

## **GOWERS REVIEW OF INTELLECTUAL PROPERTY**

### **RESPONSE FROM THE UNIVERSITY OF WARWICK**

The University welcomes the Gowers Review, as intellectual property (IP) is an important economic sector in which the University is heavily involved.

The general principles which the University applies in the management of its IP are:

1. For traditional academic works, such as textbooks or journal articles, the University is content for the academic creators to retain ownership of copyright and to manage it in the best traditions of academic freedom.
2. For IP of potential commercial value, such as patents, the University claims ownership under the Copyright, Designs and Patents Act 1998 and associated Acts, manages the IP and shares any proceeds with the academic creators.
3. We believe that IP should not be hoarded by ourselves or others, and that all transfers of IP or rights should be made with consideration of the broader public interest in mind.

As regards the questions posed by the Review, our responses are:

#### **Section 1: How IP is awarded**

The University uses the UK patenting system regularly, filing about 15 patents per year, and taking some on to the international stages. We do not believe that the UK elements of the system create significant barriers to IP registration, and find the UK Patent Office very helpful and efficient.

However, we only ever file patents in the UK as the first step in international patenting. This is because we believe that a UK-only patent is essentially worthless in all our fields of activity. If the inventions pass various review and assessment stages, they will normally be registered in Europe, US and Japan through the PCT system.

It is clear that the US part of this process is significantly more convenient and cheaper. The Japanese part is expensive because of the costs of translation, and is generally slow. The European part is very expensive at the validation stage (when an awarded patent needs to be translated into many languages to be applicable in the various countries), and thus we normally validate in the UK, Germany and possibly France. The European patenting system is in dire need of reform, and is a major impediment to European innovation. We recognise that heroic efforts have been made to implement such reform, but they have been almost entirely unsuccessful to date. A new approach is thus needed at the European level.

#### **Section 2: How IP is used**

The University primarily uses patents and copyright. Trade secrets and know-how are often used in conjunction with patents. This applies to all the areas of activity in the University.

IP arising from research is generally at such an early stage of development that no valuation method will give a reliable and meaningful result. We thus test our IP against the market, and judge its value according to the interest from third-parties who are potential licensees.

The University has been successful in obtaining licensees for a wide range of its intellectual property. Guaranteed payments from the licensees have generally been in the range of £5,000 to £500,000, with most being at the lower end. However, we do know of one much more valuable US university case (Emory University selling its rights in Emtricitabine, an anti-viral drug, to Gilead Sciences Inc in 2005 for \$575 million).

The term of our IP rights have never been an issue in these negotiations.

We do make every effort within the licence to ensure that the licensee cannot use our IP just for defensive reasons. We use methods such as agreed milestones (e.g. the date of market launch) and minimum annual royalties: the penalty for failure to meet these objectives is cancellation of the licence, so the IP reverts to the University and we can adopt alternative approaches. Such methods should be used by all universities and similar bodies, and many efforts are being made by the relevant trade organisations (UNICO, AURIL and Proton Europe) to spread such best practice within the UK and Europe.

The University is a strong user of public funds to further develop our technology so as to aid future licensing. Schemes such as the Higher Education Innovation Fund, the DTI Grants for Research and Development (previously Smart), the Research Councils Follow-on Fund and the Wellcome Trust University Translation Award are especially valuable and should be further extended.

Data on patenting and licensing are potentially useful measures of innovation. Correction needs to be made for industry sector, as patents are much more relevant in some sectors (e.g. biotechnology and electronics) than others (e.g. mechanical engineering and software). With this correction, useful national and international comparisons can be made.

### **Section 3: How IP is licensed and exchanged**

UK universities have been following with interest the US events regarding the “research exemption” (see [www.buildingipvalue.com/06US\\_Can/131\\_134.htm](http://www.buildingipvalue.com/06US_Can/131_134.htm)). Researchers at Warwick and elsewhere generally believe that their research is exempt from patent infringement, but there is no great certainty on this issue. In the light of the events in the US, especially the *Madey v Duke University* case, clarification for UK researchers, either through new legal processes or clearer explanation of the current law, is important.

The University has significant difficulties in finding potential licensing partners. However, we do not believe that listing services such as TechEx ([www.techex.com](http://www.techex.com)) are the solution. Our problem is primarily due to fact that the technology arising from our research is relatively undeveloped, so that additional development funding is required (see Section 2 on valuable funding schemes). In some cases, this has required that we licence our IP to a University spin-out company, which then raises venture capital to complete the

development process. This spin-out company may then licence its IP to a commercial company, or may even be acquired by that company.

In a number of cases, inventions have been joint between this University and another research institution. These cases have been effectively managed by a joint patent filing, and an inter-institutional invention management agreement. We have freely exchanged this model agreement with other universities who have encountered similar issues.

Currently, we see no barriers to licensing to small businesses or individuals, or to licensing companies overseas. Indeed, a majority of our licensees (other than University spin-outs) are outside the UK.

#### **Section 4: How IP is challenged and enforced**

We recognise that IP challenge and enforcement can be very expensive. We have been involved in some challenges at the US and European patent offices, which have been resolved at reasonable cost. However, we would be unlikely to enter into patent or other IP litigation because of the cost. In choosing our licensees, we are likely to take into account the ability of the licensee to afford litigation against infringers: this biases us towards exclusive licenses with major companies.

We have no other comments on this section.

#### **Other**

Academic publishers could seek either assignment of the copyright or a licence to publish the works of academics. Most academics are so keen to be published that they are willing to accept assignment of copyright. However, we believe that this is bad practice, as it may lead to impediments to the free flow of academic information. We are glad to see that Nature, a leading group of scientific journals, describes its policy as follows on [www.nature.com/nbt/authors/index.html](http://www.nature.com/nbt/authors/index.html)

*Journals in the Nature family no longer take copyright on the primary research articles we publish. Instead we ask authors to sign a license for us to publish their work.*

We would suggest that the Gowers Review consider whether, in the interests of free academic publishing, this policy should be further encouraged or enforced, particular in cases where the research has been publicly funded.

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