

## Lessons on Patentability and Infringement (Part II)

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### Author Note

In Part 1, I wrote about the requirements to be granted a patent, parts of a patent and claim construction. As before, my viewpoint is based on experience as a medical device expert witness and one skilled in the art; review of patent related case laws and legal opinions. I discuss patent infringement, infringement analysis and basis for invalidity. In Part 3, I will describe the steps that are usually taken in patent invalidity analysis.

### Introduction

Claims are the broadest reasonable interpretation of the protection offered by a patent, and are based on the specifications and drawings. Claims are given the broadest reasonable interpretation by United States Patent and Trademark Office (USPTO), consistent with the interpretation that those of ordinary skill in the art would reach. The plain meaning of a term means the ordinary and customary meaning given to the term by those of ordinary skill in the art at the time of the invention. Since the claims define in technical terms, the scope of the protection conferred by a patent, it is improper to import a claim limitation from the specification. Absence of prosecution history estoppel, a patent provides protection broader than the language of the claim. In a case of patent infringement, the claims are examined to establish validity or invalidity. One accused of infringement may assert invalidity as a defense. Proof of invalidity is accomplished by interpreting the claims and applying the claims to the target.

#### 1. Patent infringement

The scope of the patented invention is defined in the claims of the granted patent. In other words, the terms of the claims inform the public of what is not allowed without the permission of the patent holder. The definition of patent infringement may vary by jurisdiction, but it typically includes using or selling the patented invention. Permission may typically be granted in the form of a license. A party (other than the patentee or licensee of the patent) who manufactures, imports, uses, sells, or offers for sale patented technology without permission or license from the patentee, during the term of the patent and within the country that issued the patent, is considered to infringe the patent.<sup>1</sup> A validity and enforceability opinion is a legal opinion or letter in which a patent attorney or patent agent analyzes an issued patent and provides an opinion on how a court might rule on its validity or enforceability.<sup>2</sup> Validity opinions are often sought before litigation related to a patent. An invalid patent claim cannot be infringed. This statement has far-reaching implications whether you are a patent owner, or a party accused of infringement,

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<sup>1</sup> 35 U.S. Code Section 271, "Infringement of Patent"; see also Chapter 28 of the Manual of patent examination procedure, July 2010, rev.

<sup>2</sup> M. John Sterba *Legal opinion letters: a comprehensive guide to opinion letter practice* Aspen Publishers Online, 2002

albeit each situation involves very different analysis and results. As a patent owner, the validity or invalidity of your claims provide a basis for whether you have any leverage in enforcing a patent against an infringer and negotiating or maintaining the terms of a license agreement.

Once issued, a U.S. patent is presumed valid.<sup>3</sup> This means that courts will deem each claim of the patent as meeting the statutory requirements of novelty, non-obviousness, utility, written description, definiteness, enablement, and best mode. It places a heavy burden on an infringer to overcome this presumption when challenging issued patent claims. Furthermore, it means that each claim is presumed valid independently of any other claim, even if an independent claim is rendered invalid, a claim dependent therefrom may still be valid and enforceable. Thus, each claim of a patent requires a separate validity analysis.

## 2. Patent Infringement Analysis

To establish whether a patent infringes one should interpret the claims and apply the claims to the target. Frequently, to establish the ordinary meaning of a term, expert opinion from a person of ordinary skill in the art is sought. Similarly, validity must be proven by interpreting the claims and applying the claims to the target. There is always tension between patent owners and would be infringers. Patent owners always urge a broad interpretation of their claims to ensnare more infringers. The risk is that if the patent holder goes too broad, the patent holder risks ensnaring prior art and invalidating the claim. On the other hand, would be infringers generally urge a narrow interpretation of claims to escape infringement. The consequence of infringers strategy is that if the claims are too narrowly construed, they are more likely to be valid.

In the United States, the doctrine of equivalents analysis is applied to individual claim limitations, not to the invention.<sup>4</sup> The legal test, articulated is whether the difference between the feature in the accused device and the limitation literally recited in the patent claim is "insubstantial."<sup>5</sup> One way of determining whether a difference is "insubstantial" or not is called the "triple identity" test. The "doctrine of equivalents" is discussed in more detail in Part 3 of this multi-part paper. There are three types of infringement: direct infringement, indirect infringement (induced or contributory), and joint infringement.

### a. Direct Infringement

Direct infringement occurs when a person without authorization makes, uses, offers to sell or sells any patented invention within the United States or imports into the United States any patented invention during the term of the patent therefor.<sup>6</sup> Direct infringement requires that a single party's activities meet all the limitations as claimed.

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<sup>3</sup> 35 USC § 282

<sup>4</sup> *Warner-Jenkinson Company, Inc. v. Hilton Davis Chemical Co.*, 520 U.S. 17 (1997)

<sup>5</sup> *Id.*

<sup>6</sup> See 35 U.S.C. § 271(a).

## b. Indirect Infringement

The U.S. law recognizes two types of indirect infringement: inducing infringement and contributory infringement.<sup>7</sup> Inducement infringement is defined as "[w]hoever actively induces infringement of a patent shall be liable as an infringer." To find inducement, the Federal Circuit explains, the patentee must show that: (1) another person actually infringed; (2) the alleged inducer knew of the patent, and, nevertheless; (3) knowingly induced the infringing acts with a specific intent to encourage infringement by that person.<sup>8</sup> Contributory infringement occurs when: (1) there is a direct infringement; (2) the accused infringer knew its components were designed for a combination which was both patented and infringing; (3) the component has no substantial non-infringing uses; and (4) the component is a material part of the combination.<sup>9</sup> Unlike inducing infringement, the contributory infringement "has a territorial limitation requiring contributory acts to occur in the United States."<sup>10</sup>

## c. Joint Infringement

Joint infringement involves patent claims that are infringed only by aggregating the conduct of more than one party.<sup>11</sup> One or more parties can infringement on a patent, individually or jointly. "Joint infringement" refers to direct infringement of a patent claim under 35 U.S.C. §271(a) where limitations of the claim are collectively performed or provided by more than one actor but are all legally attributable to a single actor. Joint infringement applies almost exclusively to method claims with multiple steps that can be performed by different actors.

As a defense an infringer may claim that the alleged patent it infringes is invalid. The infringer has the burden to prove invalidity, because under US patent law an issued patent is presumed to be valid. Meaning that, each claim is presumed valid independently of any other claim, and even if an independent claim is rendered invalid, a claim dependent therefrom may still be valid and enforceable. Thus, each claim of a patent requires a separate validity analysis. This puts a heavy burden of proof on the infringer to show invalid, each claim of the patent deemed as meeting the statutory requirements of novelty, non-obviousness, utility, written description, definiteness, enablement, and best mode.

## 3. Basis for Invalidity

The basis for invalidity in decreasing order of value are as follows:

### a. Anticipation with other prior art

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<sup>7</sup> 35 U.S.C. § 271(b)

<sup>8</sup> See, *Vita-Mix Corp. v. Basic Holding, Inc.*, 581 F.3d 1317, 1328 (Fed. Cir. 2009).

<sup>9</sup> *Fujitsu Ltd. v. NETGEAR Inc.*, 620 F.3d 1321, 1326 (Fed. Cir. 2010).

<sup>10</sup> *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1303-04 (Fed. Cir. 2006)

<sup>11</sup> *Peerless Equip. v. W.H. Miner* (7th Cir. 1937); See also *Shields v. Halliburton* (W.D. La. 1980), *DuPont v. Monsanto* (D. Del. 1995), *Faroudja Labs. v. Dwin Elecs.* (N.D. Cal. 1999)

A claimed invention may be rejected under United States patent law when the invention is anticipated (or is “not novel”) over a disclosure that is available as prior art.<sup>12</sup> An invention is said to be anticipated when it is too similar to an earlier invention to be considered novel. Because novelty is a requirement for patentability, anticipated inventions are not patentable. To anticipate a claim, the disclosure must teach every element of the claim.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.”<sup>13</sup> And, “When a claim covers several structures or compositions, either generically or as alternatives, the claim is deemed anticipated if any of the structures or compositions within the scope of the claim is known in the prior art.”<sup>14,15</sup> “The identical invention must be shown in as complete detail as is contained in the ... claim.”<sup>16</sup>

Currently, an invention may be anticipated in any of the following ways:

- Prior publication in such writings as a news article, trade journal article, academic thesis, or prior patent.
- By existence of a prior invention, if all significant elements of the later invention are found in an earlier one prior to the date of invention or the application’s filing date.
- By placing the invention on sale more than one year prior to an application’s being filed.
- By public use or display of the invention more than a year prior to filing the patent application.

Anticipation by a prior invention or printed publication can occur only if all of the later invention’s basic elements are contained in a single invention or a single publication. For example, if a news article describes some elements of an invention, and a prior invention shows the rest, no anticipation has occurred, because no single reference contained all the elements.

In a case involving a new use for a composition, the Court of Appeals for the Federal Circuit (CAFC) held that claims were anticipated when (1) the prior references disclosed each and every element of the claimed invention, and (2) the prior references enabled a person of ordinary skill in the art to practice the invention without undue experimentation.<sup>17</sup> In another case, the CAFC held that prior art, in order to anticipate an invention, must not only disclose all elements of a claim, but also must disclose those

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<sup>12</sup> 35 USC 102

<sup>13</sup> *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

<sup>14</sup> In *Brown v. 3M*, 265 F.3d 1349, 1351, 60 USPQ2d 1375, 1376 (Fed. Cir. 2001) (claim to a system for setting a computer clock to an offset time to address the Year 2000 (Y2K) problem, applicable to records with year date data in “at least one of two-digit, three-digit, or four-digit” representations, was held anticipated by a system that offsets year dates in only two-digit formats).

<sup>15</sup> See also MPEP § 2131.02

<sup>16</sup> *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

<sup>17</sup> In *re Marin Gleave and Maxim Signaevsky*, 560 F. 3d 1331 (Fed. Cir. 2009).

elements as arranged in the claim. The CAFC analogized to a recipe in which the ingredients must be combined in a certain order.<sup>18</sup>

#### b. Obviousness

For an invention to be patentable it must be non-obvious. A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed; if the differences between the claimed invention and the prior art are such that the claimed invention would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains.<sup>19</sup>

The obviousness question requires a lot of fact finding. A patent infringement defendant or one challenging a patent at the Patent Office cannot simply present evidence of anticipation and then say “ditto” to establish obviousness. For a patent to be nonobvious it must display “ingenuity beyond the compass” of a person of ordinary skill in the art. An invention would be obvious when someone knowledgeable about the field would look at your invention and consider it to be already known; if one were to combine several references and it results in your invention. In other words, the predictable and non-unique combination of what multiple references teach would yield your invention. The prototypical example is when you have invented Apple (A) and Orange (O). A is known in the prior art, and O is known in the prior art. Upon looking at A and then looking at O, would someone of skill in the art consider A and O to be already known? If the answer is yes, then your invention is obvious. If the answer is no, it is not obvious.

Sometimes combining things is not clear, sometimes it is. This makes obviousness a tricky inquiry. Obviousness is a fact based and subjective inquiry, and in my experience many inventors are simply not capable of making an honest determination. Quite often, inventors are blinded by the fact that no single reference describes the invention entirely. That is the first step in determining whether you can obtain a patent, but that exact identity inquiry relates to novelty. Obviousness is the next step in the road to patentability, and a significant hurdle.

While the obviousness inquiry asks about whether something is a trivial, non-inventive combination of prior art references, the inquiry is not boundless. For example, hindsight is not permissible. Therefore, to demonstrate obviousness, the patent examiner would need to establish that there existed some reason to anticipate that one could successfully combine “A” and “O” to achieve the invention.

Therefore, when a patent examiner says that combining “A” and “O” is obvious and would work, you might consider experimenting and attempting to combine same to see if it does work as the examiner predicted. If they cannot be combined as the examiner hypothesized, or if the combination does not work as expected or predicted by the

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<sup>18</sup> Net MoneyIn, Inc. v. Verisign, 545 F.3d 1359 (Fed. Cir. 2008).

<sup>19</sup> 35 USC 102

examiner, that will be evidence to rebut the obviousness rejection. The obviousness determination is based on four factual inquiries: (1) the differences between the prior art and challenged claims; (2) the level of ordinary skill in the field of the pertinent art at the time of plaintiff's invention; (3) what one possessing that level of skill would have deemed to be obvious from the prior art reference; and (4) objective evidence of obviousness or non-obviousness. Notwithstanding these factual inquiries, objective evidence of obviousness or non-obviousness MUST also be considered before reaching a conclusion on obviousness. Objective evidence (or secondary considerations as they are sometimes called, includes: (1) the commercial success of the invention; (2) whether the invention satisfied a long-felt need in the industry; (3) failure of others to find a solution to the problem at hand; (4) unexpected results; (5) copying by others; (6) licensing by others; and (7) skepticism of experts.

### c. Indefiniteness

This means that the boundaries of the claim cannot be ascertained. USPTO aims to issue patents with clear and definite claim language and requires that a patent application specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his or her invention.<sup>20</sup> A claim that does not comply with this requirement is "indefinite."

What a patent covers are defined by its claims, and to be valid, a patent claim must be definite. That is, a person of ordinary skill in the art must be able to ascertain the metes and bounds of the claim, i.e., determine whether a device or method is covered by the claim or not.

Essentially, means plus function claiming allows the drafter to claim the invention based on functionality rather than the more traditional (and preferred) claiming technique that employs structure within the body of the claim itself. A claim term is functional when it recites a feature by what it does rather than by what it is.

Statute authorizes a form of functional claiming (means plus function claiming).<sup>21</sup> It says:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Therefore, a decision on whether a claim is indefinite requires a determination of whether those skilled in the art would understand what is claimed when the claim is read considering the specification. Traditionally, claim terms are typically given their ordinary and customary meaning as understood by one of ordinary skill in the pertinent art. If there is no structure in the specification the person of skill in the art cannot save the disclosure by understanding what the drafter intended to be covered by the means plus function

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<sup>20</sup> 35 U.S.C. 112(b) or pre-AIA 35 U.S.C. 112

<sup>21</sup> 35 U.S.C. § 112(f)

limitation in the claims. Thus, means-plus-function claims are valid only to the extent that the specification contains support for the structures that define the means. The broadest reasonable interpretation of a means plus function claim will, therefore, be drawn to the structure, material or acts described in the specification and their equivalents.

### **Conclusion**

In this section of a multi-part paper on patentability and infringement, I discussed patent infringement, how a patent can be infringed or found invalid. Claims of a patent are given the broadest reasonable interpretation consistent with the interpretation that those skilled in the art would reach. Claims are the broadest reasonable interpretation of the protection offered by a patent, and are based on the specifications and drawings. However, a patent may be invalid under the conditions of anticipation, obviousness and indefiniteness. A claim is anticipated only if each element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Anticipation can occur only if all the later invention's basic elements are contained in a single invention or a single publication. An invention would be obvious when someone knowledgeable about the field would look at your invention and consider it to be already known; if one were to combine several references and it results in your invention. Determination of obviousness requires a lot of fact finding. The obviousness question requires a lot of fact finding. For a patent to be nonobvious it must display "ingenuity beyond the compass" of a person of ordinary skill in the art. According to statute patents must contain definite claims that clearly and precisely inform persons skilled in the art of the boundaries of protected subject matter. In other words, a person of ordinary skill in the art must be able to determine whether a device or method is covered by the claim or not. Patent claims that do not meet this standard are rejected as indefinite.

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