

## 1. INTRODUCTION

Includes; Introduction to Handbook;  
Role of AURIL.

## 2. IP Policy & Role of Commercialisation Departments

Includes; Key elements of I.P. Policy;  
Role of Commercialisation Department;  
Sample procedure.

## 3. Establishing Awareness of IP

Includes; Introduction to THEROS;  
I.P. Presentation Slides; Key information on Patents, Trade Marks;  
Design, Copyright & Confidential Information.

## 4. Identification and Tracking of IP

Includes; Recordkeeping procedures;  
Guidelines for the use of Laboratory Notebooks;  
Sample Technical Disclosure Form.

## 5. Evaluation of IP

Includes; Sample Evaluation Form.

## 6. Protection of IP

Includes; Detailed Information on Patents, Designs, Trade Marks.

## 7. Marketing of IP

Includes; Use of Patent Information.

## 8. Commercial Arrangements & Disputes

Includes; Purchase, Sale & Review Checklist.

<b>9.</b>	<b>Sample Agreements</b>
	Includes; Licensing Agreement Checklist.
<b>10.</b>	<b>Spin Out Companies</b>
	Includes; Contact Details for UNICO.
<b>11.</b>	<b>IP Management and Review</b>
	Includes; Sample Management Information Schedule; Patent Summary Questionnaire; Sample Internal Report Format.
<b>12.</b>	<b>Ownership of Intellectual Property Rights</b>
	Includes; Copyright Contracts of Employment
<b>13.</b>	<b>Universities and the Internet</b>
	Includes; Internet Policy
<b>14.</b>	<b>THEROS Intellectual Property Guidelines</b>
	Includes; Sample Copy.
<b>15.</b>	.....

Please note: This folder is intended to give general information only and is not intended as a source of legal advice applying to specific circumstances.

An important quality of AURIL is that it provides the opportunity for Commercialisation Managers, Industrial Liaison Officers and other research management staff to gain from the experience and expertise of other individuals and organisations in the academic environment.

Where possible, transfer of best practice is encouraged. The purpose of this Handbook is to assist this process and provide a mechanism for distributing information and experience in Intellectual Property management; from raising awareness of Intellectual Property amongst academic staff and identifying and recording disclosures to supporting inventors, protecting innovation and effectively commercialising these important assets.

The Handbook is divided into a number of sections, each addressing an aspect of Intellectual Property Management and including examples of documentation produced by a variety of Members and Associate Members of AURIL. The collation, review and updating of the material is the responsibility of the Intellectual Property Special Interest Group.

The Handbook should be of assistance to AURIL representation at all levels of experience:

1. For those new to commercial management in academic and research based organisations, it should provide some practical guidance and a simple ready made tool kit for use.
2. For established managers:
  - a) it will also provide guidance and some practical tools to augment their existing experience and expertise;
  - b) it will provide a mechanism for passing on their experience and expertise to others.

The handbook deals with all types of intellectual property including patents, trade marks, designs and copyright. There is also reference to the handling of Miscellaneous Research Products such as semiconductor masks or biological organisms.

The contents are intended to be of as much practical use as possible. Some of the items included are:

- (i) Examples of documentation such as Technical Disclosure Forms or evaluation sheets.
- (ii) Educational material on intellectual property for staff including copies of slides for presentations and a practical guide to staff on intellectual property, the THEROS guidelines.
- (iii) Notes for staff on preparation for meetings with patent specialists.
- (iv) Licensing agreement checklist.

The intention is to continue to update the guide on a regular basis. Any suggestions for additional material revisions or other changes should be addressed to the coordinator of the Intellectual Property Special Interest Group.

Where members wish to copy sections of the Handbook for wider distribution and use, they are encouraged to contact the copyright owners of any sections where ownership is indicated.

Section Index

- 2.1 Key elements of IP Policy
- 2.2 Role of Commercialisation Department
- 2.3 Sample Procedure

## Introduction

Universities and Further Education establishments may have IP policy documents for the whole or specific parts of the organisation.

The introduction of a comprehensive policy document addressing the requirements of staff, institutes, associated institutes and outside parties such as industrial companies, is recommended but not always possible to either agree or implement.

In the absence of a comprehensive policy, the introduction of some short and simple guidelines is possible.

A typical policy document would contain the following:

1. Note that it is concerned with all Intellectual Property rights:
  - Confidential information
  - Patents
  - Copyright
  - Designs
  - Semiconductor design
  - Trade Marks
2. Would refer to ownership of Intellectual Property rights arising during the course of various research activities:
  - (a) Internally funded;
  - (b) Research Council funded;
  - (c) Charity funded;
  - (d) Industrially funded.
3. Would provide some Guidelines on protection of Intellectual Property rights:
  - (a) who to contact;
  - (b) how protection will be funded;
  - (c) that there is some assessment process.
4. Outline basic arrangements on remuneration including any basic lump sum or royalty split. Commonly the general document will quote ranges of royalties with scope to discuss and negotiate as required.

## **EXAMPLE**

Introduction to Research Support, Industrial Liaison and Commercialisation Office

### NEW RESEARCH FUNDING & COLLABORATIONS

#### **We are here to help you, with:**

Identifying funding opportunities

Negotiating the terms and conditions of research agreements

Industry Funding

LINK

UK Government Funding

Innovative Manufacturing Initiative

European Research Funding

Teaching Company Scheme

Regional Economic Development Funding

ROPA

Other Overseas Funding

Foresight Challenge

UK Research Council Funding

'Challenge' Funding

Charity Funding

- Protecting your academic freedoms
- Providing model agreements for: Collaborative, Contract and Consultancy Research

### COMMERCIAL OPPORTUNITIES

#### **We are here to help you, with:**

- Identifying, protecting and marketing intellectual property rights

Patentable Inventions

Copyright Works

Design Rights

Trade Marks

Start-up Companies

- Funding University Patent Applications
- Providing model agreements for: Confidentiality, Licensing, Assignment, Material Transfer

Visit our Resource Centre, located in....., where we have a wide range of information and periodicals.

Come and talk to us. We will come to see you. We can talk to your research group and industrial collaborators.

Contacts:

The starting point of the procedure is the completion of a Technology Disclosure Form by the member or members of staff concerned. The form can be provided in hard copy by the Department or if the Department has a web site, printed from the site.

On receipt of the Technology Disclosure Form by the departments it will be allocated a reference number and a database entry created. It will be briefly reviewed by the office co-ordinator and passed to the appropriate Departmental staff who will then be responsible for handling the file.

The staff concerned will undertake a preliminary assessment of the Technology Disclosure Form including potential applications and market opportunity. Other factors such as the novelty of the invention and the stage of development of the technology will also be considered. The relevant academic and research staff including department or section heads will be required to provide input to this review process.

Use of an Evaluation Form and follow-up Development Summary assists in ensuring that all parties involved understand what action (if any) is to be taken, associated target dates and individuals responsible.

Of the Technology Disclosure Forms evaluated each year a significant proportion will require further work or may not be appropriate for licensing. The Universities therefore have in place this formal procedure to ensure that:

- (i) All Technology Disclosure Forms go through an evaluation process.
- (ii) The basis on which the technology is evaluated is clearly understood.

This is equally important if the Department is, or is not planning to invest any resources in the project concerned.

## Section Index

- 3.1 Introduction
- 3.2 THEROS Intellectual Property Guidelines - Introduction
- 3.3 Presentation Slides - Introduction to Intellectual Property
- 3.4 Patents - Key Questions
- 3.5 Patent Application - Establishing Timescales
- 3.6 Trade Marks - Key Questions
- 3.7 UK Trade Mark Application - Timescales
- 3.8 Registered Design Application - Key Questions
- 3.9 Design Application - Timescales

Establishing awareness of IP amongst staff is essential for early identification of key innovations and to reduce the possibilities of accidental non-confidential disclosures that could prejudice successful Patent applications.

Education needs to be pitched correctly, emphasising practicalities such as:

- Identifying and protecting IP;
- Realising Patents are not restricted to quantum leaps in technology and incremental improvements have value;
- Understanding patenting process;
- Record keeping requirements including laboratory notebooks;
- Organisations's policy on IP and who to contact.

The United States and Canada have 12 month grace periods following a non-confidential disclosure of an invention, allowing valid Patent applications to be filed. This rule generally does not apply elsewhere, so US inventors wishing to commercialise a product outside these territories need to follow the same disciplines as inventors elsewhere in the world, i.e. should not disclose their invention in any non-confidential manner prior to filing a Patent application.

For Universities and Research based organisations, publication and presentation of papers is essential. Preferably papers are reviewed prior to publication by a patent specialist to ensure that publication does not prejudice a subsequent Patent application.

Effective ways of increasing IP awareness include seminars, use of printed matter and articles in an organisation's newsletter. The publication, THEROS IP Guidelines, is used by academic and research based organisations (<http://www.theros.co.uk>). Regular awareness sessions for staff are essential and can prove very productive.

This section includes copies of slides that can be used as part of a seminar to staff introducing Intellectual Property Rights.

This Management Handbook contains a sample copy of the above publication.

Universities and other Higher Education Institutions (HEIs), being involved in fundamental and applied research in a number of disciplines, generate numerous innovative ideas which may have significant commercial applications. These ideas may prove to be important assets both of the institutions in which they are developed and of individual staff who work on them.

The THEROS Intellectual Property Guidelines are intended to assist in the effective management of such assets, whether the assets are developed by the HEI alone or in association with other research groups or with funding authorities or with commercial companies. It provides guidelines for the identification of Intellectual Property Rights (IPR) and is intended to indicate situations in which professional advice in the management of IPR may be required.

How these Guidelines can assist

The purpose of these Guidelines is not to baffle staff with technical definitions, but to provide a practical introduction to the subject of IPR and to assist in identifying the IPR generated in the course of academic and research work.

The aim is to:

- clear up some common misconceptions about IPR.
- draw attention to the importance and relevance of IPR in academic and research work; and
- indicate the areas where professional advice is required.

This publication is circulated in a number of different ways:

- as part of induction programmes or meetings with new staff
- by the Industrial Liaison Office when approached by academic staff on Intellectual Property related enquiries, research grant applications or contracts.
- at seminars to departmental staff or at staff or post-grad society meetings.

For additional copies of the Guidelines, <http://www.theros.co.uk>

**1 Has the inventor kept “the idea” confidential?**

Disclosure to others under a Confidentiality Agreement is broadly no bar to patenting. If the inventor has described “the idea” in print or verbally or shown it at an exhibition, then Patent protection cannot cover what was disclosed. However, there may be a commercial value in filing an Application so that the marking “Patent Applied For” can be used.

**2 Is “the idea” a new product (a tangible object); a new material (eg a new plastic); a new process for making something (eg a cheaper way)?**

If so, it may be patentable.

If the idea is a business plan, or an aesthetic creation, or a way of presenting information, it is probably not patentable.

If the idea is a computer program and it is a fundamentally new concept, it may be patentable; software is protected by Copyright and may also be protected by confidentiality.

**3 Is “the idea” a variation in a product or material or process?**

If so, it is still likely to be patentable; most Patents protect improvements of previous inventions.

**4 Is there a written description of “the idea”?**

This will be needed to allow a Patent Application to be prepared. A working model is not necessary, but the more technical information that the person can provide, with sketches or drawings, the better the Patent Application will be.

**5 Who generated “the idea”?**

If an employee makes an invention, the rights often belong to the employer. The inventor is always named as such, even if it is the company which applies for the Patent. The inventor must be named as the Patent Applicant in the United States.

TIMESCALE	ACTIVITY
0	UK Initial (Provisional) Application
1 year	(a) Completion of Initial Application or updated Application filed in the UK (New technical material can be added at this stage, but no later)
	and/or
	(b) European Patent Application or International (PCT) Application
	and/or
	(c) Direct Foreign Applications
1 year 6 months (except USA)	Application published with Search Report (at this stage competitors can obtain copies of the Patent specification)
2 to 4 years (depending on country)	Examination Report received, Patent Agent and Examiner correspond and negotiate on wording of Patent Claims
4 to 5 years	Patent granted
5 to 20 years	Annual renewal fees due on an increasing scale

The precise timescale depends on the country and on whether the European Patent Office or Patent Co-Operation Treaty routes have been used. Some countries' National routes differ from the above general outline.

### NOTE

A Companies House Application and Trade Mark Application are totally separate and there is no cross-searching by the public bodies in charge of them.

#### 1 **What is a Trade Mark?**

It is any sign which serves to distinguish one Trader's goods and services from those of other Traders. Trade Marks include therefore word marks, logos, labels, slogans, jingles, distinctive smells, packaging of a distinctive shape, and combinations of these.

#### 2 **Has the Client already begun to use the Trade Mark?**

Unlike Patents and Registered Designs, use before filing does not rule out a registration and, in some instances, can be helpful, but an early Application to register should be encouraged as it is first on the register who acquires the right.

#### 3 **Is the Trade Mark a word or a symbol or a combination?**

All forms of Trade Mark that can be presented or described graphically may be registrable but by far the most common are words or symbols, or combinations of these. All three types can generally be registered. If the Mark is a word, it is usually best to register it in block capitals, which covers any type of print. If a word is registered in a particular print or in a stylised form, the Registration is centred on that form.

#### 4 **Is the Mark similar to Marks already used in the Client's field of activity or to "famous" Marks?**

If so, there is a risk of confusion which could lead to actions for infringement and for passing off. It may be advisable for the Client to choose an alternative Mark.

**5 Does the Mark describe the goods or services on which it will be used?**

If so, there is a risk that it will be unregistrable - eg, DAIRY would be unregistrable for butter.

**6 Is the Mark a surname or geographical word or one or two letters?**

If so, special rules apply and registration may prove more difficult.

**7 On what goods or services will the Mark be used?**

There are 42 classes of goods and services and a Mark may be registered in one or more of these classes. Identical Marks can sometimes be registered in different classes when there is no risk of confusion, eg PENGUIN books and PENGUIN biscuits.

TIMESCALE	ACTIVITY
0	UK Application filing (one Class)
6 months	Prosecution Activities:  Examination Report received; Patent Agents and Examiner correspond and negotiate on whether Application is acceptable.
12 months+	Applications accepted advertised for opposition by third parties. If no opposition, Mark registered.
Every 10 years (Trade Marks Act 1994)	Renewal Fees

**1 Has the Designer kept the Design confidential?**

If the Designer has sold or advertised goods or exhibited the Design, it may not be registrable. An exception is that a first, confidential order can be accepted for a Textile Design.

**2 Does the Design relate to the external appearance of the goods, ie its shape, or to the pattern on it?**

Interior details of a product cannot be protected.

**3 Is the Design primarily artistic or literary, eg is it a calendar or a poster?**

If so, it cannot be registered, but fabric and wallpaper patterns are registrable, and so are patterns on eg, tea trays, coffee mugs and table mats.

**4 Is the Design new?**

For example, if it is a small variation of a known Design, it may not be sufficiently novel to comply with legal requirements.

**5 Are the goods to be manufactured in substantial numbers?**

If not, it may not be commercially appropriate to apply.

**Note** If the Design is not registrable, it may be protected by Design right (provided it is an article) or by Copyright (if it is primarily of artistic or literary nature).

TIMESCALE	ACTIVITY
0	UK Application filing
6 months	Any corresponding foreign Applications must be filed
6 months+	Designs Registry may raise objections to Registration requiring correspondence between Patent Agent and Examiner
9 months+	Registration granted
5 years 10 years 15 years 20 years	Renewal fees due on an increasing scale

Section Index

- 4.1 Introduction
- 4.2 Record keeping procedures including Guidance for use of Laboratory Notebooks.
- 4.3 Sample Technical Disclosure Form. (TDF)

Seminars on IP are effective in encouraging staff to bring forward innovations for consideration. A proactive approach is recommended using Patent Liaison staff who regularly visit research departments.

Potential inventions should be recorded using standard forms and referenced. A typical Technical Disclosure Form (TDF) might have the following categories:-

- Department/Research Area
- Technical description
- Perceived novelty
- Potential applications/markets
- Background prior art
- Inventors/authors

The number of TDFs will represent a measure of activity and can be used to record Intellectual Property Rights other than potential inventions. These could also be logged onto an appropriate database.

The TDF should be reviewed or brought to the attention of a Patent Specialist when appropriate. Regular review of the TDF database is also recommended.

There are two main objectives of recordkeeping:

- 1 The tracking and protection of relevant intellectual property rights by the ILO, Commercialisation Manager or equivalent.
- 2 The maintenance and updating of effective records of innovations by individual academic or research staff.

While various sections in this handbook relate to recording disclosures, protection and IP portfolio management, the correct use of laboratory notebooks by staff is essential. Guidelines for their use are summarised on the sheet, Guidelines for the Correct Use of Laboratory Notebooks.

Academic and research staff will maintain records of their work in a variety of ways, including an electronic form.

However, manually updated and corroborated hard copies of laboratory workbooks can be extremely important in determining the date of conception of a particular invention. The need to maintain good records is also important for providing the date on which an invention was made, since the United States, in particular, awards patents on the basis of "first to invent" rather than "first to file" as in most other countries.

As the US can be a key substantial market for many inventions, this is an important consideration as, in a dispute, laboratory notebooks may be required to be presented as legal evidence.

It is therefore recommended that:

- (i) Permanent bindings are used on notebooks - looseleaf books should be avoided to prevent possible removal or substitution of pages.
- (ii) Pages should be numbered and any additional drawings, charts or computer printouts should be permanently attached to the notebook, clearly identified and have reference made to them in the notebook.
- (iii) All project related or other activities such as breaks in research due to secondments or holidays etc should be recorded factually.
- (iv) The notebook should be reviewed regularly by someone who understands the technology involved. Each page should ideally be signed by a witness. The choice of witness is important - it should preferably not be someone who may be nominated as a co-inventor. The witness should also sign and date any graph, charts or print outs which are inserted into the Laboratory Notebook.

Well documented notebooks should demonstrate the progress of research and are an important record in the event of a dispute. They should be stored safely. If you have any queries regarding this activity consult your ILO.

**SAMPLE**

**Contact:**

**Technical Title:**

<b>Date: Possible IPR:</b>	Patents	( )
<b>Reference:</b>	Trade Marks	( )
	Designs	( )
<b>ILO Staff:</b>	Copyright	( )
	Confidential Information	( )

**Technical Description:** Note: This should be comprehensive and include any drawings, photos or prototypes.

**Perceived Novelty:** Note: To include description of complete technology, and what is currently done.

**Potential Commercial Applicants and Market:** Note: To include known uses or applications, manufacturers, and existing licence agreements.

**Source of background IPR (if any):** Note: Who owns or controls background IPR, if any.

**Prior Art:** Summary of relevant publications

**Inventors/Authors:** Note: Specify name, title, employment status (ie staff/research) and funding route. List more than one member of staff if required.



Section Index

5.1 Introduction

5.2 Sample Disclosure Evaluation Form

5.3 Development Summary

Many organisations use Patent Committees to evaluate IP Rights, comprising technical and commercial staff with Patent Specialists. Regular reviews with a systematic framework should be adopted. Equally, research staff should understand how the TDF's are being used.

Use of Standard Disclosure Evaluation Forms by departmental Patent Committees is recommended, including factors such as potential market, market impact, competitive products, timing, IPR protection available and experience in the field concerned. Relevant Patent searches disclosing prior art or competitor's activity and market research should be considered.

A sample Disclosure Evaluation Form is provided.

## DISCLOSURE EVALUATION FORM

Project Name.....

	SCORE	WEIGHTING	TOTAL
IP PROTECTION IPR, Novelty, Inventive Step, Claims	.....	5	.....
MARKET SIZE Customers with money	.....	5	.....
INVENTOR SUPPORT Experience, contribution, enthusiasm	.....	4	.....
MARKET IMPACT	.....	3	.....
URGENCY Imminent disclosure [yes = 1; no = 10]	.....	1	.....
TIMESCALE [long = 1; short = 10]	.....	1	.....
TLO EXPERIENCE IN FIELD Agency support, deputise inventor, precedents	.....	1	.....
<b>TOTALS</b>	<b>(70)</b>		<b>(200)</b>

High=Good

DISCLOSURE EVALUATION FORM

Additional Information;

.....  
.....  
.....  
.....  
.....

Patent Search;

.....  
.....  
.....  
.....  
.....

Market Research;

.....  
.....  
.....  
.....  
.....

DEVELOPMENT SUMMARY

Department:.....Reference:.....

Project:.....Date:.....

.....ILO Staff:

.....T.DF Ref:.....

University Staff/Researchers:.....

.....

**A. Action**

No Action by ILO - review in .....months: Date:.....

Action required (summary below) - next review.....months: Date:.....

No further action by ILO. See comments.

**B. Summary**

	Internal resource	External resource
1. Internal review	.....	.....
2. Identify industry/other parties	.....	.....
3. Market or other research	.....	.....
4. Proposal preparation	.....	.....
5. Protection		
(i) I.P. review	.....	.....
(ii) Confid. Agreement-std.	.....	.....
(iii) Confid. Agreement-non std.	.....	.....
(iv) Patents/ other registrations	.....	.....
6. Agreements/contacts-std.	.....	.....
7. Agreements/contacts-non std.	.....	.....
8. Others (i).....		
(ii).....		
(iii).....		
9. Comments.....		
.....		
.....		
Copy to:.....		

Section Index

- 6.1 Introduction
- 6.2 Patent Protection - Overview/controlling costs
- 6.3 Patent Protection -Procedures for Publication
- 6.4 Patent Protection - Preparation for Inventor's meeting with Patent Agent
- 6.5 Patent Protection - Key points for Inventor's meeting with Patent Agent
- 6.6 Patent Protection - Activity after Inventor's meeting
- 6.7 Patent Protection - Key elements of Patent
- 6.8 Patent Protection - Key terms: Novelty, inventive step
- 6.9 Patent Application - Checklist of information required
- 6.10 Design Protection - Detailed information
- 6.11 Design Registration - Information required
- 6.12 Copyright Protection - Key points
- 6.13 Trade Marks - Use of Trade Marks
- 6.14 Trade Mark Search - Information required
- 6.15 Trade Mark Application for Registration - Information required
- 6.16 Computer Programmes - A special case
- 6.17 Miscellaneous Research Products - Introduction

This section provides detailed information on the protection of Intellectual Property. Any review process should consider all types of Intellectual Property that may be of relevance.

In particular, the Technical Disclosure Form (TDF) should be reviewed on as broad a basis as possible and not only with regard to Patent Protection. For instance, Confidentiality Agreements may be appropriate if discussions with a third party are required for technical or commercial evaluation purposes.

Copyright material should also be considered. The use of Copyright schedules is recommended, listing relevant Copyright works; software, text, graphics and other data, and identifying the author or creator of these works. The works' ownership should be recorded as they can be incorporated into a commercial arrangement with other IP rights.

Trade Marks, can be relevant to specialist services or software programmes developed or provided by the University.

This provides an outline of the patent system and the procedures for obtaining a Patent.

## Introduction

A Patent gives the owner of an invention the right to prevent others using it for a period of time, generally a maximum of twenty years. In return, the person seeking the Patent has to provide full details of the invention and allow these to be published by the Patent Office. A Patent can be used to give you a competitive advantage while exploiting the invention yourself, or it can provide a legal basis for licensing someone else to make use of the invention.

## Controlling Costs

Some cost aspects of Patent protection such as Official Government fees cannot be influenced; other aspects can be managed. Some key points to concentrate on:

### Patent Strategy

Develop a Patent strategy with the Patent specialists involved to ensure an understanding of the importance of a piece of technology. This will influence resource application and negotiations with any third party.

### Good awareness of IP amongst researchers

This facilitates discussions between Patent specialists and researchers, improving the quality of technical information provided to the person drafting and prosecuting Patent applications.

### Early consideration

This assists the evaluation process and decisions on Patent options. Twelve months after initial filing it has to be decided whether to proceed with an Application and where protection will be sought. International PCT (Patent Cooperation Treaty) Applications can be used to retain options in approximately 80 countries for up to 30 months from initial filing: providing additional time for product developments and assessment of commercial implications.

Organisations should also consider whether early granted Patents in key territories may be of more value.

## Quality of reporting documentation

Prosecution of a Patent application can involve extensive technical correspondence between the Examiner and Patent Agent and between the Patent Agent and Research staff. Clear communication between the Patent Agent and Research staff is essential. Prompt answers to requests for instructions and further information also helps to reduce costs.

## Patent documentation produced

- Long specifications are sometimes necessary to describe a complex invention but can increase costs incurred such as professional time in drafting Patent documentation, translations and printing costs. These can be significant.
- The number of Claims in a Patent application can increase costs and official fees at the European Patent Office.
- Inappropriate Claims also increase the amount of correspondence with the Patent Office. Patent Specialists can advise.

## Anticipate potential difficulties

Researchers should be encouraged to anticipate potential areas of difficulty in their Patent applications.

## Patentability

To be patentable, an invention must meet three requirements:

- (i) It must be capable of industrial application and not, for example, a scientific theorem or an artistic creation.
- (ii) It must be new.
- (iii) It must have an "inventive step", that is it must improve on what was previously known in some manner which is more than merely an obvious modification.

Each of these criteria can present difficulties of judgement and if you are in any doubt, consult a Patent Agent rather than assuming that Patent protection is ruled out.

### Initial Filing

The normal course in patenting in the United Kingdom is to file initially at the Patent Office an informal or Provisional Patent Application. This must be done before there is any public disclosure of the invention, and provides a twelve month period during which time the technical and commercial viability of the invention can be assessed before a full Patent Application is made. During this period, the legend "Patent Applied for" or "Patent Pending" may be used, which can be of considerable deterrent value.

The filing of a Provisional Application also gives a twelve month period in which to decide about Patent protection abroad. Any foreign Patent Applications filed within this period are examined as if they were filed on the same date as the original UK Application insofar as the subject matter is the same as that originally filed.

### Information required

To allow a Patent Agent to prepare and file the Provisional Application, they will require enough information to allow them to understand the nature and advantages of the invention and how it relates to what was used previously. This is best done either by arranging a meeting to discuss the invention or by providing descriptive notes and sketches. Normally one to three weeks is required to prepare the documents and file them at the Patent Office, but it is possible to proceed much more quickly in cases of urgency i.e. within one or two days.

It should be emphasized that it is essential to have an Application actually on file at the Patent Office before the inventor makes any disclosure of the invention (apart from disclosures in circumstances of confidentiality).

In some circumstances, the extent of work required to prepare and file a Patent Application at a professional level may incur costs which are difficult to meet or justify. As an alternative to a full, professionally prepared Provisional Patent Application, the Patent Agent may be able to offer a service which allows a Patent Office Application filing number and date to be secured making use of the Client's own description and drawings, at a significantly lower initial outlay. Again, there is a maximum period of twelve months in which to take the Patent process further. In this case more substantial amendment may be required before the end of the initial twelve month period.

### Completion

Within the twelve month period, the preparation and filing of a Complete Specification, Claims and Abstract must be undertaken. Formal Drawings should be filed as required by the Patent Office. Once the complete papers have been filed, the Patent Office will carry out a search through earlier Patents and will issue a search report which gives an indication of the novelty of the invention.

## Publication

The Application will then proceed to publication, with publication of a UK or European Application and search report marking the start of a six month period during which substantive examination of the Application has to be requested.

## Prosecution

Once the request for substantive examination has been filed, the Examiner considers the invention in the light of any documents located in the search report and makes observations as to patentability. Some expense may be incurred in overcoming any objection the Examiner might raise, and the extent of this expense will be determined by the standpoint taken by the Examiner.

## Grant

Once the Examiner is satisfied that the invention is patentable, the Patent is granted and lasts for a term of twenty years from the filing date of the Complete Application, subject to payment of annual renewal fees.

It is possible to have the Patent Office carry out these procedures very much more quickly, at the Applicant's request. This may be desirable for example if infringement occurs, or to support a licence agreement. It is also possible to pursue a rapid UK Application of this type while proceeding also with an international Application.

## Other Countries

So far as other countries are concerned, as noted above, the filing of an UK Application in effect gives a twelve-month option period for filing Patent Applications elsewhere. Patents operate mainly on a national basis, with a Patent in a particular territory, giving its owner rights only in that territory. There are a number of international arrangements which aid filing the applications.

Prior to twelve months after filing an initial Patent Application, it is necessary to decide which countries should be covered. Any foreign Applications must be filed within twelve months from the original application date, to retain the priority of that date. The priority is essential if the invention has been disclosed on any non-confidential basis.

The procedures for publication, prosecution and grant may differ from that set out above which generally describes the process for obtaining a UK Patent.

An International (PCT) Applications can be filed in respect of the following countries:

## NATIONAL PATENTS

Albania	Armenia	Austria
Australia	Azerbaijan	
Barbados	Bosnia & Herzegovina	
Bulgaria	Brazil	
Belarus	Canada	
Switzerland & Liechtenstein	China	
Croatia	Cuba	
Czech Republic	Germany	Denmark
Estonia	Spain	
Finland	United Kingdom	
Georgia	Ghana	
Hungary	Iceland	
Indonesia	Israel	
Japan	Kenya	
Kyrgyzstan	North Korea	
South Korea	Kazakstan	
Sri Lanka	Lesotho	
Liberia	Lithuania	
Luxembourg	Latvia	
Moldova	Madagascar	
Macedonia	Mongolia	
Malawi	Mexico	
Norway	New Zealand	
Poland	Portugal	
Romania	Russian Federation	
Sudan	Sierra Leone	
Sweden	Singapore	
Slovenia	Slovakia	
St Lucia	Tajikistan	
Turkey	Turkmenistan	
Trinidad and Tobago	Ukraine	
Uganda	United States of America	
Uzbekistan	Viet Nam	
Yugoslavia	Zimbabwe	

## EUROPEAN PATENT OFFICE (A single designation includes all States)

Albania	Austria	Belgium
Cyprus	Denmark	
Finland	France	
Germany	Greece	
Ireland	Italy	
Latvia	Lithuania	
Luxembourg	Monaco	
Netherlands	Portugal	
Romania	Slovenia	
Sweden	Switzerland & Liechtenstein	
Spain	United Kingdom	

## OAPI (African Intellectual Property Organisation)

Benin	Burkina Faso	Cameroon
Central African Republic	Chad	
Congo	Cote d'Ivoire	
Gabon	Guinea (Conakry)	
Guinea Bissau	Mali	Mauritania
Niger	Senegal	
Togo		

## ARIPO (African Regional Industrial Property Organisation}

Ghana	Kenya	Malawi
Sudan	Swaziland	
Uganda	Lesotho	
Zimbabwe		

## EURASIAN PATENT

Armenia	Azerbaijan	Belarus
Kazakstan	Kyrgyzstan	Moldova
Russian Federation	Tajikistan	Turkmenistan

An International (PCT) Application must be converted to a national or regional Patent in any of the territories listed above before it will be granted.

A European Patent Application can be filed and can proceed to grant in respect of the following countries:

Albania	Austria	Belgium
Cyprus	Denmark	
Finland	France	
Germany	Greece	
Ireland	Italy	
Latvia	Lithuania	
Luxembourg	Monaco	
Netherlands	Portugal	
Romania	Slovenia	
Sweden	Switzerland & Liechtenstein	
Spain	United Kingdom	

Once a European Patent grants it is necessary to bring the Patent into force and to pay renewal fees to keep the Patent in force in any of the above countries which are of interest.

In deciding on the territory to be covered, it should be borne in mind that a Patent in any particular country gives the right to prevent others making, using or selling the patented goods in that country. Thus, the countries of greatest interest are sometimes those with the greatest manufacturing capacity or, more often, the largest markets for (iv) The provider of the material has no liability associated with its use.

For Level 3 use the introduction of a standard letter and single page agreement can be very effective.

Documentation can be very simple and include lists of relevant material e.g. software disk, circuit masks, with boxes to tick.

Although it is not always possible, it is recommended that staff prepare thoroughly for a meeting with patent specialists. This helps ensure that:

- (i) Sufficient information is provided to the Patent Agent;
- (ii) Commercially useful description and claims can be drafted;
- (iii) The Patent Application is dealt with as cost effectively as possible.

The preparation for the meeting should include:

- (i) The collection and preparation of a brief summary of all known relevant publications, and a summary of the technical problems with prior systems.
- (ii) Where appropriate, preparation of sketches of the invention including basic diagrams, graphs and tables. Drawings can be freehand and informal as long as they are clear and uncluttered.
- (iii) The preparation of a list of key words and terms in the form of a glossary.
- (iv) Listing as many ways as possible of:
  - a) Putting the idea into practice.
  - b) Using for commercial gain.
  - c) Improving on the original idea.
- (v) A description of the best way in the inventor's view of implementing the invention.
- (vi) A description of the advantages of the invention and its use(s).

Many meetings with Patent Agents may be relatively informal, perhaps at a very early stage of a particular project, and may not result in the preparation of a Patent Application in the short or medium term. It is still advisable, however, to consider the above matters prior to the meeting.

It should be emphasised that the initial filing of a Patent application will usually be influenced by the following considerations:

- (i) Is the invention commercially interesting?
- (ii) Is the invention new?

The Patent Agent will usually be knowledgeable about the inventors' field of study but may not be an expert in the inventors' specialised research area.

In order to get the best out of the meeting:

- (i) The inventor should be prepared to explain the invention from a reasonably basic level, i.e. don't assume that the Patent Agent knows the area of research in detail.
- (ii) Discussions relating to the actual embodiment of the invention should not be restricted to the "preferred embodiment" - all possible variants should be highlighted.
- (iii) Any existing physical embodiments should be shown along with relevant files, research papers etc.

Following the meeting, the Patent Agent has a number of options:

- (i) Recommend that the inventor undertakes further research or information gathering for review at a set date, eg 1-2, or 6 - 9 months hence, emphasising the need to maintain confidentiality.
- (ii) Prepare a draft of the Patent application specification for review by the inventor and other relevant staff.
- (iii) Prepare an informal application using papers provided by the inventor. This may be helpful if an application is required at very short notice or to minimise costs.

If option (ii) or (iii) above is adopted, the papers will be filed at the UK Patent Office.

Within a 12 month period from the preparation and filing of an Application, the filing of a Complete Specification, Claims and Abstract is required. This will be prepared by the Patent Agent for review by the inventor and other relevant staff.

The process of Patent prosecution over the next 2-5 years will also require input from the inventor. Following the issue of the search report, the Patent Examiner will often reject some or even all of the Claims based on the results of the search.

The Patent Agent will receive this report, termed an Official Action, setting out the objections and setting a date for a response. The inventor is asked to comment on the objections and may need to provide information to show the differences between their invention and the various references cited by the Patent Examiner following the search report.

The Patent Agent can then prepare a response that will modify the scope of the original claims or ensure that the Examiner has interpreted it correctly.

The Examiner will consider the claimed invention again and could allow or reject some or all of the Claims.

The process will continue until such time as the Claims required are allowed or there is a final rejection.

The inventor's support in this process is essential in assisting in obtaining a Patent with claims that are not too narrow in scope and contribute to a commercially useful final Patent.

The intention of a Patent is to disclose an invention to the public including information on how it can be used and what distinguishes this particular invention from what has been done before.

In addition to a written specification, the Patent may include drawings and tabulations. The written specification will normally include several sections:

- (i) The field of invention
- (ii) Background information
- (iii) Summary
- (iv) Description of associated figures, i.e. drawings, graphs and tables.
- (v) Detailed description of the invention, i.e. how it works and could be used.
- (vi) Claims - one or more Claims of the invention.

Field - normally describes in one or two lines the general field of the invention should be stated and this is used by the Patent Office to allocate work to specific examiners.

Background Information - The purpose of background information is to show what has been done before and highlight what has prompted the invention - normally a "problem" requiring to be solved. The background information is termed 'prior art' and particularly for US Patent Applications, inventors are required to disclose all relevant prior art whether known patents, articles in journals and other published research information forming part of the background information the invention may relate to. Restrictions or shortcomings of the work referenced should be discussed and the advantages of the inventions described.

By addressing each part of the prior art the inventor is to a large degree anticipating the process undertaken by a patent examiner in reviewing the patent claims.

## Summary

The summary of the invention will normally describe in general terms what the inventor regards as the invention and the advantages over existing technology.

## Detailed Description

The detailed description should contain enough information for a person 'skilled in the art' to understand how the invention could be recreated. It should fully describe the invention and details of aspects of the way it can be implemented are termed embodiments.

Where appropriate the inventor should provide the correct number and type of figures to assist in understanding the invention. The figures could include sketches, schematics, graphics and/or chemical or mathematical formulae as appropriate.

Claims - The Claims summarise the key elements of the invention and should be consistent with the written information provided. The first claim is normally the broadest with subsequent claims narrowing the overall invention claimed.

In providing information to a Patent Agent, the inventor should give considerable thought to the end use of the invention. Patents with Claims that are too narrow are normally easier to get but may have limited commercial value. The Patent Agent will work with the inventor to determine the broadest acceptable Claims and therefore hopefully obtain the most scope for commercial applications.

The need for detailed technical information from the inventor and for a full understanding by the Patent Agent means that the preparation of a Patent Application will very frequently involve direct inventor/Patent Agent contact. However, the more information that the inventor can provide to start with the quicker the Patent Agent can begin the preparation of the specification.

## Further Information

The Application may be made in the name of one or more individuals and/or one or more corporate bodies. The inventor named must be the actual deviser of the invention (and there can be more than one inventor). In the most common case, the applicant is a company and the inventor is an employee of the company.

Please supply:-

1. Applicant's full name and address [ ]
2. Inventor's full name and address [ ]
3. Relationship between Applicant and inventor, eg employer/employee [ ]

## Technical Information

The Patent Application must contain sufficient technical information to allow a person of reasonable competence in the relevant technical field to put the invention into operation. Please supply:-

1. All technical information relating to the invention which is readily available, including technical writeups, drawings and photographs [ ]
2. Brief details of existing similar products or processes [ ]
3. An indication of any disadvantage of the existing products/processes [ ]
4. A brief indication of the advantages given by the invention and/or the ways in which the disadvantages of the previous technology are overcome [ ]

## Protection of Designs

The term "design" is used to refer to the visual appearance of articles which are produced industrially. The features of appearance which are relevant may be the shape of the article or part of the article, or may be decoration on the surface of the article. For example, the shape of the traditional "Coca-Cola" bottle or of the studs on a "Lego" brick are design features of the first type, while a floral decoration on a teacup or the pattern of a carpet are design features of the second type.

In the United Kingdom, there are three types of protection which may be relevant.

### Registered Designs

A Registered Design is a right granted by the Design Registry, which is part of the Patent Office, which gives the proprietor the exclusive right to make articles of that appearance for a term of years. A Registered Design is infringed by anyone making or selling articles which are identical or closely similar in appearance, regardless of whether or not this occurred because of actual copying.

Nowadays, a Registered Design can only be validly granted for an article whose visual appearance is of some significance. This should exclude from the Registered Design system those articles which are entirely lacking in any aesthetic appeal.

The maximum term of a Registered Design is 25 years, provided that renewal fees are paid at intervals of 5 years.

Registered Design rights can only be acquired by lodging an official application at the Patent Office, and the design must be new at the date of application. It is therefore necessary (with some limited exceptions) to make an application to the Patent Office before details of the design are made public in any way.

### Unregistered Design Right

This is a right to bring legal action to prevent copying of features or shape or configuration of industrially produced articles. It arises automatically when a design is created, and does not require any form of official application or registration.

Unregistered Design Right is of a relatively narrow nature. It protects only against actual copying and is not infringed by independent creation of a similar design. Its life is only 10 years from the first marketing of the design, and during the second half of that term any person can have a compulsory licence on payment of reasonable royalties.

There are also exclusions which deny Unregistered Design Right protection to features which are required to allow the article to interfit with or match the shape of, another article with which it is used; this generally precludes Unregistered Design Right protection for spare parts.

There are no aesthetic requirements for Unregistered Design Right protection; it is available for entirely functional and utilitarian articles.

Unregistered Design Right also protects "semiconductor topographies", that is the structure of integrated circuits and masks and the like used for their production.

## Copyright

Copyright is a right to prevent copying of original literary, artistic and musical works. Copyright arises automatically whenever such a work is created, and does not require any registration. "Original" means that the work is the creation of its author, not being copied from any other work.

The principal application of Copyright is in industries such as publishing, recorded music and films. However, Copyright also has a major role in other industrial sectors, as discussed below.

Computer software is protected by Copyright law by being treated as a literary work. Technical materials such as instruction manuals and engineering drawings are also protected as literary or artistic works, since there is no requirement for such works to have any literary or artistic merit. It should, however, be noted that these forms of protection are only against direct copying and do not prevent a competitor achieving the same technical effect by independent work.

Copyright protection normally lasts for the lifetime of the author plus seventy years, although there are some exceptions.

Special provisions apply where artistic works are incorporated into articles produced industrially, for example where a pattern drawing is used as the basis for a carpet design, or where a painting is reproduced on T-shirts. In these cases, Copyright protection is limited to 25 years from first marketing in relation to all types of industrially produced articles, but continues for the lifetime of the author plus 70 years for artistic uses in, for example, prints and books.

Thus, an industrially produced article will automatically have some degree of protection by way of Unregistered Design Right in three-dimensional features or by way of Copyright in features of surface decoration, and may additionally be capable of Registered Design protection.

## Other countries

The vast majority of countries have some system equivalent to Registered Designs in the UK, but the details vary considerably and in most countries the life of the protection is shorter than here, often 10 years in total. There is an International Convention which allows a foreign Registered Design application to be filed up to six months from a UK application but retaining the benefit of the original UK application date.

Unregistered Design Right is unique to the UK. In most countries, the appearance of an article is either protected by Registered Design or is unprotected, but in some countries it is possible to prevent "slavish copying" under laws of unfair competition. There is protection for semiconductor topographies in most major countries (including USA and Japan) but this generally requires some form of registration.

Copyright protection of literary, artistic and musical works is virtually universal and exists automatically everywhere. However, the scope of protection available varies from country to country. Many countries protect only works which are viewed as having some originality of expression or artistic effort. For example, in the UK there is literary copyright in material such as train timetables and manufacturers' parts lists, but in Germany these would not be regarded as copyright material since they do not have "originality" in the sense required by German Law.

## United Kingdom

The cost of preparing and filing a Registered Design Application is approximately £400-£500. This is inclusive of a Patent Agent's fees and Patent Office fees and VAT.

In addition, there may be the cost of preparing the representations (photographs or drawings) for use in the application. If you have good quality prints of photographs, with sufficient views to show all sides of the article, then supply five copies of each print to the Patent Agent. Alternatively, representations can be prepared from a sample you provide.

There are normally no further costs in a UK Registered Design Application. Sometimes, however, official objections are raised, and the cost of dealing with these will be additional.

The initial registration is for five years and can be renewed for periods of five years to a maximum term of 25 years. Current renewal costs range from £260 for the first renewal with a small percentage increase for each subsequent renewal excluding VAT.

### Other Countries

Procedures and costs vary widely depending on local laws. As a generalisation, the costs involved in obtaining registration will be in the region of £1,000-£2,000 per country. Contact a Patent Agent for more information.

**Note:** The costs quoted are for average cases, and may be exceeded where there is unusual technical or legal complexities.

## Checklist of Information

Please supply:-

1. Applicant(s) full name and address.
2. Drawings or photographs of the Design (or a sample).
3. Brief description of the article.

**Note:** If you are considering protection outside UK, it is recommended that UK Application is filed with drawings not photographs.

Unlike Patents, Copyright requires no formal registration and currently lasts for the lifetime of the author plus up to 70 years.

The first owner of Copyright is the author, but if the author creates the work in the course of employment duties, then the first owner is the employer.

The Copyright in commissioned works will not normally belong to the commissioner unless there is a written agreement to that effect. Use of a schedules summary can be helpful in ensuring that the ownership of the Copyright is clearly understood.

### Example Copyright Schedule

University:

Date:

Schedule of Copyright:

Project Name

REFERENCE	DESCRIPTION	CREATOR	ASSIGNMENT REQUIRED	COMMENTS

While academic and research organisations do not normally consider developing or using Trade Marks on products, selling services or packages of services under a distinctive brand name can be very effective. Trade Marks can also, for example, be applied to products designed by the organisation, software programmes and publications.

A Trade Mark is any word, slogan, device or other distinctive features used to distinguish the goods or services of one trader from all other similar goods or services, for example KODAK for films or HORIZON for holiday services.

In the United Kingdom, rights in a Trade Mark arise principally from an application to register it, which has the advantage of establishing exclusive rights quite quickly. Other advantages of registration are that it makes it less likely that competing traders will adopt the same Mark inadvertently.

If the Trade Mark has already been chosen for use, it is strongly recommended that a search is conducted to determine whether it will conflict with any Mark already registered or pending. Assuming that the Mark is free for use, it would then be advisable to apply immediately to register the Mark.

Registration is only possible if the Mark is distinctive, i.e., it does not consist of words or symbols which should be available to anyone to use. Thus, a Mark which simply describes the goods (e.g. DAIRY for butter) would not be registerable. Other Marks may not be distinctive when they are first adopted, for example surnames or geographical designations, but such a Mark may be registered if it can be shown that it has in fact become distinctive as a result of acquiring a reputation through use.

Once an Application has been filed at the Trade Marks Registry it is examined, and if found acceptable it is advertised in the weekly Trade Marks Journal to give third parties the opportunity to oppose. Assuming no opposition, the Mark is then registered for ten years calculated from the date of filing the Application, and thereafter can be kept in force indefinitely by renewal at intervals of ten years.

If you have not yet chosen a Trade Mark, it would be useful to consult a Trade Mark Agent at an early stage with a number of possible Marks. This would allow them to identify any problems from existing Trade Mark Registrations, and advise on the registrability of each of the proposed Marks, before substantial expenditure is committed to publicity and packaging.

If the relevant activities extend beyond the UK, or are likely to be in the foreseeable future, it is worth knowing that procedures now exist for the registration of a Community Trade Mark covering all territories of the European Union. The procedures are similar to those which apply in the UK.

Trade Mark Protection

TIMESCALE	ACTIVITY
0	Preliminary Clearance Search
0	Filing Application
3-9 Months	Reply to Examiner's Report: <ul style="list-style-type: none"> <li>a) No objections</li> <li>b) Minor objections requiring written response</li> <li>c) Complex objections requiring Hearing</li> <li>d) Camera-Ready Copy required for publication purposes (usually the case with Device Marks)</li> </ul>
9-18 Months	Application is published for third parties to oppose if they wish. Costs may be incurred if opposition is threatened or filed.
1.5-2 Years	Issue of Registration Certificate
10 Years	Renewal

**\*The above timings are approximate**

The Trade Marks Register is divided into 42 Classes, each covering a range of goods or services.

If the goods or services to be covered fall into more than one Class, additional fees will be incurred at filing and renewal.

### Trade Mark Protection - European Union (Community Trade Mark Registration)

A Community Trade Mark Registration (CTM) provides a route for obtaining protection of Trade Marks throughout the EU in a single procedure, covering the following countries:

Austria  
Belgium  
Denmark  
Finland  
France

Germany  
Greece  
Ireland  
Italy  
Luxembourg

Netherlands  
Portugal  
Spain  
Sweden  
United Kingdom

TIMESCALES	ACTIVITY
0	Filing Application  If any objections arise concerning the inherent qualification of the Mark for Registration, costs may be incurred a few months after filing.  The Application is then published for third parties to oppose if they wish. Costs may be incurred if opposition is threatened or filed.
9-15 Months	Payment of Registration Fee

Note A Companies House Search and a Trade Mark Register Search are totally separate and there is no cross-referencing by the two public bodies in charge of them.

1. **Does the Client require the search to find if a specific Mark is already Registered or to check broadly what similar or identical Marks are Registered?**

A search for identical Marks is a little quicker and cheaper than a broader search which also searches for confusingly similar Marks. If the Client intends to use the Mark, the broader search is essential.

2. **Is the Mark to be searched a word or a symbol or other illustration (e.g. a bottle shape)? A word associated with a symbol may have to be searched as a symbol.**

**If Words:-** A search for a specific word (an identical search) takes about 1 day and typically costs under £100.

A broader search to check that a word is not confusingly similar to Marks already registered takes about 1-2 days and typically costs £200-£300.

**If Symbols:-** A search for a symbol takes about 2-3 days and typically costs £250-£350.

3. **Are the searches for foreign markets?**

It is often preferable to have advice from a local Trade Mark Agent on the result of the search. Costs are variable but are generally in the range of £300-£1000 per country.

4. **On which goods or services is the Mark used or intended to be used?**

Trade Marks are registered in one or more of 42 Classes of goods and services (see next section). A search of all relevant Classes is essential (generally Trade Mark Agents will search all classes).

Please supply:-

The Mark:

List the Mark or Marks to be searched, providing a sample particularly if the Mark is a word in a distinctive style, a symbol, a label or packaging.

The Goods or Services:

List the goods or services for which the Trade Mark is or will be used.

Country:

List the countries in which searches are required.

Trade Marks Register is divided into 42 classes for particular goods and services. Typical goods and services for each class are set out below.

## Goods (Classes 1-34 Inclusive)

1. Chemicals used in industry, science and photography, as well as in agriculture, horticulture and forestry; unprocessed artificial resins, unprocessed plastics; manures; fire extinguishing compositions; tempering and soldering preparations; chemical substances for preserving foodstuffs; tanning substances; adhesives used in industry.
2. Paints, varnishes, lacquers; preservations against rust and against deterioration of wood; colorants; mordants; raw natural resins; metal in foil and powder form for painters, decorators, printers and artists.
3. Bleaching preparations and other substances for laundry use; cleaning, polishing, scouring and abrasive preparations; soaps; perfumery, essential oils, cosmetics, hair lotions; dentifrices.
4. Industrial oils and greases; lubricants; dust absorbing, wetting and binding compositions; fuels (including motor spirit) and illuminants; candles, wicks.
5. Pharmaceutical, veterinary and sanitary preparations; dietetic substances adapted for medical use, food for babies; plasters, materials for dressings, material for stopping teeth, dental wax; disinfectants; preparations for destroying vermin; fungicides, herbicides.
6. Common metals and their alloys; metal building materials, transportable buildings of metal, materials of metal for railway tracks; non-electric cables and wires of common metal; ironmongery, small items of metal hardware; pipes and tubes of metal; safes; goods of common metal not included in other classes; ores.
7. Machines and machine tools; motors and engines (except for land vehicles); machine coupling and transmission components (except for land vehicles); agricultural implements; incubators for eggs.
8. Hand tools and implements (hand operated); cutlery; side arms; razors.

Goods (Classes 1-34 Inclusive)

9. Scientific, nautical, surveying, electric, photographic, cinematographic, optical, weighing, measuring, signalling, checking (supervision), life-saving and teaching apparatus and instruments, apparatus for recording, transmission or reproduction of sound or images; magnetic data carriers, recording discs; automatic vending machines and mechanisms for coin-operated apparatus; cash registers, calculating machines, data-processing equipment and computers; fire-extinguishing apparatus.
10. Surgical, medical, dental and veterinary apparatus and instruments, artificial limbs, eyes and teeth; orthopaedic articles; suture materials.
11. Apparatus for lighting, heating, steam generating, cooking, refrigeration, drying, ventilating, water supply and sanitary purposes.
12. Vehicles; apparatus for locomotion by land, air or water.
13. Firearms, ammunition and projectiles; explosives, fireworks.
14. Precious metals and their alloys and goods in precious metals or coated therewith, not included in other classes; jewellery, precious stones; horological and chronometric instruments.
15. Musical instruments.
16. Paper, cardboard and goods made from these materials, not included in other classes; printed matter; bookbinding material; photographs; stationery; adhesives for stationery or household purposes; artists' materials; paint brushes; typewriters and office requisites (except furniture); instructional and teaching material (except apparatus); plastic materials for packaging (not included in other classes); playing cards; printers' type; printing blocks.
17. Rubber, gutta-percha, gum, asbestos, mica and goods made from these materials and not included in other classes; plastics in extruded form for use in manufacture; packing, stopping and insulating materials; flexible pipes, not of metal.

Goods (Classes 1-34 Inclusive)

18. Leather and imitations of leather, and goods made of these materials and not included in other classes; animal skins, hides, trunks and travelling bags; umbrellas, parasols and walking sticks; whips, harness and saddlery.
19. Building materials (non-metallic); non-metallic rigid pipes for building; asphalt, pitch and bitumen; non-metallic transportable buildings, monuments, not of metal.
20. Furniture, mirrors, picture frames; goods (not included in other classes) of wood, cork, reed, cane, wicker, horn, bone, ivory, whalebone, shell, amber, mother-of-pearl, meerschaum and substitutes for all these materials, or of plastics.
21. Household or kitchen utensils and containers (not of precious metal or coated therewith); combs and sponges; brushes (except paint brushes); brush-making materials; articles for cleaning purposes; steelwool; unworked or semi-worked glass (except glass used in building); glassware, porcelain and earthenware not included in other classes.
22. Ropes, strings, nets, tents, awnings, tarpaulins, sails, sacks and bags (not included in other classes); padding and stuffing materials (except of rubber or plastics); raw fibrous textile materials.
23. Yarns and threads, for textile use.
24. Textiles and textile goods, not included in other classes; bed and table covers.
25. Clothing, footwear, headgear.
26. Lace and embroidery, ribbons and braid; buttons, hooks and eyes, pins and needles; artificial flowers.
27. Carpets, rugs, mats and matting, linoleum and other materials for covering existing floors; wall hangings (non textile).
28. Games and playthings; gymnastic and sporting articles not included in other classes; decorations for Christmas trees.

Class Selection - International Classification (continued)

Goods (Classes 1-34 Inclusive)

29. Meat, fish, poultry and game; meat extracts; preserved, dried and cooked fruits and vegetables; jellies, jams, fruit sauces, eggs, milk and milk products; edible oils and fats.
30. Coffee, tea, cocoa, sugar, rice, tapioca, sago, artificial coffee; flour and preparations made from cereals, bread, pastry and confectionery, ices; honey, treacle; yeast, baking-powder; salt, mustard; vinegar, sauces (condiments); spices; ice.
31. Agricultural, horticultural and forestry products and grains not included in other classes; live animals; fresh fruits and vegetables; seeds, natural plants and flowers; foodstuffs for animals, malt.
32. Beers, mineral and aerated waters and other non-alcoholic drinks; fruit drinks and fruit juices; syrups and other preparations for making beverages.
33. Alcoholic beverages (except beers).
34. Tobacco, smokers' articles; matches.

Class Selection - International Classification (continued)

Services (Classes 35-42 Inclusive)

35. Advertising; business management; business administration; office functions.
36. Insurance; financial affairs; monetary affairs; real estate affairs.
37. Building construction; repair; installation services.
38. Telecommunications.
39. Transport; packaging and storage of goods; travel arrangement.
40. Treatment of materials.
41. Education; providing of training; entertainment; sporting and cultural activities.
42. Providing of food and drinks; temporary accommodation; medical, hygiene and beauty care; veterinary and agricultural services; legal services; scientific and industrial research; computer programming; services that cannot be placed in other classes.

## **Formalities Information**

Please supply:-

1. Applicant(s) full name and address.
2. If the Applicant will not be the user of the Trade Mark, ascertain relationship between Applicant(s) and the user and obtain full name and address of user; a formal licence is advisable.

## **Technical Information**

Please supply:-

1. Proposed Trade Mark - List the proposed Trade Mark or Marks or attach a sample if the Mark is a word in a particularly distinctive style, or a symbol or unusual packaging.
2. Goods or Services - List in detail the goods (products) and/or services for which the Trade Mark will be used in the course of trade.

## **Use of Trade Mark:**

Obtain details of any use already made of Trade Mark by the proposed Applicant:

- (a) In use since (estimated year)
- (b) Used throughout UK? Yes/No
- (c) Local use in UK - list of areas
- (d) Rough estimate of annual sales of products/services in recent years

## **Similar Marks:**

Obtain list of any similar Marks that you know of together with their owners/users and the goods or services they are used on.

This paper provides a general outline of the protection which might be available for a new computer program.

There are three forms of protection which might give exclusive rights in aspects of the program, namely Copyright, Patents and Trade Marks. In addition, protection by confidentiality may be relevant.

The most general protection is available through copyright. Copyright applies to source code and object code, to preparatory materials such as flow charts, and to user manuals. The protection applies to words on paper, words on screen, and code in any medium - everything is covered by the definition as a "literary work", but there is no test for literary merit.

As it's name suggests, Copyright is a right to prevent such material being copied. Copyright comes into existence automatically whenever an appropriate work is created, and no official registration or examination is involved. Thus, Copyright already exists in all of the code and other material that has been written.

It is highly advisable, but not essential, for all Copyright material to carry a warning notice consisting of the Copyright symbol, the name of the owner, and the year the work originated , such as:

©SPECTRA Ltd. 1998

So far as computer programs are concerned, a major disadvantage of Copyright protection is that it covers only the precise code, and not the underlying ideas or concepts. Concepts can only be protected by a Patent.

Patents give the owner of an invention the right to prevent others making use of the invention for a maximum of twenty years. Patents relate solely to inventions, that is novel forms of technology in the widest sense, and are granted by the Patent Office after an Application has been made by the owner of the invention and has been closely examined by a Technical Examiner to ensure that the invention is in fact novel and is more than an obvious development of what was previously known.

Most programs fall into the "obvious development" category, i.e. they use well-known principles. But if a program provides a new technical effect, i.e. it operates a machine or controls a process in a new way, or if it controls the operation of the computer itself in a new way, then there may be a patentable invention.

In any event, filing a Patent Application at the Patent Office, whether or not a Patent is eventually granted, gives a time during which you can use the wording "Patent Applied For", and gives the creator of the program a basis for commercial negotiations.

It should be noted that, if the inventor wishes to apply for a Patent, it is essential that the application is filed at the Patent Office before the invention is made public in any way. Disclosing the invention to a single outside person, such as a possible distributor, can count as making it public unless the disclosure is made under an agreement of confidentiality. Even demonstrating the program without disclosing how it operates should be avoided.

It is likely that a name for your program may have been created. If not, it should be considered. Such a name when used on the product is a Trade Mark and clearly it is important to prevent others providing software under the same Trade Mark. There is little protection available for unregistered Trade Marks, and it is difficult to enforce. Statutory Rights arise from registering the Trade Mark at the Patent Office. It is also very desirable, before starting to use a Trade Mark, to make sure that it will not infringe an existing Trade Mark Registration, and a Trade Mark Agent can carry out very quick searches of Registered Trade Marks to check on this.

It is most important to provide the program to others only in object code form, and to keep the source code confidential. This gives protection for the structure of the program, so others cannot easily analyse it and write similar programs.

It is also highly advisable, when the program is supplied to others, to do so on written terms (a Copyright Licence) which permits them to use the program, but includes promises that they will not make copies for others - naturally, as the creator you would wish to supply those other copies yourself, and to charge for the copies.

This term "Miscellaneous Research Products" refers to the various products of research that may or may not be protected through patents and copyrights but can be transferred in some tangible form to other researchers or other third parties for research purposes or for commercial gain.

Examples of this would be a disc containing software, a biological organism or an integrated circuit mask.

Ideally the University would wish to obtain the best deal commercially from these research products, perhaps through an exclusive licence with a company who will utilise that research product, possibly along with other intellectual property rights such as patents.

However the products may not be at a commercially viable stage or it may be perceived that there are benefits in circulating the material concerned to other researchers in order to generally enhance the science in the particular area concerned.

One way to address this issue is to have various levels of use for the products concerned.

Typically these could be:

(i) Level 1 use

An exclusive licence with a third party on commercially acceptable terms to sell the product in its current form or a developed form.

(ii) Level 2 use

A licence to companies for internal use of the research products. The licence would not be exclusive.

(iii) Level 3 use

Distribute to other scientists to use in their research for their purposes only. This takes place at minimal cost to the recipient, typically a nominal amount to cover the costs of preparing and sending the material.

In this situation it is helpful to use a simple one page agreement that is signed by the party that receives the material. The agreement should normally note that:

- (i) The material may not be of use.
- (ii) The material should not be transferred to any other party without written permission from the provider of the material.
- (iii) No technical support will be provided with it.
- (iv) The provider of the material has no liability associated with its use.

For Level 3 use the introduction of a standard letter and single page agreement can be very effective.

Documentation can be very simple and include lists of relevant material e.g. software disk, circuit masks, with boxes to tick.

Section Index

7.1 Introduction to Patent Information

Published patents can be a very useful source of technical and commercial information.

Patent information:

- is the largest single source of information
- keeps a constant record of new product development
- identifies competition in the very early stages
- can greatly reduce R&D investment
- is a source of freely available technology through lapsed patents
- can provide licensing opportunities

Searches of patent databases can provide information on:

- (i) State of the art technology
  - ie what's been done before
- (ii) Competitors
  - information on the Patents of competitors and an indication of the scope and direction of their research and development activities.
- (iii) Licensors
  - the names of companies actively involved in particular types of technology.

In particular if used correctly patent information can very effectively assist Universities in marketing their own technology.

**Patent** applications are normally published 18 months from their initial filing date. As part of the application procedure a Patent is given an internationally recognised classification. A number of organisations create electronic Patent databases for commercial use. The combination of an electronic format and a detailed classification system means that these databases can be a very effective reference tool.

**Searches** normally fall into four different categories:

Novelty

Validity

Infringement

State of the art

**Novelty** searches are normally carried out to determine whether a patent application is novel. If the invention has already been patented or has been described in a printed publication anywhere in the world at any time before the application, then it would not be novel. To be effective the search has to be very comprehensive and not limited to patent documentation.

A **validity** search is used to determine whether a granted patent is valid or should not have been granted in the first place. The search will be seeking to establish whether the invention was novel at the time of filing and not obvious. As with a full novelty search it will not be restricted to patent searches but will include other documentation.

An **infringement** search is normally carried out to establish whether a particular product or process will infringe an existing patent. To conduct the search effectively all relevant patents granted during the last 20 years have to be identified and their "Claims" examined.

A **State of the Art** search is essentially a survey of Patents under selected Classifications of technology. Normally this search would be based on technology classifications and/or company name. The search would produce a general overview of a particular area of technology.

### How to access Patent Information?

Patent information can be accessed in many ways. The approach used by an organisation will depend on the importance of the search, the budget available and the amount of work they are prepared to do themselves.

A number of organisations will undertake the searches on behalf of companies. These include firms of Patent Agents, professional search organisations and a number of the Patent Offices around the world such as the UK Patent Office.

For commercially important searches such as a validity search or a full infringement clearance search the financial consequences of getting it wrong will justify the cost of getting a professional to do it.

Essentially the greater the sophistication of the search required and the level of sifting and revising information, the more likely an expert is to be required. However, providing organisations accept that there may be some limitations to the searches they do themselves there is a significant amount of useful information that can be accessed. The various sources include commercial databases, Patent libraries and increasingly the Internet such as IBM's Patent database.

Users of these various sources should bear in mind that they require a level of technical knowledge, that it can be very time-consuming and the quality of information variable. Notwithstanding these factors patent information is a very valuable tool for commercialisation managers.

The Patent Information Network, run UK wide through the major libraries, can play a significant part in assisting organisations access information.

### **What can be searched?**

Searches can be made on one or a combination of different fields. Some examples are:

- Technology Classification(s)
- Proprietor's Name(s)
- Inventor's Name(s)
- Patent filing date
- Status of Patent - current or lapsed

Section Index

8.1 Purchase, Sale and Review Checklist

The attached checklist is an example of the type of document commonly used by intellectual property specialists such as patent agents or intellectual property lawyers when undertaking due diligence activities associated with commercial transactions.

Examples of these transactions include:

- (i) Acquisition of a company and associated assets including intellectual property rights.
- (ii) Investment in start-up or spin-out companies.
- (iii) Structuring a joint venture arrangement.

The checklist can therefore be a useful tool for Commercialisation Managers and is structured in two parts:

- (i) Summary of range of possible activities.
- (ii) List of intellectual property rights.

The checklist can be used purely as an aide memoir or in some cases will be used as the basic structure of a report or a summary to be attached to a marketing proposal.

The onus is generally on the purchaser or investor(s) to get the due diligence right. The other parties should also commit time and effort in identifying and recording the intellectual property rights to ensure that they are not undervalued. This ensures that their house is in order and that any uncertainty over the ownership of rights is cleared up.

Research on the patent position of potential purchasers or investors may also be useful and is included as items on the checklist:

- (i) When negotiating it is valuable to know where the intellectual property rights "fits" with the potential purchasers.
- (ii) To collate and provide reports summarising competitors and their patent position.

### **Patents**

Existing or new technology or improvements to existing technology, e.g. new device, chemical compound, manufacturing process etc.

### **Trade Marks (registered or unregistered)**

Products or service names, logos, smells, musical jingles, shapes of containers, distinctive shape or feature, slogans or catch phrases.

### **Designs (registered or unregistered)**

Product or packaging designs, surface or ornamental designs.

**Copyright** Note: If produced by a subcontractor or someone else who is not an employee, ensure that the ownership has been formally assigned.

Graphic designs, logos, promotional material, advertising copy, photographs.

### **Software**

Proprietary products Software for manufacturing processes, business planning, control of operations, company databases, marketing systems.

Operating instructions, technical manuals, reference materials.

Engineering and technical design drawings.

Drawings for Manufacturing tooling, patterns, die layouts

Technical or scientific reports, market research information, consultancy reports.

Architectural designs, interior layouts.

### **Confidential Information/Know-How**

Client and pricing information, documentation relating to processes, process know-how, chemical and other formulae.

### **Miscellaneous Research Products**

Biotechnology: Material transfer and micro-organism deposits (cell lines; vectors; transformed host cells), nucleotide or amino acid sequences; nucleotide probes; antibodies.

Semiconductor: Design/manufacture/masks

**This list is provided for general information only. Specific advice should always be sought on areas of interest.**

### Intellectual Property relevant to business - existing and proposed activities

- Patents  Trade Marks  Designs  Copyright  Know-How/Confidential Information

### Status of Registered rights

- Patents  Trade Marks  Designs

### Confirm ownership of Intellectual Property

- Proprietorship established from Registers.  
 Commissioned Copyright works and design right assigned.  
 Company records checked for unregistered rights.

### Licences granted to 3<sup>rd</sup> parties including any "royalty agreements".

### Strength of any key ongoing Patent Applications, strength of Registrations.

- Documents cited by Patent Office.  
 Novelty search already carried out.  
 Other prior art known.

### 3<sup>rd</sup> parties' rights - Is the use of specific Intellectual Property likely to infringe any rights of 3<sup>rd</sup> parties.

- Infringement Search

### Intellectual Property under licence from others.

- Patents  Trade Marks  Designs  Copyright  Know-How/Confidential Information

### Gaps in Intellectual Property

- Trade Marks not registered.  
 Classes of goods and services omitted from Trade Mark Registration.  
 Changes to the Trade Marks from registered details.  
 Patent Application not filed.  
 Design Application not filed.  
 Countries of interest covered - current and planned - Patent and Trade Marks

### Competitors' Intellectual Property review of position relative to competitors.

- Name search to identify competitors' patents

### Are there any collaborations and/or Joint Ventures?

- Basis of use of current IP  
 Ownership and use of any new IP

**This list is provided for general information only. Specific advice should always be sought on areas of interest.**

Section Index

9.1 Sample Agreement - Checklist

Universities will use a wide range of agreements in their dealings with third parties and in particular in relation to the licensing of Intellectual Property Rights.

The nature of these agreements will vary from simple one or two page letters dealing with copyright assignment or the use of Miscellaneous Research Products by other researchers, to complex multi-party arrangements.

Developing and using standard agreements can assist in the use of agreements and also reduce the costs of professional advisors. This has to be done with some care to ensure correct and valid agreements are in place but is possible for selected activities. The standardisation is best done with the full involvement of the advisors concerned.

For other situations full professional input will be essential. The following checklist can be used to ensure that the right level of preparatory work is done and key issues are not overlooked.

Key Points for Consideration:-

1. Who will be the parties to the Agreement?
2. Are the Grantors the Title Holders?
3. What is the purpose of the Agreement (i.e. Assignment, Licence, Registered User, etc.)?
4. What property is involved (Patent, Design, Trade Mark Numbers)?
5. Is the Agreement exclusive, non-exclusive or sole?
6. What is the territory to be covered (UK, Europe, Patent Countries, etc.)?
7. Is the Agreement in respect of making, using, selling or any combination thereof?
8. Are there to be minimums (i.e. annual sale, royalties, etc.)?
9. What is the period and is it renewable, if so on what terms?
10. What is the consideration (lump sum, royalties, shareholding or combination of these)?

11. What is the basis for calculating royalties (% of invoice price)?
12. Who will pay expenses of registration and further protection?
13. What information has to change hands (drawings, specifications, etc.)?
14. Is there a need for confidentiality?
15. What are accounting provisions for consideration (quarterly, payment currency, ex VAT etc.)?
16. When will access or audited certificate be provided?
17. What records will be kept of sales?
18. Who will own improvements and modifications?
19. Who will be preparing any artwork etc., and in whom will the Copyright vest?
20. What marking will be on the goods (i.e. made under Licence etc.)?
21. Who will pay renewal fees?
22. Who will take and defend infringement actions and who will pay?
23. Can sub-licences be granted?
24. Who can terminate, why and when? (insolvency, change of control, default, performance etc.)?
25. Which country's laws govern?
26. Arbitration.
27. Force Majeure.
28. Who will be liable for any claims? (i.e. public liability).
29. Is licence assignable?
30. What happens to stock etc. on termination?

Section Index

10.1 Introduction to UNICO

UNICO

The University Companies Association. Founded in March 1994 as the national representative body of the technology exploitation companies of UK universities.

UNICO  
PO Box 108  
Lichfield WS14 9GH

Administrator: Mrs Susan Cooke  
Tel/Fax: 01543 433 485

Email: [s.cooke@perpro.prestel.co.uk](mailto:s.cooke@perpro.prestel.co.uk)

Section Index

11.1 Review Documentation

11.2 Patent Status Questionnaire

Irrespective of the size of the organisation or portfolio of Patents concerned, regular review of pending Patent Applications and granted Patents is essential.

It is important to ensure that the protection in place, or the proposed protection, "fits" the development activities under way. As the costs can build up very quickly on Patent Applications, it is important to identify key dates and milestones in the progress of an application. Last minute decisions, without full information on commercial potential, are still far too common.

The use of Technical Disclosure Forms (TDF) and regular evaluation of these will assist the portfolio review process. Depending on the organisation concerned it is possible to have a single forum for collation, and review of TDF, decision on protection and validation of Intellectual Property rights.

The process can and should include Patent Applications, any Technical Disclosures identified and recorded, copyright and any general matters. Where appropriate categorisation by Department/Institute or individual can be used.

These can be to a large degree provided by any professional advisors involved, such as Patent Agents and solicitors, and sent on disc or as e-mail attachments.

Example layout of Schedule

<b>University:</b>		<b>Date:</b>	
<b>Department:</b>			
<b>University TDFRef/ Application Ref</b>	<b>Advisors' Ref</b>	<b>Description</b>	<b>Date of next Decision Comments</b>

This Questionnaire was initially prepared to assist staff querying their Patent Agents regarding status of current Patents.

**PATENTS SUMMARY QUESTIONNAIRE**

1 University Reference .....

2 Patent Agents' Reference .....

3 Title/Subject Matter .....

4 Priority Date .....

5 How was Application completed after Priority year?

PCT EP UK US Japan

Any others please list here or on a separate sheet

.....

.....

6 Where are Applications pending?

PCT if yes, please send front sheet of publication indicating designated countries

EP if yes, please send front sheet of publication indicating designated countries

Any others please list here or on separate sheet

.....

.....

7 Where are there granted Patents?

**Country** **Renewal Date**

.....

.....

8 Detail any expected action required during next six months and estimates of associated costs.

.....

.....

Section Index

- 12.1 Ownership of Intellectual Property Rights
- 12.2 Employees
- 12.3 Contracts of Employment
- 12.4 Students
- 12.5 Other Non-Employees

### BASIC POSITION

Ownership of or the right to apply for registered ownership of Intellectual Property Rights ("IPRs") usually belongs to the creator or creators of them.

#### Patents

UK law distinguishes between ownership and inventorship of a Patent. The owner and inventor are named on a UK Patent. An inventor does not necessarily have any rights over the Patent. Any person may apply for a Patent either alone or jointly with another. Patents may only be granted to:

1. The Inventor
2. Any person other than the Inventor who is entitled to the whole of the property in it; or
3. Any successor in title to either of those people.

#### Copyright

The author of a work is the first owner of any copyright in it. The author, for this purpose, is the person who actually carries out the work/supplies the knowledge or skill by which the work is copyright. If someone dictates a book to a secretary the dictator will be the author.

Where a work is produced by the collaboration of two or more authors for which the contribution of each author is not distinct from that of the others, there will be a work of joint ownership.

The author of a computer generated work is the person by whom the arrangements necessary for the creation of the work are undertaken. "Computer generated" means a work "generated by computer in circumstances that there is no human author of the work". The question is at what point one can say a work has no human author.

Copyright materials will become more important, both as earnings from software products increase and as learning materials (including lecture notes) can be used to form part of multimedia products. Computer aided learning is going to play a more prevalent role in modern teaching methods and universities need to own their own teaching material.

Creators of most copyright works will also have what are known as "moral rights". These are:

- the right to be identified as the creator of the work;
- the right not to suffer any derogatory treatment of the work, i.e. not to have it amended or changed by others;
- the right not to have work falsely attributed to someone who did not create it; and
- the right of privacy for certain photographs and films.

Moral rights though do not apply to computer programs.

#### Designs

The owner of the design (whether a registered design or unregistered design right) is the person who creates the design or if the design has been commissioned, the commissioner. A commissioned design is one commissioned for money or money's worth. Even with commissioned works it can be worth having an express agreement as to who will own the rights to avoid any dispute after the event.

The exception to all these basic positions relates to employees.

Who is an employee?

There is little statutory help in deciding who is an employee. Usually, anyone who has signed a contract of employment will be an employee. If there is no such formal contract, then the Courts have acknowledged that no one test or series of tests is decisive. The courts look at the degree of control which the university can exercise and whether the terms of engagement point to a contract of service rather than for services. If the university pays the worker's NIC or sickness benefits or if PAYE is deducted, then there is likely to be a contract of employment. Just because the contract is described as a "Consultancy Contract" does not mean that it will not at law be interpreted as a contract of employment.

Employees at universities will usually include professors, readers, lecturers, technicians, research staff, support staff and administrators. Students will not normally be employees unless, in addition to being registered students, they also have a contract of employment with the university.

### Automatic Ownership

The general position is that the university, as employer, will automatically own the IPRs in works created by its employees *in the course of their employment*. There is no statutory definition of this phrase. The courts tend to look at it on a case by case basis. The job description may be helpful in deciding what is within the course of employment. Something done outside of normal working hours may not have been done in the course of employment. Indeed, a senior person in a firm of management consultants owned the copyright in some lectures he wrote on budgetary control, not his employer.

The position is not quite as straightforward in relation to inventions (whether patentable or not). The university will own the rights in the invention created by the employee if:

- it was created in the normal course of his/her duties; or
- it was created in the course of duties specifically assigned to him/her

and, in addition, an invention might reasonably be expected to result from the employee carrying out such duties.

If a senior employee, who is not specifically employed to invent, develops an invention during the course of his/her duties as an employee (whether or not those duties were normal for him/her) then the university will own the rights in that invention. It is likely that an invention made by a Vice-Chancellor would be caught by such provision, but it is more debatable whether a Professor of English would be caught. A Hospital Registrar, employed to treat patients was held not to be under a duty to devise improvements to ophthalmic equipment even though he was using associated university facilities to further an academic career.

Moral rights will not arise where a copyright work is owned by the university because it was created in the course of the university employee's employment.

### Compensation

Employers have no obligation to compensate employees for IPRs created by their employees unless it says so in their contract or it is caught by the compensation provisions of the Patents Act 1977. This Act says that compensation may be awarded to employees if a patent is of outstanding benefit to the university. It is the patent which must be of outstanding benefit and not the invention. It is therefore the extent to which the monopoly given by the patent has given rise to the benefit which must be examined. The benefit must be in money or money's worth.

There are some statutory guidelines dealing with how the employee's fair share is calculated. They take into account the employee's duties, remuneration and other advantages from their employment or in relation to the invention, the employee's effort and skill, the effort and skill of others involved and the employer's contribution, though these rules are geared to industry.

### **Contrary Agreements**

The rules that vest ownership of the IPRs in the employer are generally subject to any agreement to the contrary. Some universities expressly agree that IPRs vest in some of their employees, e.g. academic members of staff. Any such express statements need to be carefully phrased so it is clear to which employees they relate.

An agreement to the contrary does not have to be in writing. It can arise as a result of custom and practice within the university. Some universities take the general view that lecture notes belong to the lecturer, but nothing in writing is ever said about this. This sort of custom and practice can be sufficient to mean that the IPRs stay with the employee. If a new lecturer is to join the university it is important to be clear about what rights he/she has in any lecture notes he/she brings with them.

### **Know-how / Confidential Information**

Employees have a duty to keep certain confidential information of their employer secret. This information has been described as specific trade secrets so confidential that a continuing duty of confidence applies even beyond the termination of employment. It would include information about an invention until a patent application is filed.

Many of the rights of employers relating to IPRs created by employees are implied by statute or common law. It is useful, however, for the university to have an express statement in its contract of employment with its employees as to what the position will be in relation to IPRs because:-

- employees will not always be aware of the statutory/common law position and may feel de-motivated if they subsequently discover that they do not own IPRs which they thought they would own;
- an express statement in the contract will make it clear that there are no "agreements to the contrary" which override the statutory/common law position;
- the university will usually want to indicate that it will, where practicable, try to acknowledge that the employee is the author of any relevant copyright work;
- the university can impress upon employees the importance of confidentiality and their common law obligations, although too wide an extension of confidentiality will be treated as a restraint of trade and void;
- the university can incorporate a power of attorney in its favour from the employee so that, where any papers need signing (e.g. by the employee as inventor), this can be done without any problems; and
- it can cover the situation whereby the university's ownership of the IPRs may be in doubt, for example where the work was created by the employee at home, outside normal working hours. It can be useful to include an assignment of all the employee's rights in IPRs. However, it must be made clear that this provision does not in any way extend the university's statutory rights in relation to inventions under the Patents Act 1977, otherwise it would be unenforceable.

Universities may also wish to review their employees job descriptions and references to hours of work to try to ensure that they assist with the interpretation of the phrase *the course of their employment*.

Students are not usually employees of the university. Even where they are, there may be a debate as to which IPRs they have created in the course of their employment and which IPRs they have created in their capacity as a student. It is important, therefore, that the university has a contract in place with students who are working in areas which are likely to develop commercially exploitable IPRs. Universities should try to take as wide a view as possible as to what might be commercially exploitable, as it may be several years later before the university discovers that there is value in some IPRs.

## **Undergraduate Students**

It is not at all clear when the contract with the undergraduate student is formed. Often it will be at the time that the student sends back his/her acceptance of an offer made through UCAS, although each case has to be determined on its facts. It is almost certainly impractical to have supplied the student with information about the assignment of IPRs at this stage. It is, therefore, suggested that a brief statement be included in the university's prospectus indicating that, if the student were to become involved with certain types of project during the course of their degree, they would be expected to enter into an assignment of IPRs created during the course of the project. This can be reinforced by papers given to the student on enrolment/registration. This does not create a watertight position but aims to flag to the student the limitations on what the university is obliged to offer to the student as part of the course.

Students will tend to become involved in project work during the third or fourth years of their course. It is advisable to make it a condition of joining the project team that the student enters into an assignment of/agrees to assign IPRs created by him/her during the course of the project to the university. If the student refuses then he/she can be moved to a project which has fewer commercial prospects. It is possible to take an assignment of future copyright and future design rights, however one can only get an agreement to assign other future IPRs as and when they arise.

The assignment, however, cannot be one sided. If it is not fair to the student, then the provisions of it may be void at law. The assignment should provide for the student to receive compensation for the assignment which should be a fair proportion of any income generated as a result of the commercial exploitation of the relevant IPRs by the university. It may also be appropriate to consider whether, if the IPRs are not exploited within a certain period, the student should have the right to call for their re-assignment to him/her.

## **Postgraduates**

Offers to these students tend to be made more on a one-to-one basis. It is, therefore, easier to tie the entering into of an assignment of future IPRs with the making of the offer to the student. During the course of initial discussions with the student, it should be made clear what the policy of the university is in relation to the creation of IPRs and the student should be shown a proforma assignment of IPRs (in the same form as discussed for undergraduates). The offer of a place should be made subject to the execution of the assignment.

## **Sponsored Students**

More frequently nowadays, students are sponsored by outside bodies who may well be the employer of the student. It is quite likely in this case, therefore, if the student does create any IPRs, that these will automatically belong to the outside body as the employer. This could cause particular problems if the student is involved with a project involving another outside body. It is, therefore, important that in the case of sponsored students, the university has discussed the situation with both the student and the sponsoring outside body and that a written agreement is reached as to who will own the IPRs or who will have the right to use them.

There are many instances nowadays where universities will be involved in work involving visiting academics, secondees from industry, independent consultants, or sponsoring outside bodies. In these circumstances, it is always important to have an express agreement as to who will own/ have the rights to use the IPRs. Where any individuals involved are employed by other universities/outside bodies, then the agreement should include those universities/outside bodies.

Whilst some works commissioned by the university will automatically belong to the university, it is safer to get an express agreement as to what will happen, rather than to rely on these statutory rules.

Section Index

13.1

UNIVERSITIES AND THE INTERNET

Each university should have a written Internet Policy to explain:

- how users are allowed to access the Internet using university facilities;
- how users or the university may be liable in law for misuse of the Internet; and
- how the user's interests and the university's interests can be protected.

The policy should apply to all computer users of the university (including all students, staff, visitors and guests), who use e-mail, bulletin boards, the word-wide web or the Internet:

- through computers based at university premises; or
- through any computers located at other sites (including private equipment) via the university's network; or
- using the university's telephone lines.

Use should only be authorised for bona fide educational purposes directly connected with a course or the university's business. Users must also comply with the "JANET Acceptable Use Policy". As a condition of use of the university's system, the university should reserve the right to have access if it wishes to read any matter sent or received using its system. There should be strict provisions to deal with security and to prevent viruses entering the system.

All material produced by students and staff and placed on the Internet should include a disclaimer of the university's responsibility for it unless it has been formally authorised.

The university must control the use of its trade mark or logo on the Internet, both in terms of when and how it is used.

Users should be told which of their actions might constitute copyright infringement, for instance, doing any of the following without the authorisation of the copyright holder:-

- downloading the work onto RAM, or vice versa;
- transferring and saving the work from RAM to hard disk;
- transferring the work in digital form via the Internet;
- encrypting the work;
- audibly playing or legibly displaying the work; or
- distributing any work extracted from the Internet, or placing copyright works on the Internet.

It is also equally important that copyright material of the university is also protected. As it is extremely difficult in practice to police the Internet effectively nothing should be published on the Internet that the university would not wish to be copied. If copyright information is placed on the Internet it should carry a copyright notice and state the extent to which it may or may not be copied.

Defamatory statements or obscene material must not be put on the Internet. As well as the user being liable, the university can also be liable as an on-line provider. The university may also want to be clear that it does not tolerate racial or sexual harassment in any form and that this principle extends to any information distributed on the Internet.

Users should understand that if they are putting information (including photographs) on the Internet containing personal data, other than their own, they must have the express written consent of those individuals to comply with data protection rules.

Section Index

14.1

Sample copy of Intellectual Property Guidelines  
For further copies:

<http://www.theros.co.uk>