

BOOK REVIEW

European Plant Intellectual Property

Margaret Llewelyn and Mike Adcock, Hart Publishing, Oxford and Portland, 2006,
551 pp incl. Index) (ISBN - 13; 978-1-84113-325-5)

Finding a balance between public and private rights in intellectual property has, and always will be, a struggle for lawmakers and others working in the ever growing subject. This topic is no exception to the rule. The earliest initiatives on providing legal protection to plant breeders took place in Europe. The first laws protecting the rights of breeders were enacted in the Netherlands and Germany in the late 19th century. The on-going tension existing in the interaction between patent law, and plant breeder's rights legislation, is a major part of the book.

Given its subject matter and length, and despite the excellent quality of writing, this is not an easy work to read. It is however, extremely thorough, and, despite the breadth and technical complexity of the subject area, provides a far-reaching and understandable overview of European plant intellectual property rights through both legislation and case law. It also discusses empirical results from a European Union (EU) research project on plant intellectual property rights. Anything you ever wanted to know about this subject area is here.

The book is divided into 10 comprehensive and logically organised chapters:

- Chapter 1: Defining the Territory
- Chapter 2: Plant Protection Rights: International Influences
- Chapter 3: The Emergence of European Plant Protection: The Route to UPOV
- Chapter 4: The Council Regulation on Community Plant Rights
- Chapter 5: The European Patent Convention – General Practice
- Chapter 6: The European Convention – the Article 53(b) Exclusions and Post-Grant Rights
- Chapter 7: The European Directive on the Legal Protection of Biotechnical Inventions
- Chapter 8: The Views of European Plant Breeders
- Chapter 9: Common Ground
- Chapter 10: European Plant Intellectual Property: Some Concluding Thoughts

Each chapter covers its specific topic in great detail, with reference to legislation, case-law and literature and a useful summary/conclusion completes each chapter. This greatly facilitates further research by the reader.

The focus of the book is, as its title says, on Europe. As a result it looks at the legislative basis of European plant intellectual law including the European Patent Convention (EPC),¹ the European Community Regulation on Plant Variety Rights² and the EU Directive on the Legal Protection of Biotechnological Inventions.³ These are however considered within the wider context of other non-European international agreements, including the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs)⁴ and the Convention on Biological Diversity.⁵ TRIPs requires its member states to provide protection for plant varieties either by patent, or by an effective *sui generis* system, or a combination of both. This commitment has proven quite controversial in developing countries which are loathe to extend intellectual property rights in such a fashion. The Rio Convention on Biological Diversity was signed in June 1992.⁶ While the Convention is not directly concerned with patent standards or plant breeder's rights, it sets out an approach to the way the biological resources of the world are to be used.

Plant breeder rights (PBR), often known as plant variety rights (PVR), are those rights granted to breeders of new varieties of plants and include the exclusive right to sell and produce the new plant variety. Plant breeders' rights typically grant the plant breeder control of the propagation material and harvested material of the variety and the right to collect royalties on it for a specific number of years. In order to be protected a plant variety must be, new; different from all other varieties; uniform; and stable. PBR legislation generally contains a wider range of exceptions than general patent law.

This area of intellectual property law has often been seen as primarily European in origin. Indeed, its importance to Europe can be seen in the PVR Case Law Database recently established by the EU.⁷ Most, if not all, PVRs around the world are generally based on the UPOV Convention which came into force in 1968, and was amended in 1972, 1978 and 1991.⁸ The amendment in 1991 significantly strengthened the rights enshrined in the Convention, which now has 63 member countries.⁹ It has been asked elsewhere if the European legislative model should be followed with respect to the

¹ <http://www.european-patent-office.org/legal/epc/>

² <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31994R2100:EN:HTML>

³ http://europa.eu.int/eur-lex/pri/en/oj/dat/1998/l_213/l_21319980730en00130021.pdf

⁴ Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) of the World Trade Organisation (WTO) TRIPS Article 27.3(b) states, "...Members shall provide for the protection of plant varieties either by patents or by an effective *sui generis* system or by any combination thereof."

⁵ The Rio Convention on Biological Diversity, <http://www.cbd.int/convention/default.shtml>

⁶ <http://www.cbd.int/convention/about.shtml>

⁷ http://www.cpvoextranet.cpvo.europa.eu/WD100AWP/WD100Awp.exe/CTX_3072-1-ZNihGBXlaP/Introduction/SYNC_552325343

⁸ The 1957 conference in France which led to the International Convention for the Protection of New Varieties of Plants 1961, and to the formation of the Union Internationale pour la Protection des Obtentions Végétales (the International Union for the Protection of New Varieties of Plants) or UPOV. See <http://www.upov.int/>

⁹ <http://www.upov.int/en/about/members/pdf/pub423.pdf>

intersection of patent and PVR?¹⁰ From the number of countries that have adopted the UPOV Convention it appears this has already happened. It will be interesting to see if the trend will continue in the future with developing countries.

Although the U.S. is a member of UPOV, Plant Variety Protection in the U.S. is quite different than in Europe and certain plant rights are covered by patents. One of the conditions the U.S. placed on its becoming a member of UPOV was their right to continue certain types of plant patent protection under their existing legislation. Because of the influence of U.S. intellectual property law and cases, on the rest of the world, several important aspects of U.S. law including some leading cases are considered by the authors.

The book covers the significant volume of PBR case law in detail with emphasis on important decisions such as *Novartis*¹¹ and its impact on the topic. In *Novartis*, the European Patent Office (EPO) addressed issues of patentability of plant material. The case highlighted the relationship between the plant breeders' rights granted under the UPOV Convention, and the "plant varieties" exception to patentability under the EPC. The final result was a very narrow interpretation finding that the exclusions in Article 53(b) of the EPC apply "only to plant groupings which can be protected under PVRs. All other plant material, including, other than those protectable under PVRs, are patentable."¹² As a result, the European patent remains an option for plant-related inventions. Other case law is also reviewed although *Novartis* is likely the most important considered.¹³ But should the legal framework let the relevant systems of protection work independently of each other or should it contain specific provisions for the area of possible overlap? From this examination of the topic, the somewhat hybrid nature of the dual system seems to be working well.

There are many other ways for breeders to obtain protection for their inventions similar or more powerful to that conferred by patent through PVRs and otherwise. They can have contracts with farmers requiring the farmers not to use part of the harvest as seed or implant devices such as a "terminator" gene to make harvested grain sterile. As is often the case, even in highly technical areas, contract law and technology can often achieve as much as legislation.

When the authors state "clearly patents are a form of intellectual property right," and ask "whether plant variety rights can or should be regarded as the same," they have already concluded that the right cannot be solely regarded as such. As PVRs are generally administered through departments of agriculture it "might be better to consider them as rights over plant material as opposed to intellectual property rights."¹⁴ This may be a technically more correct view but it is unlikely that the confusion

¹⁰ Ranier Moufang, "The Interface Between Patents and Plant Variety Rights in Europe". Paper presented at *WIPO-UPOV Symposium on Intellectual Property Rights in Plant Biotechnology* organized by the World Intellectual Property Organization (WIPO) and the International Union for the Protection of New Varieties of Plants (UPOV) Geneva, October 24, 2003. http://www.upov.int/en/documents/Symposium2003/wipo_upov_sym_06.pdf

¹¹ *Novartis* "Transgenic Plant [2000] *E.P.O.R.* 303, @ <http://legal.european-patent-office.org/dg3/pdf/t961054eu1.pdf>

¹² P. 315.

¹³ A full chapter of the book is on Article 53(b) which gives some idea of its importance.

¹⁴ Pp. 24 and 27.

between PVRs and patents will be easily resolved and one wonders if this distinction has practical importance.

Trade-offs exist in all areas of intellectual property over the tension between private incentives and public access. The debate over plants and plant material has acquired fresh momentum owing to recent developments in biotechnology connected plant breeding. The FAO International Undertaking on Plant Genetic Resources¹⁵ is a non binding agreement that provides for unrestricted access to plant genetic resources which attempts to maintain relatively unrestricted access to specified crop species under the control of governments in the public domain in developing world, while securing reasonable benefits, for development and research in developed countries.

While the authors correctly state that “minimal plant material now remains unprotected,”¹⁶ the usual questions about intellectual property protection abound throughout the book. How much protection is sufficient? What is too much or too little? From who’s perspective? What is the optimal balance between government regulation and private enterprise? Can market forces achieve this balance without regulation? The author’s comprehensive research adds much to the on-going discussions which will undoubtedly continue over the next decade if not for longer.

The authors’ maintain that “in the 21st century, the provision of plant property rights (mainly in the form of patents and plant variety rights) is regarded as the norm” but knowledge of the specifics may not be at the forefront in the mind of the average practitioner or student. Most standard texts on Intellectual Property only give passing reference, if any, to matters concerning plant protection, and generally only in connection with plant patents. The much anticipated Gowers Review of Intellectual Property published in December 2006 in the United Kingdom barely mentions PVRs.¹⁷ With these facts in mind, the authors should be congratulated on having written the definitive overview of a specialised and not well recognized known of intellectual property law.

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¹⁵ <http://www.fao.org/ag/cgrfa/IU.htm>

¹⁶ P. 520

¹⁷ http://www.hm-treasury.gov.uk/media/583/91/pbr06_gowers_report_755.pdf