

## THE CHANGING NATURE OF PRODUCTS AND PATENT INFRINGEMENT — WILL THE NEW SYSTEM BEAT THE INFRINGER WINS SITUATION? —

Yui Matsuura

Intellectual Property Dept., Technology & Innovation Studies Div.  
Mitsui & Co. Global Strategic Studies Institute

### SUMMARY

- Patent rights, which can be obtained in exchange for public disclosure of technical information, have the peculiarity that they are easier to infringe upon than other property rights. When suing for infringement, the burden of proof is on the patentee, who must collect evidence of infringement. In some cases, the difficulty of gathering evidence has forced infringement to be left unchecked, resulting in cases where the infringer wins.
- The inspection system, a legally-binding evidence-collection procedure, was established in light of the difficulty of collecting evidence necessary for a court to find patent infringement. This is expected to negate the infringer wins situation. Since patent laws and litigation systems differ from country to country, this report will focus on the situation in Japan.

### 1. INFRINGER WINS: THE CURRENT STATE OF PATENT INFRINGEMENT

How many patent-infringing inventions have been found among the following categories: bags, remote monitoring methods, and coin<sup>1</sup> manufacturing methods? The answer is just one, in bags.

Under patent law, there are three categories of inventions. Bags fall under invention of a product, remote monitoring methods fall under invention of a process, and methods of producing coins fall under process for producing a product. The category of invention can be freely chosen by the applicant and can be recognized from the name of the invention. Software-related inventions are the invention of a program and are protected as products.

The act of exploitation differs depending on the category of invention, and refers to (1) in the case of the invention of a product, the act of producing, using, transferring, etc., exporting or importing, or offering to transfer, etc.<sup>2</sup>, of the product; (2) in the case of the invention of a process, the act of using the process; and (3) in the case of the invention of a process for producing a product, the act of using the process and in addition, the act of using, transferring, etc., exporting or importing, or offering to transfer, etc., the product produced by the process.

The right to exploit the patented invention belongs to the patentee, and it is an infringement for a third party to exploit the patented invention without the permission of the patentee. Nevertheless, when suing for infringement, the patentee (plaintiff) must prove and claim the details of the defendant's conduct. For an invention of a product, it is relatively easy to prove infringement if the product can be obtained. While on the contrary, in the case of an invention of a process of producing a product, it is not easy for the patentee to gather evidence and prove infringement, since the process implemented at the other party's factory is at issue. It is similarly difficult to

<sup>1</sup> Coins used in amusement arcades.

<sup>2</sup> The act of displaying products pertaining to an invention for the purpose of transferring it or lending it out, solicitation through catalogs, distribution of brochures, etc. fall under this category.

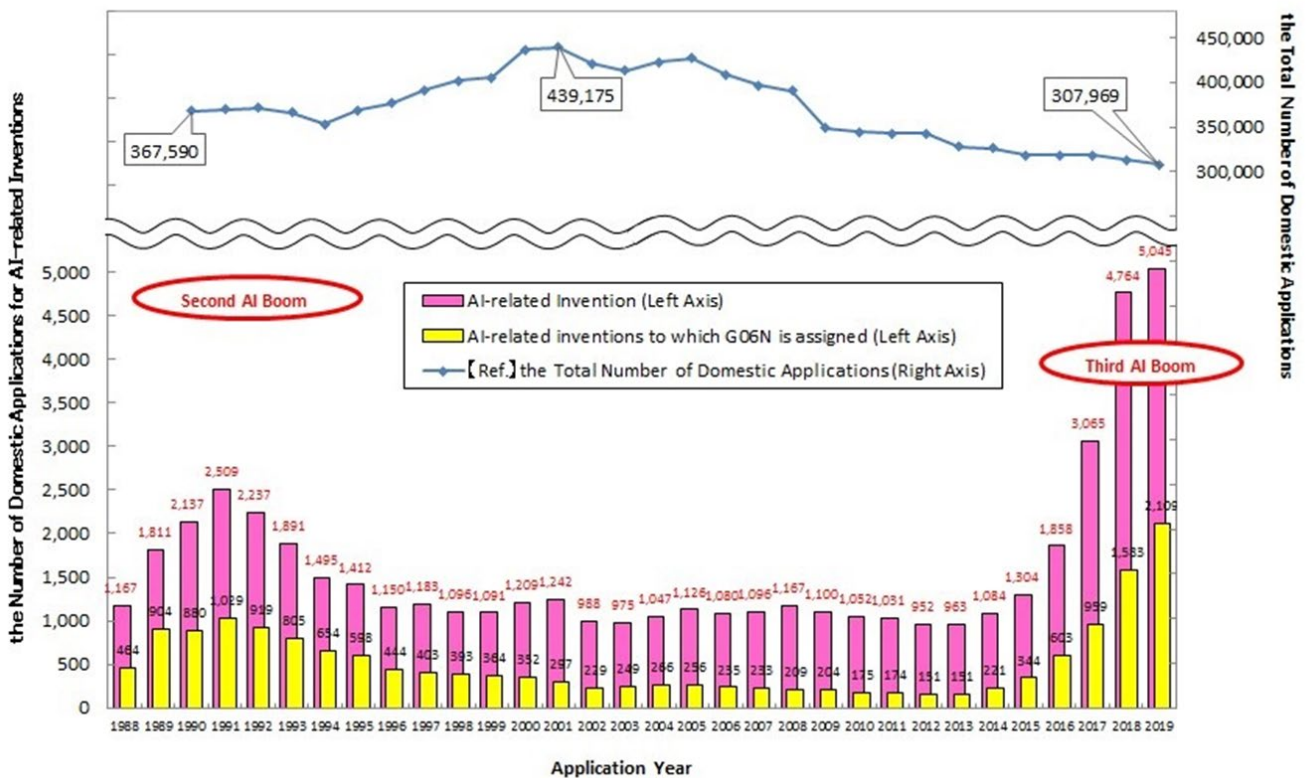
gather evidence for the invention of a process.

About 84% of the cases heard at the district court level in 2021 (cases requesting an injunction against patent infringement and cases requesting damages) involved filing a suit for infringement based on patents for inventions of products<sup>3</sup>. It is undeniable that the hurdles are high for filing suit for infringement based on a patent right for a process invention, giving rise to the situation where the infringer wins. Therefore, as stated above, the only category that makes it easy to sue for infringement and to have the court find in favor of the plaintiff is invention of a product.

## 2. THE CHANGING NATURE OF PRODUCTS AND INFRINGEMENT LITIGATION

In recent years, the number of cases where it is difficult to gather evidence of infringement has increased, even for inventions of products. One such case is technology that uses software incorporating learned models, or inventions of products that are classified as AI-related inventions<sup>4</sup>. While the overall number of patent applications in Japan is declining, the number of applications for AI-related inventions is steadily increasing (See Figure). However, litigation concerning patents for AI-related inventions is still virtually non-existent. The difficulty in proving infringement is likely to be a reason for this situation.

Figure: The number of domestic applications for AI-related inventions



Source: JPO survey of recent trends in AI-related inventions

<sup>3</sup> Counted from court cases available on the courts website (<https://www.courts.go.jp/index.html>).

<sup>4</sup> In addition to AI-related inventions, these include B-to-B products, programs and software, and business model patents, which are not available in the marketplace.

An example of an AI-related lawsuit is the case of a claim for damages related to a chatbot (Case (ne) No. 10052(2019)). The name of the invention is “Autonomous Thinking Pattern Generator,” and it falls under the category of invention of a product. The defendant’s product is an AI-based technology, and is assumed that it would have been very difficult for the patentee (appellant) to analyze its internal processes in detail.

It appears that the patentee had only indirect evidence to identify the defendant’s product by legal precedent, such as brochures, pages of product introduction, and introductory videos. When proving infringement by indirect evidence, an inference must be drawn to identify the defendant’s product, and it is difficult for the claim to be accepted if there are grounds to refute it. In this case also, the court rejected the patentee’s reasoning. As a result, the court dismissed the claim for damages on the grounds that there was not enough evidence to find infringement.

Whether the defendant’s product infringes the patent is determined by whether it falls within the technical scope of the invention, that is, whether the defendant’s product satisfies the claims, which describe the matters necessary to identify the invention to be patented. In the above example, it was difficult to apply the claims to the defendant’s product because they were abstract expressions<sup>5</sup>.

#### **Claims of Autonomous Thinking Pattern Generator (Patent No. JP5737641)**

[Claim 1]

An autonomous thinking pattern generator comprising:

a pattern converter configured to convert input information to patterns, the input information including image information, sound information or language;

a pattern recorder configured to record the patterns;

a pattern controller configured to set and change the patterns, and form connective relations between the patterns; and

an information analyzer configured to evaluate values of the input information,

wherein the pattern recorder is configured to record the patterns corresponding to the input information which is determined as worthy by the information analyzer autonomously.

([From J-PlatPat](#))

### **3. ESTABLISHMENT OF THE INSPECTION SYSTEM: A TRUMP CARD AGAINST THE INFRINGER WINS SITUATION**

Based on the fact that it is difficult to collect evidence for a court to find patent infringement, patent law conventionally made special provisions to the order to submit documents<sup>6</sup> and provided for in-camera procedures, by which only the court actually sees the documents. However, for AI-related inventions, for which huge databases hold value, it is not possible to determine infringement simply by examining the source code, and cases have arisen in which it is difficult to reach a conclusion under these provisions.

In many developed countries, mandatory evidence collection procedures have been legally implemented, such as ‘discovery’ in the United States, ‘search orders’ and ‘disclosure’ in the United Kingdom, ‘inspections’ in Germany, and ‘saisie-contrefaçon’ in France. With reference to these systems, an inspection system was established in the revised Patent Act that went into effect in October 2020, in order to strengthen evidence collection procedures by neutral experts. Under this system, a court-appointed expert enters the defending party’s manufacturing site or other premises and investigates matters necessary to prove infringement and

<sup>5</sup> Especially the part “autonomously record information deemed useful.”

<sup>6</sup> A provision whereby the court, upon application of the patentee, orders the alleged infringer to submit the documents necessary to prove infringement.

clarifies the facts concerning the existence of patent infringement. The evidence collection procedure by the expert is legally binding. The party under inspection has an obligation to cooperate, and failure to comply without just cause incurs penalty whereby the patentee's claims are accepted as true.

The introduction of the new evidence collection procedure is expected to increase the number of lawsuits filed concerning inventions for which it was difficult to prove infringement. However, there are several requirements for the court to issue an order for evidence collection (inspection order). One of the requirements is that there must be reasonable grounds to suspect that the party has infringed on the patent right. In other words, even though the inspection system has been introduced, the patentee still needs to collect their own evidence to the extent that the court recognizes a high probability of infringement<sup>7</sup>, and an inspection order is issued when further evidence is needed to prove infringement.

The inspection system is intended to be used as a last resort. In other words, it should not be used often, but in such a way that the requirements are not so strict to render it inoperable. Although the operation of the inspection system cannot yet be verified, it is said that the inspection procedure in Germany, which has a comparatively similar system, is used in about 5 to 10% of all patent infringement lawsuits<sup>8</sup>.

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## 4. HOW TO DEAL WITH PATENT INFRINGEMENT SINCE THE ESTABLISHMENT OF THE INSPECTION SYSTEM

### 4-1. As a patentee

It is easy to imitate inventions of products (on the market), but also easy to prove infringement, so it is necessary to continue to actively file patent applications to protect one's rights. Concerning inventions of other products (AI-related inventions, software, etc.), it is important to construct claims that are easy to enforce and for which it is easy to prove infringement. For example, a claim that specifies only the inputs and outputs of AI is considered easy to enforce because there is no need to analyze internal processing. Claims regarding an algorithm itself can comprise a patent, but there are significant hurdles to their enforcement since infringement cannot be proven without delving into the algorithm of the defendant's product. As a patentee, it is important to construct claims that are easy to enforce in order to ensure the effectiveness of the patent right.

Prior to the establishment of the inspection system, one strategy was to keep technologies that were unlikely to be enforceable as patent rights as technical know-how, without filing a patent application for them. In the future, taking into account the possibility of obtaining evidence through the inspection system, patent applications should also be considered for these technologies. This is because it is necessary to prevent other companies from acquiring and exercising rights before the patentee.

### 4-2. As a business dealing with technology

The establishment of the inspection system is expected to increase the number of disputes over inventions for which the enforcement of rights was restrained until now. In the case of business acquisitions, business tie-ups, or new commercial products involving technologies, it is advisable to carefully investigate and determine the possibility of infringement. If a business is alleged to have infringed on a patent, it must consider the possibility that inspection proceedings may be implemented in its response to the lawsuit. If a company does not file a patent application for a technology it implements, accumulation of evidence that can prove prior user rights<sup>9</sup>, such as using time stamps to prove the date of when the company started preparing the technology, may

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<sup>7</sup> This is intended to prevent abuse of the system by patent holders.

<sup>8</sup> Shutaro Tomatsu, Legislative Issues of Evidence Collection Procedure in Patent Infringement Suits (in Japanese), Patent Studies No.63 2017/3

<sup>9</sup> In the case a party who invents separately and independently from the patentee practices the invention (including preparation), the party has the right of prior use and does not infringe on the patent right.

provide a defense.

If the inspection system is properly operated, it could be a trump card against the infringer wins situation, where the patentee has no recourse because it is difficult to prove a case of suspected patent infringement. The more the appropriate protection and use of patents is promoted in Japan, the more significant their position will become in business.

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