

Chapter 7 Conclusions: the Way Forward

Confronted with the several and somehow inevitable “flaws” encountered in the different patent regimes, whose seamless functioning is frequently hampered by an intricate web of overlapping rights, the view is here represented that licensing strategies involving the cooperation of multiple patent owners may well represent a constructive solution to clear the way through the “patent thicket”,⁶⁹⁴ by enabling participating parties to gain “freedom to operate” within closely interrelated technological domains.

While much of the otherwise engaged discussions call for the need of legislative interventions, involving an “external”, whole-comprehensive reform of the delicate patent system’s architecture,⁶⁹⁵ this contribution invites to focus on “internal” strategies that can be carried forward by the patent holders themselves, by tactically joining their forces.⁶⁹⁶

Indeed, while on the one hand, legislative interventions aimed at improving the patent “bureaucracy”, for instance by advocating a faster and more selective granting procedure,⁶⁹⁷ remain more difficult to put in place, mostly due to their broader

694 Patent pools have been expressly proposed as a way firms can address the overlapping patents’ problem by a number of authors, among which the most notorious are Priest (1977), Merges (1999) and ultimately Shapiro (2000), this latter having coined the term “patent thicket” itself. See in this respect: Shapiro C., “Navigating the Patent Thicket: Cross Licenses, Patent Pools and Standards-Setting”, University of California at Berkeley, March 2001, also available at: <http://www.haas.berkeley.edu/~shapiro/thicket.pdf>

695 For a current and comprehensive study on the current patent reform and harmonization efforts in place, see i.a.: Straus J., and Klunker N., “Harmonisierung des internationalen Patentrechts”, In: GRUR Int., 2007, Nr. 2, p. 91 *et seq.*

696 Along the same line, i.a.: Hope J. et al., “Cooperative Strategies for Facilitating the Use of Patented Inventions in Biotechnology”, In: Rimmer M., “Patent Law and Biological Inventions”, Federation Press, 2006, Law in Context, vol. 24, p. 87. Quoting the reported author’s main statement: “At the outset, we assume that wholesale reform of the patent system is both inappropriate and impractical. Rather, a measured approach is necessary, reflecting the delicate balance of innovation [...] We see a benefit in expanding patent owners’ repertoire to include industry-driven mechanisms that may be more finely tuned to the needs of particular industry participants or group of participants. Such mechanisms may be adjusted to take account of trial and error learning in specific industry contexts, and may engender greater commitment on the part of industry than involuntary, ‘top down’ regulation”.

697 Indeed, the need of improving the overall administration of the patent offices’ filtering patent application procedure worldwide, which is certainly more than consistent, have been again recently and persuasively advocated *i.a.* by: Straus J., “Is There a Global Warming of Patents”, The Journal of World Intellectual Property, vol. 11, no. 1, p. 58 *et seq.*

In particular, sharing a widely felt pragmatic approach, there the author argues against the critical comparison between the raise into patent applications and a “global warming of patents”, fundamentally disputing that since the growing patent trends registered worldwide have some strong economic and legal grounds, the solution to contain the final output shall

scope and inevitable political strings, on the other hand, patent pools and similar collaborative business strategies are hereby embraced as a convenient, more flexible alternative to overcome the unwanted impasses of our patent regime.

In this respect, the view is taken that sustainable improvements can effectively be achieved aside from legislative reforms, when right holders choose to link their resources into cooperative licensing strategies, thus clearing “pathways” through the “patent thicket”. Given their “voluntary” nature, such solutions evidently offer substantial advantages over a complex, often politically influenced legislative reform, entailing a lengthier and more rigid procedure.

Therefore, since the problem of “blocking patents” and “holding up” situations, more and more often encountered in highly concentrated technological domains, could not be easily obviated at the source, through a radical reform of the patent system, this contribution purposely embraces the current market trends, in the attempt to define and bring forwards “best practices” for collaborative business strategies.

Accordingly, within the delineated scope of this dissertation, while in principle different types of collaborative IP models can be envisaged in the technological domain, the focus is specifically brought on patent pools and clearinghouses mechanisms, where selected patterns established in both domains are more closely analysed.

In comparison, drawing some conclusions from the practical applications outlined, patent pools appear to offer an additional advantage when confronted with technology clearinghouses. In fact, although a pool may have to pass a closer anti-trust scrutiny in order to prove pro-competitive, as of today it basically remains the only model soundly set up. Indeed, the real value and effectiveness of most clearinghouse mechanisms remain to be proved when applied to patent rights, since practical, tangible evidences of successful innovations and/or partnerships fostered through the networking endeavours of such institutions are not easily traceable.⁶⁹⁸

In the context of collaborative IP applications, at the core of this contribution special attention is dedicated to strategic business alliances promoting access to key innovations within life sciences. Here, the concrete prospects of implementing such cooperative schemes have brought into the limelight the potential for new rewarding opportunities.

In this domain, the motivations for cooperation lay at hand: as IP portfolios of flourishing biotechnology industries are taking shape, transactional costs of increasing technology transfer begin to account for a non-affordable portion of an average company’s precious research and development expenditures. In fact, expensive negotiations, and the threatening exposure to even higher potential litigation’s fees,

not consist in a general overhaul of the patent system, but in a more efficient management of its international administration.

698 This evaluation follows a personal attempt to gather tangible, practical evidence by specifically addressing the representatives of the organizations outlined in order to provide for reliable references supporting the respective institutional goals proclaimed. Regrettably, the feedback received has been evasive and therefore non-satisfactory in this respect.

constitute a serious economic inefficiency that may dislocate fundamental resources from the “core-business” of biotechnology.

Nevertheless, it has been shown that the patent pool’s stereotype that has emerged in the electronic and communication industries⁶⁹⁹ cannot be blindly transposed on a one-to-one basis in the biotechnology sector, considering the peculiarity of the industry at issue. Accordingly, elements of novelty have been properly outlined in the assessment and application of the general collaborative IP formula in the domain of life sciences.

In this respect, some illustrative “first hand” experiences of biotechnology patent pools and clearinghouse mechanisms have been reported, although most of these projects may still be classified as in a “pilot” phase, since few cases have reached the necessary “maturity” for a conclusive judgement on the sustainability of such implementations.

The case studies hereby outlined, covering some selected examples of both relatively established and experimental collaborative IP practices involving patented technologies, have been evaluated within the relevant regulatory framework on the base of the competitive parameters at hand. In particular, the legal analysis engaged has covered both the EU and the US regimes, in an attempt to find a common ground for the comparative assessment of patent pooling mechanisms.

In fact, in consideration both of the intertwined effects of national regulations and of the business importance gained by such collaborative practices, whose impact tends to go beyond individual geographical borders, the undergone evaluation has been primarily developed through a comparative perspective.

In the US the relevant legislative reference is the Department of Justice and Federal Trade Commission’s Antitrust Guidelines for the Licensing of IP (“IP Guidelines”), issued in April 1995.⁷⁰⁰ These marked the beginning of a progressively matured and more balanced approach towards pooling agreements, thereby overcoming the preconception of patent pools as “legal monopolies”⁷⁰¹ and eventually introducing a new evaluation procedure based on the so-called “Rule of Reason”.⁷⁰²

699 Aoki R. *et al.*, “Coalition Formation for a Consortium Standard through a Standard Body and a Patent Pool: Theory and Evidence from MPEG2, DVD and 3G”, Institute of Innovation Research Working Paper, 2005.

700 U.S. Department of Justice and Federal Trade Commission, Antitrust Guidelines for the Licensing of IP, April 1995, available at www.usdoj.gov/atr/public/guidelines/ipguide.htm

701 The preconception of patent as “legal monopolies” can today be rejected as false and misleading on the base of the factual consideration that, other than in the true case of a legal monopoly, alternative technologies that do not infringe the patent may well coexist in the marketplace, as provided by competitors. For an overview on the issue, see i.a.: Serafino D., “Early Pools Associated with Monopolies and Cartels (1856-1919)” in “Survey of Patent Pools Demonstrates Variety of Purposes and Management Structures”, Knowledge Ecology International Studies, June 2007, p. 9, at: <http://www.keionline.org/content/view/69/>

702 This advocates the adoption of a contextual and pragmatic approach in the evaluation of the overall pro- and anti-competitive effects of a patent pooling agreement. On the “Rule of Reason”, see: Sec. 4 “General principles concerning the Agencies’ evaluation of the rule of reason” of the U.S. Department of Justice and Federal Trade Commission, Antitrust Guidelines

These IP Guidelines, complemented by a joint report dedicated to “Antitrust Enforcement and IP Rights: Promoting Innovation and Competition”, released in April 2007,⁷⁰³ outline the competitive approach of the US federal antitrust agencies with regard to technology licensing issues. Such Guidelines, being the first of their kind, clearly represent the modern “archetype” on which the assessment of patent pools is still based nowadays.

The position endorsed is indeed based on the cardinal assumption that preserving the incentive for both creative efforts (through patent law) and competition (through antitrust) is fundamental for the progress of society. This principle of balance was indeed already incardinated in the FTC’s report of October 2003: “To Promote Innovation: the Proper Balance of Competition and Patent Law”,⁷⁰⁴ according to which: “competition and patent stand out among the federal policies that influence innovation”,⁷⁰⁵ thus in a reciprocally complementary role.

Analogously, in the EU the analysis is essentially centred on Art. 81 of the European Community Treaty (EC Treaty), addressed to undertakings, which basically prohibits certain anti-competitive agreements and concerted practices to the extent that they may significantly affect trade between EC member states, thereby delineating the power of intervention of the European Commission in the first place. The agreements caught by such prohibition shall be automatically void, except if they can be individually exempted pursuant to the criteria of the last paragraph, when fundamentally it can be proved that the long term pro-competitive effects of the agreement outweigh its first accused anti-competitive restraints, thus resulting into an overall positive balance.⁷⁰⁶

However, because such case-by-case exemption entails a lengthy and costly procedure, the European Commission eventually has issued a “Technology Transfer Block Exemption Regulation” (TTBER),⁷⁰⁷ which entered into force on the 1st of

for the Licensing of IP, April 1995, available at:

www.usdoj.gov/atr/public/guidelines/ipguide.htm

- 703 U.S. Department of Justice and Federal Trade Commission, “Antitrust Enforcement and IP Rights: Promoting Innovation and Competition”, Joint Report, April 2007, available at: <http://www.ftc.gov/reports/innovation/P040101PromotingInnovationandCompetitionrpt0704.pdf>
- 704 Federal Trade Commission, “To Promote Innovation: the Proper Balance of Competition and Patent Law”, Report, October 2003, available at: <http://www.ftc.gov/os/2003/10/innovationrpt.pdf>
- 705 See: Executive Summary, p. 1 *et seq.* in: Federal Trade Commission, “To Promote Innovation: the Proper Balance of Competition and Patent Law”, Report, October 2003, available at <http://www.ftc.gov/os/2003/10/innovationrpt.pdf>
- 706 With respect to said “efficiency goal” of Art. 81 and 82 EC, the complementarity of IP and competition law’s protection has been recently supported also by: Kolstad O., “Competition Law and IP Rights – Outline of an Economic-Based Approach”, In: Drexl J. ed.: Research Handbook on Intellectual Property and Competition Law, Cheltenham, UK, Northampton, MA, USA, Edward Elgar, 2008, p. 3 *et seq.*
- 707 Commission regulation (EC) No. 772/2004 of 27 April 2004 on the application of Art.81(3) of the Treaty to categories of technology transfer agreements, OJ 2004 L 123/11 (TTBER),

May 2004, where all agreements falling within the so called “safe harbour” of said regulation are exempted in “block”, so altogether and automatically, thereby overcoming the need of separate, individual exemptions.

Nevertheless, since the TTBER only applies to technology transfer agreements involving two undertakings, patent pools represented by more parties could not directly benefit from the block exemption and were therefore subsequently covered by some Guidelines on the Application of Article 81 of the EC Treaty to Technology Transfer Agreements.⁷⁰⁸ Basically, these were inspired by the same principles underlying the TTBER, which sustain the whole delicate architecture on which the competitive assessment of patent pools and similar practises is built. As observed throughout the comparative analysis hereby conducted, such Guidelines are in line with the fundamental approach anticipated by the US federal antitrust authorities.

As it has become apparent when taking into consideration the legislative framework for the assessment of patent pooling mechanisms, the focal point keeps on turning around the interface between intellectual property rights and antitrust law. In fact, the strive towards an “equilibrium” between patent and competition law, whose evolution has been retraced along with the legislative history of the multiparty licensing agreements in consideration, represents the aim of this contribution.

In this respect, when retracing the legal treatment of patent pools and similar collaborative practices under the major patent regimes considered, the attempt to achieve a balanced assessment, by weighing the different underlying interests involved, has been indeed a constant common challenge.

Nowadays, a positive signal may be detected in the internal consistency among the antitrust regulations of the systems outlined, where the view is taken that a given proximity may be perceived.⁷⁰⁹ In fact, fundamentally the relevant provisions at issue seem aligned on similar principles, thereby overcoming most of the conflicts traditionally ascribed to IP and antitrust law.

Nevertheless, just as the antitrust authorities are catching up with the assessment of patent pools and assimilated multiparty agreements in their simplest form, these are becoming increasingly complex, thus giving way to new, still unexplored issues. In this respect, in order to be prepared and keep pace with common arising chal-

available at:

http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=en&model=guicheti&numdoc=32004R0772

- 708 Commission Notice - Guidelines on the Application of Article 81 of the EC Treaty to Technology Transfer Agreements, O.J. C 101 , 27 April 2004, Section 4 “Technology Pools”, available at:

<http://europa.eu.int/eur-lex/lex/Notice.do?val=358871:cs&lang=en&list=343592:cs,343498:cs,358871:cs,287758:cs,282404:cs,256769:cs,224308:cs,222857:cs,215479:cs,215452:cs,&pos=3&page=1&nbl=50&pgs=10&checktexte=checkbox&visu=#texte>

- 709 This view was also expressed in: Armillotta M., “Japanese Guidelines on Standardization and Patent Pools Arrangements: Practical and Legal Considerations under the Current Antimonopoly Act – A Global Perspective”, Institute of Intellectual Property, Book Series, October 2008.

lenges, the view is taken that it is of outmost importance that the competent bodies present a united front, keeping aligned in order to reach consistent solutions.

Indeed, only through coordinated endeavours, inspired to a certain dose of pragmatism and reaching beyond the peculiarity of individual cases and national borders, the solutions provided may prove truly viable on the long-term, thereby better serving the fundamental cause of innovation also on a global scale.

