WHO OWNS SCIENCE? THE MANCHESTER MANIFESTO - RESPONSES

The Manchester Manifesto has attracted considerable comment including a mixed response\(^1\) from the Chartered Institute of Patent Attorneys (CIPA)\(^2\), as reported on the IPKat weblog\(^3\).

Jeremy Phillips writes that “The IPKat’s inbox has been swamped with emails from readers complaining about the Manchester Manifesto” and notes that “The Manchester report criticises the patent system on a number of counts, all of which CIPA repudiates.”

The opportunity to engage further with the IP Law community is a welcome one, and our response to these comments follows:

It is not surprising that the inbox of an organization of patent attorneys is “swamped” by complaints about those who presume to criticize the social value and public interest in the perpetuation of the present system of Intellectual Property Law. However, it was not the purpose of the Manchester Manifesto to abolish intellectual property, nor yet its governance by laws; but to bring these far more into line with the public interest – and indeed with the interests of the goose that lays the golden eggs and creates the discovery on which not only the IP Law industry, but civilization relies, namely science and technology research.

It is disappointing to find CIPA, and others who represent the community of IP lawyers, in apparent denial of the problems that the international operation of IP law has and continues to generate. This is not the place for a catalogue, but all will be familiar with the attempt of several pharmaceutical companies, in 2001, to use the TRIPS agreement to prevent South Africa and Brazil from using generics in those countries and hence to deny life-prolonging drugs to millions of AIDS victims. Likewise the international scientific community has spoken out on the negative effects of IP on scientific progress. The Royal Society report “Keeping Science Open”, published in 2003, noted that while patents encourage invention and exploitation they usually limit competition and “[t]hey can make it impracticable for others to pursue scientific research within the areas claimed, and because inventions cannot be patented if they are already public knowledge they can encourage a climate of secrecy”. On the impact on developing countries, the Royal Society stated that “it is clear that the benefits that (IP) brings to many developing countries may be outweighed by the disadvantages”. The report concluded that “Advances of technology and commercial forces have led to new IP legislation and case law that unreasonably and unnecessarily restrict freedom to access and to use information. This restriction of the commons in the main IP areas of patents, copyright and database right has changed the balance of rights and hampers scientific endeavour. In the interests of society, that balance must be rectified”. Six years later the IP industry have done nothing to put their house remotely in order, hence the need for the fresh look and impetus given by the Manchester

\(^1\) http://www.cipa.org.uk/pages/press/article?D5C2CBED-894B-488B-ACD2-07B01E204A06.
\(^2\) http://www.cipa.org.uk.
Manifesto. If this debate has brought home to the IP community that all is not well it has already achieved an important objective.

Below we consider and briefly rebut the points made in this posting and hope that there are out there intellectual property lawyers who would like to protect all relevant interests, not simply the interests of those who profit from the present system.

CIPA criticized the Manchester Manifesto as being “ill-informed and misleading” on the following grounds:

“Contrary to what is stated in the report, … IP rights do not ‘have the tendency to stifle access to knowledge and the free exchange of ideas that is essential to science’. Publication and knowledge-sharing is at the heart of the IP system. Not only is there a vast amount of scientific and technical information available from patent databases around the world, but the majority of it is not available from any other source.”

The view that IP rights “have the tendency to stifle access to knowledge” is not ours alone but, as noted above, is one that is shared by members of the scientific community at large. Although publication is ultimately part of the patent system, the “climate of secrecy” it has been felt to promote is not one conducive to knowledge-sharing, in advance of patenting at least. Furthermore, although the data may nominally be available once published through the patent system, we believe that data from these sources is often incomplete and needs an expert to decipher it. It would be useful, in fact, to know the average value of such data compared with other forms of publication; and this is part of the challenge issued by the Manchester Manifesto.

• Patents can’t be used to prevent a product coming onto the market - if demand for a product is not met on ‘reasonable terms’ then, subject to certain safeguards, anyone can apply to the IPO for a compulsory licence under the patent. The competition authorities can also take action if patents are abused.

They can – but will they? Do they? In many cases it must be said the answer is a resounding “No”. This criticism is naïve at best and deliberately misleading at worst. It is like saying that the justice system is flawless because “anyone can have recourse to the courts”; but we know that, for example, money and social class play an important part in access to justice. In practice, compulsory licenses are rarely used, and the effect of the system is still to deny access to products to those who need them. (See Ellen F.M.’t Hoen The Global Politics of Pharmaceutical Monopoly Power (pub AMB, 2009); available from www.msfaccess.org; also for example Odell-West (2009) ‘The legacy of Myriad for gene-based diagnostics: a new policy and regulatory option’, Journal of Intellectual Property Law & Practice 4, 267-277).

• Patents do not prevent universities from carrying out research - acts done for ‘experimental purposes’ don’t infringe.

This again may be true in theory but it is not always or even often the case in practice. Because universities are being pushed to do more commercial or pre-commercial work, it is often unclear whether the research exemption will apply; the threat of an infringement action itself, even if ultimately unfounded, may deter research. Moreover the experimental use exemption in some jurisdictions is very narrow – this affects the global research climate.
The message of the Manchester manifesto is that we need to question these bland assertions and the system that prompts them, not that IP is irredeemable.

- **Patents enable research bodies like Manchester University to earn a fair return from technical applications of their work, so that money can be ploughed back into further research. Manchester has its own technical transfer operation which depends on patents for its success.**

For most universities the returns are modest, and don’t cover the full opportunity costs that they incur. Whether or not that is the case, our point is that such returns should be foregone in the public interest.

Be that as it may, we do not speak for the University of Manchester any more than a Manchester academic writes a paper or a book she is publishing “for and on behalf of” the University of Manchester. The Manchester Manifesto is authored by an independent group that, although based at the University of Manchester, does not claim to represent it. Indeed if there are problems “in our own house”, so to speak, we are equally anxious to see them addressed!

- **The alternative to patenting university research is that big business would get a free ride - they could use the work of universities to make profits for themselves.**

This is an absurd claim that at best offers one interpretation of a single alternative. Even if this is taken as illustrative, there is a massive upside in that poor countries and generics would be able to imitate ad lib, and people who need drugs get a much cheaper, if not a free, ride. As a previous commenter has cogently pointed out, the “free ride would be available to all and the competition thus generated might well have the beneficial effect of lowering prices for those who most need it.

- **Publication of patent applications is automatic. The applicant has no choice in the matter if he wants to get a patent. Claims that the IP system inhibits knowledge-sharing are just wrong.**

We have addressed this point above, but to recap: in fact, the requirement for novelty does discourage knowledge-sharing at the pre-filing stage. The expectation of patents means that many institutions have strict rules about publication and even talking to people; for example, the University of Manchester’s own guidance advises: “If you think your invention is potentially patentable it is essential that the details of the invention are kept secret until the application for the patent is made.” This is clearly against the sharing of information that would otherwise occur as part of the scientific process. Post-patent, even automatic publication does not guarantee usable access to the information.

- **CIPA also accuses one of the report’s signatories, Joseph Stiglitz, of continuing to mislead the public in his claims that human genes and other life forms (sic) can be patented. “Back in 2006,” says Alasdair Poore, “CIPA wrote a letter to the New Scientist, correcting Stiglitz’s claims that plants or foodstuffs, such as turmeric and Basmati rice, were being patented.**

These accusations are simply untrue. It is not misleading to claim that life forms can be patented; a long history of court cases, starting with the US *Diamond v Chakrabarty* and including the well-known Harvard “onco-mouse” case has established clearly that in many jurisdictions, life forms are indeed patentable subject matter.
Even where patents over genes and naturally occurring life-forms are eventually found to be invalid, the availability of patents in the first instance creates ongoing injustice and inefficiency, often for extended periods of time, until this occurs. Patents on the neem tree and basmati rice were revoked only after long legal battles, and the Myriad patent saga in Europe and elsewhere has continued for over 15 years. Patents are reasonably easy to obtain, although of course there are associated legal costs, but to achieve a just revocation takes years of dedicated effort – as well as further, possibly insupportable, legal costs. We note that the continued patenting of traditional knowledge, or genetic piracy as it is sometimes termed, is one of the obstacles to global harmonisation of patent law.

- This new report is making similarly misleading claims about human genes, stating ‘some 20 per cent of individual human genes have been patented already or have been filed for patenting.’ That is not true. We said it in 2006 and it’s still true in 2009: no patent system in the world allows that. Patents are granted only to inventions that are not previously known: no innovation, no patent.”

In a very narrow technical sense, it may be the case that a gene itself cannot be patented, but as the law stands, patenting of a human gene is allowed provided that it is isolated from the body and that some nominal utility can be stated. We think this law is wrong and counterproductive. The information content is the same whether it is in the body, in a test tube, or indeed in a computer; to make repackaging a criterion is like saying that I can republish your book as my own because I’ve given it a different binding.

Thus, while it may not be the gene itself that is patented but the isolated form of it or an application such as a diagnostic test that involves gene sequencing, it is undeniable that patents are filed and granted over various aspects of gene technology. In common parlance this is referred to as “gene patenting” and even if such terminology is not strictly accurate, the effect in practice is the same: to restrict use of the genetic technology or information. To a patient with a family history of cancer who cannot afford the genetic test that may save her life, it is of no import whether the patent that makes it unaffordable is over the gene itself or over the method of testing.

The estimate that 20% of human genes have been patented or filed for patenting (in the “common” sense described, if not the narrow technical one on which CIPA relies), far from being untrue, is derived from a 2005 study of US patents (Jensen & Murray 2005, Science 310:239-240, online at www.sciencemag.org/cgi/content/full/310/5746/239). Explicit in the study’s findings was the fact that “nearly 20% of human genes are explicitly claimed as U.S. IP.” Although now some 4 years out of date, the results of this study are nevertheless still indicative and remain compelling evidence to support our assertions.

- According to CIPA, the Manchester Manifesto also repeats misleading views about access to pharmaceuticals in the developing world, alleging that the global intellectual property regime denies poor people access to drugs. “Without an effective patent system, who would have made the necessary investment to discover and manufacture those drugs?” asks Alasdair Poore. “It’s politics and economics that block access to drugs for the world’s poor, not the IP system.”

Whilst politics and economics may be the driving forces that block access to drugs and prevent participation in innovation, IP law provides the tools that enable this to happen. Without these,
politics would not be nearly so effective at denying ARVs to African populations, or at denying access to knowledge to developing countries. Of course this can be done by other means as well, but that is no reason to provide the tools and even encourage their use to perpetrate injustice.

There are two different issues at stake here – first, affordability of existing innovation; second, incentives for further innovation. The IP system is a tool for encouraging innovation for drugs for rich markets, but this mechanism does nothing about affordability, leading to the problems of access described. In the absence of a rich market, the IP tool is of no help in creating incentives to discover and manufacture drugs, leading to the problem of neglected diseases for which the “necessary investment to discover and manufacture” drugs is lacking. Both mechanisms to increase affordability, such as patent pools, and alternative incentives for innovation, such as prize funds, are needed to address these problems. The Manchester Manifesto includes a call to investigate such possibilities as a matter of urgency.

In conclusion, we welcome the opportunity to bring these issues more firmly to the attention of the IP Law community. We appreciate that CIPA represents a body of expertise in the specialized area of IP law, and that each of our communities has its own vested interests; but the practical problems raised by the current operation of the IP system, and the pressing issues of human welfare and global injustice that it reinforces (if not creates) cannot be ignored. We are not proposing the entire abolition of IP law. What we envision is working together with those who are able also to look beyond the intricacies of the law itself to see the very real problems that we face, and to attempt to find solutions to them. If the Manchester Manifesto has opened even a small window of opportunity for this dialogue to commence, then it has done its job.

John Harris, Sarah Chan and John Sulston, on behalf of The Manchester Manifesto Group.

FURTHER READING

-   ACLU "Patents on breast cancer genes ruled invalid in ACLU/PubPat Case"^4^.

The Nobel prize-winning scientist, and Manchester Manifesto signatory, John Sulston has warned of moves to patent artificially created life forms in an interview with the BBC Radio 4's The Today Programme: Synthetic life forms 'pretty but insignificant'\(^5\) (25 May 2010).

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