

ASEAN REGIONAL SYMPOSIUM ON TEACHING AND TRAINING OF INTELLECTUAL PROPERTY

KUALA LUMPUR, JULY 6 - 8, 1995

PRESENTATION OF QUEEN MARY AND WESTFIELD COLLEGE, LONDON.

by

Dr. Noel Byrne,
Senior Fellow in the Intellectual Property Law,
Queen Mary and Westfield College, London.

TEACHING, LEARNING AND EXAMINING INTELLECTUAL PROPERTY LAW AT QUEEN MARY AND WESTFIELD COLLEGE UNIVERSITY OF LONDON

by

Noel Byrne
Intellectual Property Law Unit
Centre for Commercial Law Studies
Queen Mary and Westfield College

July 1995

The University of London is a "federal" university comprising a number of colleges - of which Queen Mary and Westfield College (QMW) is, I believe, the largest college. Westfield College, a long-established college in the University of London, merged with Queen Mary College in the late-1980s to form the present college. Queen Mary College itself has its origins in the 1800s. Other colleges in the federation include Kings College London (KCL), University College London (UCL), London School of Economics & Political Science (LSE), and Imperial College London (Imperial). As might be expected for a large city, London has other colleges and institutions of higher education, and a number of these, somewhat deceptively or confusingly, use the names 'London' and 'University' together in their titles. There is however but one 'University of London' - so beware of imitations!

1 The Intellectual Property Law Unit, QMW

The IPLU is part of the Centre for Commercial Law Studies (CCLS); together with the Department of Law, the CCLS forms the Faculty of Law. The CCLS, and its constituent Units (arbitration, banking and finance, taxation, information technology, intellectual property) are entirely self-supporting. The CCLS receives no financial support from the State or the College but supports itself financially through teaching, research contracts, and endowments. The IPLU's principal benefactor, Dr Herchel Smith, in the early 1980s generously endowed Queen Mary College with the funds to establish the IPLU, and he continues to support our work in other ways (e.g. through student scholarships).

The IPLU has five full-time staff, Alison Firth, Ellen Gredley (librarian), Swee Ng (administrator), Jim Lahore and myself; and a large number of part-time teachers (about 20), without whom the IPLU could not teach the courses or topics that currently the Unit offers. All of our part-time teachers are practising lawyers, patent attorneys/agents, or trade mark agents.

About 120 students a year register for the various programmes offered by the IPLU. All our students are postgraduates, that is to say, an applicant for admission to one of our programmes must have an appropriate first degree.

2 The IPLU's Teaching Commitments

I will not try to describe the content of the various programmes taught by IPLU. Suffice it to say here that, at QMW, the IPLU offers three programmes: the one-semester QMW Certificate in Intellectual Property Law (for trainee patent agents), the two-semester QMW Diploma in Intellectual Property Law (for law graduates), and the two-semester University of London MSc in Management of Intellectual Property (for science or technology graduates, most of whom go on to qualify as British patent agents and/or European patent attorneys). Through the University of London LLM programme (for law graduates with high grades in their law degree examinations or graduates with equivalent qualifications, e.g. practising lawyers with first degrees in science or technology) we offer several courses: industrial and intellectual property law (with Kings College and the LSE), international and comparative patent law (with Kings College), international and comparative trade mark law (with Kings College), international and comparative copyright law (with Kings College), franchising law, and transfer of technology law.

The IPLU is supervising 12 doctoral students (11 law graduates and 1 science graduate), working towards University of London PhDs. Several of these students teach special topics on the Diploma, MSc and LLM programmes.

3 Selection Procedures

Both the University and the College lay down various academic standards for entry to the programmes I have mentioned above. If an applicant satisfies the minimum entry standards for the programme, prima facie the applicant is entitled to admission to the programme. That said, if, as a selector for the MSc and Certificate programmes, I suspect (from grades and academic reports) that an applicant may have difficulty meeting the academic demands of the programme that he or she wishes to join, I will interview the applicant (unless the applicant lives outside the United Kingdom) before making a decision on the application. If I judge that the applicant will not make the grade, I will try to discourage him from pursuing the application, and if that does not work then I will reject the application. A rejected applicant may appeal the rejection to the College authorities, and there have been several cases in recent years where this has happened. Students who have difficulty coping with the learning demands of a programme are likely to increase the cost of "delivering" the programme, because they will require extra attention and individual tuition. In my experience, good (or effective) selection procedures are essential for developing and maintaining a reputation for a programme.

Science or technology graduates on our MSc and Certificate programmes usually include several with PhDs (or doctorates) and a significant number (a majority perhaps) with first class honours degrees (average 70%+ in examination grades) and upper second class honours degrees (average between 60% and 70%) and

a minority with examinations grades between 50% and 60% (lower second class honours). Yet high grades in science or technology do not guarantee success in intellectual property law examinations, and over the years we have had several PhDs fail our examinations while students with much lower entry qualifications have passed the examinations without apparent difficulty. It is not easy to explain to a student with a PhD in science or technology that he or she is not up to a standard that a fellow student with much lower entry qualifications has satisfied with apparent ease!

We do not admit to our programmes applicants with grades below lower second, unless there are special factors (e.g. serious illness) that would explain the poor performance at undergraduate level. At present, we are considering whether for various reasons we should increase the minimum entry requirement to the MSc programme (Management of Intellectual Property) to an upper second class honours degree in science or technology. The entry requirement to the University of London LLM is an upper second class honours degree (or equivalent) or better in law.

4 Teaching Intellectual Property Law

Science or technology graduates and law graduates do not mix well, in our experience, for teaching intellectual property law. This holds true for all of the courses that, typically, are included in a programme on intellectual property law, for example patent and trade secrets laws, copyright and industrial designs laws, trade mark and unfair competition laws, antitrust (competition) law. Non-law graduates usually feel (and generally find) themselves "out-smarted" by law graduates, even on a patent law course where one might expect the science or technology graduate to have an advantage over the law graduate. After several, unsuccessful attempts to teach them jointly, we decided to teach non-law and law graduates separately, even though some courses offered on our programmes have common elements (for example, patent claims and infringement).

For all non-law graduates taking our intellectual property law programmes the IPLU runs a special, compulsory one-semester course on 'Legal Method, the Common Law and the English Legal System', covering legal system, contract law, tort law, property law, law of evidence and procedure. We believe this to be an absolutely essential foundation for some of the other courses, for example, transfer of technology law, offered to non-law graduates. The examination in 'Legal Method, the Common Law and the English Legal System' is the one that our non-law graduates find the most difficult. We encourage law graduates from Civil Law countries to attend the 'Legal Method...'-course; it is not a compulsory course for them, nor are they examined in it.

Our experience of teaching intellectual property law to science or technology graduates is that graduates in physics, mechanical or electrical engineering, or computer technology find almost incomprehensible legal decisions where the subject matter is biotechnology or chemistry, and that graduates in the biological

sciences say much the same about legal decisions on non-biological subject matter (e.g. computer-related inventions). This means that we have to select with considerable care the court judgments or patent office decisions that we require our students to read and study; and we have to remember this "mental block" when setting patent law examinations. Curiously, law graduates seem not to have a similar "mental block", or perhaps they do not recognise that they have one!

5 Learning Intellectual Property Law

Good teaching skills are an important element in the success of our several programmes, but these skills need to be supported by effective learning strategies. No matter how competent or erudite the teacher may be, a science or technology graduate is likely to face learning difficulties unless they are taught **how** to study and **understand** the law. Science or technology graduates on our various courses are guided or "walked" through appropriate decisions of courts or tribunals, for example, decisions of EPO Technical Boards of Appeal, judgments of the Court of Justice of the European Community, to familiarise them with the methodologies involved. We have to show our non-law graduates how to read legal decisions. Understandably, the science or technology graduate needs not only more guidance but a different type of guidance in the study of intellectual property law, compared with the law graduate.

As those who come from Common Law jurisdictions will know already, judge-made law is to be found in the judgments of our courts. Little in their previous studies prepares the science or technology graduate who joins our programmes for what to them is the enormous amount of written information involved in the study of intellectual property law; and most of our students tell us this.

While we recommend law textbooks for the various courses comprised in each of the programmes offered by the IPLU and provide our students with comprehensive lecture notes and materials, we insist (as far as we can) that our students read original judgments or decisions, so that they become familiar with the law-making techniques of judges.

Moreover, science or technology graduates are not used to reading legal materials with an eye for the kind of detail that matters to a lawyer. Often they overlook the important subtleties in the legal decisions they read. We have to ensure that, rapidly, they develop an eye for legal detail.

We encourage, as part of the learning process, that our students form study (or discussion) groups (4 or 5 students to a group), knowing that a student will learn more quickly if he or she has to explain a topic or point of law to fellow-students. Law graduates form themselves into study groups without being told to do so. Our non-law graduates appear not inclined to do so, and each is apt to study in isolation. In the past, we assigned our

non-law students to study groups, but found it better in the end to allow them to form their own groups.

Student representatives provide us with regular feedback on teaching and learning problems. If we identify a student who is having extreme difficulty with a course or topic, we quietly arrange extra tuition for the student. But, with effective selection procedures, "serious problem" students ought to be few.

Tutorials are a good way for the teacher to get to know the students, and to identify academically "weak" students. A typical tutorial involves the teacher and 5 or 6 students meeting once a week, or once every two weeks, to discuss a question or topic notified to the students 2 or 3 weeks before the tutorial. The students must prepare the question or topic for discussion, and they know that they may be asked during the meeting to discuss the question or topic. While the teacher must not be too hard on the students during the tutorial, since the tutorial is a learning session for the student, neither must the teacher allow the students to have an "easy ride". At the IPLU, several of our PhD students and former students who now are working as lawyers or patent agents give tutorials to our MSc and Diploma students. Because tutorials (or small group teaching) can be very costly, it is necessary to monitor this form of teaching closely lest the costs exceed the fees that the students are paying for the courses they are taking. While the IPLU is not required to make a profit (in fact, we often support students in severe financial need), neither must it run at a significant loss.

6 Preparing Students for Examinations

Since many of our students are not law graduates, and because among our law graduates taking the Diploma and LLM programmes mentioned above there are students from Civil Law jurisdictions who have not taken a written examination of the type that law graduates from Common Law jurisdictions will have endured during their undergraduate law programme, at the IPLU we regard it as an important part of our task to help our students to develop effective examination techniques, and in some cases to boost the student's morale. Our examinations are designed to test whether students both understand the law they have studied and can demonstrate this by offering a reasoned written opinion in an imaginary case. The typical science or technology graduate tends not to be good at verbal or written reasoning about legal or factual questions, and thus he or she must be given an opportunity to develop this skill. Tutorials, in which questions from past examination papers are discussed, help in this regard. Students are encouraged to submit written work and the teacher comments on the standard and suggests ways in which it might be improved.

Where time permits, we run "mock" examinations. We also get students to grade or mark each other's written work, and we find that our students can learn more from this than from a teacher's comments. We avoid what we are often asked to do: write "model" answers to past questions. Model answers can be very misleading,

and possibly damaging to a student's self-confidence, since a teacher experienced in intellectual property law is likely instinctively to write to a higher standard than he or she would normally expect from the student; or to put it another way, the teacher is unlikely to be able to put himself in the shoes of student taking the written examination. We are not allowed by College rules to use as "model" answers the best answers written by students in the end-of-course examinations, since all examination scripts are treated as confidential.

7 Examinations

All university examinations in the United Kingdom are subject to both internal and external checks and balances. These are meant to reassure both students as to fairness and lack of bias and potential employers as to academic standards.

7.1 Regulations

Each of our programmes in intellectual property law has its own specific regulations which specify, among other matters, the way in which students taking the programme will be assessed. These regulations are approved, and published, by the College or the University, depending on the particular programme. When examining our students, we must ensure that our method of examining conforms with the regulations. The regulations for a programme can be amended by submitting a proposal for amendment to the relevant College or University committee. As well as adhering to the regulations, we have to ensure also that we follow the correct procedures.

7.2 Examination Procedures

The examination procedures of the IPLU follow the norm: (1) the teacher for each course in a programme devises the end-of-course examination (lasting 2 or 3 hours), (2) the examination paper is scrutinised by colleagues, (3) the examination paper is then sent for approval to the external examiners for the programme (for example, the external examiners for the QMW Certificate in Intellectual Property Law are senior patent practitioners, a lawyer and a patent agent, and they may amend the examination paper to make it clearer or fairer or more balanced having regard for the course syllabus).

When the examination has been taken (or written), (4) the examination scripts (identified only by a reference number) are marked by the teacher responsible for the course, (5) the marked scripts are second-marked by a colleague in the IPLU, (6) the double-marked scripts are sent to the external examiners for checking (or moderation). The external examiners may alter or confirm the mark or grade awarded for a particular examination script. The external examiners will pay particular attention to "borderline" scripts, for example, marks or grades on the pass/fail line or pass/distinction line.

7.3 Board of Examiners

The next step in the examination procedure is (7) a Board of Examiners, attended by all the teachers involved in the programme, the external examiners, and representative from the Academic Standards Office in the College who records the discussions of the examinations board and advises on procedural matters. The Board discusses each student's examination results. The pass mark in our examinations is 50%. If a student does not attain this pass mark in all his or her examinations, then examination rules determine whether a single marginal fail (45% to 49%) should be treated as a pass because the student has scored highly in the other written examinations or because the student was ill for example during the examination. A student who fails two examinations (out of six examinations) usually can resit these failed examinations. But the student who fails more than two examinations has to resit all of the written examinations again.

7.4 Academic Standards

As regards academic standards, the external examiners can overrule the internal examiners, though normally they will endeavour to persuade the internal examiners to their point of view. But the College will not overrule the external examiners unless manifestly they are in the wrong. The external examiners submit a written report to the College, in which they may raise questions as to standards or procedure. The whole aim of the examination procedure is both to ensure fairness and negate any possible bias or preference and to manifest that to the students.

7.5 Appeals

With such an examination procedure, you might think that there would be little room for appeal by a student who fails the complete programme (each year several students will fail completely) or a course on the programme. But inevitably students who fail completely or partly appeal the decisions of the examinations board - more paperwork and counselling! Since however we work within strict guidelines, the chances of a successful appeal are not high. A student who fails all or some of the end-of-course examinations can resit these failed examinations in the following year.

7.6 Open-Book and Closed-Book Examinations

An "open-book" examination is one where the student is allowed to have with him or her at the written examination, any books or notes that he or she wishes to have available during the examination. The examination questions are devised accordingly. What we found, over several years, was that the academically good students did not need to refer to books or notes while the academically weak student spent the better part of the time allowed for the examination either reading the books or notes they had with them or copying directly from these without regard

to the examination question they were meant to be answering. We then tried restricting the books or notes that a student could have in the examination, but this did not work either. All of our examinations are now "closed-book", as we call it - that is to say, students taking our examinations are not allowed to have any books, notes or other reference material with them during the exmination. The academic standards of examination scripts improved considerably after the change to "closed-book".

5.6 Alternative Examining Methods

We tried to ease the examinations burden on students taking the MSc programme (Management of Intellectual Property) by introducing assessment by written coursework. As grades or marks scored for such coursework counted (up to a maximum of 30%) towards the final grade for each course, this system had to comply with examination regulations. MSc students found the burdens of this written work too demanding, and we have abandoned assessment by written coursework.

We also allowed students on the Diploma programme to write a 'long essay' (15,000 words) on a relevant topic as a substitute for one end-of-course written examination. Unfortunately, and invariably against our advice, the academically weaker students tended to opt for the long essay thinking perhaps that this would be easier than an end-of-course written examination. The standard of this written work was so poor that we abandoned the long essay.

Our experience is that, in general, science or technology graduates taking our courses in intellectual property law are not naturally gifted when it comes to expressing their opinions in writing. That said, most of these students tell us that studying intellectual property law has "sharpened" considerably their ways of thinking, reading and writing. Finally, we have considered the "multiple-choice" method of examination - the candidate selects the correct answer to a question from a choice of four or five answers (only one of which is the correct answer) - but we have had reports from several sources suggesting that this method is far from ideal.

So, on the basis of my experience, the 2 or 3 hour end-of-course written examination is perhaps the better of the available ways for examining the science or technology graduate in intellectual property law. But, and there is nearly always a 'but', great care needs to be taken when devising such an examination, especially when among the students taking a course there are some whose first or natural second language is not the language of the examination. Because we have students from all over the world (including from the ASEAN countries) on our programmes in intellectual property law, we have to ensure that examination questions do not contain phrases or expressions the meanings of which would not be apparent to a student whose first or natural second language is not English.

6 Student Surveys

The IPLU is required by the QMW Academic Standards Office to carry out "consumer" surveys, and towards that end students on our programmes are encouraged to complete questionnaries after they have taken their final examinations. In fact, long before it was a College requirement we surveyed student opinion on a regular, anonymous basis. In order to preserve the anonymity of respondents, we ask the students to type their responses to the questions. Any questionnaire which inadvertently disclosed the respondent's identity is destroyed on receipt. Nearly all the students who submit questionnaires try to be helpful in their comments; a small minority are defamatory. The questionnaires ask questions about each teacher (good, average, poor as a teacher, approachable or not, availability outside teaching periods, etc.), course organisation, course syllabus and structure, teaching materials, teaching style, learning support, examinations (e.g. easy, difficult, fair, unfair, etc.), college facilities (e.g. law library), etc.

Some questionnaires can be highly critical of a course, and a teacher may not like this, but then 'If you cannot stand the heat, you ought not to be in the kitchen'. If you ask for honest criticism, you ought not to complain if you get it. Where we can do so, we try to remedy the matter that gave rise to the criticism. We regard it as important for our students know that where they have a genuine criticism, this will be looked into. We discuss the criticisms with student representatives, and if we cannot act to remedy a criticism then we explain why we are unable to do so. It is absolutely essential, in my opinion, not only to survey student opinion but to be seen to take such opinion seriously. Our students expect this, even though they know that we cannot always act to remedy their criticisms.

APPENDICES

1 General Introduction and Learning Methods for the "Core" Subjects.

2 QMW Diploma in Intellectual Property Law - Patents for Inventions and Protection of Trade Secrets: Schedule of Lectures.

3 University of London LLM Programme - International and Comparative Law, Patents and Trade Secrets: Schedule of Lectures.

4 QMW Certificate in Intellectual Property Law - Competition Law Examination.

5 QMW Certificate in Intellectual Property Law - Patent Law Examination (II).

6 University of London MSc Management of Intellectual Property Programme - Patent Law Examination.

QUEEN MARY & WESTFIELD COLLEGE
University of London
Centre for Commercial Law Studies

INTELLECTUAL PROPERTY LAW UNIT

Certificate in Intellectual Property Law

GENERAL INTRODUCTION AND LEARNING METHODS FOR THE "CORE" SUBJECTS

by

Noel Byrne

There are three "core" subjects in intellectual property law: patent law, copyright and designs law, trade mark law. What is said in this introduction is, with a few exceptions, true equally for the three of them.

None of the three core subjects can be studied in a vacuum, divorced from the reality of the economic system within which a patent or other form of intellectual property is held and can be exploited. Patent law, copyright law, and trade mark law are not just interesting collections of legal rules. Each is meant to serve an economic, or socio-economic, function within the society that has created them.

You may think that the views expressed in this document are trying to insult your intelligence. After all, you are a science or technology graduate. You "know the ropes" already. In that case, look on this document as a reminder to the few, excluding your good self, who have forgotten what learning involves. If we could identify the few, we would hand this document to them directly (and of course discreetly). Unfortunately, we cannot at this stage say who they are.

1 Patent Law in Action

A patent is a business asset. It can be exploited in various ways, but it can be exploited successfully or effectively only by someone who appreciates the strengths and weaknesses of patents. Simply, and without more, to study the set of legal rules comprised in a patents statute or convention is akin perhaps to reading unimaginatively a script for a play, without seeing it acted.

You can never hope to progress beyond a superficial and somewhat garbled appreciation of law involved in the three core subjects if you are unwilling to 'invest' time and effort in 'seeing' the legal rules in action, through the decisions of the courts and the opinions of commentators of the intellectual property scene.

Anyone who aspires to qualifying as a British patent agent or European patent attorney needs to be familiar not only with the

basic principles of law involved in the three core subjects but also with the uses (and abuses) of intellectual property.

2 Reading and Discussion: The Keys To Understanding

As a student taking a postgraduate programme in intellectual property law, you will learn rapidly, if you are not already aware of this, that there is no substitute for individual effort and initiative. Law, let alone intellectual property law, is not a subject that can be "poured" into you, or that will be spoon-fed to you. An understanding of the law is acquired through what might be described as an 'osmotic' process.

In science or technology you acquire an understanding of the topic or phenomenon in hand by experimentation or observation. There is an added bonus when studying a science or technology topic that, in the main, there seems to be a 'right' answer to most problems - in the sense that a state or condition is verifiable or not, is present or absent, is on or off. At a simple level in mathematics, you feed the figures into the 'formula' and the 'right' answer emerges.

Intellectual property law is not like that. In law generally, there will be varying shades of opinion regarding a solution to, or decision on, any particular legal problem, and each variation is potentially 'right'. Whether an individual opinion is acceptable or not to the majority can depend on the skill with which the individual advocates it. If you present your argument logically, fluently and skillfully, in the spoken or written word, it is likely to be received more favourably by a listener or reader, and perhaps perceived to offer the better solution, than if you simply "bumble" about with no clear goal or obvious direction.

If you want to reach a standard of reasonable competence in intellectual property law, then you must read widely in order to acquire the necessary background against which to make a point or discuss an issue, and to become familiar with the specialised language of the law and the techniques of applying it in order to solve problems. You must also learn how to present your point of view persuasively and logically. Attention to detail is all-important.

3 Teaching and Learning

There are various ways in which an appreciation of intellectual property law can be acquired, and a lecturer can rarely do more in the time allowed for a lecture than cover the main issues or principles. There is the unkind, but no less telling, story of the lecturer who arrives in the room, says 'Good Morning!' to the group, and hastily adds that there is no need to write that down. You may learn more from a lecture period if you spend more of the time listening and less of your time scribbling, more time debating and less time asking the lecturer to repeat what he or she has just said so that you can write it down.

To teach any group effectively a lecturer needs the cooperation and enthusiasm of the group for the topic of the lecture. This means that the student must contribute to the effort. The lecturer can only point the way; he or she cannot "learn the law for you". The major learning effort rests with the student. In the core subjects, you will have received in advance a set of lecture notes that is relevant to the topic. It is up to you to read the notes and to question anything in the notes that you do not understand.

There are no set text books for the core subjects, at least no one book, or set of books, that could be regarded as the main or only, authoritative text books for these subjects. Several books are however 'suggested' as suitable for initial reference purposes. Postgraduate law studies, such as you have embarked on, seldom centre around a single text book, authority, or view. Different authors have different views on the different topics that go to make up the core subjects of intellectual property law. It is not possible in the short time available for a lecture or tutorial to cover the different views that exist in the diverse sources from which the content of the law relating to the topic under discussion is drawn.

In the lecture notes on the core subjects, you will find a selection of books, journal articles, and law cases referred to. It is not necessary to read every reference. Some books will not suit you because of the style in which they are written. You will discover that some books on intellectual property law are heavily academic in their approach to the law, while others are written with the legal practitioner in mind. Some books amount to no more than light summaries of the law, while others are heavily rule-oriented. Each category should merit your attention at some stage during the courses on the core subjects, as you research a particular point or issue.

To study the core subjects effectively requires organisation. The lecturer cannot organise every aspect of the particular course for you. Thus, if you do not organise yourself to cope with the work that the particular course involves, you increase your study burden. Postgraduate study in law, because it involves so much personal study and wide reading, calls for a high degree of self-organisation and motivation in order to make the most of the available time.

Of all the degrees of which it can properly be said that the student 'reads' for his or her degree, law at both undergraduate and postgraduate degree levels lives up that a reality. You really will 'read' in the fullest sense of that verb during your Certificate programme. There can be no 'spoon-feeding', because of the nature of the subject and the way in which it is examined. The lecture notes are meant as a guide. They cannot create in you an understanding of a topic; only you can do that by your own efforts. You may memorise the lecture notes or what was said in a lecture, but memorising is not the same as understanding; and undergraduate and postgraduate law exams are designed to test your understanding. Simply regurgitating a diet of lecture notes

will not gain you the success that you aspire to in the final examinations for the Certificate programme.

Science or technology graduates taking a postgraduate programme in law invariably find that, in terms both of quantity and of quality, the reading burden is very high in comparison with their earlier non-law studies. You will find that the average legal text generally demands a higher standard of competence and comprehension than the average science or technology text - which text tends to be factual or fact-based and less of a closely-worded opinion. In law, words are important; words are the main tools of a patent practitioner's trade. All this makes for hard or difficult reading initially, but it can eventually be mastered. For what it's worth, past students (including the PhDs among them) have said that the Certificate programme improved greatly their standards of written and spoken English.

4 Law Cases and Journal Articles

The life-blood of intellectual property in a Common Law jurisdiction like ours is to be found in the judgments of the courts. You will never proceed beyond a superficial understanding of the law if you do not read cases in which that law is interpreted and applied to resolve a particular issue or dispute. Law cases, beyond the facts, are not easy reading for the newcomer to law. Patent law cases present an added problem in that the judgments of the courts frequently involve complex scientific or technical matter (see, e.g., the Genentech case, where the subject matter involves complex issues of biological science). Yet, you will have to grasp the basics of the subject matter around which the legal issues turn in order to appreciate the law being applied. There is no shortcut here.

The law cases that are referred to in the lecture notes will include a number of leading cases (for example, in patent law, Catnic Lintel, and Windsurfer). Leading cases are essential reading. There is a "knack" to reading law cases which comes only through reading such cases. The cases are seeking to determine what the law is in relation to specific facts. Having determined the relevant law, the judge in the case then arrives at a conclusion in the light of the evidence presented before the court.

But in reaching a conclusion, the judge does not apply the law in a mechanical fashion. He will be influenced by, for example, the quality of the evidence presented before the court and by the way the witnesses answered questions put to them by the lawyers for each side. Then, the judge will have regard to 'public policy'. It is the 'unquantifiables' of decision-making in law that makes law cases hard reading for scientists and technologists. They are used to handling quantifiables, and except at the rarefied levels of, say, fundamental particles in physics, the decisions that science or technology graduates are called upon to make within the field of their disciplines tend to flow in a fairly straightforward manner from the data that has been collected.

A question that is likely to arise is whether it is necessary for the student to read the large number of law cases that may be associated with a particular legal rule (for example, in patent law, the rules inventive step or the interpretation of patent claims), yet are not identified by the lecturer as 'leading cases'. It would be easy to say 'No. You can forget the non-leading cases'. But then you might say, 'Why are they included in the notes?'. The answer is that they are included because they help to show how, subsequent to a particular leading case on a point of law, the later courts explained and applied the law as stated in the leading case. These non-leading cases often give a far-better "feel" for the law than a leading case on its own may do.

So each case given in the lecture notes is meant to assist you to acquire a better understanding of a particular rule of intellectual property law; to help you see the law come 'alive'.

Journal articles were mentioned earlier, and it has been said there that, in law, there are few if any papers or articles that can be classed as 'seminal', and none in intellectual property law to which I would accord that status (though others might be less severe in that respect). In the course notes, you will find that, on some matters, several or more references are given, and you will find that each restates or rehearses the law on the matter and adds a particular opinion. If only one or two articles were referred to, this would place a heavy burden on the particular source, with a possibility of its being stolen, to put it bluntly. If a number of references are given, then this eases your task because if you are unable to find one reference then another may be available. Also, the different articles assume in the reader different levels of knowledge or understanding of the topic under discussion. Where any one article is suggested or recommended, there is always a risk that it will be above or fall below the level of competence of a particular student.

That said, some students may not be able to cope with this wide-range approach to self-teaching, and it is only fair that the preferences of the lecturer should be indicated to the student.

Accordingly, I will indicate to you the journal articles and law cases that I believe you should regard as the 'minimum' reading on the patent law course, though always with a warning that the bare minimum is rarely sufficient to meet the learning objectives on this particular course.

5 Your learning objectives

So, at the end of the programme what level of competence should you have attained in each of the core subjects? In broad terms, you should understand and be able to discuss in a coherent and sensible way the main principles or areas of each of the areas of law involved, as indicated in the timetable of lectures. Imagine yourself having to address a group of business executives who have no knowledge of, say, patent law. Would you be able to explain the criterion of novelty, say, to that group,

illustrating your explanation with appropriate cases from the law reports? Would you be able to explain to them how the European Patent Convention system works?

Your learning objectives do not require that you learn in rote-fashion the whole of, say, the European Patent Convention or the U.K. Copyright, Designs and Patents Act. Rather, you must aim to reach a point where you are competent with the main principles or areas identified in the timetable, where you are 'at ease' with them, including the purposes behind them. Everything will be done, that can reasonably be done, to ensure that you attain these objectives, but **the main burden lies with you.** Your objectives should also include attaining an understanding of the ways in which the rules of law involved in the core subjects interact.

6 Conclusion

You must constantly bear in mind that you are beginning on a task that your previous studies are unlikely to have prepared you for. You cannot therefore expect to understand instantly - bear in mind that it took you at least 3 years immersion in the science, engineering or other subject that you last studied to attain the standard you reached and it required a different way of thinking about the matters involved. You must give yourself a reasonable chance; and you must also allow your fellow students a similar chance.

QUEEN MARY AND WESTFIELD COLLEGE
University of London

Centre for Commercial Law Studies

INTELLECTUAL PROPERTY LAW UNIT

Diploma in Intellectual Property Law

PATENTS FOR INVENTIONS
PROTECTION OF TRADE SECRETS

SCHEDULE OF LECTURES

Week	Date	Lecture Content
1	24 January 1995	Historical introduction to the patent system. Evolution of the European Patent Convention. Functions of the modern patent system.
2	31 January	Things that are, and things that are not, inventions under the EPC. Inventions regarded as not industrially applicable.
3	7 February	Inventions excluded from the grant of a European patent for other reasons, included on grounds of public policy.
4	14 February	Novelty and inventive step. The 'state of the art' and the person 'skilled in the art'.
5	21 February	Inventive step: EPO and German methodologies; British methodology; EPO and British case law.
6	28 February	Applying for a patent through the EPC and the Patent Cooperation Treaty. Priority of application. Sufficiency of specification. Claiming an invention.
7	7 March	Interpretation of claims and patent infringement. Defences to patent infringement proceedings.
8	14 March	Transactions relating to patents, including voluntary licences of right. Statutory controls on patent exploitation. Involuntary licences of right.
9	21 March	Ownership of inventions and patents, including the rights of co-inventors, co-patentees and inventor-employees.
10	28 March	Protection of confidential information, including 'grace-period' under patent law, and restrictive terms in contracts.

11	2 May	The EPILADY case in the United Kingdom, Germany, Holland and other EPC countries.
12	9 May	Revision of main principles.

3.3 In what circumstances might prior public disclosure of an invention not be 'novelty-defeating?

3.5 What purpose does the 'person skilled in the art' serve in patent law? What prior art is relevant when examining an invention for inventive step? What factors might be indicative of the presence or the absence of inventive step?

4 Applying for a Patent and the Patent Grant

4.1 Who can apply for a patent under the EPC or the U.K. Patents Act 1977? Who is entitled to be granted a patent? What is the difference, if any, between the filing date of an application and its priority date? What function does the filing or priority date serve in patent law?

4.2 Could you summarise the disadvantages, if any, of applying for a European patent as against a national patent? What are the advantages of applying under (a) the EPC and (b) the PCT systems? When deciding where (i.e. countries) to apply for a patent, what factors would influence your decision?

4.3 What standard must a patent specification attain in order to be acceptable for the granting of a patent? What is the function or purpose of the claim(s) in a patent specification? When examining for novelty or inventive step, what role do(es) the claim(s) serve?

4.4 Could you summarise patent office procedure from the filing of an application to the grant or refusal of a patent on the application? When is a patent application published and what purpose is publication meant to serve?

5 Patent Infringement and Revocation

5.1 What rights are comprised in the grant of a European patent (U.K.)? Who can bring proceedings for infringement of a patent under the Patents Act 1977?

5.2 What do you understand by the phrases 'infringement of the exclusive rights' and 'infringement of the claim(s)'? Where the invention is a product, what constitutes infringement? Where the invention is a process what constitutes infringement?

5.3 What is the basic rule for interpreting or construing patent claims under the Patents Act 1977?

5.4 What do you understand by the phrase 'secondary or contributory infringement'?

5.5 The 1977 Act excludes certain acts from the scope of infringement proceedings, could you summarise these? Why should these be excluded? What might constitute (a) private, non-commercial use and (b) experimentation?

5.6 Could you list or summarise the legal remedies available to the patentee where his patent has been infringed? What do you understand by (a) 'innocent infringement' and (b) 'honest prior use'?

5.7 The purchaser of a patented product has the right to keep it in repair. Could you explain the nature and scope of this right?

5.8 Could you give the grounds on which a patent may be revoked?

5.9 When might a threat to proceed for patent infringement give rise to a cause of action?

6 Patent Transactions

6.1 What formalities, if any, are required in the case of an assignment and a licence of a patent? What do you understand by an 'exclusive' licence? How does an assignment differ from an exclusive licence? What types of patent licence may be granted by the patent owner.

6.2 In what other ways, apart from assigning or licensing, could a patent owner exploit his patent rights?

6.3 What advantages are there in registering a registrable transaction or event under the Patents Act 1977?

6.4 Could you explain the phrase 'priority of interests' in the context of the registration of a registrable transaction or event? To what extent is registration to be seen as 'notice to the world' of the registered transaction or event? Could you explain the phrase 'bona fide purchaser for value without notice' in the present context?

7 Statutory Controls on Patent Exploitation

7.1 The Patents Act 1977 has rules designed to control the use of 'tying' agreements and to allow agreements to be terminated when licensed patents expire. Could you summarise these?

7.2 The Patents Act 1977 has rules designed to control certain abuses of a patent monopoly. Could you summarise these?

8 Ownership of Inventions and Patents

8.1 How does the EPC address the question of the ownership of inventions? Who, under the EPC, is given the right to a European patent?

8.2 How does the Patents Act 1977 address the question of the ownership of inventions? As between employer and employee, could you summarise the rule on the ownership of inventions under the EPC and the 1977 Act? As between an employer or an employee and a third-party, how would the question of ownership be resolved? What is the position where a contract purports to determine the question as to the ownership of an employee's invention?

8.3 Could you summarise, where an employee has made an invention that belongs to him, the rules relating to 'additional compensation'? How, if at all, do these rules differ from where the employer is entitled to the employee's invention? Where an employee has made an invention that belongs to him, what advantage, if any, is there in the employee coming to an arrangement with his employer relating to commercialisation of the invention?

8.4 As between employer and employee, could you summarise the principles relating to determination of the amount of 'additional compensation'?

8.5 As between co-inventors, could you summarise the rules on entitlement to a patent under the EPC and the Patents Act 1977?

8.6 As between co-patentees, what are the rights of a co-owner of a patent relating to use or commercialisation of the invention under the Patents Act 1977?

9 Protection of Confidential Information

9.1 To what extent do the criteria for the granting of a patent under the EPC and the Patents Act 1977 seek to protect the owner of a patentable invention against its misappropriation?

9.2 Could you summarise the main principles for the protection of information under the law relating to confidential obligations? To what extent, if any, does this law afford protection against surreptitious surveillance, phone-tapping and the like?

9.3 What do you understand by the 'springboard' principle? Is it consistent with the main principles relating to confidential obligations?

9.4 What is the 'public interest' defence to a breach of confidence? What other defences could be raised against an alleged breach of confidence?

9.5 To what extent is an (ex-)employer protected against an unauthorised disclosure of trade secrets and other confidential information by an (ex-)employee?

9.6 To what extent may an (ex-)employee be restricted by a term in an employment contract from competing with an (ex-)employer? Could you summarise the rules relating to the enforcement of restraint-of-trade clauses in employment contracts? How, if at all, do these rules differ where a restraint-of-trade clause is part not of an employment contract but of an agreement for the sale of a business?

QUEEN MARY AND WESTFIELD COLLEGE
and
KING'S COLLEGE
University of London

INTER-COLLEGIATE LLM PROGRAMME: 1995-96

INTERNATIONAL AND COMPARATIVE LAW: PATENTS AND TRADE SECRETS

1 GENERAL INTRODUCTION

This course **DOES NOT** presuppose a knowledge of basic UK and EPC patent laws. The emphasis will be on the international and comparative aspects of the subject.

The course will include the following:

(1) A discussion of the concept of patents, utility models, inventors' certificates and trade secrets; a survey of the historical development of industrial property rights; the role and influence of the World Intellectual Property Organisation (WIPO); an examination of the relevant parts of the Paris Convention for the Protection of Industrial Property together with the various revisions and proposals for future change; parallel developments in international trade; GATT/TRIPS and the World Trade Organisation.

(2) Comparative study of the use of the patent system and the legal protection of trade secrets by major industrial countries and of the economic arguments relating thereto.

(3) Regional agreements: for example, the Patent Co-operation Treaty; the Budapest Treaty for the International Recognition of the Deposit of Microorganisms; the European Patent Convention; the Community Patent Convention.

(4) A comparative study of the features of the patent systems in the major industrial countries with particular reference to the European Patent Convention, the USA and Japan.

(5) Exploitation of Industrial Property: a comparative study of the features of licensing, assignment and competition provisions with special reference to the three major systems.

(6) Industrial property litigation: a comparative analysis of the laws in the major countries, including the nature of infringement actions and remedies.

2 RECOMMENDED WORKS

There is no standard textbook for this course. Some materials will be made available to students as the course progresses. References will be provided to monographs and, in particular, periodical literature. The following texts are recommended:

Bainbridge, **Intellectual Property**, Second Edition, Pitman, 1994 - an introductory book only.

Merges, **Patent Law and Policy: Cases and Materials**, Michie, 1992 - for introductory book on United States patent law.

Reid, **A Practical Guide to Patent Law**, Second Edition, Sweet & Maxwell, 1993 - an introductory book on the U.K. and EPC patent systems.

Paterson, **The European Patent System**, Sweet & Maxwell, 1992.

Wegner, **Patent Harmonisation**, Sweet & Maxwell, 1993.

SCHEDULE OF LECTURES

Week	Date	Topics Covered
		Term I: October-December
1	5.10.95	Historical development of patent system; international arrangements, PCT and Paris Union; economic importance of patents; functions and effectiveness of patent system.
2	12.10.95	Complementary and alternative forms of legal protection, including trade secrecy. EPC: patentable and non-patentable subject matter.
3	19.10.95	Criteria of patentability (1): novelty, inventive step, sufficiency.
4	26.10.95	Criteria of patentability (2).
5	2.11.95	Patent specifications and claims: practice and procedure
6	9.11.95	Patent claims: interpretation and infringement.
7	16.11.95	Infringement of exclusive rights; contributory infringement; non-infringing acts; defences to infringement; prior user rights; remedies (including threats).
8	23.11.95	Comparison of EPC, national laws of Member States and the Community Patent Convention.
9	30.11.95	U.S. patent system (1): historical development; first-to-invent versus first-to-apply; novelty.
10	7.12.95	U.S. patent system (2):inventive step; utility; best mode.
11	14.12.95	U.S. patent system (3): interference proceedings; interpretation of claims; infringement, including doctrine of equivalence; patent misuse; fraudulent procurement.
		Term II: January-March
12	18. 1.96	Japanese patent system (1).
13	25. 1.96	Japanese patent system (2).
14	1. 2.96	Patent amendments and added subject matter.
15	8. 2.96	Patents for computer-program-related-inventions.

16	15. 2.96	Patents for inventions in the field of medicine; supplementary protection certificates.
17	22. 2.96	Patents for biotechnological inventions; the 'morality' question.
18	29. 2.96	Invention and discovery; patents for new uses of known non-medical materials; selection patents.
19	7. 3.96	Utility model protection.
20	14. 3.96	Plant variety rights and the UPOV system; U.S. plant patents.
21	21. 3.96	Protection of trade secrets and remedies for unfair competition (1).
22	28. 3.96	Protection of trade secrets and remedies for unfair competition (2).

Term III: May-June

23	2. 5.96	Proprietary aspects of patents: ownership; employees' inventions; government inventions; etc.
24	9. 5.96	Patent transactions; voluntary and involuntary licensing; government use of patented inventions.
25	16. 5.96	Patents and competition law.
26	23. 5.96	Differences of approach in other patent systems; the patent system and developing countries; current international proposals for reform.
27	30. 5.96	(Reserved session).
28	6. 6.96	(Reserved session).

QUEEN MARY & WESTFIELD COLLEGE
University of London
Centre for Commercial Law Studies

INTELLECTUAL PROPERTY LAW UNIT

Certificate in Intellectual Property Law

COMPETITION LAW EXAMINATION

Date: Time Allowed: 3 Hours.

Answer any FOUR questions. All questions carry equal marks.

The marks for each question will be awarded more for the reasoning displayed and the points selected for discussion than for the particular conclusions reached. Marks will be given, if appropriate, for any relevant points of interpretation given in an answer. YOU SHOULD NOT SPEND TIME WRITING AN INTRODUCTION OR A FORMAL PRECIS OF THE DETAILS GIVEN IN A QUESTION NOR IN DISCUSSING MATTERS IRRELEVANT TO THE ISSUES.

Question 1

Mable Leaf Corporation, a Canadian company, is the owner of a European Patent designating Germany, Holland and the United Kingdom. The claims of the patent cover a hard-disk for a computer. The Canadian company is also the proprietor of the trade mark "INSTANTER", registered in the countries of the European Community. In 1990, Mable Leaf granted John Bull Limited, a British firm, an exclusive licence to manufacture and market the patented hard-disk in the United Kingdom and to use the registered trade mark INSTANTER there, and granted Himmler GmbH, a German manufacturer, a similar licence for Germany and Holland.

In recent months, John Bull has found that its sales of INSTANTER hard-disks have been falling to competitors who are getting supplies of Mable Leaf's hard-disk by indirect means. Enquiries have revealed that (a) INSTANTER hard-disks are being bought by a commercial intermediary in Canada from Maple Leaf, shipped by this intermediary to a distributor in the Holland, and being sold out of Holland to computer manufacturers in the United Kingdom; (b) Himmler is selling computers, manufactured in its factory in Holland and incorporating INSTANTER hard-disks, directly to computer distributors in the United Kingdom; and (c) Van Der Valk, a Dutch intermediary, is buying INSTANTER hard disks from Himmler and exporting these to manufacturers in the United Kingdom.

Advise John Bull whether it can bring infringement actions to prevent the activities in (a) to (c). Its exclusive licence has been registered under the Patents Act 1977, and as a user agreement under the Trade Marks Act 1938.

Question 2

Fire Proof Ltd (FPL), Mile End Road, London, holds exclusive rights for Southern England for the assembly and sale of a fire extinguisher, incorporating a patented mechanism, manufactured by A.R. Sonist S.A, Paris, France and sold under the trade mark "DRENCH". Sonist owns a valid patent on the mechanism and is the proprietor of the DRENCH trade mark.

The terms of agreement (dated July 1989) between FPL and Sonist state (1) that the agreement is to run for a period of 6 years, (2) that FPL will be entitled to a 20% discount on the selling price of the components required by FPL for assembling DRENCH extinguishers at its Mile End Road factory, (3) that FPL will assemble the extinguishers only at its Mile End Road factory, (4) that FPL will not manufacture or sell, or assist anyone else to manufacture or sell, any product which might compete with the DRENCH extinguisher, and (5) that FPL undertakes to purchase all its requirements of refill chemicals for use in DRENCH extinguishers from Sonist during the term of the agreement. Sonist has an agreement on similar terms with another firm for Northern England and Scotland.

The refill chemicals used in the extinguisher are readily available from other suppliers. Sonist makes a modest profit from selling the extinguishers, but the supply of refill chemicals is highly profitable for the firm. FPL has learned that it can import an extinguisher using the same mechanism from Taiwan into Great Britain for sale here at a far greater profit to FPL. Purchasers of this extinguisher will be free to obtain refill chemicals on the open market.

Advise FLP as to its rights and liabilities in this matter.

Question 3

While there are important differences between the Regulation on Patent Licensing Agreements and the Regulation on Know-How Licensing Agreement, so too are these Regulations similar in a number of ways.

Compare and contrast the two Regulations.

Question 4

Discuss whether, and if so the circumstances in which, these arrangements, practices or occurrences may be incompatible with Article 85(1) of the EEC Treaty:

(a) An agreement between a manufacturer in Manchester and a commercial representative in Northern Ireland fixing the prices at which goods supplied to the representative are to be sold in Northern Ireland.
(b) An agreement between a parent firm and its two subsidiary firms, which prohibits the parties to the agreement from supplying customers in the other parties' markets.
(c) An agreement between two manufacturers to establish a jointly-owned company to market and sell their goods exclusively in a defined territory.
(d) Regular meetings of competitors, at which investment, production and pricing policies are considered by a steering committee.
(e) When one supplier in a defined market raises or lowers its prices, the other suppliers there do likewise, and by the same amount, almost immediately.

Question 5

Racing Bikes Limited (RBL), a small, highly innovative British firm, is currently owned by Fred Gordon ("Flash", to his friends), a former world racing bike champion. Over the past six months, Flash has been discussing the sale of his company to Eurovelo S.A., a French racing bike manufacturer. The parties to the negotiations have agreed a price (£4,500,000) for RBL, on terms that include a ban on Flash managing, owning shares in, being a director or an employee of, or acting as a consultant to, any business which will or might compete with the business sold to Eurovelo. The ban is to last for a period of 8 years. The assets of RBL's business include its well-known "SPEED" device mark, registered throughout Europe, various designs for new or improved frames and accessories, and patents for a new type of gear-change.

Advise Eurovelo on the legality of the ban.

Question 6

5X Cola Pty Ltd, a company established in Australia, has agreed to grant a licence to Markup (United Kingdom) Limited (MUK) to produce and sell a cola drink using an essence manufactured according to a secret formula by the Australian company. The essence will be supplied in bulk to MUK's bottling plants and there mixed with specified ingredients (including carbonated water). The cola drink will by sold in Britain under the licensor's trade mark "Five-Ex Cola", a very successful brand name in Australia and several countries in the Far East. The licensing agreement obliges MUK (a) to purchase a certain minimum quantity of essence each year from the licensor, (b) not to use any trade mark in relation to cola produced under the licensing agreement except the mark "Five-Ex Cola", (c) not to make or sell any other cola product during the period (15 years) of the licensing agreement or for 1 year thereafter, (d) to submit to the licensor on a regular basis samples of cola produced, for quality checks, and (e) to disclose to the licensor technical and commercial experience gained, and improvements made to manufacturing methods, in the production and sale of "Five-Ex Cola".

Advise 5X Cola on the legality of this agreement with MUK. The agreement will come into effect in six months time.

Question 7

Marie Lake, Managing Director, Robotic Machines Ltd, London, one of your most important clients, telephones you in something of a panic. She has just received a letter from the EEC Commission, saying that a complaint has been laid against her firm alleging a breach of Article 85 EEC, and requiring Robotic Machines to reply by a certain date to questions put in the Commission's letter. Ms Lake tells you that she recalls reading in the Financial Times about a year ago that the Commission has wide powers to investigate suspected breaches of the competition rules and to penalise infringements.

Advise Ms Lake as to the Commission's powers of investigation.

Question 8

Megafirm Corporation, a Japanese multinational enterprise, is a well-known supplier of medical electronic equipment. It is particularly strong in the world market for medical lasers. It operates in the European Community through wholly-owned subsidiaries. Its share of the European Community's total market for such lasers is around 20%, but in several of the Member States its share of the national market exceeds that figure. In the United Kingdom, for example, Megafirm (United Kingdom) Limited holds 35% of the market already. In Germany, Megafirm Elektronik GmbH has 35% of the national market; in France, Megafirm France S.A. has 20% of the French market; and in Italy, Megafirm Italia S.A. has 30% of the Italian market. Megafirm Corporation plans to increase its market share by between 20% and 30% in these countries and elsewhere in the Community by the end of the present decade.

Through its subsidiaries, Megafirm Corporation has gained its present market position in the Community by various commercial tactics. For example, Megafirm supplies its subsidiary firms in the Community at, and at times slightly below, the marginal cost of producing the laser equipment. This allows these subsidiaries to sell the equipment at less than the price of competing products. Its subsidiaries in the Community market other medical electronic equipment. If a purchaser agrees to buy several items of equipment, the price of the "package" works out at far less than if each item was bought separately, whether from Megafirm's subsidiaries or their competitors. The only condition imposed by the Megafirm's sales agreement is that equipment bought by a customer as part of a "package" must not be exported from the Community. Some of Megafirm's products use disposable items. If a purchaser's total requirements for disposables are bought only from Megafirm's subsidiaries, the purchaser is given a special rebate at the end of each year.

Advise Megafirm whether these tactics are lawful under Article 86 EEC.

QUEEN MARY & WESTFIELD COLLEGE
University of London
Centre for Commercial Law Studies

INTELLECTUAL PROPERTY LAW UNIT

Certificate in Intellectual Property Law

PATENT LAW EXAMINATION (II)

Date: Time Allowed: 3 Hours.

Answer any FOUR questions. All questions carry equal marks.

The marks for each question will be awarded more for the reasoning displayed and the points selected for discussion than for the particular conclusions reached. Marks will be given, if appropriate, for any relevant points of interpretation given in an answer. YOU SHOULD NOT SPEND TIME WRITING AN INTRODUCTION OR A FORMAL PRECIS OF THE DETAILS GIVEN IN A QUESTION NOR IN DISCUSSING MATTERS IRRELEVANT TO THE ISSUES.

Question 1

"If the patent systems of the world exist to encourage industrial innovation and economic activity they are severely limited. Other forms of intellectual property rights are required to achieve such purposes."

Discuss.

Question 2

Discuss any TWO of the following topics:

(a) The "problem-solution" methodology for assessing inventive step.

(b) The "morality clause" in Article 53(a) EPC.

(c) The "groundless threats" provisions in section 70, Patents Act 1977.

(d) The remedies of damages and account of profits for patent infringement.

(e) The provisions on "tying clauses" in section 44, Patents Act 1977.

(f) The "experimental use" defence in section 60(5), Patents Act 1977.

Question 3

In each of the following cases, advise P as to the validity of his European Patent.

(a) Before the filing date of the application for which his European Patent was granted, P disclosed to T the essential details of the patented invention during a meeting at which O was present also. At the meeting between P, T and O, the three parties discussed a manufacturing contract that T wanted to enter into with either P or O; and, in fact, T eventually concluded the contract with P. No secrecy agreement was signed by the parties before their meeting.

(b) P is the proprietor of a European Patent with claims to a transdermal patch incorporating nicotine, to help cigarette smokers give up the habit. The patch, rather like a sticking plaster, is placed on the user's hand or arm, and the nicotine in the patch enters the bloodstream through the skin. Before the filing date of the patent, the following statement by T was published in a highly respected English-language scientific journal:

'Alternative routes of drug administration more cosmetic than chewing tobacco or taking snuffs should be developed so that the nicotine addict has alternatives to cigarettes. Nicotine chewing gum has had limited success, but may soon become available worldwide. Another alternative might be transdermal application much in the manner of nitroglycerine patches. Nicotine "inhalers" might also be feasible if dosage could be adjusted.'

O alleges that, by reason of T's statement, P's patent is invalid. There is evidence that X, on reading T's statement, performed an experiment in which she removed nitroglycerine from an existing transdermal patch, inserted nicotine in the patch, and created a transdermal nicotine patch exactly as described in P's patent. When creating the transdermal nicotine patch, X read a leaflet on the nitroglycerine patch in order to discover how much nitroglycerine was contained in that patch; and she also read various scientific papers on nicotine levels that had to be present in the blood stream in order to have an effect on the human body.

(c) P owns a European Patent for a process for purifying drinking water. Before P filed the application for which his patent was granted, he gave samples of water purified by the process to several friends and employees, for test purposes.

Question 4

In relation to computer programs, compare and contrast the availability and scope of patent protection and copyright protection.

Question 5

Nomovo Incorporated is a pharmaceuticals company based in the Japan, with wholly-owned subsidiary companies in several countries of the European Community. The parent company was granted a European Patent for a drug, the active compound of which is baracen, used to cure and prevent stomach ulcers in humans. The drug is sold throughout the European Community.

A researcher working for Nomovo has discovered that baracen can be used in a liquid spray form to counteract foot odours, particularly odours resulting from foot disorders caused by fungi. The spray can be applied to the insides of stockings or shoes, though it is slightly more effective if sprayed directly onto the feet. Nomovo wants to apply for a European Patent in respect of baracen used for this purpose.

Biocide Plc, a British company, produces fungicides and insecticides for spraying or "dusting" crop plants, such as wheat, barley, and tomatoes, grown on farms. The company experimented with baracen to see if the compound could be used to eradicate or control plant diseases and pests. It found that, when baracen is applied to growing plants in the form of a dust, the compound provides highly effective protection against fungi that attack tomato plants, and the dust kills the tomato borer, an insect pest that attacks tomato plants weakened by fungal attack.

Biocide applied nine months ago for a European patent for the use of baracen as a fungicide and an insecticide, and since then it has been selling the compound (in dust form) for that purpose in the United Kingdom. The company has received a letter from lawyers acting for Novomo threatening legal proceedings for infringement of its baracen patent.

Advise

(a) Novomo whether baracen for use as a foot spray is patentable under the European Patent Convention; and

(b) Biocide (i) whether baracen for use as a fungicide and an insecticide is patentable under the European Patent Convention and (ii) whether Novomo can prevent it (Biocide) from making and/or selling baracen for such use.

Question 6

Assuming in each case the subject matter to be novel and disregarding the requirement for an inventive step, discuss whether the following claims are patentable under the European Patent Convention:

(a) A claim to a system for regulating traffic flow consisting of defining a critical passage and establishing directives for regulating urban traffic, characterised in that it also consists of applying delay time plans in real time for the traffic lights on each trunk road, as a function of parameters comprising the approach speed and number of the various vehicles, the nature of the vehicles waiting in the free-flowing traffic link, the regulating 'airlock' (in which traffic is controlled and where the maximum flow of vehicles that the critical passage can absorb on each trunk road may be temporarily lower than the flow of vehicles arriving in the relevant regulating 'airlock') and secondary roads, the degree of air and noise pollution in the approach link and the regulating 'airlock', the above delay time plans for the traffic lights increasing the speed of the vehicles on each trunk road and on the critical passage.

(b) A claim to a method of analysing performance data on board a vehicle, the method comprising these steps: communicating the recorded performance data to a storage medium remote from the vehicle; converting the data in the storage medium to a pre-selected format; loading the formatted data into a computer; loading master data, representing a known performance profile into the computer; and comparing the performance data with master data in the computer, under the control of a program for deriving analytical results regarding performance.

(c) Claims to a sheep bred according to the following method and to a method of breeding sheep comprising these steps: (i) selecting a male with specified characteristics, (ii) selecting a female with specified characteristics, (iii) mating the selected male sheep with the selected female sheep, (iv) from the offspring of this mating, selecting a sheep with a specified characteristics.

Question 7

Kahlkopf, a German manufacturer of safety helmets, owns a European Patent for a new type of inner band to be fitted to headwear. The patent designates, among other countries, Germany and the United Kingdom. The patent explains that the inner band is designed to alleviate premature baldness.

It was found during research into the causes of premature baldness that a close-fitting hat or helmet restricts blood flow in the three main blood vessels in the wearer's scalp and that over time restriction of these blood vessels results in the death of hair roots (and premature baldness).

The new inner band, when fitted inside a safety helmet, is so designed as to prevent any interference with these blood vessels. The research revealed that, in the substantial majority of human scalps, the three main blood vessels are situated 50, 70 and 100 degrees of arc from the front of the forehead. Kalhkopf's European Patent has a main claim to "a new type of inner band to be fitted to safety helmets on which band there are depressions at 50, 70 and 100 degrees of arc from the front of the wearer's forehead".

Kahlkopf has learned that a British company, Getahead, is selling safety helmets and bowler hats incorporating inner bands with depressions at 53, 68, and 96 degrees of arc from the front of wearer's forehead. Getahead is selling safety helmets and bowler hats in the United Kingdom and exporting safety helmets to Germany and other countries of the European Community. Getahead's advertisement for its bowler hats states that these have a special feature to ensure the helmet remains firmly in place when worn, which feature may also prevent premature baldness.

Kaplkopf wants to sue Getahead for patent infringement but believes that it will be more difficult to prove infringement in a United Kingdom court than in a German court (which, Kahlkopf asserts, will take an approach more favourable to the patent owner).

Advise Kahlkopf.

Question 8

Miraclean Limited was engaged in research and development of domestic cleaning disinfectants. In July 1993 its head of research was Brainy. Brainy arranged for two QMW students, Bright and Dim, to gain industrial experience by working in his laboratory during their summer vacation. Bright quickly developed an enthusiasm for his work and, whilst working on general home disinfectants, she developed a wonder formula for a mouthwash. She knew a little about patents, having received some lectures on the subject at QMW.

Bright suggested to Brainy that the company should take out a patent for this new mouthwash. Brainy said that he would think about it and that meanwhile the formula should remain secret. The formula turned out to be of outstanding benefit to Miraclean who, though not taking out a patent, granted a know-how licence in 1993 to Glee Company Limited to manufacture and market the mouth wash, the licence stating that Glee must pay Miraclean royalties for as long as it used the formula.

In July 1994, Villain, a competitor, visited Miraclean's premises and, by pretending that he was a Health and Safety officer, persuaded Dim, who was assisting in the laboratory for the second summer vacation to disclose the secret formula to him. Although Dim knew that the formula was secret he thought that it might be unsafe and readily gave it to Villain.

Villain has been selling a mouthwash with this formula in it since then and in December 1994 he made the formula public and several other manufacturers are selling a similar product. Glee is now refusing to pay Miraclean further royalties as the disclosure is placing Glee at a competitive disadvantage as against the other manufacturers.

Advise Miraclean about the following matters:

(i) Who "owns" the know-how;

(ii) What rights, if any, does it have against Dim and Villain;

(iii) Does Bright have any rights against Miraclean?

Queen Mary & Westfield College
(University of London)

Centre for Commercial Law Studies
Intellectual Property Law Unit

CERTIFICATE IN INTELLECTUAL PROPERTY LAW

PATENT LAW I **13 IPL OCO5**

Date: Wednesday 18th January 1995

Time: 1.00 - 4.15pm (inc. 15 minutes reading time)

Candidates must satisfy the Examiners in both Part A and Part B.

Marks: Section A 50 marks
Section B 50 marks (2 marks per question)

The pass mark for this paper is 50%.

Closed book examination.

© University of London

SECTION A

Your client, the owner of a small carpentry firm, rushes in with the dreaded brown-paper parcel under his arm.

"Time me!" he cries excitedly. "Don't worry, I'll pay for the chair!" and pulling out a carpenter's saw from his parcel, he proceeds to saw the leg off one of your office chairs.

"Now time me with my new saw!" he gasps, and, although somewhat red-faced from his labours, he pulls out another saw and saws off an identical leg in considerably less time than the first.

"Its all to do with the teeth", he explains, as you sit him down on your other chair and give him a cup of tea.

With only a trace of irritation in your usual professional tone of voice, you say "Tell me about it", and he does.

"Ordinary saws have the handle mounted almost straight on the blade 11, as shown in Figure 1, but mine is mounted at a sharper angle (x) of 65-70 degrees to the line of the cutting teeth 12, as shown in Figure 4. This distributes the power more evenly over the toothline and increases the effectiveness of each forward cutting stroke".

"The ordinary saw handle tends to concentrate more of the force F parallel with the toothline, in which the teeth 12 are always "set" alternately to the left and the right of the blade. This is done by bending each tooth slightly about the bend line B, shown enlarged in Figure 2, to widen the cutting path as shown in Figure 3 in end cross-section on the line 3-3 of Figure 2 looking in the direction of the arrows. Without this "setting" of the teeth, the cut would be no wider than the blade and the saw would jam. The mainly parallel action of the force overcomes the increased friction caused by the sideways set of the teeth, but does not help the user to apply downwards force to increase the cutting speed. The sharper angle x of my handle directs more of the power downward, and I have eliminated the increased resistance which occurs if this sharper-angled mounting is used on an ordinary saw".

"This is because I have discovered that it is not necessary to set all the teeth. Setting only some of the teeth reduces the lateral friction considerably and still produces a non-jamming cut width. The unset (straight) teeth 12A (Figure 5) direct all their cutting action downwards to increase the cutting efficiency of both the forward and backward strokes, even with an ordinary straight handle. After some experiments, I found it necessary to set at least one tooth in ten to avoid jamming, and it is better to set at least one in six. The best effect is obtained with every third tooth 12B (Figure 5) set alternately to left and right. Setting every second tooth gives a useful, but less noticeable, decrease in friction. The reduced lateral friction and the increased cutting efficiency from the straight teeth, especially with my angled handle mounting, make my saw much easier to use, or much faster for a given effort, as I just showed you. That chair wasn't antique, was it?".

"I'm putting the new saw in an exhibition tomorrow, so could you file a patent for me straight away? Oh yes, and another increase in efficiency comes from making the set teeth 12B shorter, as shown in Figure 5, so that, as the cut progresses through the wood, the cut-widening action follows slightly further behind the straight teeth than would happen with all teeth of equal length."

Your client then has to leave, and as there is no time to conduct a search, you begin drafting a specification for his urgent patent application.

1. Write down the main inventive concept which you would put in claim 1. **(25 marks)**

2. Write down the important subsidiary features you would put in the first few dependent claims. **(10 marks)**

   (Formal claims are not required for 1 and 2 above, but may be drafted if you wish).

3. Draw an enlarged end view in cross-section through the new saw blade with the shorter set teeth in a cut part-way through a piece of wood showing the action of the teeth. **(5 marks)**

4. Describe the action of the straight teeth and the shorter set teeth from the start of cut to the position illustrated in your drawing (3). **(10 marks)**

SECTION B

Give short answers to ALL of the following questions:

1. Briefly outline chronologically the stages which a UK patent application will pass through from the time it is filed to the grant of a patent.

2. What do you understand by the following terms in relation to patents:

   (i) "convention priority"

   (ii) "grace period"

3. What do you understand by the phrase "whole contents" in the context of prior art citable against a pending patent application?

4. What do you understand by the labels "A" and "B" in relation to published UK patent specifications?

5. Identify three possible routes by which you would be able to obtain foreign patents for a client.

6. What do you understand by the phrase "enabling disclosure" and explain briefly a key consequence of its absence?

7. Your client tells you that he has heard that it is not possible to patent "software"; how would you reply?

8. List two types of invention which are not patentable under the Patents Act 1977.

9. Why was the setting up of the Patents County Court significant from the point of view of patent agents?

10. State two important differences between US and European patent law.

11. Outline the significance of the Protocol to Art. 69 of the European Patent Convention.

12. If you were about to advise on the question of whether a particular UK patent was infringed, what are two of the first things you would do?

13. What is the disadvantage of having joint applicants for a patent in relation to subsequent exploitation of the patent?

14. Explain what is meant by "Crown Use" under the Patents Act 1977.

15. Specify two grounds upon which a compulsory licence may be granted.

16. Within what period may a person apply to have a European Patent revoked by the European Patent Office, and what are the main steps in the procedure?

17. What must be done to bring a granted European Patent into force in the UK?

18. During the prosecution of a UK patent application the objection of "added matter" is raised; what does this mean?

19. What do you understand by the phrase "deferred examination" and list two countries in which this is relevant?

20. What do you understand by the term petty patent/utility model?

21. The Patents Act 1977 provides that the Court or the Comptroller has power to revoke a patent; list four of the grounds.

22. The Patents Act 1977 provides that a valid patent can be granted only to a person who is formally entitled; specify those classes of person so entitled.

23. What formalities are required for an assignment of a UK patent and what are the consequences of non-compliance?

24. Indicate briefly the special provisions in the European Patent Convention which relate to patent applications concerning micro-organisms.

25. What are the minimum requirements for a UK patent application to obtain an official filing date?

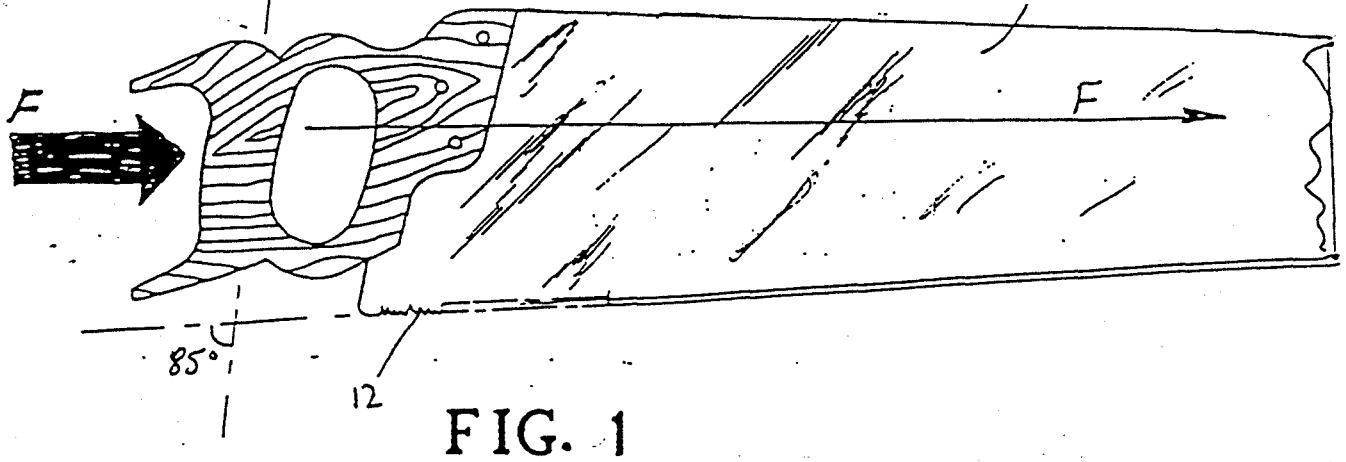
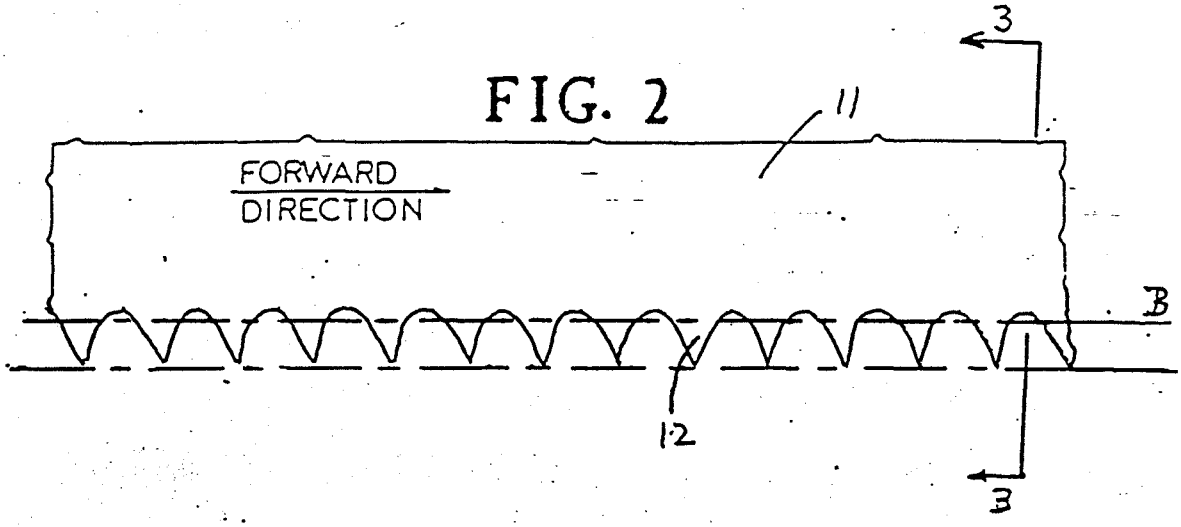


FIG. 1

FIG. 2



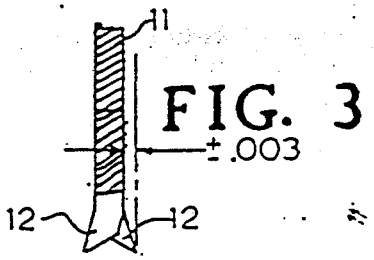


FIG. 3

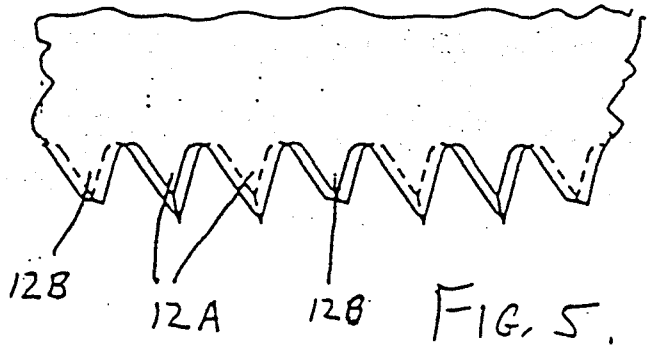


FIG. 5

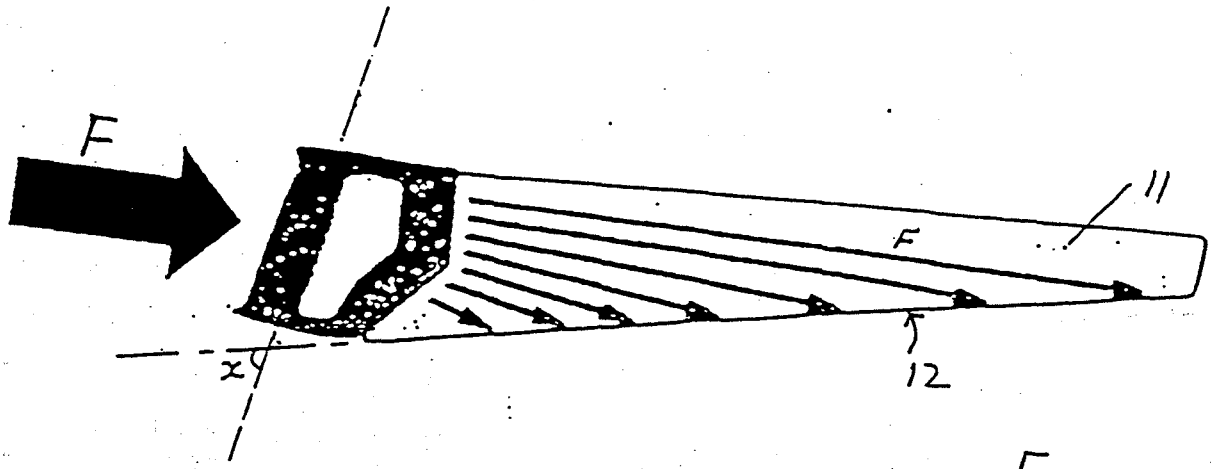


FIG. 4

QUEEN MARY & WESTFIELD COLLEGE
UNIVERSITY OF LONDON

MSc IN MANAGEMENT OF INTELLECTUAL PROPERTY

Date:	Thursday 1st June 1995
Time:	2.30 - 5.45 p.m. (inclusive of 15 mins. reading time)
Course Unit No:	13 IPL 0021
Title of paper:	Patent Law I & II

Answer question 1 and TWO other questions. Question 1 carries 40% of the marks for the examination. All other questions are of equal value.

The marks will be awarded for the reasoning displayed and the points selected for discussion rather than for particular conclusions reached. Marks will be given, where appropriate, for any relevant points of interpretation given in an answer.

YOU SHOULD NOT SPEND TIME WRITING AN INTRODUCTION OR A FORMAL PRECIS OF THE DETAILS GIVEN IN A QUESTION NOR IN DISCUSSING MATTERS IRRELEVANT TO THE ISSUES.

The pass mark for the paper is 50%.

CLOSED BOOK EXAMINATION

© University of London 1995

1. On 1st April 1995, Mr. K. Niss, proprietor of Pet-U-Like, a leading chain of animal retailers, writes to you as follows:

"We are about to embark on a selling campaign for a new range of pre-fabricated lightweight kennels, which we have named DogMatic™. The deluxe version is formed from a sheet of semi-rigid plastics material, whilst the standard model is made of cardboard. I attached a detailed description and drawings showing how the kennels are constructed."

"We are concerned to ensure that we are clear of patent infringement and would like your advice."

You undertake a patent search and find British Patent No. 4391223, in the name of The Rover Group, which you ascertain is in force.

You are also aware that boxes constructed from flat sheets of cardboard were, for many years before the date of GB4391223, used to transport goods to supermarkets.

Advise Mr. Niss.

Prior Art Cardboard Box

Slits, indicated by solid lines, are cut and folds, indicated by broken lines, are make in a sheet of cardboard. A flap, contiguous with one edge is stuck to the remote free edge to make a three-dimensional enclosure.

The Rover Group's Patent GB4391223, dated 21 July 1982

This invention relates to cardboard houses for pets and, in particular, to such houses which can be stored or shipped in an essentially flat condition and thereafter readily assembled by the pet owner in a relatively short time period, without the use of special fixtures, tools, etc.

An object of the invention is to provide an improved pet house which does not require the use of special adhesives, glues, or tapes in the assembly, thus greatly simplifying the procedure and virtually eliminating the inconvenience or mess often associated with such adhesive substances.

An embodiment of the invention will be specially described with reference to the accompanying drawing.

Referring now to the drawing, there is shown a one-piece cardboard house for an animal or pet, designated generally by the numeral **10** and comprising a bottom panel **12** constituting a floor of the house, front and rear panels **14, 16** respectively, and two side panels **18, 20**, constituting the four upright walls. In addition, the house comprises a pair of articulated roof panels **22, 24** which are hingedly connected together to form a peaked roof for the structure.

The house has a novel entrance passage **26** for the house, which is formed partially by a cut-out configuration or deep notch **28** in the front panel **14**, and partly by the edge portions **30, 32** of the roof panels **22** and **24** when the house is assembled. The notch **28** in the front panel **14** can have the shape of a crescent, and the upper portion of the entrance passage **26** which is defined by the edge portions **30, 32** can have a roughly triangular shape. The use of the edge portions **30, 32** of the roof panels **22, 24** as part of the entrance passage **26** greatly simplifies the manufacture of the house, since no special cutting or forming is required.

The two roof panels **22** and **24** are integral with one another, and integral with the one side panel **20**. The roof panel **24** has a free edge portion **34** which is held adjacent to the edge portion **36** of the left side panel **18**.

To facilitate assembly of the house, the panel **24** is provided with a tab **38** having divergent ears **40, 42** at its, free extremity portion, and the panel **18** has a pair of coextensive slots **44, 46** which receives the tab **38** when the roof panels are in place, as shown in the figures. The tab **38** is inserted into the slot **44**, and then passed outwardly through the slot **46** such that the ears **40, 42** are exposed only at the exterior of the house. FIG.3 shows the tab **38** and slots **44, 46** as they would appear, from inside the house.

The panels of the house can be provided with various kinds of decorative markings, if desired, such as windows, doors, or shutters; or with names of the pet, etc., in order to enhance its appearance. Also, the roof can have painted shingles, or other markings to give the desired visual impressions.

With respect to the material from which the house is fabricated, we have found that corrugated C-flute board having a 200 pound breaking strength is admirably suited for the present purposes.

The house presents a generally smooth interior surface which is devoid of protrusions or sharp edges, thus minimising the possibility of injury to the pet, or of damage to the house.

For shipping, the various panels may be folded over to form a flat package. Such a feature is important where the device is intended to be sold through mail order, etc.

Claims

1. A one-piece house for an animal or pet formed from a sheet of cardboard by selectively removing substantially rectangular sections of said sheet to define base, front, back, side and roof panels having free and hinged edges, wherein at least a pair of said free edges is provided with complementary coupling means, detachably to couple said free edges to form a stable, three-dimensional enclosure.

2. A one-piece cardboard house for an animal or pet according to claim 1, comprising in combination:

a bottom panel constituting a floor,

front and rear panels, and two side panels, each of said panels having two substantially vertical edge portions and being integral with the bottom panel, thereby being adapted to form the four walls of the house,

a pair of roof panels having free edge portions, said roof panels being coupled to one another and to one of the side panels of the house,

means releasably joining one free edge portion of one roof panel to the other of said side panels,

and means releasably holding the vertical edge portions of the front and rear panels adjacent to corresponding edge portions of the side panels of the house.

3. A one-piece cardboard house for an animal or pet according to claim 1 having a notch in the front panel of generally crescent shape defining an entrance for said house.

4. A one-piece cardboard house for an animal or pet according to claim 1, wherein each of said side panels has a pair of slots, and said front panel has a pair of integral tabs extending rearwardly into said pairs of slots, respectively, said slots and tabs constituting the means releasably holding the vertical edge portions of the and side panels adjacent to each other.

Pet-U-Like's DogMatic™ Kennel

The kennel **10** comprises a single piece of sturdy cardboard or other suitable material, such as semi-rigid plastics sheet, with a bottom section and four flaps as well as a coupling means around the perimeters of the side edges holding the sections together.

More specifically, the basic component of the kennel **10** is a single piece of sturdy cardboard **12**. Centrally located in the cardboard is a bottom section **14**. The bottom section has front and rear short sides **16** and **18** and long sides **20** and **22**.

In addition to the bottom section, the cardboard includes additional flaps formed integrally with the sides of the bottom section. The additional flaps include two side flaps **24** and **26** integral with the long sides of the bottom section. Each side flap consists of a side section **28** and **30** (Fig.2) integral with the bottom section at one end and also includes a roof section **32** and **34** at the other end. Perforated lines demarcate these two sections.

The additional flaps also include a front flap **46** integral with a front side of the bottom section. The front flap comprises of five sides which include two lateral sides **48** and **50** perpendicular to the lateral bottom. Integral therewith are two diagonal sides **52** and **54** set at about 45 degrees with respect to the lateral sides of the back section.

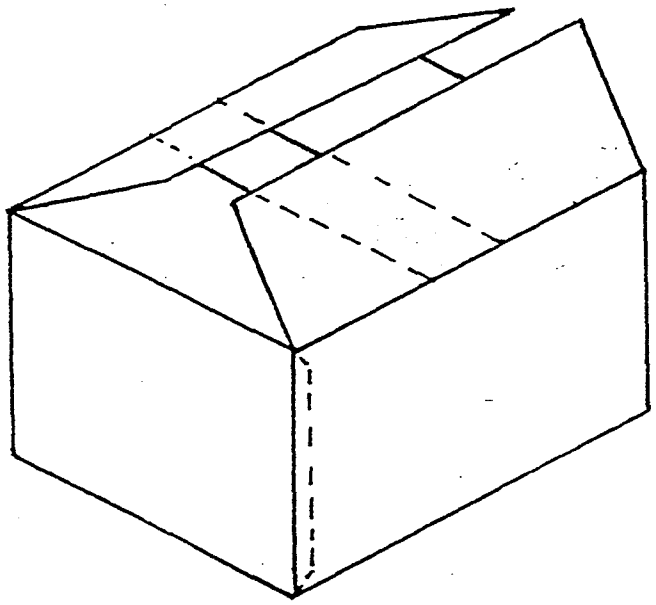
A pre-cut door **60** is formed entirely within the front flap.

Coupling between the various sections is through an adhesive **78**, preferably a commercially available reusable adhesive. The adhesive is placed on tabs **80** secured to at least some of the edges of the various sections as shown. The tabs with adhesives are adapted to couple with adjacent edges of other portions of the cardboard to form the completed kennel.

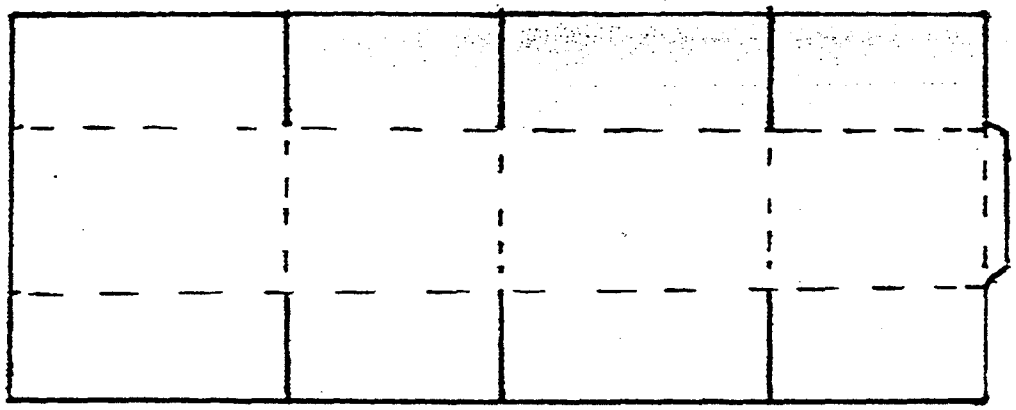
In the modified version shown in FIG.4, the coupling means between the various sections of the kennel is through a pile-type fastener **82** commercially available as Velcro. The pile-type fastener is located on tabs **84** and adjacent areas. It thus has one component thereof on the tabs and another component thereof on the associated cardboard areas **86** where a coupling is to be made.

The house is folded where the perforated seams are indicated, and the edges and roof are sealed where adhesive flaps are indicated. When assembling the house, the flaps can be glued for permanent use.

Prior Art
Cardboard Box



Assembled



Flat Sheet

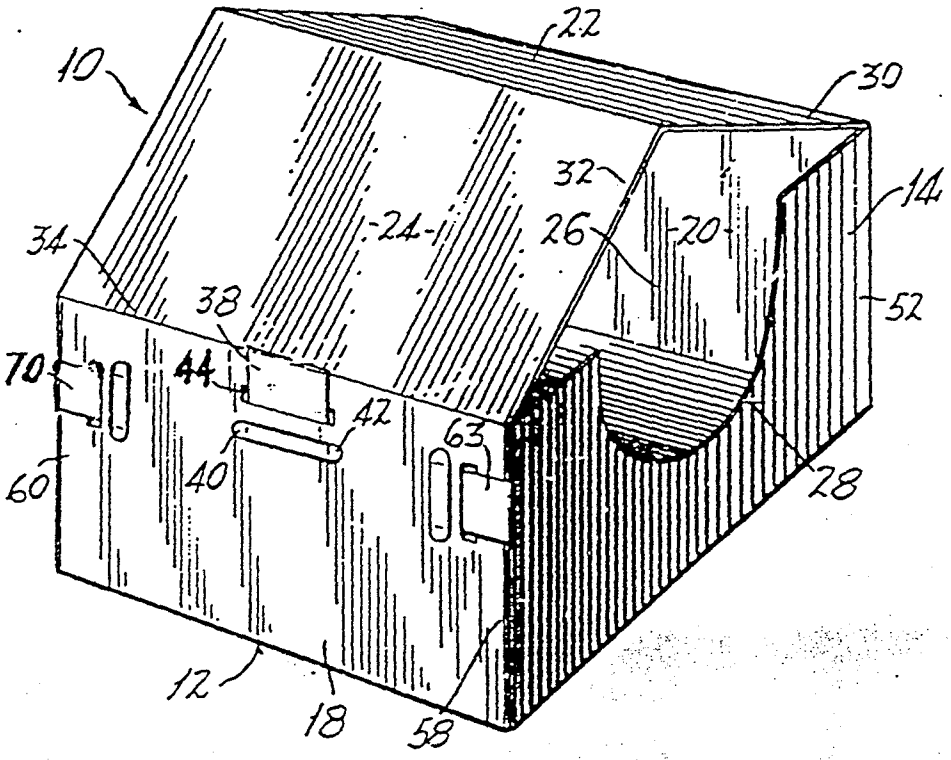


Figure 1

Figure 3

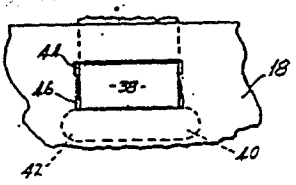
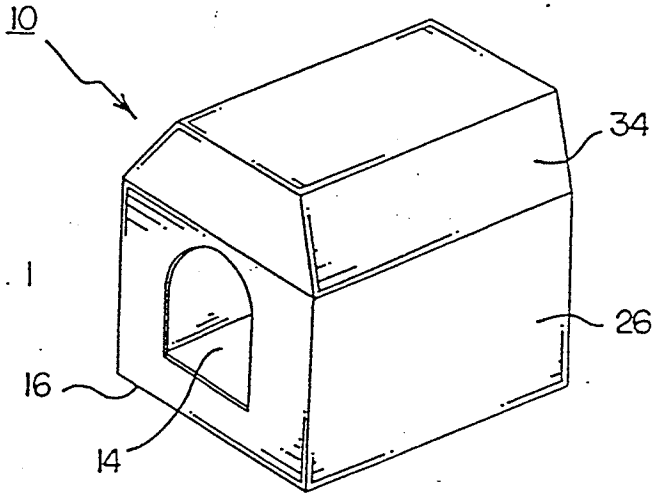
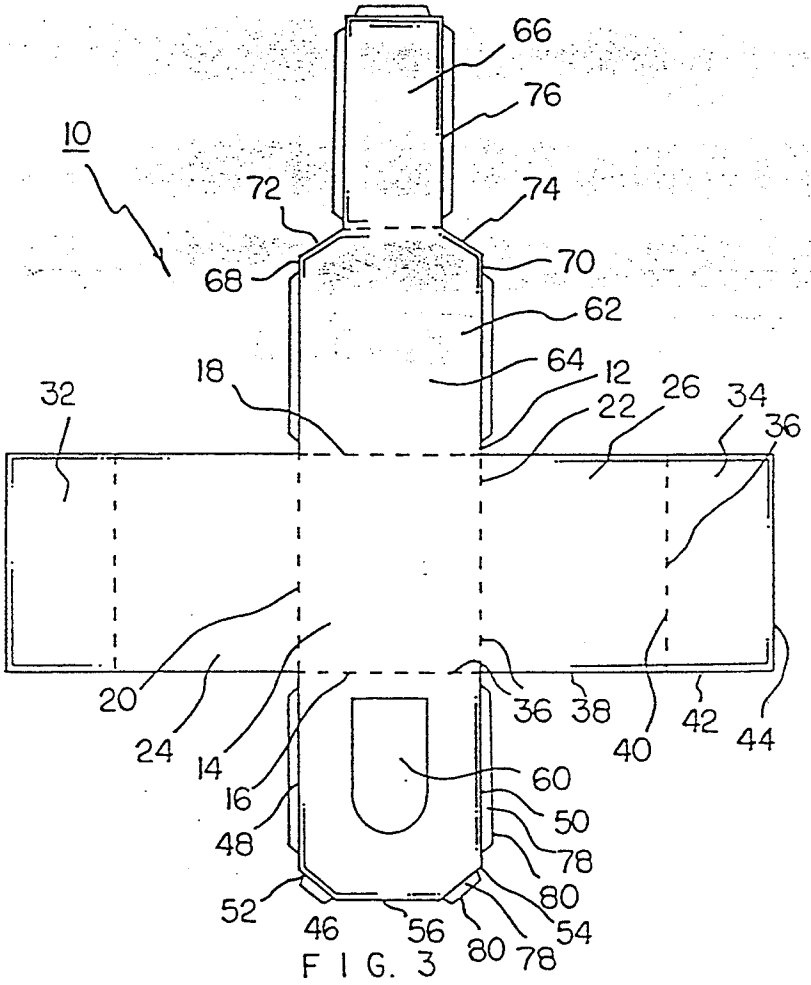


Figure 2


10
34
26
16
14

F I G. 1


66
76
10
72
74
68
70
62
64
18
12
26
34
32
22
36
20
24
14
16
48
52
46
56
80
78
60
50
78
80
54
36
38
40
42
44

F I G. 3

Pet-U-Like
DogMatic Pet House

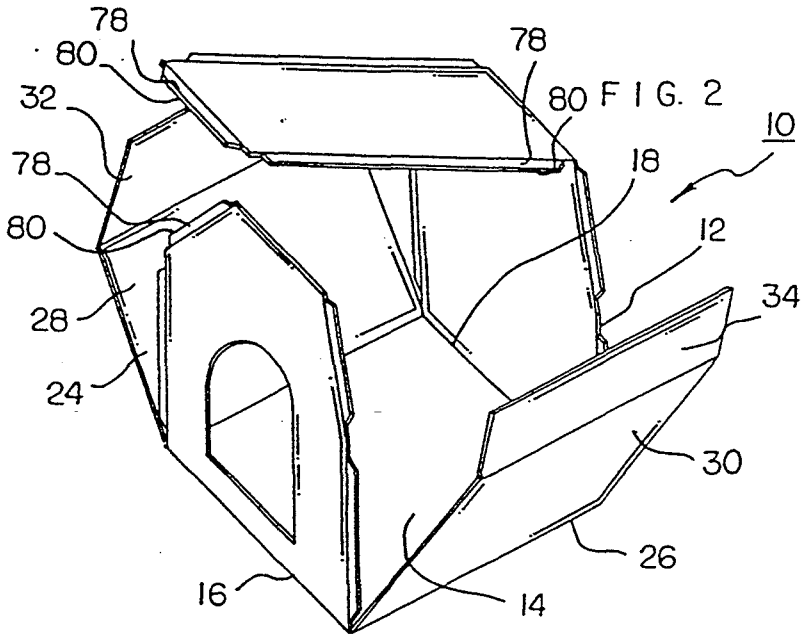


FIG. 2

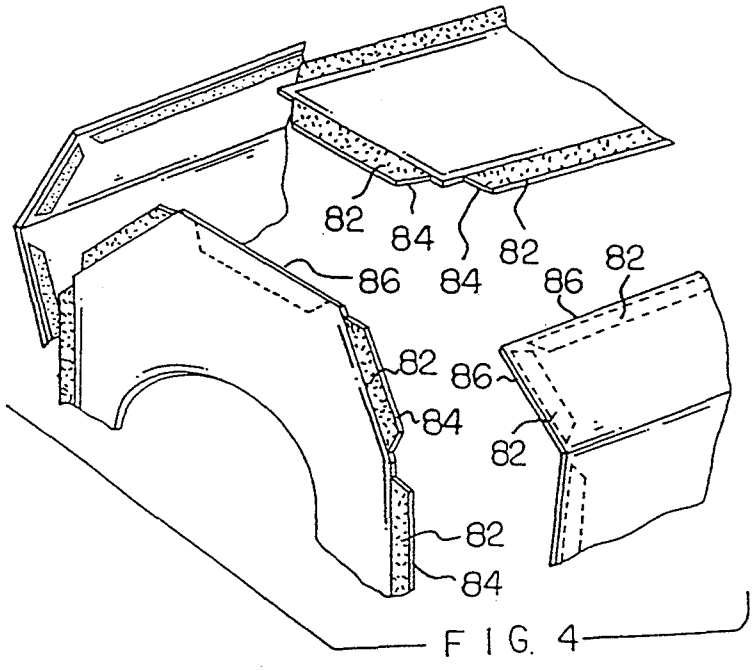
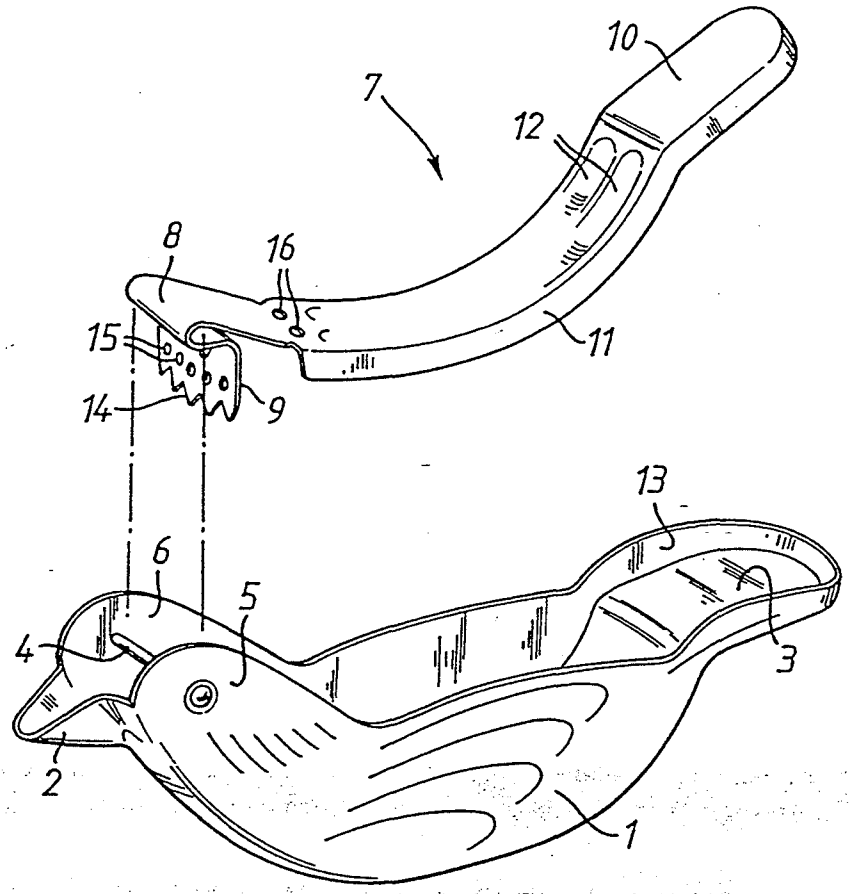
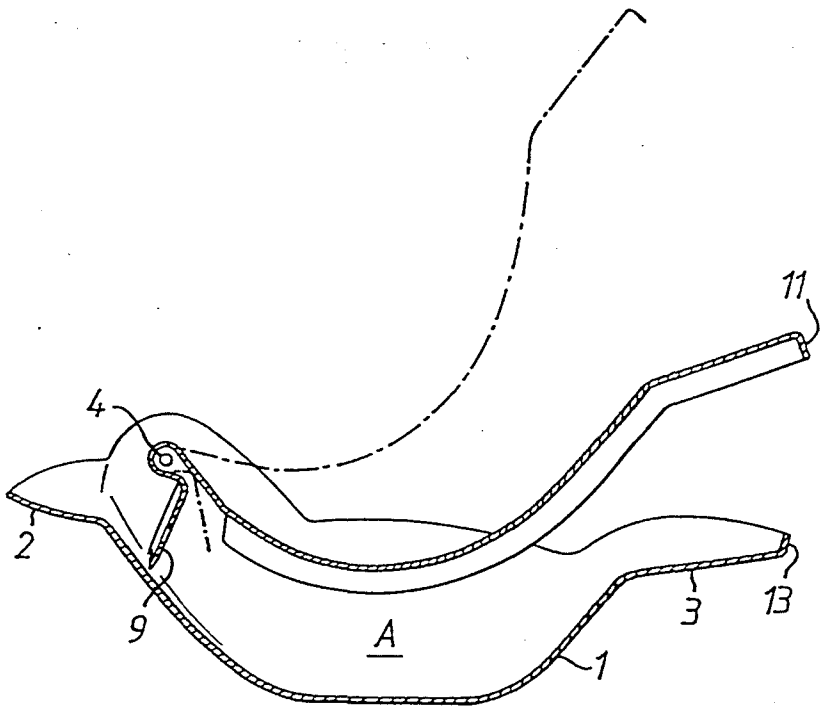


FIG. 4



Exploded Perspective View



Sectional View

3. Gill Bates, Chief Executive Officer of the Soft Micro Warehouse, writes to you as follows:

"I have heard that, although it is not possible to patent computer programs, it may, under certain circumstances, be possible to patent computer-controlled machines. Could you please explain this paradoxical situation to me?"

"I have developed a new operating system for personal computers. Normally the software for this purpose is loaded into the computer's memory from a magnetic or optical disc, but in my new portable computer I plan to store it in a read-only memory (ROM) chip."

Can Ms. Bates

(a) obtain patent protection for her new operating system?

(b) patent the program when stored on a silicon chip?

Support your advice with reference to decided cases.

4. "A sun tan is just a by-product of the body's efforts to repair DNA damaged by ultraviolet light" says Barbara Gilcrest of Boston University in a letter to the journal *Nature.*

She found that cells in the skin made more melanin, the pigment that gives you that healthy bronzed look when they are also making the enzymes that repair damaged DNA and suggests a new way of tanning without sun - spreading damaged DNA on the skin might fool the cells into producing more of the repair enzymes and a tropical tan.

News item on *BBC Radio 4*

What patent protection could you obtain for this discovery?

If the effect of the damaged DNA were therapeutic rather than cosmetic, would you modify your advice?

5. What information can be obtained from patent specifications?

Explain how a commercial organisation could use this information to determine trends in industrial and commercial developments.

6. With regard to overseas patent practice:

EITHER

(a) What do you understand by the following terms in relation to US patent practice

Continuation-in-part
Interference
Re-Issue
Duty of candour
Forum shopping

Outline the relative advantages of first-to-file and the first-to-invent patent systems.

OR

(b) Give an outline of PCT and EPC filing procedures.

How do these differ from national procedures and what are the relative advantages?

7. Discuss the ethical issues involved in **ONE** of the following propositions.

EITHER

(a) Gene fragments have been likened to a photograph of person's face - once you have it you can identify the whole individual. On the other hand, patenting genes, which are the building blocks of life, is analogous to copyrighting the alphabet to prevent authors from writing books.

Provided the normal criteria of novelty, inventive step, sufficiency, etc. are satisfied, should it be permissible to patent gene fragments?

OR

(b) Should a surgeon be able to use genetic material extracted from a patient to develop new forms of treatment? What rights should be accorded to the patient?

8. How does the protection for plant varieties available under the UPOV convention differ from patent protection for material originating from plants?