

## Beyond the US Borders: A Primary Analysis of Extraterritorial Application of US Patent Law

Zhao Lei†\*

Indiana University McKinney School of Law, 530 W. New York Street, Indianapolis, IN 46202, USA

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Intellectual property right is a critical part of international trade. In the process of international trade, protecting intellectual property rights from extraterritorial infringement is important for the US' intellectual property rights owner. Yet, all of the recognized intellectual property rights are territorial in nature and may not be protected extraterritorially. Overall, United States courts tend to favour United States plaintiffs over foreign defendants. In this article, the US laws which provide protection to patent rights from extraterritorial infringement activities will be introduced and analysed. This analysis will provide valuable information for the international business community.

**Keywords:** Territorial limitation, extraterritorial application, United States law

Today, intellectual property rights are playing a very important role in international trade. The relatively free movement of production factors, like goods and technology, around the world has made new technology spread more quickly and easily. At the same time, international transfer of technology has become a big business, with the technology receivers having to pay the owner of intellectual property rights big royalties and licensing fees. In 1999 alone, the payment made was US\$ 80 billion.<sup>1</sup>

Yet the intellectual property owner may not always focus on royalties and licensing fees, especially when the intellectual property is used in a foreign country, and that too illegally without authorization. As a result of such infringement activities, intellectual property owners tend to lose money.

Therefore, an analysis of how US law can protect its intellectual property rights extraterritorially is of great importance and will provide valuable insight both for US intellectual property rights owners as well as the international business community.

### **The Territorial Limitation of Intellectual Property Law**

Not every country treats intellectual property rights in the same way; some countries may not even recognize intellectual property rights. Therefore, intellectual property law is more or less territorial in

nature. The result is that a patent granted by one nation may be enforceable against infringing activity only within that nation's borders, and should generally not be enforceable outside that nation.<sup>2</sup> In addition, substantial standards of intellectual property law may vary significantly from country to country.<sup>3</sup> This suggests that even if someone obtained his intellectual property rights in a foreign country, the intellectual property rights may not be protected sufficiently under that country's law.

When intellectual property rights are infringed in the United States, it may be relatively easy to enforce the intellectual property rights since the courts are easy to access. Further, United States courts tend to favour United States plaintiffs over foreign defendants, knowing that most foreign nations will not provide the plaintiff with the same standard of protection as United States law.<sup>4</sup>

When a United States intellectual property owner's right is infringed outside the United States, the laws that will protect intellectual property rights out of the United States can be divided into two categories: (i) treaties and (ii) individual national intellectual property laws. In this article, the author focuses on the most conventional measure for a United States intellectual property owner - the United States law.

### **Extraterritorial Application of Patent Law**

#### **Territorial Presumption on Patent Infringement**

It is generally believed that the Congress has the authority to regulate acts outside the territorial limits

†Email: lezhao@umail.iu.edu

\*Present address: Ocean University of China,  
238 Songling Road, Qingda, China 266 100

of the United States,<sup>5</sup> while the Supreme Court of United States has considered it improper for a United States court to assert application of the United States law outside of it and the following may be reasons for the court's reluctance:

- (1) Possible conflicts with another nation's laws;
- (2) Comity;
- (3) Choice-of-law issues;
- (4) Congressional intent; and
- (5) Separation of powers<sup>6</sup>

Therefore, Section 271(a) of the Patent Act expressly states that, 'whoever without authority makes, uses, offers to sell, or sells, any patented invention, within the United States ... during the term of the patent therefore, infringes the patent.'<sup>7</sup> The territorial restriction of the Patent Act seems to be clear: all infringing activities must occur within the United States for the alleged infringer to be held liable. Accordingly, the Supreme Court has adhered to the view that patent rights are territorial in nature. For instance, in *Dowagiac Mfg Co v Minn Moline Plow Co*, the Court stated that, 'the right conferred by a patent under our law is confined to the United States and its territories and infringement of this right cannot be predicated of acts wholly done in a foreign country.'<sup>8</sup> In *Deepsouth Packing Co Inc v Laitram Corp*, the components of the infringed invention were manufactured within the United States, but the complete machines were assembled in a foreign country.<sup>9</sup> The defendant Deepsouth tried 'to make the parts of the patented machines, to sell them to foreign buyers, and to have the buyers assemble the parts and use the machines abroad.'<sup>9</sup> It was admitted that if the defendant Deepsouth had built completely assembled machines within the United States, the action would have infringed upon the patent at issue. But the Supreme Court reasoned that 'the statute makes it clear that it is not an infringement to make or use a patented product outside of the United States,' so the alleged infringer could not be liable under those forms of infringement. The Court concluded that Deepsouth had not made such a sale in the United States and therefore these activities were not infringement.<sup>9</sup>

#### **Exceptions to Patent Law's Territory Presumption**

Although Section 271(a) appears to set a territorial presumption against extraterritorial application of United States patent law, the Congress did not appreciate the strict interpretation. Congress quickly acted to enact Section 271(f) of the Patent Act trying

to give the court some powers to rule on extraterritorial infringement activities. In addition, some federal courts of appeal also seem to believe that the territory presumption is not absolute and their court's authority should not be limited to the United States border in some cases.

#### ***Federal Circuit's Expansive Interpretation of Section 271(f)***

The Congress was not happy with the *Deepsouth* ruling, so in 1984 it adopted Section 271(f) as a response to the holding in *Deepsouth*. Section 271(f) seems to be Patent Act's most relevant provision giving the United States court the authority to apply the law outside United States border. Simply put, under Section 271(f)(1), if the exporter induced or was even involved in the assembly of the device outside of the United States, the export of the unassembled components of a patented invention was an infringement. Under Section 271(f)(2), exporting a single component of an invention that is neither a staple article of commerce nor has a substantial non-infringing use could also be infringement, if the exporter has knowledge that the component's only possible use is in the patented device and that the component will be combined into the completed device in a foreign country.

It should be noted that the Federal Circuit consistently gave this provision a rather broad scope. For example, in *Waymark Corp v Porta Systems Corp*,<sup>10</sup> the issue was whether the patented device actually had to be assembled outside of the United States for infringement to occur. The court said no. In this case, the defendant manufactured the components and exported them but never assembled them. Nevertheless, the Federal Circuit held that exportation of the components without assembly was in fact infringement under Section 271(f)(1).<sup>10</sup> 'Infringement without a completed infringing embodiment is not the norm in patent law,' but the court concluded that the failure to assemble the products should not preclude a finding of infringement.<sup>10</sup> In this case, the court believed that an intent to make the combination is sufficient to trigger Section 271(f)(1) liability. The court found infringement without actual assembly and broadened the category of infringing acts, which has much greater extraterritorial consequence.<sup>11</sup>

The Federal Circuit went even further and gave more extraterritorial reach to Section 271(f) in the *Union Carbide Chemicals & Plastics Technology Corp v Shell Oil Co*.<sup>12</sup> In this case, the court ruled that, under Section 271(f)(2), infringement was

possible in the case of exportation of a catalyst to be used abroad in a patented process. The court stated that the statute did not exclude patented methods from protection because the catalyst could be considered as a part of the patented process, and its exportation would trigger liability under Section 271(f)(2).<sup>12</sup> The Federal Circuit thus broadly expanded this provision to cover not only tangible components but also method claims.

#### **Extended Application of Section 271(a)**

Section 271(a) is the territory provision of the Patent Act, yet this provision was interpreted broadly by the Federal Circuit to give it some extraterritorial application thus allowing patent holders an opportunity to sue in the United States. In 1994, the Congress added Section 271(i) to include ‘offers to sell’ and ‘importation’ of an invention to satisfy the United States’ obligations under TRIPS, but there was no clarity as to the scope of this provision. One question is whether an offer made in the United States to sell a device abroad would infringe a United States patent.<sup>11</sup> The Federal Circuit seems to believe that under Section 271(a), not all the infringements have to occur in the United States. In *NTP Inc v Research in Motion Ltd*,<sup>13</sup> the defendant, Research in Motion, offered the Blackberry system to users in the United States, but part of Research in Motion’s system was physically located in Canada.<sup>13</sup> Therefore, part of the infringement actually occurred outside of the United States. The disputed invention at issue was a remote e-mail system that was integrated into Research in Motion’s customers’ computer-based e-mail system. The relevant patents contained both system and method claims. The Federal Circuit concluded that the defendant, Research in Motion, was infringing the patent.<sup>13</sup> In analysing the patent at issue, the court stated that there is a difference between the method and system claims, and noted that Section 271(a) is ambiguous as to “how the territoriality requirement limits direct infringement where the location of at least a part of the ‘patented invention’ is not the same as the location of the infringing act.”<sup>14</sup> The court then provided a more detailed analysis of the various acts of infringement in Section 271(a) and ruled for the plaintiff.<sup>14</sup> Therefore, for a patent holder, if his patent is infringed by a defendant and part of the infringement activities occurred outside the United States, at least according to the Federal Circuit, Section 271(a) will not prevent the patent holder from successfully suing the defendant in the United States.

#### **Extended Application of Section 271(b)**

Section 271(b) states that: ‘Whoever actively induces infringement of a patent shall be liable as an infringer.’ At first glance, Section 271(b) should not be applied to activities outside the United States, but in practice this section may be a useful tool to fight infringement in a foreign country. When there is a direct infringement in the United States and the defendant knowingly induced that infringement and has the required intent to encourage the infringement in the United States, the defendant shall be liable for its inducement outside the United States. The three elements needed to find that an infringement occurred outside the United States under Section 271(b) are: (1) a direct infringement in the United States, (2) the infringement was induced by the defendant knowingly rather than by accident, and (3) the defendant’s intent of causing a direct infringement within the United States.<sup>15</sup>

A few courts have discussed when it would be sufficient for the defendant to have the ‘intent.’ In *Hewlett-Packard Co v Bausch & Lomb Inc*, the court ruled that an actual intent is required: ‘proof of actual intent to cause the acts which constitute the infringement is a necessary prerequisite to finding active inducement.’<sup>16</sup> Yet in *Manville Sales Corp v Paramount Sys Inc*, the same court held that ‘the alleged infringer’s actions induced infringing acts and that he knew or should have known his actions would induce actual infringements.’<sup>17</sup> The court seemed to be more specific about the intent when it required that ‘a defendant must have knowledge of the patent being asserted and have reason to know that the acts being induced fall within the scope of the patent.’<sup>15</sup>

In *Shockley v Arcan Inc*,<sup>18</sup> the plaintiff Mr Shockley invented a ‘mechanic’s creeper’ and applied for a patent on that invention. Not long after Mr Shockley began selling the inventive transformable creepers, similar transformable creepers imported from China appeared in the United States market. One of the defendants, Sunex, manufactured the transformable creepers and sold it to another defendant, the creepers were sold once again before they were imported into the United States.<sup>18</sup> The court found that Sunex’s manufacture and sale of the creeper in China did not support a finding of intent and ruled that it was not an infringement.<sup>18</sup> In *MEMC Electronic Materials v Mitsubishi Materials Silicon Corp*, the defendant sold products patented in the United States to Samsung Japan in Japan, which then

shipped the products to Samsung in the United States. The court found that the defendant knew that the product was issued a patent in the United States and that Samsung United States was engaged in the alleged infringement activities.<sup>19</sup> In addition, the court found that the defendant provided technical support for the products it sold to Samsung United States. The court then held that all these facts were evidence of intent to induce infringement under Section 271(b), and that the defendant could be liable.<sup>19</sup> Considering these cases together, it seems that the court would find intent only when there is evidence to support that: (1) the defendant knew the patent was being asserted; and (2) the defendant had reason to know that the acts fell within the scope of the patent.

In addition, it is believed that the following factors will help to support the finding that a foreign party has induced infringement in the United States:

- (i) Providing product support or technical support directly to a United States entity, conducting on-site visits to a United States entity;
- (ii) Indemnifying a foreign customer specifically against claims for infringement arising under United States law;
- (iii) Entering into an agreement with a foreign or United States entity that expressly provides that entity with United States distribution rights, or that provides a right to inspect the premises of a United States entity;
- (iv) Marketing the accused products within the United States;
- (v) Allowing a United States entity to perform warranty work under the name of the foreign manufacturer of the accused products;
- (vi) Granting trademark rights to a United States entity in connection with the sale or marketing of the accused products;
- (vii) Providing instructions or manuals in English;
- (viii) Manufacturing products to specifications that are specifically intended to be used in the United States market or a United States customer;
- (ix) Any other contacts between the foreign manufacturer and United States entities, that facilitate or encourage sales of the accused products in the United States.<sup>15</sup>

In international trade sometimes the evidence may not be sufficient to support a claim that the foreign

manufacturers directly infringed patent rights granted in the United States, however the above 10 factors, if existing, will be helpful for the court to hold the foreign manufacturer liable under the inducement theory. Although none of the above factors may be dispositive, the case laws suggest that more the factors present in a case, more possible it is that the foreign manufacturers will be held liable under the Section 271(b).

#### **Section 271(g)**

In 1988, the Process Patent Amendments Act was passed by the Congress, and the Patent Act started to provide some additional extraterritorial protection by adopting Section 271(g) which states that ‘whoever without authority imports into the United States or sells or uses within the United States a product which is made by a process patented in the United States shall be liable as an infringer...’ Under Section 271(g) the importation of, sale of, or offer to sell in the United States, a product made by a patented process, even if that process is performed outside of the United States, will be an act of infringement. There is no infringement if the final product either ‘is materially changed by subsequent processes’ or ‘becomes a trivial and nonessential component of another product.’ Section 271(g) is used to prevent a competitor circumventing a United States process patent by performing the process outside of the United States and importing the unpatented product into the United States.<sup>20</sup>

In summary, when the Congress passed the Section 271(f) of the Patent Act Congress intended to provide extraterritorial protection to patent holders whose patent rights were infringed outside the United States. The Federal Circuit was also ready to read the Patent Act broadly to provide support to United States patent right holders. Irrespective of whether the disputed patented invention was a method or process, the Federal Circuit showed a tendency to support protection against certain infringement activities outside the United States. But the Supreme Court of the United States on the contrary seems to dislike going too far to provide too much extraterritorial protection.

#### ***The Microsoft v AT&T case***

Unlike the Federal Circuit, which has interpreted Section 271 broadly in the past so as to provide more extraterritorial protection to United States patent holders, the Supreme Court was far more conservative

in offering extraterritorial protection. The *Microsoft v AT&T*<sup>21</sup> case is the most recent case heard by the United States Supreme Court ruling on the extraterritorial application of the United States patent law where the Supreme Court tried to curb the Federal Circuit's enthusiasm. In this case the United States Supreme Court reiterated the assumption of territoriality of patent rights.

In this case, Microsoft's Windows operating system incorporated a software called 'NetMeeting' which enabled a computer to process speech in the same manner as a software for which AT&T was issued a patent. However, Microsoft did not install the software within the United States territory. Microsoft shipped abroad a master version of Windows to manufacturers in foreign countries. These manufacturers used the so called 'master version' of the Windows operating system to generate copies, and then installed Windows and the 'NetMeeting' software onto the computers they sold in those countries.<sup>21</sup> AT&T sued Microsoft in the United States, the dispute being whether the installation of the NetMeeting software abroad infringed AT&T's United States patent.

The United States District Court for the Southern District of New York held that the Section 271(f) of the Patent Act refers to not only physical 'components' of machines or tangible structures, but also intangible information or data, therefore, the court held that Microsoft's argument that software cannot be a 'component' of a patented invention under Section 271(f) was not supported by the law.<sup>22</sup> In addition, the district court reasoned that these Windows operation system copies generated by foreign manufacturers should be considered as 'supplied from' the United States because the code or master disk used for foreign replication was originally manufactured and shipped from the United States.<sup>22</sup> Therefore based on Section 271(f), Microsoft's action was infringement of AT&T's patent through exportation. The District Court therefore ruled that Microsoft should be liable for that patent infringement. Microsoft appealed to the Federal Circuit. The Federal Circuit affirmed the ruling of the District Court.<sup>22</sup>

Fortunately for Microsoft, the Supreme Court decided to hear the case. The Supreme Court reversed the Federal Circuit's opinion and analysed the case based on two issues: whether digital software code is a 'component of a patented invention' within the

meaning of Section 271(f)(1); and, if so, whether copies of such a 'component' made in a foreign country could be considered as 'supplied from the United States.'

Firstly, the Supreme Court held that abstract software code was an 'idea' without physical embodiment and it could not be a 'usable, combinable part of a computer.'<sup>23</sup> The court stated that abstract software code is like a detailed set of instructions such as that of a blueprint. In addition, the Congress did not include the export of design tools such as blueprints in enacting the statutory provision of Section 271(f).<sup>23</sup> In other words, an intangible idea was not covered by Section 271(f) and export of that software code was thus not an infringement. So basically, the court held that unless the Windows software had been encoded or expressed in some sort of tangible medium, it could not be considered as a 'component' under Section 271(f).<sup>24</sup>

In addition, the Supreme Court held that the copies of Windows used to install on the foreign computers were not considered as 'supplied' from the United States. The Court reasoned that although software copying was much easier compared with the action of 'copy' in traditional industries, the liability should not be affected by the ease of copying.<sup>24</sup>

Therefore, the Supreme Court reversed the Federal Circuit's ruling and held that software code did not qualify as a component for purposes of triggering liability under Section 271(f), and that the copies installed onto the computers sold abroad were not considered as 'supplied' by Microsoft from the United States either.<sup>24</sup>

In the past few decades, the rapid development of international trade has caused a great increase of patent infringement outside the United States. Before the Supreme Court's ruling in *Microsoft v AT&T*, the Federal Circuits have greatly extended the application of Section 271 of the Patent Act. It remains unclear what kind of influence the Microsoft case will bring to the extraterritorial application of United States' patent law when the pressure for extraterritorial application of the Patent Act remains strong, and more people are asking the courts to use local patent rights as a means to regulate foreign conduct.

## Conclusion

Patent rights owners all across the world have always been in a dilemma when trying to protect their patent from infringement in a foreign country. Thus have to weigh the cost and benefit of registering a

patent in a particular country, and this is especially true for United States patent holders, because so many new technologies were first developed in and so many patents were first filed in the United States. For many patent owners, it may not be feasible to register their patent in many countries. When patent rights are infringed outside the United States border, the rights holders could either sue in the United States or sue in the country where the alleged infringement occurred. Generally for the United States citizen or business, to sue a foreign infringer in the United States, if possible, seems to be an easy choice. Although, all intellectual property rights are supposed to be territorial in nature, in practice, an intellectual property right holder may successfully sue a foreigner for infringement that occurred outside the territory of the United States, even if the owner has not registered or applied for a patent in that foreign country. For a United States patent owner, the Federal Circuit seems to interpret the Patent Act very liberally and almost all the provisions of Section 271 can be used as a basis for a law suit against specific extraterritorial infringement activities.

When the United State courts try to use the patent act beyond its borders, the line between infringement and non-infringement blurs. The extended application of United States' patent law and its uncertainty may cause some problems for the international business community. For manufacturers in developing countries, like India and China, when they deal with orders from the United States as well as other countries, they may need to be more careful when conducting due diligence and try not to be involved in intellectual property disputes. For instance, manufacturers in India and China may always require indemnification for potential IP infringement actions as long as the possibility of their products being exported to another country exists.

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