## Practical Issues Surrounding Indirect Infringement Law (35 U.S.C. §271b & c) —Considering the differences between U.S. and Japanese law—\*

#### The First International Affairs Committee

#### (Abstract)

The U.S. Patent Law provides for indirect infringement in §271(b) and (c). There is an accumulation of decisions of the Court of Appeals for the Federal Circuit (CAFC) regarding indirect infringement. On the other hand, in terms of Japanese Patent Law, although Section 101 providing for indirect infringement was amended by legal amendments in 2002, there is virtually no accumulation of judicial precedents after the amendments.

This report raises matters concerning indirect infringement provisions, which are peculiar to the United States, from the CAFC decisions on indirect infringement, and suggests practical issues to be kept in mind by foreign companies from these viewpoints. In addition, indirect infringement provisions in Japan and in the United States do not completely correspond to each other due to differences in subject matter and the conditions for the act of an accused infringer. However, this report also presents practical issues in terms of the amended indirect infringement provisions of Japan by referring to these U.S. judicial precedents.

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#### 1. Introduction

In terms of indirect infringement, the U.S. Patent Law (35 U.S.C) provides for inducement of infringement and contributory infringement in §271(b) and (c), respectively (it is also possible to understand that §271(f) provides for indirect infringement, but this report considers §271(b) and (c) only). On the other hand, the Japanese Patent Law has historically provided for indirect infringement in Section 101, and the subject matters have been expanded to neutral articles (those which are not articles for exclusive use, but have some part for exclusive use while being able to be used for other uses) beyond articles for exclusive use under given conditions (Section 101(ii)(iv)) by legal amendments in 2002. This is called "amended indirect infringement" hereafter.

Japanese and U.S. provisions do not completely correspond to each other due to differences in the subject matter and the conditions for

<sup>\* &</sup>quot;CHIZAI KANRI" (Intellectual Property Management), Vol. 54, No.9, pp. 1293-1306 (2004)

the act of an accused infringer, as mentioned later in Chapter 2. In addition, in the amended indirect infringement provisions of Japanese law, the "material part" requirement was added in terms of the subject matter. However, in fact, there is virtually no accumulation of infringement cases regarding these standards.

This report raises matters concerning these provisions, which are specific to the United States, from CAFC decisions on indirect infringement from 1985 onward, and suggests practical issues to be kept in mind by applicants, from these viewpoints. This report also examines practical issues in terms of the amended indirect infringement provisions of Japan by referring to these judicial precedents.

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#### 2. Indirect Infringement Provisions in Japan and the United States

# 2.1 Indirect Infringement Provisions of the U.S. Patent Law

§271(b) and (c) of the U.S. Patent Law provides for inducement of infringement and contributory infringement, respectively.

35 U.S.C. 271 (b)

Whoever actively induces infringement of a patent shall be liable as an infringer.

35 U.S.C. 271 (c)

Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination, or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

An inducing infringement requires that an accused infringer have induced a third party to conduct an act that falls into direct infringement. A contributory infringement is established when an accused infringer is aware of the existence of a relevant patent and purchasers' intent to use the accused article in the case where the accused article constitutes a material part of the invention and is made especially for use in an infringement of the patent. However, staple articles that have other substantial noninfringing uses are excluded from subject matters of contributory infringement.

#### 2.2 Indirect Infringement Provisions of Japanese Patent Law

(1) Section 101(i) and (ii) of the Old Patent Law (Amended Law of 1994)

Paragraph (i) of this section provides that "in the case of a patent for an invention of a product, acts of manufacturing, assigning, leasing, importing or offering for assignment or lease of, in the course of trade, articles to be used exclusively for the manufacture of the product." Paragraph (ii) of the same section provides for the case of a patent for an invention of a process.

(2) Section 101(ii) and (iv) of the Amended Patent Law of 2002

The amended Patent Law of 2002 provides as follows while leaving the above-mentioned conventional provisions in Paragraphs (i) and (iii):

Indirect infringement includes, "in the case of a patent for an invention of product, acts of manufacturing, assigning, etc., or importing or offering for assignment, etc. of, in the course of trade, articles to be used for the manufacture of the product (excluding those which are generally distributed in Japan) and indispensable for solving the problems through the invention concerned, knowing that the invention is a patented invention and that the articles are to be used for the working of the invention."

In short, the amended law provides that indirect infringement is established when an accused infringer knows that there is a patented invention and that these articles are to be used for the working of the invention in the case where accused articles are indispensable for solving the problems. The law also provides articles generally distributed in Japan as excluded articles. Paragraph (iv) of the said section provides for the case of an invention of a process.

# 2.3 Comparison Between Provisions in Japan and the United States

This report compares provisions in Japan with those in the United States by using the following two factors:

A: "nature of accused articles"

B: "knowledge of the use of accused articles (having known that the accused articles are to be used for the working of the patented invention)" (Figure 1).

The nature of accused articles is categorized as "staple articles," "neutral articles" or "articles for exclusive use," while the knowledge of the use of accused articles is categorized as "not knowing," "knowing" or "inducement (knowing and inducing others)."

D. Knowladge of the use of

B Knowledge of the use of accused articles					
A Nature of accused articles		Not knowing	Knowing	Inducement	
	Staple				
	Neutral			···—··—···	
	Exclusive use				
	§271(b) Inducing infringement in the U.S.				
[]	<ul> <li>§271(c) Contributory infringement in the U.S.</li> <li>Section 101(i) and (iii) Old indirect infringement provisions in Japan</li> <li>(same as the amended indirect infringement provisions)</li> </ul>				

Section 101(ii) and (iv) Amended indirect

– – <sup>J</sup> infringement provisions in Japan

# Figure 1 Comparison between Provisions in Japan and the United States

As in Figure 1, U.S. contributory infringement provision in §271(c) requires "knowing," but accused articles do not include neutral articles. In this regard, the amended indirect in-

fringement provisions in Japan require "knowing" and accused articles include neutral articles. Therefore, provisions in Japan and those in the United States do not completely correspond to each other. However, the U.S. Patent Law has an inducing infringement provision in §271(b), and this provision does not question the nature of accused articles. Therefore, inducement of the act of infringement may constitute an infringement not only in terms of articles for exclusive use but also general-purpose articles and neutral articles. As above, comparing provisions in Japan with those in the United States in terms of the above-mentioned two factors, the scope provided as acts of infringement differs between them. Although the Japanese Patent Law does not have a provision corresponding to §271(b) of the U.S. Patent Law, those who have induced infringement may be accused of a joint unlawful act in Article 719 of the Civil Code.

The next part introduces some CAFC decisions on indirect infringement from 1985 onward, and thereby presents practical issues to be kept in mind by applicants in relation to matters specific to the United States. Consideration is also given to practical issues regarding the amended indirect infringement provisions in Japan while referring to these juridical precedents.

### **3. Introduction of U.S. Judicial** Precedents

# 3.1 §271(b) of the U.S. Patent Law: Inducing Infringement

As mentioned in the above, various kinds of acts may amount to inducing infringement since §271(b) of the U.S. Patent Law provides that the act of actively inducing infringement of a patent shall be an act of infringement, regardless of the nature of the accused article. On the other hand, as is clear from the term "actively," such acts are clearly distinguished from acts due to mere negligence. In short, for proof of an inducing infringement, the plaintiff shall have to prove that (1) the defendant has known or should have known that his/her act will induce others to commit a direct infringement and that (2) the defendant has recommended (induced) others to commit a direct infringement<sup>1)-3)</sup>. However, there is no choice but to determine what specific cases defendants are accused of inducing infringement because they have been aware of direct infringement and induced that infringement, on the basis of individual cases. The following introduces examples of CAFC decisions on matters regarding inducing infringement that are peculiar to the United States.

 Case in Which the Existence of Liability for Inducing Infringement Was Determined Based on the Degree of Relationship with a Direct Infringer (Jacobson Case<sup>4</sup>)

In this case, the court determined that liability for inducing infringement differs between two parties who make contact with a direct infringer differently, even when they conduct the same act of selling (or leasing) staple articles to the direct infringer.

Mr. Jacobson (Mr. J), the plaintiff of this case, possessed patents for asphalt rubber for repairing asphalt pavement (Mr. J's patents) described in the product-by-process claims. On the other hand, Cox Paving (Company C), the defendant, manufactured and sold pavement repair material. The direct infringer of Mr. J's patents was a pavement repair contractor, but Mr. J brought suit alleging that Company C's acts of selling material amount to inducing infringement of a patent. The district court found that Company C's acts of selling material amount to inducing infringement and is thus subject to injunction. Against this decision, Company C filed an appeal.

The CAFC examined whether Company C's acts of selling material amount to inducing infringement with respect to each pavement repair work.

i) The CAFC determined that the act of repair work by Able Bituminous Contractors, Inc. (Company A) directly infringed Mr. J's patents and that Company C's acts to Company A amounted to inducing infringement since Company C sold material to Company A while being aware of the existence of Mr. J's patents and the fact of infringement of the patents by Company A as is clear from the fact that Company C offered Company A advice concerning bidding, attended a meeting with Company A and visited repair work site.

ii) For Mr. Lee's acts of leasing asphalt paving equipment, the court found that the acts

do not amount to inducing infringement since he neither attended a meeting with the contractor nor had contact with the contractor either before or after work.

Incidentally, Company C also sold material to Blaze Construction, Inc. (Company B), but for Company B's work, the court found that Company C's inducement of infringement was not established since Company B had postponed execution of repair work until the expiration of the patents and thereby there was no direct infringement by Company B during the term of the patents.

 (2) Case in Which the Court Found that an Abbreviated New Drug Application (ANDA) Shall Not Amount to Inducing Infringement (Warner-Lambert Case<sup>5)</sup>)

The disputed issue in this case was whether evidence showing an accused infringer to have known the possibility of direct infringement by others is sufficient to prove inducing infringement.

Apotex Corp. (Company A) filed an abbreviated new drug application (ANDA) with the FDA (Food and Drug Administration) to manufacture and sell gabapentin (GP), which is a drug for epilepsy, as a generic drug. Warner-Lambert Co. (Company W) is a holder of a substance patent for GP, a method patent for treatment of epilepsy and a method patent for treatment of neurodegenerative disease. Company W was selling GP as an antiepileptic drug with approval of a New Drug Application (NDA), but had not obtained approval as a drug for treatment of neurodegenerative diseases. The term of the substance patent for GP and the method patent for treatment of epilepsy had already expired, but Company W filed a suit against Company A for infringement of the method patent for treatment of neurodegenerative disease.

The CAFC stated with regard to whether Company A's act amounts to inducing infringement as provided in §271(b) after holding that even if Company W's method patent for treatment of neurodegenerative disease without approval of an NDA does exist, Company A's act of filing an ANDA asan antiepileptic drug other than those described in the relevant patent do not amount to infringement of the patent as provided in §271(e)(2)(A).

Company W argued that Company A

should have expected that GP sold by itself would be used as a drug for treatment of neurodegenerative diseases in place of GP sold by Company W even if it sells GP as a drug for epilepsy, because GP is prescribed by physicians as a drug for treatment of neurodegenerative diseases in more than 89% of cases. Against this argument, the CAFC held that there was no inducing infringement because even if Company W's argument was true, mere knowledge of possible infringement by others does not amount to inducement, and Company W must prove Company A's specific intent and action to induce infringement, but Company W had not submitted any evidence that Company A encouraged physicians to use its GP as a drug for treatment of neurodegenerative diseases.

(3) Case in Which the Court Found that Indemnification for Ordinary Patent Infringement Does Not Amount to Inducing Infringement (Hewlett-Packard Case<sup>1)</sup>)

The disputed issue in this case was whether indemnification for patent infringement induces direct infringement.

Hewlett-Packard Co. (Company H) had a patent for an X-Y plotter used to create two-dimensional plots (Company H's patent). Bausch & Lomb Inc. (Company B) also had a patent for a plotter (Company B's patent). Company B created a division called Houston Instruments (HI division) at the end of 1982 to sell plotters. However, in 1985, Company B sold the HI division to Ametek, Inc. (Company A) on the condition that (1) Company B grants a license for its patent to Company A, (2) Company B promises Company A indemnification for responsibility of infringement of Company H's patent with a ceiling, (3) Company B and Company A advance development, making sure not to infringe Company H's patent, and (4) Company A obeys gag orders. In 1986, Company H filed a suit against Company B for infringement of its patent. The district court held that Company B's act of selling before the sale of the HI division to Company A constituted direct infringement but that the act of selling the HI division on the abovementioned conditions did not amount to inducement.

The CAFC held that it was obvious that Company B and Company A had known Company H's patent because they had agreed to respect that patent at the time of sale of the HI division but that a mere promise of indemnification for responsibility of infringement did not amount to inducing infringement (however, inducing infringement may be found if indemnification is given for the purpose of overcoming the deterrent of the patent laws). Thus, the CAFC affirmed the district court's decision since agreement between Company B and Company A did not show any intent to induce infringement.

- (4) Cases in Which Corporate Officer's Liability for Inducing Infringement Was Disputed
  - Case in which the court found that an officer who took reasonable steps to avoid infringement was not liable for inducing infringement (Micro Chemical case<sup>6)</sup>)

The disputed issue in this case was whether a corporate officer who took means to avoid infringement shortly after knowing the act of direct infringement is liable for inducing infringement.

Micro Chemical Inc. (Company M) had a patent for machines and methods for weighing, dispensing, and delivering microingredients, such as vitamins and medicine, into livestock feed (Company M's patent). Initially, Lextron Inc. (Company L) made and sold microingredient feed additive systems, which used a method similar to a "cumulative weigh method" described in Company M's patent (Type 1). After issuance of Company M's patent, however, Company L stopped producing and selling Type 1 machines, and started selling machines created by changing the "cumulative weigh method" to another publicly-known method (Type 2). For Type 2 machines (for Type 1 machines, parties concerned had previously reconciled their dispute), Company M sued Company L for direct infringement of its patent and its President, Mr. H, for inducement to infringe. The district court judged that Company L did not infringe Company M's patent on the grounds that the patent was invalid. Therefore, Company M appealed to the CAFC.

The CAFC reversed the district court's judgment that Company L's act did not infringe Company M's patent and found that Company L's machines did not infringe apparatus claims but directly infringed method claims. For Mr. H's act, the CAFC stated that the act before issu-

ance of the patent alone could not constitute infringement, and then held that Mr. H was not liable for inducing infringement because Company M did not show the evidence of "(defendant's) having known (that his act would induce Company L's act of direct infringement)," which is necessary to constitute inducing infringement, based on the undisputed facts that Mr. H took reasonable steps to avoid infringement at the same time when Company L was sued two days after the issuance of the patent and that Mr. H sought the advice of counsel in redesigning the accused machines.

 Case in which the court found that officers who had not been aware of a patent until suit was filed were not liable for inducing infringement (Manville case<sup>2</sup>)

The disputed issue in this case was whether corporate officers who instructed the manufacture of infringing articles are liable for inducing infringement.

Manville Sales Corp. (Company M) had a patent for a lighting system made by assembling parts. Mr. D, corporate secretary of Paramount Systems Inc. (Company P), obtained a copy of a drawing of Company M's lighting system that had been submitted to the Florida Department of Transportation, and sent the drawing to Mr. B, President of Company P. Mr. B instructed a designer of Company P to create a design and gave the drawing to him. Then, Company M filed suit against Company P, Mr. D and Mr. B alleging infringement of its patent. The district court found direct infringement by Company P, and direct and inducing infringement by Mr. D and Mr. B. Mr. D and Mr. B then appealed to the CAFC.

The CAFC held that the liability of defendant officers should be determined based on the relationship between company and employment and officers' decisions were made under agency principles of the company, and that since the acts of Mr. D and Mr. B were not unusual circumstances but within the scope of their usual employment in the company, the district court's determination that Mr. D and Mr. B were liable for direct infringement was an abuse of its equitable power. Moreover, for inducement of infringement, the CAFC stated that officers who actively assist with their corporation's infringement might be personally liable for inducing infringement and that the plaintiff had to show that the alleged infringers knew or should have known their actions would induce actual infringements. Then, the CAFC held that since Mr. D and Mr. B had not been aware of the patent until the suit was filed, they as officers did not have intent to cause infringement or approve it and thus, the district court's decision to hold them liable for inducing infringement was an error.

Case in which the court found that an officer who has the authority to control was liable for inducing infringement (Sensonics case<sup>7</sup>)

The disputed issue in this case was whether a one-man owner is liable for inducing infringement.

Sensonics Inc. (Company S) had a patent for an invention of a vibrator for aircraft instruments (Company S's patent). Aerosonic Corp. (Company A) manufactured and sold vibrators which were copies of the vibrator described in Company S's patent in complete detail, except that their vibrating-reed design was different from that of Company S's vibrator by order of Mr. F who was founder, owner, president, chief executive officer, and chief of development of Company A. Company S sued Company A for infringement of its patent, and the district court found that Company A committed the act of direct infringement and that Mr. F, a corporate officer, was personally liable for inducing infringement. Company A appealed to the CAFC for the validity and enforceability of Company S's patent and Mr. F's personal liability.

The CAFC held that Company S's patent was valid and enforceable. The CAFC then supported the district court's finding that Mr. F's testimony that "(he) did not have the authority to control or discontinue production of the accused device after he became aware of Company S's patent right" could not be believed, and thus held Mr. F liable for inducing infringement.

(5) Case to Decide Whether Parent Company Is Liable for Inducing Infringement with Respect to the Act of Its Affiliate (Insituform Case<sup>8)</sup>)

The disputed issue in this case was whether a parent company of the company that gave a technical license for an infringing process is liable for inducing infringement.

Insituform Technologies Inc. (Insituform)

had a patent for a process for lining pipelines, including sewers, which may leak (Insituform's patent). The parties concerned disputed over whether Process 1 (one of the two processes subject to the suit) worked by one of the defendants, Inliner U.S.A (Inliner), infringes Insituform's patent under the doctrine of equivalents. In addition to this, the parties disputed over whether a co-defendant, Kanal Sanierung Hans Mueller GmbH & Co. KG (KM) is liable for inducing infringement due to the fact that its affiliate (not a party to this case) gave a technical license for the relevant process to Inliner.

The CAFC affirmed the district court's determination of infringement of Insituform's patent by Inliner's Process 1 under the doctrine of equivalents. On the other hand, KM's affiliate (not a party to this case) gave a technical license for a process infringing Insituform's patent to Inliner after KM received notice of Insituform's patent. However, there was no evidence that this affiliate was KM's alter ego. The CAFC vacated the district court's holding that KM induced infringement and remanded with regard to the alter ego issue.

### 3.2 U.S. Patent Law: Contributory Infringement

Requirements for contributory infringement as provided in §271(c) of the U.S. Patent Law are that (1) direct infringement is constituted by a customer, etc. of the accused infringer and (2) material, etc. used for a component of the accused article or a process is an article for exclusive use. However, if patentee's act of selling products, devices, etc. is found to be the grant of an implied license to customers, the act of customers, etc. who purchase a component of these products, devices, etc. from the accused infringer will not amount to direct infringement. Therefore, contributory infringement by the accused infringer may not be constituted. The following introduces (1) two decisions concerning implied license and (2) one decision concerning the finding of articles for exclusive use.

- (1) Implied License
  - Case in which an implied license for a process patent was found based on a patentee's sale of a machine (Met-Coil case<sup>9</sup>)

The disputed issue in this case was whether a patentee's sale of a machine useful only in practicing the patented process confers an implied license upon purchasers of the machine.

Met-Coil Systems Corp. (Company M), the plaintiff holding a patent for a method for connecting sections of metal ducts, made and sold forming machines that are exclusively used for processing the ends of ducts to form flanges (unpatented) and corner pieces for use with the flanges in connecting sections of ducts. On the other hand, Korners Unlimited, Inc. (Company K), the defendant, made and sold corner pieces used for the same purpose as Company M's products. In addition, the purchasers of Company M's forming machine were practicing the claimed invention using the said forming machine and corner pieces. The district court found that the purchasers of the forming machine had an implied license to practice the claimed process and that Company K's sale of corner pieces did not fall into contributory infringement. The CAFC also affirmed this finding.

The CAFC set out the following two requirements for the grant of an implied license by virtue of a sale of nonpatented equipment used to practice a patented invention:

Requirement 1: Subject equipment had no noninfringing uses.

Requirement 2: The circumstances of the sale plainly indicate that the grant of an implied license should be inferred.

Based on the above-mentioned two requirements, the CAFC determined as follows. Regarding Requirement 1, the relevant forming machine is an article for exclusive use and has no noninfringing use, so this requirement is met. Regarding Requirement 2, although Company M contended that it had sent customers written notices neglecting the grant of a license for corner pieces purchased from unlicensed sources and that no implied license arose where the sale was accompanied by such notices, the CAFC determined that Company M's customers were not notified at the time of purchasing the forming machine and notices were sent after they purchased the machine and that such notices were not a part of the circumstances at the time of the sale, when the implied license would have arisen.

In judging the above circumstances, the CAFC concluded that there was no contributory infringement by Company K since Company M's customers had an implied license to practice the patented invention and there was thus no direct infringement by the customers.

 Case in which the court found the sale of one of the coupled products as the grant of an implied license (Anton case<sup>10</sup>)

The disputed issue in this case was whether the purchasers of a patented battery pack connection are granted an implied license by patentee's sale of a female plate, which has no other substantial uses, separately from a male plate.

Anton Bauer Inc. (Company A), the plaintiff, possessed a patent for a male-female battery pack connection (Company A's patent). In that connection, the female plate is attached to a television camera while the male plate is attached to a battery pack. All claims of Company A's patent were relating to the male-female connection, and no claim separately covered the male plate or the female plate. Company A sold female plates alone to electric companies for use in television cameras. Company A also sold female plates alone to end-users as an after-market product, as well as battery packs containing male plates, and did not sell the male and female plates together. On the other hand, PAG Ltd. (Company P), the defendant, sold battery packs containing male plates claimed in Company A's patent, on the premise of connection to the female plates claimed in Company A's patent. Company A filed suit alleging that Company P's products do not have other substantial uses than use in malefemale connection and thus infringe Company A's patent. The district court granted a preliminary injunction holding that Company P's products contribute to or induce the infringement of Company A's patent, but the CAFC reversed this district court's determination.

The CAFC determined as follows.

(i) Company P's products are for exclusive use without other substantial uses than use in male-female connection. In this regard, these products constitute contributory infringement. However, to succeed on the claim of these indirect infringements, it must be proved that there is direct infringement.

(ii) In this case, Company A did not place express restrictions on its customers at the time

of sale of its own products. Therefore, Company A is considered to have granted an implied license for the relevant patent at the time of selling its own products, and it is possible to determine that Company A's patent has been exhausted.

iii) There is no direct infringement of a patent because of the grant of an implied license or the exhaustion of the patent, and thus there is no indirect infringement.

(2) Finding of Articles for Exclusive Use

Case in which an article was not found to be for exclusive use because there were other uses than those claimed in the patent (Bard case<sup>11</sup>).

The disputed issue in this case was whether a catheter for medical use has other uses than use in the method patent concerned (whether the catheter is for exclusive use).

C.R Bard Inc. (Company B) filed an application for an invention claiming a catheter device and an invention of method of treatment for angina using the claimed catheter. In response to reasons for refusal, Company B reduced these claims to the method claims only and obtained a patent (Company B's patent). On the other hand, Advanced Cardiovascular Systems Inc. (Company A) sold catheters used for this method, and was thus accused of induced and contributory infringement. The district court determined that Company A's act amounted to contributory infringement, but the CAFC reversed this determination.

The method claims of Company B's patent included the step of channeling blood flow through the wall of the proximal portion of the main lumen immediately adjacent the balloon to fluidly connect locations within the coronary artery surrounding the proximal and distal portions of the tube. On the other hand, the prior art in Company B's patent used the inlets of a catheter so that blood enters the tube placed only in the aorta.

Company B argued that it was sufficient if the openings of a catheter were immediately adjacent the balloon fluidly connect locations within the coronary artery surrounding the distal portion of the tube, and that a surgeon's act of inserting Company A's catheter into a coronary artery to a point where the catheter's end draws blood from the artery amounted to direct infringement, and Company A's catheter amounted to contributory infringement. Company A's catheter has a series of ten openings in the tube near, and at the proximal end of the balloon. The first opening is the closest to the balloon and the remainder are located at prescribed intervals, the furthest from the balloon being 6.3 centimeters away.

For Company A's catheter, there were three possible fact patterns of use as follows.

The first pattern involves positioning the catheter such that all of its side openings are located only in the aorta. This is the same as a pattern described in the prior art cited in the examination of the subject patent.

The second pattern involves positioning the catheter such that all of the side openings are located within the coronary artery, which is intended by the subject method patent.

The third pattern involves positioning the catheter such that some of the side openings are located in the aorta and some are located in the artery.

The district court concluded that Company B's patent did not require that all holes be immediately adjacent the balloon, nor that the blood flowing through the balloon come solely from the coronary artery.

In response to this, Company A argued that it is acceptable to use a catheter in such a way that all of the openings are located in the aorta since it is sufficient to treat 40 to 60 percent of stenoses requiring angioplasty if a catheter is located less than three centimeters from the entrance to the coronary artery.

The CAFC held that even assuming that the district court's conclusion that "claim 1 is applicable to the third of the fact patterns" is correct, the use of the first fact pattern still remains and there are substantial noninfringing uses for Company A's catheter, therefore it does not amount to contributory infringement.

#### 3.3 **Proof of Direct Infringement**

There must be direct infringement for the establishment of inducement or contributory infringement. This part introduces a case in which contributory infringement was established as a result of the finding of direct infringement by circumstantial evidence (Moleculon Case<sup>12</sup>).

The subject of Moleculon Research Corporation's (Company M) patent (Company M's patent) was a method for restoring a preselected pattern composed of eight smaller cubelets that may be rotated in groups of four adjacent cubes, which is a method for restoring a preselected pattern of cubelets, including the step of rotating a first set of cube pieces comprising four cubes about a first axis, the step of rotating a second set of four cubes about a second axis, and the step of repeating the above two steps until the preselected pattern is achieved on the six faces of the composite cube. Company M sued CBS Inc. (Company C), which sells threedimensional puzzles, for infringement of Claims 3, 4, 5, 6 and 9 of Company M's patent.

Method claims 3-5 can be infringed only by a puzzle user. Therefore, Company M argued that Company C's act amounted to inducement of infringement. On the other hand, Company C argued that it could not be liable for inducing infringement of claims 3-5 because there was no evidence of direct infringement of the method claims. The district court held that Company M had met its burden of showing inducement of infringement with circumstantial evidence of extensive puzzle sales, dissemination of an instruction sheet teaching the method of restoring the preselected pattern with each puzzle, and the availability of a solution booklet on how to solve the puzzle.

The CAFC stated that it was hornbook law that direct evidence of a fact was not necessary and that it was necessary to deny the argument that proof of inducement of infringement or direct infringement requires direct, as opposed to circumstantial evidence. Then, the CAFC determined that there was no clear error in the district court's finding of inducement of infringement with regard to Company C's sale of three-dimensional puzzles since "circumstantial evidence is not only sufficient, but may also be more certain, satisfying and persuasive than direct evidence<sup>13</sup>".

#### 4. Practical Issues Regarding U.S. Inducing Infringement Provision and Contributory Infringement Provision

(1) Practical Issues Regarding Implicated License

A contributory infringement generally requires direct infringement by customers, etc. of the accused infringer. However, if patentee's act of selling machines, products, etc. is found to be the grant of an implicit license to the customers, the customers' act will not constitute direct infringement, and thus, contributory infringement by the accused infringer will not be established in some cases. This point must be noted. In the Met-Coil case, the patentee's sale of a flange forming machine was deemed to be the grant of an implicit license, and in the Anton case, the sale of one of the coupled products was also deemed so. In both cases, the claim of contributory infringement was denied, and the patentees lost the case. The following points out practical issues in reference to both cases.

1) For patentees, when filing a patent application for a combination product, applicants should draft claims for each component in addition to the combination product (final product). In the case of an invention for a process of manufacture, applicants should consider claims for manufacturing equipment and material, as well as products after manufacturing, if possible. The plaintiff could accuse the accused infringer of direct infringement if it had claimed not only the method for connecting sections of metal ducts but also the related forming machine and raw material components, etc. in the Met-Coil case, and if it had claimed the male and female plates separately in addition to claims for the combination of the male and female plates in the Anton case.

2) Even if claims for a combination product or claims for a process of manufacture alone are patented as the final outcome, it is important to place restrictions on the purchase of components and raw materials from those other than the patentee and the use of them by a contract, note, etc. at the time of sale of the component or manufacturing equipment (by the time of the sale at the latest) to avoid the grant of an implied license. In particular, in the Met-Coil case, although Met-Coil placed restrictions on purchase after the sale of the manufacturing equipment, these restrictions were considered invalid. Therefore, it is important to consider restrictions on purchase before the actual sale of products and equipment, including at the time of the conclusion of a sales contract or a license contract, or the distribution of an instruction manual.

On the other hand, in the position of the accused infringer, it is necessary to consider

whether the patentee's sale of products or equipment grants an implicit license through careful examination of discovery materials (sales contract, license contract, instruction manual, etc.) and pay attention to the fact that such an implied license can be one means of defense.

### (2) Practical Issues Regarding Provision of General-Purpose Articles

The indirect infringement provision in the United States is applicable to the act of inducing infringement of a patent (§271(b)). In this case, the provision is applicable regardless of whether or not the accused article is for exclusive use. Therefore, it is not possible to escape from the charge of indirect infringement just because the subject matter is not an article used exclusively for working a patented invention or is a generalpurpose article. In the Jacobson case, the court held that one who merely sold material would be found to have induced infringement if he/she attended a meeting for repair work that falls into the act of direct infringement, offered advice and visited the work site. On the other hand, the court also held that the act of one who leased equipment for the work without attending a meeting and contacting with the contractor before or during work would not amount to inducement of infringement. In this way, the act of selling material that is considered to be a general-purpose article may be found to amount to inducement of infringement depending on the form of involvement in the act of direct infringement. Therefore, if suppliers come to know, before supplying material or component, the risk that their customer may commit infringement of a patent, they must be very careful even if the material or component is a general-purpose article.

#### (3) Practical Issues Regarding Indemnification for Patent Infringement

A mere agreement on indemnification for standard patent infringement does not constitute inducement of infringement. As shown in the Hewlett-Packard case in which the court held that there was no evidence showing intent to infringe in an indemnification agreement at the time of sale of a corporate division, the proof of active inducement of patent infringement is required to prove intent that has triggered the act constituting an infringement. However, the intent to induce infringement may be found if an agreement was concluded with one who may commit infringement for the purpose of overcoming the deterrent of the patent laws, for example, an agreement indemnifying a very large amount of damages.

Therefore, the plaintiff in an infringement suit should confirm whether there was an act deemed to induce infringement, such as indemnification of a large amount and an act of disrespecting patents, at the time of concluding an agreement.

On the other hand, in the case of concluding an indemnification agreement despite knowledge of the existence of a related patent, it is necessary to draw an agreement that is not found as inducing infringement, by including articles that stipulate the intent to make efforts to avoid infringement.

In addition, it should be noted that a patent license might constitute inducement of infringement if there is a causal relation between the license agreement and the act of infringement, which is considered to be inducing infringement.

(4) Practical Issues Regarding Subsidiaries and Affiliates

It should be noted that the alter ego issue also applies to determination on the application of §271(b) of the U.S. Patent Law. For example, in the Institutorm case, the disputed issue was whether the defendant is in a position to control another company (not party to this case) (alter ego) in relation to the inducement of infringement by that company. Therefore, if there is a subsidiary or affiliate in an alter ego relationship, it is necessary for the parent companies to manage and comprehend such a company in addition to themselves so that the company would not commit an act of inducing infringement. On the other hand, patentees should keep in mind that if they can prove that the accused infringer has a subsidiary or affiliate in an alter ego relationship, they may be able to exercise their rights against the subsidiary or affiliate.

(5) Practical Issues Regarding Corporate Officers

Officers or directors ("officers, etc." hereafter) who have been actively involved in the act of patent infringement shall be liable for the infringement together with their corporation<sup>14)</sup>. For the proof of "active involvement in the act of patent infringement," it is necessary to prove that the officers, etc. have known that their own act would induce direct infringement by their corporation and have encouraged the corporation to commit direct infringement.

In short, the plaintiff who is a patentee must prove that the officers, etc. of a corporation had the authority to control direct infringement by their corporation and had a specific intent to promote infringement by the corporation. As shown in the Sensonics case, an officer who is also a chief of engineering is deemed to be in a position to instruct the design change of the accused product, so the officer will be blamed for inducing infringement if he/she actively encouraged the manufacture and sale of the accused product despite his/her position to stop direct infringement by the corporation.

As indicated in the Micro Chemical case and the Manville Sales case, the defendant officer, etc. can avoid the liability for inducing infringement by proving they had not known the existence of a patent or had taken reasonable steps to avoid infringement at the time of becoming aware of a patent infringement. Specific examples are cases when an officer, etc. has sought advice of a counsel, etc. and has attempted the design change of the accused product.

The Japanese Patent Law does not have any provisions corresponding to §271(b) of the U.S. Patent Law, but corporate officers, etc. who induced infringement may be accused of a joint unlawful act under Article 719 of the Civil Code of Japan or the liability to third persons under Article 266-3(1) of the Commercial Code of Japan.

(6) Practical Issues Regarding the Proof of Direct Infringement

In the Moleculon case, indirect infringement was found as a result of proof of direct infringement of a process patent by circumstantial evidence. It is generally difficult to prove the working of a process patent at the consumer's stage, and it is thus hard to prove direct infringement as a prerequisite for the finding of indirect infringement. However, if it is very easy to presume the working of an invention claimed in a process patent, direct infringement may be proven from circumstantial evidence. It should be noted that patentees can prove direct infringement depending on the contents of their process patents, and consequently can prove indirect infringement.

#### 5. Practical Issues Regarding Amended Indirect Infringement Provisions in Japan Seen from U.S. Judicial Precedents

(1) Practical Issues Regarding the Scope of the Subject Matters

Due to legal amendments, indirect infringement of Japan became applicable not only to the provision of articles for exclusive use but also to the supply of articles indispensable for solving the problems through the invention concerned, excluding those which are generally distributed in Japan (widely-distributed articles) (in parentheses of Section 101(ii) and (iv)). Comparing this with Inducement of the United States with a focus on the nature of the accused articles, inducement provision in the United States (§271(b)) covers a broader scope, as mentioned in 2.3 above. In the United States, even for widely-distributed articles, an act will amount to inducement of infringement ( $\S271(b)$ ) if it falls into the act of actively inducing infringement. However, in Japan, indirect infringement will not be questioned as long as supplied articles are widely distributed. This point should be noted.

(2) Practical Issues Regarding Neutral Articles

In the case where the subject matter is a neutral article, the case will be handled differently under U.S. contributory infringement (§271(c)) and under indirect infringement in Japan (Section 101). Both plaintiffs and defendants should note this.

Under §271(c) of the U.S. Patent Law, contributory infringement will not be established if the accused article is a staple product having other substantial use than use in the patented invention concerned. In the Bard case, the establishment of contributory infringement was disputed for an invention of method of use of a catheter. However, the catheter, accused article, had two other uses than the patented invention, and is thus recognized as a staple product. One of these uses was the same as the conventional one. The patent subject to the Bard case is not considered to be industrially applicable and is not patented in Japan since it falls under a treatment method. There is only room for obtainment of a patent for an invention of product with limitation of use. However, considering this catheter case in Japan while supposing that a treatment method is patentable in Japan, this case would be unlikely to fall into the exception clause, "excluding those which are generally distributed in Japan," under the Japanese Patent Law (indirect infringement provision amended in 2002 (Section 101(iv))), because "Comments on the Amended Industrial Property Law of 2002<sup>15</sup>)" explains that this provision is aimed to exclude standard products and widely-distributed products, which are generally obtainable in the market for "screws, nails, bulbs, transistors, etc." and catheters are hardly distributed to that degree. On the other hand, although this catheter had other substantial uses than use in the patented invention, it is considered to fall under the "article indispensable for solving the problems through the invention concerned" under Section 101(iv). In short, according to the above-mentioned "Comments on the Amended Industrial Property Law of 2002," components, etc. which are required to solve the "problem to be solved by the invention" fall under such articles. Therefore, the scope of the subject matters of contributory infringement in the United States (§271(c)) is narrower than that in Japan since "a staple article or commodity of commerce suitable for substantial noninfringing use" is excluded from the subject to indirect infringement in the United States based on the premise of no act of inducement.

In addition, the Warner-Lambert case is one in which there was a question of whether the provision of a substance used for a patent of a method of treating diseases amounts to inducement of infringement (§271(b)). In this case, the court held that such an act does not amount to inducement of infringement even if 89% of prescriptions prepared by physicians are related to the patented process. Applying Japanese law to this case without considering the types of act of inducing infringement, the case may fall into Section 101(iv) unless the above-mentioned substance is "generally distributed in Japan." Therefore, the scope of subject matters of contributory infringement (§271(c)) seems to be narrower than that in Japan. However, considering the types of act subject to inducement of infringement (§271(b)), the scope is broader in the United States.

It should be noted that the scope of subject matters of indirect infringement may be broader than that of contributory infringement in the United States, taking into account decisions mentioned above.

(3) Lastly, Virtual Subject Matters Are Considered

What about the case where the "subject matter consists of two constituent elements, a and b, and constituent a is used for use A while constituent b is used for use B"? If use A is a patented use, it is possible for the accused infringer to argue in the United States that a relevant act will not amount to contributory infringement ( $\S271(c)$ ) since the above-mentioned subject matter has substantial use B other than use A. However, inducement of infringement (§271(b)) will be established if the accused infringer who is a supplier of the above-mentioned subject matter induces its customers. On the other hand, in Japan, indirect infringement will be established if the accused infringer has known customer's intent to use the subject matter for working the patented invention concerned since constituent element a of the above-mentioned subject matter falls under the "article indispensable for solving the problems through the invention concerned."

For example, in the case where the subject matter is an IC, which may become part of circuit A or circuit B and has constituent element a that is part of circuit A and constituent element b that is part of circuit B, and part of circuit A is patented, indirect infringement of the relevant patent will be found in Japan if the supplier of the above-mentioned IC has known its customer's intent to use the IC to work the patented invention concerned. In the United States, contributory infringement (§271(c)) may not be found for this case.

### 6. Conclusion

This report pointed out and considered matters that may be disputed in terms of indirect infringement in the United States, in light of amended indirect infringement provisions in Japan.

Since a subjective requirement "actively" exists in §271(b) that provides inducement of infringement, it seems more difficult for patentees to prove inducement of infringement compared to contributory infringement under §271(c). Thus, the search for evidence is expected to become one of the key points in suits. In addition, there are no articles that clearly provide for the specific cases where inducement of infringement is found, and various acts other than those introduced in this report may amount to inducement of infringement. Therefore, it is necessary to continue paying attention to future decisions and trends thereof.

Regarding contributory infringement, indirect infringement provisions in Japan were amended by legal amendments in 2002 so as to be closer to the provision under  $\S271(c)$  in the United States. However, it has to be noted that the provisions in Japan and the provision in the United States do not completely correspond to each other in terms of the scope of subject matters of indirect infringement. Incidentally, although we must await future accumulation of judicial precedents with respect to operations of the amended indirect infringement provisions in Japan, CAFC decisions and practical issues introduced in this report will serve as a reference in considering the application of indirect infringement provisions in Japan.

It will be a real pleasure for me if this report is of some help in considering indirect infringement and adopting practical measures both in Japan and in the United States.

#### Notes:

- Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525 (CAFC 1990/7/30).
- Manville Sales Corp. v. Paramount Systems Inc., 16 USPQ2d 1587 (CAFC 1990/10/23).
- 3) Rodime PLC v. Seagate Technology Inc., 50USPQ2d 1429 (CAFC 1999/4/13).
- 4) Jacobson v. Lee 33 USPQ2d 1590 (CAFC 1994/4/14).
- 5) Warner-Lambert Co. v. Apotex Corp. 65 USPQ2d 1481 (CAFC 2003/1/16).
- 6) Micro Chemical Inc. v. Great Plains Chemical Co. 53 USPQ2d 1258 (CAFC 1999/10/6).
- 7) Sensonics Inc. v. Aerosonic Corp. 38 USPQ2d

- Instuform Technologies Inc. v. Cat Contracting Inc. 48 USPQ2d 1610 (CAFC 1998/10/30).
- Met-Coil Systems Corp. v. Korners Unlimited, Inc. 231 USPQ 474 (CAFC 1986/10/8).
- Anton / Bauer Inc. v. PAG Ltd. 66 USPQ2nd 1675 (CAFC 2003/5/21).
- C. R. Bard Inc. v. Advanced Cardiovascular Systems Inc. 15 USPQ2nd 1540 (CAFC 1990/ 8/2).
- 12) Moleculon Research Colporation v. CBS,Inc. 229 USPQ 805 (CAFC 1986/5/16).
- 13) Michalie v. Cleveland Tanders, Inc., 364 US 325, 330 (1960).
- 14) Donald S. Chisum, *Element of United States Patent Law, Second Edition* (2000) (Japanese translation), 407.
- 15) Comments on the Amended Industrial Property Law of 2002 (Japan Institute of Invention and Innovation, 2002), 27-31.

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