

## **BOOK REVIEWS**

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## INTELLECTUAL PROPERTY RIGHTS AND THE LIFE SCIENCE INDUSTRIES A Twentieth Century History

By Graham Dutfield Ashgate, Hampshire, 2003 ix, 288 pp ISBN 0 7546 2111 1

ever judge a book by its cover. This aphorism applies doubly to this book. Firstly, it has a very poor cover in terms of visual appeal, whereas actually it is quite an interesting read. Secondly, and of more note, the content does not really live up to the title. It does not constitute, as a reader might assume, a detailed analysis of the history of the interaction between intellectual property rights ('IPR') and the life sciences industries (a catch-all phrase cover everything from organic chemistry, synthetic dvestuffs to biotechnology, plant breeding, pharmaceuticals. to genomics developments). Rather it is an interesting historical discussion of the evolution of these different industries, alongside a fairly high level discussion of the IPR issues connected to them. The historical review of the life sciences industries (which comprises the significant middle section of the book) is sandwiched in between a relatively generic introduction to IPR matters (including some brief discussion of economic and regulatory issues), and the concluding chapters, which look at future trends in IPR, from globalisation, through forms of 'resistance' to conventional IPR regimes, ending with a discussion of the net impact of IPR on the life sciences industries

To my reading, there was insufficient effort to synthesise the two strands of the book — IPR, and the life science industries — and look at their interconnection in depth and detail. This left me a little disappointed, as there are numerous areas of quite specific interaction between the life sciences industries and the IPR systems that could have provided subject matter for a text devoted to looking at the detailed interplay between the legal structures granting rights in relation to intangibles and the biotechnology industries dealing with the tangible use of those rights. However, it may be a little harsh to criticise the text too much from the perspective of a number of detailed issues it did not cover or explore in much depth. To be fair, the book is attempting a broader macro view of the interaction, looking more at the drivers for, and consequences of, expansion of the 'proprietarian' model of IPR to service the demands of the 'powerful economic actors' of the life sciences industries.

Let us take a closer look at what the book does have to say, because it is certainly a valuable addition to a much broader debate. It commences with a chapter on 'intellectual property and regulation theory', which argues the case for seeing the development of the IPR system in the light of models of power, institutionalism, economic interests and regulatory capture. This considers in particular those interests groups with a 'pro-IP' perspective — including IP lawyers, who are depicted through reference to the views of some other commentators as a 'Latin trained clergy' trained in the arcana of IP and socialised to promote the protection of such private property rights. Overall this chapter is pushing the relatively old and uncontroversial argument that IPR systems have arisen to service the needs of powerful private interests who are always pushing for stronger rights, to the possible detriment of consumers and other interest groups at large. It is followed by a further chapter quickly reviewing the modern evolution of patent law, from the late nineteenth century through to the late twentieth, with a brief review of the Paris Convention, the European Patent Convention and the WTO Agreement on Traderelated Aspects of Intellectual Property Rights ('TRIPS'), finishing off with some discussion of those categories of subject matter that WTO member countries may exclude from patent protection. This latter aspect is really the only substantive area where the chapter treads on life science specific IP issues, and it does so very lightly.

Then follows what I found to be the most rewarding element of the book. Chapters 4–7 are devoted to a review of the recent evolution of the life sciences industries. This provides a nice consolidated summary, again spanning some of the nineteenth as well as the twentieth century. There is discussion of IPR issues within these chapters, so my characterisation of this element of the book as being insufficiently integrated with the consideration of IPR matters is a bit unfair, but for the most part the discussion is at a fairly high level and is largely confined to documenting the industries' expanding use of patents in particular. However there is also some

discussion of administrative and enforcement matters and the issues around (the narrowing) exceptions to the patents system.

Later chapters then go back to broader IP-related discussions in the context of developing global trade policy and the property rights analysis. There is also some discussion of the 'backlash' against strong IPR protection, and the interface with other global debates, such as those surrounding biological diversity, traditional knowledge, biopiracy and benefit sharing. The analysis (chapter 9, 'Forums of Resistance?') rightly concludes that there is little evidence at the moment that proponents of a strong IPR system are meeting formidable opposition from these counter-cultural debates, which at this stage are more events occurring in the sidewaters around the forward thrust of property rights. In the scope of this discussion there is some mention of the effective ways in which USA and the EU manipulate, work around or forum shop debates that might potentially weaken the IPR system. Interestingly, from the point of view of recent debates in Australia around the Free Trade Agreement with the USA, there is some discussion of the patent provisions contained in a previous FTA between the USA and Jordan. The author discusses the use of such agreements to provide higher than required levels of protection and whittle down otherwise internationally permitted exceptions, in particular those exceptions contained in Article 27.3(b) of TRIPS.<sup>2</sup> Exactly the same stance is adopted in our FTA with the USA, but of course did not actually require much substantive change to our previous practices, as we already provided for patent protection for plants, animals and processes for their production (even where this involved, in the case of plants, potential overlap or dual protection with our sui generis systems for protection of plant breeder's rights).

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Agreement Between the United States of America and the Hashemite Kingdom of Jordan on the Establishment of a Free-Trade Area, available at <a href="http://www.sice.oas.org/Trade/us-jrd/usjrd.asp">http://www.sice.oas.org/Trade/us-jrd/usjrd.asp</a>. See paragraphs 17 and 18 of Article 4 in particular. Note that the other core permitted exceptions are retained, namely: inventions contrary to *ordre public* or morality, including exclusions needed to protect human, animal or plant life or health or to avoid serious prejudice to the environment; or diagnostic, therapeutic and surgical methods for the treatment of humans or animals.

<sup>&#</sup>x27;Members may also exclude from patentability... plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, Members shall provide for the protection of plant varieties either by patents or by an effective *sui generis* system or by any combination thereof. The provisions of this subparagraph shall be reviewed four years after the date of entry into force of the WTO Agreement.'

In the penultimate chapter the author makes a laudable, if hopeful, plea for a more democratic approach to the IPR systems, balancing out the 'interpretative custody' in which the system is currently held by property owners (and their advisers) with the needs of society as a whole. How this debate is going to be engendered and how the public are going to be effectively involved in such processes (or more fundamentally spurred to care enough to involve themselves) is of course the tougher question.

The book finishes with an epilogue discussing how the development of the life sciences industries might have proceeded in a world without patent protection. It notes that many of the scientific developments, occurring as they did within the framework of publicly funded research, would have occurred in any event, although acknowledging that later investment in their development and commercialisation may have been impeded. The author rightly discusses the inhibitory as well as the incentive impacts of IPR systems. He also concludes that we simply do not have the analytical tools to establish whether the net impact of such systems is positive or negative. However the clear theme and conclusion of the book is that there are socially negative consequences to these systems, developing as they do from a narrow property perspective, and that there will be a constant need to fight to redress these imbalances. I think that fight is likely to see its toughest days in the twentyfirst century. If, despite our own worst efforts, we are lucky enough to survive until the twenty-second century, then we can perhaps hope for that future patent free utopia. However, to be realistic, that is only really likely if and when the negative consequences of the IPR systems impact too heavily on the interests of major property and rights holders, or perhaps (more darkly) when the IPR systems are viewed as unnecessary in the light of the more effective technical and contractual boundaries that might be able to be erected in the future around intangibles and their tangible progeny. I view this later 'dystopia' as darker as it will not provide any public framework for readjusting the social consequences of such systems of protection, whereas the current IPR systems do allow for this in theory, by means of limitations in scope of rights, exceptions and defences, though admittedly to an apparently diminishing degree.<sup>3</sup>

As I indicated at the outset, there have been a range of quite detailed interactions between the IPR system and the life sciences industries over the last century that would bear further scrutiny and overview. These include areas such as: the role of material transfer agreements; the interaction between plant breeding, plant breeder's right and contractual closed loop breeding arrangements; extensive debates around

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Witness again the recent extension of copyright term for most works to life plus 70 years and the more extensive effective protection measures given to those claiming to be copyright owners (by way of 'takedown' notices for material posted on the internet), both further consequences of the FTA with the USA.

patenting of life forms and genetic information; and campaigns for access to patented drugs. This book does deal briefly with some of these matters, and of course it would be too much to expect any single text to deal with them all, but some further reference to a few of them may have been beneficial. These are all issues that have received much attention in other articles, and will be subject to debate well into the twenty-first century, which is likely to see not only further amazing growth in the life science industries, but also the evolution of a range of new and problematic areas at the interface with the intellectual property system.