

## **DINNER/DISCUSSION SUMMARY**

"Encouraging Innovation and Economic Growth – Does the Patent System deliver?"

Held at the Royal Society, 6 Carlton House Terrace, London SW1Y 5AG Wednesday 27<sup>th</sup> February 2002

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In the Chair: The Lord Oxburgh KBE FRS

Council Member, The Foundation for Science and Technology

Speakers: The Hon Sir Hugh Laddie

Patent Judge Alison Brimelow

Chief Executive, The Patent Office

Ian Harvey

Chief Executive Officer, BTG

Sir Hugh Laddie's lecture reflected on the conundrum that competition - the survival of the fittest - was supposed to bring prosperity, yet patents, which created a temporary monopoly, were also supposed to promote growth. A classic explanation for the need for patents used pharmaceuticals as an example. New medicines took a long time to develop, but once ready they were cheap to manufacture and easily copied. It was argued that without intellectual property rights there would be no new drugs.

In discussion one participant wondered whether the current structure in fact succeeded in stimulating innovation in the pharmaceutical industry. He had worked in a company which identified several hundred interesting compounds but marketed only three in the last 20 years. The problem was the very high costs of bringing a new product to the market. It was said that in Europe this cost £130m to £160m. The investment tended to be not in the original idea but in testing to satisfy regulatory requirements, and the key decision was choosing what to market.

A number of speakers saw pharmaceuticals as a special case. Arguably they should have longer patent protection as a form of taxation, so that companies could cover the costs of testing out of profits. Another speaker thought that without patents for pharmaceuticals the manufacturers would resort to secrecy, with terrible end results. Mussolini had

abolished patents on pharmaceuticals and the prices of medicines had shot up, garage industries had flourished and people died. It was asserted that most of the drugs from which people benefited would not be there without the patent system. In the United States most new therapies came from the risk-taking private sector rather than the National Institutes of Health.

The question was raised whether a long period of patent protection, to cover heavy development costs, would be equally valid for other technologies such as the car industry. One speaker thought not, in that instance: there are very few infringement actions in the car industry, because patents were a side issue. Another speaker disagreed, on the ground that when a new fundamental technology such as variable transmission came in it took a very long time to develop and heavy costs had to be recouped. Another participant observed that the car industry had a history of saying that it could not meet environmental targets, eg for emissions, but then doing so when compelled by regulation.

The process of enforcing patents through the courts was described as great soap-opera but ludicrously slow. There would always be disputes, because the inventor naturally thought his invention was wonderful while others thought it obvious. Judges might not be the best people to adjudicate,

though if the rules allowed it they could probably tell potential litigants very quickly whether their claims were worth pursuing. One suggestion was statutory time limits, but these could be unreasonably short or too long to be effective. There was a mistaken perception that the Woolf reforms, giving judges some power to speed things up, had solved the problem. There were lessons to be learned from abroad. Nevertheless one commentator thought the legal process in the UK was a lot faster than in the US, where litigants faced a non-specialist judge and a jury and the outcome was a lottery.

Some speakers complained about the variation in rules between countries. Efforts to persuade the US to go for "first to file" instead of "first to invent" had not been successful, and inventors had to know the local rules. One Japanese company which took out a lot of patents had instructed its UK subsidiary to draft patent applications in a style suitable for the American system, so that they did not have to be redrafted. There was a case for a simple system that would give rough justice. The American "first to invent" rule was just but created an evidential problem. In Europe a Community patent would be very welcome, so long as it was affordable and could be enforced.

It was noted in discussion that the use made of the patent system varied from place to place and from industry to industry. Semiconductor companies, it was suggested, tended not to patent detailed designs, preferring to get on and make products and settle up if they infringed someone else's patent. At one time Japanese companies had been reluctant to go to law to enforce their patents because they were too busy making things better. An American who claimed, implausibly, to be the inventor of the liquid crystal display had successfully sued a Japanese company in his home state for infringing his patent, and they paid him off instead of taking the dispute further.

One speaker reported that in his experience there was nowhere more patent-oriented than the US, but that this did not get in way of business. Companies got on with their job at the same time as filing patents and litigating about them. Much of the growth in the American economy came from start-up companies, and patents were essential for them because venture capitalists looked for sustainable competitive advantage. In response to this it was observed that venture capitalists were bound to invest in companies that took advantage of the current patent system. It did not follow that the patent system made venture capitalists invest. Patents were not a feature of Internet start-up companies.

Similarly, a speaker's experience in an American university was that the academics were focussed on doing world-class research but also on getting value from it. They published as much as anyone, but also filed claims. In the UK it was suggested that universities were under pressure to take out patents for the wrong reasons, but needed to do so in order to

be able to deal with the commercial sector without being exploited.

Some speakers complained about patents being taken out for unmeritorious inventions, particularly in the US. Some genetic patents seemed more like planting flags than developing therapies. One company had patented the idea of putting a cover on a light-sensitive drum in order to keep the light off it.

In his lecture Sir Hugh Laddie had observed that it was often assumed that weak economies ought to have intellectual property systems modelled on those of rich countries, in order to become like them. In discussion it was said that the developed countries coerced others by threatening heavy import duties if they did not sign up to the agreement on trade-related aspects of intellectual property (TRIPS - Agreement on Trade-Related Aspects of Intellectual Property Rights, World Trade Organization). Yet the commitment of the advanced countries to patent rights was not unlimited. During the anthrax scare Canada had proposed revoking the patents on ciprofloxacin in order to protect the Canadian population. In fact, it was said, this was a false dilemma, because the manufacturers were producing as much of the medicine as they could.

Similar ambivalence could be observed elsewhere. One participant had attended a conference in India, a country whose film, computer and other industries gave it reasons to take patents seriously, yet many judges at the conference had been unable to understand how high prices for patented medicines in India could be justified. In Egypt, copyright protection of computer programs was seen as stopping children learning by copying. The speaker saw TRIPS as a wrong solution. Another participant disagreed, seeing costs and distribution problems rather than intellectual property as the problem for the third world. Manufacturers ought not to be expected to give their products away in underdeveloped countries, but they might well be ready to sell them cheap in a particular market so long as there were measures to prevent re-export.

In a concluding comment on the debate one speaker remarked that many of the participants were enthusiasts for one approach or other. It was necessary to get into detail and address the issues with rather more subtlety. Electronic and drug patents, for example, could obviously not be treated in the same way, and the latter ought just occasionally to yield to the need to keep people alive. In reality there was no perfect model that would work across the board.

Jeff Gill

The discussion was held under the Foundation's Rule that the speakers may be named but those who contribute in the discussion are not. None of the opinions stated are those of the Foundation which maintains a strictly neutral position.