

Intellectual Property (IP) Law

Lecture 3

MGT 388



INTELLECTUAL
PROPERTY

Relevant IP laws

- Information (Trade Secrecy)
 - **1. Confidential information (See IP Lecture 1)**
- Creative expression and design
 - **2. Copyright (See IP Lecture 1)**
- Reputation
 - **3. Registration of Trade Marks (See IP Lecture 2)**
 - **4. Passing Off (See IP Lecture 2)**
- Invention
 - **5. Patents**

The process of invention and re-invention

- Most inventions produce solutions to problems
- These solutions, in turn can throw up problems - constant need to innovate e.g.
 - Problem = The preservation of food and drink for long periods
 - *Innovation = The tin can (patented in 1810)*
 - Problem = Difficulty in opening the tin can
 - *Innovation = Claw shape tin opener (patented in 1855)*
 - Problem = Claw shape opener was dangerous to use
 - *Innovation = Rotating wheel tin opener (patented in 1870)*
 - Problem = Tin opener produced sharp edges – problem for canned drinks
 - *Innovation = The removable ring pull (patented in 1963)*
 - Problem = Litter and safety (removable ring pulls were sharp and discarded)
 - *Innovation = The retained ring pull (patented in 1976)*

5. Patents

- “A patent is an exclusive right granted for an invention, which is a product or a process that provides, in general, a new way of doing something, or offers a new technical solution to a problem.” (WIPO)
- i.e. stops others from using the invention without patent holder’s consent
- Justifications for the protection of invention via system of patents:
 - *Moral justification* - taking another’s ideas is akin to stealing
 - *Reward of monopoly* - protect the result of inventive work -> incentive to invest in R&D
 - *Secure economic development* - R&D underpins economies of most developed nations.
 - *Given in exchange for secrets*
 - Disseminates new information about innovation which would otherwise be kept secret
 - Stimulates creativity in those also working in area.
 - Patents often only place information can be fully obtained about an invention
 - Over 90% of patents no longer in force, so patent reference system is may be useful to investigate previous inventions and assess value of continuing with a proposed research project.
 - Provides information about what competitors are doing

Routes to obtain a patent

- A UK national can obtain a patent via one of three routes:
 - i) a European Patent, via an application to the European Patent Office (EPO). This will be valid in as many EPC member states as the applicant designates.
 - ii) a PCT (patent co-operation treaty) patent provided through WIPO which allows filing in multiple jurisdictions through a single application.
 - iii) a UK Patent, via an application to the UK Patent Office. This is only enforceable within the territory of the UK.
- Our focus here is on the UK Patent
 - Governed by The Patents Act 1977
 - Act allows for UK courts to be influenced, but not bound, by decisions of EPO.

Who can apply for a patent?

- s7(2)(a) *Inventor* - A patent for an invention may be granted primarily to the inventor or joint inventors
- s7(2)(b) *Contracting party with inventor* – e.g. research funding body
- s39 where the invention is made by an employee in the course of his employment then the employer is regarded as being entitled to the patent
 - Note s40: where the patent is of outstanding benefit to the employer, the employee may make a claim for a contribution of that benefit (but very hard to prove)

Before we go on: a ‘person skilled in the art’

- The court must use a reference point in determining whether:
 - There is an appropriate level of detail in a patent application
 - The invention for which the application is made is indeed ‘a step forward’ in terms of development
- For this purpose the court will place itself in the shoes of a legal concept termed ‘a person skilled in the art’
 - a normally skilled but unimaginative worker in the relevant area
 - with all the accompanying knowledge at the date the invention was created
 - but without any knowledge of the invention itself
 - “halfway between an idiot and a genius”

The Patent Application Procedure

- The Specification Document:
 - (i) Specification
 - Biographical information of inventor
 - Written description(may include supplementary drawings/photos)
 - Gap in knowledge which invention fills
 - *Workings* - how invention was created
 - *Enablement* - provide sufficient information to enable any person skilled in the art to reproduce invention by following the steps outlined in the description
 - (ii) Claims
 - Defines the matter for which the applicant seeks protection i.e. the scope of the 20 year monopoly
 - Must relate to one invention or to a group of inventions which are so linked as to form a single inventive concept
- Significance of filing date
 - UK has a 'First to file' system - 20 years protection from the *priority date*

What cannot be patented?

- s1(2) Not an invention:
 - (a) a discovery, scientific theory or mathematical method
 - (b) a literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever
 - (c) a scheme, rule or method for performing a mental act, playing a game or doing business, or a program for a computer
 - (d) the presentation of information
- s1(3) Something that is contrary to public policy or morality
 - methods of medical treatment as outlined in s.4A(1)
 - certain types of biological material e.g. the human body at various stages of formation; processes for cloning humans; uses of human embryos for commercial or industrial purposes (s76A)
 - Others e.g. a new type of letter bomb

What can be patented?

- s1(1) A patent may only be granted for an invention where:
 - (a) the invention is new (*novelty*)
 - (b) it involves an inventive step (*inventiveness*)
 - (c) it is capable of industrial application

(a) Must be 'new' (Novelty)

- Justification for novelty requirement
 - Ensures patents cannot be used to stop people doing what they were doing before patent granted
 - A patent monopoly is only justly rewarded if the patent information is not otherwise available
- An invention must “not form part of the state of the art” (s2)
 - State of the art = “any matter(whether a product, a process, information about either ... which has [prior to the patent application] been made available to the public (whether in the UK or elsewhere) by written or oral description, by use or in any other way”
 - i.e. Anything which has been disclosed to the public in such a way that it clearly and unambiguously describes the invention so as to “enable” the person reading it to be aware (but not necessarily understand) the new technical effect contained within the invention.
- Therefore an invention is not ‘new’ if has been ‘made available to the public’
 - ‘Made available to the public’ = a) Potentially available & b) directly accessible
 - (Note the importance of confidentiality...)

(a) Must be 'new' i.e. Novelty (cont.)

- No 'mosaicing' - It is not permitted to combine pieces of art to show that the various component parts of the invention were known (and thus not 'new') albeit not in that combined form.
- As such, a new use of an old thing can be deemed 'new'
 - e.g. 'Workmate' invention comprised workbench, saw, and vice (*Hickman v Andrews*)
 - (Also note that a new process of making 'old' things can be deemed 'new')

(b) Must involve an ‘inventive step’

- “An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art...”
 - i.e. the invention must make a qualitative step forward because:
 - Public should not be prevented from doing something that is an obvious extension or variation of what is already known
 - Encourages more speculative, risky research.
- Note: ‘Mosaicing’ is permitted in considering what is an inventive step
 - i.e. Was the combining of various elements that existed within the art a natural and logical step (i.e. an ‘obvious’ development)?
 - e.g. The combination of a workbench, saw, and vice to produce the ‘workmate’ was not deemed to be obvious and thus was patentable

(b) Must involve an 'inventive step' (cont.)

- In deciding whether an inventive step the courts will:
 - Identify the "person skilled in the art", and their common general knowledge
 - Identify the inventive concept (the essence of the invention)
 - Identify what differences exist between the 'state of the art' (i.e. the level of knowledge prior to the invention) and the inventive concept
 - Do those differences constitute steps that would have been obvious to the person skilled in the art, or do they require a degree of invention?

(c) Must be capable of industrial application

- s4(1) an invention shall be taken to be capable of industrial application if it can be made or used in any kind of industry, including agriculture.
- Objections on this issue are rare but possible
 - e.g. *Re Ducketts Patent Application*
 - Invention related to a propulsion system
 - Went against established laws of nature (was described as creating energy out of nothing – thus breached the principle of conservation of energy)
 - Was found to be incapable of industrial application

Patent granting process

- If Patent Office (PO) is satisfied as regards novelty, inventiveness and industrial application, they will begin the process of granting the patent:
 - 1) The PO will run a search to see if a patent over the same material has been filed anywhere else. It will also make a search of existing technical literature.
 - 2) The application will be published (usually within 18 months of filing). This gives public access to the information. Opponents to the patent may challenge.
 - 3) In light of both the official search and responses from the public the applicant is offered the opportunity to amend the claims. If there is any disagreement between the applicant and the examiner, then the issue will be heard before a senior examiner.

Infringement of Patents

- Claimant must show:
 - An infringing act has been committed within the UK
 - Defendant's conduct falls within the scope of protection of the patent (i.e. that which is specified in the *claims* section of the specification document)
- The scope of the patent's monopoly is determined by the *claims*
- How are the *claims* construed i.e. how is the wording therein interpreted:
 - Purposive interpretation used - 'what would the person skilled in the art have understood the patent holder to have used the language (in the claims) to mean?'

Infringement of Patents (cont.)

- If UK infringement and within scope of claims shown, the 1977 Patents Act covers two type of infringement:
- s60(1) Direct infringement
 - *Products* - making; using; trading with; offering to trade with; keeping for purpose of trading with; importing
 - *Processes* – using; offering it for use; importing a product obtained directly by means of that process, or keeping such a product for disposal or otherwise
- s60(2) Indirect infringement
 - Supplies or offers to supply direct infringer with any of the means, relating to an essential element of the invention, for putting the invention into effect
 - s60(3) excludes the supply of ‘staple commercial products’ (i.e. those which are readily available) from being cable of being indirect infringement

Defences to Patent Infringement

- Consent given by patent holder
- Patent should never have been granted
 - i.e. argue lack of novelty, inventiveness, incapable of industrial application
- Deny infringing conduct within the scope of the 'claims'
- Patent not in force (as annual renewal fees have not been paid)
- Private use
- Non-commercial experiment/research
 - Must be purely experimental i.e. cannot use if commercial intent behind the research
- Use in the preparation of medicines
- Farmers' Privilege (Patent Regulations 2000)
 - farmers may reproduce certain types of patented biological material
 - Permits farmer to propagate a limited group of patented crops
 - Permits the farmer to reproduce patented livestock

Compulsory Licensing & Exhaustion of Rights

- Compulsory Licensing
 - s48 To a third party
 - s55-58 To the Crown
- Exhaustion of Rights
 - Once a patented product is placed into the market with the consent of the patent owner then the patent owner:
 - cannot control what happens to goods thereafter in terms of controlling the sale of that specific item
 - can prevent the reproduction of the item and the sale of that reproduction

Remedies for infringement of patent

- Search orders (*Anton Pillar*) orders
- Injunctions
 - Final injunctions
 - Interlocutory injunctions (*American Cyanamid v Ethicon* [1975] AC 396)
 - Freezing orders (*Mareva* injunctions)
- Damages
- Account of profits
- Delivery up
- Destruction of the infringing items

University of Sheffield IP Policy

- The General Regulations relating to IP state that taught students own any IP which they create in the course of their study or research. This is to encourage enterprise amongst students and to remain legally compliant. However, in order to recognise the significant contribution of other organisations or individuals to the creation of student IP, there will be some exceptions to the sole ownership by taught students of their IP. Such exceptions may include:
 - a) students employed or sponsored by another institution or organisation;
 - b) students undertaking a sponsored project or placement;
 - c) where the Intellectual Property is generated as a result of collaborative work, for example with other students or with members of staff (or where the work being undertaken derives from the Intellectual Property of staff);
 - d) units which have as a primary or substantial purpose, the creation of Intellectual Property;
 - e) other exceptional circumstances.
- Under the General Regulations a register of modules exempt under (d) must be kept.
- Where a module is exempt there should be contractual arrangements in place to illustrate how the IP will be shared.
- For more details see: <https://www.sheffield.ac.uk/lets/pp/policy/ip>