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INTERNATIONAL INTELLECTUAL PROPERTY TRAINING INSTITUTE
KOREAN INTELLECTUAL PROPERTY OFFICE

WORLD INTELLECTUAL PROPERTY ORGANIZATION
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WIPO ASIAN REGIONAL TRAINING COURSE FOR INTELLECTUAL PROPERTY TRAINERS AND INSTRUCTORS

organized by
the World Intellectual Property Organization (WIPO)

in cooperation with
the International Intellectual Property Training Institute (IIPTI)

and
the Korean Intellectual Property Office (KIPO)

and with the assistance of
the Japan Patent Office (JPO)

Daeduk, Daejeon, Republic of Korea, March 18 to 22, 2002

INTELLECTUAL PROPERTY (IP) TODAY; RECENT DEVELOPMENTS, CURRENT AND EMERGING ISSUES

PATENTABILITY OF BUSINESS METHOD RELATED INVENTIONS

Document prepared by Mr. Bong-Sig Song,
Presiding Trial Judge, Industrial Property Tribunal,
Korean Intellectual Property Office (KIPO), Daejeon

[redacted]

Patentability of Business Model Related Inventions

March 19, 2002

Bong-sig Song

The Korean Intellectual Property Office

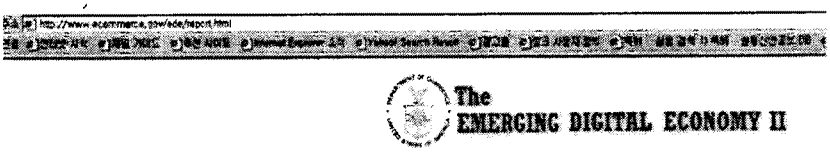
Change of Economy Circumstances

20C (Industry- based Society)	21C(Knowledge-based Society)
• cold war, bipolar political system	• post cold war, multipolar, globalization
• political war	• economy war
• size of economy, structure	• speed of economy, network
• capital, labor intensive	• knowledge, information
• few items, mass production	• various items, small production
• hardware	• software
• analog	• digital

Digital Economy

- **Core of Digital Economy : Business Model (*e*-commerce) + Information Technology(Computer, Communication, Internet)**
- **Electronics becomes key factors. (from sub to main)**
  - **mechatronics, bionics (sub)**
  - **e-commerce, business, campaign, marketplace, cash, money, crime, publishing, book, novel, education, banking, trade, strategic, bid, government, culture, healthcare (main)**
- ***e*-wave : new Business Model + Internet → exponential effect**
- **C^3I : Computer, Communication, Commerce & Integration**

Emerging Digital Economy in U.S.A.







Download the Appendices

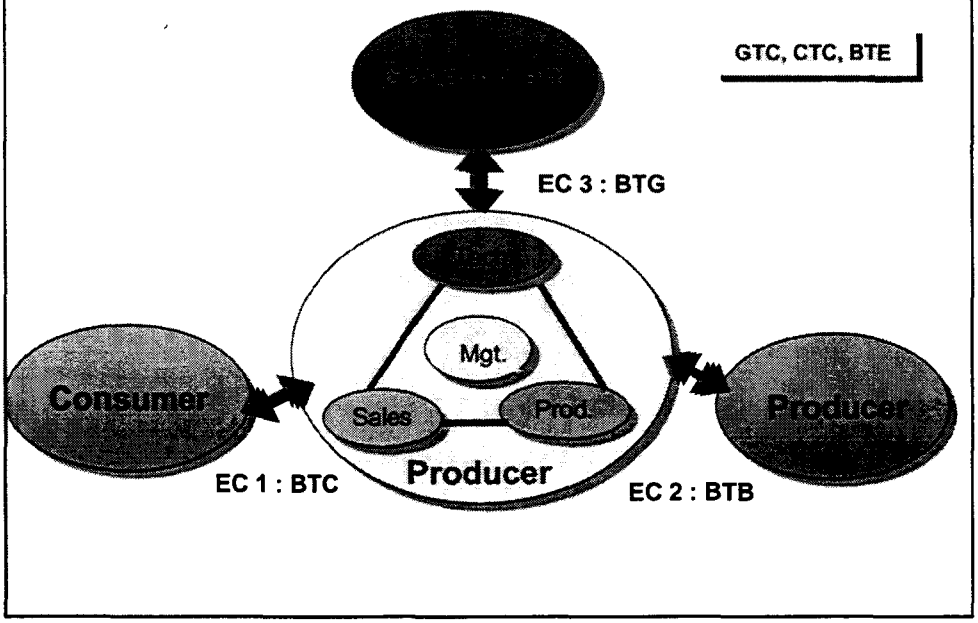
- Authors/Contributing Editors
- Letter from U.S. Commerce Secretary William M. Daley
- Executive Summary
- Introduction: Under Secretary Robert Shapiro
- Chapter I: Electronic Commerce in the Digital Economy
- Chapter II: Information Technology Industries
- Chapter III: Contribution of Information Technology to Gross Product Originating Per Worker
- Chapter IV: Labor Markets in the Digital Economy
- A Look Ahead
- Download the Appendices in Acobe Acrobat reader

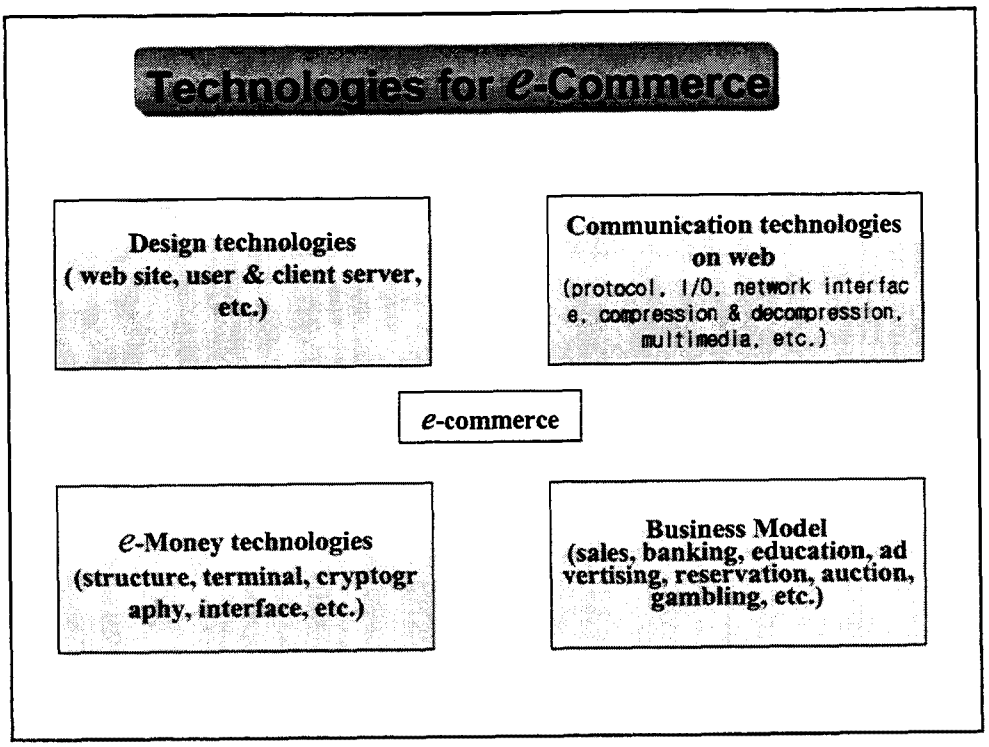
What is *e*-commerce ?

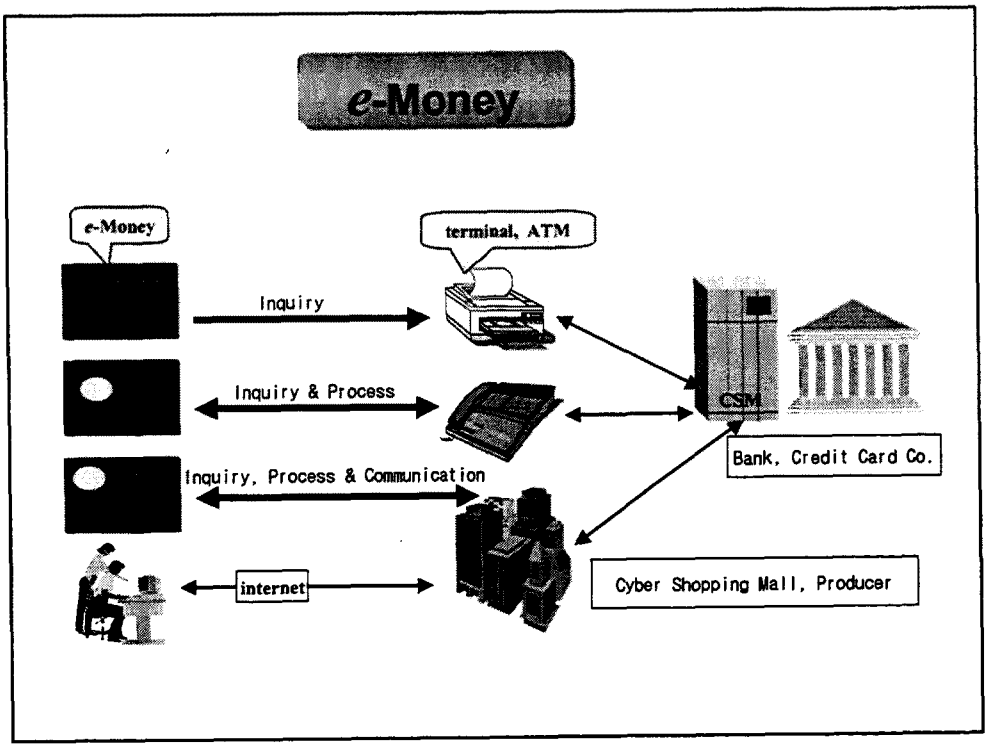
Electronic Commerce ?	All Transactions done by the electronic media utilizing internet technology. (excha nge of money, goods, service, information, etc.)

Narrow	*e*-commerce utilizing computer network (i nternet)
Broad	All economic activities utilizing computer network (advertising, order, design, produc tion, sales, development, etc.)
Types	Electronic Data Interchange World Wide Web

e-Commerce Types




Technologies for e-Commerce
Design technologies
(web site, user & client server, etc.)
Communication technologies on web
(protocol, I/O, network interfac e, compression & decompression, multimedia, etc.)
e-commerce
e-Money technologies
(structure, terminal, cryptogr aphy, interface, etc.)
Business Model
(sales, banking, education, ad vertising, reservation, auction, gambling, etc.)


e-Money
e-Money
terminal, ATM
Inquiry
Inquiry & Process
Inquiry, Process & Communication
internet
CSM
Bank, Credit Card Co.
Cyber Shopping Mall, Producer

▣ Network Types

【 *e*-Purse types 】

☞ download money to *e*-purse via internet.

- eCash
- CYBERCASH
- iCash
- INiCIS
- eCredit
- NCash

【 Prepaid Card Types 】

☞ purchase prepaid card with password at a convenience store.

- WebMoney
- BitCash
- Ecoin
- iMint
- CyberPASS

【 *e*-Check Types 】

☞ Cyber checks on internet.

- NetCheque
- ECheck

▣ Hardware Types

【 IC Card types 】

☞ Built-in IC Chip

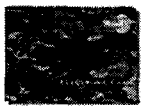


Contact type
- Memory
- CPU
- Co-Processor
- EEPROM



Nonconct type
- RF antenna

- Mondex Card
- VISA Cash
- PROTON Card





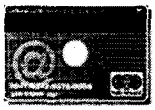


【 CD Types】

☞ Disk types driven by CD-ROM

- CD Cash
- Hybrid Card



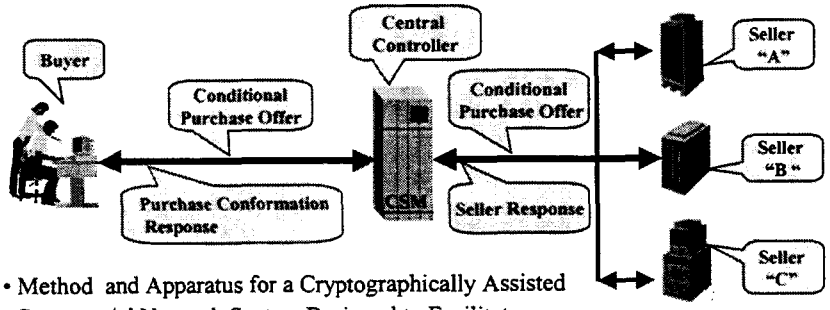


Examples of Business Model Inventions

- Sales and purchasing methods
  - Business cryptography, Insurance, Market analysis, Auctions, Billing
- Rewards programs
  - Incentive programs, Redemption of coupons
- Advertising techniques
  - Advertising management, Catalog system
- Financial transactions
  - Credit and loan processing, Stock/Bond trading
- Reservation system
- Health care management, On-line education
- Postage meter system
- Gambling methods

Reverse Auction Patent

U.S .Patent No. 5,794,207



- Method and Apparatus for a Cryptographically Assisted Commercial Network System Designed to Facilitate Buyer Driven Conditional Purchase Offers

1. Buyer inputs into computer a conditional purchase offer.
2. Central Controller(CSM) conveys the offer to the plurality of sellers.
3. Sellers present an estimate to the CSM.
4. CSM compares and selects one of the best offers from sellers' responses, and informs it to the buyer.

USPTO(United States Patent & Trademark Office)

- The invention means invention or discovery.
- Types of Patent
  - Utility Patent : patent commonly referred to as a Utility Patent. Protects the fundamental aspects of useful products and processes.
  - Design Patent : new original and ornamental design.
  - Plant Patent : invent or discovery, and asexually reproduce any distinct and new variety of plants.
- Inventions Patentable
  - Subject Matter
    - new and useful process, machine, manufacture, and composition of matter
  - Novelty
    - not known or used by others in U.S.A.
    - not patented or printed publication in U.S.A. or foreign countries.
  - Non-obviousness
    - not obtained through the prior arts.
    - differences are not obvious.

- U.S. Supreme Court's Interpretation on Patentable Subject Matter
  - Diamond V. Chakrabarty, 447 U.S. 303(1980)
    - Anything under the sun that is made by man.
  - Diamond V. Diehr, 450 U.S. 175(1981)
    - Unpatentable matters
      - laws of nature
      - natural phenomena
      - abstract ideas : mathematical algorithms, business methods
- Holding of the State Street Bank

  (State Street Bank & Trust Co. V. Signature Financial Group, Inc. Fed. Cir. (1998)
  - Patentability of useful, concrete, and tangible results.
  - Denied mathematical algorithm & business methods exception.
  - Shift from physical requirements.
  - Algorithm is patentable if it is applied in a useful way, but unpatentable if it is merely an abstract idea.
- Flood of Business Models Patent Applications
  - Business Methods Patent Initiative(March 29, 2000)

Representative Business Model Patents

Assignee	U.S. Pat. No.	Subject
Open Market	5,715,314	Virtual Shopping Cart
Open Market	5,724,424	Digital Active Advertising
Netcentives	5,774,870	On-Line Frequency Awards
Cybergold	5,794,210	Attention Brokerage
Amazon	5,960,411	One Click
Priceline	5,794,207	Reverse Auction
Netdelivery	5,790,793	E-mail push

Examples of Non-Technical Patents

- US Pat. No. 5,668,736 (Sep. 19, 1997)
  - Method of Remodeling an Existing Building
- US Pat. No. 5,190,458 (Mar. 2, 1993)
  - Method of Psychological Testing of a Person
- US Pat. No. 6,015,947 (Jan. 18, 2000)
  - Method of Teaching Music
- US Pat. No. 5,616,089 (April 1, 1997)
  - Method of Gripping a Putter

US005616089A

United States Patent [19]
Miller

[11] **Patent Number: 5,616,089**
[45] **Date of Patent: Apr. 1, 1997**

[54] **METHOD OF PUTTING**

[76] *Inventor:* **Dale D. Miller**, 4801 Indigo Dr., Wausau, Wis. 54401

[21] Appl. No.: 624,364
[22] Filed: Mar. 29, 1996
[51] Int. Cl.[6] A63B 53/00
[52] U.S. Cl. 473/409; 473/131; 473/300
[58] Field of Search 473/131, 409, 473/207, 212, 213, 214, 225, 251, 266, 293, 300, 294, 252

[56] **References Cited**
U.S. PATENT DOCUMENTS

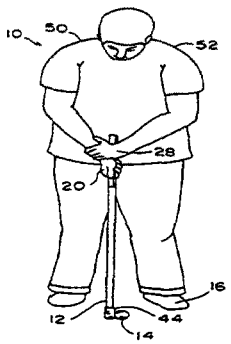
3,263,998	8/1966	Fanning	473/409
3,486,755	12/1969	Hedge	473/293
4,067,575	1/1978	Kay, Jr.	473/300
4,272,077	6/1981	Solasy	473/300
4,603,228	8/1986	Canning, Jr.	473/293

Primary Examiner—Steven B. Wong
Attorney, Agent, or Firm—Andrus, Sceales, Starke & Sawall

[57] **ABSTRACT**

A method of putting features the golfer's dominant hand so that the golfer can improve control over putting speed and direction. The golfer's non-dominant hand stabilizes the dominant hand and the orientation of the putter blade, but does not otherwise substantially interfere with the putting stroke. In particular, a right-handed golfer grips the putter grip with their right hand in a conventional manner so that the thumb on the right hand is placed straight down the top surface of the putter grip. The golfer addresses the ball as if to stroke the putter using only the right hand. Then, the golfer takes the left hand and uses it to stabilize the right hand and the putter. To do this, the golfer places their left hand over the interior wrist portion of the right hand behind the thumb of the right hand with the middle finger of the left hand resting on the styloid process of the right hand. The golfer presses the ring finger and the little finger of their left hand against the back of the right hand. The golfer also presses the palm of the left hand against the putter grip and squeezes the right hand with the left hand. The golfer then takes a full putting stroke with the above described grip.

13 Claims, 2 Drawing Sheets



JPO(Japan Patent Office)

- The invention means the highly advanced creation of the technical ideas by which a laws of nature is utilized.
- Inventions Patentable
  - industrial Applicability
    - natural laws as such, mere discoveries, those contrary to natural laws, those in which natural laws are not utilized(non-statutory inventions).
  - Novelty
    - not publicly known or worked in Japan or elsewhere prior to the filing of the patent application.
    - not described in a distributed publication or made available to the public through electric telecommunication lines in Japan or elsewhere prior to the filing of the patent application.
  - Inventive Step
    - not made easily, prior to the filing of the patent application, by a person with ordinary skills in the prior arts to which the invention pertains.

- Business Model patents are approved as part of software related patents.
- Inventive step would be denied when the invention can be easily conceived through combining publicly known means and methods by those having common knowledge on the business field related to the patent application and technological knowledge on the computer technology.
  - Application of a technology to another specific field
    - creating a "medical data search system" by applying a publicly known "file search system" in the medical field.
  - Automation of manual tasks
    - creating a system for receiving orders, which have been received by facsimile and telephone, on an Internet Website.
  - Change of design based on artificial arrangements, etc.
    - merely applying a generally known cooling-off system to an *e*-commerce apparatus.

EPO(European Patent Office)

- EPO, EPC(European Patent Convention)
  - EPC came into force on Oct. 7, 1977.
  - 20 contracting countries, 6 extension countries
  - official languages : English, French , German
  - All states are automatically designated when filing.
  - Headquarter : Munich, branch : Hague, sub-office : Berlin, vienna
- European patents will be granted for any inventions which are susceptible of industrial application, new and involving inventive step.
- Novelty
  - An invention will be considered to be new if it does not form part of the state of the art.
- Inventive Step
  - An invention will be considered as involving an inventive step if, having regard to the state of the art, it is not obvious to a person skilled in the art.

- Industrial Application
  - An invention shall be considered as susceptible of industrial application if it can be made or used in any kind of industry, including agriculture.
- The followings shall not be regarded as inventions.
  - discoveries, scientific theories and mathematical methods
  - aesthetic creations
  - schemes, rules and methods for performing mental acts, playing games or doing business, and programs for computers
  - presentations of information.
  - methods for treatment of the human or animal body or therapy and diagnostic methods.
- To be patentable, an invention must have technical character. This means that the invention must relate to a technical field and solve technical problems.
  - A computer program has a technical character if it causes a technical effect when runs on a computer. This effect must be more than the normal physical interaction between program and computer.

Harmonization among the Trilateral Offices

- In light of disputes over Business Model patenting system, there have been increasing calls for clarification of examination standards and international harmonization of practices.
  - International discussions were also encouraged in the Kyushu-Okinawa G7 Summit and Finance Ministers' Meeting in 2000.
  - The Trilateral Offices conducted an international comparison of the judgement of patentability by using hypothetical applications in the Trilateral Technical Meeting.
    - Mere automation of a business process known as a manual process using well-known method is not considered patentable.
  - The Offices will conduct an international comparison of prior arts searches by using 20 actual international applications under the PCT, and actively exchange information on the handling of Business Model inventions and trends of court judgements.
- The Offices are promoting mutual corporation with the aim of improving the search environment for relevant precedents.

Summary of Views

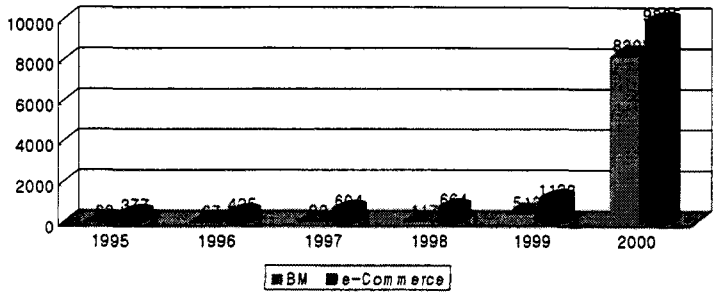
- Consensus for Business Model Inventions
  (Reports on Comparative Study,Trilateral Technical Meeting June 14-16, 2000, Tokyo)
  - A technical aspect is necessary for a computer-implemented Business Model to be eligible for patenting.
  - To merely automate a known human transaction process using well known automation techniques is not patentable.
  - USPTO: technological feature may be implicitly recited in the claim.
  - EPO and JPO require that technical aspect be expressed in the claim.
- USPTO, JPO and EPO recognize Business Model as one type of the computer-related inventions.
- Business Model are more admissively patentable in USPTO and JPO.
- Varied acceptance phase in accordance to each country's advancement in IT industry

KIPO(Korean Intellectual Property Office)

- An Invention means the highly advanced creation of technical ideas utilizing rules of nature.
- Inventions patentable
  - industrial applicability
  - Novelty
    - not publicly known or worked in Korea prior to the filing of the patent application.
    - not described in publications distributed in Korea or in foreign countries prior to the filing of the patent application.
    - not available to the public through electric telecommunication lines in Korea or elsewhere prior to the filing of the patent application.
  - Inventive Step
    - not easily made prior to the filing of the patent application by a person having ordinary skills in the art s to which the invention pertains.

- A Business Model patent is approved as part of software related patents.
- A Business Model application is patentable when it is possessed or combined with tangible technical means to implement or practice it.
  - Business Model + Information Technology(IT) => C^3I
- A pure Business Model is not accepted as a patentable statutory subject matter.
- A Business Model merely automated by employing a computer is not patentable.
- Inventive step
  - new BM + new IT =>patentable
  - new BM + conventional IT =>patentable or unpatentable
  - conventional BM + new IT => patentable or unpatentable
  - conventional BM + conventional IT => unpatentable

Applications Trend of *e*-Commerce



Thank You.

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