

## BUSINESS METHOD PATENTS EVOLVING ALONG WITH ICT

### —THE EFFECTIVENESS OF BUSINESS PROTECTION AND THE RESULTING BENEFITS—

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#### SUMMARY

- A boom has emerged in “business method patents” for solutions that use ICT to address business problems in various industries. It is thought that the current boom is largely related to the evolution of the “digital economy,” which has been brought about by the development and widespread use of ICT.
- Although business method patents have been regarded as being difficult to enforce, there have been cases where patent infringement is recognized, resulting in protection being granted for business methods. The protection of intellectual property under business method patents is expected to be strengthened in the future.
- Even companies that distanced themselves from patent strategies during the *monozukuri* era of “making things” can derive considerable value from utilizing business method patents, considering the effectiveness of such patents in the *kotozukuri* era of “making things happen.”

After eating a 250-gram steak at an Ikinari Steak restaurant, our imaginary Mary might drop by a Lawson convenience store to ship an item that she had listed on the Mercari marketplace using SMARI. She thought to herself she could buy some ice cream there and paid for it using the proceeds from her transaction on Mercari through Merpay. Then, upon reaching home, she found that the clothes she had rented through Mechakari arrived, and may even consider wearing the clothes to work the very next day!

While this is an imaginary scenario of an ordinary day for a millennial (a person born between roughly 1980 and 2000), all the services described here have something in common: a business method patent (Figure 1).

**Figure 1: Various services and business method patents (patent applications)**

Service	Company	Business Method Patent
<b>Ikinari Steak</b> Steak restaurant chain offering steak servings by the gram	Pepper Food Service Co., Ltd.	Patent No. JP5946491 (application filed on 2014.06.04, patent registered on 2016.06.10) System for providing steaks
<b>SMARI</b> Service for returning items rented or purchased online using the existing logistics networks of convenience store chains	Mitsubishi Corporation Lawson Inc.	Patent Publication No. JP2019-197287 (application filed on 2018.05.07) System, server, and device for returning rented and purchased items
<b>Merpay</b> Mobile payment service	Mercari Inc.	Patent No. JP6542455 (application filed on 2018.10.11, patent registered on 2019.06.21) Information processing method, device, and program
<b>Mechakari</b> Flat-rate subscription service for fashion rentals	Stripe International Inc.	Patent No. JP6633508 (application filed on 2016.12.28, patent registered on 2019.12.20) Device and method for providing items, and processing program thereof

Source: Compiled by MGSSI

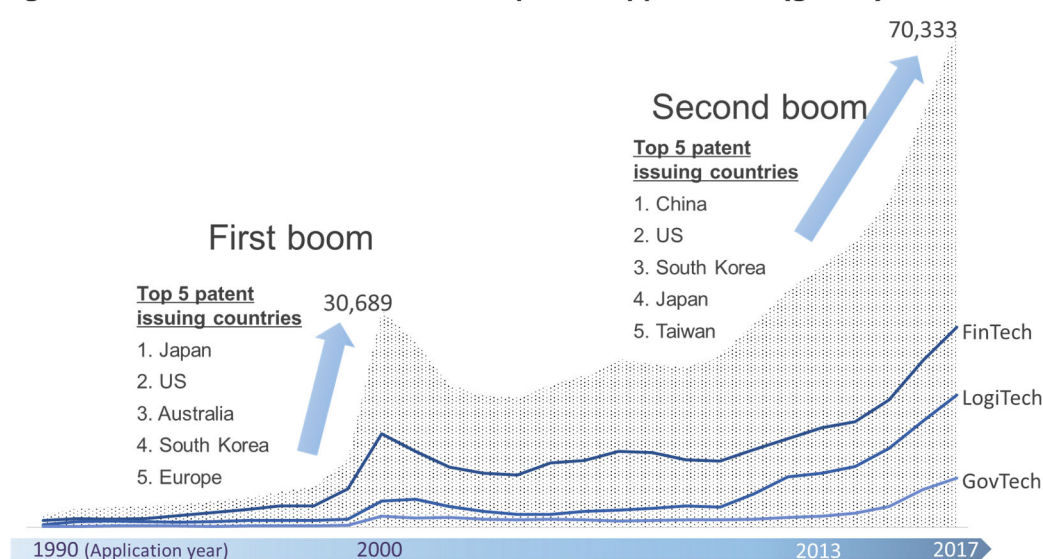
## BUSINESS METHOD PATENTS ARE IN THE MIDDLE OF A BOOM CYCLE

Business method patents<sup>1</sup> refer to a class of patents for innovative methods that utilize ICT (information and communication technology) to provide solutions for problems encountered when doing business in various industries. Patents are not granted for business ideas and methods that are no more than artificial arrangements, and it is essential that inventions include specific technical ideas using ICT.<sup>2</sup>

A well-known example of a business method patent is Amazon's 1-Click ordering patent filed in 1997. This patent gave Amazon an enormous advantage over its competitors, as it enabled Amazon to offer an unrivaled service of one-click ordering.

According to data for the number of business method patent applications (Figure 2), it is evident that an initial boom occurred around 2000 and a second boom began around 2013, which is currently ongoing.

**Figure 2: Number of business method patent applications (global)**



Source: Compiled by MGSSI based on data from Questel's global patent search database Orbit Intelligence

The first boom was triggered by a 1998 US court ruling<sup>3</sup> on the patentability of a business model, which validated the business method patent. It is thought that the second boom is largely related to the evolution of the "digital economy,"<sup>4</sup> which has been brought about by the development and spread of ICT.

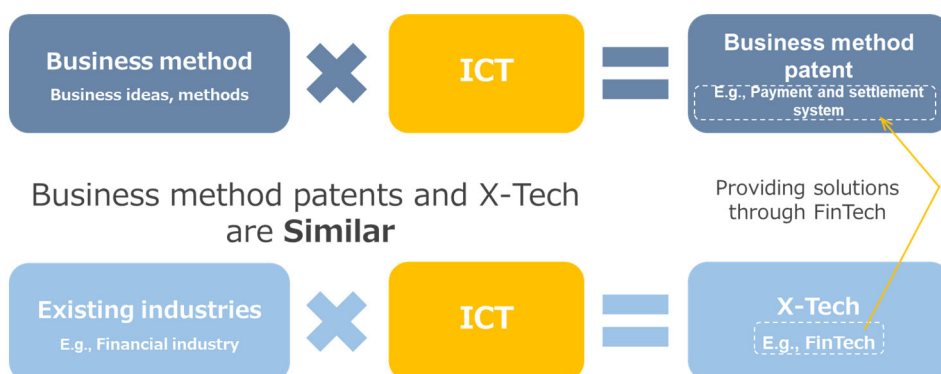
One of the features of a digital economy that ICT gets every industry integrated is expressed fittingly by the term "X-Tech" (cross-tech), which refers to the hybridization of technologies across various industries. As business method patents and X-Tech both involve the utilization of ICT to generate solutions (Figure 3), solutions conceived through X-Tech have a strong connection with business method patents.

<sup>1</sup> The Japan Patent Office uses the term, "business-related invention."

<sup>2</sup> For example, regarding *sushi* delivery services, the idea of providing a discount if delivery is not made within 30 minutes of ordering is not recognized as an invention because it is no more than an artificial agreement. However, if technological ingenuity using ICT is incorporated to realize the idea, such an invention may be patentable.

<sup>3</sup> *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368: A decision that resulted from a debate on the validity of a patent for an asset management system called a hub-and-spoke model. Prior to this ruling, it was generally accepted that ideas for business methods were not patentable.

<sup>4</sup> The new economy and society created by the development and spread of ICT is called the "digital economy" (2019 White Paper on Information and Communications in Japan issued by the Ministry of Internal Affairs and Communications).

**Figure 3: X-Tech and business method patents**

Source: Created by MGSSI

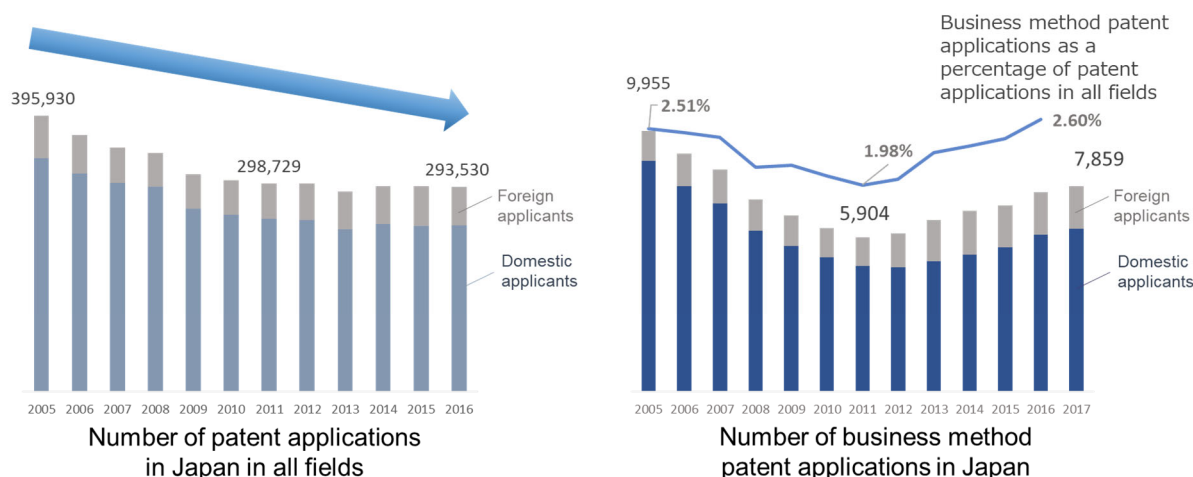
Business method patents are assigned the subclass G06Q of the International Patent Classification (IPC). The IPC has a hierarchical structure, and the sub-groups for business methods include classifications corresponding to FinTech (G06Q/40), LogiTech (G06Q50/28), and GovTech (G06Q50/26)

## BUSINESS METHOD PATENTS IN JAPAN

The currently ongoing second global boom in business method patent applications is showing some interesting trends, especially in Japan. Although the number of domestic patent applications across all fields has been decreasing year by year in tandem with the shrinking domestic market, the number of applications for business method patents has been increasing since bottoming out in 2011 (Figure 4).

**Figure 4: Number of business method patent applications and patent applications across all fields in Japan**

While the number of patent applications overall is decreasing, the number of business method patent applications is increasing in Japan.



Source: Compiled by MGSSI based on data from Orbit Intelligence

In Japan, in terms of patent applications overall, general electronics manufacturers and automobile manufacturers (Mitsubishi Electric, Toyota Motor, etc.) dominate the top spots among applicants, while in the area of business method patents alone, digital platformers<sup>5</sup> (Yahoo, Rakuten, etc.) are among leading applicants. Out of the business method patent applications filed in recent years, approximately 80% were filed by domestic applicants and approximately 20% by foreign applicants. Well represented among the foreign applicants are Chinese and South Korean companies, such as Alibaba (China) and Samsung (South Korea). It

<sup>5</sup> ICT companies that provide third parties with online platforms in various fields, including advertisement/searching, e-commerce, social networking services and apps, and device and software retailing.

is apparent that digital platformers and IT companies, who drive the digital economy, are filing patent applications in search of business opportunities.

Worth noting is the absence of any of the major US digital platformers, represented by GAFA, is because of the effect of the 2014 US ruling<sup>6</sup> on the patentability of a business method.

### CAN THE ACQUISITION OF A BUSINESS METHOD PATENT EFFECTIVELY PROTECT A BUSINESS?

It has been recognized that business method patents are difficult to enforce because its granted scope of rights is narrow and just a slight difference in the business method from a third-party perspective could avoid infringement. From a patent holder standpoint, it is difficult to prove infringement by a third party.

In October 2019, Money Square Holdings(HD), Inc. issued a press release<sup>7</sup> saying that Gaitame Online's service, "i-cycle order," was found to infringe on the FinTech business method patent held by Money Square HD (Patent No. JP6154978).

Up until this case, patent infringement lawsuits related to business method patents consistently resulted in rulings against the plaintiffs, but this decision opens up the possibility of a shift in the direction of rulings in favor of such plaintiffs. As the Japan Patent Office (JPO) has also begun a review from the perspective of ensuring effective protection of rights in the AI and IoT technology age,<sup>8</sup> it is expected that the protection of intellectual property under business method patents will be strengthened going forward. These trends should increase the effectiveness of business method patents as well as reinforce deterrence against patent infringement.

Could it be that Money Square HD had adopted a business method patent strategy in anticipation of actually exercising its rights? Let's look at this by comparing the status of patent applications filed by Money Square HD and Gaitame Online (Figure 5).

**Figure 5: Status of patent applications for Money Square Holdings and Gaitame Online**

	Money Square Holdings	Gaitame Online
No. of patent families <sup>note</sup> (with divisional applications)	20 (9)	14 (0)
Countries where applications have been filed	Japan, US, Australia, Europe, Hong Kong, India, South Korea, Russia, Singapore	Japan only

Note: The same invention disclosed by a common inventor(s) and patented in more than one country.

Source: Compiled by MGSSI

Money Square HD's first strategy is maintaining the "Pending" status of its applications. Money Square HD actively uses the divisional patent application system<sup>9</sup> to keep applications pending at the JPO and intentionally procrastinate the finalization of the scope of rights (the extent to which patent rights cover). The greatest merit

<sup>6</sup> Alice Corp. v. CLS Bank International: A decision was made by a US court that a software program related to financial transactions was drawn from a mere "abstract idea," and thus ineligible for patent protection. After this ruling, business method patents in the US became subject to more stringent reviews.

<sup>7</sup> Press release by Money Square HD Holdings, providing notification of the court's judgment in favor of Money Square HD Holdings on its lawsuit against Gaitame Online (October 2019): [https://www.m2j.co.jp/sc/web/open\\_info/20191008\\_07\\_Gai0\\_m2hd.pdf](https://www.m2j.co.jp/sc/web/open_info/20191008_07_Gai0_m2hd.pdf) (Japanese only).

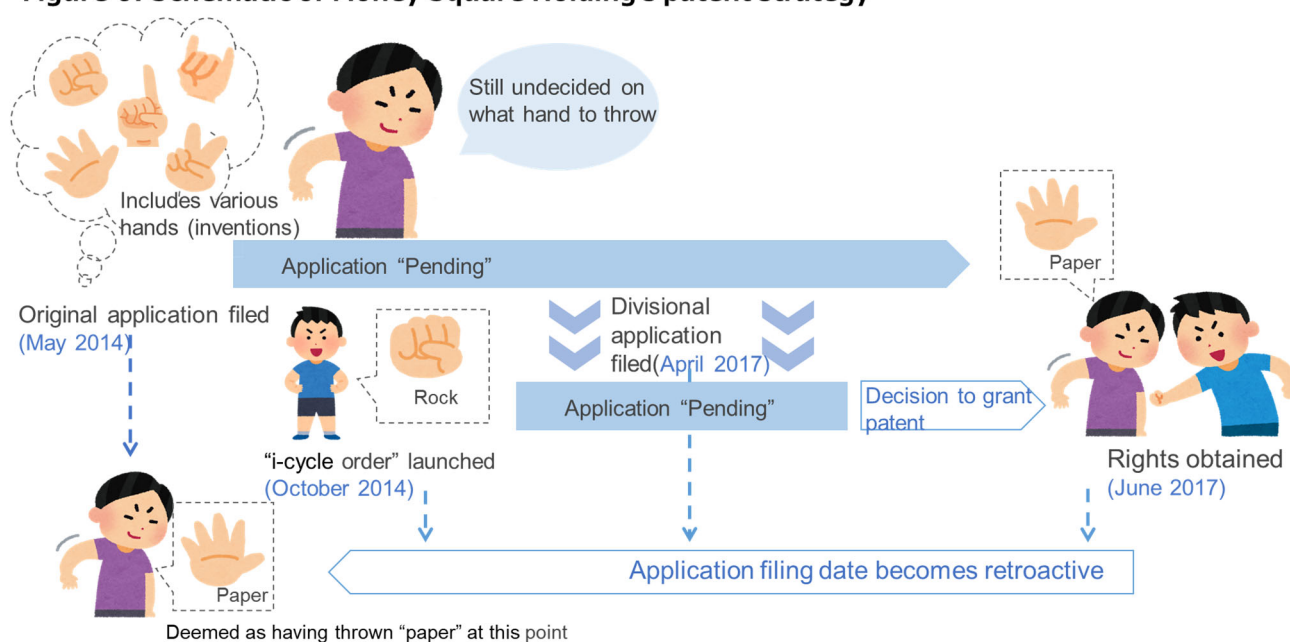
<sup>8</sup> Report on the study of a patent system suitable for the age of AI and IoT technology, issued in 2019 by the Japan Patent Office: [https://www.jpo.go.jp/news/public/iken/document/191115\\_tokkyo-kadai/35-shiryuu-05.pdf](https://www.jpo.go.jp/news/public/iken/document/191115_tokkyo-kadai/35-shiryuu-05.pdf) (Japanese only).

<sup>9</sup> A divisional application refers to the part of a patent application for two or more inventions that is split off and filed as a new application.

of the Pending is that the scope of rights can be flexibly modified (amended),<sup>10</sup> which also provides the effect of a retroactive filing date.<sup>11</sup> In other words, a patent applicant can be filed at an early stage and changed the final scope of rights later in accordance with updates to the service in response to customer feedback and the needs or services provided by a competitor. This is an effective strategy for competing with rivals.

Money Square HD made use of the divisional application system to gain the right to “defeat” i-cycle order after Gaitame Online began offering its i-cycle order service, (Figure 6). This right was deemed to have been filed prior to the actual appearance of the i-cycle order service due to the effect of the retroactive filing date, and, therefore, Gaitame Online’s offering of its i-cycle order service was ruled an infringement. The acquisition of such rights after the appearance of a competing service can be likened to throwing your hand a little later than your opponent in a game of rock-paper-scissors. This is legitimate, however, because all the rights that can be gained through divisional applications are deemed as being included in the original application.

**Figure 6: Schematic of Money Square Holding’s patent strategy**



Source: Created by MGSSI

Money Square HD’s second strategy is applying for patents in foreign countries. Patent rights acquired in Japan are valid only in the territory of Japan. This is called the territoriality principle. Patent rights acquired in Japan can prevent infringement in Japan, but not in foreign countries. To counter infringement in a foreign country, it is necessary to apply for and acquire a patent in that specific country. Money Square HD decides on which countries to file a patent application according to the content of the business method to be claimed (Figure 5). That is, it adopts a strategy for guarding against potential infringements in overseas markets as well.

As illustrated in the case of Money Square HD, it is quite possible to protect a business with a business method patent by employing a strategy in anticipation of actually exercising the patent right.

## EFFECTS OF BUSINESS METHOD PATENTS

With the pace of business innovations speeding up owing to the advent of the digital economy, what effects will business method patents have? The first effect is creating barriers to market entry. Taking the 1-Click patent as

<sup>10</sup> Certain requirements, including timing requirements, must be satisfied.

<sup>11</sup> The filing date of a divisional application is considered the same as the filing date of the original application, even though the divisional application is filed later.

an example, it is clear that the patent served as a barrier to market entry for competitors, and brought an enormous advantage to Amazon by enabling it to offer an unrivaled service in the early days of e-commerce.

Business method patents can become barriers to market entry for competitors even if the status of those patents are “Pending.” As with Money Square HD’s strategy, when a patent application is pending at the Patent Office, there is some latitude to change the ultimate scope of rights. Other companies who want to avoid infringing on a patent may hesitate to offer similar services as they wait for a decision on the scope of rights, which, in the meantime, buys the patent applicant company time to expand its market share.

The second effect involves advertisement and promotion. When a company makes an official announcement of its business method patent application, such an announcement not only demonstrates the company’s technological capabilities, but also has the effect of conveying the two attitudes described below.

#### **Pioneering new business ideas and services**

When a business is launched from scratch (from zero to one), the act of inventing takes place. By filing business method patent applications, a company can show its proactive stance toward creating and promoting new business ideas and services.

#### **Forward-looking attitude about intellectual property**

Applying for a business method patent not only protects the company’s intellectual property, but also shows respect for the intellectual property of third parties and demonstrates the company’s soundness, all of which are important for gaining the trust of investors as well as general consumers.

Even companies that distanced themselves from patent strategies during the *monozukuri* era of “making things” can derive considerable value from utilizing business method patents, considering the effectiveness of such patents in the *kotozukuri* era of “making things happen.” Digital platformers and IT companies are no longer the only ones applying for business method patents, as they are being joined by companies from a wider range of industries. Accordingly, it will become increasingly more important to fully understand the situation at other companies before engaging in business, and it will become the norm to investigate business method patents in the context of marketing and new business planning and development.