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Examining the interface between the objectives of competition policy and intellectual property

Note by the UNCTAD secretariat

Executive summary

The main objective of intellectual property is to encourage innovation and provide incentives for innovation by granting temporary protection to inventors. The objective of competition policy is to promote economic efficiency and ensure that markets function effectively for the benefit of consumers by correcting market failures. The ultimate goal of both intellectual property and competition policy is to enhance economic growth and consumer welfare. However, the exercise of intellectual property rights under certain circumstances may raise competition-related concerns. Therefore, innovation and the protection of competition in the market require a balanced approach.

The present note[1] considers the relationship between intellectual property rights and competition; elaborates on business practices in the exercise of intellectual property rights that create competition-related concerns, and addresses ways of dealing with anti-competitive practices related to intellectual property rights.

[1] This document has not been formally edited.

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I. Introduction

1. The main objective of intellectual property law is to encourage innovation and to provide incentives for innovation by granting protection to inventors that will allow them to recover research and development investments and reap the benefits of their inventions for a limited period of time. The objective of competition law is to promote efficiency and enhance economic growth and consumer welfare. Competition among rival firms creates an environment favourable to innovation, new products and better quality and, thereby, competitiveness.

2. The present note examines the interface between the objectives of competition policy and intellectual property rights. It considers exercises of intellectual property rights by businesses in ways that result in conflict with competition policy, and discusses ways in which competition authorities may deal with such cases. It provides case examples of the intersection of the exercise of intellectual property rights and/or consequences for competition and innovation in markets.

3. In the note, intellectual property rights refer to patents, registered trademarks, copyrights and registered and unregistered designs, know-how, confidential business information and other practical, non-patented information or business processes.

4. The recognition or grant of intellectual property rights to a business confers on the latter the exclusive right to produce a patented good or exercise the rights of ownership over a protected process or technical know-how for a certain period of time (for example, 20 years for a patented product). This gives the business market power, if not a monopoly, or a degree of immunity from rivalry on the market. The exercise of intellectual property rights and the protection afforded by intellectual property legislation may facilitate conduct by the intellectual property owner that would be deemed anti-competitive, tending to suppress competition, raise prices and reduce output and quality. However, competition law and policy, particularly in the developing world, strives to make markets contestable, with the ultimate objective of enhancing consumer welfare.

5. Since intellectual property gives innovators market power and competition policy aims at, among other goals, preventing or eliminating the abuse of market power, policy objectives in both areas may be contradictory if intellectual property rights holders engage in abusive business practices in terms of restricting competition and preventing rivalry and market entry. However, both intellectual property and competition policies aim to enhance economic growth and consumer welfare through innovation and competition. There may be concerns if innovation and competition are affected by the way intellectual property rights are exercised if it results in possible negative consequences for consumers.

6. In addition, in developing countries, there may be a lack of knowledge of the types of technology that may be granted the same protection as that afforded under patent or trademark legislation. For example, certain identifiable business processes, significant and/or practical farming and agricultural knowledge or other traditional knowledge used in developing countries may qualify for the same types of intellectual property protection as a registered patent or trademark. Such types of know-how, such as of plant-breeding and agro-farming methods, should therefore be granted intellectual property protection and should be subject to regulation by competition authorities.

II. The relationship between intellectual property rights and competition law and policy

7. The interface between intellectual property rights and competition law may lead to two distinct results, and it is necessary for a competition authority to seek the appropriate balance of outcomes between them.

8. First, the exercise of intellectual property rights can result in various degrees of exclusivity. The owner of a patent (patentee) may decide to produce and sell a patented product to the exclusion of all others, leading to a monopoly. In another scenario, a patentee may, due to a lack of resources to produce, grant to another business or trader (licensee) the right to produce and sell on terms and conditions that may result in the restriction of competition. For example, upon the grant of a licence, a patentee or licensor may agree not to sell the patented product in the licensee's territory, may impose export bans to other regions, a maximum-quantities production clause, a minimum selling price, a penalty clause with the object of reducing demand from rivals or may require the licensee to agree to buy additional technology or products from the patentee that are not related to the licensed patent. In addition, bargaining strength may be held by a licensee that is a single powerful company while the patentee may be a single inventor, such as a scenario involving Google or Microsoft imposing strict terms on an individual software writer or technology application inventor who operates from a weak bargaining position. Such exclusive arrangements may lead to market foreclosure, and there is potential for competition-related concerns. In other scenarios, intellectual property rights may be abused by their holders through practices aimed at extending the period of protection initially granted by a patent. Situations where the very existence of intellectual property rights creates an insurmountable obstacle or barrier to entry may lead to concerns with the intellectual property itself. Such practices may hinder competition in the market and deter entry by newcomers, which might be innovative but too small to be able to deal with large multinational patent owners. The exercise of intellectual property rights in such an abusive manner is diametrically opposed to the most obvious goal of competition law and policy which aims at promoting rivalry, market access, open use and open markets.

9. Second, the exercise of intellectual property rights can lead to the creation of innovative processes and products that then provide for new products and open new markets. The recoupment of profits as a result of the grant of intellectual property rights and the exercise of such rights could lead to further investments in new or complementary product markets and even further innovations and the generation of dynamic efficiencies. For example, the creation of cellular technology and the Internet has led to the growth of diverse consumer products and services, such M-Pesa in Kenya. The exercise of intellectual property rights in this fashion enhances consumer welfare, as new products are developed to widen the range of products available at reasonable prices and quantities to consumers, providing them with new products and services, greater access and wider choice in both products and prices.

10. The tension between intellectual property and competition policies and its effect on economic development cannot be underestimated. The World Intellectual Property Organization (2016) states:

> There is a close link between patent rights and competition, which, in simple terms, can be characterized by two factors: on the one hand, patent laws aim to prevent the copying or imitation of patented goods and thus complement competition policies in that they contribute to a fair market behaviour. On the other hand, competition laws may limit patent rights in that patent holders may be barred from abusing their rights. In sum, experience shows that too high or too low protection of both patents and competition may lead to trade distortions. A balance has thus to be found between competition policy and patent rights, and

this balance must achieve the goal of preventing abuses of patent rights, without annulling the reward provided for by the patent system when appropriately used.

It is important to strike the right balance between intellectual property protection and competition, to ensure that both fair market operation and innovation are encouraged. For this to occur, both intellectual property and competition agencies need to adopt a balanced approach to intellectual property protection and competition in their legislative frameworks and the enforcement of relevant laws.

III. Intellectual property rights practices raising competition-related concerns

11. This chapter considers business practices in the acquisition or use of intellectual property rights, focusing on patents and licensing practices that raise competition-related concerns, including intra-technology restrictions, settlements between producers of pharmaceutical products that aim to block or delay market entry by generic drugs and anti-competitive behaviour during the standard-setting processes of firms that are owners of standard-essential patents. Mergers and acquisitions involving large firms in intellectual property-intensive sectors, such as pharmaceuticals, aerospace, chemicals and software, may also raise competition-related concerns that require appropriate remedies.

A. Intra-technology restrictions

12. An intra-technology restriction is imposed by a patentee or licensee in a licence agreement and aims to minimize rivalry or freeriding. Patent owners intend to recover high research and development costs through such restrictions, which can constrain businesses with weak bargaining positions. Typically, intra-technology restrictions are agreed upon by licensees because the price of acquiring a licence is not worth paying unless the licensee is guaranteed protection from technology competition, that is, from rivalry by other licensees. Some intra-technology restrictions may result in a restriction of trade or limitation of a licensee's sphere of operation to a certain region or group of customers or a single choice of supplier. Intra-technology restrictions that impose conditions on a licensee or patentee but do not limit competition in the market are not a concern for competition authorities, while restrictions that raise competition-related concerns may include the imposition of one or more of the following conditions in a licence contract:

(a) Requirement to commit to a long-term contract such that alternative arrangements with rival technology licensors would become financially unfeasible;

(b) Non-compete clause that forbids the licensee to compete or to handle products that compete with that of the patentee;

(c) Geographic or territorial restriction or ban preventing the licensee from selling in or into the licensed geographic region, area or territory;

(d) Maximum-quantities clause that limits the quantity to be produced by a licensee to the level of anticipated demand expected in a geographic region, area or territory;

(e) Requirement to pay royalties before production begins or to extend royalty payments beyond the patent expiration date, or imposition of a demand for non-licence and non-product related royalty payments;

(f) Limitation-of-use clause, limiting the use of the patent to a certain scientific field, for example, whereby the licensee is allowed to use the patent to develop medicinal or pharmaceutical products or processes but not industrial products or processes;

(g) Imposition of a minimum retail price, fixing terms and conditions that could directly impact the selling price of the product or service;

(h) Grant of veto powers over the grant of future licences to the licensee;

(i) Imposition of penalty clauses, whereby the patentee or licensee has to pay a cost if it does business with another firm;

(j) Imposition of grant-back clauses, whereby the licensee is required to give back to the licensor the right to use any patented improvement that the licensee contributes to the original patented invention;

(k) Exclusive grant-back clauses, which provide the licensor an exclusive right to use or sublicense any patented improvements while the licensee is given a non-exclusive right to use the patented improvements;

(l) Exclusive tie-in and buying clause whereby the licensee is required to acquire all technology or products solely from the patentee, including unpatented materials as part of a tie-in or other mandatory packaged licensing.

13. With regard to (k) and (l), article 40 of the Agreement on Trade-related Aspects of Intellectual Property Rights of the World Trade Organization refers to exclusive grant-back conditions and coercive package licensing as examples of practices with possible anti-competitive effects in the relevant market. Exclusive grant-back arrangements may have anti-competitive effects since improvements made to a certain technology by licensees may be accumulated by the original patent owner, providing market power that may be abused.

B. Refusal to license

14. Despite the fact that there is no legal obligation for intellectual property right holders to license their patents, refusal to license intellectual property rights may constitute abuse if the exercise of such rights involves abusive conduct, similar to a refusal to deal in a competition case. In European Union competition law enforcement, for example, a unilateral refusal to license is considered abusive in exceptional circumstances in which access is indispensable and refusal to license prevents the emergence of a new product for which there is potential consumer demand (such as in the Magill case) and also excludes all competition in secondary markets. In recent cases, European Union case law has included the consideration of another factor, namely, consumer harm likely to be caused by refusal. In a case related to Microsoft, the European Commission considered that a refusal to supply the necessary interoperability information to its competitors had the effect of reducing the incentives of its competitors to innovate, thereby limiting consumer choice. The then-Court of First Instance upheld the Commission decision in 2007, finding that consumer injury might arise not only when manufacturing of new products was limited but also when technical development was restricted. The Court interpreted consumer harm broadly and noted that consumer choice would be affected if rival products could not compete on equal terms in the market. Lianos and Dreyfuss (2013) note that United States of America antitrust law is permissive of conduct involving unilateral refusal to license even in situations in which a patent owner has a dominant position in the relevant market.

C. Patents, standard setting and competition

15. A technical standard is an established norm or requirement for a technical system that establishes uniform engineering or technical criteria, methods, process and practices. There is no doubt about the benefits of technical standards, especially for consumers. Standards may increase efficiency, innovation and consumer choice, and enhance public health and safety. They also allow interoperability between products, which makes products more valuable for consumers. Enterprises can collaborate to establish industry standards through standard-setting organizations. Competition concerns may arise if standards agreed upon involve intellectual property rights, such as a patent.

16. Companies generally wish to have their technologies identified as standard-essential, as such identification is likely to increase demand for their technology. The competitive risk is that standard-essential technologies may be licensed for prices that do not reflect market value, as they benefit from being recognized as standard-essential. The owner of a standard-essential patent may wish to take advantage of this situation by setting higher royalties or imposing more favourable licensing terms (for the patent owner) on firms that intend to implement the standard than would have existed prior to inclusion of the patent in an adopted standard; in competition terminology, this is called hold-up. Patent hold-up may threaten the diffusion of valuable standards and undermine the standard-setting process, distort incentives for innovation and result in higher prices and limited output for consumers. To prevent such abuse, many standard-setting organizations require participants to disclose the existence of intellectual property rights that may be infringed due to compliance with a standard, and to commit to licensing on fair, reasonable and non-discriminatory terms. An example of a hold-up scenario is provided in box 1.

Box 1

China National Development and Reform Commission decision in Qualcomm case

In March 2015, the China National Development and Reform Commission published its decision in the Qualcomm case, which resulted in a $975 million fine against Qualcomm for alleged violations of anti-monopoly law. The decision reveals the views of the Commission regarding intellectual property licensing practices involving standard-essential patents.

The Commission determined that Qualcomm held a dominant market position for its standard-essential patents for code division multiple access, wideband code division multiple access and long-term evolution wireless communications. In addition to its dominant market position for its patents, there were barriers to entry by other market actors, including switching costs. The Commission found that Qualcomm also held a dominant market position in three baseband chip markets, namely for code division multiple access baseband chips, wideband code division multiple access baseband chips and long-term evolution baseband chips. The Commission found that Qualcomm had abused its market position in these markets by engaging in some of the practices listed in chapter III (A) in the present note, for example by charging excessive royalties. In addition, Qualcomm had engaged in portfolio licensing that included expired patents in the portfolio, and Qualcomm had required some licensees to provide royalty-free grant-back licences for relevant wireless communications patents that were not standard-essential patents. The Commission noted that grant-backs could discourage licensees from technical innovation and restrict or eliminate market competition. Finally, Qualcomm had included in its licence portfolio non-standard-essential patents that some licensees did not wish to license. Qualcomm had unreasonably bundled the sale of non-standard-essential patents with standard-essential patents, at a constant licensing rate. According to the Commission, such bundling restricted competition in the market for non-standard-essential patents, hampered innovation and harmed consumers. Qualcomm had also imposed a no-challenge requirement on the sale of baseband chips, requiring purchasers of such chips to enter into an agreement that provided that purchasers would not challenge the licensing agreement.

The Commission decided that Qualcomm should cease the identified practices and should provide patent lists, should not bundle non-standard-essential patents with standard-essential patents without reasonable cause and should not require royalties for expired patents or grant-backs without consideration or require the acceptance of royalties for expired patents, grant-backs without consideration or no-challenge clauses as conditions for supplying baseband chips. The Commission imposed a fine equal to 8 per cent of Qualcomm’s revenue in China in 2013 (¥6.088 billion ($975 million)).

Source: Mondaq (2015).

17. Royalty payments for standard-essential patents that are either invalid or not used may unduly increase production costs, which in turn may lead to higher prices for consumers. For example, in one case, Motorola sought and enforced an injunction that led Apple to renounce its legitimate rights to challenge the validity and infringement of Motorola’s standard-essential patents. The European Commission found that Motorola’s seeking and enforcement of injunctions against a willing licensee – Apple – on the basis of one of its standard-essential patents, violated European Union competition rules, and also reached a similar conclusion in a case involving Samsung. In both cases, the Commission concluded that if standard-essential patent holders had committed to licensing their standard-essential patents and did so on fair, reasonable and non-discriminatory terms, it was anti-competitive to seek to exclude competitors from the market by seeking injunctions on the basis of standard-essential patents if the licensee was willing to take a licence on fair, reasonable and non-discriminatory terms. In such situations, seeking injunctions might distort licensing negotiations and lead to unfair licensing terms, thereby adversely affecting consumer choice and prices (European Commission, 2014a).

18. Recent research, however, points to possible opportunistic behaviour by prospective licensees. In the absence of available injunctions, a prospective licensee may hold up a patent holder, as the latter can neither seek an injunction nor refuse to license without violating competition law; this phenomenon is known as reverse hold-up, whereby a prospective licensee is able to drive the negotiated royalty rate below its value under fair, reasonable and non-discriminatory terms.

D. Standardization, patent pools and competition

19. Many standards are based on complementary technology, which is often developed by different firms. Standardization and patent pools are therefore related. Standards may be important for the wide adoption of new technologies in the market yet may also create a barrier to entry to a relevant market, as switching from one standard to another is either not possible or only possible at an unreasonable cost. A patent pool can address the need for standardization if patents relevant to a standard are owned by more than one entity. A patent pool enables participating patentees to use the pooled patents, provides a standard licence for pooled patents to licensees that are not members of the pool and allocates to each member of the pool a portion of the licensing fees in accordance with the agreement. Many standardization cases have been investigated by competition authorities and, in most, no violation of competition rules was found. According to the United States Department of Justice, the analysis of patent pools under competition law involves the following criteria:

(a) Patents clearly identified and available for licensing individually, as well as in a package as chosen by a potential licensee;

(b) Patents are valid and not expired;

(c) Limitation to patents that are technically essential and which, by definition, are not competing, and use of an independent expert to assess whether a patent is essential;

(d) Patent pool has a limited duration;

(e) Royalties proposed by the arrangements are reasonable;

(f) Availability of worldwide non-exclusive licences;

(g) Freedom of licensees to develop and use alternative patents;

(h) Requirement that licensees grant back non-exclusive, non-discriminatory licences to use patents that are essential to comply with the technology;

(i) Requirement that pool participants not collude on prices outside the scope of the pool, such as on downstream products.

20. For example, the European Commission investigated and approved a DVD-related standardization case, finding that the patent pool had promoted technical and economic progress by allowing efficient introduction of the technology. The Commission considered in its analysis the fact that the patent pool had been composed of essential patents and the licensing agreement provided for a non-exclusive and non-discriminatory licence.

E. Pay-for-delay settlements and competition

21. Pay-for-delay settlements are a common practice in the pharmaceuticals industry, in which there is significant competition, and rivalry from generic drug producers threatens the high profits earned by original brand-name producers. Pay-for-delay settlements are agreements whereby brand-name drug manufacturers pay generic drug producers that challenge their patents to delay the introduction of lower-cost generic drugs. Such deals extend the protection granted to the original brand-name producers, thereby delaying competition and causing harm to consumers in terms of higher prices for brand-name drugs for a longer period of time. Many competition authorities attempt to stop this anti-competitive practice. A landmark United States Supreme Court decision in 2013 paved the way for scrutiny of pay-for-delay agreements in the pharmaceuticals industry in the United States, and is a good example for other jurisdictions (see box 2).

Box 2
United States Supreme Court: Federal Trade Commission v Actavis, 2013

In 2009, the Federal Trade Commission filed a complaint challenging an agreement between Solvay Pharmaceuticals and two generic drug manufacturers, in which Solvay had paid for the delayed release of generic equivalents to one of its brand-name drugs. The Commission stated that Solvay had paid the companies to prevent them from acquiring patents for their competing generic drugs and to delay entry for a nine-year period until 2015. The Court of Appeals for the Eleventh Circuit dismissed the complaint and held that anti-competitive effects within the scope of patent protection were per se legal under antitrust laws. In 2012, the Commission appealed in the Supreme Court and, in 2013, the Supreme Court reversed the district court’s decision and held that pay-for-delay agreements between this brand and generic drug companies were subject to antitrust scrutiny.

Regarding the Supreme Court decision, the Chair of the Commission stated that it was “a significant victory for American consumers, American taxpayers and free markets. The Court has made it clear that pay-for-delay agreements between brand and generic drug companies are subject to antitrust scrutiny, and it has rejected the attempt by brand-name and generic companies to effectively immunize these agreements from the antitrust laws. With this finding, the Court has taken a big step toward addressing a problem that has cost Americans $3.5 billion a year in higher drug prices".

Sources: Federal Trade Commission (2013a); Federal Trade Commission (2013b).

F. Non-cash patent settlements and competition

22. Non-cash patent settlements, also known as reverse payments, have long been a subject of discussion in competition circles, especially since the enactment of the Drug Price Competition and Patent Term Restoration Act in the United States, referred to as the Hatch-Waxman Act, in 1984. The Act provides for an economic incentive for manufacturers of generic medicines to contest and challenge patentees of original medicines. It provides a statutory platform for the Food and Drug Administration to expedite approval for generic medicines.

23. A case law in this area, arising from the Actavis case, is evolving. The issue of reverse payments has, over time, widened the split between the appellate circuits, yet the Supreme Court ruling has enforced the use of rule of reason principle in such cases. This principle was applied by the California Supreme Court in its decisions on Cipro cases I and II, guided by its own methods of analysis. The Court upheld subject patent settlements to competition scrutiny to avoid collusive practices between original and generic drug manufacturers, to allow for analyses of effects on competition in the market. The Court detailed the structure of the rule of reason as applied to patent settlements and listed four elements required to challenge a reverse payment agreement, namely, the settlement includes a limit on the settling generic challenger's entry into the market; the settlement includes cash or equivalent financial consideration flowing from the brand to the generic challenger; and the consideration exceeds the value of goods and services other than any delay in market entry provided by the generic challenger to the brand, as well as the brand's expected remaining litigation costs absent settlement. In its analysis, including of the need to include competition considerations in cases related to reverse payments, the Court noted that payments went beyond cash transfers and might take other forms of exchange involving non-quantifiable value assets that might be geared to eliminating competition, and therefore called for caution in evaluating such settlements (Wallace, 2015).

G. Mergers and acquisitions with an intellectual property rights dimension

24. Mergers and acquisitions are a cross-cutting area of competition law enforcement touching on many areas related to business transactions. Similarly, developments in technology have given rise to mergers and acquisitions with an intellectual property dimension. In mergers and acquisitions, especially in the technology sector, intellectual property issues more often than not feature prominently in decisions to merge with or acquire the interests of another company. It is therefore necessary for an acquiring party to examine the selling company's patents, copyrights, licences and trademarks and any other intellectual property rights related to the transaction.

25. Competition agencies, on the other hand, must endorse the intellectual property-related aspects of a merger or acquisition application and, at the same time, legal experts are expected to understand the intellectual property rights addressed in individual cases. This may call for further training to equip lawyers, especially in small agencies – who may not be in a position to hire external skilled resources in this area – to enable them to diligently deal with intellectual property-related cases. This area of competition law enforcement has generated some important cases in both developed and emerging

economies, such as the Google-Motorola Mobility case handled by the European Commission detailed in box 3.

Box 3

European Commission decision in Google-Motorola Mobility case, 2012

This case, based on article 6 (1) (b) of Council Regulation No. 139/2004, was based on a notification by Google to the Commission related to acquiring sole control over Motorola Mobility by way of shares purchase. The notification was issued based on the significant presence of the parties to the proposed transaction in the European Union-wide market, each commanding a turnover in excess of €250 million. Google is a provider of Internet search and online advertising and other online services and software products, and derives its main revenue from online advertising services and mobile online services, in that order. Google also develops and makes available to original equipment manufacturers of smart mobile devices an open-source mobile operating system known as Android. Motorola supplies television set-up boxes, end-to-end video solutions, cable broadband access solutions and mobile devices, including smart telephones.

The Commission analysed the transaction from various angles, including the definition of relevant market. No horizontally affected markets were identified, while vertical relationships between Google – as a supplier of the open source Android operating system and online services – and Motorola – as a supplier of mobile devices and holder of crucial intellectual property rights for mobile devices – were identified as areas for analysis. With regard to standard-essential patents, the Commission was of the view that such patents used in relation to smart mobile devices were necessary and could not be excluded for purposes of access to the standard in this case. In cases where non-standard-essential patents were used in mobile operating systems and might bring additional value, they were not essential for access to a standard by definition and therefore might be considered on a case-by-case basis. The Commission concluded that there were no significant market foreclosure concerns, as the market was competitive and developing, and competing original equipment manufacturers would have alternatives available. The Commission noted that Google had issued a legally binding and irrevocable letter to various standard-setting organizations regarding the acquisition of Motorola standard-essential patents. The commitment was to apply fair, reasonable and non-discriminatory terms in the context of standardization and to honour Motorola's pre-existing commitment to license its standard-essential patents at a maximum per unit royalty rate of 2.25 per cent of the net selling price with regard to the relevant end product, subject to "off-sets of any cross-licences or other considerations". The Commission ruled out Google's ability to use Motorola's standard-essential patents to significantly impede competition in the market due the existence of many other market participants with cross-licences with Motorola. Contract law would prohibit any interference in the market by Google on the terms of Motorola licences. Finally, the Commission considered that the transaction did not "raise serious doubts as to its compatibility with internal markets regarding the mobile operating systems used as key inputs into smart mobile devices".

Source: European Commission (2012).

IV. Addressing anti-competitive practices related to intellectual property rights

26. As noted, there is a need to strike the right balance between intellectual property protection and competition to promote both competition and innovation, and there are a few ways to achieve this. Governments may set up from the beginning, or reform, intellectual property rights legislation and patent systems to leave minimum room for abuse by intellectual property rights holders that results in foreclosing markets, preventing access by rival firms and, eventually, discouraging innovation and harming consumers. At the international level, intellectual property rights are governed by the Agreement on Trade-related Aspects of Intellectual Property Rights of the World Trade Organization, article 40 of which states that “some licensing practices or conditions pertaining to intellectual property rights which restrain competition may have adverse effects on trade and may impede the transfer and dissemination of technology”. This provision allows members to specify in legislation licensing practices or conditions that may constitute an abuse of intellectual property rights with an adverse effect on competition in the relevant market. Governments may thus adopt appropriate measures to prevent or control such practices.

A. Intellectual property and competition policies

27. Developing countries may adopt policies that have a balanced approach, allowing businesses to recoup their research and development investments while ensuring that the market remains contestable. A priority policy should be to ensure that intellectual property rights are not exercised in an abusive manner and that the exercise of such rights does not prevent the development of complementary or substitute product markets. Furthermore, countries need to ensure that their patent systems are balanced and do not leave space for abusive patent acquisitions or abusive extensions of patent protection beyond legally and economically legitimate periods.

B. Competition legislation governing intellectual property rights

28. Another way to address abusive exercises of intellectual property rights, possibly with a clearer message to the holders of such rights, is to include additional provisions in competition legislation expressly providing for the regulation of the exercise of such rights. Such provisions may be articulated in competition law or in subsidiary regulations, and may include the following:

(a) Scope. Competition law may expressly provide that the rules of competition as provided for under the law shall apply in their entirety to the exercise of intellectual property rights;

(b) Definition. Competition law may extend the definition of intellectual property rights for the purpose of enabling the application of the same law to know-how and certain unregistered businesses processes and not only to copyrights and related rights, trademarks, geographical indications, industrial designs and patents. The law may also expressly include in its definitions that agreements as assessed in the law should include any formal or informal arrangements defining the terms upon which a patent, registered design or process or other know-how may be licensed by the owner of intellectual property rights;

(c) Prohibitions. Competition law may expressly provide a list of conditions that, if met, would lead to a finding that an intra-technology restriction had gone beyond the limits of legal protection. Alternatively, legislation may state when a licensing arrangement is likely to adversely affect production input, supply, output, price and quality. Patentees and other intellectual property owners have developed a practice of filing fraudulent or baseless patent infringement lawsuits to deter entry and to facilitate collusion on intellectual property rights among competing technology owners. Competition legislation may be used to impose an absolute ban on the use of intellectual property licensing agreements among competitors as a means of settling lawsuits or deterring entry into markets.

29. Competition authorities may develop guidelines for competition cases involving intellectual property, which may detail the circumstances in which intra-technology restrictions would be considered anti-competitive and may make it clear at the outset that a legitimate exercise of intellectual property rights is not an abuse of dominance in itself. However, if a patentee seeks to extend a position of dominance beyond the protection provided by law, via anti-competitive means, such a practice is likely to be subject to infringement proceedings by a competition authority. For example, guidelines may explain the circumstances in which a restriction could foreclose access to production inputs, raise rival costs, lead to a reduction in outputs, foreclose access to the market by potential investors in existing or substitute intellectual property or raise prices. Guidelines may also detail when intra-technology restrictions would be considered pro-competitive.

30. As there are certain dynamic efficiencies that may be attained by granting intellectual property rights, such as innovation and technological advances, any guidelines should recognize the right of technology investors and patent owners to be rewarded for their investments and the need to encourage further research and development activities. Guidelines may further explain the conditions under which a licensing agreement may be considered likely to promote investment in innovation and access to and widespread use of technology; promote the creation of, or entry into, new markets; or reduce the uncertainty of demand. They may also detail instances in which grant-back, patent-pooling, cross-licensing or royalty-free exchange licensing arrangements may be viewed as promotion.

31. In addition, a competition authority may develop regulations providing a non-exhaustive list of exemptions to certain intellectual property agreements or unilateral conduct. For example, regulations may provide exemptions for arrangements or agreements in which there is a sale or transfer of intellectual property rights but that carry no risk of creating, maintaining or enhancing a dominant position or of eliminating potential rivals and new technology from being developed. Such regulations would place the burden of proof on a patent holder and licensee (the parties to the agreement) to prove or establish that the no-risk features had been met, in order to claim an exemption from the competition authority. Exemptions may also be granted for intellectual property rights licensing arrangements that encourage innovation and foster dynamic efficiencies and technical and economic development, and the burden of proving these features of an agreement should be imposed on exemption claimants. An example of licensing regulation is provided in box 4.

Box 4

Japan Anti-Monopoly Act and licensing screening

Japan adopted its competition law, the Anti-Monopoly Act, in 1947. Article 6 of the Acts states that “an enterprise must not enter into an international agreement or an international contract which contains such matters as fall under unreasonable restraint of trade or unfair trade practices”. The Japan licensing regulation was based on this provision and the Japan Fair Trade Commission screened and regulated international licensing contracts between foreign and domestic firms, up to 1997, with fluctuation from ex ante control to an ex post review approach. The Commission mainly focused on the control of grant-back clauses in order to encourage local innovation. A policy objective until the 1990s was to use competition law to strengthen the bargaining position of licensees vis-à-vis licensing companies and to encourage domestic innovation and improvements based on original technology by Japanese firms.

Source: Hiroko (2015).

C. Competition law enforcement

32. Competition authorities may prevent abusive exercises of intellectual property rights by enforcing rules of competition in order to make markets contestable. If intra-technology restrictions are imposed unilaterally by a dominant enterprise or via an agreement, leading to anti-competitive effects in a market, an authority may enforce provisions of competition law prohibiting the abuse of dominance or dealing with anti-competitive agreements. The same standard of assessment and analysis as that applicable to unilateral and coordinated conduct would apply in such intellectual property rights-related cases.

33. Competition authorities may have a role in and should aim at, first, minimizing potential conflicts between intellectual property rights and competition law, with the object of ensuring that markets are not completely foreclosed and there is no harm to consumers resulting from the exercise of intellectual property rights. In this regard, authorities may need to focus on ensuring that intra-technology restrictions, whether imposed by a patentee or licensee, do not result in a restriction of competition in the market or, most importantly, in depressed or retarded levels of consumer welfare. Similarly, practices such as a refusal to license might require close competition-related scrutiny to prevent anti-competitive consequences if they may be avoided. Second, authorities must investigate pay-for-delay or non-cash patent settlements to discourage collusive arrangements between brand-name and generic pharmaceuticals companies, which hamper competition by delaying the entry of cheaper generic drugs to the market, resulting in higher prices paid by consumers and taxpayers for brand-name medicines. Third, authorities must analyse the potential anti-competitive effects of mergers and acquisitions that involve intellectual property. Finally, they need to design suitable remedies, which may require the licensing of patents or trademarks to avoid eliminating or lessening competition.

34. Overall, competition authorities should adopt a balanced approach to competition law enforcement and intellectual property protection. They should keep in mind that even if the exercise of intellectual property rights by a patentee leads to a monopoly, there may still be a possibility for the creation of new markets or products or for innovation.

D. Regulating know-how

35. In addition to regulating de jure intellectual property rights, competition authorities may choose to recognize that, especially in the developing world, there is a significant level of use of undisclosed yet identifiable agricultural and medical and plant-breeding and farming-related knowledge and processes, which may be granted intellectual property protection and should be included in the scope of competition law. Such traditional knowledge or know-how may also be the subject of contractual conditions and restrictions among businesses even if they are imposed through informal arrangements. In such contexts, individual medical practitioners, plant-breeders or farmers may be the inventors or owners of know-how but may operate under large corporations that impose long-term contracts with constraining and highly restrictive clauses. Such restrictions may, in practice, have the same impact that, for example, contracts by Microsoft have had on individual software developers, and, as such, require the scrutiny of competition authorities.

Exclusive and exclusionary use of know-how might limit competition in a market. The use of know-how in such cases may therefore be assessed in the same way as the use of other intellectual property rights. Competition authorities need to examine arrangements that restrict the sale, transfer or licensing of know-how in a manner that limits competition in a market. Competition legislation in developing countries should therefore define know-how and other non-typical intellectual property as subject to intellectual property protection and the granting of intellectual property rights, and thus as falling under the scope of competition law.

E. Other legislative measures

36. Governments may adopt other appropriate laws and regulations besides competition legislation to achieve a balance between intellectual property protection and competition. In the United States, the Hatch-Waxman Act was adopted to ensure that such a balance is respected. Another example of United States legislation is the bill to stop pay-for-delay settlements in the pharmaceuticals industry (that delay the entry of cheaper generic drugs into the market to compete with higher-priced brand-name drugs) that, once passed, will prohibit such settlements (see box 5).

Box 5

United States: Bill to stop pay-for-delay settlements in the pharmaceuticals industry

A Federal Trade Commission report in December 2014 identified 29 potential pay-for-delay settlements involving 21 brand-name drugs with a combined United States sale of about $4.3 billion. The report found that patent settlements that included a payment delayed generic drug entry by 17 months longer on average than those that did not include a payment. According to the Commission, pay-for-delay deals cost American consumers an additional $3.5 billion annually by delaying the entry of cheaper generic drugs, and added to the federal deficit. The Congressional Budget Office estimated that legislation restricting such agreements would reduce the debt by almost $5 billion over the next decade.

In order to stop pay-for-delay deals in the pharmaceuticals industry, a Preserve Access to Affordable Generics Act was reintroduced to Congress in September 2015. The original act had been introduced in 2009. The legislation would make it illegal for brand-name pharmaceuticals companies to use anti-competitive payments to delay the entry of generic drugs into the market. The legislation would allow drug producers to prove their deals were not anti-competitive, and would authorize the Federal Trade Commission to initiate a proceeding against parties to any agreement resolving or settling a patent infringement claim in connection with the sale of a drug. Penalties would include monetary fines and loss of the 180-day exclusivity period for the marketing of a generic drug.

Sources: Federal Trade Commission (2012); Generics and Biosimilars Initiative (2015).

F. Government agency coordination in regulating intellectual property rights

37. Competition authorities should advocate an appropriate balance between intellectual property protection and competition with regard to relevant government agencies. This may be done through inter-agency coordination and cooperation, for example, based on arrangements such as memorandums of understanding with other government regulators or departments responsible for intellectual property regulation, such as patent offices, national standard-setting agencies and food and drug approving agencies. Along with the authority,

such agencies may develop further policies, legislation and guidelines on regulating and enforcing intellectual property rights, to prevent unwarranted, frivolous or overly broad patents or otherwise unjustified or unfair registrations of designs.

V. Conclusion

38. In order to achieve the goals of innovation, competitive markets and, eventually, economic growth, there is a need for a balanced approach to intellectual property protection and competition. Regulatory authorities should ensure that intellectual property rights are not exercised in a way that hampers innovation, restricts competition in the market or deteriorates consumer welfare.

39. Competition authorities have a significant role in ensuring that the exercise of intellectual property rights is not abusive and does not produce anti-competitive results. There are various ways in which authorities may deal with abusive practices in the area of intellectual property rights. First, the exercise of intellectual property rights may be addressed in competition legislation. This requires competition law to apply to such practices in its entirety. The law should make this explicit in its provisions on the scope of application. Second, intellectual property-related competition cases may be addressed through prohibition and exemption provisions in certain intellectual property agreements and/or arrangements. Third, authorities may develop supplementary guidelines explaining the circumstances in which licensing agreements may be anti-competitive. Competition law enforcement may be a strong tool in dealing with abusive exercises of intellectual property rights, refusal to license cases, pay-for-delay settlements and anti-competitive conditions imposed by patentees or licensees in licensing agreements. Last but not least, authorities may also advocate and coordinate intellectual property rights policies with other relevant agencies to prevent unjustified grants of intellectual property protection.

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