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Discretionary Injunctive Relief for Patent Infringement: Partial Remuneration After EBay and Its Implications for the Developing World

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Science and Technology in International Economic Law
Balancing Competing Interests

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12 Discretionary injunctive relief for patent infringement
Partial remuneration after eBay and its implications for the developing world

Richard Li-dar Wang

12.1 Introduction: automatic injunctive relief and the eBay decision
The right to exclude unauthorized use has been characterized as a key component of the owner's rights on property. In the same vein, with regard to remedies for property encroachment, injunctive relief is commonly considered an extension of the owner's right to exclude and is granted almost automatically by the courts when the infringement of the property is vindicated. Intellectual property, including patents, is not an exception in this respect. In the United States, the Court of Appeals for the Federal Circuit — the court that possesses the exclusive jurisdiction to hear patent law cases at the appellate level since 1982 — explicitly held in 1985 that injunctive relief shall be granted as a rule if the disputed patents were infringed, valid and enforceable. Even before the establishment of the court, it was not uncommon for the district courts to grant injunctions in summary judgments when the infringement and validity of the patents at suit were founded.

The rule of automatic injunctive relief for patent infringement was consistently maintained for a couple of decades. Somewhat surprisingly, the Supreme Court of the United States overturned that rule in its eBay decision of 2006. In that case, the Court held that rather than invariably granted, injunctive relief shall be determined at the court's sound discretion and adjudicated on the basis of the four traditional factors in equity. The invention at suit was a business method for operating electronic marketplaces, which is a system for creating or receiving digital images and textual description of a product, and incorporating the two into a data record for presenting the product on the electronic marketplace, and generating an identification code to track that product. eBay Inc and its subsidiary Half.com, Inc operated popular Internet marketplaces, allowing individual sellers to post products and sell them online through auction or at fixed prices. The patentee, MerExchange,
development (‘R&D’) investment that the inventor contributes to the relevant state of the art. In other words, the patent system should refrain from rewarding inventors beyond the extent that he or she benefits the public.  

Additionally, Ted Sichelman points out that patents should not be considered as a set of private rights that are created to reward the labour of the inventor or the social value she brings about through the invention. The patent system would be better conceived as a public regulatory scheme. Every aspect of the system should closely track the magnitude of incentive necessary for inducing the specific invention, which could be approximately measured by the R&D cost. Remuneration beyond such a level, even just restoring the patentee to the status quo before the infringement, will be excessive and inadequate. Such supra-optimal remedies would generate redundant patent racing, which may bring about unnecessary deadweight loss and R&D duplication, which therefore is not preferable.

In light of the theoretical reflection in the post-eBay era, the function of the liability rule is no longer limited to alleviating transaction costs. The rule is now instrumental in adjusting the strength of patent protection, so as to avoid over-incentivizing specific types of innovation. Particularly, the denial of injunctive relief could be used to eliminate excessive protection towards certain inventions and bring it back on track with the original goal of the patent system.

The primary goal of the patent system is to incentivize innovation, not to recognize natural rights as we usually do as to real and personal properties. The public needs to provide a substantial amount of benefits to induce and encourage the R&D endeavours of the inventors, but such incentive need not be up to the extent that equates to the value of the invention. Positive externalities are common and pervasive, even in real and personal properties, but the property law has never intended to internalize completely those benefits to the owners. In a competitive market, as a matter of fact, we only reimburse suppliers the marginal costs they spend in producing the goods or services. If that condition has been met, namely the market price set at the point where MR = MC, then there would be no undersupply of goods or services, and allocative efficiency could be achieved.

In the patent field, the law just provides exclusive rights for a limited period of time. When the patent term expires, the claimed invention falls back to the public domain and is eternally open to everyone. The protection that the patent system affords to the claimed invention simply covers a portion of its utility value to the public. In essence, unlike real or personal properties, full reimbursement to inventors has never been established as a goal or a reality in the patent world.

Unpatentable subject matters could serve as a good example to illustrate the relationship between patent protection and the R&D cost of the claimed invention. The patent law does not protect certain types of major discovery, such as abstract ideas, algorithms, other laws of nature and physical phenomena, no matter how valuable they are to the human being or how many endeavours it takes to achieve those accomplishments. The reason behind their non-patentability lies either in that the patent protection for such discoveries costs the public too much, or in that no considerable incentive seems necessary for sustaining supply of this type of innovation. This case is a salient instance of partial remuneration in the patent system.

12.4 Proper use of discretionary injunctive relief: from partial remuneration to layered remedies

Injunctive relief is a prominent feature of the property rule that constructs the basic framework of property law. Property rights are typical private rights. According to John Locke, property is a natural right of human beings, which should be kept whole in facing possible harms. If a property right is unfortunately infringed, the right to exclude and the injunctive remedy play a critical role in preventing further encroachment and securing full remuneration for the owner.

As for patents, injunctive relief could cut off the sales of alleged infringing products on the market, and is hence a powerful threat to alleged infringers in negotiation for licensing or infringement settlement. For multi-component products where the cost of switching infringing components to non-infringing ones is very high, injunctive relief could furnish patentees with the ability to demand and attain remarkably higher royalties than they would get through reasonable compensation as the courts may adjudicate in infringement litigations. In this situation, injunctions that are automatically granted would lend the component patentee unwarranted leverage over the whole product, creating an opportunity to hijack the product from the market. Consequently, if the infringing component is insignificant to the consumer's demand and its switching cost is high, granting injunctions on multi-component products is not an advisable remedy in infringement litigation.

Further, we can use denial of injunctive relief as a tool to adjust the incentive that patent law affords to inventors, in order to tailor this incentive more closely to the contribution the inventors bring to society through the patented inventions and the cost actually incurred in the R&D process. Four indicators are suitable for evaluating the inventor's contribution and R&D endeavours: (1) the need for the invention in the normal course of business; (2) the prospect of profits even without patent protection; (3) great upfront investment; and (4) competitors that are trying to develop the invention. In addition, there are two situations under which compensation of actual damages is insufficient to mobilize an adequate amount of innovation activities, and injunctive relief may therefore be necessary; (5) infringement is hard to detect; and (6) the net social welfare of the invention is exceptionally high in relation to the benefits the inventors may retain. Employing these indicators as a guide, we could have a better standard for judging on the granting or denial of injunctive reliefs.
LLC, failed to reach licence agreements with the two Internet operators and
initiated an infringement lawsuit against them. The Federal Circuit ruled for Merixchange, following its general rule and
granting injunctive reliefs as a relief for patent infringement. The Supreme Court overruled that holding, stating that even though the Patent Act proclaims that 'patents shall have the attributes of personal property', including 'the right to exclude others from making, using, offering for sale, or selling the invention', in the meantime the Act still indicates that 'the several courts having jurisdiction...may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable.' Under well-established principles of equity, the Supreme Court ruled, a plaintiff-patentee has to satisfy a four-factor test for permanent injunctions. The plaintiff must prove: (1) that it has suffered an irreparable injury; (2) that monetary damages are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, an injunction is warranted; and (4) that the public interest would not be adversely affected by injunctive relief. The district court has the right to evaluate those four factors and exercise its equitable discretion to determine granting or denying of permanent injunctions, which is reviewable on appeal only for abuse of discretion.

The eBay decision abandoned the automatic injunction rule for patent infringement, and opened the door for reflecting the nature and magnitude of patents' right to exclude and injunctive relief for their infringement. Following this introductory section, Section 12.2 of this essay reviews the case law development in the United States after the eBay decision. Section 12.3 continues to explore relevant patent theories and finds that the eBay case exemplifies the feature of partial remuneration that has been hidden in the patent system. Section 12.4 tries to articulate a better way to adjudicate injunctive relief. Six indicators and the notion of the layered remedy system are put forward. Section 12.5 turns to look at the implications that discretionary injunctions may bring for developing countries. A short remark in Section 12.6 concludes this work.

12.2 The development of injunctive relief in the post-eBay era

In the aftermath of the milestone judgment, lower courts have interpreted the eBay case in divergent ways, yet some general tendencies in applying the four-factor test have emerged so far. In the concurring opinion joined by three other liberal justices, Justice Kennedy candidly indicated that for those patentees that do not exploit the claimed invention by themselves but simply license others to practise the technology (so-called non-practising entities, 'NPEs'), monetary damages may be insufficient to compensate the royalty loss of the patentees. Injunctive relief could otherwise provide undue leverage in licensing negotiation, empowering the patentees to squeeze out extravagant fees from companies that seek to practise the claimed technologies. Taking Justice Kennedy's concurrence as a guide, trial courts normally construe the eBay decision as directing them to reject injunctive relief when the plaintiff-patentee is an NPE.

On the contrary, in cases of head-to-head competition, courts usually find that patent infringement causes irreparable harm to the plaintiff, and sustain its request for permanent injunctions. As explained in the Smith & Nephew case, the directly competing product of infringers erodes the sales volume and market share of the patentees, and in turn interferes with their ability to establish relationships with new customers. The resulting loss of profits, market share and brand name recognition constitutes injuries that tend to last in the relevant market and are difficult to calculate. The competitive harm is therefore irreparable, and monetary damages may not be enough to compensate for the loss in lieu of a permanent injunction. In fact, a survey on district court decisions from 2006 to 2008 reveals that since eBay, 'with two exceptions, permanent injunctions were issued in all twenty-six cases where courts found direct competition between a plaintiff and the infringer.

12.3 Liability rule and the strength of patent protection reconsidered: arguing for partial remuneration to inventors

Monetary remedies without injunctive relief in patent infringement cases are frequently associated with the theory of liability rule. In their groundbreaking article in 1972, Calabresi and Melamed put forward their theory of property and liability rules. They divided the modality of protecting economic entitlement into three types. The liability rule means that the state protects the entitlement by way of adjudicating the price for its usage ex post after the entitlement is exploited. The opposite modality of protection is the property rule, which demands the user to strike a deal beforehand. Exploitation of the entitlement is forbidden if no prior consent from the owner is secured. Injunctive relief inhibits continued use by the infringers and ex ante negotiation are therefore necessary. It plays a crucial role in the enforcement mechanism in support of the property rule.

Since the rise of economic analysis in the field of intellectual property, commentators have been using the framework of property and liability rules to analyse various aspects of patent law. Traditionally, scholarly discussion of the liability rule has centred on the issue of transaction cost. The eBay decision channels the focus of concern instead to the benefit that patents may generate to the public. Some scholars emphasize the patent grant as a quid pro quo in exchange for the inventor's contribution to the public. Based on this rationale, the scope of patent protection and the strength of remedies (including monetary and injunctive relief) upon finding infringement should be proportionate to the magnitude of technological progress and research and
There may be counterarguments that stress the importance of injunctions in preventing possible infringement. The patent law scholarship has nevertheless shown that efficient patent infringement exists under certain circumstances. This is especially true when the infringement eliminates the last few units of monopolistic profits the inventor might obtain through patent protection. The reason is that the last few units of monopoly profits engender the most marginal deadweight loss of social welfare. In contrast, the marginal R&D productivity decreases rapidly when the R&D investment increases. Thus small curtailment of the expected monopoly rent of the inventors may not substantially dampen their incentive to innovate, disclose or commercialize. Even if the incentive were affected, generally it might be offset by the relative gain of social welfare.

Premised on the thought that patent protection should be commensurate with the R&D investment of the claimed inventions, the remedy for infringement should actually be layered to reflect different levels of R&D cost. The layered remedy system may be structured with three levels of relief. Level 1 comprises only monetary compensation for actual damages, and is suitable for ordinary inventions that do not require significant investment in R&D. On the contrary, Level 3 consists of monetary damages and injunctive relief, and is set for inventions in demand of high R&D inputs. The Level 2 remedy is heightened monetary compensation consisting of actual and enhanced damages, which is aimed at redressing inventions of significant R&D cost but not high enough or unsuitable for injunctive relief. The six indicators as put forth above would work here as well, helping to evaluate which level of remedies a valid and infringed patent should enjoy.

12.5 Developing countries and the TRIPS Agreement

Scholarly discussion after eBay brings the public back to the discourse of injunctive relief in the patent law. It serves as a bridge, enabling more public policy concerns to be taken into account under the patent system. Developing countries frequently have more conflicting policy concerns with regard to patent protection. The development after eBay, particularly the change from automatic injunctions to discretionary ones, allowing courts to consider the inventor's actual public contribution and R&D investment in presiding on injunctive relief, could greatly assist developing countries in resolving their problems.

With regard to new innovations, developing countries are typically faced with two kinds of public policy concern. On one hand, developing countries are calling for employing new technologies to meet their societal needs, including igniting economic growth and tackling social problems, such as public health concerns and essential medicine deficiencies. On the other hand, situated in a globalized economic environment, the governments of developing countries have to provide substantial incentive by way of patents to encourage technology transfer, foreign direct investment and domestic technical innovation. As a result, a patent system with at least a moderate strength of protection has to be in place in those countries. In order to accommodate divergent public concerns surrounding individual inventions, discretionary injunctive relief could play a positive role in fine-tuning the strength of patent protection on a case-by-case basis, and make the patent system more tailored to the diverging social contexts presented in various developing countries.

For instance, developing countries could use indicators (1) to (4) and (6) as put forward in the last section to evaluate the benefit that the invention at issue may bring to their domestic society, and gauge accordingly the appropriate strength of patent remedies through discretionary injunctions. In the course of that evaluation, in addition to the technological and industrial development at the international level, the courts of developing countries should keep an eye on their domestic settings. In using indicators (1), (2) and (4) to estimate the possibility that the invention would still come along if not conceived by the inventor, the courts should not only examine the incentive already existing in relevant industries, but also put emphasis on the possibility that the invention might be introduced into their countries. Indicator (6) is a double-edged sword for the developing world. On one hand, extra incentives should be provided for those inventions of which positive externalities are exceptionally high. On the other hand, injunctive relief may not meet the social needs in making use of the same inventions. More focused discussion and nuanced standards thus have to be developed and articulated as to this point.

The TRIPS Agreement has been the most important international convention in the patent field. It establishes the minimum standard of patent protection for all WTO members. In paragraph 4 of the preamble, the Agreement recognizes that intellectual property rights are private rights. Fortunately, the same Agreement still leaves room for discretionary injunctive relief. Paragraph 2 of Article 44 authorizes WTO members to provide only declaratory judgments and adequate compensation as remedies for infringement of intellectual property. Developing countries should leverage the leeway as stipulated in the TRIPS Agreement and make good use of the discretion allowed for injunctive relief. Hopefully that flexibility can help develop better practices of patent enforcement that are more compatible with the social and economic contexts of individual WTO members.

12.6 Concluding reflections

The right to exclude and injunctive relief have been deemed as the most prominent features of patent rights. It was not until the eBay decision of the US Supreme Court in 2006 that the door was opened for discretionary injunctions in patent infringement cases. This chapter has examined the development of case law and scholarly discussion on injunctions in the post-eBay era. Pure monetary relief without accompanying injunctions in infringement cases
is normally associated with the theory of liability rule. Since Calabresi and Melamed’s seminal article in 1972, scholarly discussion of the liability rules has centred on the issue of transaction costs. The eBay decision channels the focus instead to another important aspect of the patent system, namely the contribution that the patent and its claimed invention may create to the public.

The author finds that the eBay decision illustrates the fact that patents are not private rights that demand full remuneration when being infringed, but rather a tool of incentivizing sufficient innovations to the public. The strength of patent protection towards individual inventions should be closely tailored to the extent that is necessary for maintaining adequate supply of the specific invention. Along this line of thought, the remedies for patent infringement need not redress all the losses that the patentee suffers. They should be capable of recovering for the patentee the R&D cost, but not the whole value that the claimed invention generates to the public. Positive externalities do not need to be internalized and efficient infringement actually does occur in the patent field. By restraining from over-incentivizing, the patent system could ameliorate the deadweight loss resulting from excessive protection.

Discretionary injunctive relief affords excellent flexibility for courts to adjust the strength of patents according to the R&D cost of the claimed inventions. Six indicators were further put forward to assess the necessary magnitude of the incentive to promote specific inventions, which can serve as a useful guide for courts to exert discretion and determine granting or denying of injunctive relief in infringement lawsuits. Those indicators could also help the patent law develop a layered remedy system in proportion to different levels of R&D cost for the claimed inventions.

Typically, developing countries face conflicting policy concerns towards innovations. Discretionary injunctive relief enables those countries to adjust the strength of patent protection on a case-by-case basis, which in turn could help the developing world overcome its dilemma. Such relief for patent infringement is in compliance with the TRIPS Agreement. The same six indicators could further assist courts in developing countries to adjudicate on injunctive relief more wisely and consistently.

Notes

1 Associate Professor and Deputy Director, Institute of Technology Law, National Chiao Tung University (Hsinchu, Taiwan). SJD. 2007, Indiana University Maurer School of Law (US). Email: rcdwie@gmail.com. Many thanks to Miss Tien-Iain Wang for her valuable contribution in preparing this chapter. An earlier draft of this work with the title of ‘Liability Rule: A Better Solution for Developing Countries in Promoting and Protecting Innovations’ was delivered at the International Conference on Trade, Science, Technology, and Justice, organized by the Institute of Technology Law, National Chiao Tung University, in Hsinchu, Taiwan, on 1 November 2011.


3 Balganeh, op. cit. p. 593.


8 eBay, 547 US at 390.

9 MercExchange, LLC v. eBay Inc., 401 F.3d 1323, 1339 (Fed. Cir. 2005).


12 35 USC § 283 (2012).


15 eBay, 547 US at 396–7 (Kennedy, J., concurring, joined by Stevens, Souter and Breyer, JJ).


19 Ibid., at 983.


23 Ibid, at 1092.


13 From science to the law of subsidies

An empirical and political analysis of fisheries international trade

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13.1 Introduction

Ensuring a vibrant fisheries sector is extremely important for the developing and less developed countries (‘LDCs’), as the sector is a major source of income, employment and foreign exchange earnings for these economies. It has been reported that approximately 40 per cent of global fishery production is exported, and nearly half of the international trade is attributed to developing countries’ exports. Moreover, the small-scale fisheries play a considerable role in developing countries, unlike their developed counterparts.

Nevertheless, reaping the natural comparative advantage may not always be possible for a developing country/LDC, given the provision of fishery export subsidies from their developed counterparts for the following reasons. First, subsidies to capital or variable costs and other subsidiary activities (e.g. equipment and labour, subsidization of vessels, price supports, etc.) provide unfair cost advantages to the recipients. Second, the huge subsidies provided by several developed countries to their fishing fleets create overcapacity and may lead to overexploitation of the fish stocks in the long run or harmful emissions. This overexploitation may take place in the home country as well as other country waters affected by the transfer of access rights. The evidence from literature indicates that access right transfers may lead to environmental consequences if the home country lacks the requisite regulatory mechanism. Case studies undertaken in this regard have shown that in Senegal and Argentina, environmental overexploitation from access right transfers led to injuries to local fisheries in their own waters.

It has been observed that certain varieties of fisheries subsidy provided in developed countries significantly affect production and trade patterns. For instance, the fishermen in a developed country, aided by access right transfers, fuel subsidies and subsidized fishing gear, would always be privileged enough to catch more fish and market their catch at a lower price, as compared to their developing country and LDC counterparts. The lower price becomes a