

Guide to the Commercial Exploitation of Intellectual Property (version 2.0)

Purpose of this Document

This document accompanies the Code of Practice on Intellectual Property, Commercial Exploitation and Financial Benefits (version 2.0 issued 5th July 2010), which is referred to as the "IP Code". Its purpose is to explain the processes and procedures to be followed when potentially commercialisable intellectual property (IP) is identified.

What Is Technology Transfer?

Technology Transfer is a term used to describe the formal transferring of knowledge and inventions from the University into the commercial sector.

Who is involved in Technology Transfer?

The Technology Commercialisation Manager and IP Advisors within Academic Legal Services are responsible for identifying, evaluating, managing, protecting, developing and commercially exploiting the University's intellectual property through licence agreements, assignments and company formation. They work alongside colleagues in other groups within Research and Enterprise.

The University's technology transfer activities are part of Research and Enterprise and are overseen by the Director of Research and Enterprise. The oversight ensures that Research and Enterprise resources are selectively invested where they will deliver most value to the University.

Decisions with an impact on University finances are made by the Director of Finance and Corporate Services; some major decisions need to be approved by the Senior Management Board and the Strategy and Finance Committee.

Disclosure

The early identification of IP is vital. The University encourages a 'self-auditing' approach, whereby researchers are always alert to the prospective value of their research. If you believe you have made an invention you should contact your normal school contact within Research and Enterprise Development or the IP Advisors in Academic Legal Services. After the initial discussion you will be asked to complete an invention disclosure form which, together with other relevant information, can be downloaded from the Research and Enterprise web site. The completed form should be treated as confidential information; please arrange for all inventors to sign it, and send it to the IP Advisors, marked "Confidential".

On receipt of the completed invention disclosure form, an Academic Legal Services code will be assigned to the invention. This code will be referenced in all subsequent internal and external correspondence regarding the invention.

At this stage the IP Advisors will carry out an initial due diligence process to establish whether the invention can be protected and who has rights to it. This will include consideration of such issues as ownership, publication, prior art, the parties involved and pre-existing contractual obligations. Unless there are other factors the University is generally the owner of IP created by its employees, as explained in the IP Code.

Where initial due diligence shows good potential for IP protection a commercial assessment will then be made. If the invention is ready for market, the Technology Commercialisation Manager will assess the potential market and assess whether the invention has enough public or market value to warrant support from the University relative to other opportunities that the University has in the commercialisation portfolio at that point. If the University does not wish to proceed it may decide to waive its rights to the invention and offer to assign the invention to you, in which case you will be free to commercialise it at your own risk and cost. The market assessment will involve gathering information concerning the market size, competition, industry feedback and other appropriate market data.

For inventions which are not yet ready for market, the commercialisation manager will assess the stage of development of the invention and whether further funding is needed and then work with colleagues in the Research and Enterprise teams to direct the academic to suitable sources such as research council funding, collaboration funding, charitable trust or industrial sponsorship.

It is important to remember that an invention and associated information must remain confidential prior to any patent protection. The University encourages publication, provided that the implications for possible commercial exploitation and existing confidentiality obligations are considered first. If you wish to publish or make any public disclosure concerning a possible invention you should first contact the IP Advisors to discuss the most appropriate form of action.

The technology transfer process requires teamwork between you (the inventor) and the Academic Legal Services team throughout. For instance, if a patent application is to be filed you will need to provide detailed accounts of the invention to increase the strength and effectiveness of the patent, and potentially collaborate in drafting – even though it is the IP Advisor which gives instructions to the patent agent. Similarly, teamwork is necessary when the Technology Commercialisation Manger begins marketing an invention. It is usually the case that you will be aware of the companies whose interests lie within the scope of your research and which could therefore be potential licensees. These potential licensees may want further technical information to help them decide whether to enter into a licence, which you will be best placed to provide. For these reasons it is important that both you and your School understand the necessary commitment of time and effort before embarking on the technology transfer process.

IP Protection

As part of the process, the IP Advisors will develop an IP strategy, in consultation with a patent agent. The IP strategy will involve deciding upon the appropriate type of IP protection (see Appendix B) and the countries in which to file any patent applications. The University will pay for IP protection, but because costs may be

significant, the IP strategy will have to be considered in light of the commercial potential and approved by TTAG. Once approval has been obtained, the IP Advisors will proceed with protection of the IP in line with the commercialisation strategy. At this stage the confirmatory Assignment, Revenue Sharing and Inventor Split agreements will need to be signed by you and your Head of School. You will also be asked to confirm that you understand the commitment you are making to assist in the process.

Marketing

The Technology Commercialisation Manager will produce a marketing strategy as part of the commercialisation plan. Key to the marketing strategy is deciding on the best route by which to commercialise the invention, whether to license it to an established company or form a spin-out company. This decision will depend on many factors, including your own aspirations and the views of your Head of School, but you should consider the degree of personal commitment needed to create a successful company as well as the financial implications. These factors will form part of the input to the decision as to the most appropriate route to market. The marketing strategy will also address such factors as field of use, exclusivity, and geographic limitations.

Licensing

If it is decided to license the invention to an established company via a licence agreement (an agreement which transfers the use of the intellectual property rights from the licensor to the licensee) then the initial marketing campaign may include approaching known company contacts, sending a non-confidential summary of the invention to targeted companies, and advertising on the Research and Enterprise web site and technology transfer databases. If there is interest from a company, a confidentiality agreement will be put in place and only then will the Technology Commercialisation Manager send a confidential information package to the company for review.

As the potential licensee is reviewing the confidential information, the Technology Commercialisation Manager will conduct a thorough review of the company for its suitability as a licensee, to ensure that the deal is right for all parties. This will include looking at the size of the company, its financial position, its market share and product lines. If it is decided the company is suitable Academic Legal Services will start negotiations, taking into account payments (royalties, up-front, reimbursement of patent costs), milestones, field of use, etc. The Technology Commercialisation Manager will keep you informed of progress throughout.

Licence Management

Once the licence agreement has been signed, Research and Enterprise is responsible for its maintenance. This involves ensuring that both parties comply with the terms of the licence. It includes payment of royalties, reimbursable expenses, reporting and patent management.

The University's liabilities, which may include payments to third parties and expenses incurred from the IP management such as patent fees, legal and commercial advice, will be the first claim on the gross revenue received from licensed IP. A fuller list of the categories of deductible costs is provided in Annex 1 of

the IP Code. After deduction of these costs, the remaining net revenue will be shared between University central funds, the inventor(s) and the inventor's School, according to the formula set out in the IP Code. Examples of the use of the revenue sharing formula are provided in Appendix C.

When the University is distributing Net Revenue, the University will deduct income tax and national insurance contributions from inventor's share of Net Revenue when required by current regulations. It is the University's practice that any employer national insurance contributions due on the payment to the inventor are deducted from the inventor(s) share (as set out in the IP Code) before payment to the inventor (i.e. the net payment to the inventor, the income tax, the employee national insurance contribution and the employer national insurance contribution all come from the inventor share).

Spin-Out Companies

If it is decided to create a spin-out company to commercialise the IP, a business plan, management team and full company documentation will be required.

The business plan must be approved by the Director of Finance and Corporate Services.

The management team could be the inventor(s), but it is more likely that one or more suitable managers will be brought in by the Technology Commercialisation Manger in consultation with the inventor(s). The strength of the management team is a critical factor in the success of the company. The relationship of the inventor(s) with the company must be defined; typically they will provide consultancy to the company rather than being employees.

Company documentation will need to include a shareholders' agreement and an IP licence. Generally the University will seek to license rather than assign the existing IP to the spin-out, at least initially. The treatment of future ("pipeline") IP created and owned by the University must also be considered.

The shareholders of the company will include the inventor(s), the University and any investors. The allocation of shares to the parties involved will be agreed in accordance with the IP Code. As the company grows through the introduction of more investors, the percentage of the company owned by both the inventor(s) and the University will decrease.

Depending on the circumstances the University will require the right to nominate either a director or observer to the Board of the company.

See also the section on general policies for spin-out companies below.

General Spin-Out Policies

The following general principles apply to the formation of any spin-out company from the University.

The creation of a spin-out company is a complex undertaking. The Technology Commercialisation Manger will manage the process, including the securing of formal approval from a number of perspectives within the University:

• Research and Enterprise must agree that a spin-out is the most appropriate way to commercialise the IP;

- The Head of School must approve the commitment of academic time (and facilities where relevant);
- The formation of the company, the impact of all aspects of the proposal, and the University's receipt of shares must be approved by Strategy and Finance Committee;
- If members of University staff are to act as directors of the company, this must be approved by the Vice-Chancellor.

Academic Legal Services will manage the provision of legal and tax advice to the University on the company formation. Inventors should seek their own legal and tax advice.

University staff acting as directors should have formal training in the role and responsibilities of a company director.

Members of staff involved in spin-outs must declare their involvement in the annual Declaration of Outside Interests.

As set out in the IP Code, inventors receiving equity in spin-outs do so in place of any share of the University's equity or royalties. When the University realises value from its shareholding, the inventor's School will receive a share of the University's proceeds.

Revision History

This Guide will be managed by Academic Legal Services and amended as necessary.

Version	Author	Date	Comments
1.0	Sue O'Hare	7 April 2005	Issued
1.1	Sue O'Hare	30 March 2007	Amended to include the effects of the strategic partnership with ANGLE plc, to accompany version 1.1 of the IP Code, and issued
1.2	Sue O'Hare	13 November 2007	Amended following the termination of the strategic partnership with ANGLE plc to supersede revenue sharing arrangements in version 1.1 of the IP Code, and issued
1.3	Liz Kirby	17 December 2008	Amended to accompany version 1.2 of the IP Code, formalising the removal of the ANGLE revenue share.
2.0	Liz Kirby	24 August 2010	Amended to accompany version 2.0 of the IP Code

Appendix B: Intellectual Property

Intellectual Property (IP) can be defined as a category of intangible rights protecting commercially valuable products of the human intellect; like other forms of property, IP has an owner, can be bought, sold and rented, and must be sufficiently protected. Within the University environment IP often arises as the product of research projects and collaborations.

Intellectual Property Rights (IPR) are the legally protected rights which enable owners of IP to exert a monopoly control over its exploitation, usually with commercial gain in mind. IPR can be bought, sold or licensed.

Intellectual Property can be protected by the following methods:

Patents

A patent is a legal monopoly lasting 20 years which covers invention(s), each of which embodies a new idea capable of being made or used in industry and involves a non-obvious inventive step. Patent protection gives the owner the right to prevent others from manufacturing, employing or selling the invention without permission. In most cases an idea is not patentable if it has been publicly disclosed before a patent application is filed. Examples of public disclosure include learned papers, journals, magazines, the internet, poster displays and oral and casual disclosure.

Plant Variety Rights (Plant Breeders' Rights)

Plant Variety Rights (PVR) protect new varieties of plants. Protection is only granted after there has been official testing of the plant variety (with a separate testing mechanism for genetically modified plants). PVR protection applies for a period of 25 years from the date of grant for all species, except trees, vines and potatoes which are protected for 30 years.

Copyright

Copyright arises automatically and applies to literary and artistic works, films, videos, records, broadcasts and typographical arrangements, including computer software, although the latter may also be patentable if it has a technical aspect. In terms of written work, copyright protects the precise form of the words rather than the ideas behind them. Copyright lasts for at least 70 years after the death of the creator.

Trademarks

A trademark is a distinctive mark or logo which is used to distinguish, but does not describe, a product or service. A trademark can be registered by applying to official registries, or unregistered (certain rights are acquired automatically).

Design Rights

Design rights apply to the design (appearance/shape) of a manufactured item. They do not cover functionality, so altering the appearance of a technical component would not infringe the design rights. Designs can be registered, although unregistered designs automatically acquire certain rights.

Database Rights

The selection and/or arrangement of the contents of a database may be covered by copyright protection. Database rights may exist either in addition to or instead of copyright. These protect against unauthorised extraction and re-use of the contents of the database, arise automatically and last for 15 years from the date of creation, or if published during this time, for 15 years from publication.

Confidential Know-How

Information/knowledge held only by the individual or organisation, which has not entered the public domain and has only been disclosed under suitable confidentiality agreements.

Appendix C: Revenue Sharing

The table (reproduced from the IP Code) sets out the sliding scale for sharing net revenue, after the deduction of allowable costs.

Net revenue	Inventor	School	University
first £5,000	100%	0%	0%
£5,001 - £100,000	60%	20%	20%
£100,000 - £3,043,000	1⁄3	1⁄3	1⁄3
over £3,043,000	1⁄3	-	² /3

The scale is applied to each technology, so all income from commercialisation projects relating to a particular technology is recorded and aggregated.

The following worked examples demonstrate the application of the scale in two illustrative cases.

<u>Case 1</u>

In this case there is a single inventor who has not previously received any income from commercialisation. Suppose the University receives income of £100,000 but incurred costs of £15,000 in the commercialisation. The first step is to deduct the costs, leaving £85,000 which is then shared as follows.

Inventor share = (100% of first £5,000) + (60% of (£85,000 - £5,000)) = £53,000

School share = (0% of first £5,000) + (20% of (£85,000 - £5,000)) = £16,000

University share = $(0\% \text{ of first } \text{\pounds}5,000) + (20\% \text{ of } (\text{\pounds}85,000 - \text{\pounds}5,000)) = \text{\pounds}16,000.$

<u>Case 2</u>

In this case there are two inventors. The two inventors have agreed that they made an equal contribution to the work and will share income 50:50 between them. The Inventors have previously received £15,000 of income from commercialisation of this technology (from another licence of the same technology to a different company) so start on the middle tier of the scale.

Suppose the University receives income of \pounds 100,000 but incurred costs of \pounds 15,000 in the commercialisation. The first step is to deduct the costs, leaving \pounds 85,000 which is then shared as follows.

First the £85,000 is divided between the two inventors in the ratio of their agreed shares. In this case the shares are equal, so there is £42,500 to be divided between Inventor 1, the School and the University; and another £42,500 to be divided between Inventor 2, the School and the University.

The Inventors are on the middle tier of the scale, so each receives 60% of £42,500 or £25,500. The School and the University each receive 20% of £42,500 or £8,500 from this distribution.

Adding the two figures for the School and University gives the overall distribution:

Inventor 1 share	= £25,500
Inventor 2 share	= £25,500
School share	= £17,000
University share	= £17,000.