I P BULLETIN

Vol. V and VI (Issue I and II compiled), pp. 20-30

LICENSING AND PATENT STRATEGIES: BUSINESS AND LEGAL PRACTICALITIES

Author: Aaradhana Aiyyar[1]

Abstract

Within intellectual property ('IP') law, licensing is one of the most important aspects. The law and economy of society must constantly balance the competing interests of patent holders. This paper focuses on the main types of licensing: voluntary, compulsory, cross, fair, reasonable and non-discriminatory (FRAND) , and shop rights. It reviews some of the most important strategic practices relating to patents: patent pooling, patent monetization, stick licensing, patent left, defensive and offensive patent aggression, and patent trolling. This paper will address the legal and business phenomena of diverse licensing schemas on innovation, competition, and access to technology. Using a doctrinal approach to statutes, cases, and the literature, the paper focuses on the dual nature of licensing as a mechanism of regulation and as a form of strategy. It most clearly shows that voluntary and FRAND licensing is the most likely to promote positive collaboration and licensing of technology, and that stick licensing and patent trolling is the most likely to show the negative, exploitative aspects of a legal system. It also shows that the most important licensing environment must balance the right to exclusivity with the right to license publicly, to promote innovation, and to preserve the public interest and fairness in competition.

Keywords: Patent licensing, FRAND, compulsory licensing, patent pooling, competition law, innovation policy

INTRODUCTION

Licensing is a significant component of IP law and business innovation ecosystem. In the global economy, where innovation and technology transfer, and international cooperation is fundamental, licensing is the instrument that permits the original creator or the patent holder to

[1] 1st Year law student at IP University.

permit a third party to use, make, sell, or distribute an invention or technology under certain conditions. From a legal point of view, licensing clarifies the rights and obligations of the parties, and how the parties should comply with patent law, competition law, and contract law. From a business perspective, licensing helps to recover a firm's investments in innovation.

This paper considers the forms of licensing

1. Voluntary
2. Compulsory
3. Cross
4. FRAND
5. Shop rights licensing
6. Patent pooling
7. Patent monetization,
8. Patent trolling.

It also considers the defensive and offensive patent aggression, patent left, and stick licensing and the nexus of law, economics, and innovation management.

A. VOLUNTARY LICENSING

Voluntary licensing means a patent holder gives another entity a license to legally use their invention for some fee. Licensing usually is a written contract setting out terms regarding scope, duration, royalties, and field of use[2].

Voluntary licensing is crucial for patent commercialization. It enables patent holders to earn money from their inventions while others do the manufacturing and selling. Pharmaceutical companies, for instance, license the manufacturing of their chemical formulations to other companies so they can sell the medicine worldwide and earn royalties.

The most common is the technology industry. For instance, licensing agreements where certain companies permit some hardware manufacturers to use its software. There are many such

[2] W.R. Cornish, David Llewelyn & Tanya Aplin, *Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights* 212 (9th ed. 2019).

agreements containing field restrictions and territorial limitations. Voluntary licenses must be within the legal frameworks of national patent legislation and must not contravene laws on anti-competitive practices or abuse of dominant position[3]. These are recognized inclusionary doctrines in the competition laws of Europe and the USA.

B. COMPULSORY LICENSING

Compulsory licensing is an ability of the state to negate the exclusivity of a patentee and permit another person to exploit a patented invention. This is often done in the public interest. Article 31 of the TRIPS[4] Agreement allows the state to issue compulsory licenses to address public health crisis, practice in some anti-competitive behaviours, or not working the patent in a particular jurisdiction (WIPO 46).

Legally, compulsory licensing represents the equilibrium that ought to exist between basic patent rights and the public good. India is arguably the most significant country that has been implementing compulsory licenses, particularly Section 84[5] of the Indian Patents Act, 1970. The most notable case on this subject is *Bayer Corporation v. Natco Pharma Ltd.* where Natco was granted its first compulsory license and Natco was able to manufacture a generic version of Nexavar[6], a cancer drug that Bayer sold at exorbitant prices.

Economically, compulsory licensing reduces or eliminates disruptions that arise from monopoly, but also leads to disincentives such as reduced foreign direct investment, and reduced research and development in sectors regarded as hostile to patent protection. This explains its polemical nature.

C. CROSS LICENSING

When two or more parties grant mutual rights to use one or more of their patents, it is termed cross-licensing. This arrangement might help negotiate litigation and promote joint innovation[7].

---

[3] Council Regulation (EC) No 1/2003, On the Implementation of the Rules on Competition Laid Down in Articles 81 and 82 of the Treaty, art. 3 (EU).
[4] Agreement on Trade-Related Aspects of Intellectual Property Rights art. 31, Apr. 15, 1994, 1869 U.N.T.S. 299.
[5] The Patents Act, No. 39 of 1970, § 84 (India).
[6] *Bayer Corp. v. Natco Pharma Ltd.*, (2013) I.A. No. 45, Controller of Patents (India)
[7] Stanley M. Besen & Leo J. Raskind, An Introduction to the Law and Economics of Intellectual Property, 5 *J. Econ. Persp.* 3, 20 (1991).

Sectors such as telecommunications, semiconductors, and automotive industries, with their technology-intensive products and numerous overlapping patents, tend to indulge in cross licensing.

Legally, cross licenses have to comply with the competition law to restrict market collusion or price-fixing. From a business standpoint, they reduce transaction costs and promote joint R&D.

D. FRAND LICENSING

FRAND Licensing, which means Fair, Reasonable, and Non-Discriminatory, is usually applied to standard-essential patents (SEPs). SEPs are patents which must be obtained to comply with an industry standard (e.g. Wi-Fi/5G). SEPs holders are often compelled by standard-setting organizations (SSOs) to grant their patents on FRAND terms to avoid monopolistic control and ensure access to the market.

The arguments surrounding FRAND are about what should be `fair` and `reasonable. One example can be seen in *Huawei Technology Co. Ltd v. ZTE Corp.*[8]. The Court of Justice of the European Union explained the terms in which the SEP owners can act and seek injunctions while still observing FRAND. These terms are as follows:

- The SEP holder must first notify the alleged infringer, clearly identifying the SEP and explaining the infringement.
- After the infringer shows willingness to license, the SEP holder must make a written offer on FRAND terms, specifying the royalty and its calculation.
- The implementer must respond in good faith, either accepting the offer or making a reasonable FRAND counter-offer without delay.
- If negotiations continue while the SEP is used, the implementer must provide appropriate security (such as a bank guarantee).
- Injunctions may be sought only as a last resort, and failure to follow this process may amount to abuse of dominant position under EU competition law.

Also, from the perspective of a business, FRAND licensing instruments are a means of levelling the field and constituting the equitable compensation of patent holders while ensuring

[8] *Huawei Techs. Co. Ltd. v. ZTE Corp.*, Case C-170/13, ECLI:EU:C:2015:477 (CJEU)

the fair compensation of the patent holders. It also serves as a means of motivating innovation while securing consumer access to products which have a low level of differentiation.

E. LICENSING OF E. SHOP (RIGHTS)

Shop rights are the non-exclusive, royalty-free license impliedly conferred to an employer to use an employee's invention created within the employer's use of resources, time or facilities. Unlike the assignment of rights, the employer's patent ownership is not transferred. Instead, the employer is merely granted usage rights

This equitable doctrine is aimed at preventing enrichment of employees at the expense of the company whose resources they are using. One of the classic representation of this principle is the case of *US v. Dubilier Condenser Corp*[9] where the Supreme Court ruled that usage of company tools and material by employees allows the employer to acquire what is termed as a `shop right` to the invention.

Most modern employment contracts specify terms around intellectual property ownership and transfer beforehand. From the firm's perspective, the inclusion of shop rights clauses means that employers will obtain the benefits of the developed innovations, and the firm will face no risk of litigation.

F. DEFENSIVE AND OFFENSIVE PATENT AGGRESSION

Patent aggression describes the approaches that firms may choose to assert or defend their patent portfolios. Offensive patent aggression encompasses the assertion of patents against competitors, either to prevent entry to the market, gain exorbitant licensing rights, or obtain significant bargaining power. Defensive patent aggression describes the acquisition of patents to prevent litigation, or to create cross-licensing shields[10].

Take, for instance, patent giants such as IBM and Google, who hold immense patent collections not for the mere objective of innovation, but to block other potential litigants within their field. This type of defensive aggregation spurred the formation of the License on Transfer (LOT) Network; an organization focused on the prevention of opportunistic patenting.

Under the law, highly aggressive practices surrounding patents may constitute an abuse of market power and anti-competitive behaviour. From the perspective of the firm, however, such

[9] *United States v. Dubilier Condenser Corp.*, 289 U.S. 178 (1933)
[10] Mark A. Lemley, Rational Ignorance at the Patent Office, 95 *Nw. U. L. Rev.* 1495, 43 (2001).

practices are often seen as fundamental within the operational framework of an industry characterized by rapid innovation and frequent copying.

G. Patent Left

Under a patent left, anyone who uses the patented technology must also contract on the same open terms that they will also license any improvements or any derivative inventions that come within the scope of their patent. This model has been championed by the Open Invention Network (OIN) and Creative Commons to allow coordinated collaborative technological advancement, particularly within the software and biotech fields.

As a play on the software phenomenon of copyleft, Patent left operates by conditioning the grant of a patent licence on reciprocity. Any party that uses the patented technology is required, by contract, to license any improvements, modifications, or derivative inventions under the same open terms. This ensures that adaptations of the original patent cannot be enclosed within exclusive proprietary rights and must remain accessible to the wider innovation community. Strategically, patent left prevents downstream appropriation of collectively developed technology and promotes cumulative, collaborative innovation rather than exclusive control. Patent left is not proprietary, as is the case with most legal patents, and is therefore more aligned with open innovation and cooperative advancement.

Patent left, legally speaking, most significantly departures, within legal scholarship, from a more exclusive control of antiquated and traditional models of patent law. However, it is still legally compliant with the principles of contract law. It is also, from a business standpoint, more so for small innovators to continue building on the original technology without fears of infringing upon more proprietary patents, building a climate of collaboration to move fast and be fully open.

H. Patent Pool

A patent pool is a form of collaboration whereby a group of patent owners or patent covering businesses join together to license their patents as one unit to one or more third parties. This collaborative model is useful and streamlines the licensing of technologies that span many interlinked patents.

- Patent pools are common within most sectors, including telecommunications, as it is the sector that has most standards that include patents such as Moving Picture Experts Group(MPEG) or Digital Versatile Disc(DVD). Patent pools also enhance the sector by

reducing transaction costs, lowering the chances of litigation, and accelerating the diffusion of technology.

Nonetheless, there are legal aspects of collusion and market power concerning patent pools, and therefore, they must be analysed under the antitrust laws. The U.S. Department of Justice (DOJ) and Federal Trade Commission (FTC) have provided patent pools guidelines hoping to encourage innovative legal activities patent pools are intended to foster, albeit without the antitrust implications of collusion or the monopolization of a market. From a business perspective, patent pools are situational win-win outcomes, as they allow for the equitable distribution of technology and the continued profitability of patent holders.

I. PATENT MONETIZATION

Hall and Ziedonis[11] define patent monetization as the various means of deriving revenue from intellectual property assets such as through licensing, patent sales, or patent litigation.

In the current innovation economy, patents, and other legal instruments, are considered financial assets, as in the case of Qualcomm and IBM, who earn far greater returns from patent royalties and licensing than from the sale of goods and services. Patent monetization also encompasses securitization, as patent portfolios are used to secure loans or attract other investments.

Legally, there are arguments concerning patent validity, patent infringement, and fair use in patent monetization. However, from a business perspective, patent monetization augments the financial returns stemming from investments made into the organization's R&D, and allows for the continued support of innovation through R&D.

J. STICK LICENSING

Carrot licensing refers to a voluntary, incentive-based licensing strategy in which a patent holder encourages adoption of its technology by offering favourable terms, such as reasonable royalties, access to complementary technologies, or collaborative benefits, rather than relying on litigation threats. It contrasts with stick licensing by promoting cooperation and market entry through positive inducements rather than coercion.

[11] **Bronwyn H. Hall & Rosemarie H. Ziedonis,** *The Patent Paradox Revisited: An Empirical Study of Patenting in the U.S. Semiconductor Industry, 1979–1995*, **32 RAND J. Econ. 101 (2001).**

Frequently contrasted to "carrot licensing", stick licensing involves using litigation threats to compel companies to take a license. More specifically, the licensor pulls out the "stick" of infringement lawsuits and uses them to muzzle licensing agreements.

While stick licensing is legal, it is arguably coercive (and coercive bullying, at that), especially if employed overly aggressively. It is also litigation that involves a wide range of dispute and patent validity, and of course, patent misuse. However, stick licensing is an effective strategy, and in certain markets, it may even be essential in order to stave off infringement suits, especially if, as is often the case, powerful businesses are involved.

Unethical outcomes are more likely when such strategies stifle innovation or impose an unfair, litigation-inhibiting bully on small, start-up ventures. It is thus not surprising that competition authorities and courts are increasingly inclined to assess the use of stick licensing as patent misuse or as an excessive restriction of competition.

K. PATENT TROLLING

Patent trolling behaviour, or "Non-Practising Entity (NPE) behaviour," refers to a patent holder who, rather than practicing or executing the patent, ostensibly fails to innovate or develop a product or service that is within the patent's claims, and instead enforces it, or threatens to enforce it, through litigation (or litigation threats) to extract a settlement or license fee from the operating companies. Typically, patent trolls engage in licensing a patent litigatively.

Patent trolls take advantages of how asymmetrical the costs of litigation are—they know that their defendant's best option is usually to settle rather than face the long and arduous skills of the litigation process. A prime example of this is the *eBay Inc. v. MercExchange, L.L.C.*[12] case where the U.S. Supreme Court restricted the ability to seek automatic injunctions when dealing with patents as a potential NPE abuse tactic.

With regard to the law, patent trolling consequences affect the equilibrium that exists between the protection of a patent and the prevention of protection abuse. Inc. law, trolling creates a void in the market and establishes a disincentive for innovation in smaller players i.e. start-ups. On the other hand, there are scholars that claim that NPEs do serve a positive purpose of patent enforcement for those inventors too weak to litigate.

[12] *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006)

COMPARATIVE ANALYSIS

Contemporary licensing practices show that the patent system works best when exclusive rights are actively used rather than just being granted. Most licensing models contain the same tension. Too much exclusivity will limit copying, but too much accessibility will stifle innovation. Licensing, therefore, is a seamless permission and governance system that alters innovation ecosystems.

Collaborative models, such as voluntary and cross-licensing, are important in the reduction of transaction costs, the avoidance of litigation, and the stimulation of cumulative innovation, especially in innovation dense industries. These models also permit firms to internally manage the externalities resulting from overlapping patent walls and foster inter-firm collaboration while protecting proprietary interests. Research in the telecommunications and semiconductor industries have confirmed the relationship between cross-licensing and increased research productivity, as well as lower levels of uncertainty in the marketplace. These findings support the notion that certain forms of strategic inter-firm cooperation are more likely to enhance innovation than the absence of cooperation altogether.

Varying compulsory and FRAND licensing are forms of regulation aimed at the market failure brought on by the patent monopolies. While compulsory licensing focuses on the affordability and accessibility of the markets that serve the public interest, like the drug markets, FRAND licensing lessens the monopolization of the standards by limiting the monopolistic ability of the SEP holder to take advantage of lock-in. These all show that patent laws are beginning to serve the goals of competition, since they are recognizing that exclusive rights are likely to stifle innovation rather than encourage it.

Patent pools and shop rights stand on the same middle ground of protecting the added value of the organization and encouraging the flow of technology. Shop rights are protector measures against rogue enrichment of the employees that allow a company to us fully exploit and market the commercially valuable internal innovations, thus, stabilizing the innovation employment relations. Especially in the technology based standards like MPEG and DVD technology, patent pools are lessening fragmentation by combining complimenting patents. If structured in line with the antitrust rules, the pools are efficient since they avoid royalty stacking, promote quicker access to the market, and thus, reaffirm that the cooperation of licensing is superior to the fragmentation of licensing in exclusivity.

On the other hand, certain licencing techniques, namely patent trolling and stick licensing, show how patent systems and their safeguards may be manipulated. These techniques advocate for the acquisition of legal "rents" and sidestep patent-related technological progress, the results of which are escalating legal costs of litigation for operational firms, especially for patent-related litigation for start-up firms and small-scale innovators. Assertive-centred patenting licencing techniques may be detrimental to the overall economy; while they may protect vested interests, they negatively affect patent-related technological advancement because they create hurdles for new entrants to the market, reduce systemic innovation by diverting attention away from economising on productive activities, and are detrimental to advocacy and promote litigation as a substitute for innovation. The non-practising entities are not selectively bad, not all patent trolls are bad; litigation will reduce, and there will be less of a negative impact on patent-related technological advancement. Patent-related technological advancement has a negative impact on the economy and the costs far outweigh the benefits of advocacy for patent trolls.

From the perspective of trade and technology, patent trolling and stick licensing has the potential to alter the patterns of global competition. Once patents are granted, firms have the ability to solidify their competitive advantage. Patent licensing allows firms to monetise their competitive and intangible assets. This leads to a competitive advantage encouraging further investment into research and development. However, on the other hand, if a firm simply exploits a patent without using the patent to promote innovation and development, they will then create an adverse situation which leads to a more harmful problem which is similar to a financial parable where the firm has then created a financial patent.

In the regulation of Intellectual Property, the framework of such regulation is central to the operational system of such regulation, and within such framework, the critical managerial issue is how to promote Patents as catalysts for the stimulation of further innovations relevant to such technology, as opposed to utilizing Patents to exclude others. The various combinations of models of licenses demonstrate that, arguably, a single 'one size fits all' type of solution to this problem is unattainable in any particular industry. The balancing act for lawmakers is how to design constructive regulation to avoid the creative destruction of useful innovations, in an effort to avoid the detrimental effects of overregulation in an attempt to control unpatented innovations. The balancing act for companies within knowledge-based economies is that what are perceived as the foremost sources of competitive differentiation are the choices/decisions

that are made within the framework of Licensing. The future of Patent Licensing models will be defined by the balance of economic and social/ethical considerations, with an emphasis on the socio-ethical justification for the system to promote technological development, rather than the unrestrained, self-serving/greedy, capitalist, opportunistic exploitation of the Patent System.