# A Comparative Study on Patent Infringement Types and Court Judgements in United States, Japan, and Taiwan<sup>(\*)</sup>

# Invited Researcher: KAO, Chien-Chung (\*\*)

A person directly infringes a patent by making, using, offering to sell, selling, or importing any patented invention, without authority, during the term of the patent. Judging whether directly infringing or not usually depends on "all elements rule" or "doctrine or equivalence". Unlike direct infringement, in the case where one or few elements are absent in an allegedly infringing device, however, the device increases the possibility of the infringement which could lead to indirect infringement. The United States and Japan have addressed indirect infringement for decades, including different requirements further codified in their respective statute laws. On the contrary, there is a lack of clear statutory language addressing indirect infringement in Taiwan patent law. This research will compare and analyze the differences between Japan, United States and Taiwan's court judgments and patent laws about direct and indirect patent infringements, especially focusing on the relationships between direct and indirect patent infringements, defendant's subjective requirements, infringement types, infringement objects, exclusions of infringement objects, etc. The necessity of adopting indirect infringement into Taiwan Patent Act and the advices will also be covered in this research.

# **I. Introduction**

If the accused infringing product or process lacks one of the technical features of the patent or one technical feature is not the same and not equivalent, then it does not constitute patent infringement<sup>1</sup>. Unlike direct infringement, in the case where one or few elements are absent in an allegedly infringing product, however, the product highly increases the possibility of the infringement which could lead to the so-called indirect infringement. The United States, Germany, S. Korea and Japan all have addressed indirect infringement, including different requirements further codified in their respective patent law. On the contrary, there is a lack of clear statutory language addressing indirect infringement in Taiwan patent act. In 2008, Taiwan Intellectual Property Office (TIPO) proposed and drafted an article adopting indirect infringement into Taiwan patent act. But through many public hearings, many Taiwanese users worried that it could lead to patentee's patent right and lawsuits abuses and caused serious damages to the local Taiwanese Original Equipment Manufacturer (OEM) companies. Since Taiwan just established its Intellectual Property Court in 2008, there was no previous court judgment about patent indirect infringement

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<sup>(\*\*)</sup> Patent Examiner, Taiwan Intellectual Property Office, at our institute over a period of approximately 7 months from July 4, 2017 through February 3, 2018, as an Invited Researcher for the Fiscal Year 2017.

<sup>&</sup>lt;sup>1</sup> Taiwan Intellectual Property Office, "The point for patent infringement judgment", pp. 29-51, Feb, 2016.

and the oppose from different sectors that led to no consensus about this issue, TIPO decided to delete patent indirect infringement from the draft in 2009.

But patent infringement cases are rarely alleged and decided by paragraph 1 (joint infringement) and paragraph 2 (induced and contributory infringement), article 185, Taiwan Civil Code<sup>2</sup> in Taiwan court proceedings. Because the premise for joint, induced and contributory infringement in article 185 is direct infringement. Besides article 185, Taiwan Civil Code can only claim for compensation of the injury. The patentee doesn't have the right to claim as in the event of patent right infringement set in Article 96, Taiwan patent act<sup>3</sup>, such as demand a person who infringes or is likely to infringe the patent right to stop or prevent such infringement, request for destruction of the infringing articles or the materials or implements used in the infringing act, or request for other necessary disposal.

Based on different economic growths and social needs, Japan, United States, S. Korea and European countries do not adopt the same criterion for the legislation of indirect patent infringement. It's necessary to study and research the patent indirect infringement systems and their court judgements in United States, Japan to construct the complete concepts of patent indirect infringement behaviors. And examine whether Taiwan Civil Code or Taiwan patent act can provide complete and necessary protection for patentee or need any amendment of Taiwan patent act under the situation of patent indirect infringement.

# **II. The Patent Infringement Types and Court Judgements in United States**

Under section 271(a) of the U.S. Patent Code, direct infringement occurs when a party makes, uses, sells, offer for sale or imports a patented invention. The importation, use, sale or offer for sale of a non-patented product in the US is also an act of infringement, if the non-patented product was made outside the US by a process patented in the United States. The types of direct infringements can be literal infringement or infringement under the Doctrine of Equivalence. Direct infringement requires no level of intent. The theory of direct infringement becomes more and more complicated when the accused system or method is the result of components supplied by or steps performed by

<sup>&</sup>lt;sup>2</sup> Article 185, Taiwan Civil Code: "If several persons have wrongfully damaged the rights of another jointly, they are jointly liable for the injury arising therefrom. The same rule shall be applied even if which one has actually caused the injury cannot be sure. Instigators and accomplices are deemed to be joint tortfeasors."

<sup>&</sup>lt;sup>3</sup> Article 96, Taiwan Patent Act:" Right to claim in the event of patent right infringement

A patentee of an invention patent may demand a person who infringes or is likely to infringe the patent right to stop or prevent such infringement.

In case an infringement of invention patent occurs due to intentional act or negligence, the patentee may claim for damages suffered therefrom.

When making a demand pursuant to Paragraph 1, the patentee may request for destruction of the infringing articles or the materials or implements used in the infringing act, or request for other necessary disposal.

multiple entities. The law of "divided infringement", also called "joint infringement", is at issue when multiple parties are involved in infringement. The Federal Circuit also outlined a relationship requirement for divided infringement in the Akamai V case<sup>4</sup>. Actors in a joint enterprise can all be held liable "for the steps performed by the other as if each is a single actor" and thus can be liable as direct infringers. A joint enterprise exists where all the following requirements are met: (1) an agreement, express or implied, among the members of the group; (2) a common purpose to be carried out by the group; (3) a community of pecuniary interest in that purpose, among the members; and (4) an equal right to a voice in the direction of the enterprise, which gives an equal right of control.

A defendant may be held liable for infringement though it did not directly engage in infringing activities itself. The two types of indirect infringement are contributory infringement under section 271(c) and inducement infringement under section 271(b). To be liable for inducement under section 271(b), the defendant must actively and knowingly aid and abet another's direct infringement. The conduct being induced by the defendant must constitute direct infringement. The Supreme Court made clear in the Global-Tech Appliances, Inc. v. SEB S.A., case<sup>5</sup> that the knowledge requirement to section 271(b) did not require actual knowledge on the part of the inducer. It is enough to show that the defendant was willfully blind to the possibility that the induced acts constituted patent infringement. The Supreme Court stated the standard of willful blindness requires "(1) the defendant must take deliberate actions to avoid learning of that fact." Evidence of good faith, such as an attorney's no-infringement opinion, can negate liability for inducement.

Section 271(c) creates liability for those who have contributed to the infringement of a patent by supplying a key component of a patented device. A claim of contributory infringement requires the existence of direct infringement. The Federal Circuit has essentially broken the statute down into four elements. In order to establish contributory infringement, the court has held that a patent owner must show: (1) that there is direct infringement, (2) that the accused infringer knew that the combination for which its components were being made was both patented and infringing, (3) that the component has no substantial noninfringing uses, and (4) that the component is a material part of the invention<sup>6</sup>. Only the sale of an article capable of both an infringing use and other lawful uses is not sufficient for a finding of contributory infringement.

Section 271(d) exempts certain activities by a patent owner from the misuse doctrine. Section 271(f) broaden US patent protection and prohibit shipping patented devices in smaller components

<sup>&</sup>lt;sup>4</sup> Akamai Techs., Inc. v. Limelight Networks, Inc., 134 S. Ct. 2111,2117 (2014)

<sup>&</sup>lt;sup>5</sup> Global-Tech Appliances, Inc. v. SEB S.A.,131 S.Ct. 2060 (2011)

<sup>&</sup>lt;sup>6</sup> Fujitsu, 620 F.3d at 1326 and 1330. The second element was essentially reaffirmed by the Supreme Court in Global-Tech, which stated that §271(c) requires knowledge of the existence of the patent and knowledge that the component infringes. Global-Tech, 131 S. Ct. at 2069.

for assembly overseas. But they are beyond the scope of this research report.

# III. The Patent Infringement Types and Court Judgements in Japan

#### 1. Direct Infringements: Literal and Equivalent Infringements

The general principle is that patent infringement is recognized only if an allegedly infringing product meets all of the structural elements stated in the claims. It's also being understood that for the interpretation of the claim language, the description and drawings may be taken into account. This is known as literal infringement. Literal infringement cannot be affirmed where not all elements of the claim are embodied in the accused device.

On February 24, 1998, in the "Ball Spline Bearing case"<sup>7</sup>, the Supreme Court has provided a guideline in favor of the doctrine of equivalents. Then the products should be regarded as identical with the construction as indicated in the scope of the patent claim and fall within the scope of the technical scope of the patented invention if meets the requirement of the guideline.

#### 2. Indirect Infringements

Certain acts, which do not directly constitute infringement, are deemed to constitute infringement, as preliminary acts or contributory acts with a high likelihood of infringement. They are stipulated in Patent Act, Article 101<sup>8</sup>

The provisions on indirect infringement are designed to set up a system for practically securing the actual effects of a patent right, but on the other hand, they must be carefully employed so as not to expand the scope of a patent right unjustly. There is contributory indirect infringement only in Japan. Article 101, subparagraph 1 and 4 are for exclusive product indirect infringement and article 101, subparagraph 2 and 5 are for non-exclusive product indirect infringement.

## 3. Major Court Judgments

"Hammer for Sand Making Machine" case, "Bread Machine Patent" case, alchitaro and Hanako" case, "Single-Lens Reflex Camera" case and "Clips for Printed Circuit Board Jigs" case are explained at this chapter.

# **IV.** The Patent Infringement Types and Court Judgements in Taiwan

<sup>&</sup>lt;sup>7</sup> Japan Supreme Court, 1994 (O) 1083, 24 February 1998.

<sup>&</sup>lt;sup>8</sup> Japan Patent Act, Article 101.

#### **1.** Types of Infringements

Only the person who directly commits these actions will be held to have infringed the patent under Taiwan Patent Act. In Taiwan legal system, there is no concept similar to the "indirect infringement" or "contributory infringement" that exists in U.S., Japan, and other European countries. Taiwan Patent Act provides no provision on indirect infringement currently.

The types of patent infringements in Taiwan and their respective stipulated laws are as following table.

Types of patent infringement	Law
Direct Infringement	Article 96, Taiwan Patent Act
Joint Infringement	The first paragraph, Article 185, Taiwan Civil Code
Inducement Infringement	The second paragraph, Article 185, Taiwan Civil Code
Contributory Infringement	The second paragraph, Article 185, Taiwan Civil Code

#### (1) Direct Infringement: Literal Infringement

Literal infringement occurs where all elements of a claim are represented in the product or method in dispute by the direct conduct of the accused infringer.

# (2) Direct Infringement: Infringement under the Doctrine of Equivalents (DOE)

Under DOE, infringement occurs if an element, composition, step, or combination thereof in the patent claim is altered or replaced but such alternation or replacement does not bring forth substantial difference in the perspective of one of ordinary skill in the art. However, if an element of the patent claim is completely missing in the accused product or process, rather than altered or replaced by another similar element, then DOE does not apply<sup>9</sup>(All-elements Rule).

The "triple identity test" or "tripartite test" or "way-function-result test" and "insubstantial difference test" is adopted to test whether the corresponding technical features of accused infringing product or process and the plaintiff's patented claim are equivalent or not.

#### (3) Joint Infringement

Joint infringers are jointly and severally liable for damages under the general tort law of Taiwan Civil Code. A patent owner can only rely on the theory of "joint torts" under the Civil Code should one wish to claim liabilities against an indirect infringer, such as inducing infringer or contributory infringer.

(4) Instigation and help Infringement: deemed to be joint infringement

<sup>&</sup>lt;sup>9</sup> The newest "Directions for Determining Patent Infringement" published in Feb. 2016, TIPO.

As long as a patent owner can prove that (1).a direct infringer and direct infringing conduct exist, and (2).the instigation (inducement) or help (contribution) by the indirect infringer must be "intentional" or merely done out of "negligence", and that (3).there is a causal link between the indirect infringer's 'induction" or "contribution" and the result of the infringement, the accused direct and indirect infringers would be held responsible for joint infringement.

#### 2. Some Court Judgments

"Takeda" Case, "Drain Bag" Case, "MPS" case and "Apparatus for Web Page Event Recording and Playing" Case are mentioned at this chapter.

# V. The Comparison of Patent Infringement Types and Case Laws in United States, Japan and Taiwan

#### **1. Direct Infringements**

For direct infringement, United States, Japan and Taiwan have basically the same criterion which is "all-element rule" for literal infringement.

United States in determining equivalence is according to "[a]n analysis of the role played by each element in the context of the specific patent claim will thus inform the inquiry as to whether a substitute element matches the function, way, and result of the claimed element, or whether the substitute plays a role substantially different from the claimed element."<sup>10</sup> In Japan, the Supreme Court has provided a guideline for the doctrine of equivalents<sup>11</sup>. If the 5 requirements of DOE are met, then the products should be regarded as identical with the construction as indicated in the scope of the patent claim and fall within the scope of the technical scope of the patented invention. In Taiwan, "way-function-result test" and "insubstantial change" are suggested in the "Directions for Determining Patent Infringement" published by TIPO's to test the DOE.

U.S. Courts have also interpreted Section 271(a) to address about the doctrine of divided infringement, where a relationship status between two or more parties can lead to a finding of divided infringement. The Federal Circuit also outlined a relationship requirement for divided infringement. Actors in a "joint enterprise"<sup>12</sup> can all be held liable "for the steps performed by the other as if each is a single actor<sup>13</sup> and a direct infringer.

#### 2. Indirect Infringements

<sup>&</sup>lt;sup>10</sup> Warner-Jenkinson Co. v. Hilton Davis Chemical Co., 117 S. Ct. 1040, 41 USPQ2d 1865, 1875 (1997)

<sup>&</sup>lt;sup>11</sup> Japan Supreme Court, 1994 (O) 1083 ,24 February 1998

<sup>&</sup>lt;sup>12</sup> Akamai Techs., Inc. v. Limelight Networks, Inc., 797 F.3d at 1022 (2015)

<sup>13</sup> Id.

The comparisons of indirect infringements including types of indirect infringements, types of behaviors, infringement objects, exclusions of infringement objects, subjective requirements and relationship with direct infringement in U.S. and Japan are listed as following table.

country	Types of	Objective require	ements	Subjective	Relation-	
	indirect infringements	Types of infringement behaviors	Infringement objects	Exclusions of infringement objects	requirements	ship with direct infringe- ment
United States	Inducement infringement Under 35 U.S.C. 271 (b)	Actively induces infringement	No requirement	No requirement	1. knew the patent 2. knowledge ( or willful blindness) that the induced acts constitute patent infringement	Depends on direct infringe- ment
	Contributory infringement Under 35 U.S.C. 271 (c)	offer to sell, sells within the United States or imports into the United States	a component or a material or apparatus constituting a material part of the invention	a staple article or commodity suitable for substantial noninfringing use	<ol> <li>knew the patent</li> <li>knew the use of the component would infringe the patent</li> </ol>	
Japan	Contributory infringement under Patent Act Article 101, Subpar. 1 and 4 (for exclusive product)	acts of producing, assigning, importing or offering for assignment as a business	any product to be used exclusively for the producing of the patented product or any product to be used exclusively for the use of the patented process" (Exclusive product)	No requirement	No requirement	Eclectic Theory : Whether independenc e theory or dependence theory be applied should be analyzed case-by-case
	Contributory infringement under Patent Act Article 101, Subpar. 2 and 5 (for non-exclusive product)		Indispensable object for the resolution of the problem by the invention (Non-exclusive product)	widely distributed within Japan	1. knew the article (or product) is utilized for the working of the invention 2. knew the invention is patented	

The types of infringements, types of behaviors, objective requirements and subjective requirements in Taiwan's "joint torts" under the Civil Code are listed as following table.

Taiwan	Types of	Types of	Objective	Subjective	Relationship
	infringements	infringement	requirements	requirements	with direct
		behaviors			infringement
"joint torts"	Joint	the behaviors	several persons	intension or	Depends on
under Taiwan	infringement	must have	have	negligence	direct
Civil Code	under Civil	causal	wrongfully		infringement
	Code, Article	relationship	damaged the		
	185, Para. 1	with the	rights of		
		damages	another jointly		
	Contributory	caused by the	to assist others		
	infringement	tort acts	to commit torts		
	under Civil				
	Code, Article				
	185, Para. 2				
	Inducement		to encourage or		
	infringement		incite others to		
	under Civil		commit torts		
	Code, Article				
	185, Para. 2				

The instigation (inducement) or help (contribution) by the joint infringer could be "intentional" or merely done out of "negligence" through the Taiwan court judgments.

# VI. The Influence of Adopting Indirect Infringement into Taiwan Patent Act

In the existing Taiwan legal system, there is no concept similar to "indirect infringement" or "contributory infringement" found in foreign patent laws like U.S. or Japan or European countries. A patent owner can only rely on the joint torts of the Civil Code if an attempt to claim liability is made against an indirect infringer, such as an inducing infringer or a contributory infringer.

In 2008, Taiwan Intellectual Property Office (TIPO) proposed and drafted an article adopting indirect infringement into Taiwan patent act. The final version of the drafting in 2009 was: "On the premise that clearly knowing a product is used as the main technical means of the patented invention to solve the problem, offering for sale or selling this product to any person who infringes upon such patent right shall be deemed as the patent infringement, and the product can be got in the general trading is excluded."

However, through public hearings, people worried about this draft of provision mostly represented an ambiguous legal concept such as "main technical means" which the coverage is difficult to be defined and may cause trouble on the judicial judgment and patents practice. Also considered the domestic industry development, social and economic needs, TIPO decided to delete patent indirect infringement from the draft in 2009.

# 1. The Problems and Disadvantages of Using Civil Code for the Patent Indirect Infringement

- (1) The indirect infringement must depend on the direct infringement
- (2) The right to stop infringement and the right to prevent infringement
- (3) The indirect infringement objective requirement
- (4) The indirect infringement subjective requirement
- (5) Responsible liability

# 2. The Necessity of Adopting Patent Indirect Infringement

- (1) Not Enough Protection under Civil Code
- (2) Indirect Infringement Not Necessary Damages the Local Original Equipment Manufacturing (OEM) Industry

# 3. Advices for Adopting Patent Indirect Infringement

The advice for adopting patent indirect infringement into Taiwan Patent Act will be as following table.

country	Type of indirect	Objective requirements			Subjective	Relation-
	infringements	Types of	Infringement	Exclusions of	requirements	ship with
		infringement	objects	infringement		direct
		behaviors		objects		infringe-
						ment
Advices	Contributory	offer to sell or	any product to be	No exclusion	No requirement	Depends on
for	infringement	sell	used exclusively			direct
Taiwan's			for the producing			infringe-
future			of the patented			ment
indirect			product			
infringe-			(exclusive			
ment			product )			
	Contributory	offer to sell or	Indispensable	a staple article	1. knew the	Depends on
	infringement	sell	object for the	or commodity	article (or	direct
			resolution of the	suitable for	product) is	infringe-
			problem by the	substantial	utilized for the	ment
			invention	noninfringing	working of the	
			(Non-exclusive	use	invention	
			product)		2. knew the	
					invention is	
					patented	

# **VII.** Conclusion

The theory of "joint torts" under the Civil Code is the only way for patent owner wish to claim liability against an indirect infringer, such as an inducing infringer or a contributory infringer.

However, patent indirect infringement under Civil Code has problems and disadvantages such as the patent holder can claim for compensation only after the direct infringement happened, patent holder cannot claim the right to stop or prevent infringement, a product which can be easily acquired by ordinary trading could be the infringement object, the subjective requirement is not limited to intentional behavior, the joint infringers share the damage compensations, etc. Because there is not enough protection for the patent holder under Civil Code and indirect infringement system not necessary damages the local OEM industry, it is advised that Taiwan should adopt indirect infringement into the Patent Act.

The advices for adopting patent indirect infringement into Taiwan Patent Act are as following. The patent indirect infringement should depend on direct infringement in order not to expand the scope of protection and thus makes a balance between the private patent right and the public interest. Type of Indirect Infringement will be contributory infringement only. The types of indirect infringement behaviors will be limited only for "offer to sell or sell" The infringement objects should be only for products and should not include method or process. The infringement objects could be either "any product to be used exclusively for the producing of the patented product" or "indispensable object for the resolution of the problem by the invention". The subjective requirement will be no requirement for exclusive product infringement. Knew the article (or product) is utilized for the working of the invention and knew the invention is patented will be the subjective requirement for non-exclusive product infringement.