied for shall not be registered where it is identical with or similar to the earlier trade mark and is to be registered for goods or services which are not similar to those for which the earlier trade mark is registered, where in the case of an earlier Community trade mark the trade mark has a reputation in the Community and, in the case of an earlier national trade mark, the trade mark has a reputation in the Member State concerned and where the use without due cause of the trade mark applied for would take unfair advantage of, or be detrimental to, the distinctive character or the repute of the earlier trade mark.

SECTION 2

EFFECTS OF COMMUNITY TRADE MARKS

Article 9

Rights conferred by a Community trade mark

1. A Community trade mark shall confer on the proprietor exclusive rights therein. The proprietor shall be entitled to prevent all third parties not having his consent from using in the course of trade:

(a) any sign which is identical with the Community trade mark in relation to goods or services which are identical with those for which the Community trade mark is registered;

(b) any sign where, because of its identity with or similarity to the Community trade mark and the identity or similarity of the goods or services covered by the Community trade mark and the sign, there exists a likelihood of confusion on the part of the public; the likelihood of confusion includes the likelihood of association between the sign and the trade mark;

(c) any sign which is identical with or similar to the Community trade mark in relation to goods or services which are not similar to those for which the Community trade mark is registered, where the latter has a reputation in the Community and where use of that sign without due cause takes unfair advantage of, or is detrimental to, the distinctive character or the repute of the Community trade mark.

2. The following, *inter alia*, may be prohibited under paragraph 1:

(a) affixing the sign to the goods or to the packaging thereof;

(b) offering the goods, putting them on the market or stocking them for these purposes under that sign, or offering or supplying services thereunder;

(c) importing or exporting the goods under that sign;

(d) using the sign on business papers and in advertising.

3. The rights conferred by a Community trade mark shall prevail against third parties from the date of publication of registration of the trade mark. Reasonable compensation may, however, be claimed in respect of matters arising after the date of publication of a Community trade mark application, which matters would, after publication of the registration of the trade mark, be prohibited by virtue of that publication. The court seized of the case may not decide upon the merits of the case until the registration has been published.

Article 10

Reproduction of Community trade marks in dictionaries

If the reproduction of a Community trade mark in a dictionary, encyclopaedia or similar reference work gives

the impression that it constitutes the generic name of the goods or services for which the trade mark is registered, the publisher of the work shall, at the request of the proprietor of the Community trade mark, ensure that the reproduction of the trade mark at the latest in the next edition of the publication is accompanied by an indication that it is a registered trade mark.

Article 11

Prohibition on the use of a Community trade mark registered in the name of an agent or representative

Where a Community trade mark is registered in the name of the agent or representative of a person who is the proprietor of that trade mark, without the proprietor's authorization, the latter shall be entitled to oppose the use of his mark by his agent or representative if he has not authorized such use, unless the agent or representative justifies his action.

Article 12

Limitation of the effects of a Community trade mark

A Community trade mark shall not entitle the proprietor to prohibit a third party from using in the course of trade:

(a) his own name or address;

(b) indications concerning the kind, quality, quantity, intended purpose, value, geographical origin, the time of production of the goods or of rendering of the service, or other characteristics of the goods or service;

(c) the trade mark where it is necessary to indicate the intended purpose of a product or service, in particular as accessories or spare parts,

provided he uses them in accordance with honest practices in industrial or commercial matters.

Article 13

Exhaustion of the rights conferred by a Community trade mark

1. A Community trade mark shall not entitle the proprietor to prohibit its use in relation to goods which have been put on the market in the Community under that trade mark by the proprietor or with his consent.

2. Paragraph 1 shall not apply where there exist legitimate reasons for the proprietor to oppose further commercialization of the goods, especially where the condition of the goods is changed or impaired after they have been put on the market.

Article 14

Complementary application of national law relating to infringement

1. The effects of Community trade marks shall be governed solely by the provisions of this Regulation. In other respects, infringement of a Community trade mark shall be governed by the national law relating to infringement of a national trade mark in accordance with the provisions of Title X.

2. This Regulation shall not prevent actions concerning a Community trade mark being brought under the law of Member States relating in particular to civil liability and unfair competition.

3. The rules of procedure to be applied shall be determined in accordance with the provisions of Title X.

SECTION 3

USE OF COMMUNITY TRADE MARKS

Article 15

Use of Community trade marks

1. If, within a period of five years following registration, the proprietor has not put the Community trade mark to genuine use in the Community in connection with the goods or services in respect of which it is registered, or if such use has been suspended during an uninterrupted period of five years, the Community trade mark shall be subject to the sanctions provided for in this Regulation, unless there are proper reasons for non-use.

2. The following shall also constitute use within the meaning of paragraph 1:

(a) use of the Community trade mark in a form differing in elements which do not alter the distinctive character of the mark in the form in which it was registered;

(b) affixing of the Community trade mark to goods or to the packaging thereof in the Community solely for export purposes.

3. Use of the Community trade mark with the consent of the proprietor shall be deemed to constitute use by the proprietor.

SECTION 4

COMMUNITY TRADE MARKS AS OBJECTS OF PROPERTY

Article 16

Dealing with Community trade marks as national trade marks

1. Unless Articles 17 to 24 provide otherwise, a Community trade mark as an object of property shall be

dealt with in its entirety, and for the whole area of the Community, as a national trade mark registered in the Member State in which, according to the Register of Community trade marks,

(a) the proprietor has his seat or his domicile on the relevant date; or

(b) where subparagraph (a) does not apply, the proprietor has an establishment on the relevant date.

2. In cases which are not provided for by paragraph 1, the Member State referred to in that paragraph shall be the Member State in which the seat of the Office is situated.

3. If two or more persons are mentioned in the Register of Community trade marks as joint proprietors, paragraph 1 shall apply to the joint proprietor first mentioned; failing this, it shall apply to the subsequent joint proprietors in the order in which they are mentioned. Where paragraph 1 does not apply to any of the joint proprietors, paragraph 2 shall apply.

Article 17

Transfer

1. A Community trade mark may be transferred, separately from any transfer of the undertaking, in respect of some or all of the goods or services for which it is registered.

2. A transfer of the whole of the undertaking shall include the transfer of the Community trade mark except where, in accordance with the law governing the transfer, there is agreement to the contrary or circumstances clearly dictate otherwise. This provision shall apply to the contractual obligation to transfer the undertaking.

3. Without prejudice to paragraph 2, an assignment of the Community trade mark shall be made in writing and shall require the signature of the parties to the contract, except when it is a result of a judgment; otherwise it shall be void.

4. Where it is clear from the transfer documents that because of the transfer the Community trade mark is likely to mislead the public concerning the nature, quality or geogaphical origin of the goods or services in respect of which it is registered, the Office shall not register the transfer unless the successor agrees to limit registration of the Community trade mark to goods or services in respect of which it is not likely to mislead.

5. On request of one of the parties a transfer shall be entered in the Register and published.

6. As long as the transfer has not been entered in the Register, the successor in title may not invoke the rights arising from the registration of the Community trade mark.

7. Where there are time limits to be observed *vis-à-vis* the Office, the successor in title may make the corresponding statements to the Office once the request for registration of the transfert has been received by the Office.

8. All documents which require notification to the proprietor of the Community trade mark in accordance with Article 77 shall be addressed to the person registered as proprietor.

Article 18

Transfer of a trade mark registered in the name of an agent

Where a Community trade mark is registered in the name of the agent or representative of a person who is the proprietor of that trade mark, without the proprietor's authorization, the latter shall be entitled to demand the assignment in his favour of the said registration, unless such agent or representative justifies his action.

Article 19

Rights in rem

1. A Community trade mark may, independently of the undertaking, be given as security or be the subject of rights in rem.

2. On request of one of the parties, rights mentioned in paragraph 1 shall be entered in the Register and published.

Article 20

Levy of execution

1. A Community trade mark may be levied in execution.

2. As regards the procedure for levy of execution in respect of a Community trade mark, the courts and authorities of the Member States determined in accordance with Article 16 shall have exclusive jurisdiction.

3. On request of one the parties, levy of execution shall be entered in the Register and published.

Article 21

Bankruptcy or like proceedings

1. Until such time as common rules for the Member States in this field enter into force, the only Member State in which a Community trade mark may be involved in bankruptcy or like proceedings shall be that in which such proceedings are first brought within the meaning of national law or of conventions applicable in this field.

2. Where a Community trade mark is involved in bankruptcy or like proceedings, on request of the competent national authority an entry to this effect shall be made in the Register and published.

Article 22

Licensing

1. A Community trade mark may be licensed for some or all of the goods or services for which it is registered and for the whole or part of the Community. A licence may be exclusive or non-exclusive.

2. The proprietor of a Community trade mark may invoke the rights conferred by that trade mark against a licensee who contravenes any provision in his licensing contract with regard to its duration, the form covered by the registration in which the trade mark may be used, the scope of the goods or services for which the licence is granted, the territory in which the trade mark may be affixed, or the quality of the goods manufactured or of the services provided by the licensee.

3. Without prejudice to the provisions of the licensing contract, the licensee may bring proceedings for infringement of a Community trade mark only if its proprietor consents thereto. However, the holder of an exclusive licence may bring such proceedings if the proprietor of the trade mark, after formal notice, does not himself bring infringement proceedings within an appropriate period.

4. A licensee shall, for the purpose of obtaining compensation for damage suffered by him, be entitled to intervene in infringement proceedings brought by the proprietor of the Community trade mark.

5. On request of one of the parties the grant or transfer of a licence in respect of a Community trade mark shall be entered in the Register and published.

Article 23

Effects *vis-à-vis* third parties

1. Legal acts referred to in Article 17, 19 and 22 concerning a Community trade mark shall only have effects *vis-à-vis* third parties in all the Member States after entry in the Register. Nevertheless, such an act, before it is so entered, shall have effect *vis-à-vis* third parties who have acquired rights in the trade mark after the date of that act but who knew of the act at the date on which the rights were acquired.

2. Paragraph 1 shall not apply in the case of a person who acquires the Community trade mark or a right concerning the Community trade mark by way of transfer of the whole of the undertaking or by any other universal succession.

3. The effects *vis-à-vis* third parties of the legal acts referred to in Article 20 shall be governed by the law of the Member State determined in accordance with Article 16.

4. Until such time as common rules for the Member States in the field of bankruptcy enter into force, the effects *vis-à-vis* third parties of bankruptcy or like proceedings shall be governed by the law of the Member State in which such proceedings are first brought within the meaning of national law or of conventions applicable in this field.

Article 24

The application for a Community trade mark as an object of property

Articles 16 to 23 shall apply to applications for Community trade marks.

TITLE III

APPLICATION FOR COMMUNITY TRADE MARKS

SECTION 1

FILING OF APPLICATIONS AND THE CONDITIONS WHICH GOVERN THEM

Article 25

Filing of applications

1. An application for a Community trade mark shall be filed, at the choice of the applicant,

(a) at the Office; or

(b) at the central industrial property office of a Member State or at the Benelux Trade Mark Office. An application filed in this way shall have the same effect as if it had been filed on the same date at the Office.

2. Where the application is filed at the central industrial property office of a Member State or at the Benelux Trade Mark Office, that office shall take all steps to

forward the application to the Office within two weeks after filing. It may charge the applicant a fee which shall not exceed the administrative costs of receiving and forwarding the application.

3. Applications referred to in paragraph 2 which reach the Office more than one month after filing shall be deemed withdrawn.

4. Ten years after the entry into force of this Regulation, the Commission shall draw up a report on the operation of the system of filing applications for Community trade marks, together with any proposals for modifying this system.

Article 26

Conditions with which applications must comply

1. An application for a Community trade mark shall contain:

(a) a request for the registration of a Community trade mark;

(b) information identifying the applicant;

(c) a list of the goods or services in respect of which the registration is requested;

(d) a representation of the trade mark.

2. The application for a Community trade mark shall be subject to the payment of the application fee and, when appropriate, of one or more class fees.

3. An application for a Community trade mark must comply with the conditions laid down in the implementing Regulation referred to in Article 140.

Article 27

Date of filing

The date of filing of a Community trade mark application shall be the date on which documents containing the information specified in Article 26 (1) are filed with the Office by the applicant or, if the application has been filed with the central office of a Member State or with the Benelux Trade Mark Office, with that office, subject to payment of the application fee within a period of one month of filing the abovementioned documents.

Article 28

Classification

Goods and services in respect of which Community trade marks are applied for shall be classified in conformity with the system of classification specified in the Implementing Regulation.

SECTION 2

PRIORITY

Article 29

Right of priority

1. A person who has duly filed an application for a trade mark in or for any State party to the Paris Convention, or his successors in title, shall enjoy, for the purpose of filing a Community trade mark application for the same trade mark in respect of goods or services which are identical with or contained within those for which the application has been filed, a right of priority during a period of six months from the date of filing of the first application.

2. Every filing that is equivalent to a regular national filing under the national law of the State where it was made or under bilateral or multilateral agreements shall be recognized as giving rise to a right of priority.

3. By a regular national filing is meant any filing that is sufficient to establish the date on which the application was filed, whatever may be the outcome of the application.

4. A subsequent application for a trade mark which was the subject of a previous first application in respect of the same goods or services, and which is filed in or in respect of the same State shall be considered as the first application for the purposes of determining priority, provided that, at the date of filing of the subsequent application, the previous application has been withdrawn, abandoned or refused, without being open to public inspection and without leaving any rights outstanding, and has not served as a basis for claiming a right of priority. The previous application may not thereafter serve as a basis for claiming a right of priority.

5. If the first filing has been made in a State which is not a party to the Paris Convention, paragraphs 1 to 4 shall apply only in so far as that State, according to published findings, grants, on the basis of a first filing made at the Office and subject to conditions equivalent to those laid down in this Regulation, a right of priority having equivalent effect.

Article 30

Claiming priority

An applicant desiring to take advantage of the priority of a previous application shall file a declaration of priority and a copy of the previous application. If the language of the latter is not one of the languages of the Office, the applicant shall file a translation of the previous application in one of those languages.

Article 31

Effect of priority right

The right of priority shall have the effect that the date of priority shall count as the date of filing of the Community trade mark application for the purposes of establishing which rights take precedence.

Article 32

Equivalence of Community filing with national filing

A Community trade mark application which has been accorded a date of filing shall, in the Member States, be equivalent to a regular national filing, where appropriate with the priority claimed for the Community trade mark application.

SECTION 3

EXHIBITION PRIORITY

Article 33

Exhibition priority

1. If an applicant for a Community trade mark has displayed goods or services under the mark applied for, at an official or officially recognized international exhibition falling within the terms of the Convention on International Exhibitions signed at Paris on 22 November 1928 and last revised on 30 November 1972, he may, if he files the application within a period of six months from the date of the first display of the goods or services under the mark applied for, claim a right of priority from that date within the meaning of Article 31.

2. An applicant who wishes to claim priority pursuant to paragraph 1 must file evidence of the display of goods or services under the mark applied for under the conditions laid down in the Implementing Regulation.

3. An exhibition priority granted in a Member State or in a third country does not extend the period of priority laid down in Article 29.

SECTION 4

CLAIMING THE SENIORITY OF A NATIONAL TRADE MARK

Article 34

Claiming the seniority of a national trade mark

1. The proprietor of an earlier trade mark registered in a Member State, including a trade mark registered in the Benelux countries, or registered under international arrangements having effect in a Member State, who applies for an identical trade mark for registration as a Community trade mark for goods or services which are identical with or contained within those for which the earlier trade mark has been registered, may claim for the Community trade mark the seniority of the earlier trade mark in respect of the Member State in or for which it is registered.

2. Seniority shall have the sole effect under this Regulation that, where the proprietor of the Community trade mark surrenders the earlier trade mark or allows it to lapse, he shall be deemed to continue to have the same rights as he would have had if the earlier trade mark had continued to be registered.

3. The seniority claimed for the Community trade mark shall lapse if the earlier trade mark the seniority of which is claimed is declared to have been revoked or to be invalid or if it is surrendered prior to the registration of the Community trade mark.

Article 35

Claiming seniority after registration of the Community trade mark

1. The proprietor of a Community trade mark who is the proprietor of an earlier identical trade mark registered in a Member State, including a trade mark registered in the Benelux countries, or of a trade mark registered under international arrangements having effect in a Member State, for identical goods or services, may claim the seniority of the earlier trade mark in respect of the Member State in or for which it is registered.

2. Article 34 (2) and (3) shall apply.

TITLE IV

REGISTRATION PROCEDURE

SECTION 1

EXAMINATION OF APPLICATIONS

Article 36

Examination of the conditions of filing

1. The Office shall examine whether:

(a) the Community trade mark application satisfies the requirements for the accordance of a date of filing in accordance with Article 27;

(b) the Community trade mark application complies with the conditions laid down in the Implementing Regulation;

(c) where appropriate, the class fees have been paid within the prescribed period.

2. Where the Community trade mark application does not satisfy the requirements referred to in paragraph 1, the Office shall request the applicant to remedy the deficiencies or the default on payment within the prescribed period.

3. If the deficiencies or the default on payment established pursuant to paragraph 1 (a) are not remedied within this period, the application shall not be dealt with as a Community trade mark application. If the applicant complies with the Office's request, the Office shall accord as the date of filing of the application the date on which the deficiencies or the default on payment established are remedied.

4. If the deficiencies established pursuant to paragraph 1 (b) are not remedied within the prescribed period, the Office shall refuse the application.

5. If the default on payment established pursuant to paragraph 1 (c) is not remedied within the prescribed period, the application shall be deemed to be withdrawn unless it is clear which categories of goods or services the amount paid is intended to cover.

6. Failure to satisfy the requirements concerning the claim to priority shall result in loss of the right of priority for the application.

7. Failure to satisfy the requirements concerning the claiming of seniority of a national trade mark shall result in loss of that right for the application.

Article 37

Examination of the conditions relating to the entitlement of the proprietor

1. Where, pursuant to Article 5, the applicant may not be the proprietor of a Community trade mark, the application shall be refused.

2. The application may not be refused before the applicant has been given the opportunity to withdraw his application or submit his observations.

Article 38

Examination as to absolute grounds for refusal

1. Where, under Article 7, a trade mark is ineligible for registration in respect of some or all of the goods or services covered by the Community trade mark application, the application shall be refused as regards those goods or services.

2. Where the trade mark contains an element which is not distinctive, and where the inclusion of said element in the trade mark could give rise to doubts as to the scope of protection of the trade mark, the Office may request, as a condition for registration of said trade mark, that the applicant state that he disclaims any exclusive right to such element. Any disclaimer shall be published together with the application or the registration of the Community trade mark, as the case may be.

3. The application shall not be refused before the applicant has been allowed the opportunity of withdrawing or amending the application or of submitting his observations.

SECTION 2

SEARCH

Article 39

Search

1. Once the Office has accorded a date of filing to a Community trade mark application and has established that the applicant satisfies the conditions referred to in Article 5, it shall draw up a Community search report citing those earlier Community trade marks or Community trade mark applications discovered which may be invoked under Article 8 against the registration of the Community trade mark applied for.

2. As soon as a Community trade mark application has been accorded a date of filing, the Office shall transmit a copy thereof to the central industrial property office of each Member State which has informed the Office of its decision to operate a search in its own register of trade marks in respect of Community trade mark applications.

3. Each of the central industrial property offices referred to in paragraph 2 shall communicate to the Office within three months as from the date on which it received the Community trade mark application a search report which shall either cite those earlier national trade marks or trade mark applications discovered which may be invoked under Article 8 against the registration of the Community trade mark applied for, or state that the search has revealed no such rights.

4. An amount shall be paid by the Office to each central industrial property office for each search report provided by that office in accordance with paragraph 3. The amount, which shall be the same for each office, shall be fixed by the Budget Committee by means of a decision adopted by a majority of three-quarters of the representatives of the Member States.

5. The Office shall transmit without delay to the applicant for the Community trade mark the Community search report and the national search reports received within the time limit laid down in paragraph 3.

6. Upon publication of the Community trade mark application, which may not take place before the expiry of a period of one month as from the date on which the Office transmits the search reports to the applicant, the Office shall inform the proprietors of any earlier Community trade marks or Community trade mark applications cited in the Community search report of the publication of the Community trade mark application.

7. The Commission shall, five years after the opening of the Office for the filing of applications, submit to the Council a report on the operation of the system of searching resulting from this Article, including the payments made to Member States under paragraph 4, and, if necessary, appropriate proposals for amending this Regulation with a view to adapting the system of searching on the basis of the experience gained and bearing in mind developments in searching techniques.

SECTION 3

PUBLICATION OF THE APPLICATION

Article 40

Publication of the application

1. If the conditions which the application for a Community trade mark must satisfy have been fulfilled and if the period referred to in Article 39 (6) has expired, the application shall be published to the extent that it has not been refused pursuant to Articles 37 and 38.

2. Where, after publication, the application is refused under Articles 37 and 38, the decision that it has been refused shall be published upon becoming final.

SECTION 4

OBSERVATIONS BY THIRD PARTIES AND OPPOSITION

Article 41

Observations by third parties

1. Following the publication of the Community trade mark application, any natural or legal person and any group or body representing manufacturers, producers, suppliers of services, traders or consumers may submit to the Office written observations, explaining on which grounds under Article 7, in particular, the trade mark shall not be registered *ex officio*. They shall not be parties to the proceedings before the Office.

2. The observations referred to in paragraph 1 shall be communicated to the applicant who may comment on them.

Article 42

Opposition

1. Within a period of three months following the publication of a Community trade mark application, notice of opposition to registration of the trade mark may be given on the grounds that it may not be registered under Article 8:

(a) by the proprietors of earlier trade marks referred to in Article 8 (2) as well as licensees authorized by the proprietors of those trade marks, in respect of Article 8 (1) and (5);

(b) by the proprietors of trade marks referred to in Article 8 (3);

(c) by the proprietors of earlier marks or signs referred to in Article 8 (4) and by persons authorized under the relevant national law to exercise these rights.

2. Notice of opposition to registration of the trade mark may also be given, subject to the conditions laid down in paragraph 1, in the event of the publication of an amended application in accordance with the second sentence of Article 44 (2).

3. Opposition must be expressed in writing and must specify the grounds on which it is made. It shall not be

treated as duly entered until the opposition fee has been paid. Within a period fixed by the Office, the opponent may submit in support of his case facts, evidence and arguments.

Article 43

Examination of opposition

1. In the examination of the opposition the Office shall invite the parties, as often as necessary, to file observations, within a period set them by the Office, on communications from the other parties or issued by itself.

2. If the applicant so requests, the proprietor of an earlier Community trade mark who has given notice of opposition shall furnish proof that, during the period of five years preceding the date of publication of the Community trade mark application, the earlier Community trade mark has been put to genuine use in the Community in connection with the goods or services in respect of which it is registered and which he cites as justification for his opposition, or that there are proper reasons for non-use, provided the earlier Community trade mark has at that date been registered for not less than five years. In the absence of proof to this effect, the opposition shall be rejected. If the earlier Community trade mark has been used in relation to part only of the goods or services for which it is registered it shall, for the purposes of the examination of the opposition, be deemed to be registered in respect only of that part of the goods or services.

3. Paragraph 2 shall apply to earlier national trade marks referred to in Article 8 (2) (a), by substituting use in the Member State in which the earlier national trade mark is protected for use in the Community.

4. The Office may, if it thinks fit, invite the parties to make a friendly settlement.

5. If examination of the opposition reveals that the trade mark may not be registered in respect of some or all of the goods or services for which the Community trade mark application has been made, the application shall be refused in respect of those goods or services. Otherwise the opposition shall be rejected.

6. The decision refusing the application shall be published upon becoming final.

SECTION 5

WITHDRAWAL, RESTRICTION AND AMENDMENT OF THE APPLICATION

Article 44

Withdrawal, restriction and amendment of the application

1. The applicant may at any time withdraw his Community trade mark application or restrict the list of goods or services contained therein. Where the application has already been published, the withdrawal or restriction shall also be published.

2. In other respects, a Community trade mark application may be amended, upon request of the applicant, only by correcting the name and address of the applicant, errors of wording or of copying, or obvious mistakes, provided that such correction does not substantially change the trade mark or extend the list of goods or services. Where the amendments affect the representation of the trade mark or the list of goods or services and are made after publication of the application, the trade mark application shall be published as amended.

SECTION 6

REGISTRATION

Article 45

Registration

Where an application meets the requirements of this Regulation and where no notice of opposition has been given within the period referred to in Article 42 (1) or where opposition has been rejected by a definitive decision, the trade mark shall be registered as a Community trade mark, provided that the registration fee has been paid within the period prescribed. If the fee is not paid within this period the application shall be deemed to be withdrawn.

TITLE V

DURATION, RENEWAL AND ALTERATION OF COMMUNITY TRADE MARKS

Article 46

Duration of registration

Community trade marks shall be registered for a period of ten years from the date of filing of the application. Registration may be renewed in accordance with Article 47 for further periods of ten years.

Article 47

Renewal

1. Registration of the Community trade mark shall be renewed at the request of the proprietor of the trade mark or any person expressly authorized by him, provided that the fees have been paid.

2. The Office shall inform the proprietor of the Community trade mark, and any person having a registered right in respect of the Community trade mark, of the expiry of the registration in good time before the said expiry. Failure to give such information shall not involve the responsibility of the Office.

3. The request for renewal shall be submitted within a period of six months ending on the last day of the month in which protection ends. The fees shall also be paid within this period. Failing this, the request may be submitted and the fees paid within a further period of six months following the day referred to in the first sentence, provided that an additional fee is paid within this further period.

4. Where the request is submitted or the fees paid in respect of only some of the goods or services for which the Community trade mark is registered, registration shall be renewed for those goods or services only.

5. Renewal shall take effect from the day following the date on which the existing registration expires. The renewal shall be registered.

Article 48

Alteration

1. The Community trade mark shall not be altered in the register during the period of registration or on renewal thereof.

2. Nevertheless, where the Community trade mark includes the name and address of the proprietor, any alteration thereof not substantially affecting the identity of the trade mark as originally registered may be registered at the request of the proprietor.

3. The publication of the registration of the alteration shall contain a representation of the Community trade mark as altered. Third parties whose rights may be affected by the alteration may challenge the registration thereof within a period of three months following publication.

TITLE VI

SURRENDER, REVOCATION AND INVALIDITY

SECTION 1

SURRENDER

Article 49

Surrender

1. A Community trade mark may be surrendered in respect of some or all of the goods or services for which it is registered.

2. The surrender shall be declared to the Office in writing by the proprietor of the trade mark. It shall not have effect until it has been entered in the Register.

3. Surrender shall be entered only with the agreement of the proprietor of a right entered in the Register. If a licence has been registered, surrender shall only be entered in the Register if the proprietor of the trade mark proves that he has informed the licensee of his intention to surrender; this entry shall be made on expiry of the period prescribed by the Implementing Regulation.

SECTION 2

GROUNDS FOR REVOCATION

Article 50

Grounds for revocation

1. The rights of the proprietor of the Community trade mark shall be declared to be revoked on application to the Office or on the basis of a counterclaim in infringement proceedings:

(a) if, within a continuous period of five years, the trade mark has not been put to genuine use in the Community in connection with the goods or services in respect of which it is registered, and there are no proper reasons for non-use; however, no person may claim that the proprietor's rights in a Community trade mark should be revoked where, during the interval between expiry of the five-year period and filing of the application or counterclaim, genuine use of the trade mark has been started or resumed; the commencement or resumption of use within a period of three months preceding the filing of the application

or counterclaim which began at the earliest on expiry of the continuous period of five years of non-use shall, however, be disregarded where preparations for the commencement or resumption occur only after the proprietor becomes aware that the application or counterclaim may be filed;

(b) if, in consequence of acts or inactivity of the proprietor, the trade mark has become the common name in the trade for a product or service in respect of which it is registered;

(c) if, in consequence of the use made of it by the proprietor of the trade mark or with his consent in respect of the goods or services for which it is registered, the trade mark is liable to mislead the public, particularly as to the nature, quality or geographical origin of those goods or services;

(d) if the proprietor of the trade mark no longer satisfies the conditions laid down by Article 5.

2. Where the grounds for revocation of rights exist in respect of only some of the goods or services for which the Community trade mark is registered, the rights of the proprietor shall be declared to be revoked in respect of those goods or services only.

SECTION 3

GROUNDS FOR INVALIDITY

Article 51

Absolute grounds for invalidity

1. A Community trade mark shall be declared invalid on application to the Office or on the basis of a counterclaim in infringement proceedings,

(a) where the Community trade mark has been registered in breach of the provisions of Article 5 or of Article 7;

(b) where the applicant was acting in bad faith when he filed the application for the trade mark.

2. Where the Community trade mark has been registered in breach of the provisions of Article 7 (1) (b), (c) or (d), it may nevertheless not be declared invalid if, in consequence of the use which has been made of it, it has after registration acquired a distinctive character in relation to the goods or services for which it is registered.

3. Where the ground for invalidity exists in respect of only some of the goods or services for which the Community trade mark is registered, the trade mark shall be declared invalid as regards those goods or services only.

Article 52

Relative grounds for invalidity

1. A Community trade mark shall be declared invalid on application to the Office or on the basis of a counterclaim in infringement proceedings:

(a) where there is an earlier trade mark as referred to in Article 8 (2) and the conditions set out in paragraph 1 or paragraph 5 of that Article are fulfilled;

(b) where there is a trade mark as referred to in Article 8 (3) and the conditions set out in that paragraph are fulfilled;

(c) where there is an earlier right as referred to in Article 8 (4) and the conditions set out in that paragraph are fulfilled.

2. A Community trade mark shall also be declared invalid on application to the Office or on the basis of a counterclaim in infringement proceedings where the use of such trade mark may be prohibited pursuant to the national law governing the protection of any other earlier right an in particular:

(a) a right to a name;

(b) a right of personal portrayal;

(c) a copyright;

(d) an industrial property right.

3. A Community trade mark may not be declared invalid where the proprietor of a right referred to in paragraphs 1 or 2 consents expressly to the registration of the Community trade mark before submission of the application for a declaration of invalidity or the counterclaim.

4. Where the proprietor of one of the rights referred to in paragraphs 1 or 2 has previously applied for a declaration that a Community trade mark is invalid or made a counterclaim in infringement proceedings, he may not submit a new application for a declaration of invalidity or lodge a counterclaim on the basis of another of the said rights which he could have invoked in support of his first application or counterclaim.

5. Article 51 (3) shall apply.

Article 53

Limitation in consequence of acquiescence

1. Where the proprietor of a Community trade mark has acquiesced, for a period of five successive years, in the use of a later Community trade mark in the Community while being aware of such use, he shall no longer be entitled on the basis of the earlier trade mark either to apply for a declaration that the later trade mark is invalid or to oppose the use of the later trade mark in respect of the goods or services for which the later trade mark has been used, unless registration of the later Community trade mark was applied for in bad faith.

2. Where the proprietor of an earlier national trade mark as referred to in Article 8 (2) or of another earlier sign referred to in Article 8 (4) has acquiesced, for a period of five successive years, in the use of a later Community trade mark in the Member State in which the earlier trade mark or the other earlier sign is protected while being aware of such use, he shall no longer be entitled on the basis of the earlier trade mark or of the other earlier sign either to apply for a declaration that the later trade mark is invalid or to oppose the use of the

later trade mark in respect of the goods or services for which the later trade mark has been used, unless registration of the later Community trade mark was applied for in bad faith.

3. In the cases referred to in paragraphs 1 and 2, the proprietor of a later Community trade mark shall not be entitled to oppose the use of the earlier right, even though that right may no longer be invoked against the later Community trade mark.

SECTION 4

CONSEQUENCES OF REVOCATION AND INVALIDITY

Article 54

Consequences of revocation and invalidity

1. The Community trade mark shall be deemed not to have had, as from the date of the application for revocation or of the counterclaim, the effects specified in this Regulation, to the extent that the rights of the proprietor have been revoked. An earlier date, on which one of the grounds for revocation occurred, may be fixed in the decision at the request of one of the parties.

2. The Community trade mark shall be deemed not to have had, as from the outset, the effects specified in this Regulation, to the extent that the trade mark has been declared invalid.

3. Subject to the national provisions relating either to claims for compensation for damage caused by negligence or lack of good faith on the part of the proprietor of the trade mark, or to unjust enrichment, the retroactive effect of revocation or invalidity of the trade mark shall not affect:

(a) any decision on infringement which has acquired the authority of a final decision and been enforced prior to the revocation or invalidity decision;

(b) any contract concluded prior to the revocation or invalidity decision, in so far as it has been performed before that decision; however, repayment, to an extent justified by the circumstances, of sums paid under the relevant contract, may be claimed on grounds of equity.

SECTION 5

PROCEEDINGS IN THE OFFICE IN RELATION TO REVOCATION OR INVALIDITY

Article 55

Application for revocation or for a declaration of invalidity

1. An application for revocation of the rights of the proprietor of a Community trade mark or for a declaration that the trade mark is invalid may be submitted to the Office:

(a) where Articles 50 and 51 apply, by any natural or legal person and any group or body set up for the purpose of representing the interests of manufacturers, producers, suppliers of services, traders or consumers, which under the terms of the law governing it has the capacity in its own name to sue and be sued;

(b) where Article 52 (1) applies, by the persons referred to in Article 42 (1);

(c) where Article 52 (2) applies, by the owners of the earlier rights referred to in that provision or by the persons who are entitled under the law of the Member State concerned to exercise the rights in question.

2. The application shall be filed in a written reasoned statement. It shall not be deemed to have been filed until the fee has been paid.

3. An application for revocation or for a declaration of invalidity shall be inadmissible if an application relating to the same subject matter and cause of action, and involving the same parties, has been adjudicated on by a court in a Member State and has acquired the authority of a final decision.

Article 56

Examination of the application

1. In the examination of the application for revocation of rights or for a declaration of invalidity, the Office shall invite the parties, as often as necessary, to file observations, within a period to be fixed by the Office, on communications from the other parties or issued by itself.

2. If the proprietor of the Community trade mark so requests, the proprietor of an earlier Community trade mark, being a party to the invalidity proceedings, shall furnish proof that, during the period of five years preceding the date of the application for a declaration of invalidity, the earlier Community trade mark has been put to genuine use in the Community in connection with the goods or services in respect of which it is registered and which he cites as justification for his application, or that there are proper reasons for non-use, provided the earlier Community trade mark has at that date been registered for non-use, provided the earlier Community trade mark has at that date been registered for not less than five years. If, at the date on which the Community trade mark application was published, the earlier Community trade mark had been registered for not less than five years, the proprietor of the earlier Community trade mark shall furnish proof that, in addition, the conditions contained in Article 43 (2) were satisfied at that date. In the absence of proof to this effect the application for a declaration of invalidity shall be rejected. If the earlier Community trade mark has been used in relation to part only of the goods or services for which it is registered it shall, for the purpose of the examination of the application for a declaration of invalidity, be deemed to be registered in respect only of that part of the goods or services.

3. Paragraph 2 shall apply to earlier national trade marks referred to in Article 8 (2) (a), by substituting use

in the Member State in which the earlier national trade mark is protected for use in the Community.

4. The Office may, if it thinks fit, invite the parties to make a friendly settlement.

5. If the examination of the application for revocation of rights or for a declaration of invalidity reveals that the trade mark should not have been registered in respect of some or all of the goods or services for which it is registered, the rights of the proprietor of the Community trade mark shall be revoked or it shall be declared invalid in respect of those goods or services. Otherwise the application for revocation of rights or for a declaration of invalidity shall be rejected.

6. The decision revoking the rights of the proprietor of the Community trade mark or declaring it invalid shall be entered in the Register upon becoming final.

TITLE VII

APPEALS

Article 57

Decisions subject to appeal

1. An appeal shall lie from decisions of the examiners, Opposition Divisions, Administration of Trade Marks and Legal Devision and Cancellation Divisions. It shall have suspensive effect.

2. A decision which does not terminate proceedings as regards one of the parties can only be appealed together with the final decision, unless the decision allows separate appeal.

Article 58

Persons entitled to appeal and to be parties to appeal proceedings

Any party to proceedings adversely affected by a decision may appeal. Any other parties to the proceedings shall be parties to the appeal proceedings as of right.

Article 59

Time limit and form of appeal

Notice of appeal must be filed in writing at the Office within two months after the date of notification of the decision appealed from. The notice shall be deemed to have been filed only when the fee for appeal has been paid. Within four months after the date of notification of the decision, a written statement setting out the grounds of appeal must be filed.

Article 60

Interlocutory revision

1. If the department whose decision is contested considers the appeal to be admissible and well founded, it shall rectify its decision. This shall not apply where the appellant is opposed by another party to the proceedings.

2. If the decision is not rectified within one month after receipt of the statement of grounds, the appeal shall be remitted to the Board of Appeal without delay, and without comment as to its merit.

Article 61

Examination of appeals

1. If the appeal is admissible, the Board of Appeal shall examine whether the appeal is allowable.

2. In the examination of the appeal, the Board of Appeal shall invite the parties, as often as necessary, to file observations, within a period to be fixed by the Board of Appeal, on communications from the other parties or issued by itself.

Article 62

Decisions in respect of appeals

1. Following the examination as to the allowability of the appeal, the Board of Appeal shall decide on the appeal. The Board of Appeal may either exercise any power within the competence of the department which was responsible for the decision appealed or remit the case to that department for further prosecution.

2. If the Board of Appeal remits the case for further prosecution to the department whose decision was appealed, that department shall be bound by the ratio decidendi of the Board of Appeal, in so far as the facts are the same.

3. The decisions of the Boards of Appeal shall take effect only as from the date of expiration of the period referred to in Article 63 (5) or, if an action has been brought before the Court of Justice within that period, as from the date of rejection of such action.

Article 63

Actions before the Court of Justice

1. Actions may be brought before the Court of Justice against decisions of the Boards of Appeal on appeals.

2. The action may be brought on grounds of lack of competence, infringement of an essential procedural requirement, infringement of the Treaty, of this Regulation or of any rule of law relating to their application or misuse of power.

3. The Court of Justice has jurisdiction to annul or to alter the contested decision.

4. The action shall be open to any party to proceedings before the Board of Appeal adversely affected by its decision.

5. The action shall be brought before the Court of Justice within two months of the date of notification of the decision of the Board of Appeal.

6. The Office shall be required to take the necessary measures to comply with the judgment of the Court of Justice.

TITLE VIII

COMMUNITY COLLECTIVE MARKS

Article 64

Community collective marks

1. A Community collective mark shall be a Community trade mark which is described as such when the mark is applied for and is capable of distinguishing the goods or services of the members of the association which is the proprietor of the mark from those of other undertakings. Associations of manufacturers, producers, suppliers of services, or traders which, under the terms of the law governing them, have the capacity in their own name to have rights and obligations of all kinds, to make contracts or accomplish other legal acts and to sue and be sued, as well as legal persons governed by public law, may apply for Community collective marks.

2. In derogation from Article 7 (1) (c), signs or indications which may serve, in trade, to designate the geographical origin of the goods or services may constitute Community collective marks within the meaning of paragraph 1. A collective mark shall not entitle the proprietor to prohibit a third party from using in the course of trade such signs or indications, provided he uses them in accordance with honest practices in industrial or commercial matters; in particular, such a mark may not be invoked against a third party who is entitled to use a geographical name.

3. The provisions of this Regulation shall apply to Community collective marks, unless Articles 65 to 72 provide otherwise.

Article 65

Regulations governing use of the mark

1. An applicant for a Community collective mark must submit regulations governing its use within the period prescribed.

2. The regulations governing use shall specify the persons authorized to use the mark, the conditions of membership of the association and, where they exist, the conditions of use of the mark including sanctions. The regulations governing use of a mark referred to in Article 64 (2) must authorize any person whose goods or services originate in the geographical area concerned to become a member of the association which is the proprietor of the mark.

Article 66

Refusal of the application

1. In addition to the grounds for refusal of a Community trade mark application provided for in Articles 36 and 38, an application for a Community collective mark shall be refused where the provisions of Article 64 or 65 are not satisfied, or where the regulations governing use are contrary to public policy or to accepred principles of morality.

2. An application for a Community collective mark shall also be refused if the public is liable to be misled as regards the character or the significance of the mark, in particular if it is likely to be taken to be something other than a collective mark.

3. An application shall not be refused if the applicant, as a result of amendment of the regulations governing use, meets the requirements of paragraphs 1 and 2.

Article 67

Obervations by third parties

Apart from the cases mentioned in Article 41, any person, group or body referred to in that Article may submit to the Office written observations based on the particular grounds on which the application for a Community collective mark should be refused under the terms of Article 66.

those particulars the registration or inclusion of which is provided for by this Regulation or by the Implementing Regulation. The Register shall be open to public inspection.

Article 84

Inspection of files

1. The files relating to Community trade mark applications which have not yet been published shall not be made available for inspection without the consent of the applicant.

2. Any person who can prove that the applicant for a Community trade mark has stated that after the trade mark has been registered he will invoke the rights under it against him may obtain inspection of the files prior to the publication of that application and without the consent of the applicant.

3. Subsequent to the publication of the Community trade mark application, the files relating to such application and the resulting trade mark may be inspected on request.

4. However, where the files are inspected pursuant to paragraphs 2 or 3, certain documents in the file may be withheld from inspection in accordance with the provisions of the Implementing Regulation.

Article 85

Periodical publications

The Office shall periodically publish:

(a) a Community Trade Marks Bulletin containing entries made in the Register of Community trade marks as well as other particulars the publication of which is prescribed by this Regulation or by the Implementing Regulation;

(b) an Official Journal containing notices and information of a general character issued by the President of the Office, as well as any other information relevant to this Regulation or its implementation.

Article 86

Administrative cooperation

Unless otherwise provided in this Regulation or in national laws, the Office and the courts or authorities of the Member States shall on request give assistance to each other by communicating information or opening files for inspection. Where the Office lays files open to inspection by courts, Public Prosecutors' Offices or central industrial property offices, the inspection shall not be subject to the restrictions laid down in Article 84.

Article 87

Exchange of publications

1. The Office and the central industrial property offices of the Member States shall despatch to each other on request and for their own use one or more copies of their respective publications free of charge.

2. The Office may conclude agreements relating to the exchange or supply of publications.

SECTION 4

REPRESENTATION

Article 88

General principles of representation

1. Subject to the provisions of paragraph 2, no person shall be compelled to be represented before the Office.

2. Without prejudice to paragraph 3, second sentence, natural or legal persons not having either their domicile or their principal place of business or a real and effective industrial or commercial establishment in the Community must be represented before the Office in accordance with Article 89 (1) in all proceedings established by this Regulation, other than in filing an application for a Community trade mark; the Implementing Regulation may permit other exceptions.

3. Natural or legal persons having their domicile or principal place of business or a real and effective industrial or commercial establishment in the Community may be represented before the Office by an employee, who must file with it a signed authorization for insertion on the files, the details of which are set out in the Implementing Regulation. An employee of a legal person to which this paragraph applies may also represent other legal persons which have economic connections with the first legal person, even if those other legal persons have neither their domicile nor their principal place of business nor a real and effective industrial or commercial establishment within the Community.

Article 89

Professional representatives

1. Representation of natural or legal persons before the Office may only be undertaken by;

(a) any legal practitioner qualified in one of the Member States and having his place of business within the Community, to the extent that he is entitled, within the said State, to act as a representative in trade mark matters; or

(b) professional representatives whose names appear on the list maintained for this purpose by the Office.

Representatives acting before the Office must file with it a signed authorization for insertion on the files, the details of which are set out in the Implementing Regulation.

2. Any natural person who fulfils the following conditions may be entered on the list of professional representatives:

(a) he must be a national of one of the Member States;

(b) he must have his place of business or employment in the Community;

(c) he must be entitled to represent natural or legal persons in trade mark matters before the central industrial property office of the Member State in which he has his place of business or employment. Where, in that State, the entitlement is not conditional upon the requirement of special professional qualifications, persons applying to be entered on the list who act in trade mark matters before the central industrial property office of the said State must have habitually so acted for at least five years. However, persons whose professional qualification to represent natural or legal persons in trade mark matters before the central industrial property office of one of the Member States is officially recognized in accordance with the regulations laid down by such State shall not be subject to the condition of having exercised the profession.

3. Entry shall be effected upon request, accompanied by a certificate furnished by the central industrial property office of the Member State concerned, which must indicate that the conditions laid down in paragraph 2 are fulfilled.

4. The President of the Office may grant exemption from:

(a) the requirement of paragraph 2 (c), second sentence, if the applicant furnishes proof that he has acquired the requisite qualification in another way;

(b) the requirement of paragraph 2 (a) in special circumstances.

5. The conditions under which a person may be removed from the list of professional representatives shall be laid down in the Implementing Regulation.

TITLE X

JURISDICTION AND PROCEDURE IN LEGAL ACTIONS RELATING TO COMMUNITY TRADE MARKS

SECTION 1

APPLICATION OF THE CONVENTION ON JURISDICTION AND ENFORCEMENT

Article 90

Application of the Convention on Jurisdiction and Enforcement

1. Unless otherwise specified in this Regulation, the Convention on Jurisdiction and the Enforcement of Judgments in Civil and Commercial Matters, signed in Brussels on 27 September 1968, as amended by the Conventions on the Accession to that Convention of the States acceding to the European Communities, the whole of which Convention and of which Conventions of Accession are hereinafter referred to as the 'Convention on Jurisdiction and Enforcement', shall apply to proceedings relating to Community trade marks and applications for Community trade marks, as well as to proceedings relating to simultaneous and successive actions on the basis of Community trade marks and national trade marks.

2. In the case of proceedings in respect of the actions and claims referred to in Article 92:

(a) Articles 2, 4, 5 (1), (3), (4) and (5) and Article 24 of the Convention on Jurisdiction and Enforcement shall not apply;

(b) Articles 17 and 18 of that Convention shall apply subject to the limitations in Article 93 (4) of this Regulation;

(c) the provisions of Title II of that Convention which are applicable to persons domiciled in a Member State shall also be applicable to persons who do not have a domicile in any Member State but have an establishment therein.

SECTION 2

DISPUTES CONCERNING THE INFRINGEMENT AND VALIDITY OF COMMUNITY TRADE MARKS

Article 91

Community trade mark courts

1. The Member States shall designate in their territories as limited a number as possible of national courts and tribunals of first and second instance, hereinafter referred to as 'Community trade mark courts', which shall perform the functions assigned to them by this Regulation.

2. Each Member State shall communicate to the Commission within three years of the entry into force of this Regulation a list of Community trade mark courts indicating their names and their territorial jurisdiction.

3. Any change made after communication of the list referred to in paragraph 2 in the number, names or territorial jurisdiction of the courts shall be notified without delay by the Member State concerned to the Commission.

4. The information referred to in paragraphs 2 and 3 shall be notified by the Commission to the Member States and published in the *Official Journal of the European Communities*.

5. As long as a Member State has not communicated the list as stipulated in paragraph 2, jurisdiction for any proceedings resulting from an action or application covered by Article 92, and for which the courts of that State have jurisdiction under Article 93, shall lie with that court of the State in question which would have jurisdiction *ratione loci* and *ratione materiae* in the case of proceedings relating to a national trade mark registered in that State.

Article 92

Jurisdiction over infringement and validity

The Community trade mark courts shall have exclusive jurisdiction:

(a) for all infringement actions and — if they are permitted under national law — actions in respect of threatened infringement relating to Community trade marks;

(b) for actions for declaration of non-infringement, if they are permitted under national law;

(c) for all actions brought as a result of acts referred to in Article 9 (3), second sentence;

(d) for counterclaims for revocation or for a declaration of invalidity of the Community trade mark pursuant to Article 96.

Article 93

International jurisdiction

1. Subject to the provisions of this Regulation as well as to any provisions of the Convention on Jurisdiction and Enforcement applicable by virtue of Article 90, proceedings in respect of the actions and claims referred to in Article 92 shall be brought in the courts of the Member State in which the defendant is domiciled or, if he is not domiciled in any of the Member States, in which he has an establishment.

2. If the defendant is neither domiciled nor has an establishment in any of the Member States, such proceedings shall be brought in the courts of the Member State in which the plaintiff is domiciled or, if he is not domiciled in any of the Member States, in which he has an establishment.

3. If neither the defendant nor the plaintiff is so domiciled or has such an establishment, such proceedings shall be brought in the courts of the Member State where the Office has its seat.

4. Notwithstanding the provisions of paragraphs 1, 2 and 3:

(a) Article 17 of the Convention on Jurisdiction and Enforcement shall apply if the parties agree that a different Community trade mark court shall have jurisdiction;

(b) Article 18 of that Convention shall apply if the defendant enters an appearance before a different Community trade mark court.

5. Proceedings in respect of the actions and claims referred to in Article 92, with the exception of actions for a declaration of non-infringement of a Community trade mark, may also be brought in the courts of the Member State in which the act of infringement has been committed or threatened, or in which an act within the meaning of Article 9 (3), second sentence, has been committed.

Article 94

Extent of jurisdiction

1. A Community trade mark court whose jurisdiction is based on Article 93 (1) to (4) shall have jurisdiction in respect of:

— acts of infringement committed or threatened within the territory of any of the Member States,

— acts within the meaning of Article 9 (3), second sentence, committed within the territory of any of the Member States.

2. A Community trade mark court whose jurisdiction is based on Article 93 (5) shall have jurisdiction only in respect of acts committed or threatened within the territory of the Member State in which that court is situated.

Article 95

Presumption of validity — Defence as to the merits

1. The Community trade mark courts shall treat the Community trade mark as valid unless its validity is put in issue by the defendant with a counterclaim for revocation or for a declaration of invalidity.

2. The validity of a Community trade mark may not be put in issue in an action for a declaration of non-infringement.

3. In the actions referred to in Article 92 (a) and (c) a plea relating to revocation or invalidity of the Community trade mark submitted otherwise than by way of a counterclaim shall be admissible in so far as the defendant claims that the rights of the proprietor of the Community trade mark could be revoked for lack of use or that Community trade mark could be declared invalid on account of an earlier right of the defendant.

Article 96

Counterclaims

1. A counterclaim for revocation or for a declaration of invalidity may only be based on the grounds for revocation or invalidity mentioned in this Regulation.

2. A Community trade mark court shall reject a counterclaim for revocation or for a declaration of invalidity if a decision taken by the Office relating to the same subject matter and cause of action and involving the same parties has already become final.

3. If the counterclaim is brought in a legal action to which the proprietor of the trade mark is not already a party, he shall be informed thereof and may be joined as a party to the action in accordance with the conditions set out in national law.

4. The Community trade mark court with which a counterclaim for revocation or for a declaration of invalidity of the Community trade mark has been filed shall inform the Office of the date on which the counterclaim was filed. The latter shall record this fact in the Register of Community trade marks.

5. Article 56 (3), (4), (5) and (6) shall apply.

6. Where a Community trade mark court has given a judgment which has become final on a counterclaim for revocation or for invalidity of a Community trade mark, a copy of the judgment shall be sent to the Office. Any party may request information about such transmission. The Office shall mention the judgment in the Register of Community trade marks in accordance with the provisions of the Implementing Regulation.

7. The Community trade mark court hearing a counterclaim for revocation or for a declaration of invalidity may stay the proceedings on application by the proprietor of the Community trade mark and after hearing the other parties and may request the defendant to submit an application for revocation or for a declaration of invalidity to the Office within a time limit which it shall determine. If the application is not made within the time limit, the proceedings shall continue; the counterclaim shall be deemed withdrawn. Article 100 (3) shall apply.

Article 97

Applicable law

1. The Community trade mark courts shall apply the provisions of this Regulation.

2. On all matters not covered by this Regulation a Community trade mark court shall apply its national law, including its private international law.

3. Unless otherwise provided in this Regulation, a Community trade mark court shall apply the rules of procedure governing the same type of action relating to a national trade mark in the Member State where it has its seat.

Article 98

Sanctions

1. Where a Community trade mark court finds that the defendant has infringed or threatened to infringe a Community trade mark, it shall, unless there are special reasons for not doing so, issue an order prohibiting the defendant from proceeding with the acts which infringed or would infringe the Community trade mark. It shall also take such measures in accordance with its national law as are aimed at ensuring that this prohibition is complied with.

2. In all other respects the Community trade mark court shall apply the law of the Member State to which the acts of infringement or threatened infringement were committed, including the private international law.

Article 99

Provisional and protective measures

1. Application may be made to the courts of a Member State, including Community trade mark courts, for such provisional, including protective, measures in respect of a Community trade mark or Community trade mark application as may be available under the law of that State in respect of a national trade mark, even if, under this Regulation, a Community trade mark court of another Member State has jurisdiction as to the substance of the matter.

2. A Community trade mark court whose jurisdiction is based on Article 93 (1), (2), (3) or (4) shall have jurisdiction to grant provisional and protective measures which, subject to any necessary procedure for recognition and enforcement pursuant to Title III of the Convention on Jurisdiction and Enforcement, are applicable in the territory of any Member State. No other court shall have such jurisdiction.

Article 100

Specific rules on related actions

1. A Community trade mark court hearing an action referred to in Article 92, other than an action for a

declaration of non-infringement shall, unless there are special grounds for continuing the hearing, of its own motion after hearing the parties or at the request of one of the parties and after hearing the other parties, stay the proceedings where the validity of the Community trade mark is already in issue before another Community trade mark court on account of a counterclaim or where an application for revocation or for a declaration of invalidity has already been filed at the Office.

2. The Office, when hearing an application for revocation or for a declaration of invalidity shall, unless there are special grounds for continuing the hearing, of its own motion after hearing the parties or at the request of one of the parties and after hearing the other parties, stay the proceedings where the validity of the Community trade mark is adready in issue on account of a counterclaim before a Community trade mark court. However, if one of the parties to the proceedings before the Community trade mark court so requests, the court may, after hearing the other parties to these proceedings, stay the proceedings. The Office shall in this instance continue the proceedings pending before it.

3. Where the Community trade mark court stays the proceedings it may order provisional and protective measures for the duration of the stay.

Article 101

Jurisdiction of Community trade mark courts of second instance — Further appeal

1. An appeal to the Community trade mark courts of second instance shall lie from judgments of the Community trade mark courts of first instance in respect of proceedings arising from the actions and claims referred to in Article 92.

2. The conditions under which an appeal may be lodged with a Community trade mark court of second instance shall be determined by the national law of the Member State in which that court is located.

3. The national rules concerning further appeal shall be applicable in respect of judgments of Community trade mark courts of second instance.

SECTION 3

OTHER DISPUTES CONCERNING COMMUNITY TRADE MARKS

Article 102

Supplementary provisions on the jurisdiction of national courts other than Community trade mark courts

1. Within the Member State whose courts have jurisdiction under Article 90 (1) those courts shall have jurisdiction for actions other than those referred to in Article 92, which would have jurisdiction *ratione loci* and *ratione materiae* in the case of actions relating to a national trade mark registered in that State.

2. Actions relating to a Community trade mark, other than those referred to in Article 92, for which no court has jurisdiction under Article 90 (1) and paragraph 1 of this Article may be heard before the courts of the Member State in which the Office has its seat.

Article 103

Obligation of the national court

A national court which is dealing with an action relating to a Community trade mark, other than the action referred to in Article 92, shall treat the trade mark as valid.

SECTION 4

TRANSITIONAL PROVISION

Article 104

Transitional provision relating to the application of the Convention on Jurisdiction and Enforcement

The provisions of the Convention on Jurisdiction and Enforcement which are rendered applicable by the preceding Articles shall have effect in respect of any Member State solely in the text of the Convention which is in force in respect of that State at any given time.

TITLE XI

EFFECTS ON THE LAWS OF THE MEMBER STATES

SECTION 1

CIVIL ACTIONS ON THE BASIS OF MORE THAN ONE TRADE MARK

Article 105

Simultaneous and successive civil actions on the basis of Community trade marks and national trade marks

1. Where actions for infringement involving the same cause of action and between the same parties are brought in the courts of different Member States, one seized on the basis of a Community trade mark and the other seized on the basis of a national trade mark:

(a) the court other than the court first seized shall of its own motion decline jurisdiction in favour of that court where the trade marks concerned are identical and valid for identical goods or services. The court which would be required to decline jurisdiction may

stay its proceedings if the jurisdiction of the other court is contested;

(b) the court other than the court first seized may stay its proceedings where the trade marks concerned are identical and valid for similar goods or services and where the trade marks concerned are similar and valid for identical or similar goods or services.

2. The court hearing an action for infringement on the basis of a Community trade mark shall reject the action if a final judgment on the merits has been given on the same cause of action and between the same parties on the basis of an identical national trade mark valid for identical goods or services.

3. The court hearing an action for infringement on the basis of a national trade mark shall reject the action if a final judgment on the merits has been given on the same cause of action and between the same parties on the basis of an identical Community trade mark valid for identical goods or services.

4. Paragraphs 1, 2 and 3 shall not apply in respect of provisonal, including protective, measures.

SECTION 2

APPLICATION OF NATIONAL LAWS FOR THE PURPOSE OF PROHIBITING THE USE OF COMMUNITY TRADE MARKS

Article 106

Prohibition of use of Community trade marks

1. This Regulation shall, unless otherwise provided for, not affect the right existing under the laws of the Member States to invoke claims for infringement of earlier rights within the meaning of Article 8 or Article 52 (2) in relation to the use of a later Community trade mark. Claims for infringement of earlier rights within the meaning of Article 8 (2) and (4) may, however, no longer be invoked if the proprietor of the earlier right may no longer apply for a declaration that the Community trade mark is invalid in accordance with Article 53 (2).

2. This Regulation shall, unless otherwise provided for, not affect the right to bring proceedings under the civil, administrative or criminal law of a Member Sate or under provisions of Community law for the purpose of prohibiting the use of a Community trade mark to the extent that the use of a national trade mark may be prohibited under the law of that Member State or under Community law.

Article 107

Prior rights applicable to particular localities

1. The proprietor of an earlier right which only applies to a particular locality may oppose the use of the Community trade mark in the territory where his right is protected in so far as the law of the Member State concerned so permits.

2. Paragraph 1 shall cease to apply if the proprietor of the earlier right has acquiesced in the use of the Community trade mark in the territory where his right is protected for a period of five successive years, being aware of such use, unless the Community trade mark was applied for in bad faith.

3. The proprietor of the Community trade mark shall not be entitled to oppose use of the right referred to in paragraph 1 even though that right may no longer be invoked against the Community trade mark.

SECTION 3

CONVERSION INTO A NATIONAL TRADE MARK APPLICATION

Article 108

Request for the application of national procedure

1. The applicant for or proprietor of a Community trade mark may request the conversion of his Community trade mark application or Community trade mark into a national trade mark application

(a) to the extent that the Community trade mark application is refused, withdrawn, or deemed to be withdrawn;

(b) to the extent that the Community trade mark ceases to have effect.

2. Conversion shall not take place:

(a) where the rights of the proprietor of the Community trade mark have been revoked on the grounds of non-use, unless in the Member State for which conversion is requested the Community trade mark has been put to use which would be considered to be genuine use under the laws of that Member State;

(b) for the purpose of protection in a Member State in which, in accordance with the decision of the Office or of the national court, grounds for refusal of registration or grounds for revocation or invalidity apply to the Community trade mark application or Community trade mark.

3. The national trade mark application resulting from the conversion of a Community trade mark application or a Community trade mark shall enjoy in respect of the Member State concerned the date of filing or the date of priority of that application or trade mark and, where appropriate, the seniority of a trade mark of that State claimed under Article 34 or 35.

Article 112

Staff

1. The Staff Regulations of officials of the European Communities, the Conditions of Employment of other servants of the European Communities, and the rules adopted by agreement between the Institutions of the European Communities for giving effect to those Staff Regulations and Conditions of Employment shall apply to the staff of the Office, without prejudice to the application of Article 131 to the members of the Boards of Appeal.

2. Without prejudice to Article 120, the powers conferred on each Institution by the Staff Regulations and by the Conditions of Employment of other servants shall be exercised by the Office in respect of its staff.

Article 113

Privileges and immunities

The Protocol on the Privileges and Immunities of the European Communities shall apply to the Office.

Article 114

Liability

1. The contractual liability of the Office shall be governed by the law applicable to the contract in question.

2. The Court of Justice shall be competent to give judgment pursuant to any arbitration clause contained in a contract concluded by the Office.

3. In the case of non-contractual liability, the Office shall, in accordance with the general principles common to the laws of the Member States, make good any damage caused by its departments or by its servants in the performance of their duties.

4. The Court of Justice shall have jurisdiction in disputes relating to compensation for the damage referred to in paragraph 3.

5. The personal liability of its servants towards the Office shall be governed by the provisions laid down in their Staff Regulations or in the Conditions of Employment applicable to them.

Article 115

Languages

1. The application for a Community trade mark shall be filed in one of the official languages of the European Community.

2. The languages of the Office shall be English, French, German, Italian and Spanish.

3. The applicant must indicate a second language which shall be a language of the Office the use of which he accepts as a possible language of proceedings for opposition, revocation or invalidity proceedings.

If the application was filed in a language which is not one of the languages of the Office, the Office shall arrange to have the application, as described in Article 26 (1), translated into the language indicated by the applicant.

4. Where the applicant for a Community trade mark is the sole party to proceedings before the Office, the language of proceedings shall be the language used for filing the application for a Community trade mark. If the application was made in a language other than the languages of the Office, the Office may send written communications to the applicant in the second language indicated by the applicant in his application.

5. The notice of opposition and an application for revocation or invalidity shall be filed in one of the languages of the Office.

6. If the language chosen, in accordance with paragraph 5, for the notice of opposition or the application for revocation or invalidity is the language of the application for a trade mark or the second language indicated when the application was filed, that language shall be the language of the proceedings.

If the language chosen, in accordance with paragraph 5, for the notice of opposition or the application for revocation or invalidity is neither the language of the application for a trade mark nor the second language indicated when the application was filed, the opposing party or the party seeking revocation or invalidity shall be required to produce, at his own expense, a translation of his application either into the language of the application for a trade mark, provided that it is a language of the Office, or into the second language indicated when the application was filed. The translation shall be produced within the period prescribed in the implementing regulation. The language into which the application has been translated shall then become the language of the proceedings.

7. Parties to opposition, revocation, invalidity or appeal proceedings may agree that a different official language of the European Community is to be the language of the proceedings.

Article 116

Publication; entries in the Register

1. An application for a Community trade mark, as described in Article 26 (1), and all other information the publication of which is prescribed by this Regulation or the implementing regulation, shall be published in all the official languages of the European Community.

2. All entries in the Register of Community trade marks shall be made in all the official languages of the European Community.

3. In cases of doubt, the text in the language of the Office in which the application for the Community trade mark was filed shall be authentic. If the application was filed in an official language of the European Community other than one of the languages of the Office, the text in the second language indicated by the applicant shall be authentic.

Article 117

The translation services required for the functioning of the Office shall be provided by the Translation Centre of the Bodies of the Union once this begins operation.

Article 118

Control of legality

1. The Commission shall check the legality of those acts of the President of the Office in respect of which Community law does not provide for any check on legality by another body and of acts of the Budget Committee attached to the Office pursuant to Article 133.

2. It shall require that any unlawful acts as referred to in paragraph 1 be altered or annulled.

3. Member States and any person directly and personally involved may refer to the Commission any act as referred to in paragraph 1, whether express or implied, for the Commission to examine the legality of that act. Referral shall be made to the Commission within 15 days of the day on which the party concerned first became aware of the act in question. The Commission shall take a decision within one month. If no decision has been taken within this period, the case shall be deemed to have been dismissed.

SECTION 2

MANAGEMENT OF THE OFFICE

Article 119

Powers of the President

1. The Office shall be managed by the President.

2. To this end the President shall have in particular the following functions and powers:

(a) he shall take all necessary steps, including the adoption of internal administrative instructions and the publication of notices, to ensure the functioning of the Office;

(b) he may place before the Commission any proposal to amend this Regulation, the Implementing Regulation, the rules of procedure of the Boards of Appeal, the fees regulations and any other rules applying to Community trade marks after consulting the Administrative Board and, in the case of the fees regulations and the budgetary provisions of this Regulation, the Budget Committee;

(c) he shall draw up the estimates of the revenue and expenditure of the Office and shall implement the budget;

(d) he shall submit a management report to the Commission, the European Parliament and the Administrative Board each year;

(e) he shall exercise in respect of the staff the powers laid down in Article 112 (2);

(f) he may delegate his powers.

3. The President shall be assisted by one or more Vice-Presidents. If the President is absent or indisposed, the Vice-President or one of the Vice-Presidents shall take his place in accordance with the procedure laid down by the Administrative Board.

Article 120

Appointment of senior officials

1. The President of the Office shall be appointed by the Council from a list of at most three candidates, which shall be prepared by the Administrative Board. Power to dismiss the President shall lie with the Council, acting on a proposal from the Administrative Board.

2. The term of office of the President shall not exceed five years. This term of office shall be renewable.

3. The Vice-President or Vice-Presidents of the Office shall be appointed or dismissed as in paragraph 1, after consultation of the President.

4. The Council shall exercise disciplinary authority over the officials referred to in paragraphs 1 and 3 of this Article.

SECTION 3

ADMINISTRATIVE BOARD

Article 121

Creation and powers

1. An Administrative Board is hereby set up, attached to the Office. Without prejudice to the powers attributed to the Budget Committee in Section 5 — budget and financial control — the Administrative Board shall have the powers defined below.

2. The Administrative Board shall draw up the lists of candidates provided for in Article 120.

3. It shall fix the date for the first filing of Community trade mark applications, pursuant to Article 143 (3).

2. late payment of the registration fee;

3. issue of a copy of the certificate of registration;

4. registration of the transfer of a Community trade mark;

5. registration of a licence or another right in respect of a Community trade mark;

6. registration of a licence or another right in respect of an application for a Community trade mark;

7. cancellation of the registration of a licence or another right;

8. alteration of a registered Community trade mark;

9. issue of an extract from the Register;

10. inspection of the files;

11. issue of copies of file documents;

12. issue of certified copies of the application;

13. communication of information in a file;

14. review of the determination of the procedural costs to be refunded.

3. The Implementing Regulation and the rules of procedure of the Boards of Appeal shall be adopted and amended in accordance with the procedure laid down in Article 141.

Article 141

Establishment of a committee and procedure for the adoption of implementing regulations

1. The Commission shall be assisted by a Committee on Fees, Implementation Rules and the Procedure of the Boards of Appeal of the Office for Harmonization in the Internal Market (trade marks and designs), which shall be composed of representatives of the Member States and chaired by a representative of the Commission.

2. The representative of the Commission shall submit to the Committee a draft of the measures to be taken. The Committee shall deliver its opinion on the draft within a time limit which the chairman may lay down according to the urgency of the matter. The opinion shall be delivered by the majority laid down in Article 148 (2) of the Treaty in the case of decisions which the Council is required to adopt on a proposal from the Commission. The votes of the representatives of the Member States within the Committee shall be weighted in the manner set out in that Article. The chairman shall not vote.

The Commission shall adopt the measures envisaged if they are in accordance with the opinion of the Committee.

If the measures envisaged are not in accordance with the opinion of the Committee, or if no opinion is delivered, the Commission shall, without delay, submit to the Council a proposal relating to the measures to be taken. The Council shall act by a qualified majority.

If, on the expiry of a period of three months from the date of referral to the Council, the Council has not acted, the proposed measures shall be adopted by the Commission, save where the Council has decided against the measures by a simple majority.

Article 142

Compatibility with other Community legal provisions

This Regulation shall not affect Council Regulation (EEC) No 2081/92 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs (1) of 14 July 1992, and in particular Article 14 thereof.

Article 143

Entry into force

1. This Regulation shall enter into force on the 60th day following that of its publication in the *Official Journal of the European Communities*.

2. The Member States shall within three years following entry into force of this Regulation take the necessary measures for the purpose of implementing Articles 91 and 110 hereof and shall forthwith inform the Commission of those measures.

3. Applications for Community trade marks may be filed at the Office from the date fixed by the Administrative Board on the recommendation of the President of the Office.

4. Applications for Community trade marks filed within three months before the date referred to in paragraph 3 shall be deemed to have been filed on that date.

(1) OJ No L 208, 24. 7. 1992, p. 1.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 20 December 1993.

For the Council

The President

A. BOURGEOIS

Statement by the Council and the Commission on the seat of the Office for Harmonization in the Internal Market (trade marks and designs)

'In adopting the Regulation on the Community Trade Mark, the Council and the Commission note:

— that the representatives of the Governments of the Member States, meeting at Head of State and Government level on 29 October 1993, decided that the Office for Harmonization in the Internal Market (trade marks and designs) should have its seat in Spain, in a town to be determined by the Spanish Government;

— that the Spanish Government has designated Alicante as the seat of the Office.'

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COUNCIL REGULATION (EC) No 3288/94

of 22 December 1994

amending Regulation (EC) No 40/94 on the Community trade mark for the implementation of the agreements concluded in the framework of the Uruguay Round

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 235 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament [1],

Whereas the Agreement establishing the World Trade Organization (hereinafter, the 'WTO Agreement') was signed on behalf of the Community; whereas the Agreement on Trade-Related Aspects of Intellectual Property Rights (hereinafter, the 'TRIPs Agreement'), annexed to the WTO Agreement, contains detailed provisions on the protection of intellectual property rights whose purpose is the establishment of international disciplines in this area in order to promote international trade and prevent trade distortions and friction due to the lack of adequate and effective intellectual property protection;

Whereas in order to ensure that all relevant Community legislation is in full compliance with the TRIPs Agreement, the Community must take certain measures in relation to current Community acts on the protection of intellectual property rights; whereas these measures entail in some respects the amendment or modification of Community acts; whereas these measures also entail complementing current Community acts;

Whereas Regulation (EC) No 40/94 creates the Community trade mark [2]; whereas Article 5 of Regulation (EC) No 40/94 defines the 'Persons who can be proprietors of Community trade marks' by referring notably to the Paris Convention for the protection of industrial property and requires reciprocal national treatment from countries which are not parties to the Paris Convention; whereas Article 29 of Regulation (EC) No 40/94, concerning the right of priority, also needs to be amended in this respect; whereas in order to comply with the national treatment obligation in Article 3 of the TRIPs Agreement, these provisions should be modified to ensure that nationals of all WTO Members, even if the Member in question is not a party to the Paris Convention, receive a treatment no less favourable than that accorded to nationals of Community Member States;

Whereas Article 23 (2) of the TRIPs Agreement provides for the refusal or invalidation of trade marks which contain or consist of false geographical indications for wines and spirits without the condition that they are of such a nature as to deceive the public, a new subparagraph (j) has to be added to Article 7 (1) of Regulation (EC) No 40/94,

HAS ADOPTED THIS REGULATION:

Article 1

Regulation (EC) No 40/94 is amended as follows:

1. Article 5 (1) (b) shall be replaced by the following:

   '(b) nationals of other States which are parties to the Paris Convention for the protection of industrial property, hereinafter referred to as 'the Paris Convention', or to the Agreement establishing the World Trade Organization;'

2. Article 5 (1) (d) shall be replaced by the following:

   '(d) nationals, other than those referred to under subparagraph (c), of any State which is not party to the Paris Convention or to the Agreement establishing the World Trade Organization and which, according to published findings, accords to nationals of all the Member States the same protection for trade marks as it accords to its own nationals and, if nationals of the Member States are required to prove registration in the country of origin, recognizes the registration of Community trade marks as such proof.'

3. In Article 7 (1) after subparagraph (i) the following shall be added:

   '(j) trade marks for wines which contain or consist of a geographical indication identifying wines or for spirits which conrain or consisr of a

[1] Opinion delivered on 14 December 1994 (not yet published in the Official Journal).

[2] OJ No L 11, 14. 1. 1994, p. 1.

geographical indication identifying spirits with respect to such wines or spirits not having that origin.'

4. Article 29 (1) shall be replaced by the following:

'1. A person who has duly filed an application for a trade mark in or for any State party to the Paris Convention or to the Agreement establishing the World Trade Organization, or his successors in title, shall enjoy, for the purpose of filing a Community trade mark application for the same trade mark in respect of goods or services which are identical with or contained within those for which the application has been filed, a right or priority during a period of six months from the date of filing of the first application.'

5. Article 29 (5) shall be replaced by the following:

'5. If the first filing has been made in a State which is not a party to the Paris Convention or to the Agreement establishing the World Trade Organization, paragraphs 1 to 4 shall apply only in so far as that State, according to published findings, grants, on the basis of the first filing made at the Office and subject to conditions equivalent to those laid down in this Regulation, a right of priority having equivalent effect.'

Article 2

This Regulation shall enter into force on 1 January 1995.

It shall be applicable as of 1 January 1996.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 22 December 1994.

For the Council

The President

H. SEEHOFER

(1) Title:

A Study on the WIPO Draft of Patent Law Treaty (PLT/CE/II)

(2) Date:

October, 1996 (The 27th International Congress in Hiroshima)

(3) Source:

1) Source: PIPA
2) Group: Japan
3) Committee: #3

(4) Authors:

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(5) Key words:

WIPO; harmonization treaty; Patent Law Treaty; PLT

(6) Statutory Provisions:

Draft Patent Law Treaty(PLT/CE/II), Articles 2, 3, 4, 6, 7, 8, and 10, and Draft Regurations, Rules 3 and 6

(7) Abstract:

The purpose of the Patent Law Treaty is , in view of improving the convenience of users, to realize

international harmonization of the formalities and the procedures for obtaining a patent. To this end, the draft Treaty(PLT/CE/I) prepared by the International Bureau of WIPO (hereinafter International Bureau) were discussed in the first session of the Committee of Experts on the Patent Law Treaty at the end of 1995.

Taking into account the views expressed in the first session, the International Bureau modified the draft Treaty and prepared a new draft(PLT/CE/II) which contains such new provisions as filing date and unity of invention. This new draft Treaty was discussed in the second session of the Committee of Experts on the Patent Law Treaty held from 17 to 21 of June, 1996.

We herein represent our basic position toward the new draft Treaty, indicate some problems regarding articles 2 (application), 3 (filing date), 4 (representation; address for service), 6 (unity of invention), 7 (request for recordal of change in name or address), 8 (request for recordal of change in ownership or change in inventorship), and 10 (opportunity to make observations, amendments and corrections in case of intended refusal) and present our proposals.

1. Preface

During the period from 1985 to 1990, 10 sessions of the Committee of Experts of WIPO had been held to consider the harmonization of patent systems and the views expressed therein were worked up into the Basic Proposal(PLT/DC/3) which was submitted to the first session of the Diplomatic Conference in June, 1991. The Conference, however, came up against brick wall due to the announcement of the United States in 1994 to suspend adoption of so called fist-to-file principle.

As a breakthrough to such situation, the Advisory Committee Conference for WIPO Patent Harmonization Treaty was held in May, 1995. However, no agreement was reached for patent harmonization treaty based on the Basic Proposal. Instead, it was advised that, to promote patent harmonization limited to the formalities, more than one session of the Committee of Experts should be held before the WIPO General Assembly of 1997. In accordance with this advice, the first session was held in December of 1995 and the second in June of 1996.

The second session of the Committee of Experts saw some confrontation between those who argued to limit this treaty only to the formalities (USA, Sweden et al) and those who argued to contain not only the formalities but also substantial matters (France et al). The United States also argued that the unity of invention should not be contained for its objection to extending this patent law treaty to substantial matters. In the session, other countries further pointed out various problems. The International Bureau will take into account the views

expressed in the second session and prepare the next draft treaty to be submitted to the third session of the Committee of Experts.

While predicting the prospect of the Patent Law Treaty is difficult, we herein represent our basic position toward the draft Treaty(PLT/CE/II) and report our study results concerning each provision.

2. Our Basic Position

In principle, we support this Patent Law Treaty because the harmonization of formalities will simplify the procedures on the part of applicant and reduce the cost for obtaining patents. Also, we basically support the newly added provisions of filing date and unity of invention.

Further, we believe that the true harmonization will be realized when not only the formalities but also the substantial matters are harmonized. It is hoped, therefore, that, even after the conclusion of this Patent Law Treaty, further harmonization including substantial matters will be discussed in the Committee of Experts and the true harmonization will be realized in the near future.

3. Study of Each Provision

We have studied the draft Patent Law Treaty and the minutes of the second session of the Committee of Experts in comparison with the Japanese patent law, PCT, and EPC and report the results in the form of tables(1-1, 1-2, 1-3, 1-4, 1-5, 1-6) with problems found and our proposals thereto. The Minutes described in the tables means the minutes of the second session of Committee of Experts (dated June 28, 1996).

Table 1-1
The Problems and Proposals for the draft Patent Law Treaty(1)(Article 2)

Article or Rule	Problems	Proposals
Article 2: Application (2) [Request] Any Contracting Party may require that the request part of the application contain some or all of the following indications or elements:	While a Contracting Party is allowed to require containing up to 16 elements within the request part of the application, the delegation of India proposed to add following item (Minutes No.100): "A Contracting State may require to furnish information regarding the prosecution of a corresponding application in other Contracting States."	This item should not be added since it will impose excessive burden on the part of applicant to send such information regarding corresponding applications to specific Contracting States.
(3) [Presentation of the Request] As regards the requirements concerning the presentation of the request part of the application, no Contracting Party shall refuse the application, (ii) where the Contracting Party allows the transmittal of communications to the Office by electronic means... [reserved].	The consideration regarding electronic application is now reserved, for which it is not clear whether current Japanese practice is appropriate or not.	It should be requested that current Japanese practice be accepted
(5) [Language] Any Contracting party may require that the application be in the language or in one of the languages of or admitted by the Office.	Art. 3 allows that "description" may be in any language (Art. 3(1)(b)). This Art.2(5), however, allows a Contracting Party to designate specific language for application. As a result, it is expected that the Contracting Party requires translation of "description" different from the specific language. However, no relevant provision exists.	The position of International Bureau as to deadline and other matters for submitting translation is to leave the decision to each Contracting Party(Minutes No.156). It should, however, be specified in the Treaty that a Contracting Party may require submission of translation to make clear its treatment on the Treaty. Further, the deadline for submitting translation should be specified in the Treaty.

Table 1-2
The Problems and Proposals for the draft Patent Law Treaty(2)(Article 3)

Article or Rule	Problems	Proposals
Article 3: Filing Date (1)(a) The filing date of the application shall be the date of receipt by the Office of a communication containing following elements (i) (ii) (iii) and (iv).	(A) Some developing countries proposed that the payment of the filing fee be contained in the requirement for a filing date(Minutes No.162) (B) An electronic application was left undiscussed. (C) In Japan, the filing date is granted even to a defective application except that it is rejected as unacceptable. There is no corresponding provision.	(A) The payment of the filing fee should not be included in the requirement for granting the filing date (Neither PCT nor Japan requires it.) (B) The filing date should be granted to the electronic applications if the requirement provided in Art.3 is satisfied. (C) Japanese law needs to be modified to specify the provisions for granting the filing date.
(i) an express or implicit indication to the effect that the communication is an application for a patent	No problem found. "Tokkyo Negai(patent application)" shall be the name of corresponding document in Japan.	
(ii) indications allowing the identity of the applicant to be established	No problem found. (The name of applicant shall be specified in a Japanese application.)	
(iii) a description	No problem found. "Hatsumei no shosai na setsumei(detailed description of invention)" shall be the corresponding part in a Japanese application. Neither Drawings nor claims are required (Minutes No.153 and No.164).	(A) We agree to the proposal that a "description" can be replaced with a reference to an earlier application (Minutes No.155).

(iv) if the description is not in the language or in one of the languages of or admitted by the Office, an indication to the effect that the application contains a description.	(A) A number of delegations objected to allowing a description in foreign languages (Minutes No.158) and the matter was left over to further discussion. (B) In the case of the description in a foreign language, the applicant may be required to submit translation thereof. The International Bureau explained that it is the matter of each national law (Minutes No.156). (C) As to accepting an application in foreign language, a question would be raised about the treatment of one with incorrect translation.	(A) Current draft Treaty should be adopted since there seems no problem for Japan to accept applications in various foreign languages because it actually accepts English applications. (B) It should at least be provided that the translation be submitted before the publication of unexamined application. (C) Provisions regarding correction of translation and invalidation in part due to incorrect translation should be specified in this Treaty.

Table 1-3
The Problems and Proposals for the draft Patent Law Treaty(3)(Article 3)

Article or Rule	Problems	Proposals
Article 3 (1)(b) The indications referred to in subparagraph (a)(i), (ii), and (iv) shall be in the language or in one of the languages of or admitted by the Office, whereas the description referred to in subparagraph (a)(iii) may be in any language.	No problem found. In Japan, when an application is filed in a foreign language in Japan, documents other than specification, drawing and abstract are required to be submitted in Japanese.	
Article 3 (2) If the application does not comply with any of the requirements of subparagraph (a), the Office shall promptly notify the applicant.	(A) There is no provision specifying the period within which the Office "promptly" notifies (Minutes No.166). (B) Is it possible for the applicant to supplement or correct any defect?	(A) While it is supposed to be explained in the Notes (Minutes No.167), appropriate period should be specified in the Treaty. (B) Supplementing process should be admitted if the application does not comply with the requirement for obtaining the filing date.
Rule 3 Each Contracting Party shall be free to determine the circumstances in which the receipt of a communication shall be deemed to constitute receipt of the communication by the Office concerned.	No problem found.	(A) We agree to the proposal that this rule should cover receipt by the private courier service approved by the Office (Minutes No. 172).

Table 1-4
The Problems and Proposals for the draft Patent Law Treaty(4)(Article 4)

Article or Rule	Problems	Proposals
Article 4: Representation; Address for Service (4)[Language] Any Contracting Party may require that the power of attorney be in the language or in one of the languages of or admitted by the Office.	A delegation suggested in the second session of the Committee of Experts that a Contracting Party may require a translation of power of attorney where the power of attorney was not filed in the language or in one of the languages of or admitted by the Office. It was agreed that the International Bureau would study this suggestion (Minutes No.195).	It may impose more burden on the part of applicant if he/she is required to submit translation of the power of attorney in the language or in one of the languages of or admitted by the Office. Such requirement of translation should be limited, therefore, to certain specific languages such as English.
(5) [Reference to Power of Attorney] Any Contracting party may require that any communication made to the Office by a representative contain a reference to the power of attorney.	While such provisions were approved in the second session of the Committee of Experts, it may require complicated procedures to contain a reference to the power of attorney in all of the documents.	This provision should be deleted.

Table 1-5
The Problems and Proposals for the draft Patent Law Treaty(5)(Article 6)

Article or Rule	Problems	Proposals
Article 6: Unity of Invention (1)[Requirement of Unity of Invention] Any Contracting Party may require that the application relate to one invention only or to a group of inventions so linked to form a single general inventive concept.	While a Contracting Party can choose to require "one invention" in accordance with the draft Treaty which allows to require either of "one invention" or "a group of inventions," one delegation suggested that the wording be revised to refer only to "a group of inventions." (Minutes No.215)	It should refer only to "a group of invention" and the words "one invention" should be deleted.
(2)[Validity of Patent Not Affected by Lack of Unity of Invention] Once a patent has been granted, it may not be revoked or invalidated on the ground of non-compliance with the requirement of unity of invention.	No problem found.	

Rule 6(1) Where a group of inventions is claimed, the requirement of unity of invention shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of those inventions, considered as a whole, makes over the prior art.	(A) Because of the words "only when," problem would be raised, if the scope of the unity of the invention provided in Rule 6 is narrower than the scope of Art.37 of Japanese Patent Law. (B) It was suggested that the words "in one and the same application" be added after the word "claimed," (Minutes No.219). We found no problem about this suggestion since it accords with PCT and EPC.	(A) We need to confirm whether the scope of the unity of the invention provided in Rule 6 is not narrower than that set in Art. 37 of Japanese Patent Law.
Rule 6(2) The determination whether a group of inventions is so linked as to form a single general inventive concept shall be made without regard to whether the inventions are claimed in separate claims or as alternatives within a single claim.	No problem found.	

Table 1-6
The Problems and Proposals for the draft Patent Law Treaty(6)(Articles 7,8 and 10)

Article or Rule	Problems	Proposals
Article 7: Request for Recordal of Change in Name and Address (1) As regards the requirements concerning the presentation of the request, no Contracting Party shall refuse the request in the following cases, (ii) where the Contracting Party allows the transmittal of communications to the Office by electronic means... [reserved].	It is not clear whether requests by electronic means currently under way in Japan will be accepted or not. There has been no substantial discussion regarding this matter.	We hope that the Treaty will not cause to change current Japanese practice for it is the leading case as to communication by electronic means. We hope that at least requests by electronic means be accepted.
Article 8: Request for Recordal of Change in Ownership or Change in Inventorship (1)(b) Where the recordal of a change in ownership results from a contract, any Contracting Party may require, where the recordal is requested by the new applicant or the new owner, that the request be accompanied by certificates such as a copy of the contract.	The Contracting Party can require certificates only when the request is made by new applicant or new owner.	To comply with Art.11(b) of TLT, a Contracting Party should be allowed to require former applicant or former owner to submit certificates, for which International Form 4 should be thus modified.
(1)(h) A single request shall be sufficient even where the change relates to more than one application or patent, provided that the applicant and the new applicant, or the owner and the new owner are the same for each application or patent.	There should be added appropriate conditions.	Where certain certificates are required for more than one application or patent , such provision should be added that it is in the case where the certifications are the same.

Article 10: Opportunity to Make Observations, Amendments and Corrections in Case of Intended Refusal An Office may not refuse an application or other documents without giving the applicant or the requesting or communicating party at least one opportunity to make observations on the intended refusal, and to make amendments and corrections.	It is not clear exactly in what situation any observations, amendments, and corrections can be made.	It is favorable to clarify, for instance, in Note that exactly in what situation such opportunity shall be given and in what situation not.

(1) Title:

COSTS OF PATENT RIGHT INFRINGEMENT LITIGATION IN JAPAN

(2) Date:

October, 1996 (27th International Conferrence in Hiroshima)

(3) Source:

1) Source: PIPA
2) Group: Japan
3) Committee: #4

(4) Authors:

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(5) Keywords:

Injunction, Damage

(6) Provisions:

Patent Law Article 100 and Article 102

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SUMMARY

When we consider patent infringement lawsuits as one of the means to solve patent disputes, a cost factor is one of the important criteria. The present paper is intended to provide a basis for estimating costs of lawsuits, assuming that patent infringement

lawsuits will be filed in Japan. In the paper, first a method of calculating costs of patent infringement lawsuits will be described. Secondly, the result of calculating the cost of a lawsuit for each specific simulation of three model cases by using this method will be reported.

1. INTRODUCTION

When there is doubt that others may have infringed our patent rights, we generally investigate to determine whether these constitute infringement of the patent rights or not in an objective manner before exercising the rights on grounds that they have infringed the rights. When determining, as a result of the investigation, that these are actual infringement of the rights, we issue warning to them. This warning may result in settlement of the dispute with the others, cutting off unnecessary costs of lawsuits thereafter. Otherwise, the right to demand injunction or damage may be exercised by means of filing of a lawsuit as a last resort if the others do not stop infringing the patent rights. Patent owners may decide whether or not to file a lawsuit, collectively taking into account such factors for judgment as lawsuit costs, a possibility of winning the case, its influence on the social aspects (for instance, a corporate image) and the like.

This paper describes costs of lawsuits quantifiable to a certain extent as a main theme in the first chapter. In the second, it describes a method of calculating the costs. In the third, it reports the actual cost estimation for three model cases.

2. HOW TO ESTIMATE COST OF PATENT INFRINGEMENT LAWSUIT

This chapter provides a basis for estimating how much will be needed in monetary terms if patent owners (plaintiffs) file patent infringement lawsuits.

An attorney cost, largest of all the costs of a lawsuit, greatly depends upon such factors as complexity of a case, the number of attorneys, prominence of an attorney, relationship between an attorney and a client, solvency of a client and the

like. This makes it practically impossible to uniquely pinpoint a calculating method. Thus, in this chapter, assuming that both plaintiffs and defendants are large corporations like those belonging to PIPA, a method of calculating a maximum cost needed for employing an attorney will be provided. If this maximum cost is known, it would be easy to estimate overall costs necessary for a lawsuit.

It should be understood that there may be attorneys or clients who decide costs based on criteria other than those described below.

It should also be understood that costs of a lawsuit described hereinbelow do not include indirect expenses carried by a client (e.g., internal labor cost, investigation and experiment costs). Further, there are items to be considered before filing of a lawsuit. These items are as follows:

(1) Collection of evidence as to whether the products of a defendant are within the scope of patent rights or not and grasping of infringement facts including consultation with lawyers or patent attorney for the purpose of seeking expert opinion;

(2) Market investigation as a basis for calculating monetary losses due to infringement and estimation of profits accruing to the defendant from selling of his products infringing the rights; and

(3) Issuance of letters of warning.

These expenses necessary in the stage before filing of the lawsuit may be considered to be lawsuit costs in a broad sense. However, above-noted items to be examined in the prestage and the specific contents thereof greatly vary depending upon such factors as a plaintiff's company, a representative's plan, binding strength of patent rights, infringing situations and the like, making it impossible to make an absolute determination. Thus, these will not be discussed in this chapter.

I. Patent Infringement Lawsuit Cost (hereinafter called as TLC)

Patent infringement lawsuit costs consist of four kinds as follows:

1) Court cost (mainly complaint fees and attached to a written complaint: hereinafter called CRC);

2) Lawyer cost (mainly retaining fees, rewards and daily allowances: hereinafter called LAC);

3) Patent attorney cost (mainly fees, rewards and daily allowances: hereinafter called PAC); and

4) Other costs (Investigation and judgment fees, verification fees, etc.: hereinafter called OTH)

Retaining fees are costs to be paid to lawyers when making a request to them for filing a lawsuit irrespective of its result (success or failure). Rewards are paid only when filing of a lawsuit results in success. Fees and rewards for patent attorney are equivalent to those paid to the lawyers. Daily allowances are costs to be paid to lawyers or patent attorneys or their travel expense or some compensation for he absence from their offices.

II. How to Estimate CRC (in the case of estimation standard in Tokyo District Court)

1) Estimation of lawsuit costs based on injunction request (IJL)

IJL = defendant's estimated annual sales amount as of filing of a lawsuit × ratio of patented invention in a product × defendant's profit rate × (Number of) years for the patent rights to be remained effective × 1/8 alternatively,

IJL = plaintiff's estimated annual sales reduction as of filing of a lawsuit × ratio of patented invention in a product × (Number of) years for the patent rights to be remained effective × 1/8

2) Estimation of lawsuit costs (CFD) based on damage request

CFD = defendant's sales amount in the year before filing of a lawsuit × defendant's profit rate × years of defendant' s patent right infringement until filing

of a lawsuit alternatively,

CFD = defendant's sales amount in the year before filing of a lawsuit × license fee rate × years of defendant's patent right infringement until filing of a lawsuit otherwise,

CFD = plaintiff's sales reduction in the year before filing of a lawsuit × plaintiff's profit rate × years of defendant's patent right infringement until filing of a lawsuit

3) Estimation of X = IJL + CFD and complaint fees CRC from an attached table 1 (reference [I])

4) Note

In the case for appeal procedure (second instance), those who appealed need to pay CRC.

In the case of preliminary injunction CRC is uniformly 1,500 yen.

III. How to Calculate LAC

1) Estimation of economical profits (IJE) based on injunction request

IJE = plaintiff's annual net profit when patented invention is enforced × remaining years of patent rights × 1/3 × ratio of patented invention in a product alternatively,

IJE = defendant's annual net profit when patented invention is enforced × remaining years of patent rights × 1/3 × ratio of patented invention in a product

2) Estimation of economical profits based on damage request

same as in the case of lawsuit costs (CFD) based on damage compensation request

3) Estimation of starting fees (hereinafter called TCH)

Calculate Y = IJE + CFD and TCH from an attached table 2 (reference [II])

In the case of appeal made by defendant after having lost the case,

TCH of second instance = 2 × TCH of first instance

4) Estimation of rewards (hereinafter called HSU)

In the case of winning,

if decided, HSU = 2 × TCH

if defendant makes appeal, in principle, HSU = 0

In the case of losing,

in principle, HSU = 0

5) Estimation of daily allowances (hereinafter called LDC)

Days of oral proceedings a times/year ... normally a = 6 to 10

Days of consultations before and after oral proceedings b times/year ... normally b = a

Allowances for lawyer c 0,000 yen/times ... normally c = 5 to 20

LDC = (a + b) × c × hearing period (years)

6) LAC = (TCH + HSU + LDC) × m

m = the number of lawyers

But when two or more lawyers are employed and they belong to the same office,

if the number of lawyers is two: m = 1. 2

if the number of lawyers is three: m = 1. 5

if the number of lawyers is four: m = 1. 6

Estimation of economical profits of 1) and 2) is based on a reference material [IV] and a result of seeking legal consultation from a lawyer. Estimation of starting fees and rewards of 3) and 4) is based on the lawyer reward rule of Tokyo Lawyers' Association (issued on April 1, 1996) (reference [II]). Values of m for daily allowances of 5) and the case 6) of a plurality of lawyers belonging to the same office are based on legal consultation with lawyers and experiences.

IV. How To Calculate PAC

1) Estimation of fees and rewards (hereinafter called TSR and APR)

Calculate TSR and APR from an attached table 3 (reference [III]) according to estimation of LAC

2) Estimation of daily allowances (hereinafter called PDC)

Days of oral proceedings a times/year ... normally a = 6 to 10

Days of consultation before and after oral proceedings b times/year ... normally b=a

Allowances for assistant c 0,000 yen/times ... normally c = 3 to 15

PDC = (a + b) × c × hearing period (years)

3). PAC = (TSR + APR + PDC) × n

m: the number of patent attorney

But when two or more patent attorney are employed and the belong to the same office,

if the number of patent attorney is two: n = 1.2

if the number of patent attorney is three: n = 1.5

if the number of patent attorney is four: n = 1.6

2) and 3) are the same as 5) and 6) in .

V. How to Calculate OTH

Judgment costs, verification costs and costs of witness summons Judgment fee is 1.5 million yen per one case (including daily allowances, rewards, document fees and other actual expenses for those engaged in judgment)

VI. how to Calculate TLC

TLC = CRC + LAC + PAC + OTH

VII. References

[I] Simple Estimation Table for Complaint Filing Fees, p38 in "Lawyer Duty Handbook" (issued in 1994) (Edition effective from October 1, 1992)

[II]Lawyer Reward Rule by Tokyo Lawyers' Association (effective from April 1, 1996)

[III]Patent Business Standard Fees by Attorneys' Association (issued in April 1, in 1996)

[IV] "Patent Suit and Lawyer" in Invention Booklet 10, written by Hidesato Iida, issued by Invention Society

[V] Adjudgment and Suit Trial in "Newest Patent Management Manual" Vol. 3 written by Tadayosi Masui, Zenjiro Endo and Chikara Koshi, issued by New Technology Development Center

[VI] "Filing of Patent Suit" written by Nobumitsu Hunaki, Noriyoshi Inoue, issued by New Japan Laws and Regulations Publishing K.K

3. MODEL CASES

This chapter describes the results of calculating costs of lawsuits and related expenses for three model cases, assuming that patent infringement lawsuits have actually been filed. In reality, even after a lawsuit has been filed, the case may be settled before reaching court decision. However, in the model cases described below, it is assumed that cases have ended because of court decision. Model Case 2 and 3 are the ones modified from actual precedents.

3.1 Case 1

I. Outline

[I] Outline and progress of the case

1) Outline

(1) Patentee: Company A

(Content of a right; patent for use of a material X for a product Y. Right remaining years; 10 years)

Infringer: Company B

(2) Company A has had an exclusive right to manufacture and sell products Y based on a patented invention since 5 years ago.

(The number of sold products; 16.50 million pieces/year. Unit price of a product Y to an agent; 110 yen/piece. Ratio of patented invention in a product Y; 50%)

Company B started manufacturing and selling products Y a year ago.

(Unit price of a product Y to an agent; 100 yen/piece).

(The number of sold products; 10 million/year).

Participation of company B in the market has reduced market price, having resulted in reduction of a unit price of a product Y by company A to an agent from 110 yen/piece to 100 yen/piece.

There had been no change in this situation until the conclusion reached in a second instance.

(3) Company B did not contest validity of the patent right and thus the trial focused on "whether the product Y is included within the technical scope of the patent or not".

(4) The number of agents for company A was two (from different offices) and the number of patent attorney was one.

(5) Hearings were held in Tokyo District Court. Agents, patent office were located in Tokyo and those concerned from company A were all residents in Tokyo.

(6) There was no on-site verification, appraisement or witness.

(7) Preliminary injunction (both first and second instances)

The number of times for hearings and questioning: 16 times.

The number of documents prepared and presented by company A: 8 (plus one written complaint)

Trial (both first and second instances)

The number of times for oral proceedings: 16 times.

The number of documents prepared and presented by company A (plus one written complaint).

The number of times for preliminary meeting with agents, an assistant in both Preliminary injunction and Trial (both first and second instances): 32 times

2) Progress of the case

First instance: January 5, in 1989 to December 25, in 1991

Company A won the case → Company B apealed against a decision.

Second instance: January 5, in 1992 to December 25, in 1994

Company B lost the case → This decision was settled.

(1) Outline of lawsuit (first instance)

Preliminary injunction: injunction

Trial: injunction and damage

(2) How to calculate lawsuit costs (damages charged).

as lost profit

(110-100)yen/piece * 16.50million/year * one year=165 million yen

[I] [II] [III]

[I] (selling price) [II] (number of pieces sold) [III] (period of infringement)

(3) Conclusion (first instance).

Injunction.

Damage payment order.

Amount to pay: 90 million yen (equivalent to three years of selling by company B)

(100 yen/piece * 10 million pieces/year * three years * 0.03)

Note) Company A did not increase the amount of damage by accessory appeal (due to extended infringement period). Thus, the amount ordered to pay was as decided in the first instance.

Payment order of trial expenses of 1.23 million yen accruing to plaintiff.

II. Expenses

[I] Court expenses

1) Preliminary injunction

Complaint filing fees (affixed stamp price): 1,500 yen

2) Trial

Price of injunction equivalent to products in contest: 206 million yen

(110 yen/piece * 15 million pieces/year * 0.1 * 10 years * 8/1)

[I] [II]

[I] (Profit rate) [II] (Right remaining years)

Price of damages request equivalent to products lawsuited: 165 million yen

Total price of products sued in trial: 371 million yen
(206 million yen+165 million yen)
Complaint filling fees: 1,230,600 yen

[II] Expenses for lawyers (estimation of starting fees and rewards)

1) Economical profit

Injunction: 270 million yen
(110 yen/piece * 15 million pieces/year * 0.1 * 10 years * 1/3 * 0.5)
[I] [II]
[I] (Profit rate) [II] (Patent contribution rate)

Damage compensation request: 165 million yen

Economic profit in preliminary injunction: 275 million yen

Economic profit in trial: 440 million yen

2) Preliminary injunction (first instance)

Starting fees: 17.88 million yen (8.94 million yen/person * 2 people)

Rewards: Not paid because of appealing by the defendant

3) Trial (first instance)

Starting fees: 24.98 million yen
(12.49 million yen/person * two people)

Rewards: Not paid because of appealing by the defendant

4) Preliminary injunction (second instance)

Starting fees: 35.76 million yen
(17.88 million yen/person * two people)

Rewards: 35.76 million yen (17.88 million yen/person * two people)

5) Trial (second instance)

Starting fees: 49.96 million yen
(24.98 million yen/person * two people)

Rewards: 49.96 million yen (24.98 million yen/person * two people)

Expenses for lawyers (estimation of total daily allowances)
(daily allowance is 100 thousand yen/person and time)

First instance (preliminary injunction + trial)
(32 + 32) times * 100 thousand yen/person and time * two

people = 12.8 million yen

Second instance (preliminary injunction + trial)

(32 + 32) times * 100 thousand yen/person and time * two people = 12.8 million yen

Expenses for lawyers (expenses before staring of court trial)

Consultation fees:	200 thousand yen
Appraisement letter:	500 thousand yen
Opinion letter:	300 thousand yen
Warning letter:	100 thousand yen
Total:	1.1 million yen

[III] Expenses for patent attorneys (estimation of fees and rewards)

The same as estimation of starting fees and rewards for lawyers. But fees and rewards shall be obtained by multiplying values calculated based on Table 3 by 0.7.

1) Preliminary injunction (first instance)

Fees: 7.06 million yen

2) Trial (first instance)

Fees: 10.53 million yen

3) Preliminary injunction (second instance)

Fees + rewards:

7.06 million yen + 7.06 million yen = 14.12 million yen

4) Trial (second instance)

Fees + rewards:

10.53 million yen + 10.53 million yen = 21.06 million yen

Expenses for patent attorneys (estimation of daily allowances)

The same as estimation of daily allowances for lawyers (daily allowance is 70,000 yen/person and time)

First instance (preliminary injunction + Trial)

(32 + 32) times * 70,000 yen/ person and time = 4.48 million yen

Second instance (preliminary injunction + Trial)

(32 + 32) times * 70,000 yen/person and time = 4.48 million yen

Expenses for patent attorney (expenses before starting of court trial)

700 thousand yen, including consultation fees and appraisement fees

④ Total expenses

(Unit: 0,000 yen)

		Court	Agent (two)				Patent attorney (one)				Total
			Starting fee	Reward	Daily allowance	Others	Fee	Reward	Daily allowance	Others	
First instance	Preliminary injunction	0	1788	0	640	55	706	0	224	35	3498
	Trial	123	2498	0	640	55	1053	0	224	35	4628
Second instance	Preliminary injunction	0	3576	3576	640	0	706	706	224	0	9428
	Trial	0	4996	4996	640	0	1053	1053	224	0	12962
Total		123	12858	8572	2560	110	3518	1759	896	70	30516

III. Effect

(Unit; 0,000 yen)

Economical effect of injunction request	Acquired damage amount	Refunded court expense	Total
27500	9000	123	36623

3.2 Case 2

I. Outline

[I] Outline and progress of the case

1) Outline

Patent owner: Company A (chemical company)

(1) Possession of two patents

Patent (1) Basic patent for a chemical material (X)

(5 year remaining period)

Patent (2) Patent of improvement of the basic patent)
(5 year remaining period)

Infringer: Company B (chemical company)

(2) Sales volume was 1.47 million kg for the period.

(3) An issue during a patent trial was whether a chemical product X manufactured and sold by company B was within the technical scope of patent (1) or (2) or not.

Company A had requested an assistant professor of a certain university to determine whether the particle size of a chemical material constituting company B's product X satisfied a constitutional factor (numerical value limit range) as a characteristic of patent (1) or not three times before.

(4) A trial sought by patent owner company A shall focus on an injunction to the effect that company B shall stop manufacturing and selling of its chemical product X and damage compensation request to the effect that company B shall pay 397 million yen. This damage amount was obtained by multiplying the sales volume of 1.47 million kg of company B's chemical product X in the past three years by a profit rate of 270 yen per kg.

(5) Suit agents for company A included two lawsuit agent lawyers and two patent attorney, with all belonging to the same office.

(6) A lawsuit was filed with Tokyo District Court and the agents, patent office were located in Tokyo and those concerned from company A were all residents in Tokyo. First instance took nine years.

(7) The number of times for oral proceedings was totally 33 times and the number of documents (plus one letter of complaint) prepared and presented by company A was 8. The number of times for meeting with the agents before trial was 33 times.

(8). During first instance of the case, company B requested Patent Agency to hold a trial for invalidation of the two patents owned by company A (on the account of no inventive step shown with respect to the patent (1) and existence of prior application with respect to the patent (2)). In the case of the patent (1),

an invalidation trial was held, reaching a decision. However, in the case of the patent (2), the request was rejected. Because of expiration of the right period for the patent (2) 5 years after the lawsuit had been filed, company A withdrew only the injunction to company B. Immediately after this, judgment was reached in the first instance.

2) Progress of the case

First instance: April 8, in 1981 to February 9, in 1990

Plaintiff company A won the case → This decision was settled.

(1) Outline of lawsuit (first instance)

Trial: injunction and damage compensation requests

(2) How to calculate lawsuit costs (damage amount)

Company A should have obtained a profit calculated by multiplying the sales volume of 1.47 million kg of infringer company B's products in the past three years by a profit rate of 270 yen per kg.

As lost profit

1.47 million kg * 270 yen/kg = 397 million yen

[I] [II] [III]

[I] (Sales volume) [II] (Profit rate)

[III] (Profit company A would have obtained)

(3) Judgment (first instance)

Injunction → withdrew due to expiration of the patent right

Damage compensation payment order Amount to be paid:

225 million yen (equivalent to 8-year selling of the products by company B)

(562.5 million yen * 8 years * 0.05)

Payment order of 1/5 (340 thousand yen) of court expenses for company A

II. Expenses

[I] Court expenses

Only for Trial

Price of lawsuit in the case of injunction: 98 million yen

(580 thousand kg/year * 270 yen/kg : 5 years * 1/8)

[I] (Profit rate) [II] (Right remaining years)

Price of lawsuit in the case of damage compensation request: 397 million yen

Total prices of lawsuit in Trial: 495 million yen
(98 million yen + 397 million yen)

Complaint filing fee: 1,602,600 yen

[II] Expenses for lawyers (estimation of starting fees and rewards)

1) Economic profit

Injunction: 261 million yen
(580 thousand kg/year * 270 yen/kg * 5 years * 1/3 * 1.0)

[I] (Profit rate) [II] (Patent contribution rate)

Damage compensation request: 397 million yen

Economic profit for Trial: 658 million yen
(98 million yen + 397 million yen)

2) Trial (first instance)

Starting fee: 20.22 million yen
(16.85 million yen/person * 1.2 people)

Reward: 17.85 million yen
(14.88 million yen/person * 1.2 people)

Expenses for lawyers (estimation of total daily allowances)

(A daily allowance is 100 thousand yen/person and time)

First instance (Trial)

(33 + 33) times * 100 thousand yen/person and time * 1.2 people = 7.92 million yen

[III] Expenses for patent attorneys (estimation of fees and rewards)

The same as estimation of starting fees and rewards for lawyers. But fees and rewards are calculated by multiplying values obtained based on table 3 by 0.7.

1) Trial (first instance)

Fee: 18.12 million yen (15.1 million yen/person * 1.2

people)

Reward: 7.2 million yen (6 million yen/person * 1.2 people)

2) Expenses for patent attorney (estimation of daily allowances)

The same as estimation of daily allowances for lawyers (a daily allowance is 70,000 yen/person and time)First instance (Trial)

(33 + 33) times * 70,000 yen/person and time * 1.2 people = 5.54 million yen

3) Expenses for invalidation trial request: 2.5 million yen

[IV] Others

Appraisement fee for an assistant professor of a certain university:

4.5 million yen (1.5 million yen/time × 3 times)

⑤ Total expenses

(Unit: 0,000 yen)

	Court	Agent (two)			Patent attorney (one)			Total
		Starting fee	Reward	Daily allowance	Fee	Reward	Daily allowance	
First instance (Trial)	160	2,022	1,785	792	1,812	720	554	8,385

III. Effect

(Unit; 0,000 yen)

Economical effect of injunction request	Acquired damage amount	Refunded court expense	Total
0	22,500	34	22,500

3.3 Case 3

I Outline

[I] Outline and progress of the case

1) Outline

(1). Patent right owner: Company A (engaged in manufacturing and selling of relatively high priced end products)

(Coverage of patent rights: product patent having characteristics in certain part of the end product)

The number of patent rights relating to lawsuits is one and the number of effective remaining years is 5.75 years.

Infringer: Company N

(2). Defendant company N's products were sold from 1986 to March 3, 1991. Infringement was found in selling of both these products themselves and the above-noted characteristic parts thereof.

(3). Company A filed a lawsuit for requesting damage to be compensated from company N and injunction of selling of its products on the ground that profits obtained by selling of company N's products resulted in profit losses to company A.

(4). Issues of the case were the following three:

(a) Whether defendant's product is within the technical scope of the right or not (regarding direct infringement);

(b) Whether characteristic parts are only used for manufacturing products under the patent right or not (regarding indirect infringement); and

(c) If infringement by company N's product is certified, whether losses accruing to the plaintiff are not equivalent to all the profits obtained by company N by selling its products but only limited to characteristic parts (profits thereof) or not.

(5). Three lawyers in charge of the case company A were from the same law firm and two patent attorneys were from the same patent office.

(6). The lawsuit was filed with Tokyo District Court and the lawyers, and patent attorneys for company A were residents in

Tokyo.

(7). No on-site verification, appraisement or witnesses.

(8). No request filed for preliminary injunction.

2) Progress of the case

First instance: Tokyo District Court (Period: 4 years) (1989 to 1992)

Plaintiff company A won the case and then defendant company N appealed.

Second instance: Tokyo High Court (Period: one year) (1992 to 1993)

Appeal was rejected, resulting in a victory for the person being appealed (plaintiff).

(1) Outline of the case

There was no request for preliminary injunction and damage amount contested on the ground that all the profits from selling of the products by the defendant were equal to profits losses to company A and injunction of selling of its products.

(2) How to estimate lawsuit costs (damage amount) (First instance)

(a) Lost profits were the basis for estimation.

(b) While defendant's past sales amounted to 1.3 billion yen (three years from 1986 to 1989), initially as lost profits during the procedure, damage of 50.68 million yen was requested to be compensated.

(c) Total cost of the lawsuit was set to 62.71 million yen including economic effects of the injunction.

(d) Therefore, for a cost of the injunction, 12.03 million yen is obtained by means of inverse estimation, multiplying the above cost by 1/8 as court expenses.

(3) Judgment (First instance)

Injunction order

Damage compensation payment order: 6.44 million 7 thousand yen

Sharing of trial costs: 1/5 shall be paid by the defendant

and the rest shall be paid by the plaintiff.

(4) Note

In this case, subject of litigation in contest resulted in the decision that it was not the product as a whole but limited to its characteristic parts. Thus, damage amount to be compensated was greatly reduced. (First instance).

Accordingly, in the second instance, that is, the appeal procedure, subject matter in contest was on the result of the first instance and for damage amount, the amount ordered to pay for compensation in the first instance was the basis of estimation.

However, economic effects of the injunction were calculated, considering that the product as a whole would be influenced. More particularly, in the second instance, since the cost of the injunction request initially charged (multiplied by 1/8), 12.03 million yen, was for the patent right period remaining effective of 5.75 years, it was possible to calculate the cost of the injunction charged for one year. Thus, a method of estimating the cost of the patent right period remaining effective of 1.5 years was adopted at the time when the second instance was brought in.

II. Expenses

[I] Expenses for court

First instance: 210 thousand yen

By referring to a conversion table (attached table 1), from the cost of the lawsuit, 40 × 6271 × 17600 = 268 thousand yen

Court decision resulted in the increase of a burden by 4/5 (in the end, the amount carried by the defendant was refunded) 214 thousand yen

Second instance: No court expenses, because it was the appeal procedure requested by the defendant.

[II] Expenses for lawyers

First instance: 19.08 million yen

Starting fees

Cost related to damage to be compensated 50.68 million yen

Cost related to injunction 1203 × 8/3 = 32.08 million yen

Total In the conversion table (table 2), with 82.76 million yen as the amount of economic profits, 3.173 million yen

With the number of lawyers 3, multiplied by 1.5, 4.759 million yen

Reward 4.759 × 2 = 9.518 million yen

Daily allowance 10 × 1.5 × (8 × 4) = 4.8 million yen

Second instance: 4.95 million yen

Starting fees

Cost related to the amount of damage 6.447 million yen

Cost related to injunction 8.369 million yen * 1203 × 8/3 = 3208 3208 ÷ 5.75 = 557.9 557.9 × 1.5 = 836.9

Total in the conversion table (table 2) with 14.82 million yen as the amount of economic profits, 1.247 million yen

With the number of lawyers 3, multiplied by 1.5, 2.494 million yen

Reward 1.247 × 2 = 2.494 million yen

Daily allowance 10 × 1.5 × (8 × 1) = 1.2 million yen

[III] Expenses for patent attorney

First instance: 9.66 million yen

Fees

In the conversion table (table 3) with 82.76 million yen as the amount of economical profits, 4.155 million yen

With the number of patent attorney 2, multiplied by 1.2, 4.986 million yen

Multiplied by 7, 3.49 million yen

Reward (ditto) 3.49 million yen

Daily allowance 7 × 1.2 × (8 × 4) = 2.688 million yen

Second instance: 2.49 million yen

Fees

In the conversion table (table 3) with 14.82 million yen

as the amount of economical profits, 1.086 million yen

With the number of patent attorney 2, multiplied by 1.2, 912 thousand yen

Multiplied by 7, 912 thousand yen

Reward (ditto) 912 thousand yen

Daily allowance 7 × 1.2 × (8 × 1) = 672 thousand yen

[IV] Total expenses

(Unit: 0,000 yen)

	Court	Agent (two)			Patent Attorney (one)			Total
		Starting fee	Reward	Daily allowance	Fee	Reward	Daily allowance	
First instance	21	476	952	480	349	349	268	2895
Second instance	0	125	250	120	91	91	67	744

III. Effect

First instance

Economical effect of injunction (8.37 million yen)

Acquired amount of damage to be compensated (6.45 million yen) ⇒ Actually, it was zero yen as of this time due to appealing.

Second instance

Economical effect of injunction (8.37 million yen)

Acquired amount of damage to be compensated 6.45 million yen (plus interests until conclusion of second instance)

Opinions may differ as to how to consider the economical effects of the injunction. In actual cases, the effect of a injunction may arise when the defendant loses the case in the first instance or more fortunately when an infringement lawsuit is filed. In this case, the value at the time of passing judgment

in the first instance was adopted.

4. Conclusion

The paper touched upon how to calculate lawsuit costs, citing the specific examples of the model cases in the previous chapters. As described in the first chapter, whether or not to actually file a lawsuit may be decided by paying collective consideration to such factors as costs, the possibility of winning, an influence on the social aspects and the like. Among these, costs must be important consideration without doubt. It will be a gratification if the results of examination pertaining to costs as resources for determination described in the paper will somehow help you when considering whether to file a lawsuit as one of the means to solve patent disputes.

Table 1 Complaint filing fee simple calculation table (used since October 1, 1992)

Kind	Amount charged in filed suit						
	300 thousand yen or less, (to 300 thousand yen)	Over 300 thousand and less than 1 million yen, (300 thousand to 1 million yen)	Over 1 million and less than 3 million yen, (1 million to 3 million yen)	Over 3 million to less than 10 million yen, (3 million to 10 million yen)	Over 10 million to less than 100 million yen, (10 million to 100 million)	Over 100 million and less than 1 billion yen, (100 million to less than 1 billion yen)	Over 1 billion, (1 billion to)
Suit	500 yen each up to 50,000 yen 500 yen 500 1000 1500 2000 2500 3000	80x + 800	70x + 1,600	50x + 7,600	40x + 1 7,600	30x + 117,600	20x + 1,117,600

Note: x in the table represents a cost of suit (0,000 yen).
(Example) if a suit cost is 1 million yen, x is 100.

Table 2

Standard reward for lawyers (excerpt from Lawyer Reward Rule of Tokyo Lawyers' Association (used since April 1, 1996))

Amount of economical profit	Starting fee	Reward
Less than 3 million yen	0.08Y	0.16Y
Over 3 million and less than 30 million yen	0.05Y + 90,000 yen	0.1Y + 180,000 yen
Over 30 million and less than 300 million yen	0.03Y + 690,000 yen	0.06Y + 1,380,000 yen
Over 300 million yen	0.02Y + 3,690,000 yen	0.04Y + 7,380,000 yen

Note: Unit of economical profit (Y) in the table is (yen).

(Example) If an economical profit is 1 million yen, Y is 1,000,000.

Table 3 Patent business standard cost (excerpt from patent business standard cost table used since April 1, 1996)

Price of object	Fee	Reward
Less than 500 thousand yen	1,500X	1,500X
Over 500 thousand and less than 1 million yen	1,200X + 15,000	1,200X + 15,000
Over 1 million and less than 3 million yen	1,000X + 35,000	1,000X + 35,000
Over 3 million and less than 5 million yen	800X + 95,000	800X + 95,000
Over 5 million and less than 10 million yen	700X + 145,000	700X + 145,000
Over 10 million and less than 50 million yen	500X + 345,000	500X + 345,000
Over 50 million and less than 100 million yen	400X + 845,000	400X + 845,000
Over 100 million and less than 1 billion yen	300X + 1,845,000	300X + 1,845,000
Over 1 billion yen	200X + 11,845,000	200X + 11,845,000

Note 1: X in the table represents the price of an object (0,000 yen).
(Example) If the price of an object is 1 million yen, X is 100.

Note 2: Fees and rewards in the table may increase/decrease within the range of 30% depending on the nature of a case.

(1) Title:

Patent infringement actions for suing damages - Recent cases in Japan

(2) Date:

October 1996 (The 27th General Meeting in Hiroshima)

(3) Source:

1) Source: PIPA
2) Group: Japan
3) Committee: #4

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(5) Key word: Damages

(6) Provisions of Laws:

Article 102 of the Japanese Patent Law

(7) Summary:

To analyze recent cases of suing damages for patent infringement in Japan, especially from the viewpoint of "claimed amount vs. approved amount," and identify the trend and;

To evaluate and estimate amounts of damages, effects obtained by injunctions and costs for suits, and through

these efforts, determine cost performance for claims, for the purpose of analyzing economical effects for companies to pursue patent infringement actions.

I. Preface

We tried to evaluate recent damages claiming cases for patent infringement in Japan, and as the base for this task, we have studied judicial precedents in past ten (10) years. This paper is to present our findings.

At length, we retrieved cases in LEX/DB files (TKC Information Service) using it as the database, and using the set of product of "Patent multiplied by Damages" as the key word for retrieval. We retrieved cases setting the term for search from January 1986 to date, and as the result, found forty-five (45) files of precedent summaries. Then, from these files, we selected twenty-four (24) cases that actually show decisions for amounts of damages, and next, preliminarily studied the main sentences of judgments and identified twelve (12) cases in which damages are approved. In this process we found another two (2) cases that relate to the two cases in original twelve, so we added these two to the twelve, making the number of final targets fourteen (14).

LEX/DB database contains almost all precedent collections that have been listed in major journals specialized in precedent, and as to retrieval methods, it may provide for many ways. However, main purpose of our study was to determine the trend of damages suing cases for patent infringement in Japan, rather than to acquire complete statistic data analysis, so we decided that these fourteen (14) cases are typical ones as such that show characteristics of recent cases where damages have been approved, and thus made them the target for our study.

II. Description of the cases

The cases are summarized as follows.

Case 1

No. 10296 (wa), 1974

Plaintiff : A company , Defendant: B company

A sued B for damages complaining that B has infringed the patented innovation of "stone selecting and picking-up machine", the patent right to which A owns as the exclusive licensee, and the court partly approved the damages.

In this case, A had signed a non-exclusive license agreement between C company, in which A granted C non-exclusive license for the use of the machine, assuring C that if there occurs infringement problems between C and any third party A shall eliminate the trouble and in case A fails to do so it shall indemnify C for penalty. And so A failed, it had paid 8,000,000 yen to C as the penalty for breach of contract.

Plaintiff A claimed against B 8,720,000 yen for damages which include the said penalty of 8,000,000 yen, and the court dismissed the 8,000,000, deciding the damages to be 320,000 yen, which is the amount of ten percent (10%) of the sales of B.

Case 2

No. 1726 (wa), 1985

Plaintiff: A company, Defendant: B company

A sued B for injunction and damages for infringement of patent complaining that B's product is infringing A's patented innovation of "core texture material," and the court ordered B to pay 58,527,952 yen to cover A's damages on lost (expected) profit.

Case 3
No. 4025 (wa), 1983
Plaintiff: A company, Defendant: B company

A claimed payment of royalty (license fee) against B, and B denied the existence of the alleged license agreement. So, A changed the charge from claim for royalty payment to that for "to prohibit B from using the patent" and for indemnity, which A claimed based on its patent right.

This is the case for infringement of patented innovation, namely "method to manufacture light fireproof materials from industrial wastes." And the court calculated the damages applying standard "Royalty Calculation Method" defined in common license agreements for government owned patent, and then judged that the amount should be the sum equivalent to three percent (3%) of selling price, which totally resulted in 4,549,935 yen.

Case 4
No. 7127 (wa), 1984
Plaintiff: A company, Defendant: B company

A sued B for injunction and damages for infringement of patent. The patent was "manufacturing method of wooden mosaic construction materials," and the complaint of A was that the method used by B had infringed the said patented innovation.

The court calculated the damages as five percent (5%) of selling price, which was the exact amount the plaintiff had demanded. However, as the patent right of A had changed from that of sole ownership to joint-ownership with other parties, the court judged that the damages incurred after the patent was jointly owned should be calculated

based on the ratio of ownership interest of A. Thus, the damages were judged as 133,599,959 yen.

Case 5
No. 1371 (wa), 1983
Plaintiff: A company, Defendants: Four parties (companies)

A owned exclusive license for the patent right to "forced type fresh concrete mixer with two wheels." And based on the license, A sued the four defendants for injunction against selling and using their products, and for the damages. A won the suit.

Patent owner was a German company. Between that company, A had signed "license and know-how agreement" which authorized A to use the patent with absolutely exclusiveness in Japan and other areas, and actually A had been exclusively manufacturing and selling the said mixer in Japan. The claimed amount was high 144,910,000 yen, but because of the fact that A had been selling the product with discounted prices, and also because of cost deduction, final approved damage was judged as 95,604,866 yen.

Case 6 and 7
No. 3939 (wa) and 3940 (wa), 1981
Plaintiff: A, Defendants: B, C

A sued B and C for injunction against use of the pigments which A and B were respectively applying for their products, and for the damages. The reason of the suit was defendants' infringement of A 's patent right to "chromic chloride pigments." A won the suit.

Plaintiff A was an United States based company, and the claimed amounts were 1,066,000,000 yen for B, and 383,231,800 yen for C. It must be categorized in extremely

high amount cases ever claimed in Japan. Plaintiff A estimated these amounts based on the calculation of "350 yen per kilogram," which was the formula of the royalty that A had already agreed until then between D, an outsider.

The court finally applied "five percent (5%) of sales" standard as the calculation base. The standard was the averaged royalty ratio in the chemical industry, and it was as little as approximately one tenth (1/10) of what claimed by A. Under such basic rule, the court determined the amount of damage in a way that: for the period when defendants' profits exceed the amount of the said 5% royalty, the amounts of such profits should be the damage, and for the period when the profits are lower than the royalty, damage should remain the amount of royalty. Thus, it ordered B to pay 225,091,820 yen, and ordered C to pay 39,140,502 yen.

Case 8
No. 12030 (wa), 1989
Plaintiff: A company, Defendant: B company

A sued B for injunction against use of the hair piece and the pin applied for it, along with the damages, by reason of B's infringement of A's patent right to the "hair piece." The case was decided in favor of A. In this case A claimed relatively high amount of 100,000,000 yen for damages, but the evidence was not clear. However, defendant B did not protest against the amounts of 6,447,000 yen which A claimed as the profit gained by B, and this amount was approved as the amount of the damages.

Case 9
No. 9806 (wa), 1986
Plaintiff A company: Defendant: B company

A sued B for injunction against use of B's "laver handling machine" along with the damages, complaining that B was infringing A' s patent. The case was decided in favor of A. In this case, both companies respectively owned specific patents related to the machine, and had already been disputing each other making such actions as cross injunction. And while they had once managed to settle reconciliation between them through certain efforts as establishing a joint venture, terms and conditions in reconciliation agreement were not well implemented. The suit occurred under such background. The court calculated the profit of B as 2,200,000 yen and recognized it as plaintiff's damages.

Case 10
No. 1627 (ne), 1991

The plaintiff sued the defendant for damages, complaining that defendant's products namely the "ball spline shaft which is used for eternal rubbing movement and which has the support designed as divided structure" were infringing plaintiff's patent.

The court judged that the defendant could have replaced the method or mechanism which is used in the said shaft and which infringe plaintiff's said patent when the defendant applied the patent (s) for the shaft. And thus, the court judged that the said shaft actually infringed the said patent of the plaintiff, and decided the case in favor of the plaintiff. The amount of 22,240,000 yen which the plaintiff claimed as its lost profits (15% of selling price) was completely approved.

Case 11

No. 16565 (wa), 1992
Plaintiff: plaintiff, Defendant: A, B

This case was the one that so-called "parallel import of true brand goods" which the defendants were engaging in was judged as being infringement of plaintiff's "automotive wheels" patent. The damage was approved (in the first trial).

In this case the plaintiff claimed total amount of 11,820,000 yen against defendant A, the seller of the said goods and B, the importer of the same. The amount was the sum equivalent to 10% of the sales of A and B (it was calculated as 6,890,000 for A and 4,290,000 for B). The claims against B was dismissed by reason of Exhaustion Theory. In the end, the court ordered A, the seller, to pay 4,820,000 yen, deciding that the amount of the damages should be that of seven percent (7%) of selling price, which was the typical royalty ratio the plaintiff was applying when it executes license agreement for the patent.

Case 12, 13
No. 3743 (wa) and 3746 (wa), 1989

In these two cases, defendants' rice polishing machine were judged as such that; the machine had been made under only intention of using it to implement plaintiff's patented innovation for "method for polishing rice with poured water," and that; accordingly, the machine indirectly infringed plaintiff's patent. Under such decision, the court approved plaintiff's claims for injunction and damages.

In both cases the plaintiff claimed 3,800,000 yen for damages, and the court approved 3,400,000 yen for each (total 6,800,000). The damages were calculated based on

the standard "Royalty Calculation Method" defined in common license agreements for government owned patent; and in the calculation, the court decided the royalty for the patent as one percent (1%) of the selling price, leading it by multiplying four percent (4%)-royalty-ratio by one fourth (1/4). The 4% was the ratio defined in the said method and the 1/4 was the utilization rate decided by the court.

Case 14
No. 10671 (wa), 1990

The plaintiff owned the exclusive license for the patent of "flexible pipe for leading cables or tubes," and it sued the defendant for damages complaining that defendant's products were infringing its exclusive license. For the damages, the plaintiff claimed the amount of money which it could usually receive in licensing said patented innovation (i.e. damages equivalent to royalty), along with legal costs. Claimed amount was 13,158,920 yen, which consists of 7,388,920 yen for the royalty equivalent and 5,770,000 yen for legal costs.

The court decided the usually-receivable money as to be seven point five percent (7.5%) of the sales, which led 2,518,000 yen; and as for the legal costs, it decided that only the portion that had appropriate causal relationship between the infringement should be approved, which resulted in 1,600,000 yen. Thus, totally 4,118,000 yen was approved.

III. Overview and Analysis

In this section, we try to analyze the trend in patent infringement actions for suing damages in Japan, based on the said fourteen (14) cases.

(1) Claimed amounts vs. Approved Amounts

First, we try to analyze "claimed amounts vs. approved amounts" referring Table 1 and Graph 1. Fourteen cases distribute as follows.

These amounts are generally low in terms of comparison to those of the United States of America where we recently see many cases that have won large amounts of damages ranging from one billion yen to ten billion yen (1,000,000,000 to 10,000,000,000), such as 873 million dollars of Polaroid case or 96 million dollars of Minolta case.

Possible reason for this is that; patent suits in Japan seem to be mainly pursued for the purpose of injunction or honor-restoration, rather than the pursuit of economical benefits by means of claims for damages, and that; right from the beginning, the scales of object markets are small, and that; there is such difference between lawsuit systems in both countries that while they have punitive damages system such as triple-damages in the United States of America, in Japan, the system allows only damage-claiming for recovering lost profits.

Also, when we compare approved amounts to claimed amounts, we can see that approved amounts are reduced by half in more than half of cases. Some part of the reason of this is probably that, in suits in Japan, relatives feel it difficult to calculate damages. In fact, Discovery System seen in the U.S. does not exist in Japan, and it is said that judges tend to be extremely passive for applying "order to submit documents" provided in Article 105 of the Patent Law, so it is very difficult for a plaintiff to acquire exact numerical value data which can be used as the base for calculation. Thus, we have to assert that there is disadvantage for a plaintiff who tries to claim a large amount of damage.

As stated above, here we can conclude that:
In damage suing case in Japan, absolute value of claimed damages is low, and in addition to this, an amount likely to be approved against claimed damages tends to become further lower, and that:
The reason for this trend is the complication of the factors such as "purpose to suit," "scale of markets" and the "characteristics of lawsuit systems in Japan."

(2) Examination of effect obtained by injunction

As aforementioned, approved damages tend to be held down to the level far lower than what have been claimed, and approved amounts themselves are not very large at the first place as shown in precedents. So, cost performance for suit may not necessarily be expected to be good. However, damages mentioned above are for compensation for past infringement, and when we consider benefit gained by winning suits we may have to consider future benefit, that is to say effect obtained by injunction.

At the same time, in the questionnaire which the Committee carried out for PIPA members companies this year, there were opinions that they "consider the effect obtained by injunction" when they evaluate cost efficiency in suits. Accordingly, here we have examined the effect of wining suit, evaluating the effect obtained by injunction through the method descried below.

As for the effect obtained by injunction, we have estimated it referring to the calculation formula used by the plaintiff in the case No. 10671 (wa), 1990 (Case 14). In short, we have applied the following method.

To calculate damages per year (damages/year) by dividing judged damages by the number of years (period) of past infringement, and then multiply the result (damages/year)

by the number of years for which the patent remain existing, to obtain the future effect of the injunction.

The results are shown in Graph 2. According to the graph, there are four (4) cases where effect obtained by injunction is greater than effect from damages, and there are two (2) cases where the effect becomes rather large amount if we include the effect obtained by injunction to it.

Consequently, if we consider the effect obtained by injunction as the future effect, there is possibility that cases whereby we can obtain enough effect that well offsets costs may increase.
In next paragraph, we try to assess comparative examination for such cost performance.

(3) Cost performance in patent suites in Japan

Generally speaking, it is difficult to estimate costs for suits because there exist a lot of uncertain factors there. The Committee this year has studied this cost estimation matters in detail and reported the findings separately. Here, we have tried to estimate costs for suits on the fourteen (14) cases, based on the principle defined in the said findings. However, it must be noted that the estimate in this paper is merely an experimental aim, since costs are affected by claimed amount or numbers of trials held in the suit, or they vary according to payment capacity of parties.

In the study executed in accordance with such conditions, we found, out of the fourteen (14), four (4) cases where approved damages were larger than costs and therefore satisfies the efforts for cost consuming suit (see Table 2). All of the four (4) cases are such high-amount ones as approved damages exceed 50,000,000 yen, and for the three

cases out of them, originally claimed damages exceed 100,000,000 yen. Accordingly, there seems to exist the trend that shows that unless both claimed amount and approved amount reach certain high level, we are not likely to get result that well offsets the costs. Probable reason is that, as costs are not in proportion to claimed amount, the larger the amount is, the lower becomes the ratio of costs' portion.

In addition to the examination of approved damages, we also calculated future economical effect obtained by injunction against infringement and examined the results in relation to costs. As the result, when we look at "damages + effect obtained by injunction" about the cases where approved damages are lower than costs, there are two (2) cases which have obtained economical effect that offsets the costs. The two cases could obtained such an effect because of the length of remaining period of patent right (Table 2).

Also, we calculated "semi-effect" obtained by injunction, that is the amount calculated by multiplying "damages/year" and "period from the date when infringement was suspended to the date of judgment" together; and then look at the economical effect, adding this amount to "damages + effect obtained by injunction." But, from this test there newly appeared no case which offsets costs.

Consequently, with eight (8) cases it can be estimated that they could not obtain the effect that offsets the costs. However, strictly speaking, there are many affairs that only the parties concerned know, such as details of why they had to depend on lawsuit, actual costs for suit and effects other than "damages + effect obtained by injunction"(such as preventive function to stop possible infringements by parties other than the defendant). So, we have to understand that the findings can only be evaluated

as assumptive estimate, and needless to say, a suit cannot be evaluated only for its economical effect.

In conclusion:

Economically efficient suits are conditioned on the fact that they have claimed damages of over certain high level of amount and as the result obtained relatively high amount.

Also, economical effect gained by injunction is an important factor.

Further, it is necessary to well consider remaining period up to expiration of right. If the trial continue for a long time, not only costs increase but also effect from injunction decrease, and this will make efficiency further worse. So, we should pay attention to this point, too.

Table 1 - Claimed Amounts versus Approved Damages in recent patent infringement actions

No.	Case No./Name	Court	Area	Period	Claimed amount (Yen)	Decided damages (Yen)	Provisions	Calculation
1	No. 10296 (wa), 1974 Damages claiming	Tokyo District Court	Agricultural machine	10 years	1. Damages: 720,152 2. 8,000,000 for penalty the plaintiff had paid to a non-exclusive licensee	1. 327,432 2. Damages for the penalty were dismissed	Patent Law 102-2	Amount equivalent to royalty for sales (10%)
2	No. 1726 (wa), 1985 Injunction against infringement of patent	Osaka District Court	Textile	3 years	58,527,959	58,527,959	Patent Law 102-1	Lost profits
3	No. 4025 (wa), 1983 Royalty claiming	Osaka District Court	Chemical	4 years	4,549,935	4,549,935	Patent Law 102-2	Based on Royalty Calculation Method defined in common license agreement for government owned patent. Royalty was decided as to be 3% of the selling price.
4	No. 7127 (wa), 1984 Injunction against infringement of patent	Osaka District Court	Construction materials	3 years	336,508,227	133,599,959	Patent Law 102-1	Multiplied sales and profit ratio (5%) together. After the right became that of joint-ownership, multiplied the said product by 1/4 i.e. interest of joint-ownership.
5	No. 1371 (wa), 1983 Injunction against infringement of exclusive license	Osaka District Court	Machinery	9 years	144,910,000	Defendant 1: 94,383,866 Defendant 2: 510,000 Defendant 3: 246,000 Defendant 4: 465,000 Total: 95,604,866	Patent Law 52, 102-1	Damages equivalent to royalty was decided as to be 4% of the price (The plaintiff had agreed between the patent owner to pay him royalty of 3 or 4% of the selling price).

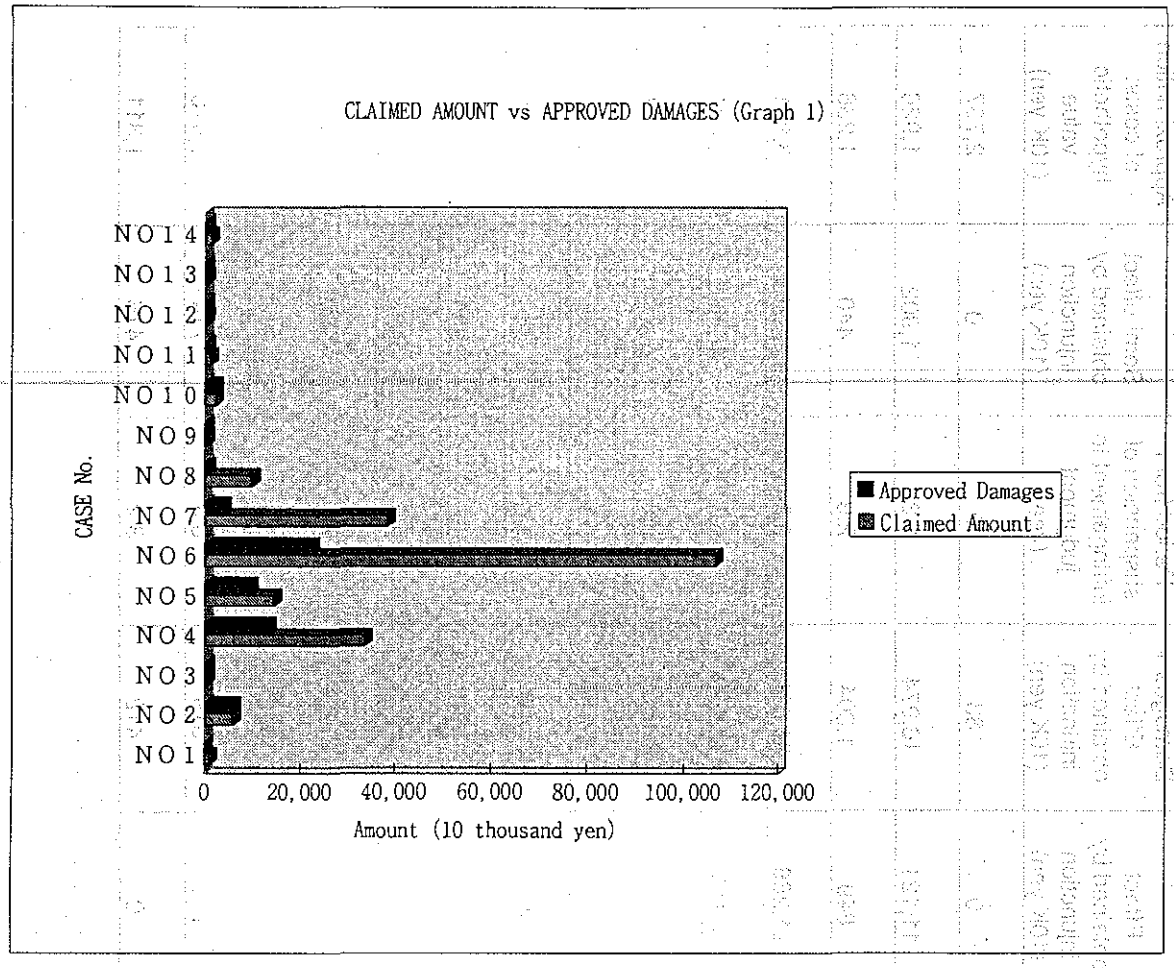
6	No. 3939 (wa), 1981 Injunction against infringement of patent	Tokyo District Court	Chemical	10 years	1,066,000,000	225,091,820	Patent Law 100, 102-2	Amount equivalent to royalty was calculated multiplying the selling price by 5%.
7	No. 3940 (wa), 1981 Injunction against infringement of patent	Tokyo District Court	Chemical	10 years	383,231,800	39,140,502	Patent Law 100, 102-2, 105	Amount equivalent to royalty was calculated multiplying the selling price by 5%. Part of the right to make a claim for damages had been barred by prescription.
8	No. 12030 (wa), 1989 Injunction against infringement of patent	Tokyo District Court	Other/ Munufacturer	3 years	100,000,000	6,447,000	Patent Law 101, 102-1	Profits the defendant had gained through sales of its products.
9	No. 9806 (wa), 1986 Injunction against infringement of patent	Osaka District Court	Machinery	6 years	4,500,000	2,200,000	Patent Law 102-1	Net profit was calculated as to be 2,200,000 yen and the amount was applied as the damages.
10	No. 1627 (ne), 1991 Injunction against infringement of patent	Tokyo High Court	Machinery	11 years	22,240,000	22,240,000	Patent Law 102-1	Lost profits
11	No. 16565 (wa), 1992 Injunction against infringement of patent	Tokyo District Court	Automotive component	2 years	11,180,000 (68,870,000 + 42,930,000) 10%	4,820,000 (68,870,000)x7% (42,930,000)x0%	Patent Law 2-3-1, 68, 100,102-2	Amount equivalent to royalty (7%)
12	No. 3743 (wa), 1989 Injunction against infringement of patent	Tokyo District Court	Agricultural machine	5 years	3,800,000	3,400,000	Patent Law 101, 102-1	Amount equivalent to royalty (1%)
13	No. 3746 (wa), 1989 Injunction against infringement of patent	Tokyo District Court	Agricultural machine	5 years	3,800,000	3,400,000	Patent Law 101,102-1	Amount equivalent to royalty (1%)
14	No. 10671 (wa), 1990 Injunction against infringement of patent	Tokyo District Court	Machinery	4 years	13,158,920	4,118,000	Civil Law 416,709 Patent Law 102-2	2,518,000 yen as 7.5% of sales. Legal costs: 1,600,000 yen

Table 2 - Cost performance of patent suits in Japan

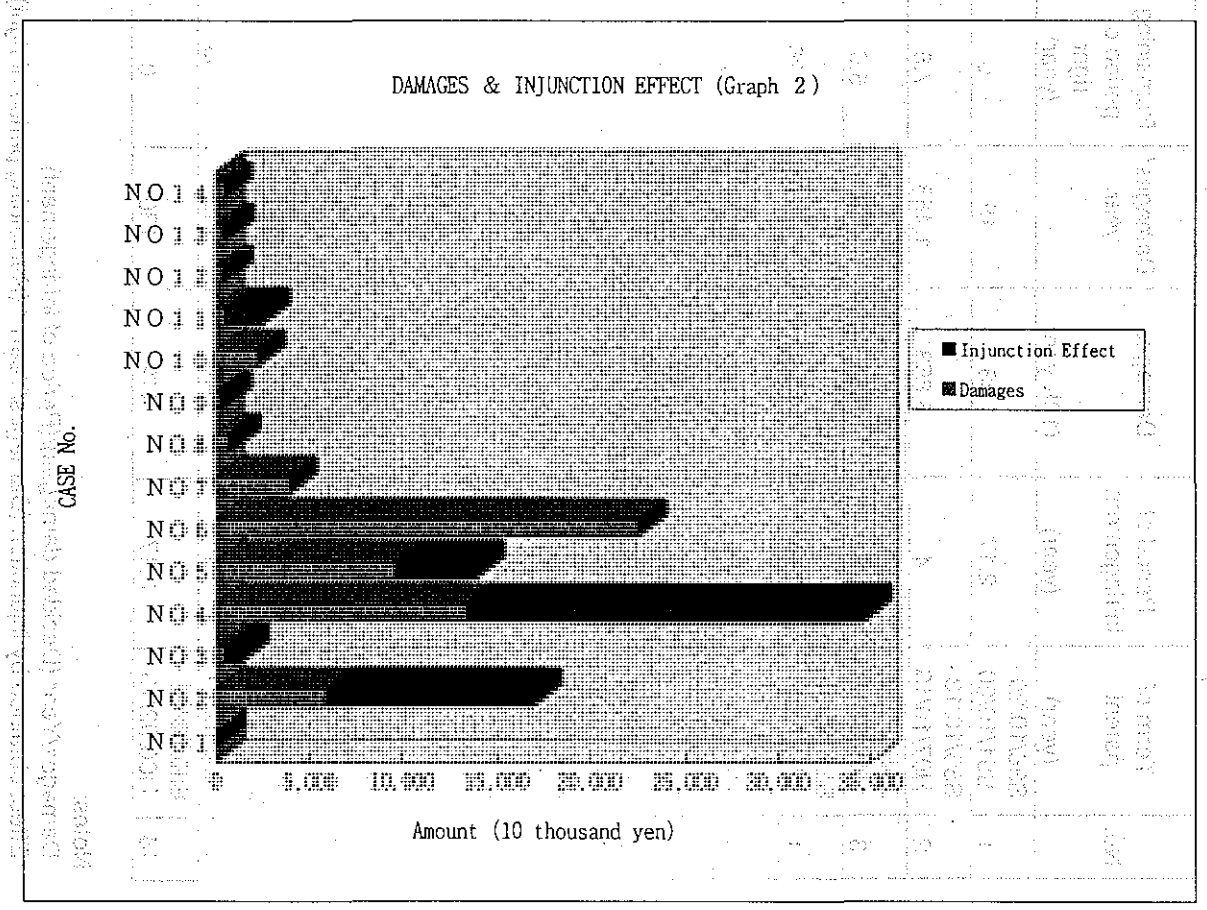
No.	Term of patent (year)	Period of infringement (year)	Damages (10K yen)	Damages/ year	Remaining period of right (year)	Effect obtained by injunction (10K yen)	Damages + Effect obtained by injunction (10K yen)	Period from suspension of infringement to judgment (year)	Semi-effect obtained by injunction (10K yen)	Approximation of costs: hypothetic value (10K yen)
1	S36/10/20 - S51/10/20	2.17	33	15	0	0	33	0	0	2,737
2	S55/10/13 - H07/10/13	4	5,853	1,463	7.6	11,121	16,974	1.3	1,902	1,926
3	S58/01/06 - H05/05/31	3	455	152	5.6	849	1,304	2.9	440	1,236
4	S52/02/21 - H04/02/21	2.67	13,360	5,004	4.25	21,266	34,626	3.5	17,513	3,871
5	S54/11/14 - H04/06/07	2.2	9,560	4,345	1	4,345	13,905	9.3	40,413	4,481
6	S46/03/10 - S61/10/12	8.2	22,509	2,745	0	0	22,509	0.5	1,373	9,351
7	S46/03/10 - S61/10/12	8	3,914	489	0	0	3,914	0.1	49	4,261
8	S54/06/25 - H06/06/25	4.8	645	134	1.7	228	873	1.6	215	1,700
9	S54/03/02 - H06/03/02	3.3	220	67	3	200	420	5	333	1,743
10	S55/05/30 - H03/04/26	5.92	2,224	376	0	0	2,224	2.5	939	3,447
11	H03/12/20 - H05/10/29	2.25	482	214	9.25	1,982	2,464	2.1	450	736
12	S56/03/24 - H07/07/09	3	340	113	1	113	453	6.3	714	1,476
13	S60/10/31 - H08/02/24	3	340	113	1.58	179	519	6.3	714	1,478
14	S56/08/31 - H06/02/13	3.17	412	130	0	0	412	3.2	416	1,311

Notes:
*Damages/Year (Decided damages)/(Period of infringement)
*Effect obtained by injunction (Damages/Year) * (Remaining period of right)
Remaining period is "from the date of judgment to the expiration date."
*Semi-effect obtained by injunction (Damages/Year) * (Period from suspension of infringement to the date of judgment)

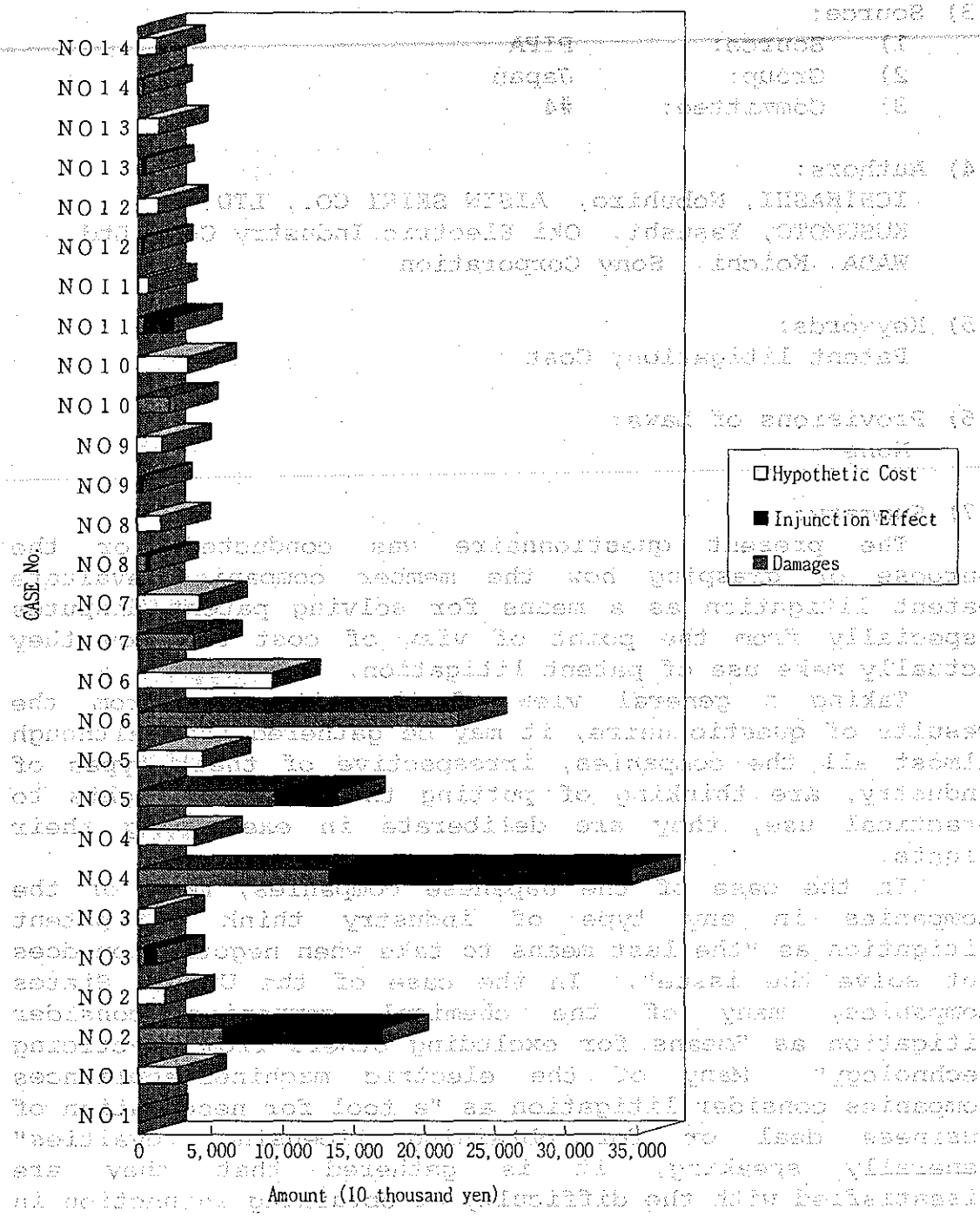
CLAIMED AMOUNT vs APPROVED DAMAGES (Graph 1)



DAMAGES & INJUNCTION EFFECT (Graph 2)



EFFECT vs COST IN LITIGATIONS (Graph 3)



(1) Title:
Cost Effectiveness in Patent Litigation

(2) Date:
October, 1996
The 27th International Congress, Hiroshima

(3) Source:
1) Source: PIPA
2) Group: Japan
3) Committee: #4

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(5) Keywords:
Patent litigation, Cost

(6) Provisions of Laws:
None

(7) Summary:
The present questionnaire was conducted for the purpose of grasping how the member companies evaluate patent litigation as a means for solving patent disputes especially from the point of view of cost and how they actually make use of patent litigation.

Taking a general view of the situation from the results of questionnaire, it may be gathered that although almost all the companies, irrespective of their types of industry, are thinking of putting their patent rights to practical use, they are deliberate in exercising their rights.

In the case of the Japanese companies, most of the companies in any type of industry think of patent litigation as "the last means to take when negotiation does not solve the issue". In the case of the United States companies, many of the chemical companies consider litigation as "means for excluding others from practicing technology" Many of the electric machines-appliances companies consider litigation as "a tool for negotiation of business deal or for obtaining licensing royalties" Generally speaking, it is gathered that they are dissatisfied with the difficulty of obtaining injunction in a patent litigation and the high cost.

Cost Effectiveness in Patent Litigation

1. Preface

The present questionnaire was conducted under the title of "Cost Effectiveness in Patent Litigation" for the purpose of grasping how the member companies evaluate patent litigation as a means for solving patent disputes especially from the point of view of cost and how they actually make use of patent litigation. The present analysis was performed for the purpose of contributing to the panel discussion to be held between the Japanese and the United States companies in the 27th International Congress.

2. Outline of Investigation by Questionnaire

Number of questionnaire-addressed companies:	
Member companies of Japanese Group	84
Member companies of United States Group	66
Number of answered companies	
Member companies of Japanese Group	55
Machine-metal companies	11
Electric machines-appliances companies	11
Chemical companies	32
Others	1
Member companies of United States Group	14
Machine-metal companies	0
Electric machines-appliances companies	5
Chemical companies	6
Others	3

3. Results of Investigation and Analysis

3. 1 In order to grasp the experiences of the Japanese and the United States companies relating to patent litigation, the number of companies who received and filed lawsuits with respect to patent infringements in the past five years were investigated.

Number of companies who have received a patent lawsuit

Japanese companies

Number of answered companies		yes	no	Rate of reception
Machine-metal	(11)	5	6	45%
Electric machines-appliances	(11)	8	3	73%
Chemical	(32)	11	21	34%
Others	(1)	0	1	0%
Total	(55)	24	31	44%

United States companies

Number of answered companies		yes	no	Rate of reception
Machine-metal	(0)	-	-	-%
Electric machines-appliances	(5)	5	0	100%
Chemical	(5)	5	0	100%
Others	(3)	2	1	67%
Total	(13)	12	1	92%

Of the Japanese companies, 73% of the electric machines-appliances companies have experience of receiving lawsuits showing a high figure as compared to other types of industry. Of the United States companies, as many as 92% of the answered companies have the experience of receiving lawsuits.

Number of companies who have ever filed a patent lawsuit

Japanese companies

Number of answered companies		yes	no	Rate
Machine-metal	(11)	5	6	45%
Electric machines-appliances	(11)	5	6	45%
Chemical	(32)	16	16	50%
Others	(1)	0	1	0%
Total	(55)	26	29	47%

United States companies

Number of answered companies		yes	no	Rate
Machine-metal	(0)	-	-	-%
Electric machines-appliances	(4)	4	0	100%
Chemical	(5)	5	0	100%
Others	(3)	3	0	100%
Total	(12)	12	0	100%

About half of the Japanese companies have experience of filing patent lawsuits and all of the answered United States companies have experience of filing patent lawsuits.

Next, the number of lawsuits (received and filing) classified by countries are as follows:

Number of lawsuits-received classified by countries

	Japanese companies			US companies		
	Japan	USA	Others	Japan	USA	Others
Machine-metal	2	12	0	-	-	-
Electric machines-appliances	1	41	3	0	32	1
Chemical	8	10	6	0	16	4
Others	0	0	0	1	4	4
Total	11	63	9	1	52	9

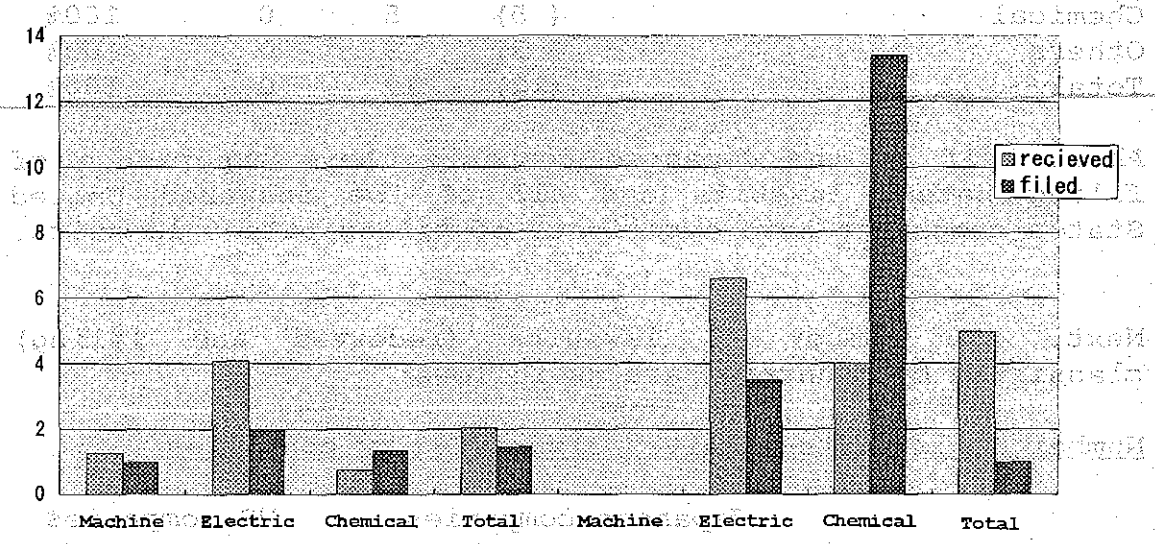
Number of lawsuits-filed classified by countries

	Japanese companies			US companies		
	Japan	USA	Others	Japan	USA	Others
Machine-metal	3	7	1	-	-	-
Electric machines-appliances	4	4	3	0	12	2
Chemical	49	10	11	24	25	18
Others	0	0	0	0	2	1
Total	56	21	15	24	39	21

An overwhelmingly large number of lawsuits were received in the United States by the member companies. Further, the largeness of the number of lawsuits received in the United States by the electric machines-appliances companies is outstanding. The largeness of the number of lawsuits filed by the Japanese chemical companies is also significant.

The number of lawsuits per company (total number of lawsuits, received and filed respectively, in each categorized companies divided by number of such categorized companies) are as shown in GRAPH 1.

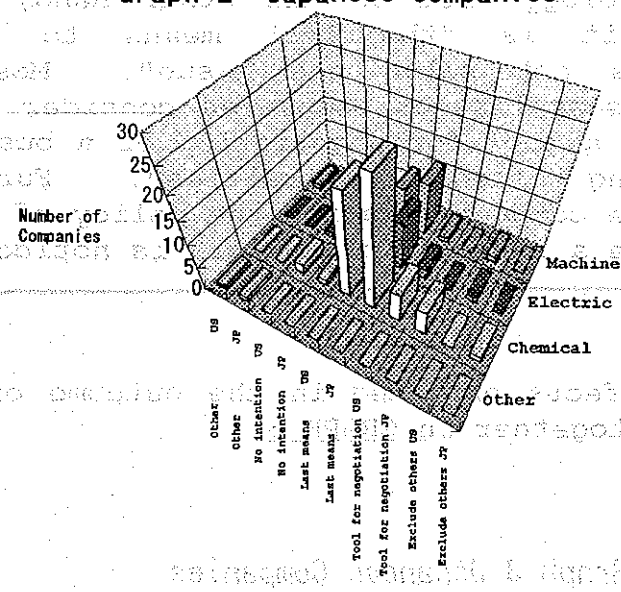
Graph 1



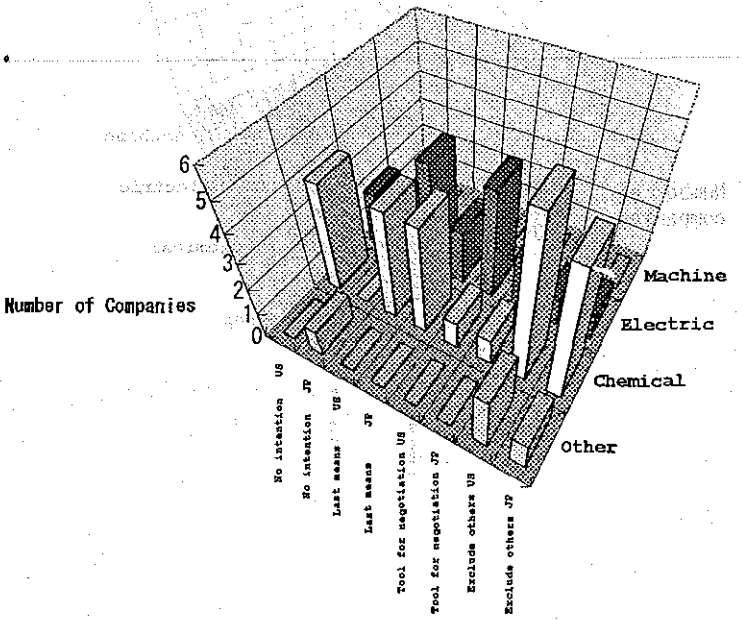
Of the Japanese companies, the electric machines-appliances companies have the largest average number of lawsuit-received. Of the United States companies, the chemical companies have an average number of lawsuit-filed towering above the others.

3. 2 The ways how the answered companies think of patent litigation as means for enforcing their patents are put together in GRAPH 2.

Graph 2 Japanese Companies



Graph 2 US companies

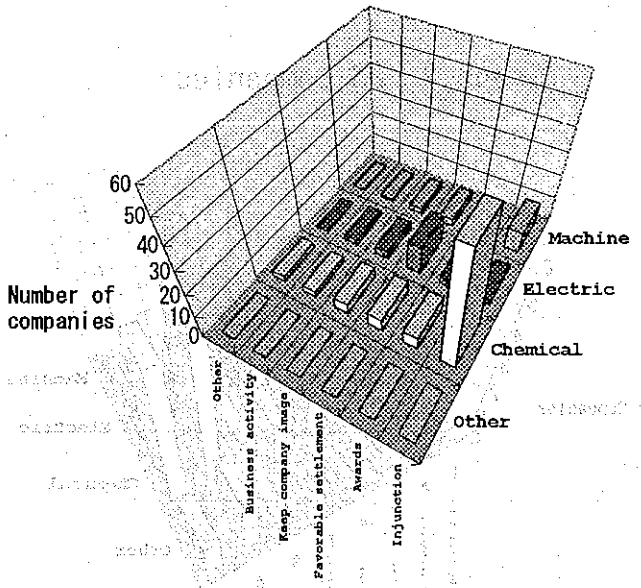


Most of the Japanese companies in any type of industry consider that "patent litigation is the last means to take when negotiation does not solve the issue". Of the United States companies, most of the chemical companies consider patent litigation as "means for excluding others from

practicing technology" but on the other hand, they also consider that it is "the last means to take when negotiation does not solve the issue". Most of the electric machines-appliances companies consider that "they use a lawsuit as a tool for negotiation of a business deal or for obtaining licensing royalties". Further, the existence of some companies having the policy of "having no intention to file a lawsuit in general" is noticed.

3. 3 The effects expected in the outcome of a patent lawsuit are put together in GRAPH 3.

Graph 3 Japanese Companies



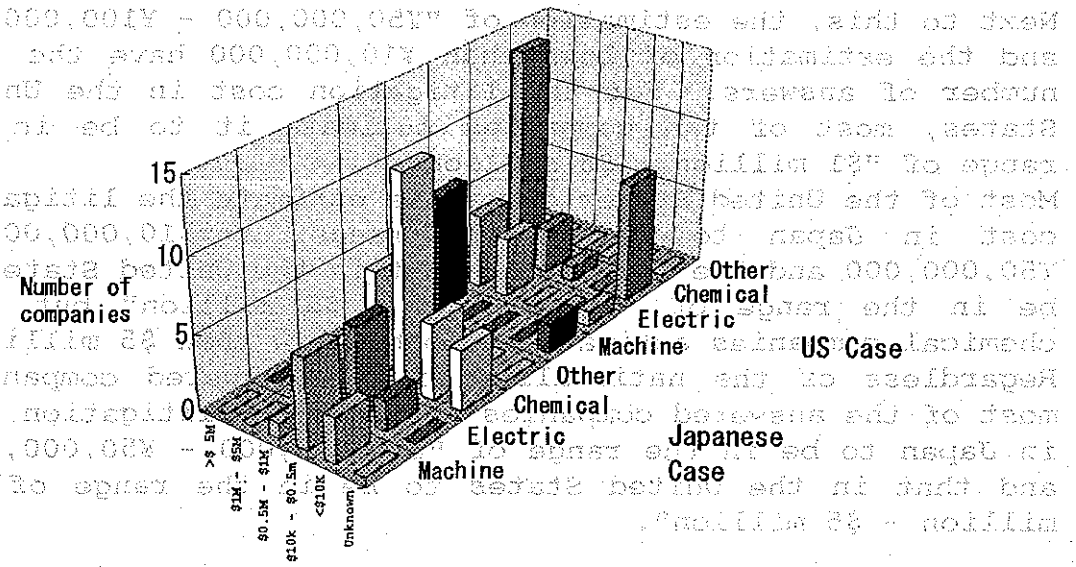
Of the Japanese companies, most of the machine-metal and chemical companies expect "injunction of infringing products". Especially, the chemical companies show a big figure in this respect. On the other hand, most of the electric machines-appliances companies expect the effect of "making a settlement more favorable". It appears that the electric machines-appliances companies consider patent litigation as the last means to take as a part of negotiation for a settlement. In contrast, the GRAPH shows that most of the machine-metal and chemical companies seek

"injunctions" when using a lawsuit as the last means to take. It is noted that even when observed separately, both the Japanese and the United States companies show the same tendency.

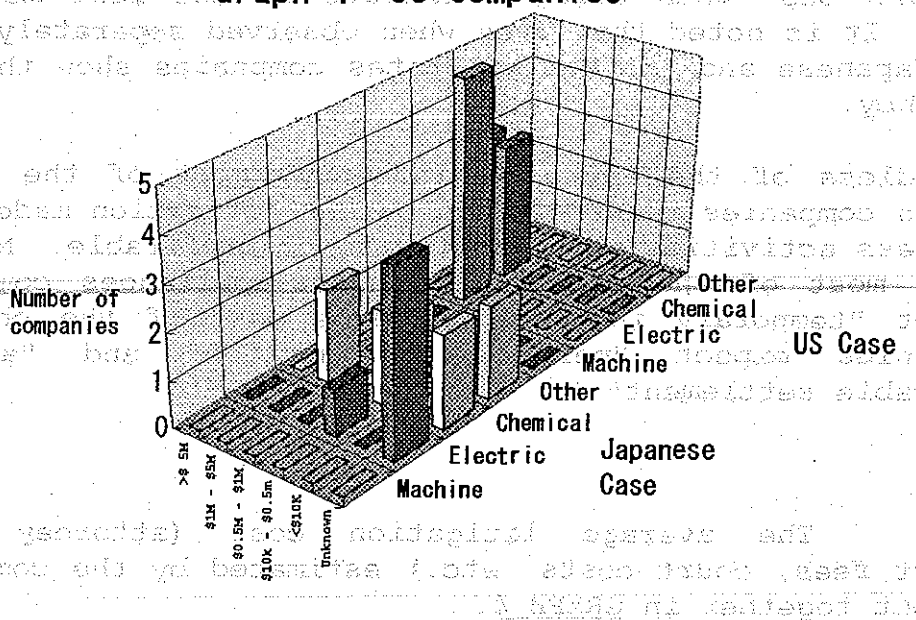
Regardless of the types of industry, most of the United States companies answered that patent litigation made their business activities more beneficial or profitable. Next to this, most of the electric machines-appliances companies expect "temporary injunction" while most of the chemical companies expect "permanent injunction" and "a more favorable settlement".

3. 4 The average litigation cost (attorney fees, expert fees, court costs, etc.) estimated by the companies are put together in GRAPH 4.

Graph 4 Japanese Companies



Graph 4 US Companies



Most of the Japanese companies estimate the litigation cost in Japan to be in the range of ¥10,000,000 - ¥50,000,000. Next to this, the estimation of "¥50,000,000 - ¥100,000,000 and the estimation of less than ¥10,000,000 have the same number of answers. For the litigation cost in the United States, most of the companies estimate it to be in the range of "$1 million - $5 million".

Most of the United States companies estimate the litigation cost in Japan to be in the range of ¥10,000,000 - ¥50,000,000 and the litigation cost in the United States to be in the range of "$1 million - $5 million" but some chemical companies estimate it to be more than $5 million.

Regardless of the nationality of the answered companies, most of the answered companies estimate the litigation cost in Japan to be in the range of "¥10,000,000 - ¥50,000,000" and that in the United States to be in the range of "$1 million - $5 million".

3.5 We asked the companies for their free comments on the following questions.

* What factors does your company think are important in using a patent lawsuit effectively?
* How does your company evaluate a patent lawsuit in terms of cost effectiveness?
* Compared to the past, has there been a change in the awareness or recognition in your company regarding patent lawsuit?

The gist of the answers of the Japanese companies is as follows:

[Mechanical companies]
Many companies consider that in view of cost, the use of patent litigation should be avoided by all means but at the same time, some companies consider that it is unavoidable to use lawsuit for protecting their own rights and interests.

[Electric machines-appliances companies]
Some of the companies consider a lawsuit as the last means for settlement of negotiation while considering that some amount of cost is unavoidable for protecting their own rights. Further, some companies are of the opinion that it is preferable to settle the issue by negotiations and for that purpose, the significance of the existence of litigation should be recognized. Some companies have the idea that a certain degree of understanding is now prevailing that a lawsuit is means for negotiations.

[Chemical companies]
When the litigation cost is taken into consideration, there is the idea of taking into consideration of not only attorney fees but also the merit of injunction. In the case of a pharmaceutical product or a main product, there is the idea that a lawsuit should be used even by disregarding the cost problem to some degree.

Throughout the types of industry, almost all companies are of the opinion that when trying to use a patent lawsuit, they take into consideration of cost balancing by conducting a cost evaluation in advance without fail and meet the situation by generally judging it from every angle. On the other hand, there are many companies who are of the opinion that the number of cases is increasing in which they enter into negotiation with other companies with an attitude of being always ready to use a lawsuit based on

the strong idea of protecting their own rights. Further, many of the machine-metal and electric machines-appliances companies attempt to solve the dispute by negotiations by all means and at the same time, even when a lawsuit is brought in, they still seek a way to reach an agreement. On the contrary, many of the chemical companies consider that they exercise a patent right as an exclusive right for which it is originally intended. It may be said that such idea is based on the recognition peculiar to the chemical industry that apart from taking an action for damages, if the action for injunction was successful, the exercise of the patent right would be sufficiently effective in view of cost.

The gist of the answers of the United States companies is as follows:

[Electric machines-appliances companies]
The evaluation of cost with the inclusion of not only the court cost but also the man-hours and the influence on business is conducted. Further, there are some companies who compare the royalty income and the degree of influence with the attorney fees. Half of the answered companies consider that there is a change in the awareness of patent litigation when compared to the past.

[Chemical companies]
There was an answer to the effect that a lawsuit is examined by taking into consideration of the market scale, the remaining period of a patent right, sales amount, scale of infringement and etc. Further, there was an opinion to the effect that a settlement is initially attempted by negotiations but if no agreement is reached, a lawsuit is used although it does not come to terms with the cost. However, some company was of the opinion that even in that case, the evaluation of cost is not neglected. Further, there was an answer to the effect that the number of cases in which patent rights are exercised is increasing of late.

[Others]
There was an opinion that the use of a lawsuit should be studied by always taking the corporate business objective into consideration. There was an opinion that it is general to make comparison between a collateral benefit and cost but the evaluation of the collateral benefit is difficult. Further, there was also an opinion that a patent lawsuit has come to be considered as a business tool of late.

(1) Title: The Affect of *Markman* on the Cost of Patent Litigation

(2) Date: October, 1996 (The 27th Convention in Hiroshima)

(3) Source:

1. Source: PIPA
2. Group: U.S.
3. Committee: 4

(4) Author: Edward Blocker, U.S. Philips Corporation

(5) Key Words: "Claim Construction", Claim Interpretation", "*Markman* Hearing", "JMOL", "JNOV"

(6) Statutory Provision:

Fed. R. Civ P. 12(b)(6), 56

(7) Abstract:

It has been unclear for a number of years whether a judge or the jury is to make factual determinations relevant to claim interpretation because of the inconsistent treatment of this issue by the Court of Appeals for the Federal Circuit. The Supreme Court's recent affirmation of the Federal Circuit *Markman v. Westview Instruments, Inc.* decision ends further speculation and makes clear that the judge rather than the jury is responsible for determining how a patent claim is to be interpreted. The key procedural question left unanswered by both the Supreme Court and the Federal Circuit revolves around timing, that is, when during the course of litigation should the district court interpret the claims. Such timing will significantly affect the cost of patent litigation. When claims are interpreted through hearings well before trial, the litigation process can be streamlined and can lead to early settlement or summary judgement before trial. A significant cost savings may be realized. This paper will explore many of the factors affecting the cost of patent litigation in view of the *Markman* decision.

THE AFFECT OF *MARKMAN* ON THE COST OF PATENT LITIGATION

I. Introduction ---------- 1

II. Background - The State of the Law Before *Markman* ---------- 1

III. The *Markman* Decision ---------- 2
A. District Court ---------- 2
B. Federal Circuit ---------- 3
C. Supreme Court ---------- 3

IV. *Markman*'s Impact ---------- 4

V. Conclusion ---------- 7

THE AFFECT OF *MARKMAN* ON THE COST OF PATENT LITIGATION

I. Introduction

In *Markman v. Westview Instruments Inc.*[1], the U.S. Supreme Court (hereinafter referred to as the "Court") held that there is no Seventh Amendment right to a jury trial in determining the interpretation of a patent claim. The unanimous ruling by the Court settles once and for all that in a patent infringement suit, the judge rather than the jury is responsible for determining how a patent claim is to be construed. Although the jury remains responsible for determining whether the patent has been infringed, the judge's interpretation of the patent claims at issue often makes clear whether the accused product literally falls within the scope of the patent claim. The jury's role clearly has been reduced and often may be no more than a trivial legal exercise.

The Court's affirmance of the Federal Circuit decision[2] has been, as was the Federal Circuit decision before it, widely heralded as a landmark patent case because of its impact on the issue of literal infringement. The Federal Circuit decision has resulted in changes in the way patent litigation is conducted. These changes can include hearings, at the discretion of the judge, commonly referred to as "Markman" hearings, outside the presence of the jury and before the jury trial begins. At the Markman hearing , the judge determines how the patent claims at issue are to be interpreted. Other courts hear evidence on patent claims during the trial and prior to jury deliberations instruct the jury as to their interpretation.

How these and other changes will affect the cost of patent litigation is uncertain. Views have dramatically differed as to cost savings. Predictions have ranged from little, if any, affect to significant cost reductions due to the relatively early determination of claim construction by the court. Conclusions as to cost savings, many of which can be drawn based on several post - *Markman* cases, will be reviewed in detail following a brief description of the state of the law prior to *Markman* and the *Markman* case itself.

II. Background - The State of the Law Before Markman

A number of old Supreme Court cases have held that claim construction is ultimately a matter of law[3], and in *Markman* the issue was not seriously in dispute. Rather, what divided the Federal Circuit were factual disputes which could arise during claim construction, and, if so, how they should be treated. The first Federal Circuit case to address the issue, *SSIH Equipment S.A. v. United States International Trade Commission*[4] held that claim construction is a matter of law[5]. Following this case a line of Federal Circuit opinions continued to hold that claim construction is strictly a matter for the court[6]. A second line of cases developed, however, which held that there are factual determinations relevant to claim construction. The first such case was *McGill, Inc. v. John Zink Co*[7] and culminated in *Tol-O-Matic, Inc. v. Proma Produkt-Und Marketing Gesellschaft m.b.H.*[8]. In *Tol-O-Matic*, the court held that interpretation of certain claim language "required that the jury give consideration and weight to several underlying factual questions including the description of the claimed element in the specification, the intended meaning and usage of the claim terms

by the patentee, what transpired during the prosecution of the patent application, and the technological evidence offered by the expert witnesses."[9]

The Court's affirmation of the Federal Circuit's *Markman* decision ends the previously inconsistent treatment of claim construction and adopts those line Federal Circuit of cases which hold that claim construction is exclusively a matter of law.

III. The *Markman* Decision

A. District Court

Herbert Markman, the owner of U.S. Reissue Patent No. 33054 for an "Inventory Control and Reporting System for Drycleaning Stores," sued Westview Instruments, Inc. and Althon Enterprises, Inc., an operator of dry-cleaning establishments using Westview's products (collectively, "Westview") alleging infringement of his patented system for monitoring dry cleaning inventory[10]. Westview argues that its system merely records an inventory of receivables while in contrast, Markman's patented system records and tracks an inventory of articles of clothing.

The Markman patent is directed to a computerized system for keeping track of dry cleaning and laundry inventory. When customers bring in clothing to be cleaned, the Markman system generates a customized written record including management and customer receipts plus bar-coded tags. These tags can be attached to individual items of clothing and thereafter scanned at any point during the drycleaning process in order to track the items and detect spurious additions or deletions from inventory.

The accused Westview device also generates bar-coded tickets or invoices listing similar customized information, but does not permanently retain in memory any information about the articles of clothing to be cleaned. Only the invoice number, date and cash total are retained in permanent memory in the Westview system. Thus, the Westview system tracks only invoices, not articles of clothing.

Claim 1 of the reissue patent requires that the system include a data processor having "means to maintain an *inventory* total" and to "generate at least one *report* of said total," and that the system be able to "detect and localize spurious *additions* to *inventory* as well as spurious deletions therefrom."[11]

Westview moved for judgment as a matter of law (JMOL) at the close of Markman's case in chief, but the trial court denied the motion and instructed the jury to determine the meaning of the claims in connection with deciding infringement. In returning a general verdict of infringement, the jury interpreted the term "inventory" as covering both receivables and articles of clothing. Westview renewed its JMOL motion. This time, the trial court granted the motion, holding that claim construction is a question of law for the court.[12] The trial court held the expert's "artificial interpretation" of key claim terminology was contrary to the patent specification, the prosecution history, and the customary meanings of the claim terms. That is that "inventory" means "articles of clothing," not just dollars or invoices. That Westview's accused system has no means for maintaining "inventory," thus defined, in memory. Nor would an interpretation of "inventory" as meaning only cash

dollars and not clothing articles make sense in light of the claim 1 requirement that the system be capable of detecting spurious "additions" to inventory.

B. Federal Circuit

Markman appealed to the Federal Circuit which decided, *en banc*, that the District Court did not err in taking the issue of claim construction away from the jury[13]. The majority concluded that "the interpretation and construction of patent claims, which define the scope of the patentee's rights under the patent, is a matter of law exclusively for the court."[14] The Federal Circuit's holding that patent construction is a question of law follows immediately from its decision to base the meaning of the claims solely on the patent application itself, that is, on the claims, the specification, and the prosecution history. Extrinsic evidence such as expert testimony as to the meaning of terms or the state of the art is not determinative, though it can still be persuasive.

The majority analogized the construction of patent claims to the interpretation of statutes, another matter of law strictly for the court. Both are fully integrated "written instruments" that historically have been interpreted by the courts. Patents, like statutes, are public documents which are deemed to be known to all persons and enforceable against them. "Extrinsic evidence" (such as the testimony of Markman's expert or Westview's product brochures) must only be used to aid the trial court's "understanding of the patent, not for the purpose of varying or contradicting the terms of the claims."[15] When the trial court chooses to admit such extrinsic evidence, the trial court, though assisted and enlightened thereby, is not making credibility determinations or evidentiary findings of a factual nature.

Circuit Judge Mayer, concurring only in the result strongly challenged on Seventh Amendment grounds the majority's denomination of claim construction as a question of law. He contended that the majority's decision "is not just about claim language, it is about ejecting juries from infringement cases. . . . [because] to decide what the claims mean is nearly always to decide the case."[16]

C. Supreme Court

The Court granted Markman's petition for certiorari for the following question: In a patent infringement action for damages, does a right to a jury trial exist under the Seventh Amendment of the U.S. Constitution for factual disputes about the meaning of a patent? The Seventh Amendment provides that "[i]n suits at common law, where the value in controversy shall exceed $20, the right of trial by jury shall be preserved". The right to a trial by jury is the right which existed under the English common law when the Seventh Amendment was adopted.

According to the Court, which unanimously affirmed the Federal Circuit, the most similar 18th century analogy to modern claim construction was the construction of a patent specification. From the few patent cases available during that time period, the Court found no established jury practice sufficient to support an argument that today's construction of a claim should be a jury specific issue. The Court asserted that there is no reason to infer

that juries supplied the complete interpretation of written instruments in patent litigation when judges ordinarily construed such written documents.

Since the historical and legal precedents provided no absolute answers, the Court turned to more practical and policy based considerations in determining who is better suited to define the terms of a patent. "Where history and precedent provide no clear answers, functional considerations also play their part in the choice between judge and jury to define terms of art".[17] These considerations led the Court to conclude that "judges, not juries are better suited to find the accurate meaning of patent terms. . . . Patent construction in particular ' is a special occupation, requiring, like all others, special training and practice. The judge, from his training and discipline, is more likely to give proper interpretation to such instruments than a jury . . . . '"[18]

The Court recognized the jury's traditional responsibility in assessing the credibility of an expert witnesses, but concluded that credibility is not a significant factor in patent claim analysis. The expert's credibility, according to the Court, is only one aspect of the multifaceted exercise of claim construction and, in any event, the expert's testimony must be consistent with the patent as a whole. In short, the Court concluded that a judge's skills in interpreting the claims outweigh any benefit of having a jury assess the credibility of an expert.

The Court's decision was also spurred by its stated goal of providing greater uniformity in patent claim interpretation which the Court reasoned would be more likely achieved by having such interpretation determined exclusively by the courts. According to the Court, such uniformity will promote the public interest by strengthening the U.S. patent system, which in turn will foster the development of technology.

IV. *Markman's* Impact

How *Markman* will affect the cost of patent litigation remains uncertain. Post-*Markman* patent litigation strategies with respect to the resolution of patent interpretation issues involving infringement can have a significant impact on the cost of patent litigation. In developing strategies to minimize the cost of patent litigation, one should be mindful that:

1. Courts increasingly are conducting Markman hearings, particularly in the context of summary judgment motions. See e.g. *Elf Atochem N. Am, Inc. v. Libbey-Owens-Ford Co.*[19]; *Loral Fairchild Corp. v. Victor Co. of Japan, Ltd.*[20] and *Moll v. Northern Telecom, Inc.*[21] The parties through these Markman hearings are provided with an explicit explanation as to how the claims at issue are to be literally interpreted.

2. Such hearings are often conducted well before trial and usually involve expert witnesses experts who assist the court in its interpretation of the claims. Since the issue of claim interpretation is central to any resolution of infringement issues in patent litigation, parties in pending cases will increasingly move for an early resolution of the claim construction issue either under Rule 12(b)(6) or Rule 56 of the Federal Rules of Civil Procedure.[22]

3. District courts are now looking at revising local rules in order to accommodate the *Markman* decision.[23] Such revised local rules, which can require the parties within the first year of the lawsuit to identify all disputed terms within the claims, provide support for their interpretation of these disputed terms and list all witnesses who are available to testify regarding the meanings of these disputed terms, will allow the courts to determine whether Markman hearings are required and, if so, to hold such hearings at a relatively early stage of litigation.

4. Markman hearings can streamline the litigation process and reduce the burden of pursuing an infringement action. The decision can serve as a powerful tool to help resolve cases at an early stage. The interpretation of the claim is often the key issue in patent cases. Once the meaning of disputed patent language is decided by a judge, the parties may then move quickly toward settlement or summary judgment.

5. Far fewer expert witnesses are expected to be required during a Markman hearing as compared to a trial. See *Markman v. Westview Instruments, Inc.* 52 F. 3d 967, 983 (Fed. Cir. 1995) ("the court has complete discretion to adopt the expert legal opinion as its own, to find guidance from it, or to ignore it entirely, or even to exclude it.") (citations omitted); *Mall*, 37 USPQ2d at 1843 ("[T]he decision to utilize extrinsic evidence rests solely with the trial judge . . . and is to be used only for the purpose of assisting the court in understanding the patent"). *See also GTY Indus. v. Genlyte Group Inc.*, 38 USPQ 1801 (C.D. CA 1995)[24]. With potentially far fewer expert witnesses required for a Markman hearing, costs normally associated with expert witnesses during the course of a trial may be substantially reduced.

6. The standard of review on appeal from a jury trial has changed. In a jury trial, issues of fact are for the jury to decide, while questions of law are for the judge[25]. On appeal, the jury's verdict is reviewed by first distinguishing between its factual and legal components, with factual conclusions upheld if they are reasonable ("substantial evidence" standard), and implied legal conclusions subject to de novo review[26]. Since claim construction is a matter of law, the Federal Circuit has determined that claim construction is subject to a de novo review on appeal[27]. In other words, all aspects of claim construction will be reviewed de novo including any underlying fact findings.

7. The jury's ultimate role in determining infringement, however, will not be settled until the Supreme Court decides *Hilton Davis Chemical Co. v. Warner-Jenkinson Co.*[28], which is expected to be decided during the next term of the Supreme Court. *Hilton Davis* relates to the second prong of the infringement analysis, that is, the doctrine of equivalents.[29] The Federal Circuit in *Hilton Davis* reaffirmed the longstanding practice of having the jury decide the issue of infringement under the doctrine of equivalents.[30] *Hilton Davis* holds that the doctrine of equivalents remains a jury issue, that there is no threshold equitable determination required by the court before the issue can go to the jury, and that the legal standard governing the

jury's decision is whether the differences between the defendants' product and the patent claim are "insubstantial." Affirmance by the Court of the Federal Circuit decision would no doubt constrain to some significant degree the effect of *Markman* on the conduct of patent litigation. For example, a court, knowing that the doctrine of equivalents issue will have to go to the jury, may decide to forgo a *Markman* hearing on claim interpretation and literal infringement, opting instead to satisfy its claim interpretation responsibilities in its jury instructions.

8. The use of a Markman hearing complicates patent litigation because it forces attorneys to prepare for another hearing which, of course, includes the preparation of expert witnesses. The *Markman* hearing is essentially a mini-trial on claim construction. The cost associated with a Markman hearing may be substantially offset by separating out complicated interpretation issues which would otherwise be addressed during the jury trial.

9. There can be several drawbacks to holding a Markman hearing. Instead of a jury making a determination on patent claims considering various kinds of evidence, a judge will determine claim construction with much less evidence before him. The court may decide the claim construction issues separately and without the benefit of hearing the whole case. The significance of passages in the specification and file history is often better understood when the background of the prior art, the history of the invention and the overall commercial setting are fully explained, as usually happens at a trial. In a separate *Markman* hearing, presentation of prior art background and history of the invention are likely to be more limited. The increased costs associated with a trial may be well worthwhile in order to permit the judge to interpret the claims in context with the overall case.

10. If Markman spurs more summary judgment rulings, its effect may be to slow down the judicial process as those rulings are appealed to the Federal Circuit, which usually takes about a year to decide. Parties would then have the burden of having to pay for two appeals (interlocutory appeal regarding claim construction as well as appeal from final decision by the district court) rather than one appeal (appeal from final decision of the district court).

11. "The 'obligation' created by the Federal Circuit to instruct the jury on the meaning of the words used by an inventor in a claim basically leaves a district court with three options. The court can attempt to resolve these disputes on the paper record [,for example, in the context of ruling on a motion for summary judgment of claim interpretation]. Second, the court can hold a trial to resolve the disputes [,for example, hold a *Markman* beach trial prior to the main jury trial]. Finally, the court can wait until trial and attempt to resolve claim disputes the evening before the jury must be instructed."[31] [32] This last option, that is, determining claim construction just prior to jury deliberations would have essentially no affect on the cost of patent litigation.

12. There is a significant advantage to the defendant in moving for a Markman hearing. The defendant can raise any number of arguments for avoiding infringement by construing various claim elements narrowly, and presenting all of these arguments to a judge at the hearing. By distinguishing the alleged infringing product from the claim, the defendant avoids literal infringement. The defendant need not be concerned about the otherwise confusing and diluting effects of presenting too many arguments to the jury at a trial. The *Markman* hearing encourages defendants to present different claim construction arguments in order to maximize their statistical chance of avoiding both infringement before trial and costs associated with going to trial.

13. By not holding a separate *Markman* hearing and waiting until after the presentation of evidence at trial to resolve claim construction issues, the parties are forced either to present evidence under alternative claim interpretations or to risk presenting their entire case based on a claim interpretation which later turns out to be erroneous as explained by the judge to the jury in his instructions to the latter. Litigants generally will be unwilling to risk everything on a claim interpretation that is not yet decided.

14. The key procedural question left unanswered by *Markman* is timing -- when during the course of a litigation should the district court interpret the claims? The affect of *Markman* on the cost of litigation ultimately revolves around the answer to this question. Many district courts have resolved the question by conducting *Markman* hearings early on in the case. The court, however, is under no obligation to interpret a claim conclusively or finally during the hearing and can at its discretion delay interpreting the claim until the jury is ready to deliberate.[33]

V. Conclusion

Markman will undoubtedly affect how patent litigation is conducted and consequently the cost thereof. Through Markman hearings, which are increasingly being conducted, early resolution of claim interpretation issues can be had by the parties which, in turn, can facilitate settlement discussions or lead to summary judgment before trial. The Markman hearings will typically require far fewer expert witnesses than at trial. Cost savings also may be realized through the use of fewer expert witnesses who are limited to selected technical issues as raised by the judge.

These and other cost savings are dependent on when during the course of litigation the judge interprets the claims. The judge is not obligated to hold a Markman hearing and, even if held, can postpone until providing instructions to the jury as to how the claims are to be interpreted.

The degree to which and over what period of time before *Markman* affects the cost of patent litigation remains to be seen and likely will require several more years before its affect can be fairly evaluated.

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1. 116 S.Ct. 1384 (1996).

2. *Markman v. Westview Instruments Inc.*, 52 F.3d 967 (Fed. Cir. 1995).

3. See, e.g., *Bates v. Coe*, 98 U.S. 31, 38-39 (1878) ("In construing patents, it is the province of the court to determine what the subject-matter is upon the whole face of the specification and the accompanying drawings."); *Winans v. Denmead*, 56 U.S. (15How.) 330,338 (1853) ("[T]wo questions arise. The first is, what is the thing patented; the second, has that thing been constructed, used, or sold by the defendants. The first is a question of law, to be determined by the court, construing the letters-patent, and description of the invention and specification of claim annexed to them. The second is a question of fact, to be submitted to a jury."); *Silsby v. Foote*, 55 U.S. (14 How.) 218, 225 (1852) ("The construction of the claim was undoubtedly for the court.")

4. 718 F.2d 365 (Fed. Cir. 1983).

5. *Id.* at 376. ("With respect to infringement, the question of 'what is the thing patented' is one of law.") (quoting Winans,, 56 U.S. (15 How.) at 337).

6. See, e.g., *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 822-23 (Fed. Cir. 1992).

7. 736 F. 2d 666 (Fed. Cir.), cert. denied, 469 U.S. 1037 (1984).

8. 945 F.2d 1546 (Fed. Cir. 1991).

9. *Id.* at 1550.

10. 772 F. Supp 1535 (E.D. EPa 1991).

11. *Markman v. Westview Instruments, Inc.* 772 F.Supp. 1535,1536 (E.D. Pa. 1991) (emphases added).

12. *Id.*

13. 52 F.3d 967 (CAFC 1995)

14. *Id.* at 970-71.

15. *Id.* at 981.

16. *Id.* at 989.

17. *Markman*, 116 S.Ct. at 1395.

18. *Id.* (quoting from *Parker v. Hulme*, 18F. Cas. 1138, 1140 (No. 10,740) (CC ED Pa. 1849).

19. 894 F. Supp. 844 (D. Del. 1995). (In response to cross-motions filed by the parties for a partial summary judgment on the issue of infringement an evidentiary hearing was held to resolve the meaning of disputed terms in the patent claims at issue)

20. 911 F. Supp 76 (EDNY 1966).

21. 37 USPQ 2d 1839 (E.D. Pa. 1995).

22. Rule 12(b)(6) concerns a Motion for Judgment on the Pleadings for failure to state a claim on which relief can be granted; Rule 56 concerns Motions for Summary Judgment.

23. For example, the District Court for the Northern District of California has proposed new local rules of practice which require the parties within about the first ten months of the lawsuit to specify any special or uncommon meanings of words in the claims, identify all references from the specification that support, describe or explain each element of the claim, identify all passages from the prosecution history that describe or explain each element of the claim and identify all extrinsic evidence that further supports the construction of the claim, including, but not limited to expert testimony, inventor testimony, dictionary definitions and citations to learned treatises. The parties within these first ten months must identify the construction of those claims and terms on which they agree and on which they disagree and suggest jointly agreeable dates for a hearing on all disputed issues of claim construction. Any party who would like to call one or more witnesses as part of that party's case-in-chief at the claims construction hearing must identify each such witness, describe the subjects that his or her testimony will cover and estimate the time that the witness' direct examination will consume.

24. The court granted a defense motion to bar testimony of the patentee's "patent law expert" witness. The court reasoned that the only "extrinsic evidence" (i.e. evidence other than the patent and its prosecution history) which it can properly receive under *Markman* is technical in nature. The court would not permit expert testimony which "coalesces the testimony of fact witnesses and technical experts, presents a foundation of understanding regarding the patent system . . . and presents a coherence between the factual and the legal patent documents such that the Court may establish claim scope and the trier of fact may apply that scope to the issues of infringement." *Id.* at 475.

25. *Walker v. New Mexico & Southern Pacific*R.R., 165 U.S. 593, 596 (1897).

26. See, e.g., *Read Corp. v. Portec, Inc.*, 970 F. 2d 816, 821 (Fed. Cir. 1992)

27. *Markman*, 52 F.3d at 979.

28. 62 F3d 1512 (Fed Cir. 1995), *cert. granted*, 116 S.C. 1014 (1996).

29. The doctrine of equivalents is intended to discourage infringers from making "unimportant and insubstantial changes and substitutions in the patent which, though adding nothing, would be enough . . . [to evade] the reach of law." *Graver Tank & Mfg. Co v. Linde Air Prods. Co.*, 339 U.S. 605,607 (1950).

30. Vigorous dissents in *Hilton Davis* argued that the issue is a question for the court, not the jury. Indeed, Circuit Judge S. Jay Plager in a dissent in which three other judges joined urged that the doctrine is equitable in nature, and therefore an issue for the court. In this way, Judge Plager's approach would prevent the "unfettered" use of the doctrine by juries and would result in more public certainty with respect to the scope of patents - the same goal the Supreme Court articulated in the *Markman* opinion.

31. *Elf Atochem North America Inc. v. Libbey-Owens-Ford Co.*,37 USPQ2d 1065, 1069 (DC Del 1995).

32. *Johns Hopkins University v. Cellpro*, 894 F. Supp. 819 (D. Del 1995). During the course of the trial the parties submitted proposed final jury instructions which included instructions as to the interpretation of six disputed portions of the claims in suit. The parties also presented arguments which referred to testimony and evidence offered during the trial. On the eve of the last day of trial, the court issued the cited opinion, which included the final jury instructions including the court's construction of the disputed claim terminology

33. In *Sofamor Danek Group, Inc. v. Depuy-Motech, Inc.*,74 F.3d 1216 (Fed. Circ. 1996) the Federal Circuit clarified that "the trial court [which denied patentee's motion for a preliminary injunction following a three day hearing on claim construction] has no obligation to interpret [a] claim . . . conclusively and finally during a preliminary injunction hearing. Under *Markman*, claim interpretation is a matter of law. However, *Markman* does not obligate the trial judge to conclusively interpret claims at an early stage in a case. A trial court may exercise its discretion to interpret the claims at a time when the parties have presented a full picture of the claimed invention and prior art . . . ." *Id.* at 1221.

३८. ए. आय. आर. (सिक्स) दिल्ली ४०१ (१९९१)' तथा कृष्णमाचारी, ३१५ ई.सी. १०५१ (१९७९)

३९. मेसर्स्पाल्मर, ए.आय.आर. १९ एस.सी.

४०. ए. आय. आर. (सिक्स) दिल्ली ४०१ (१९९१)' तथा कृष्णमाचारी, ३१५ ई.सी. १०५१ (१९७९)

४१. मेसर्स्पाल्मर, ए.आय.आर. १९ एस.सी.

४२. ए. आय. आर. (सिक्स) दिल्ली ४०१ (१९९१)' तथा कृष्णमाचारी, ३१५ ई.सी. १०५१ (१९७९)

४३. मेसर्स्पाल्मर, ए.आय.आर. १९ एस.सी.

४४. ए. आय. आर. (सिक्स) दिल्ली ४०१ (१९९१)' तथा कृष्णमाचारी, ३१५ ई.सी. १०५१ (१९७९)

४५. मेसर्स्पाल्मर, ए.आय.आर. १९ एस.सी.

४६. ए. आय. आर. (सिक्स) दिल्ली ४०१ (१९९१)' तथा कृष्णमाचारी, ३१५ ई.सी. १०५१ (१९७९)

४७. मेसर्स्पाल्मर, ए.आय.आर. १९ एस.सी.

४८. ए. आय. आर. (सिक्स) दिल्ली ४०१ (१९९१)' तथा कृष्णमाचारी, ३१५ ई.सी. १०५१ (१९७९)

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५०. ए. आय. आर. (सिक्स) दिल्ली ४०१ (१९९१)' तथा कृष्णमाचारी, ३१५ ई.सी. १०५१ (१९७९)

