1. Introduction

Recent growth in patent transactions has been accompanied by increasing numbers of patent disputes, especially in the field of information and communication technology. Such patent disputes are increasingly and conspicuously being initiated by Non-Practicing Entities (NPEs) - companies that do not use patents in a product or service but merely acquire patents for the sake of licensing or asserting them through litigation.

NPEs generally enforce their patents against manufacturers and service providers whose products and services unavoidably use them. Recently, NPEs are increasingly enforcing standard-essential patents against such companies.

The licensing or sale of standard-essential patents under reasonable conditions is a natural and lawful exercise of a patent holder’s rights. However, patent holders often use the threat of injunction to demand higher than reasonable royalties. Often in such cases, the product manufacturer under threat of injunction has already invested significantly in product development and commercialization, and thus it may be very costly for them to switch to another technology.

It has been pointed out that such patent assertion may prevent healthy technological innovation with severe consequences for corporate management [1][2].

In this article, we discuss worldwide trends in the exercise of standard-essential patent rights.

2. Issues Concerning the Exercise of Standard-essential Patent Rights

2.1 Hold-up

Standards organizations in the field of information and communication technology, including mobile communications, develop standards for interoperability and ultimately contribute to reduced costs. Technological improvements are inherent to standardization work, and organization members contribute technical proposals that incorporate many patents. In the case of LTE technology, for example, as of March 2013, about 6,000 patent families had been declared to the European Telecommunications Standards Institute (ETSI) as standard-essential patents [3] [4].

If standard-essential patents are not declared before a standard is established, it is difficult in practice for manufacturers and service providers (hereinafter referred to as “business enterprises”) to

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*1 NPE: Non-Practicing Entity. An entity that is itself not engaged in a business utilizing the patented invention but has conducted the R&D for the patented invention and is engaged in licensing activities, or an entity that is itself not engaged in a business utilizing the patented invention nor in the R&D but has acquired the patent from another entity and is engaged in licensing activities. These entities often bring actions to court in order to secure high licensing fees.

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evaluate the possibility of patent infringement.

Taking advantage of this environment, entities involved in standardization may avoid fulfilling their obligation to declare their essential patents, and may, after products or systems that use standardized technology are widely adopted, exercise their rights in order to secure high license fees. This is the so-called hold-up issue that has long been recognized [5]-[7].

2.2 Patent Rights Transfer and the Efficacy of FRAND Declarations

Even if a patent rights holder declares Fair, Reasonable, and Non-Discriminatory (FRAND) licensing terms to the relevant standards organization, a third party acquiring those rights might claim that the declaration is no longer effective. This sometimes occurs, for example, when the original patent rights holder withdraws from business. As a result, business enterprises may no longer be able to obtain licenses under FRAND terms.

2.3 Asymmetry between Patent Rights Holder and Party Accused of Infringement

In general, it is relatively easy for a patent rights holder to demonstrate patent infringement with respect to products or services that comply with standards by comparing the standard specifications with the scope of the patent claims.

However, when business enterprises make capital investments, it is difficult from a cost perspective to utilize technologies other than those that are standards-based; in practice, often other options do not exist. Thus, business enterprises that receive demands to terminate services or manufacturing activities on the grounds of standard-essential patent infringement (i.e., the patent holder exercises their right to seek injunction), are put in a seriously disadvantageous negotiating position. Moreover, since NPEs do not engage in manufacturing products or providing services and an amicable agreement through cross-licensing is thus not possible.

3. Trends in the United States and Europe

As shown in Table 1, and as illustrated by recent precedents, restrictions governing injunction demand rights in the United States, Europe and Japan vary. Trends in the United States and Europe (especially Germany) of various issues concerning the exercise of standard-essential patent rights are described below.

3.1 Trends in the United States

1) The Four-factor Test for Injunction Relief in the eBay Case

In the United States, injunctive relief is not automatically granted upon an infringement ruling. Rather, courts can only discretionally grant injunctions when the “four-factor test” (Table 2) is satisfied. This test was established in the U.S. Supreme Court’s landmark ruling on the eBay vs Merc-

*2 Patent family: A group of patents for the same invention that are applied for in multiple countries.


*4 Cross-licensing: A patent licensing arrangement whereby patent holders grant each other rights to use each other’s patents.

*5 eBay: A U.S. company engaged in Internet sales and auctions.
Exchange, L.L.C., case related to eBay’s “Buy It Now” function. In its ruling, the Supreme Court pointed out that the district court had not applied the four-factor test and remanded the case back to the district court. In its re-examination of the case, the district court ruled that monetary compensation was sufficient relief.

It is clear that application of the four-factor test allows courts to retain discretion with respect to the granting of injunctions in patent lawsuits between market competitors. However, it is more difficult for lawsuits initiated by NPEs against business enterprises, to satisfy all four factors. Consequently, in the United States, this test serves to curb excessive injunction requests.

2) FTC Report

In a report issued by the Federal Trade Commission (FTC) in 2011, the FTC pointed out the following issues concerning patent applications in the field of software, including telecommunications and other standard-essential patents, and called for improvements.

- Software Patents Issues
  I. Ex-Post Patent Transactions

  When a business enterprise enters ex-ante into a patent licensing or sales transaction to develop and commercialize a product, such a transaction promotes innovation. However, ex-post patent transactions can have adverse effects on innovation, competition, and the consumer.

  Ex-ante patent transactions, as part of a technology transfer agreement, allow companies to make technology choices with prior knowledge of costs, avoid redundant R&D, and pass such benefits on to the consumer. By contrast, ex-post transactions result in redundant R&D, raise costs unnecessarily, and deter innovation.

II. Patent Notices

  It is important that claims in patent notices clearly identify the scope of the patent rights. Software patents, however, are prone to ambiguities which make it difficult to determine whether or not a patent would be infringed. This situation, combined with the huge number of patents that need to be checked and short product cycles, is viewed as a key factor leading to ex-post transactions in the area of software.

Since FTC report recommendations are often incorporated into the United States legal system and its policies, much attention is paid to future amendments to the law, especially with respect to the following issues described in the FTC’s 2011 report:

1. Unfair behavior by standard-essential patent holders who demand excessively favorable royalties and conditions from infringers by leveraging the fact that manufacturers have already launched standard-compliant products.

2. Ambiguous scope of patent rights in patent notices which allow patent holders to unfairly distort the claims to their advantage.

3.2 Trends in Europe

Next we describe the situation in Germany, the largest market in Europe and which has the largest number of patent lawsuits, and also actions being taken by the European Commission (EC).

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*6 “Buy It Now” function: A function provided by eBay whereby the user does not participate in the auction but buys the item immediately at the price indicated by the seller.
1) Germany

In Germany, the Orange-Book-Standard (DVD format specifications) case established a framework for restricting injunctive relief to standard-essential patent holders [11]. According to the case, since it is not possible to avoid using essential patents when providing products or services that comply with standard specifications, a holder of standard-essential patents is regarded as having a dominant position in the market. If a patent holder in such a position refuses a request from a patent user to enter into a license agreement under reasonable terms, the patent holder is, under competition law, regarded as abusing their dominant position and cannot be granted injunctive relief (Table 3). Conversely, injunctive relief is only granted if an infringer refuses to offer to take an unconditional license from the patent holder.

2) EC

In Europe, there have recently been many cases where standard-essential patent holders have sought injunctive relief. The EC is investigating allegations that certain standard-essential patent holders have abused their dominant market position and have distorted competition by seeking injunctions against willing licensees despite having made FRAND commitments to the ETSI and other standards organizations. In particular, the EC is investigating complaints from Apple and Microsoft that Motorola Mobility has abused its dominant market position in enforcing its patents and seeking injunctions in the EU [12]. The EC is also investigating whether Samsung has abused its dominant position by seeking injunctive relief against Apple despite having already made FRAND commitments with respect to its 3G standard-essential patents [13]. In this respect, European regulators are moving to implement restrictions on the granting of injunctions with respect to standard-essential patents.

4. Situation in Japan

4.1 Pending Cases

Litigation based on standard-essential patents is becoming more prevalent in Japan as well, though not to the extent as in the United States and Europe. Some examples of pending cases [1] are given below (as of this writing).

1) A Luxembourg patent management company has filed suit against a mobile telephone operator based on a patent concerning codec technology.

2) A German patent management company has filed suit against a mobile telephone operator based on patents concerning access restriction control and codec technologies.

3) A vendor that has withdrawn from the mobile terminal business has filed suit against another mobile phone vendor based on a patent concerning power control and other technologies.

4) A mobile terminal vendor has filed suit against another mobile terminal vendor based on a patent concerning Hybrid Automatic Repeat reQuest (HARQ) and other technologies.

Table 3 Conditions by which the patent proprietor who asserts a claim for injunctive relief based on his patent, although the defendant is entitled to be granted a license under the patent in suit, only abuses his dominant position on the market and only acts in bad faith [15]

<table>
<thead>
<tr>
<th></th>
<th>Conditions</th>
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<tbody>
<tr>
<td>I</td>
<td>The party seeking a licence must have made him, and remain bound by, an unconditional offer to conclude a licence contract, which the patent holder cannot refuse without inequitably impeding the party seeking a licence or infringing the prohibition on discrimination; and,</td>
</tr>
<tr>
<td>II</td>
<td>The party seeking a licence must, if he has already used the subject matter of the patent before the patent holder has accepted his offer, comply with those obligations that the licence contract to be concluded imposes on the use of the licensed subject matter. This means in particular that the party seeking a licence must pay or guarantee the payment of the licence fees resulting from the contract.</td>
</tr>
</tbody>
</table>

*7 Codec: Technology for coding and decoding data.
*8 HARQ: A technique for recovering from transmission errors through a combination of error-correcting codes and retransmission.
4.2 Regulations Governing the Right to Seek Injunction Rights in Japan’s Patent Act

Under Japan’s Patent Act, if a court judges that infringement has occurred and the patent rights holder has sought an injunction, the right to seek injunction is granted. Unlike the United States and Europe, there are no judicial precedents or clear regulations that restrict the exercise of rights concerning standard-essential patents. Japan’s Patent Act regulates the right to seek injunction as follows:

[Patent Act Article 100: Right to seek injunction]
“A patentee or exclusive licensee may demand a person who infringes or is likely to infringe the patent right or exclusive license to stop or prevent such infringement.”

As a result, even if a patent rights holder demands an injunction for just one patent among thousands essential to a standard, if the court judges that infringement has occurred, the defendant must still stop manufacturing infringing products and/or offering infringing services. While some experts believe that the prohibition of “abuse of rights” under Japan’s Civil Code’s Article 1, Clause 3, could be used as a defense against an injunction request, others believe that because the requirements for having “abuse” recognized are severe, in practice such a defense will only be effective in a limited number of cases [14].

The application of antitrust law regulations, such as “Transactions with Unfair Conditions of Constraint” or “Abuse of Dominant Bargaining Position”, could also be considered, but Japan’s antitrust law states that such regulations cannot be applied in cases where the exercise of rights as stipulated in the Patent Act has been recognized. Such application would therefore require that exceptional conditions such as “deviation from the intent of the intellectual property system” were met [2].

In short, compared with the United States and Europe, there are fewer clear judgment criteria in Japan concerning restrictions on rights to seek injunctions based on standard-essential patents.

4.3 State of the Debate

Members of industry, government, and academia in Japan are debating the matter of exercising the right to seek an injunction [16] [17]. Many business enterprises are concerned about the exercise of rights to seek an injunction with respect to standard-essential patents. Seventy-eight percent (78%) of enterprises in the electronics industry have expressed the view that restrictions should be established [14]. At the “Symposium on the Exercise of Standard-essential Patent Rights” (sponsored by the Institute of Intellectual Property), industry members expressed the need for guidelines on the restriction of rights to seek injunction as well as for revisions in the law to limit the right to seek an injunction based on standard-essential patents.

Intellectuals are also of the opinion that since the aim of the patent system is to contribute to the growth of industry, determining the extent to which the exercise of patent rights should be recognized is simply a governmental policy judgment matter, and that patent rights are not rights to demand injunctions without restriction; rather, they have “inherent limitations” [18]. The position that patent rights have inherent limitations reflects the view that the only rights that should be recognized are those that concord with the aim of the Patent Act to “contribute to the growth of industry”.

4.4 Direction of System Revision

Reference 17 contains recommendations by intellectuals on reforming the legal system to restrict rights to seek injunctions based on standard-essential patents.

1) Statement 1 (Reference [19], pp.123-125)
This recommendation suggests that if the two requirements in Table 4 are met, the right to seek injunction should be restricted.

Entities that fall under requirement (a) are patent
holders that have neither engaged in the business nor conducted R&D (NPEs or enterprises that have withdrawn from the business), or those that demand exorbitant licensing fees despite having filed FRAND declarations.

The “public interest” noted in requirement (b) refers to behavior that obstructs civilian life or property, the construction of public facilities, or the sound development of industry as a whole.

According to this recommendation, if an injunction demand requires an enterprise to suspend its manufacturing or service activities, a judgment will be made as to whether the aim of the patent holder’s demand meets requirement (a) and whether requirement (b) is met based on a comparison of the extent to which the patent holder and the business enterprise have suffered losses.

2) Statement 2 (Reference [19], pp.138-139)

Table 5 presents a classification of cases that can be treated under current law as evidence that rights to seek injunctions should be restricted.

According to this recommendation, in public interest cases, revisions in the law are necessary because it is difficult to apply “injunction demand rights restrictions inherent in the patent system” under Japanese law.

Both statements seek to clarify, through codification that there are cases in which injunction demand rights should be restricted. Business enterprises that apply methods compliant with standard specifications in manufacturing products or providing services are being considered in the debate.

5. Conclusion

The licensing of standard-essential patents under reasonable conditions is a natural and lawful exercise of a patent holder’s rights. Nevertheless courts in the United States and Europe use discretionary procedures for granting or denying injunctions sought on products and services that infringe standard-essential patents. These procedures take into consideration such factors as public interest and antitrust laws.

By contrast, Japanese courts generally grant injunctions once patent infringement is proven. Consequently, members of industry, the legal profession, and scholars have expressed the view that certain restrictions should be established in Japan through revision of the Patent Act and other means.

In Japan, it is widely expected that the aforementioned issues concerning injunctions based on standard-essential patents will become harmonized with international trends through continuous debate across industry, academia, and government.

REPRESENTATION

Table 4  Requirements for restrictions on injunction demand rights

<table>
<thead>
<tr>
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<th>A demand is made with the aim to gain inappropriate profits or inflict damage on the other party; and</th>
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<tbody>
<tr>
<td>(a)</td>
<td>The profit gained by the patent rights holder is significantly smaller than the loss suffered by the other party or the gain of the public interest.</td>
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</tbody>
</table>

Table 5  Restrictions on injunction demand rights: Possibility of support under current law

<table>
<thead>
<tr>
<th>Possible under current law</th>
<th>Cases based on public interest</th>
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<tr>
<td></td>
<td>Cases violating fair and equitable principles</td>
</tr>
<tr>
<td></td>
<td>Cases where the profits of parties concerned are significantly out of balance</td>
</tr>
</tbody>
</table>

Difficult under current law Possibility that restrictions on injunction demand rights are inherent in the patent system

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