

Pattern Jury Instructions of the Seventh Circuit (Patents)

Preliminary Instructions to Be Given at Outset of Trial

- 11.1.1 The Parties And The Nature Of The Case
- 11.1.2 The Patent System
- 11.1.3 How A Patent Is Obtained
- 11.1.4 The Parts Of A Patent
- 11.1.5 The Patent Claims
- 11.1.6 Issues To Be Decided
- 11.1.7 Infringement: The Meaning Of The Patent Claims
- 11.1.8 Person Of Ordinary Skill
- 11.1.9 Infringement; Burden Of Proof
- 11.1.10 Direct Infringement
- 11.1.11 Burden of Proof
- 11.1.12 Indirect Infringement
- 11.1.13 Willful Infringement
- 11.1.14 Invalidity
- 11.1.15 Invalidity — Anticipation
- 11.1.16 Invalidity — Obviousness
- 11.1.17 Invalidity — Written Description/Claiming Requirements
- 11.1.18 Damages

Final Instructions

- 11.2 Infringement
 - 11.2.1 The Patent System
 - 11.2.2 Person of Ordinary Skill
 - 11.2.3 The Parts of a Patent
 - 11.2.4 The Patent Claims
 - 11.2.5 Infringement: Interpretation Of The Patent Claims
 - 11.2.6 Independent And Dependent Claims
 - 11.2.7 Means-Plus-Function Claims
 - 11.2.8 “Comprising” / “Consisting Of” / “Consisting Essentially Of”
 - 11.2.9 Interpretation Of The Patent Claims
 - 11.2.10 Direct Infringement — Elements
 - 11.2.11.1 Infringement — Definition
 - 11.2.11.2 Infringement — Doctrine Of Equivalents
 - 11.2.11.3 Infringement — Means-Plus-Function Claim Language
 - 11.2.11.4 Determining Infringement
 - 11.2.11.5(A) Infringement By Multiple Parties
 - 11.2.11.5(B) Infringement By Multiple Parties
 - 11.2.12 Indirect Infringement — Inducement
 - 11.2.13 Indirect Infringement — Contributory Infringement
 - 11.2.14 Willful Infringement
 - 11.2.15 Prior Use Defense To Infringement

- 11.3 Invalidity
 - 11.3.1 Validity — General [Pre-AIA And Post-AIA]
 - 11.3.2(A) Invalidity — Specification Requirements [Pre-AIA]
 - 11.3.2(B) Invalidity — Specification Requirements [Post-AIA]
 - 11.3.2.1 Specification Requirements — Written Description [Pre-AIA And Post-AIA]
 - 11.3.2.2 Specification Requirements — Enablement [Pre-AIA And Post-AIA]
 - 11.3.2.3(A) Specification Requirements — Best Mode [Pre-AIA]
 - 11.3.2.3(B) Specification Requirements — Best Mode [Post-AIA]
 - 11.3.2.4 Specification Requirements — Indefiniteness [Pre-AIA And Post-AIA]
 - 11.3.3(A) Section 102 And 103 Defenses — Definition Of “Prior Art” [Pre-AIA]
 - 11.3.3(B) Section 102 And 103 Defenses — Definition Of “Prior Art” [Post-AIA]
 - 11.3.4(A) Section 102 Defenses — Prior Art — Definitions [Pre-AIA]
 - 11.3.4(B) Section 102 Defenses — Prior Art — Definitions [Post-AIA]
 - 11.3.5 Section 102 Defenses — Elements [Pre-AIA And Post-AIA]
 - 11.3.6 Prior Invention
 - 11.3.7 Experimental Use [Post-AIA]
 - 11.3.8 Obviousness [Pre-AIA and Post-AIA]
 - 11.3.9 Obviousness — Additional Factors Indicating Nonobviousness [Pre-AIA And Post-AIA]
 - 11.3.10 Obviousness — Combining Of Prior Art References [Pre-AIA And Post-AIA]
- 11.4.1 Damages — General
- 11.4.2 Start Of The Damages Period And The Requirement Of Notice (Claims Involving Products)
- 11.4.3 Two Types Of Damages — Lost Profits & Reasonable Royalty
- 11.4.4 Lost Profits – But For Test
 - 11.4.4.1 Lost Profits — *Panduit* Factors
 - 11.4.4.2 Lost Profits — Two Supplier Market
 - 11.4.4.3 Lost Profits — Market Share Method
 - 11.4.4.4 Lost Profits — Collateral Sales
 - 11.4.4.5 Lost Profits — Price Erosion / Cost Increases
 - 11.4.4.6 Lost Profits — Amount
- 11.4.5 Reasonable Royalty
- 11.4.6 Single / Multiple Recoveries For Infringing Act
- 11.4.7 Totaling The Damage Award

11. PATENTS

Preliminary Instructions to Be Given at Outset of Trial

11.1.1 THE PARTIES AND THE NATURE OF THE CASE

This is a patent case. It involves U.S. Patent No[s]. _____, _____, and _____. Patents are often referred to by their last three digits. I will call the patent[s] in this case the _____, _____, and _____ patent[s].

The ____ patent relates to [*briefly describe technology or subject matter involved; repeat as necessary for each patent*]. During the trial, the parties will offer testimony to familiarize you with this [technology; subject matter].

Plaintiff contends that Defendant [infringed; is infringing] the ____ patent by its [making / using / selling / offering for sale / importing] _____. Plaintiff contends that it is entitled to recover damages caused by that infringement. [Plaintiff also contends that Defendant's infringement was willful.]

Defendant [denies that it [infringed; is infringing] the ____ patent] [and] [contends that the ____ patent is invalid]. I will explain these contentions to you later. First, I will give you some background about the U.S. patent system, the parts of a patent, and how a person gets a patent.

Committee Comment

1. The purpose of the proposed preliminary instructions is to give the jury an overview of the applicable law, rather than a detailed description of the law that the jury ultimately will apply during its deliberations. The trial judge may, if she wishes, use as preliminary instructions the more complete set of applicable instructions contained in Sections 11.2 through 11.4.

2. The bracketed section in the second paragraph is intended to include a short descriptive overview of the nature of the patented technology, without getting into the details of that technology.

3. The third paragraph should be tailored to the types of infringement being alleged in the case, e.g., making, using, selling, etc., and can include reference to contributory or inducement infringement if those issues are present.

11.1.2 THE PATENT SYSTEM

Patents are issued by the United States Patent and Trademark Office, which is part of our government. That office is sometimes referred to as the PTO.

The PTO grants a patent to the inventor for a set period of time, which, in this case, is [20 years from the time the application for the patent was filed, subject to any modified patent term] / [17 years from the date the patent issued].

During the term of the patent, if another person makes, uses, offers to sell, or sells in the United States or imports something that is covered by the patent without the patent owner's consent, that person is said to infringe the patent. The patent owner enforces a patent against persons believed to be infringers in a lawsuit in federal court, such as in this case.

The invention covered by a patent is described in the part of the patent that is called the "patent claim" or "patent claims." The patent claims are found in separately numbered paragraphs at the end of the patent. When I use the word "claim" or "claims," I am referring to those numbered paragraphs.

[To be entitled to patent protection, an invention must be new, useful, and nonobvious. A patent is not valid if it covers [a product; a process] that was already known or that was obvious at the time the invention was made. That which was already known at the time of the invention is called "prior art." I will give you more instructions about what constitutes prior art at the end of the case.]

Committee Comment

1. The Federal Judicial Center has published a video entitled "The Patent Process: An Overview for Jurors" (Fed. Jud. Center 2013), which the Court may wish to consider displaying to the jury at the outset of the case.

2. The Committee believes that a short introduction to the general nature of the patent system is appropriate because that system is not typically known to most jurors. This description is based primarily on the patent statute.

3. The reference to the length of the patent term found in the second paragraph should be modified depending on the term of the patent(s) at issue.

4. Where bracketed references to "product; process" are found, the court should use the appropriate term depending on the type(s) of patent claim(s) at issue.

11.1.3 HOW A PATENT IS OBTAINED

When an applicant for a patent files a patent application with the Patent and Trademark Office, the application is forwarded to a Patent Examiner. The Patent Examiner reviews the application to determine whether or not the invention described in the patent application and set out in the claims meets the requirements of the patent laws for patentable inventions.

The Patent Examiner advises the applicant of his findings in a paper called an “office action.” The Examiner may “reject” the claims, that is, refuse to issue a patent containing those claims, if he believes the claims do not meet the requirements for patentable inventions. The applicant may respond to the rejection with arguments to support the existing claims, by making changes or amendments to the claims, by submitting new claims, or any combination of these. If the Examiner ultimately determines that the legal requirements for a patent have all been satisfied, he “allows” the claims, and the Patent and Trademark Office issues a patent after the applicant pays an issue fee.

This process, from the filing of the patent application to the issuance of the patent, is called “patent prosecution.” The record of papers relating to the patent prosecution is called the “prosecution history” or “file history.” The prosecution history becomes available to the public when the patent is issued or the application is published by the PTO (normally 18 months after filing).

Committee Comment

This instruction is intended for cases in which the jury will be hearing evidence regarding the prosecution history of the patent and may be eliminated in cases in which there is no such issue.

Read in conjunction with Instructions 11.1.2 through 11.1.4, this instruction completes the description of the patent system. Use of these instructions, alone or together with the Federal Judicial Center video referenced in the Committee Comment to Instruction 11.1.2, could obviate the need for the parties to present “patent experts” to explain the patent system, the importance of claims, the parts of a patent, and the prosecution of patents. These instructions are not, however, intended to preclude, in an appropriate case, expert testimony focused on specific matters concerning, for example, the prosecution history of the patent at issue.

11.1.4 THE PARTS OF A PATENT

A patent includes two basic parts: a written description of the invention, and the patent claims. The written description, which may include drawings, is often called the “specification” of the patent.

You have been provided with a copy of the ___ patent. Please look at the patent as I identify its different sections. [Other patents are also involved in this case. I am using this particular patent as an example to describe the various parts of a patent.]

The first page of the ___ patent provides identifying information, including the date the patent issued and patent number along the top, as well as the inventor’s name, the filing date, [the assignee, which is the company or individual that currently owns the patent], and a list of the prior art publications considered in the Patent Office during the time the patent was being sought.

The specification of the patent begins with a brief statement about the subject matter of the invention, which is called an “Abstract.” This is found on the first page.

[Next, are the drawings, which appear as Figures ___ to ___ on the next ___ pages. The drawings depict various aspects or features of illustrative embodiments of the invention. They are described in words later in the patent specification.]

The written description of the invention appears next. In this portion of the patent, each page is divided into two columns, which are numbered at the top of the page. The lines on each page are also numbered. The written description of the ___ patent begins at column 1, line 1, and continues to column ___, line ___. [It includes a background section[, a summary of the invention,] and a detailed description of the invention, including some specific examples.]

The written description is followed by the one or more numbered paragraphs, which are called the claims, which I mentioned to you earlier. The claims may be divided into a number of [parts or steps], which are called “claim limitations” or “claim requirements.” In the patent, the claims begin at column ___, line ___ and continue to the end of the patent, at column ___, line ___.

Committee Comment

See Final Instruction 11.2.3.

The purpose of this instruction is to give the jurors a brief introduction to the anatomy of a patent document, which will assist them in understanding terminology likely to be used by counsel and witnesses during the course of the trial. This can be best accomplished if the jurors are provided with a copy of the patent or, if multiple patents are involved, one of the patents that is at issue. If multiple patents are involved, the bracketed sentence at the end of the second paragraph should be used.

11.1.5 THE PATENT CLAIMS

The claims of a patent define the invention covered by the patent. [In other words, the claims describe what the patent does and does not cover, somewhat like the way a property deed describes the boundaries of a parcel of land.]

When a [product; process] is accused of infringing a patent, the patent claims must be compared to the accused [product; process] to determine whether infringement has been proven. [The claims are also at issue when the validity of a patent is challenged.] [In reaching your determinations with respect to infringement [and invalidity], you must consider each claim of the patent separately.]

In this case, we are concerned with claims _____ of the _____ patent. Plaintiff contends that Defendant infringed [this claim] [these claims]. Defendant denies this [and contends that claims _____ are invalid].

The language of patent claims may not be clear to you, or the meaning or the claims may be disputed by the parties. I will tell you what certain words in the patent claims mean. You must use the meanings I give you when you decide whether the patent is infringed [and whether it is invalid].

Committee Comment

See Final Instruction 11.2.4.

Because the patent claims are the central focus in any patent litigation, it is important for the jury to learn early on that the patent claims are important. This instruction is intended to alert the jury to the purpose of the patent claims and to identify those that are alleged to be infringed.

If the court has construed the claims or limitations in them prior to trial, the court may provide that construction to the jury as part of the preliminary instructions. The Committee believes that the better course is to permit the court's construction to be used by counsel during opening statements, rather than providing the construction in preliminary instruction.

11.1.6 ISSUES TO BE DECIDED

I will now give you some information about the law and the issues that will be presented to you at this trial. At the close of the trial, I will give you specific instructions about the law you are to follow as you deliberate to reach your verdict. You must follow the law as I describe it to you.

11.1.7 INFRINGEMENT: THE MEANING OF THE PATENT CLAIMS

As you assess the issues to be decided in this case, you must apply the meaning of the patent claims as I provide that meaning to you in the Final Instructions I will be giving at the end of the case.

Committee Comment

If the court has construed the claims or limitations in them prior to trial, the court may provide that construction to the jury as part of the preliminary instructions. The Committee believes that the better course is to permit the court's construction to be used by counsel during opening statements, rather than providing the construction in preliminary instruction.

11.1.8 PERSON OF ORDINARY SKILL

In these instructions, I will use the concept of a “person of ordinary skill in the field of the invention.” In this case, the field of the invention is [insert]. It will be up to you to decide the level of ordinary skill in that field. I will give you further instructions about this at the end of the case.

Committee Comment

See Final Instruction 11.2.2.

11.1.9 INFRINGEMENT; BURDEN OF PROOF

Plaintiff contends that Defendant [infringes; has infringed; has induced someone else to infringe; has contributed to infringement of] the ___ patent[s]. Defendant denies [this; these] contention[s]. Plaintiff is required to prove infringement by a preponderance of the evidence. This means that Plaintiff must persuade you that its infringement contentions are more probably true than not true. I will describe Plaintiff's contentions regarding the issue of infringement.

11.1.10 DIRECT INFRINGEMENT

Plaintiff contends that Defendant infringes claims ___ of the _____ patent by [*choose all that apply*: making, using, selling, offering for sale, or importing] _____. [This is called “direct infringement.”]

To establish direct infringement, Plaintiff must prove that every requirement in [the particular claim of Plaintiff’s patent that you are considering; Plaintiff’s patent] is found in Defendant’s [product; process]. A requirement of a claim is found in Defendant’s [product; process] if the requirement is in the [product; process] exactly as it is in the claim [or] [if the requirement is in the [product; process] in a manner that is equivalent to what is in the claim. A [part of Defendant’s product; step in Defendant’s process] is equivalent to a claim requirement if it performs substantially the same function, in substantially the same way, to reach substantially the same result. In my instructions at the end of the case, I will explain in more detail how you make this determination.]

[Describe specific product/process accused of infringement and which claims are alleged to be infringed.]

Committee Comment

This instruction, and those that follow, are adapted from the “final” instructions on infringement and validity that appear later in these Instructions. They are, for the most part, truncated versions of those instructions intended to provide an introduction to the issues to be presented during the trial.

11.1.11 BURDEN OF PROOF

When I say a particular party must prove something by “a preponderance of the evidence,” or when I use the expression “if you find,” or “if you decide,” this is what I mean: When you have considered all the evidence in the case, you must be persuaded that it is more probably true than not true.

When I say that a particular party must prove something by “clear and convincing evidence,” this is what I mean: When you have considered all of the evidence, you are convinced that it is highly probable that it is true.

[This is a higher burden of proof than “more probably true than not true.” Clear and convincing evidence must persuade you that it is “highly probably true.”]

Committee Comment

See Pattern Instructions 1.27 and 1.28.

Infringement claims require proof by a preponderance of evidence. Invalidity claims require clear and convincing evidence.

11.1.12 INDIRECT INFRINGEMENT

Plaintiff contends that Defendant induced the infringement of [claims __, __, __ of] Plaintiff's patent. To succeed on this contention, Plaintiff must prove that Defendant knew of Plaintiff's patent, [acted; encouraged; instructed] [one or more others; *insert name or other description of infringer*] to [use; make] a product; perform a process] in a manner that infringed Plaintiff's patent, and knew or should have known that its acts would cause infringement of Plaintiff's patent.

Plaintiff [also] contends that Defendant contributed to the infringement of [claims ____ of] Plaintiff's patent. To succeed on this contention, Plaintiff must prove that Defendant knew of Plaintiff's patent, [sold; supplied] a component that forms a significant part of the patented invention and that is not a commonly available item with other uses. Plaintiff must also prove that another person infringed Plaintiff's patent by using this component and that Defendant knew the component was especially made for a use that would infringe Plaintiff's patent.

Committee Comment

The first paragraph of this instruction describes the issues on a claim of inducement to infringe. *See* Final Instruction 11.2.12. The second paragraph describes the issues on a claim of contributory infringement. *See* Final Instruction 11.2.13.

11.1.13 WILLFUL INFRINGEMENT

Plaintiff contends that Defendant infringed Plaintiff's patent willfully. Infringement is willful if Plaintiff proves by a preponderance of the evidence that Defendant knew that it was infringing the patent or acted in reckless disregard of Plaintiff's rights. In making this determination, you should consider all of the evidence, including any evidence regarding whether Defendant acted maliciously, deliberately, or in bad faith.

At the conclusion of the case, I will explain in more detail how you are to decide the issue of willful infringement.

Committee Comment

See Final Instruction 11.2.14.

The Supreme Court ruled in 2016 that no heightened evidentiary burden is required for a finding of willfulness. *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S.Ct 1923, 1932, 1934 (2016). Hence, no direction concerning "clear and convincing evidence" is required for determining willfulness.

[PRELIMINARY COMMENT: In light of the Leahy-Smith America Invents Act (“AIA”), Public Law No. 112-29, 125 Stat. 284 through 341, the Preliminary Instructions regarding invalidity issues may need to be revised depending on whether or not the AIA applies in a particular case. Instructions applicable to pre- and post-AIA invalidity issues are included in the Final Instructions.]

11.1.14 INVALIDITY

Defendant contends that claims _____ of the ___ patent(s) are invalid. Only a valid patent may be infringed. Plaintiff denies that these claims are invalid.

The law presumes each claim of the ___ patent(s) to be valid. For this reason, Defendant has the burden of proving invalidity by clear and convincing evidence.

If you find that any one of the requirements for a valid patent is not met for a patent claim, then that claim is invalid. You must consider the issue of validity separately for each claim that is at issue.

I will now explain to you briefly the legal requirements for each of the grounds on which Defendant relies to contend that the patent claims are invalid. I will provide more details for each ground in my final instructions.

Committee Comment

The bracketing in the second paragraph takes account of the fact that the Court may have already defined “clear and convincing” evidence in a case involving a claim of willful infringement; there is no need to provide the definition twice.

11.1.15 INVALIDITY — ANTICIPATION

Defendant contends that the invention covered by claims ___ of the ___ patent is not new because it was “anticipated” by the prior art. “Prior art,” in general, includes anything that was publicly known prior to Plaintiff’s [invention] [filing date] invention. I will provide you with a more specific definition following the conclusion of the evidence.

To prove that a claim is anticipated by the prior art, Defendant must prove by clear and convincing evidence that each and every requirement of the claim is present in a single item of prior art and that a person with an ordinary level of skill in the field of the invention who looked at the prior art would have been able to make and use the invention disclosed in the claim.

Committee Comment

See Final Instruction 11.3.5.

As reflected in the final instructions on anticipation, there are a number of grounds upon which a patent claim can be held invalid for anticipation. If the case involves a small number of particularized invalidity issues, the court may wish to consider giving, in lieu of this instruction, an instruction tailored to the particular issue or issues. The final instructions covering the particular issue or issues may be adapted for this purpose.

11.1.16 INVALIDITY — OBVIOUSNESS

Defendant contends that claims ___ of the ___ patent are invalid for obviousness. A patent claim is invalid for obviousness if a person with an ordinary level of skill in the field of the invention who knew about all the prior art existing at the time of the invention would have come up with the invention at that time. [“Prior art” in general, includes anything that was publicly known prior to Plaintiff’s invention. I will provide you with a more specific definition following the conclusion of the evidence.] [Unlike anticipation, obviousness may be shown by considering more than one item of prior art.]

Committee Comment

See Final Instructions 11.3.14.

The bracketing of the definition of “prior art” takes account of the fact that the Court may have just defined this term in describing the defense of anticipation.

11.1.17 INVALIDITY — WRITTEN DESCRIPTION/CLAIMING REQUIREMENTS

Defendant contends that claims ___ of the ___ patent are invalid because the patent does not contain [a written description of the invention; an enabling description of the invention/a description of the best mode of the invention]. To succeed on this contention, Defendant must prove that:

[- The specification section of the patent does not contain an adequate written description of each and every requirement of the particular patent claim that is at issue.]

[- The specification section of the patent does not contain enough information to enable a person of ordinary skill in the field of the invention to make and use the invention without undue experimentation.]

I will explain in more detail at the end of the case how you decide [this; these] issue[s].

Committee Comment

See Final Instructions 11.3.2.1 through 11.3.2.3(B).

The Court should use only the instructions for the particular “claim requirement” defenses involved in the particular case.

11.1.18 DAMAGES

Plaintiff contends that it has suffered damages as a result of Defendant's infringement in the form of [lost profits that Plaintiff would have made if Defendant had not infringed] [and/or] [a reasonable royalty on each of Defendant's sales of an infringing [product; process]]. I will explain to you at the end of the case [how lost profits are calculated [and/or] how a reasonable royalty is determined].

Plaintiff must prove its damages by a preponderance of the evidence.

Committee Comment

See Final Instruction 11.4.3.

The court should tailor this preliminary instruction to the theory or theories of damages being advanced. Often a patent holder will seek lost profits damages on some infringing sales and a reasonable royalty on the remainder, thus making the damages proofs, and the related instructions, inherently complex.

This preliminary damages instruction does not address damages flowing from collateral or "convoys" sales. The committee did not believe it necessary to include a preliminary instruction addressing this type of contention because it would unduly increase the complexity of the preliminary instructions. The matter of such sales can be addressed by counsel in opening statements.

Final Instructions

11.2 INFRINGEMENT

11.2.1 THE PATENT SYSTEM

At the beginning of the trial, I gave you some general information about patents and the patent system and a brief overview of the patent laws relevant to this case. I will now give you more detailed instructions about those aspects of patent law that specifically relate to this case.

11.2.2 PERSON OF ORDINARY SKILL

Some issues in patent cases are determined by considering a “person of ordinary skill in the field of the invention,” a term that I will use later in these instructions. In this case, the field of the invention is [insert].

It is up to you to decide the level of ordinary skill. In making this decision, you should consider all the evidence, including:

- the levels of education and experience of persons working in the field of the invention;
- the types of problems encountered in the field of the invention; and
- the sophistication of the technology in the field of the invention.

Committee Comment

The level of ordinary skill in the art/field is a prism or lens through which a judge or jury views the prior art and the claimed invention. *See Graham v. John Deere Co.*, 383 U.S. 1, 27-28 (1966); *Dystar Textilfarben GmbH v. C.H. Patrick Co.*, 464 F.3d 1356, 1360-3 (Fed. Cir. 2006); *Al-Site Corp. v. VSI Int’l, Inc.*, 174 F.3d 1308, 1323-25 (Fed. Cir. 1999); *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 666-67 (Fed. Cir. 2000). The list of factors is adapted from N.D. Cal. Patent Jury Instr. 4.3.b.iii.

The level of ordinary skill in the pertinent art is one of the three basic factual inquiries in applying the nonobviousness condition of patentability. It is also the standard for determining the enabling quality of the disclosure in a patent specification or a publication and for understanding the teachings of the prior art. Generally, the skill is that of a person who would be expected to solve the type of problem in question rather than that of a person who ordinarily uses the product or process. The Committee chose to use the phrase “ordinary skill in the field” rather than the patent law term “ordinary skill in the art,” believing that this would be more understandable to lay jurors.

The Committee placed this definition early in the instructions because, in some cases, it may be used several times, for example, in describing the doctrine of equivalents, the written description requirement, etc. In a case in which the term is used only at a later point in the instructions, the trial judge may wish to consider moving this instruction so that it is closer to the particular place(s) where the term is used.

In cases in which the level of ordinary skill has been determined by pretrial ruling or by stipulation of the parties, it should be inserted in lieu of this instruction.

11.2.3 The Parts of a Patent

You have been provided with a copy of the ___ patent. Please look at the patent as I identify its different sections. [Other patents are also involved in this case. I am using this particular patent as an example to describe the various parts of a patent.]

The first page of the ___ patent provides identifying information, including the date the patent issued and patent number along the top; the name(s) of the inventor(s), the filing date; [the assignee, which is the company or individual that owned the patent on the date it was issued]; and a list of documents considered in the Patent Office during the time the patent was being sought.

The next part of the patent, which is sometimes referred to as the specification, begins with a brief statement about the subject matter of the invention, which is called an abstract. This is found on the first page.

[Next are the drawings, which appear as Figures ___ to ___ on the next ___ pages. The drawings depict various aspects or features of the invention. They are described in words later in the patent.]

A description of the invention appears next. In this portion of the patent, each page is divided into two columns, which are numbered at the top of the page. The lines on each page are also numbered. A description of the ___ patent begins at column 1, line 1, and continues to column ___, line ___. [It includes a background section, a summary of the invention, and a detailed description of the invention, including some specific examples.]

The description of the invention is followed by one or more numbered paragraphs, which are called the claims.

Committee Comment

See Preliminary Instruction 11.1.4.

11.2.4 THE PATENT CLAIMS

The claims of a patent are the numbered paragraphs at the end of the patent. The claims describe what the patent owner may prevent others from doing.

Claims are usually divided into [parts; steps], called “limitations” or “requirements.” For example, a claim that covers the invention of a table may describe the tabletop, four legs and glue that holds the legs and the tabletop together. The tabletop, legs and glue are each a separate limitation or requirement of the claim.

In this case, we are concerned with claims _____ of the _____ patent. Plaintiff contends that Defendant infringed claims _____. Defendant denies this [and contends that claims ____ are invalid].

To decide whether Defendant infringed the patent, you must compare the claims to [*the accused product; process*]. [Similarly, in deciding a challenge to the validity of a patent, you must compare the claims to the asserted prior art.] [In reaching your determinations with respect to infringement [and invalidity], you must consider each claim of the patent separately.]

Committee Comment

See Preliminary Instruction 11.1.5.

11.2.5 INFRINGEMENT: INTERPRETATION OF THE PATENT CLAIMS

The owner of a patent has the right to prevent others from [making; using; offering for sale; selling; importing] the invention covered by the patent. A [product; process] infringes a patent if that [product; process] is covered by at least one claim of the patent.

I will tell you the meaning of any disputed terminology in the patent claims. You must use the meanings I give you when you decide whether the patent is infringed [and whether it is invalid].

Committee Comment

A patent confers the right to exclude others from making, using, selling, or offering for sale the invention within the United States or importing the invention into the United States. 35 U.S.C. §§ 154(a)(1) and 271(a); *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 978 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996).

An infringement analysis entails two steps. The first step is determining the meaning and scope of the patent claims asserted to be infringed. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1311-13 (Fed. Cir. 2005) (*en banc*). The second step is comparing the properly construed claims to the device or method accused of infringing. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996).

A simple patent case includes two parts: construing the patent claims and determining whether infringement of the construed claims occurred. The first is a question of law, to be determined by the court. The second is a question of fact, to be submitted to a jury. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 384 (1996).

11.2.6 INDEPENDENT AND DEPENDENT CLAIMS

There are two types of patent claims, independent claims and dependent claims. An independent claim stands on its own and does not refer to any other claim of the patent. A dependent claim refers to at least one other claim in the patent. A dependent claim includes each of the requirements of the other claim[s] to which it refers, as well as the requirements in the dependent claim itself, even though it does not repeat those requirements of the other claims.

Earlier I described a hypothetical patent claim for a table that described the tabletop, four legs, and glue to hold the legs and tabletop together. That is an example of an independent claim, which I will call claim 1. In that same hypothetical patent, a dependent claim, which I will call claim 2, might state, “the table of claim 1, where the tabletop is square.” In this situation, in order to infringe dependent claim 2, it is not enough for Plaintiff to prove that Defendant made a table with a square tabletop – Plaintiff must also prove, as stated in claim 1, that the table has four legs and glue to hold the legs and tabletop together.

Committee Comments

1. A patent claim may be in independent, dependent, or multiply dependent form. (A multiply dependent claim is one that alternatively depends from different claims.) 35 U.S.C. § 112 ¶¶ 3-5 (1984); §112(c-e) (post-AIA). See *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352 (Fed. Cir. 2007), for determining whether a claim is dependent or not.

2. A dependent claim is narrower in scope than the claim from which it depends. *Glaxo Group Ltd. v. Ranbaxy Pharms., Inc.*, 262 F. 3d 1333, 1336 (Fed. Cir. 2001). A dependent claim incorporates by reference a previous claim and adds a limitation to the invention claimed. *Curtiss-Wright Flow Control Corp. v. Velan, Inc.*, 438 F.3d 1374, 1380 (Fed. Cir. 2006); *Bloom Eng’g Co. v. North Am. Mfg. Co.*, 129 F.3d 1247, 1250 (Fed. Cir. 1997).

11.2.7 MEANS-PLUS-FUNCTION CLAIMS

Some parts of a patent claim describe a “means” of doing something, rather than the physical structure that performs the function. These are called means-plus-function claims.

For example, let’s say that a patent describes a table with legs glued to the tabletop. As I said before, one way to write a patent claim for the table is to describe the tabletop, four legs, and glue between the legs and the tabletop. Another way to write the claim is to describe the tabletop and the legs, but use the phrase “a means for securing the legs to the tabletop” rather than describing the glue. This would be a means-plus-function requirement. In other words, it describes a “means” for performing the “function” of securing the legs to the tabletop, rather than expressly describing the glue.

A means-plus-function requirement also covers structures that are described in the patent specification and structures equivalent to those that are described in the patent, such as using an equivalent to glue to secure the legs to the tabletop.

Claims ___ of the ___ patent include means-plus-function requirements. In instructing you about the meaning of a means-plus-function claim requirement, I will tell you, first, the function that each of the means-plus-function claim requirements performs; and second, the structure disclosed in the patent specification that corresponds to each means-plus-function requirement.

Committee Comments

1. A claim element may be expressed as a means for performing a function. 35 U.S.C. §112, ¶ 6 (pre-AIA), §112(f) (post-AIA). As long as the patent discloses a specific corresponding structure(s), the patentee may define a structure for performing a certain function generically by way of a means-plus-function expression. *Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d 1352, 1360 (Fed. Cir. 2000).

2. The question of whether there is infringement of a claim with a §112(f) limitation is a question of fact. *Lockheed Martin Corp. v. Space Systems/Loral, Inc.*, 324 F.3d 1308, 1318 (Fed. Cir. 2003); *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1328-29 (Fed. Cir. 2003) (“infringement of a 112, ¶ 6 limitation requires that the relevant structure in the accused device perform the identical function recited in the claim and be identical or equivalent to the corresponding structure in the specification”).

3. There is no “heightened bar to overcome the presumption that a limitation expressed in functional language without the word ‘means’ is not subject to § 112, para. 6.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015) (en banc), overruling prior case law. When a claim term does not include the word “means,” the presumption that the claim element is not a § 112, para. 6 claim element can be overcome, and § 112(f) will apply, if the challenger shows that the claim lacks sufficiently definite structure or recites function without sufficient structure for performing that function. *Id.*

11.2.8 “COMPRISING” / “CONSISTING OF” / “CONSISTING ESSENTIALLY OF”

[When a patent claim uses the term “comprising,” it means that the invention includes the listed requirements, but is not limited to those requirements.]

[When a patent claim uses the term “consisting of,” it means that the invention includes the listed requirements, and only those requirements.]

[When a patent claim uses the words “consisting essentially of,” it means that a [product; process] containing [structures; steps] beyond those described in the claim is covered only if those additional [structures; steps] do not have a significant effect on the basic and novel characteristics of the invention.]

Committee Comments

1. This instruction may be incorporated into the claim-definitional portion of the infringement instruction, where appropriate.

2. “*Comprising.*” *Vehicular Techs. Corp. v. Titan Wheel Int’l, Inc.*, 212 F.3d 1377, 1382-83 (Fed. Cir. 2000); *CollegeNet, Inc. v. ApplyYourself, Inc.*, 418 F.3d 1225, 1235 (Fed. Cir. 2005); *Mars, Inc. v. H.J. Heinz Co., L.P.*, 377 F.3d 1369, 1376 (Fed. Cir. 2004); *ArcelorMittal France v. AK Steel Corp.*, 700 F.3d 1314, 1320 (Fed. Cir. 2012). *But see Dippin’ Dots, Inc. v. Mosey*, 476 F.3d 1337 (Fed. Cir. 2007) (the presumption raised by the word “comprising” does not reach into each of the steps to render every word an open-ended phrase, especially where the patentee has narrowly defined the claim term).

3. “*Consisting of.*” *Vehicular Techs. Corp. v. Titan Wheel Int’l*, 212 F.3d 1377, 1382-83 (Fed. Cir. 2000); *Norian Corp. v. Stryker Corp.*, 363 F.3d 1321, 1331 (Fed. Cir. 2004); *Conoco, Inc. v. Energy & Env’tl. Int’l, L.C.*, 460 F.3d 1349, 1359 (Fed. Cir. 2006).

4. “*Consisting essentially of.*” *PPG Indus. v. Guardian Indus. Corp.*, 156 F.3d 1351, 1354- 55 (Fed. Cir. 1998); *W.E. Hall Co. v. Atlanta Corrugating, LLC*, 370 F.3d 1343, 1353 (Fed. Cir. 2004); *Ecolab, Inc. v. FMC Corp.*, 569 F.3d 1335 (Fed. Cir. 2009).

11.2.9 INTERPRETATION OF THE PATENT CLAIMS

I [have provided you; will provide you] with a copy of Plaintiff's patent. I have defined certain [words; phrases] in [some of] the claims. You must use these definitions in making your decision. The [words; phrases] I have defined are as follows:

(list claim terms and definition from claim construction by the Court or stipulations by the parties)

Committee Comment

In cases involving multiple claims or multiple claim terms, the court should consider providing the definitions in a chart format, with each definition cross-referenced to the claim or claims to which it applies.

11.2.10 DIRECT INFRINGEMENT — ELEMENTS

Plaintiff contends that Defendant has infringed [claims __, __, and __ of] Plaintiff's patent. To succeed on this contention, Plaintiff must prove the following by a preponderance of the evidence:

1. Every requirement in the claim of Plaintiff's patent that you are considering is found in Defendant's [product; process]; and

2. Defendant [made, used, sold, offered for sale, or imported] that [product; process] [in; into] the United States.

Committee Comments

1. *Usage*. A finding of infringement requires a showing that the accused infringer committed a prohibited act of the type described in element 2. No instruction need be given on these prohibited acts if there is no dispute that such an act has occurred directly or indirectly. 35 U.S.C. § 271.

2. *Authority*. First element: *Riles v. Shell Exploration & Prod. Co.*, 298 F.3d 1302, 1308 (Fed. Cir. 2002); *Pfizer, Inc. v. Teva Pharms. USA, Inc.*, 429 F.3d 1364, 1376 (Fed. Cir. 2005); *PSC Computer Prods., Inc. v. Foxconn Int'l*, 355 F.3d 1353, 1357 (Fed. Cir. 2004); *Cross Med. Prods. v. Medtronic*, 424 F.3d 1293, 1310 (Fed. Cir. 2005). Second element: 35 U.S.C. § 271(a).

11.2.11.1 INFRINGEMENT — DEFINITION

As I stated in the previous instruction, infringement occurs if each requirement of a claim is found in Defendant’s [product; process]. As I have explained, Plaintiff contends that Defendant infringed [claims __, __, and __] of Plaintiff’s patent. To determine whether Defendant infringed Plaintiff’s patent, you must compare Defendant’s [product; process] against each one of these claims.

To determine whether a dependent claim has been infringed, you must compare Defendant’s [product; process] to both the dependent claim and the claim[s] to which [it; they] refer[s]. For example, if claim 2 is dependent from claim 1, it may say, “2. The [product; process] according to claim 1, wherein” In this situation, dependent claim 2 cannot be “literally” infringed unless claim 1 is also infringed. For this reason, in the example you would have to compare Defendant’s [product; process] to all the requirements of both claims 1 and 2 when deciding infringement of claim 2.

A requirement of a claim is found in Defendant’s [product; process] if the requirement is in the [product; process] exactly as it is in the claim [or] [if the requirement is in the [product; process]] in a manner that is equivalent to what is in the claim.

[If all of the requirements of the claim are in Defendant’s [product; process] exactly as they are in the claim, that is called “literal infringement.”]

[If all of the requirements of the claim are in Defendant’s [product; process], but one or more of them is equivalent to what is in the claim, that is called “infringement by equivalence.”]

[The following claim requirements must be met literally; infringement by equivalence does not apply to these requirements: *(list claim terms that must be met literally, and definition from claim construction by the Court or stipulations by the parties)*]

Committee Comments

1. This instruction sets forth the basic test for direct infringement. It is adaptable to cases involving claims of literal infringement, infringement by way of the doctrine of equivalents, or both.

2. The Committee used the term “infringement by equivalence” rather than the term “doctrine of equivalents” believing that the former would be easier for lay jurors to understand.

3. The final bracketed paragraph of the instruction applies in cases in which the court has determined that the doctrine of equivalents does not apply to a particular claim element due to prosecution history estoppel. This is an issue to be decided by the court and should be done before giving the jury its instructions. *See generally Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722 (2002); *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, *v. Hilton Davis Chem. Co.*, 520 U.S. 17 (1997). In *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 344 F.3d 1359, 1367 (Fed. Cir. 2003) (*en banc*), the Federal Circuit held that the court, not the jury,

will decide whether a presumed estoppel is rebutted (“We agree . . . that rebuttal of the presumption of surrender is a question of law to be determined by the court, not a jury.”).

4. There are rare circumstances in which a dependent claim may be infringed via the doctrine of equivalents even when the parent claim is not literally infringed. *See Wilson Sporting Goods Co. v. David Geoffrey & Assocs.*, 904 F.2d 677 (Fed. Cir. 1990).

11.2.11.2 INFRINGEMENT — DOCTRINE OF EQUIVALENTS

A [part of Defendant’s product; step in Defendant’s process] is equivalent to a claim requirement if a person of ordinary skill in the field of the invention would regard any differences between them as insubstantial.

[[A [part; step] is also equivalent to a claim requirement if it performs substantially the same function, in substantially the same way, to reach substantially the same result.]

[One factor you may consider in making the determination of equivalence is whether a person of ordinary skill in the field of the invention would have regarded Defendant’s [part; step] to be interchangeable with the claim requirement.]]

In determining infringement by equivalence, you must still use the meanings for the claim requirements that I have provided.

Committee Comments

1. *Insubstantial differences*: *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 39-40 (1997); *Honeywell Int’l. Inc. v. Hamilton Sundstrand Corp.*, 370 F.3d 1131, 1139 (Fed. Cir. 2004) (*en banc*); *Novartis Pharmaceuticals Corp. v. Eon Labs Mfg., Inc.*, 363 F.3d 1306, 1312 (Fed. Cir. 2004); *Chiuminatta Concrete Concepts v. Cardinal Inds.*, 145 F.3d 1303 (Fed. Cir. 1988).

2. *Function / way / result test*: *Machine Co. v. Murphy*, 97 U.S. 120, 124 (1878); *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 39-40 (1997); *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 934 (Fed. Cir. 1987) (*en banc*); *SRI Int’l v. Matsushita Electric Corp., of America*, 775 F.2d 1107, 1123 (Fed. Cir. 1985) (*en banc*).

3. *Interchangeability*: *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 609 (1950); *Interactive Pictures Corp. v. Infinite Pictures, Inc.*, 274 F.3d 1371, 1383 (Fed. Cir. 2001); *Caterpillar Inc. v. Deere & Co.*, 224 F.3d 1374, 1380 (Fed. Cir. 2000); *Al-Site Corp. v. VSI Int.*, 174 F.3d 1308, 1316 (Fed. Cir. 1999); *Chiuminatta Concrete Concepts, Inc. v. Cardinal Inds.*, 145 F.3d 1303, 1309 (Fed. Cir. 1998); *Overhead Door Corp. v. Chamberlain Group*, 52 U.S.P.Q. 1321, 1327 (Fed. Cir. 1999).

4. The Committee chose to use the phrase “a person of ordinary skill in the field” rather than the patent law term “a person of ordinary skill in the art,” believing the former term would be more understandable to lay jurors.

5. *See Gemalto S.A. v. HTC Corp.*, 754 F.3d 1364, 1374-75 (Fed. Cir. 2014) (“Applying the doctrine of equivalents to cover cache memory used in the prior art is not permissible.”); *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 935 n.1 (Fed. Cir. 1987) (*en banc*) (“The doctrine of equivalents is limited in that the doctrine will not extend to cover an accused device in the prior art . . .”); *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861, 870 (Fed. Cir. 1985) (“First, the doctrine will not extend to an infringing device within the public domain, i.e., found in the prior art at the

time the patent issued”); *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 900 (Fed. Cir. 1984) (no infringement despite equivalence if “the equivalent device is within the public domain, i.e., found in the prior art.”).

6. *Hypothetical claim analysis.* The court may use a hypothetical claim analysis under which one posits a hypothetical claim that is sufficient in scope to cover literally the accused product and then determine whether that claim would have been patentable over the prior art. *Ultra-Tex Surfaces, Inc. v. Hill Bros. Chemical Co.*, 204 F.3d 1360, 1364-65 (Fed. Cir. 2000) (“Under a hypothetical claim analysis, a patentee proposes a hypothetical claim that is sufficiently broad in scope to *literally* encompass the accused product or process. . . . If that claim would not have been allowed, the prior art bars application of the doctrine and infringement by equivalence may not be found.”); *Streamfeeder. LLC v. Sure-Feed Sys., Inc.*, 175 F.3d 974 (Fed. Cir. 2000); *K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1368-69 (Fed. Cir. 1999) (cannot allow the doctrine of equivalents to cover subject matter that could not have been legally patented in the first instance); *Marquip, Inc. v. Fosber America, Inc.*, 198 F.3d 1363, 1367 (Fed. Cir. 1999) (this court has consistently limited the doctrine of equivalents to prevent its application to ensnare prior art”); *Athletic Alternatives, Inc. v. Prince Mfg., Inc.*, 73 F.3d 1573, 1582 (Fed. Cir. 1996) (doctrine of equivalents “cannot be used to protect subject matter in, or obvious in light of, the prior art.”); *Wilson Sporting Goods Co. v. David Geoffrey & Assocs.*, 904 F.2d 677, 683 (Fed. Cir. 1990) (“there can be no infringement if the asserted scope of equivalency of what is literally claimed would encompass the prior art.”).

7. *No capture through equivalents of subject matter specifically excluded by the claim.* *Dolly, Inc. v. Spalding & Evenflo Cos.*, 16 F.3d 394, 400 (Fed. Cir. 1994) (“In short, the concept of equivalency cannot embrace a structure that is specifically excluded from the scope of the claims.”); *Source Vagabond Sys. Ltd. v. Hydrapak, Inc.*, 753 F.3d 1291 (Fed. Cir. 2014); *Augme Techs., Inc. v. Yahoo! Inc.*, 755 F.3d 1326, 1335 (Fed. Cir. 2014) (“No reasonable jury could find equivalence here because doing so would require a determination that embedded code is substantially the same as linked code—the very thing that the construction of ‘embedded’ excludes. ‘[T]he concept of equivalency cannot embrace a structure that is specifically excluded from the scope of the claims.’ [citing *Dolly*] *** [W]e have found ‘specific exclusion’ where the patentee seeks to encompass a structural feature that is the opposite of, or inconsistent with, the recited limitation. [citation omitted] Because the Augme patents make clear that embedded and linked code are opposites, we agree with the district court that they ‘cannot possess only insubstantial differences.’”).

8. *No application of equivalents that would vitiate a claim element.* Vitiating occurs when the evidence is insufficient to support a finding of equivalency of a claim element or when the theory of equivalency is legally insufficient. Conversely, if there is evidence to conclude that the claim element is satisfied equivalently and the theory is legally sufficient, then the element is not vitiated. District courts should grant summary judgment when vitiating would result. See *Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co.*, 520 U.S. 17, 39 n. 8 (1997) (“Of course, the various legal limitations on the application of the doctrine of equivalents are to be determined by the court, either on a pretrial motion for partial summary judgment or on a motion for judgment as a matter

of law at the close of the evidence and after the jury verdict. Fed. Rule Civ. Proc. 56; Fed. Rule Civ. Proc. 50. Thus, under the particular facts of a case, if prosecution history estoppel would apply or if a theory of equivalence would entirely vitiate a particular claim element, partial or complete judgment should be rendered by the court, as there would be no further material issue for the jury to resolve. Finally, in cases that reach the jury, a special verdict and/or interrogatories on each claim element could be very useful in facilitating review, uniformity, and possibly post-verdict judgments as a matter of law. See Fed. Rules Civ. Proc. 49 and 50. We leave it to the Federal Circuit how best to implement procedural improvements to promote certainty, consistency, and review-ability to this area of the law.”).

9. *Claims drawn to specific structures have limited equivalents. See Source Vagabond Sys. Ltd. v. Hydrapak, Inc.*, 753 F.3d 1291 (Fed. Cir. 2014); *Carnegie Mellon Univ. v. Hoffmann-LaRoche Inc.*, 541 F.3d 1115 (Fed. Cir. 2008).

10. *Equivalents cannot be found where the accused instrumentality is different in kind rather than a subtle difference in degree. See Trading Tech. Intl., Inc. v. eSpeed, Inc.*, 595 F.3d 1340 (Fed. Cir. 2010); *American Calcar, Inc. v. American Honda Motor Co., Inc.*, 651 F.3d 1318 (Fed. Cir. 2011).

11. *Limitation on infringement by equivalence.* The doctrine of equivalents cannot be used to extend patent coverage to structures or processes that are described in the patent specification but not mentioned in the patent claims, or to erase or ignore meaningful structural and functional limitations of a patent claim. See *Johnson & Johnston Associates v. R. E. Service Co.*, 285 F.3d 1046, 1054 (Fed. Cir. 2002) (*en banc*). In an appropriate case, it may be necessary to revise the pattern instruction to cover this point.

12. *Means-plus-function claims.* For means-plus-function claims, the doctrine of equivalents permits equivalent functions in addition to equivalent structures. See *Texas Instr., Inc. v. U.S. Intern. Trade Comm.*, 805 F.2d 1558, 1563 (Fed. Cir. 1986) citing *Radio Steel & Mfg. Co. v. MTD Prods., Inc.*, 731 F.2d 840, 847-48 (Fed. Cir. 1984), *cert. den.*, 469 U.S. 831 (1984); *but see Chiuminatta Concrete Concepts v. Cardinal Inds., Inc.*, 145 F.3d 1303, 1311 (Fed. Cir. 1988).

11.2.11.3 INFRINGEMENT — MEANS-PLUS-FUNCTION CLAIM LANGUAGE

Claim[s] _____ in Plaintiff's patent contain[s] [a] requirement[s] that [is; are] written in a particular form called means-plus-function form. Specifically, claim ___ contains the following means-plus-function language: [fill in] On page ___ of these instructions, I provided you with a definition of the function and the structure[s] described in the patent that perform[s] this function.

Plaintiff must prove that the entire claim is infringed. The means-plus-function language is only part of the entire claim. The paragraphs numbered 1 and 2 below concern only the means-plus-function part[s] of the claim. You must use the other rules that I have already given you for the other parts of the claim.

As with the other claim requirements, Plaintiff must prove that each means-plus-function claim requirement is met literally, or by equivalence. The rules for determining whether a claim requirement is met by equivalence are the same as the ones I have already given you.

In determining whether a means-plus-function claim requirement is met literally, different rules apply than the ones I gave you earlier. Specifically, to prove that a means-plus-function claim requirement is met literally, Plaintiff must prove the following [as to each means-plus-function claim requirement]:

1. Defendant's product includes structure that performs the identical function in this claim requirement, as I defined the function for you [on page ___ of these instructions] [earlier, namely (recite the function)]; and
2. That structure in defendant's product is the same as, or equivalent to, the structure in this claim requirement, as I have identified it for you [on page ___ of these instructions] [earlier, namely (recite the corresponding structure)]. [Structures are equivalent if they are substantially the same or are not substantially different.]

Committee Comments

1. Need for identical function plus same or equivalent structure for literal infringement: *Ishida Co., v. Taylor*, 221 F.3d 1310, 1316 (Fed. Cir. 2000) (identical function); *Chiuminatta Concrete Concepts v. Cardinal Inds., Inc.*, 145 F.3d 1303, 1308-09 (Fed. Cir. 1988), citing *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 934 (Fed. Cir. 1987) (*en banc*); *Caterpillar v. Deere & Co.*, 224 F.3d 1374, 1379 (Fed. Cir. 2000); *Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1267 (Fed. Cir. 1999).

2. If a structure that predates the invention itself is not equivalent under § 112(f), it cannot be equivalent under the doctrine of equivalents. See *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1320 n.2 (Fed. Cir. 1999), citing *Chiuminatta Concrete Concepts, Inc. v. Cardinal Inds., Inc.*, 145 F.3d 1303 (Fed. Cir. 1998).

3. A literal equivalent under § 112(f) must have been available at time of patent issuance, and use of after-arising technology infringes, if at all, under the doctrine of equivalents. *Al-Site*, 174

F.3d at 1320-21, citing *Warner-Jenkinson Co. v. Hilton-Davis Chemical Co.*, 520 U.S. 17, 29, (1997); *cf. Ishida Co, Ltd. v. Taylor*, 221 F.3d 1310, 1317 (Fed. Cir. 2000).

4. In a case in which the only claims at issue are means-plus-function claims, this instruction should be read before the instruction on the doctrine of equivalents, and the third paragraph of this instruction (cross-referencing the doctrine of equivalents instruction) should be eliminated.

11.2.11.4 DETERMINING INFRINGEMENT

You must decide whether there is infringement separately for each claim. [There is one exception to this rule. If you decide that an independent claim is *not* infringed, then there cannot be literal infringement of any dependent claim that refers directly or indirectly to that independent claim.]

Committee Comments

1. *Comparing product/process with each claim.* See *Johnson & Johnston Assocs., Inc. v. R.E. Svc. Co.*, 285 F.3d 1046, 1052 (Fed. Cir. 2002) (*en banc*); *Caterpillar Inc v. Deere & Co.*, 224 F.3d 1374, 1379 (Fed. Cir. 2000) (compare properly construed claim with accused device or method); *Cook Biotech Inc. v. Acell, Inc.*, 460 F.3d 1365, 1373 (Fed. Cir. 2006) (same); *Lava Trading v. Sonic Trading Management, LLC.*, 445 F.3d 1348, 1352 (Fed. Cir. 2006) (same).

2. *Exception to separate consideration for each claim:* 35 U.S.C. § 112, ¶ 4 (a dependent claim includes all of the limitations of the claim to which it refers); *Kim v. ConAgra Foods, Inc.*, 465 F.3d 1312, 1316, n.1 (Fed. Cir. 2006) (dependent claims not infringed when independent claim not infringed); *Oak Technology, Inc. v. ITC*, 248 F.3d 1316, 1323, n.4 (Fed. Cir. 2001) (same). *But see* Instruction 11.2.11.1, comment 4.

11.2.11.5(A) INFRINGEMENT BY MULTIPLE PARTIES

[This instruction is to be given when multiple participants are involved in alleged infringement of a method claim.]

Infringement [also] occurs when multiple parties form a joint enterprise which infringes or when multiple parties act on separate parts of a method claim in Plaintiff's patent, but all of the acts are attributable to one controlling party.

[Joint enterprise]

To succeed on a joint enterprise claim, Plaintiff must prove the following by a preponderance of the evidence:

1. There was an express or implied agreement including the Defendant;
2. The parties to the agreement shared a common purpose;
3. Each party had a financial interest in that purpose;
4. Each party had an equal voice in the direction of the enterprise; and
5. Collectively, the parties performed all of the steps of the claim.

Committee Comment

See the comments to Instruction 11.2.11.5(B).

11.2.11.5(B) INFRINGEMENT BY MULTIPLE PARTIES

[Attribution]

Plaintiff alleges that a third party's action[s] may be attributed to Defendant for the purpose of determining if Defendant infringed Plaintiff's patent. To succeed on this claim, Plaintiff must prove the following by a preponderance of the evidence:

1. Defendant and [Third Party] each performed at least one step of the claim;
2. Collectively, Defendant and [Third Party] performed all of the steps of the claim;
and
3. Defendant directed or controlled the performance of [Third Party]. Plaintiff may establish this by proving that [Defendant [required; instructed] [Third Party] to perform one or more steps of the claim, and [Third Party] would receive a benefit if it did so] [or] [Defendant contracted with [Third Party] to perform one or more steps of the claim] [or] [[Third Party] was the agent of Defendant].

[The "use" of a system claim includes elements in the possession of more than one actor.]

In order to infringe a claim to a system, [alleged infringer] must have put the claimed invention into service. In other words, [alleged infringer] must control the system and obtain benefit from it.

Committee Comment

1. The Committee has provided alternative instructions 11.2.11.5(A) and 11.2.11.5(B) to be used depending on the facts of the case. Accordingly, instruction (A) or instruction (B) could be the sole instruction or both could be given.

2. The *en banc* ruling in *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 797 F.3d 1020, 1022 (Fed. Cir. 2015) differentiates between (a) joint infringement involving actions by multiple parties and (b) what is called "divided" infringement, where multiple parties perform different steps of the method but the infringement is attributable to one of them only. This instruction attempts to address both situations. Instructions 11.2.11.5(A) and 11.2.11.5(B) treat the issues separately and assume the trial court will choose the appropriate instruction.

3. On remand from *Limelight Networks, Inc. v. Akamai Techs., Inc.*, 572 U.S. 915 (2014), the Federal Circuit declared *en banc*, "Direct infringement under §271(a) occurs where all of the steps of a claimed method are performed by or attributable to a single entity." *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 797 F.3d 1020, 1022 (Fed. Cir. 2015) citing *BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1379-81 (Fed. Cir. 2007). "Where more than one actor is involved in practicing the steps, a court must determine whether the acts of one are attributable to the other such that a single entity is responsible for the infringement. We will hold an entity responsible for others' performance of method steps in two sets of circumstances: (1) where that entity directs or controls others' performance, and (2) where the actors form a joint enterprise."

Akamai, 797 F.3d at 1022. Instruction 11.2.11.5(A) concerns the joint enterprise. Instruction 11.2.11.5(B) concerns the attribution issue.

4. See also *Limelight Networks, Inc. v. Akamai Techs., Inc.*, 572 U.S. 915 (2014); *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1329 (Fed. Cir. 2008); *BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1380-81 (Fed. Cir. 2007).

5. See 35 U.S.C. § 271(a); *Centillion Data Systems, LLC v. Qwest Comms.s Int'l, Inc.*, 631 F.3d 1279, 1285-1287 (Fed. Cir. 2011) (“By causing the system as a whole to perform this processing and obtaining the benefit of the result, the customer has ‘used’ the system under § 271(a). It makes no difference that the back-end processing is physically possessed by Qwest.”).

11.2.12 INDIRECT INFRINGEMENT — INDUCEMENT

Plaintiff contends that Defendant induced [someone; *name of alleged direct infringer*] to infringe [claims __, __, __ of] Plaintiff’s patent. To succeed on this contention, Plaintiff must prove the following by a preponderance of the evidence:

1. Defendant knew of Plaintiff’s patent.

2. Defendant [acted; encouraged; instructed; induced; [or] caused] [*insert name or other description of direct infringer*] to [use; make] a product; perform a process] in a manner that directly infringed Plaintiff’s patent, as defined in other instructions that I have given you.

3. Defendant knew or should have known that its acts would cause [*insert name or other description of direct infringer*] to infringe Plaintiff’s patent.

4. That other person directly infringed the patent.

[In considering this contention, you are not allowed to consider a failure (if any) of Defendant to obtain the advice of counsel or a failure (if any) of Defendant to present such advice to you.]

Committee Comments

1. *Knowledge of plaintiff’s patent: Manville Sales Corp. v. Paramount Systems, Inc.*, 917 F.2d 544, 553 (Fed. Cir. 1990). Such knowledge may be constructive. *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 765-66 (2011) (ruling that the facts showed “willful blindness” to the likely existence of the patent). In such a case, the Court may want to supplement the knowledge element with “or Defendant believed that there was a high probability that the patent existed and took deliberate action to avoid learning of the patent.” *Id.* See also, *Unwired Planet, LLC v. Apple Inc.*, 829 F.3d 1353, 1364 (Fed. Cir. 2016).

2. *Encouragement (element 2): Manville Sales Corp. v. Paramount Systems, Inc.*, 917 F.2d 544, 553 (Fed. Cir. 1990).

3. *Intent to cause infringement: Lucent Technologies, Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1321-22 (Fed. Cir. 2009) (“[t]he plaintiff has the burden of showing that the alleged infringer’s actions induced infringing acts *and* that he knew or should have known his actions would induce actual infringements.”) (quoting *DSU Med. Corp. v. Paramount Systems, Inc.*, 471 F.3d 1293, 1306 (Fed. Cir. 2006).

4. *Direct infringement is required by a single party who performs or controls others to perform all of the steps (in a method claim):* In *Limelight Networks, Inc. v. Akamai Techs., Inc.*, 572 U.S. 915 (2014), the Supreme Court ruled that there must be direct infringement of a method claim by a single actor. It rejected the Federal Circuit *en banc* ruling in the case below that there could be divided infringement with no single actor performing all of the method steps, so long as all steps were performed. The Supreme Court mentioned the Federal Circuit’s decision in *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318 (Fed. Cir. 2008) and emphasized that the Court had no opinion on its correctness. *Muniauction* applies the “well-settled rule that a

defendant cannot . . . avoid liability for direct infringement by having someone else carry out one or more of the claimed steps on its behalf.” *Id.* at 1329, citing *BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1379 (Fed. Cir. 2007) (internal quotations omitted). *Muniauction* holds that there can be infringement of a method claim by multiple actors but “*only if* one party exercises control or direction over the entire process such that every step is attributable to the controlling party – the “mastermind.” 532 F.3d at 1329 (emphasis added) (finding no liability by defendant even where it controls access to its system and instructs bidders on its use; Defendant does not control the bidders).

5. A defendant’s belief of patent invalidity is not a defense to induced infringement. *Commil USA, LLC v. Cisco Systems, Inc.*, 135 S.Ct. 1920, 1928 (2015) (“[B]ecause infringement and validity are separate issues under the Act, belief regarding validity cannot negate the scienter required under § 271(b).”)

6. *Advice of counsel.* With respect to the last paragraph of the instruction, *see* 35 U.S.C. § 298. This language should be used only in a case in which evidence relating to advice of counsel has been admitted for some other purpose.

11.2.13 INDIRECT INFRINGEMENT — CONTRIBUTORY INFRINGEMENT

Plaintiff contends that Defendant contributed to the infringement of [claims __, __, __ of] Plaintiff's patent. To succeed on this contention, Plaintiff must prove the following by a preponderance of the evidence:

1. Defendant knew of Plaintiff's patent.
2. Defendant [sold; supplied] a component that forms a significant part of the invention described in a claim in Plaintiff's patent.
3. [Another person; *insert name*] infringed Plaintiff's patent by using this component.
4. Defendant knew the component was especially made or adapted for a use that would infringe Plaintiff's patent.
5. The component was not a commonly available item or a product with substantial non-infringing uses.

Committee Comments

1. *Knowledge of plaintiff's patent: Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 488 (1964).

2. *Supplied an important or material part: 35 U.S.C. § 271(c); Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 483 (1964). The term "significant" is used in place of the statutory term "material," as "significant" effectively is the definition of materiality. By using the definition, one avoids the need to use the term "material" and then define it.

3. *Direct infringement by another: Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 341-42 (1961); *Nordberg Mfg. v. Jackson Vibrators, Inc.*, 153 U.S.P.Q. 777, 783 (N.D. Ill. 1967) (would infringe).

4. *Knowledge that some other person would use this component to infringe: Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 483 (1964).

5. *Not a commonly available item: 35 U.S.C. § 271(c) ("not a staple article"); Dawson Chem. Co. v. Rohm & Haas Co.*, 448 U.S. 176, 200 (1980) ("In essence, this provision places materials like the dry ice of the *Carbice* case outside of the scope of the contributing infringement doctrine."). *Or a product with substantial noninfringing uses: 35 U.S.C. § 271(c); Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1374 (Fed. Cir. 2003) (affirming determination of no contributory infringement: "The record showed that the accused flooring products could be installed by methods not claimed in the '267 and '907 patents. . . . For instance, the installation instructions for Unilin's floor product are a noninfringing 'snap-snap' method. . . . Akzenta's published PCT application also discloses noninfringing methods of installing its floor products."). The Committee chose to use the words "not a commonly available item" in lieu of the statutory language for ease of jury understanding.

11.2.14 WILLFUL INFRINGEMENT

Plaintiff contends that Defendant infringed Plaintiff's patent willfully.

You are to consider the issue of willful infringement only if you have found that Defendant infringed Plaintiff's patent. Not all infringement is willful.

Infringement is willful if Plaintiff proves by a preponderance of the evidence that Defendant knew that it was infringing the patent or acted in reckless disregard of Plaintiff's rights. In making this determination, you should consider all of the evidence, including any evidence regarding whether Defendant acted maliciously, deliberately, or in bad faith.

You should consider what Defendant knew at the time that it performed the acts that are accused of infringement [or manufactured or sold the accused product].

[You may not consider whether Defendant consulted with an attorney.]

Committee Comment

1. The Supreme Court ruled in 2016 that no heightened evidentiary burden is required for a finding of willfulness. *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S.Ct 1923, 1934 (2016). It overruled *In re Seagate Technology, LLC.*, 497 F.3d 1360 (Fed. Cir. 2007) (*en banc*) and explained that the decision to award enhanced damages is a matter for the district court's discretion without explicit limits or conditions. The Supreme Court indicated in *Halo* that enhanced damages "are not to be meted out in a typical infringement case" but are reserved for behavior that is willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant, or characteristic of a pirate. *Halo*, 136 S.Ct. at 1932.

2. Adapted from *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S.Ct 1923, 1932 (2016) and *Rite-Hite Corp. v. Kelley Co., Inc.*, 819 F.2d 1120, 1125-1126 (Fed. Cir. 1987). *Halo* at 1932. The full list from *Halo* has been shortened, omitting willful, wanton, consciously wrongful, flagrant, and characteristic of a pirate. The court should consider whether any of these ought to be mentioned in light of the evidence.

3. As to Defendant's knowledge, the Supreme Court explained in *Halo*, "culpability is generally measured against the knowledge of the actor at the time of the challenged conduct." *Halo*, 136 S.Ct. at 1933. Thus, in assessing the culpability of Defendant's conduct, the court should consider, as one factor in its analysis, what Defendant knew or had reason to know at the time of the infringement of the patents. *Accord, WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1340-41 (Fed. Cir. 2016) ("Proof of an objectively reasonable litigation-inspired defense to infringement is no longer a defense to willful infringement.")

4. Underlying factual components of the willfulness question should be left to the jury. *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1341 (Fed. Cir. 2016) ("We do not interpret *Halo* as changing the established law that the factual components of the willfulness question should be resolved by the jury.").

5. Failures to obtain opinions of counsel or the failure to present such opinions cannot be used to prove willful infringement. 35 U.S.C. § 298.

6. Some other pattern jury instructions provide lists of non-exclusive factors for the jury to consider in determining willfulness. *See, e.g.*, Fed. Cir. Bar Ass'n Instruction 3.8. The Committee decided not to include such a list, for several reasons: the factors are better left to attorney argument, leaving it to the jury to weigh them against the standard for willfulness and providing a non-exclusive list might mislead a jury to believe that other factors should not be considered.

7. The trial court may use a special interrogatory with respect to any questions dealing with willfulness.

11.2.15 PRIOR USE DEFENSE TO INFRINGEMENT

One of the defenses against infringement that is available to accused infringers is the prior use defense. Under this defense, even if the patent appears to be infringed, there is no infringement if Defendant proves activity in the United States that is early enough. This defense does not invalidate the patent but prevents Plaintiff from enforcing the patent against this particular Defendant.

[For patents issued after September 15, 2011:

Did Defendant prove by clear and convincing evidence that it used commercially the accused [method; machine; manufacture; product; composition of matter] in manufacturing or another commercial process in the United States, in good faith, at least one year before [the effective filing date of the patent; or the earliest date when the claimed invention was disclosed to the public?]

Committee Comment

In 1999, a new “prior commercial use” defense was added to the Patent Act with respect to claims involving alleged infringement of business method claims. The America Invents Act amended and broadened this defense in 2011. However, the version of 35 U.S.C. § 273 that applies depends on the patent date. The expanded Section 273 applies only to patents issued on or after Sept. 16, 2011, and the earlier version applies to patents issued before that date. In light of this amendment, the Committee considered but decided against proposing detailed model instructions concerning this defense.

The statute contains numerous, detailed elements to the defense, and only the most basic requirement is stated in this instruction. If this defense is asserted, the applicable detail as found in the statute will need to be added. Some examples include the type of use, whether the patent is a “university patent,” whether the alleged infringer derived from the patentee, that the defense is personal, whether sites of use have changed and when (with respect to the effective filing date of the claimed invention and any date of assignment or transfer of the patent), whether there was an assignment of the entire enterprise or line of business to which the defense relates.

To establish the defense, Defendant is not required to prove inventorship or trade secret status of the accused method, machine, manufacture, product, or composition of matter.

Prior to adoption of the America Invents Act in 2011, the “prior commercial use” defense was too rarely utilized to merit inclusion of a model instruction. Between 1999 and 2011, the defense had been the subject of only one published opinion, and that case had found the defense inapplicable. *Sabasta v. Buckaroos, Inc.*, 507 F. Supp. 2d 986 (S.D. Iowa 2007).

11.3 INVALIDITY

Introductory Note: On September 16, 2011, the President signed into law the Leahy-Smith America Invents Act (“AIA”), Public Law No. 112-29, 125 Stat. 284 through 341. Parts of that Act affecting patent validity issues became effective on September 16, 2012. There are some validity issues that need to be addressed under the patent statutes that existed prior to the AIA (pre-AIA cases), some validity issues that need to be addressed under the AIA (post-AIA cases), and some issues that are not affected by the AIA (pre-AIA and post-AIA cases).

To address these points, the following instructions include a bracketed portion in the instruction title that identifies whether the instruction can be used for pre-AIA and post-AIA cases, pre-AIA cases only, or post-AIA cases only. In instances where separate instructions are needed to cover pre-AIA and post-AIA cases, those are provided in the same instruction section and identified as “pre-AIA” and “post-AIA.”

11.3.1 VALIDITY — GENERAL [Pre-AIA And Post-AIA]

Defendant has challenged the validity of [claim[s] ____ of] the ____ patent(s) on [state the grounds].

Each of the claims of the ____ patent(s) is presumed to be valid. For that reason, Defendant has the burden of proving invalidity by clear and convincing evidence, which I defined earlier.

You must evaluate and determine separately the validity of each claim of the patent(s).

Committee Comment

1. The invalidity of the patent or any asserted claim, for failure to comply with any requirement of 35 U.S.C. §§ 101, 102, 103, 112, or 251, is a defense to alleged infringement. *See* 35 U.S.C. §§ 101, 102, 103, 112, 251, & 282; *Graham v. John Deere*, 383 U.S. 1 (1965) (patentability, and thus validity, is dependent upon three explicit conditions: novelty, utility, and nonobviousness).

2. Patents are entitled to a presumption of validity. 35 U.S.C. § 282; *Avia Group Int’l, Inc. v. L.A. Gear Cal.*, 853 F.2d 1557, 1562 (Fed. Cir. 1988); *DMI, Inc. v. Deere & Co.*, 802 F.2d 421, 427 (Fed. Cir. 1986); *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1534 (Fed. Cir. 1983). The presumption of validity is a procedural device. It “imposes on the party against whom it is directed the burden of going forward with evidence to rebut or meet the presumption.” FED. R. EVID. 301; *DMI*, 802 F.2d at 427. As the Federal Circuit has recognized, “the presumption is one of law, not fact, and does not constitute ‘evidence’ to be weighed against a challenger’s evidence.” *Avia Group*, 853 F.2d at 1562.

11.3.2(A) Invalidity — Specification Requirements [Pre-AIA]

Under patent law, the part of the patent called the “specification” must meet certain requirements. Defendant contends that claim(s) ___ of the ___ patent [is/are] invalid because the specification fails to satisfy the law’s [written description,] [enablement,] [and/or] [best mode] requirement[s].

If Defendant proves by clear and convincing evidence that any one of these requirements is not met for an asserted claim, then that claim is invalid. I will now explain to you in detail the specification requirement[s] that Defendant says makes the patent claims invalid.

Committee Comment

1. “The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.” 35 U.S.C. § 112, ¶ 1. The AIA made some minor language changes to this section, now found in 35 U.S.C. § 112(a).

2. Under the America Invents Act, § 15(a), the best mode defense is inapplicable in proceedings commenced on or after September 16, 2011.

11.3.2(B) INVALIDITY — SPECIFICATION REQUIREMENTS [Post-AIA]

Under patent law, the part of the patent called the “specification” must meet certain requirements. Defendant contends that claim(s) ___of the ___ patent [is/are] invalid because the specification fails to satisfy the law’s [written description] [and/or] [enablement,] requirement[s].

If Defendant proves by clear and convincing evidence that any one of these requirements is not met for an asserted claim, then that claim is invalid. I will now explain to you in detail the specification requirement[s] that Defendant says makes the patent claims invalid.

Committee Comment

1. “The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.” 35 U.S.C. § 112(a).

2. Under the America Invents Act (Pub. L. No. 112-29, 125 Stat. 284 (2011)), § 15(a), the best mode defense is inapplicable in proceedings commenced on or after September 16, 2011.

11.3.2.1 SPECIFICATION REQUIREMENTS — WRITTEN DESCRIPTION [Pre-AIA And Post-AIA]

The law requires that the specification section of the patent contain an adequate written description of the invention(s) set forth in the patent claim(s).

Defendant contends that claim(s) ___ of Plaintiff's patent [is/are] invalid because the specification does not contain an adequate written description. To succeed on this contention, Defendant must prove that a person of ordinary skill in the field of the invention would not recognize that the specification describes all the requirements of the claim. The specification does not have to use the exact words found in the claim.

If Defendant proves this as to a particular claim by clear and convincing evidence, then you should find that claim invalid.

Committee Comment

1. A patent's specification must include an adequate written description; however, it need not include the exact words of the claims. *Purdue Pharma L.P. v. Faulding, Inc.*, 230 F.3d 1320, 1323 (Fed. Cir. 2000); *Union Oil Co. of Cal. v. Atl. Richfield Co.*, 208 F.3d 989, 996-1001 (Fed. Cir. 2000); *Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473, 1478-80 (Fed. Cir. 1998); *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997). *See also Turbocare Div. of Demag Delaval Turbomachinery Corp. v. General Elec. Co.*, 264 F.3d 1111, 1118 (Fed. Cir. 2001); *Reiffin v. Microsoft Corp.*, 214 F.3d 1342, 1345-46 (Fed. Cir. 2000) (the description must clearly allow persons of ordinary skill in the art to recognize that the inventor invented what is claimed).

2. Lack of adequate written description must be proven by clear and convincing evidence. *Chiron Corp. v. Genentech, Inc.*, 363 F.3d 1247 (Fed. Cir. 2004).

3. If priority is at issue, the term "patent" may need to be changed to "patent application as originally filed." *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1330 (Fed. Cir. 2003) (one of the roles of the written description requirement is to ensure that patent claims are not amended to claim subject matter different from what was described in the patent application on the date of its filing).

11.3.2.2 SPECIFICATION REQUIREMENTS — ENABLEMENT [Pre-AIA And Post-AIA]

The law requires that the “specification” section of the patent contain enough information to enable a person of ordinary skill in the field of the invention to make and use the invention, without an unreasonable amount of experimentation. A patent does not have to state information that persons of ordinary skill in the field would be likely to know or could obtain without undue effort.

Defendant contends that claim(s) ___ of Plaintiff’s patent [is/are] invalid because the specification fails to meet this requirement. To succeed on this contention, [Defendant] must prove that the specification does not enable a person of ordinary skill in the field of the invention to make and use [products; processes] covered by the full scope of claim ___, without an unreasonable amount of experimentation. Whether the amount of experimentation is unreasonable depends on the complexity of the field of the invention and the level of expertise and knowledge of persons of ordinary skill in that field.

If Defendant proves this as to a particular claim by clear and convincing evidence, you should find that claim invalid.

Committee Comment

1. To be enabling, the specification must teach those skilled in the art how to make and use the full scope of the claimed invention without undue experimentation. *See* 35 U.S.C. § 112; *Durel Corp. v. Osram Sylvania Inc.*, 256 F.3d 1298, 1306 (2001); *Union Pac. Resources Co. v. Chesapeake Energy Corp.*, 236 F.3d 684, 690-92 (Fed. Cir. 2001); *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384 (Fed. Cir. 1986) (a patent need not teach what is well known in the art).

2. A court may consider a number of factors when determining if an unreasonable amount of experimentation is required to practice the claimed invention. *Enzo Biochem, Inc. v. Calgene, Inc.*, 188 F.3d 1362, 1369-78 (Fed. Cir. 1999); *Nat’l Recovery Techs., Inc. v. Magnetic Separation Sys., Inc.*, 166 F.3d 1190, 1195-98 (Fed. Cir. 1999). Lack of enablement must be proven by clear and convincing evidence. *Ralston Purina Co. v. Far-Mar Co.*, 772 F.2d 1570, 1573-74 (Fed. Cir. 1985); *White Consolidated Indus., Inc. v. Vega Servo Control, Inc.*, 713 F.2d 788, 791 (Fed. Cir. 1983).

3. The following factors have been set forth as relevant to the issue of reasonable experimentation: how much experimentation is necessary; how much direction or guidance the patent provides; whether the patent contains working examples; the simplicity or complexity of the invention; what is disclosed by the prior art; the level of skill possessed by those in the field; the predictability of the art; and the breadth of the claims. *Enzo*, 188 F.3d at 1371; *see also, In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988) (setting out factors to consider in determining if the patent’s teachings require an unreasonable amount of experimentation). The Committee does not recommend including these factors in the instruction, though a judge may consider doing so in a particular case.

11.3.2.3(A) SPECIFICATION REQUIREMENTS — BEST MODE [Pre-AIA]

The law requires that if an inventor believed, at the time he applied for the patent, that there was a “best mode,” or best way, to [make; use; carry out] the [product; process] covered by the patent, he had to disclose it in the patent specification. The inventor also may disclose other modes, and he need not state which of the modes he discloses in the patent is the best.

Defendant contends that claim(s) ___ of Plaintiff’s patent [is/are] invalid for failure to satisfy the “best mode” requirement. If Defendant proves this by clear and convincing evidence [as to a particular claim], you should find that claim invalid.

Committee Comment

1. A holding of invalidity for failure to disclose the best mode requires clear and convincing evidence that the inventor both knew of and concealed a better mode of carrying out the claimed invention than that set forth in the specification, although he need not state which of the modes is the best. *See* 35 U.S.C. § 112, ¶ 1; *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1330 (Fed. Cir. 2002); *Mentor H/S Inc., v. Med. Device Alliance, Inc.*, 244 F.3d 1365 (Fed. Cir. 2001); *Amgen, Inc. v. Chugai Pharm. Co.*, 927 F.2d 1200, 1209-10 (Fed. Cir. 1991).

2. Under the America Invents Act, § 15(a), the best mode defense is inapplicable in proceedings commenced on or after September 16, 2011.

11.3.2.3(B) SPECIFICATION REQUIREMENTS — BEST MODE [Post-AIA]

Committee Comment

Under the America Invents Act, § 15(a), the best mode defense is inapplicable in proceedings commenced on or after September 16, 2011.

11.3.2.4 SPECIFICATION REQUIREMENTS — INDEFINITENESS [Pre-AIA And Post-AIA]

Committee Comment

The Committee did not include a jury instruction regarding indefiniteness because invalidity due to indefiniteness is, as a general matter, a question of law to be determined by the court. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014); *Aero Prods. Int’l Inc. v. Intex Recreation Corp.*, 466 F.3d 1000, 1015-16 (Fed. Cir. 2006)

The question of whether there may be circumstances in which factual issues surrounding indefiniteness may be submitted to the jury has not been definitively answered. *See BJ Services Co. v. Halliburton Energy Services, Inc.*, 338 F.3d 1368, 1372 (Fed. Cir. 2003) (“Like enablement, definiteness, too, is amenable to resolution by the jury where the issues are factual in nature.”); *but see Dow Chem. Co. v. Nova Chemicals Corp. (Canada)*, 458 F. App’x 910, 917-20 & n. 8 (Fed. Cir. 2012) (unpublished) (affirming jury finding of no indefiniteness, but noting that “because the district court provided a construction to the jury, which was the only basis upon which the jury could reach the conclusion it did, we do not need to reach the question of whether it was error to submit the question of indefiniteness to the jury . . .”).

11.3.3(A) SECTION 102 AND 103 DEFENSES — DEFINITION OF “PRIOR ART” [Pre-AIA]

In addressing some of Defendant’s invalidity defenses, you will have to consider what is disclosed in the “prior art.”

[The parties agree that the following [items; processes; references] are prior art: [*list uncontested prior art*].]

[The parties dispute that other [items; processes; references] are prior art.]

Before you may consider any disputed [item; process; reference] to be prior art [for purposes of Defendant’s defense of anticipation], Defendant must prove by clear and convincing evidence that the [item; process; reference] was [any one of the following]:

[*use only those that apply in the particular case*]

[For U.S. Patent No. [...] in suit:]

- [known] [or] [used] by someone else in the United States before the date of invention, unless the [knowledge] [or] [use] was private or secret;
- [in public use] [or] [on sale] [offered for sale] in the United States more than one year before the patent application was filed;
- patented by someone else [before the date of the invention] [or] [more than one year before the patent application was filed];
- described in a publication [before the date of the invention] [or] [more than one year before the patent application was filed]; or
- described in a published patent application filed in [the United States; a foreign country] before the date of invention.

Committee Comment

1. *General authority.* See 35 U.S.C §§ 102(a)-(g); *Woodlawn Trust v. Flowertree Nursery, Inc.*, 148 F.3d 1368, 1370 (Fed. Cir. 1998); *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1570 (Fed. Cir. 1997); *Lamb-Weston, Inc. v. McCain Foods, Ltd.*, 78 F.3d 540, 544 (Fed. Cir. 1996). This instruction is intended to cover the most common types of “prior art” described in section 102; it is not intended to be an exhaustive list. See, e.g., 35 U.S.C. § 102(g) (prior invention). In some cases, different “prior art” may be relied upon for section 102 and section 103 defenses. If that occurs, the instruction will need to be modified accordingly.

2. Section 3(n)(1) of the AIA specifies that the AIA amendments apply to any patent or application that contains *or ever contained* a claim with an effective filing date after March 15, 2013. Moreover, the AIA amendments apply to *all claims* instead of just the claim(s) that had such an effective filing date. This instruction should be used only where the patent at issue never

included a claim having a priority date *after March 15, 2013* and which never contained a priority claim to any patent or application that contains or ever contained a claim with an effective filing date *after March 15, 2013*.

3. *Private / secret knowledge or use.* The Committee has not provided a definition of “private” or “secret” as used in the first bullet point, leaving that to be determined, if necessary, in the context of the particular case being tried. Private or secret knowledge or use by others, generally speaking, is not prior art. *Woodland Trust v. Flowertree Nursery, Inc.*, 148 F.3d 1368, 1371 (Fed. Cir. 1998) (“when an asserted prior use is not that of the applicant, § 102(b) is not a bar when the prior use or knowledge is not available to the public.”); *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1550 (Fed. Cir. 1983) (“There is no reason or statutory basis, however, on which Budd’s and Cropper’s secret commercialization of a process, if established, could be held a bar to the grant of a patent to Gore on that process.”). *But cf. SmithKline Beecham Corp. v. Apotex Corp.*, 365 F.3d 1306 (Fed. Cir. 2004); *Eolas Techs., Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1334 (Fed. Cir. 2005).

4. “*On sale.*” See *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55 (1998). A single offer to sell, primarily for profit rather than for experimental purposes, is sufficient, even if no sale is made. *Scaltech v. Retec/Tetra, LLC*, 269 F.3d 1321, 1328 (Fed. Cir. 2001); *Group One, Ltd. v. Hallmark Cards, Inc.*, 254 F.3d 1041, 1046-47 (Fed. Cir. 2001). If someone other than the inventor secretly uses a process to make a product, the sale of the product does not constitute a sale of the process. *D.L. Auld Co. v. Chroma Graphics Corp.*, 714 F.2d 1144, 1147 (Fed. Cir. 1983).

5. “*Publication.*” See *In re Cronyn*, 890 F.2d 1158, 1159-61 (Fed. Cir. 1989) (“reasonably accessible to the public”); *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1568-69 (Fed. Cir. 1988).

11.3.3(B) SECTION 102 AND 103 DEFENSES — DEFINITION OF “PRIOR ART” [Post-AIA]

In addressing some of Defendant’s invalidity defenses, you will have to consider what is disclosed in the “prior art.”

[The parties agree that the following [items; processes; references] are prior art: *[list uncontested prior art]*].

[The parties dispute that other [items; processes; references] are prior art.]

Before you may consider any disputed [item; process; reference] to be prior art [for purposes of Defendant’s defense of anticipation], Defendant must prove by clear and convincing evidence that the [item; process; reference] was [any one of the following]:

[use only those that apply in the particular case]

- patented before *[insert effective filing date]*;
- described in a U.S. patent or public patent application filed in the United States before *[insert effective filing date]*;
- described in a publication before *[insert effective filing date]*;
- in public use [anywhere in the world] before *[insert effective filing date]*;
- on sale [anywhere in the world] before *[insert effective filing date]*; or
- otherwise available to the public [anywhere in the world] before *[insert effective filing date]*.

[A disclosure made 1 year or less before *[insert effective filing date]* is not prior art if it was made by [the inventor; a joint inventor; someone who obtained the information from the inventor or a joint inventor].]

[A disclosure made 1 year or less before *[insert effective filing date]* is not prior art if the information in the disclosure had already been publicly disclosed by [the inventor; a joint inventor; someone who obtained the information from the inventor or a joint inventor].]

[A disclosure is not prior art if the information in the disclosure was obtained directly or indirectly from [the inventor; a joint inventor].]

[A disclosure is not prior art if the information in the disclosure had been publicly disclosed by [the inventor; a joint inventor; someone who obtained the information from the inventor or a joint inventor] before *[insert effective filing date]*.]

[A disclosure is not prior art if the information in the disclosure and the invention as described in [the patent; claim __ of the patent] were owned by [the same person; someone who was obligated to assign the invention to the same person] as of *[insert effective filing date]*.]

Committee Comment

1. *General authority.* See 35 U.S.C. § 102, as amended by the Leahy-Smith Invents Act of 2011 (post-AIA); *Woodlawn Trust v. Flowertree Nursery, Inc.*, 148 F.3d 1368, 1370 (Fed. Cir. 1998); *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1570 (Fed. Cir. 1997); *Lamb-Weston, Inc. v. McCain Foods, Ltd.*, 78 F.3d 540, 544 (Fed. Cir. 1996). This instruction is intended to cover the most common types of “prior art” described in section 102; it is not intended to be an exhaustive list. See, e.g., 35 U.S.C. § 102(g) (prior invention). In some cases, different “prior art” may be relied upon for section 102 and section 103 defenses. If that occurs, the instruction will need to be modified accordingly.

2. Section 3(n)(1) of the AIA specifies that the AIA amendments apply to any patent or application that contains *or ever contained* a claim with an effective filing date after [March 15, 2013]. Moreover, the AIA amendments apply to *all claims* instead of just the claim(s) that had such an effective filing date. This instruction should be used for any patent that includes or ever included a claim having an effective filing date *after March 15, 2013* or whichever asserted a priority claim to any patent or application that contains or contained at any time a claim with an effective filing date *after March 15, 2013*:]

3. *Private / secret knowledge or use.* The Committee has not provided a definition of “private” or “secret” because the AIA intended that activity that is secret is not prior art. See generally 157 Cong. Rec. S5319 to S5321 (daily ed. Sept. 6, 2011).

4. *Effective filing date.* “Effective filing date” is defined in 35 U.S.C. § 100(i), which represents a change from pre-AIA law. In most cases, the effective filing date will be determined by the court prior to trial or will not be contested. In the unusual case where a jury question is involved, this instruction will require modification.

5. The AIA removed the requirement that the patent or application has to be in the English language in order to qualify as prior art. Additionally, it legislatively overruled *In re Hilmer*, 53 C.C.P.A. 1288, 359 F.2d 859 (1966). The statute now allows patents issued under 35 U.S.C. § 151 or patent applications published or deemed published under Section 122(b) to speak as prior art as of their earliest filing date under Sections 119, 120, 121, 365(a), or 365(b) of the patent statute.

6. In a case in which there is a dispute as to whether the disclosure in question is the result of a disclosure made within one (1) year or less of the effective filing date by the inventor, by another who obtained the subject matter disclosed directly from the inventor, or if the subject matter disclosed and the claimed invention were owned by the same person or subject to an obligation of assignment to the same person, the jury should be instructed here regarding exceptions under § 102(b)(2).

7. For “otherwise available to the public,” see *Helsin Healthcare S.A. v. Dr. Reddy’s Laboratories Ltd.*, 2016 WL 832089 (D. N.J. 2016) (appeal pending). The committee did not provide an instruction for this category of prior art. The AIA does not define the term “disclosure.” The Patent and Trademark Office Manual of Patent Examining Procedure (MPEP) provides guidance at §2152.02(e):

The availability of the subject matter to the public may arise in situations such as a student thesis in a university library (see, e.g., *In re Cronyn*, 890 F.2d 1158, 13 USPQ2d 1070 (Fed. Cir. 1989); *In re Hall*, 781 F.2d 897, 228 USPQ 453 (Fed. Cir. 1986); *In re Bayer*, 568 F.2d 1357, 196 USPQ 670 (CCPA 1978) and MPEP § 2128.01, subsection I.); a poster display or other information disseminated at a scientific meeting (see, e.g., *In re Klopfenstein*, 380 F.3d 1345, 72 USPQ2d 1117 (Fed. Cir. 2004), *Massachusetts Institute of Technology v. AB Fortia*, 774 F.2d 1104, 227 USPQ 428 (Fed. Cir. 1985) and MPEP § 2128.01, subsection IV.); subject matter in a laid-open patent application or patent (see, e.g., *In re Wyer*, 655 F.2d 221, 210 USPQ 790 (CCPA 1981); see also *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 78 USPQ2d 1684 (Fed. Cir. 2006)); a document electronically posted on the Internet (see, e.g., *Voter Verified, Inc. v. Premier Election Solutions, Inc.*, 698 F.3d 1374, 104 USPQ2d 1553 (Fed. Cir. 2012), *In re Lister*, 583 F.3d 1307, 92 USPQ2d 1225 (Fed. Cir. 2009), *SRI Int'l, Inc. v. Internet Sec. Sys., Inc.*, 511 F.3d 1186, 85 USPQ2d 1489 (Fed. Cir. 2008), and MPEP § 2128); or a commercial transaction that does not constitute a sale under the Uniform Commercial Code (see, e.g., *Group One, Ltd. v. Hallmark Cards, Inc.*, 254 F.3d 1041, 59 USPQ2d 1121 (Fed. Cir. 2001) and MPEP § 2133.03(e)(1)). Even if a document or other disclosure is not a printed publication, or a transaction is not a sale, either may be prior art under the “otherwise available to the public” provision of AIA 35 U.S.C. 102(a)(1), provided that the claimed invention is made sufficiently available to the public.

11.3.4(A) SECTION 102 DEFENSES — PRIOR ART — DEFINITIONS [Pre-AIA]

[Use only those that apply in the particular case per Instruction 11.3.3(A).]

(a) “date of invention”

The term “date of invention” [, as used in the previous instruction,] means [*insert agreed upon date, if applicable*] [the date the patent application was filed [, *insert effective filing date*], unless Plaintiff proves by a preponderance of the evidence that the invention was conceived and actually reduced to practice at an earlier date. An invention as described in a patent claim is “conceived” when the inventor has formed the idea of how to make and use every aspect of the invention. An invention is “actually reduced to practice” when it is made or when the inventor determines that it will work for its intended purpose.]

[To establish an earlier date, Plaintiff must prove that [the invention was actually reduced to practice at an earlier date, in which case that date is the invention date] [, or] [the inventor conceived the invention before the date of the prior art and used reasonable diligence before the date of the prior art to reduce the invention to practice, in which case the date of the invention is the date when the invention was conceived.] Reasonable diligence means the inventor worked on a reasonably continuous basis to reduce the invention to practice].

(b) “on sale”

An [item; process] is “on sale,” as that term is used in these instructions, if it was the subject of a commercial offer for sale in the United States more than one year before the patent application date[, and if, at that time, it was ready for patenting]. A single offer to sell, primarily for profit rather than for experimental purposes, is sufficient, even if no actual sale was made.

(c) Experimental use / offer

If a [use; offer to sell] is primarily for experimental purposes, it does not constitute prior art. A [use; offer to sell] is considered to be primarily for experimental purposes if it is an effort [by; [or] [under the control of] [the inventor; the assignee of the inventor] to test claimed features of the invention or to determine if the invention will work for its intended purpose. If the [use; offer to sell] is primarily for experimental purposes, it does not matter that the inventor incidentally derived some profit from it.

(d) Public use

An invention is considered to have been in public use if it was:

- (1) accessible to the public or commercially exploited in the United States; and
- (2) ready for patenting, which means that [it was described in a filed U.S. patent application] [it was [constructed] [or] [performed], and there was reason to believe that the invention would work for its intended purpose.]

(e) “publication”

To qualify as a “publication,” the [article; patent; other reference] must be distributed to, or reasonably accessible by, persons interested in the field of the invention, and it must be complete enough to enable a person with ordinary skill in the field to use the invention without undue experimentation.

Committee Comment

1. This instruction should be used only where the patent at issue never included a claim having an effective filing date *after March 15, 2013* and never contained a priority claim to any patent or application that contains or ever contained a claim with an effective filing date *after March 15, 2013*.

2. Title 35 U.S.C. § 102(a), (b) (pre-AIA); *Clock Spring, L.P. v. Wrapmaster, Inc.*, 560 F.3d 1317, 1325-27 (Fed. Cir. 2009); *American Seating Co. v. USSC Group, Inc.*, 514 F.3d 1262, 1267 (Fed. Cir. 2008); *Invitrogen Corp. v. Biocrest Manuf., L.P.*, 424 F.3d 1374, 1379-82 (Fed. Cir. 2005); *SmithKline Beecham Corp. v. Apotex Corp.*, 365 F.3d 1306, 1316-20 (Fed. Cir. 2004); *Grain Processing Corp. v. Am. Maize-Prods. Co.*, 840 F.2d 902, 906 (Fed. Cir. 1988); *Moleculon Research Corp. v. CBS, Inc.*, 793 F.2d 1261, 1265-67 (Fed. Cir. 1986); *WL Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1549-50 (Fed. Cir. 1983).

3. *Conception and reduction to practice.* Conception occurs when the inventor has formed the idea as to how to make and use every aspect of the claimed invention. *Singh v. Blake*, 222 F.3d 1362, 1366-70 (Fed. Cir. 2000) (“A conception must encompass all limitations of the claimed invention.”); *Cooper v. Goldfarb*, 154 F.3d 1321, 1326-31 (Fed. Cir. 1998). Reduction to practice occurs when the invention is made and shown to work for its intended purpose. *Cooper*, 154 F.3d at 1326-31; *Estee Lauder Inc. v. L’Oreal, S.A.*, 129 F.3d 588, 593 (Fed. Cir. 1997). (“[A] reduction to practice does not occur until the inventor . . . knows that the invention will work for its intended purpose.”). “A patent owner need not prove the inventor *continuously* exercised reasonable diligence throughout the critical period; it must show there was *reasonably continuous* diligence.” *Perfect Surgical Techniques, Inc. v. Olympus Am., Inc.*, slip op. at 7 (Fed. Cir. Nov. 15, 2016). Reasonable diligence allows for interruptions necessitated by the inventor or others working with him. *In re Jolley*, 308 F.3d 1317, 1327 (Fed. Cir. 2002); *Griffith v. Kanamaru*, 816 F.2d 624, 626 (Fed. Cir. 1987).

4. “*On sale.*” See *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55 (1998). A single offer to sell, primarily for profit rather than for experimental purposes, is sufficient, even if no sale is made. *Scaltech v. Retec/Tetra, LLC*, 269 F.3d 1321, 1328 (Fed. Cir. 2001); *Group One, Ltd. v. Hallmark Cards, Inc.*, 254 F.3d 1041, 1046-47 (Fed. Cir. 2001). If someone other than the inventor secretly uses a process to make a product, the sale of the product does not constitute a sale of the process. *D.L. Auld Co. v. Chroma Graphics Corp.*, 714 F.2d 1144, 1147 (Fed. Cir. 1983). The bar is triggered when a claimed invention is (1) ready for patenting and (2) the subject of a commercial offer for sale before the critical date. *Merck & Co. v. Watson Laboratories, Inc.*, 822 F.3d 1347 (Fed. Cir. 2016).

5. “*Ready for patenting.*” If the case involves a ready for patenting issue, the following may be used to define that phrase:

An[item; process] is ready for patenting when [(1) it had been described in a filed U.S. patent application;] (2) [the item has been constructed] [or] [the process had been performed]; [or] (3) there was reason to believe that the invention would work for its intended purpose.]

6. “*Experimental use.*” If the Defendant offers evidence showing shown that it is highly probable that there was a prior public use or prior sale, then the burden is on the Plaintiff patentee to come forward with evidence showing that the purpose of the prior public use or prior sale was experimental.

7. “*Public Use*” See *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 424 F.3d 1374, 1379 (Fed. Cir. 2005); *Pfaff v. Wells Electronics, Inc.*, 525 U.S. 55, 66-68 (1998).

8. “*Publication.*” See *In re Cronyn*, 890 F.2d 1158, 1159-61 (Fed. Cir. 1989) (“reasonably accessible to the public”); *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1568-69 (Fed. Cir. 1988).

9. Some claims may have different inventive dates due to, e.g., different effective filing dates where some subject matter was added in a continuation-in-part patent application, or where there are different dates of conception or reduction to practice for separate claims.

10. The Committee did not include a statement of the burden of persuasion as to an inventor proving an earlier date of invention to overcome alleged prior art cited against the patent and leaves it to the trial court with the help of the parties to include appropriate instructions, including whether corroboration is required for evidence of prior invention.

11. If there is a factual issue to be resolved by the jury as to the date of invention of the patent claims in suit, the jury should be instructed in this instruction as to how they should determine that date of invention. Otherwise, the court should instruct the jury as follows:

“You are instructed that the invention defined by claim ____ of the [abbreviated patent number] patent was invented on [invention date].”

11.3.4(B) SECTION 102 DEFENSES — PRIOR ART — DEFINITIONS [Post-AIA]

[Use only those that apply in the particular case per Instruction 11.3.3(B).]

(a) “on sale”

An [item; process] is “on sale,” as that term is used in these instructions, if it was the subject of a commercial offer for sale anywhere in the world before the [effective filing date] [patent application date] [, and if, at that time, there was reason to believe that the [item; process] would work for its intended purpose]. A single offer to sell, primarily for profit rather than for experimental purposes, is sufficient, even if no actual sale was made.

(b) “publication”

To qualify as a “publication,” as that term is used in these instructions, the [article; patent; other reference] must be distributed to or be reasonably accessible by persons interested in the field of the invention. [The publication also must be complete enough to enable a person with ordinary skill in the field to use the invention without undue experimentation.]

(c) Public use

An invention is considered to have been in public use if it was:

- (1) accessible to the public or commercially exploited anywhere in the world; and
- (2) ready for patenting, which means that [it was described in a filed U.S. patent application] [it was [constructed] [or] [performed]], and there was reason to believe that the invention would work for its intended purpose.]

Committee Comment

1. The AIA removed the requirement from 35 U.S.C. § 102 that the on sale or public use activities must be in the U.S. The statute permits activities and sales anywhere in the world to be prior art.

2. “*On sale.*” See *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55 (1998). A single offer to sell, primarily for profit rather than for experimental purposes, is sufficient, even if no sale is made. *Scaltech v. Retec/Tetra, LLC*, 269 F.3d 1321, 1328 (Fed. Cir. 2001); *Group One, Ltd. v. Hallmark Cards, Inc.*, 254 F.3d 1041, 1046-47 (Fed. Cir. 2001). If someone other than the inventor secretly uses a process to make a product, the sale of the product does not constitute a sale of the process. *D.L. Auld Co. v. Chroma Graphics Corp.*, 714 F.2d 1144, 1147 (Fed. Cir. 1983). The Committee is unaware as of this writing whether the experimental use doctrine will continue to be applied for AIA patents, i.e., first inventor to file patents.

3. “*Publication.*” See *In re Cronyn*, 890 F.2d 1158, 1159-61 (Fed. Cir. 1989) (“reasonably accessible to the public”); *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1568-69 (Fed. Cir. 1988). The bracketed sentence at the end of the definition likely does not apply to the defense of obviousness.

4. “Public Use” See *Invitrogen Corp. v. Biocrest Mfg., L.P.* 424 F.3d 1374, 1379 (Fed. Cir. 2005); *Pfaff v. Wells Electronics, Inc.*, 525 U.S. 55, 66-68 (1998).

5. Some claims may have different inventive dates due to, *e.g.*, different effective filing dates where some subject matter was added in a continuation-in-part patent application.

6. The America Invents Act, Publ. L. No. 112-29, 125 Stat. 284 (2011), eliminated the need to define “date of invention” except for a limited category of patents.

7. There has been some suggestion that the experimental use exception is no longer viable post-AIA. However, nothing in the legislative history for AIA reveals an intent one way or the other to eliminate or recognize the exception. The U.S. Patent and Trademark Office released comments regarding examination under AIA. See 78 Fed. Reg. 11059 (2013). Comment 12 addresses the issue of the experimental use exception to public use, and whether the exception remains viable under the AIA. According to the PTO, “[u]nder pre-AIA case law, the experimental use exception negates a use that would otherwise defeat patentability. Neither the AIA nor its legislative history expressly addresses whether the experimental use exception applies to a public use under AIA 35 U.S.C. 102(a)(1), or to a use that makes the invention available to the public under the residual clause of AIA 35 U.S.C. 102(a)(1). Because this doctrine arises infrequently before the [PTO], and is case-specific when it does arise, the [PTO] will approach this issue when it arises on the facts presented.” *Id.* At 11063. Since the viability of the exception remains an open question, the pre-AIA experimental use instruction could be used for post-AIA cases.

11.3.5 SECTION 102 DEFENSES — ELEMENTS [Pre-AIA And Post-AIA]

A patent claim is invalid if the invention it describes is not new. If there is “prior art” that already shows the same invention covered by a patent claim, then the claim is invalid because it is “anticipated” by the prior art.

Defendant contends that [Plaintiff’s patent; claim[s] __, __, __ of Plaintiff’s patent] [is; are] invalid because [it is; they are] anticipated by prior art.

To succeed on this contention, Defendant must prove two things by clear and convincing evidence [as to the particular claim you are considering]:

1. All of the requirements of the [claim(s) you are considering] are expressly stated or inherent in a single item of prior art.

2. A person of ordinary skill in the field of the invention, looking at the single prior art item, would be able to make and use the invention disclosed in the claim [without an unreasonable amount of experimentation. Whether the amount of experimentation is unreasonable depends on the complexity of the field of the invention and the level of expertise and knowledge of persons of ordinary skill in that field.]

If Defendant proves each of these by clear and convincing evidence as to a particular patent claim, then you must find for Defendant on that patent claim.

Committee Comment

1. To be patented an invention must be new. 35 U.S.C. §§ 101, 102(a) & (e). If it is not new or known to others, it is said to be “anticipated.” *Hoover Group, Inc. v. Custom Metalcraft, Inc.*, 66 F.3d 299, 302 (Fed. Cir. 1995) (“lack of novelty (often called ‘anticipation’) requires that the same invention, including each element and limitation of the claims, was known or used by others before it was invented by the patentee”). The law of anticipation requires that every limitation in a claim be found in a single prior art reference, either explicitly or inherently. *See MEHL/Biophile Int’l Corp. v. Milgraum*, 192 F.3d 1362, 1365 (Fed. Cir. 1999); *see also SmithKline Beecham Corp. v. Apotex Corp.*, 403 F.3d 1331, 1345 (Fed. Cir. 2005); *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989) (“anticipation” requires that the identical invention be described in a single prior art reference).

2. *Enablement / undue experimentation requirement.* *See In re Omeprazole Patent Litig.*, 483 F.3d 1364, 1379 (Fed. Cir. 2007); *Novo Nordisk Pharms., Inc. v. Bio-Technology Gen. Corp.*, 424 F.3d 1347 (Fed. Cir. 2005), citing *SmithKline Beecham*, 403 F.3d at 1337.

3. Anticipation must be proven by clear and convincing evidence. *See, e.g., Union Oil Co. of Cal. v. Atlantic Richfield Co.*, 208 F.3d 989, 995 (Fed. Cir. 2000).

11.3.6 PRIOR INVENTION

Committee Comment

1. The Committee did not include an instruction on prior invention because the issue does not arise often.

2. In cases where priority of invention is an issue to be submitted to the jury, instructions will be required. For example, the jury will need to consider not only the dates when the respective inventions were conceived, but also when the inventions were reduced to practice. An inventor who claims to be the first to conceive of a prior invention but was the last to reduce to practice must also show reasonable diligence from a time just before the other party entered the field until his own reduction to practice in order for the “prior invention” to anticipate the claimed invention in suit.

3. This defense is not applicable to post-AIA cases.

11.3.7 EXPERIMENTAL USE [Post-AIA]

Committee Comment

There has been some suggestion that the experimental use exception is no longer viable post-AIA. However, nothing in the legislative history for AIA reveals an intent one way or the other to eliminate or recognize the exception. The U.S. Patent and Trademark Office released comments regarding examination under AIA. *See* 78 Fed. Reg. 11059 (2013). Comment 12 addresses the issue of the experimental use exception to public use, and whether the exception remains viable under the AIA. According to the PTO, “[u]nder pre-AIA case law, the experimental use exception negates a use that would otherwise defeat patentability. Neither the AIA nor its legislative history expressly addresses whether the experimental use exception applies to a public use under AIA 35 U.S.C. 102(a)(1), or to a use that makes the invention available to the public under the residual clause of AIA 35 U.S.C. 102(a)(1). Because this doctrine arises infrequently before the [PTO], and is case-specific when it does arise, the [PTO] will approach this issue when it arises on the facts presented.” *Id.* at 11063. Since the viability of the exception remains an open question, no instruction is provided. If necessary, the pre-AIA instruction may be used.

11.3.8 OBVIOUSNESS [Pre-AIA and Post-AIA]

Defendant contends that [Plaintiff's patent; claim[s] __, __, __ of Plaintiff's patent] [is; are] invalid because [it is; they are] obvious.

In order to show that the claimed invention is obvious, Defendant must prove by clear and convincing evidence [as to the particular claim you are considering] that a person of ordinary skill in the field of the invention, who knew about all the prior art existing [**pre-AIA:** at the time the invention was made; **post-AIA:** before [*insert effective filing date of claimed invention*]] would have conceived the invention at that time. [Unlike anticipation, which allows you to consider only a single item of prior art,] [Obviousness; obviousness] may be shown by considering one or more items of prior art in combination.

In deciding obviousness, you should put yourself in the position of a person with ordinary skill in the field [**pre-AIA:** at the time the invention was made; **post-AIA:** before [*insert effective filing date of claimed invention*]]. You must not use hindsight; in other words, you may not consider what is known now or what was learned from Plaintiff's patent. In addition, you may not use Plaintiff's patent as a roadmap for selecting and combining items of prior art.

In making your decision regarding obviousness, you are to consider each of the following factors:

1. The scope and content of the prior art. You may consider prior art that was reasonably relevant to the problem the inventor faced that a person of ordinary skill would consider in attempting to solve the problem.
2. Any differences between the prior art and the invention in the patent claim that you are considering.
3. The level of ordinary skill in the field of the invention [**pre-AIA:** at the time the invention was made; **post-AIA:** before [*insert effective filing date of claimed invention*]].
4. Additional factors, if any, that indicate that the invention was obvious or not obvious. I will define them in the next instruction.

Committee Comment

1. General authority. 35 U.S.C. § 103(a); *KSR Int'l. Co. v. Teleflex, Inc.*, 550 U.S. 398, 416-21 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 27-28 (1966). At least one set of post-*KSR* pattern instructions adopts the view that obviousness – either the ultimate issue or the underlying facts or both – is a matter for determination by the court, not the jury. See N.D. Cal. Pattern Patent Instructions 4.3a, 4.3b (2007). This is premised upon the Supreme Court's statement in *KSR* that “[t]he ultimate judgment of obviousness is a legal determination,” *KSR Int'l*, 550 U.S. at 427, and a post-*KSR* decision in which the Federal Circuit stated that it reviews “a jury's conclusions on obviousness, a question of law, without deference, and the underlying findings of fact, whether explicit or implicit within the verdict, for substantial evidence.” *Dippin' Dots, Inc. v. Mosey*, 476

F.3d 1337, 1343 (Fed. Cir. 2007). The Committee is not prepared to conclude that the Supreme Court intended, by its statement in *KSR* regarding the standard of review, to overturn the long-established practice of having juries determine obviousness – particularly because the question of who decides that point was not presented in *KSR*. In addition, the quoted language from *Dippin’ Dots* appears to concern the standard of review, not the question of who decides obviousness (and it is also noteworthy that in *Dippin’ Dots* itself, obviousness was decided by a jury and the Federal Circuit did not suggest this was inappropriate). *See also Agrizap, Inc. v. Woodstream Corp.*, 520 F.3d 1337 (Fed. Cir. 2008) (review of jury verdict; “due deference” is accorded to jury’s factual determinations underlying obviousness determination, even if they are not explicit, but application of law to facts is reviewed *de novo*). The proposition that a jury’s decision on a particular issue is reviewed *de novo* does not, in the Committee’s view, mean that it is inappropriate for a jury to decide the point in the first place. Future developments in the law may, of course, require an alteration of these instructions’ allocation of the obviousness determination to the jury.

2. For pre-AIA cases, for purposes of this defense, the invention must have been obvious to a person of ordinary skill in the inventor’s field at the time the invention was made. *Prometheus Labs. Inc. v. Roxane Labs. Inc.*, 805 F.3d 1092 (Fed. Cir. 2015); *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 662-68 (Fed. Cir. 2000); *In re Dembiczak*, 175 F.3d 994, 998-1000 (Fed. Cir. 1999). Post-AIA, the invention must have been obvious to a person of ordinary skill in the inventor’s field before the effective date of the claimed invention. 35 U.S.C. § 103 (post-AIA).

3. Obviousness may be shown by considering more than one item of prior art. *Brown & Williamson Tobacco Corp. v. Phillip Morris, Inc.*, 229 F.3d 1120, 1124-31 (Fed. Cir. 2000); *In re Rouffet*, 149 F.3d 1350, 1355-57 (Fed. Cir. 1998). In determining obviousness, a non-enabling reference may qualify as prior art, and even an inoperative device qualifies as prior art for all that it teaches. *ABT Sys., LLC v. Emerson Elec. Co.*, 797 F.3d 1350 (Fed. Cir. 2015).

4. One may not consider what is known today, or what was learned from the teachings of the patent. *Ecolochem, Inc. v. S. Cal. Edison Co.*, 227 F.3d 1361, 1371-81 (Fed. Cir. 2000); *In re Kotzab*, 217 F.3d 1365, 1369 (Fed. Cir. 2000).

5. The fourth factor – concerning “secondary considerations” regarding obviousness – is bracketed because there may be cases in which no evidence regarding such considerations is offered.

11.3.9 OBVIOUSNESS — ADDITIONAL FACTORS INDICATING NONOBVIOUSNESS [Pre-AIA And Post-AIA]

As I stated in the previous instruction, in deciding obviousness you should consider whether any of the following are true, which if so may indicate the invention was not obvious.

[The court should state only those questions that are appropriate—i.e., for which evidence was introduced at trial.]

1. Has the invention achieved commercial success? If so, is that success based on the invention itself, rather than on advertising, promotion, sales tactics, or features of the product other than those found in the claimed invention?

2. Has the invention satisfied a long-felt need for a solution to the problem facing the inventors at the time the invention was made?

3. Did others try, but fail, to solve the problem solved by the claimed invention?

4. Did others copy the invention?

5. Did the invention achieve unexpected superior results over the prior art?

6. Did others in the field [or the Defendant] praise the invention or express surprise at the making of the invention?

7. Did others seek or obtain a license to the [Patent(s)-in-Suit]?

8. Did the inventor, in making the invention, proceed contrary to accepted wisdom [or guidance from the prior art]?

Not all of these factors may be present. No single factor is more or less important than the others.

Committee Comment

1. General authority: *See Graham v. John Deere Co.*, 383 U.S. 1, 27-28 (1966); *KSR Intern. Co. v. Teleflex, Inc.*, 550 U.S. 398, 415 (2007) (citing *Graham* for “secondary considerations” that may show nonobviousness). *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 667-68 (Fed. Cir. 2000); *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1129-31 (Fed. Cir. 2000); *SIBIA Neurosciences, Inc. v. Cadus Pharm. Corp.*, 225 F.3d 1349, 1356-57 (Fed. Cir. 2000); *In re Dance*, 160 F.3d 1339, 1343 (Fed. Cir. 1998); *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718-19 (Fed. Cir. 1991).

2. This instruction is to be used only if evidence of “secondary considerations” has been introduced and should include only those factors that are supported by evidence introduced in the case.

3. The objective evidence, such as the commercial success, the licenses, and industry recognition of the import of the patent, must always be considered when deciding the issue of obviousness. *Richardson-Vicks Inc. v. Upjohn Co.*, 122 F.3d 1476, 1483 (Fed. Cir. 1997) (“[A]ll evidence touching the obvious-nonobvious issue must be considered before a conclusion is reached on the issue.”); *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538 (Fed. Cir. 1983). This is so because evidence of such secondary considerations “may often be the most probative and cogent evidence in the record,” *Stratoflex*, 713 F.2d at 1538, and is “invariably relevant to a determination under Section 103.” *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1579 (Fed. Cir. 1997).

4. Commercial success must be related to a patented feature, and not the result of something else, such as innovative marketing. *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1129-31 (Fed. Cir. 2000); *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 719 (Fed. Cir. 1991).

5. The presence of any of these indications may suggest that the invention was not obvious. *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 662-63, 667-68 (Fed. Cir. 2000); *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1129-31 (Fed. Cir. 2000).

11.3.10 Obviousness — Combining Of Prior Art References [PreAIA and Post-AIA]

The fact that each of the elements of the claim may be found in prior art is not enough, by itself, to prove obviousness. In determining whether Defendant has proved obviousness, you may combine multiple items of prior art only if a person who has ordinary skill in the field would have been motivated to combine them when trying to solve the problem that is addressed by the claimed invention and would have had a reasonable expectation of success in doing so. In deciding this, you may consider, among other things, any of the following factors:

1. What the prior art suggests about combining;
2. The knowledge possessed by persons who have ordinary skill in the field of the invention;
and
3. The effects of market pressures and design needs that existed at the time, and the number of identified and predictable solutions for those demands.

Committee Comment

1. General authority. *See KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 417-21 (2007).

11.4.1 DAMAGES — GENERAL

If you find that Defendant infringed any valid claim of the [____ Patent], you must then determine the amount of damages to award to Plaintiff. If you do not find that Defendant infringed any valid claim of the [____ Patent], you should not consider the question of damages.

I will now instruct you about the measure of damages. By instructing you on damages, I am not suggesting which party should win on any issue.

If you find that Defendant infringed any valid claim of the patent, you are to award Plaintiff damages adequate to compensate Plaintiff for that infringement. The damages you award are intended to compensate the patent holder, not to punish the infringer. Plaintiff must prove damages by a preponderance of the evidence.

Committee Comments

1. As a general matter, damages must be awarded if there has been a determination of both infringement and validity. 35 U.S.C. § 284 (2006); *Siemens Med. Solutions, USA Inc. v. Saint-Gobain Ceramics*, 637 F.3d 1269, 1290 (Fed. Cir. 2011) (neglecting the requirements of 35 U.S.C. § 284 is legal error); *Dow Chem. Co. v. Mee Indus., Inc.*, 341 F.3d 1370, 1381-82 (Fed. Cir. 2003); *Grain Processing Corp. v. American Maize-Prod. Co.*, 185 F.3d 1341, 1349 (Fed. Cir. 1999); *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1545 (Fed. Cir. 1995) (*en banc*); *Del Mar Amonics, Inc. v. Quinton Instr. Co.*, 835 F.2d 1320, 1326-28 (Fed. Cir. 1987); *Lam Inc. v. Johns-Manville Corp.*, 718 F.2d 1056, 1065 (Fed. Cir. 1983).

2. The damage award must be intended to compensate the patent holder, not to punish the infringer. *Lucent Tech, Inc. v. Gateway Inc.*, 580 F.3d 1301, 1324 (Fed. Cir. 2009); *Integra Lifesciences I, Ltd. v. Merck KGaA*, 331 F.3d 860, 870 (Fed. Cir. 2003).

11.4.2 START OF THE DAMAGES PERIOD AND THE REQUIREMENT OF NOTICE (CLAIMS INVOLVING PRODUCTS)

Plaintiff can recover damages only for infringement that occurred after Plaintiff gave notice of its patent rights. Plaintiff must prove by a preponderance of the evidence that it gave notice.

There are three ways a patent holder can give notice of its patent rights.

The first way is to give notice to the public in general by placing the word “patent” or the abbreviation “PAT.” with the number of the patent on substantially all the products Plaintiff sells that include the patented invention. [Anyone that Plaintiff licensed to use the patented invention must also mark in the same manner substantially all of its products that include the patented invention.] This type of notice is effective from the date Plaintiff [and its licensees] began to mark in this manner substantially all of [its; their] products that included the patented invention.

The second way Plaintiff can give notice of the patent to the public in general is by placing the word “patent” or the abbreviation “PAT.” on substantially all the products Plaintiff sells that include the patented invention. The notice must also identify a free website address that the public can access and find information about the product and the patents that cover it. [Anyone that Plaintiff licensed to use the patented invention must also mark in the same manner substantially all of its products that include the patented invention.] This type of notice is effective from the date Plaintiff [and its licensees] began to mark in this manner substantially all of [its; their] products that included the patented invention, but only if that date is on or after September 16, 2011.

The third way Plaintiff can give notice of patent rights is by directly informing Defendant that it is infringing a particular patent and identifying the infringing product. This type of notice is effective from the time it is given.

If Plaintiff did not give notice in any of these ways before filing this lawsuit, then Plaintiff can recover damages only for infringement that occurred after it filed this lawsuit, on [*date*.]

Committee Comment

1. Title 35 U.S.C. § 287(a), the patent marking statute, states: “Patentees, and persons making, offering for sale, or selling within the United States any patented article for or under them, or importing any patented article into the United States, may give notice to the public that the same is patented, either by fixing thereon the word “patent” or the abbreviation “pat.”, together with the number of the patent, or when, from the character of the article, this cannot be done, by fixing to it, or to the package wherein one or more of them is contained, a label containing a like notice. In the event of failure so to mark, no damages shall be recovered by the patentee in any action for infringement, except on proof that the infringer was notified of the infringement and continued to infringe thereafter, in which event damages may be recovered only for infringement occurring after such notice. Filing of an action for infringement shall constitute such notice.”

2. This instruction (based on a Model ABA Instruction) should be used where patents containing product claims (as opposed to method or process claims) are being asserted and the

patent owner or its licensees are producing a tangible product that can be marked. *Am. Med. Systems, Inc. v. Med. Eng'g Corp.*, 6 F.3d 1523, 1538-39 (Fed. Cir. 1993). When a patent contains both product and process claims, and there is a tangible item that can be marked, a patent owner must comply with § 287(a) if both the product and process claims are asserted. *Id.* at 1538; *see also Devices for Med. Inc. v. Boehl*, 822 F.2d 1062, 1066 (Fed. Cir. 1987). It is unclear, however, whether a patentee can avoid the requirements of § 287(a) by only asserting the process claims. *Compare Boehl*, 822 F.2d at 1066, with *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1083 (Fed. Cir. 1983) and *Loral Fairchild Corp. v. Victor Co. of Japan, Ltd.*, 906 F. Supp. 813, 817 (E.D.N.Y. 1995).

3. When Plaintiff does not practice the patent, or when the patent involves only method claims, damages begin at the time the infringement starts and there is no requirement that Defendant receives actual or constructive notice of the patent. *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1220 (Fed. Cir. 2002). (“The recovery of damages is not limited where there is no failure to mark, i.e., where the proper patent notice appears on products or where there are no products to mark”), citing *Wine Railway Appliance Co. v. Enterprise Railway Equipment Co.*, 297 U.S. 387, 393; *Am. Med. Sys., Inc. v. Med. Eng'g Corp.*, 6 F.3d 1523, 1538 (Fed. Cir. 1993) (“The law is clear that the notice provisions of Section 287 do not apply where the patent is directed to a process or method.”). In such cases, this instruction should not be given.

4. Actual notice requires “the affirmative communication of a specific charge of infringement by a specific accused product or device.” *Amsted Indus. Inc. v. Buckeye Steel Castings Co.*, 24 F.3d 178, 187 (Fed. Cir. 1994); *Lans v. Digital Equipment Corp.*, 252 F.3d 1320, 1327-28 (Fed. Cir. 2001). However, the charge of infringement may be “qualified.” *Gart v. Logitech, Inc.*, 254 F.3d 1334, 1346 (Fed. Cir. 2001). The Leahy-Smith America Invents Act, effective September 16, 2011, amended the patent marking statute, 35 U.S.C. § 287(a) by adding a “virtual” marking provision that permits a patent owner to put the word “patent” or the abbreviation “PAT.” on substantially all the products it sells that include the patented invention and also including a free email address that the public can access and find information about the product and the patents that cover it. This “virtual” marking provision is applicable to all cases pending on or commenced on or after the enactment of the AIA and is effective as of September 16, 2011.

5. If there are licensees of the patent, the requirement of notice applies to the patent holder and all licensees. In such a case, the bracketed language in the third and fourth paragraphs should be used.

6. Damages measured as a reasonable royalty may begin to run from the date of publication of the patent application. *See* 35 U.S.C. § 154(d). In such cases, this instruction will require substantial modification based upon the section 154(d).

7. Although the notice requirement, in a proper case, limits Plaintiff’s recovery to post-notice damages, the requirement does not preclude consideration of pre-notice activities or conditions in ascertaining the proper measure of damages. Hypothetical negotiations over a reasonable royalty are deemed to occur when infringement begins, even if Defendant had no notice of Plaintiff’s patent rights until a later time. *Applied Med. Resources Corp. v. U.S. Surgical Corp.*, 435 F.3d

1356, 1361-64 (Fed. Cir. 2006); *Wang Labs., Inc. v. Toshiba Corp.*, 993 F.2d 858, 869-70 (Fed. Cir. 1993). Similarly, an award of lost profits should account for the effect of infringement prior to notice. *Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 711 F.3d 1348, 1379-80 (Fed. Cir. 2013) (price erosion damages analysis must measure price changes against infringement-free market conditions, and thus “the proper starting point of such a price erosion analysis is the date of first infringement”).

11.4.3 TWO TYPES OF DAMAGES — LOST PROFITS & REASONABLE ROYALTY

There are two alternative types of damages that Plaintiff may be entitled to recover for each infringing [sale; offer for sale; use; importation]: either lost profits or a reasonable royalty, but not both.

Lost profits consist of the additional profits that Plaintiff would have made if there had been no infringement by Defendant. I will describe what Plaintiff must prove to recover lost profits damages.

A reasonable royalty is defined as the amount the patent owner and someone wanting to use the patented invention would agree upon as a fee for use of the invention. I will describe what Plaintiff must prove to recover reasonable royalty damages.

Plaintiff is entitled to recover no less than a reasonable royalty for each infringing [sale; *fill in other infringing act*], even if Plaintiff cannot prove that it suffered lost profits in connection with that [sale; *fill in other infringing act*].

Committee Comments

Title 35 U.S.C. § 284 (2006); *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1545-46 (Fed. Cir. 1995) (*en banc*). A patentee is entitled to no less than a reasonable royalty on any infringing sales. In such cases, the court is obliged to award such reasonable royalties “as the award evidence will support.” *Dow Chem. Co. v. Mee Indus., Inc.*, 341 F.3d 1370, 1382 (Fed. Cir. 2003). *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1313 (Fed. Cir. 2011). A patentee is entitled to a royalty greater than zero even “if the patentee’s evidence of a royalty rate is weak or if the patentee has no evidence to offer. A zero royalty is appropriate only if there is no genuine dispute that zero is the only reasonable royalty.” *Info-Hold, Inc. v. Muzak LLC*, 783 F.3d 1365, 1371-72 (Fed. Cir. 2015) (*discussing Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286 (Fed. Cir. 2014)).

11.4.4 LOST PROFITS – BUT FOR TEST

To recover lost profits, Plaintiff must prove the following things by a preponderance of the evidence:

1. A reasonable probability that, but for Defendant’s infringement, Plaintiff would have made additional profits through the sales of all or some of the patented [product; process] that Defendant made.

2. The amount of profit Plaintiff would have made on those additional sales. Plaintiff does not need to prove this amount with precision [, and if there are uncertainties regarding the specific amount of lost profits, you may resolve those uncertainties in favor of Plaintiff and against Defendant].

[3. Defendant reasonably should have foreseen that Plaintiff would have lost profits.]

There are alternative ways for Plaintiff to establish an entitlement to recover lost profits. I will discuss these in the following instructions.

It is important for you to remember that lost profits damages are the profits lost by Plaintiff due to the infringement by Defendant, not the profits made by Defendant.

Committee Comments

1. *Grain Processing Corp. v. American Maize-Prod. Co.*, 185 F.3d 1341, 1349 (Fed. Cir. 1999); *Siemens Med. Solutions, USA Inc. v. Saint-Gobain Ceramics*, 637 F.3d 1269, 1289 (Fed. Cir. 2011), citing *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1545 (Fed. Cir. 1995) (*en banc*). To establish a right to lost profits, the plaintiff must prove, by a preponderance of the evidence, “a reasonable probability that, ‘but for’ the infringement it would have made the sales that were made by the infringer.” *Rite-Hite*, 56 F.3d at 1545. “A patentee may resort to any method showing, with reasonable probability, entitlement to lost profits ‘but for’ the infringement.” *Micro Chemical, Inc. v. Lextron, Inc.*, 318 F.3d 1119, 1122 (Fed. Cir. 2003).

2. The jury is given discretion to resolve conflicts in the evidence of damages. Doubts in the amount of damages are resolved in favor of the patent owner and against the infringer. *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1309 (Fed. Cir. 2006). Once a patentee shows causation, “the trial court may resolve doubts underlying the precise measurement of damages against the infringer.” *Minco, Inc. v. Combustion Eng’g, Inc.*, 95 F.3d 1109, 1118 (Fed. Cir. 1996).

3. As to the foreseeability element, see *Rite-Hite Corp.*, 56 F.3d at 1545-46. This element is bracketed because typically it will become an issue only if the defendant offers evidence of lack of foreseeability.

4. The measure of damages is different for a design patent. This instruction will require modification for such a case.

11.4.4.1 LOST PROFITS — *PANDUIT* FACTORS

[One way that] Plaintiff may establish that it is reasonably probable, that is, more likely than not, that it would have made additional sales of the patented [or competing] [product; process] [is] by proving three things:

1. There was a demand for the patented [or competing] [product; process];
2. There was no acceptable, non-infringing substitute for the patented [product; process]; and
3. Plaintiff was capable of satisfying the demand.

I will explain each of these to you.

First, “demand” for the product is generally satisfied when Plaintiff proves that there were significant sales of either Plaintiff’s patented product or of Defendant’s infringing product. [However, where the product includes features and functionality not covered by the patent, Plaintiff must prove that the patented feature drives the demand for the product.]

Second, an “acceptable, non-infringing substitute” is a product that does not infringe Plaintiff’s patent and has the advantages of the patented invention that were important to the purchasers of Defendant’s product. If purchasers of Defendant’s product were motivated to purchase that product because of features that were available only from that product and Plaintiff’s patented product, then other products are not acceptable substitutes, even if they otherwise competed with Plaintiff’s and Defendant’s products.

Third, to prove Plaintiff was capable of “satisfying the demand” for the patented product, Plaintiff must prove that it had the manufacturing and marketing capacity, either itself or through the use of third parties, to make the sales it says were lost to Defendant.

Committee Comments

1. One way in which a plaintiff can establish a right to lost profits is to satisfy the so-called *Panduit* test, which is generally said to require proof of (a) demand, (b) an absence of acceptable non-infringing substitutes, (c) plaintiff’s possession of sufficient manufacturing and marketing capacity to satisfy the demand, and (d) the amount of profit the plaintiff would have made. *Panduit Corp. v. Stahl Bros. Fibre Works*, 575 F.2d 1152, 1156 (6th Cir. 1978); *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1545 (Fed. Cir. 1995) (*en banc*). The committee has dropped the fourth element from this instruction because that is a requirement for any lost profit award and is covered more generally in instruction no. 4.5, *infra*.

2. The bracketed references to “competing” products are included to cover situations in which it is appropriate for the plaintiff to recover lost profits on non-patented products that compete with those sold by the infringer. *See, e.g., Rite-Hite*, 56 F.3d at 1546; *King Instruments Corp. v. Perego*, 65 F.3d 941, 947 (Fed. Cir. 1995).

3. The *Panduit* test is one way of proving causation for lost sales, but it is not the exclusive means of proving causation for lost sales. *Rite-Hite*, 56 F.3d at 1548; *BIC Leisure Products, Inc. v. Windsurfing Int'l*, 1 F.3d 1214, 1218 (Fed. Cir. 1993); *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1577-78 (Fed. Cir. 1989).

4. Proof of “demand” for the product is generally satisfied by showing that there were significant sales of either the plaintiff’s patented product or by significant sales of the defendant’s infringing product. *Gyromat Corp. v. Champion Spark Plug Co.*, 735 F.2d 549, 552 (1984). Since one or both of these facts is generally a basic component of most patent cases, the existence of “demand” is rarely a contested issue at trial. However, where the product includes features and functionality not covered by the patent, Plaintiff must prove that the patented feature drives the demand for the product. *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1320 (Fed. Cir. 2011); *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1337–38 (Fed. Cir. 2009). In such a situation, the court may want to give a specific instruction to that effect as suggested in the last, bracketed sentence of the definition of “demand.”

5. What constitutes an “acceptable, non-infringing substitute” is frequently a hotly contested issue. *Tate Access Floors, Inc. v. Maxcess Techs., Inc.*, 222 F.3d 958, 971 (Fed. Cir. 2000); *Grain Processing Corp. v. American Maize-Prod. Co.*, 185 F.3d 1341, 1349 (Fed. Cir. 1999); *Stryker Corp. v. Intermedics Orthopedics, Inc.*, 96 F.3d 1409, 1417-18 (Fed. Cir. 1996); *Zygo Corp. v. Wyko Corp.*, 79 F.3d 1563, 1571 (Fed. Cir. 1996); *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1548 (Fed. Cir. 1995) (*en banc*); *Standard Haven Prods. Inc. v. Gencor Indus.*, 953 F.2d 1360, 1373 (Fed. Cir. 1991); *Slimfold Mfg. Co. v. Kinkead Indus., Inc.*, 932 F.2d 1453 (Fed. Cir. 1991); *Kaufman Co. v. Lantech, Inc.*, 926 F.2d 1136, 1142 (Fed. Cir. 1991); *SmithKline Diagnostics, Inc. v. Helena Labs., Corp.*, 926 F.2d 1161, 1164 (Fed. Cir. 1991); *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1576-77 (Fed. Cir. 1989). Whether a product needs to have actually been available on the market during the period of infringement is unclear. *Compare, Grain Processing*, 185 F.3d at 1341 (need not necessarily have been available) *with Zygo*, 79 F.3d at 1571 (must have been available) *with Astrazeneca AB v. Apotex Corp.*, 782 F.3d 1324, 1340 (Fed. Cir. 2015)(to be considered as a non-infringing alternative, that alternative had to have been available during the period of defendant’s infringement); *see also Synqor, Inc. v. Artesyn Tech., Inc.*, 709 F.3d 1365, 1383 (Fed. Cir. 2013) (finding that jury instruction on acceptable non-infringing substitutes “available from suppliers” was not erroneous, because it did not require substitute products to be “on the market”).

6. A plaintiff must be able to prove that it had the manufacturing and marketing capacity to make any lost sales. *Foran Corp. v. General Elec. Co.*, 107 F.3d 1543, 1553 (Fed. Cir. 1997); *Stryker Corp. v. Intermedics Orthopedics, Inc.*, 96 F.3d 1409, 1417-18 (Fed. Cir. 1996); *Kearns v. Chrysler Corp.*, 32 F.3d 1541, 1551 (Fed. Cir. 1994).

7. The burden of proof shifts to the defendant to disprove lost sales once the patent owner introduces sufficient evidence to satisfy the *Panduit* test. *Rite-Hite*, 56 F.3d at 1545.

11.4.4.2 LOST PROFITS — TWO SUPPLIER MARKET METHOD

[An alternative way that] Plaintiff may establish that it is reasonably probable that it would have made additional sales of the patented [product; process] [is] by proving two things:

1. Plaintiff and Defendant are the only suppliers for the [product; process] in the market; and
2. Plaintiff was capable of making all of the sales made by Defendant.

If Plaintiff proves these things, it is entitled to recover its lost profits on all of the sales made by Defendant unless Defendant proves that Plaintiff would not have made some or all of the sales.

Committee Comments

Where there are only two suppliers in the market for a product, it may be inferred that plaintiff would have made defendant's infringing sales, unless the defendant can demonstrate otherwise. *Golden Blount, Inc. v. Robert H. Peterson Co.*, 428 F.3d 1354, 1370 (Fed. Cir. 2006); *Kaufman Co. v. Lantech, Inc.*, 926 F.2d 1136, 1141 (Fed. Cir. 1991); *Lam, Inc. v. Johns- Manville Corp.*, 718 F.2d 1056, 1065 (Fed. Cir. 1983).

11.4.4.3 LOST PROFITS — MARKET SHARE METHOD

[An alternative way that] Plaintiff may establish that it is reasonably probable that it would have made additional sales of the patented [product; process] [is] by proving two things:

1. Plaintiff would have made some portion of Defendant's infringing sales if Defendant's infringing product had not been available; and
2. Plaintiff was capable of making those additional sales.

If Plaintiff proves these things, it is entitled to recover its lost profits on the percentage of Defendant's sales that reflects what Plaintiff proves was Plaintiff's share of the market. [You may reach this conclusion even if acceptable, non-infringing substitute products were available from others.]

Committee Comments

Under the "market share" test a patent owner may recover lost profits even though acceptable non-infringing substitutes are available from others. *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1578 (Fed. Cir. 1989). In such cases, the plaintiff is entitled to recover lost profits on a percentage of defendant's sales equal to the defendant's (plus the plaintiff's) market share, and a reasonable royalty on the balance of the defendant's infringing sales. *State Indus.*, 883 F.2d at 1577-78; *Crystal Semiconductor Corp. v. Tritech Microelectronics, Int'l.*, 246 F.3d 1336, 1354-56 (Fed. Cir. 2001). This instruction addresses the situation where there are competing products other than the defendant's infringing product; Instruction 11.4.4.1 addresses the situation where there is no such competing product.

11.4.4.4 LOST PROFITS — COLLATERAL SALES METHOD

Plaintiff contends that the patented product is normally sold along with other collateral [products] [or] [services], such as [*identify the collateral products or services*]. To recover lost profits for such collateral sales, Plaintiff must prove two things:

1. It is reasonably probable that Plaintiff would have sold the collateral [products] [or] [services] if Defendant had not infringed; and
2. The collateral [products] [or] [services] function together with the patented product as a functional unit. Plaintiff may not recover lost profits on other [products] [or] [services] that might be sold along with the patented product for convenience or business advantage, but that are not functionally part of the patented product.

Committee Comments

1. Permitting a patentee to recover lost profits on items not part of the patented product requires a careful balancing of the desire to fully compensate the patent holder for all actual damages on the “entire market value” of a product against the antitrust risk of permitting the patent holder to interfere with the sale of non-patented items. This legal test is intended to achieve such a balance. *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 507 (1964); *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1550 (Fed. Cir. 1995) (*en banc*).

2. “A patentee may recover lost profits on unpatented components sold with a patented item, a convoyed sale, if both the patented and unpatented products ‘together were considered to be components of a single assembly or parts of a complete machine, or they together constituted a functional unit.’” *Depuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1333 (Fed. Cir. 2009), *citing Am. Seating*, 514 F.3d at 1268 (*quoting Rite-Hite*, 56 F.3d at 1550). In contrast, “there is no basis for extending that recovery to include damages for [unpatented] items that are neither competitive with nor function with the patented invention.” *Id.* (*quoting Rite-Hite*, 56 F.3d at 1551).

3. The instruction uses the phrase “collateral products” rather than the phrase “convoyed sales,” in an effort to avoid some of the imprecision that exists in the case law as to exact scope of the phrase “convoyed products.” “Convoyed products” is broad enough to include products or services typically sold with the patented product, whether or not any functional relationship exists between the patented product and the convoyed product. The existence of such convoyed sales may be taken into account in setting a reasonable royalty rate, whether or not any functional relationship exists between the two. *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1554 (Fed. Cir. 1995) (*en banc*); *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970) (factor no. 6). However, lost profits may only be recovered on the subset of convoyed products for which a functional relationship exists, which this instruction denominates “collateral products.” *Rite-Hite*, 56 F.3d at 1549-1550. *See further, Juicy Whip, Inc. v. Orange Bang, Inc.*, 382 F.3d 1367, 1371-73 (Fed. Cir. 2004) (permitting recovery of lost sales of syrup collateral to sale of a patented juice dispenser).

11.4.4.5 LOST PROFITS — PRICE EROSION / COST INCREASES

Plaintiff [also] contends that it lost profits [because it had to charge lower prices for its products due to Defendant's infringement] [[and; or] [because it incurred increased costs because of Defendant's infringement] [*insert alternative theory of price erosion, e.g., foregone price increases*].

If Plaintiff proves that such lost profits were reasonably foreseeable by Defendant, Plaintiff is entitled to recover the profits it lost as a result of its [lowered prices; increased costs; *alternative theory, e.g., foregone price increases*], in addition to any profits it lost due to sales it did not make because of Defendant's infringement.

Committee Comments

1. This instruction should be utilized only in those cases where the plaintiff's lost profits damage claim includes claims based upon price erosion and/or cost increases. If only one of those types of claims is being asserted, the instruction should be appropriately simplified by deleting references to the other type of claim.

2. To prove price erosion for the sales it made (or would have made) during the infringement period, a patent owner must show that it would have been able to charge higher prices, but for the defendant's infringing acts. *Crystal Semiconductor Corp. v. Tritech Microelectronics Int'l, Inc.*, 246 F.3d 1336, 1357-60 (Fed. Cir. 2001); *Fiskars, Inc. v. Hunt Mfg. Co.*, 221 F.3d 1318, 1324-25 (Fed. Cir. 2000); *Minco, Inc. v. Combustion Eng'g, Inc.*, 95 F.3d 1109, 1120 (Fed. Cir. 1996).

11.4.4.6 LOST PROFITS — AMOUNT

If you conclude that Plaintiff has proved that it lost profits because of Defendant's infringement, the lost profits that you award should be the amount of revenue that Plaintiff would have received on any sales that Plaintiff lost because of the infringement, minus any additional costs that Plaintiff would have incurred in making those sales [, plus the amount by which Plaintiff's profits on its own sales were decreased as a result of reduced prices or increased costs caused by Defendant's infringement].

Plaintiff is required to prove the amount of its lost profits to a reasonable probability and may not recover amounts that are speculative. However, mathematical certainty is not required[, and if the reason Plaintiff has difficulty proving the amount of its lost profits is that Defendant did not maintain adequate records, then you should resolve any doubts as to the amount of lost profits in Plaintiff's favor.]

Committee Comments

1. The bracketed language in the first paragraph of this instruction should only be included in cases where the plaintiff's lost profit claim includes a claim based on price erosion and/or increased costs.

2. The proper measure of recovery is any net profits lost by plaintiff as a result of defendant's infringing acts. Plaintiff's fixed costs are generally ignored in determining those incremental profits. *Paper Converting Mach. Co. v. Magna-Graphics Co.*, 745 F.2d 11, 22 (Fed. Cir. 1984).

3. Plaintiff must prove the amount of its lost profits by a reasonable probability. *Grain Processing Corp. v. Am-Maize Products Co.*, 185 F.3d 1341, 1349-50 (Fed. Cir. 1999); *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1545 (Fed. Cir. 1995) (*en banc*). Mathematical certainty is not required. *Del Mar Avionics, Inc. v. Quinton Instrument Co.*, 836 F.2d 1320, 1327 (Fed. Cir. 1987); *Lam, Inc. v. Johns-Manville Corp.*, 718 F.2d 1056, 1065 (Fed. Cir. 1983). However, the amount of lost profits cannot be based on mere speculation. *Oiness v. Walgreen Co.*, 88 F.3d 1025, 1030-31 (Fed. Cir. 1996).

4. Doubts resulting from defendant's failure to retain appropriate records are to be resolved in the plaintiff's favor. *Lam*, 718 F.2d at 1066; *Ryco Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 1428 (Fed. Cir. 1988).

11.4.5 REASONABLE ROYALTY

Plaintiff seeks to recover a reasonable royalty. [Plaintiff is entitled to recover a reasonable royalty for any of Defendant's infringing sales for which Plaintiff did not prove lost profits.]

A royalty is a payment made to the owner of a patent by another person or entity so that it can [make; use; sell; offer for sale, or import] the patented invention. A "reasonable royalty" is the amount Plaintiff and Defendant would have agreed upon as a royalty at the time Defendant's infringement began. In determining a reasonable royalty, you should assume that Plaintiff would have been willing to allow Defendant to [make; use; sell; offer for sale; or import] the patented invention and that Defendant would have been willing to pay Plaintiff to do so. You should take into account what Plaintiff's and Defendants' expectations would have been if they had negotiated a royalty and had acted reasonably in their negotiations. You should assume that both Plaintiff and Defendant would have believed that Plaintiff's patent was valid and infringed. You should also assume that Defendant would have been willing to pay, and Plaintiff would have been willing to accept, the reasonable royalty they negotiated. This is not an exact science. The evidence may support more than one reliable method for estimating a reasonable royalty. Your role is to determine what reasonable royalty Plaintiff and Defendant would have agreed upon if they had negotiated in this manner, not just what either Plaintiff or Defendant would have preferred.

In determining a reasonable royalty, you may consider the following factors, in addition to any others that are shown by the evidence:

1. Royalties that others paid to Plaintiff to be allowed to [make; use; sell; offer for sale; or import] the patented invention;
2. Royalties that Defendant paid to others for comparable patents;
3. Whether Plaintiff had a policy of licensing or not licensing the patents;
4. Whether Plaintiff and Defendant are competitors;
5. Whether use of the patented invention helps to make sales of other products or services;
6. Whether the patented invention is commercially successful, as well as its profitability;
7. The advantages of using the patented invention over products not covered by the patent;
8. The extent of Defendant's use of the patented invention and the value of that use to Defendant;
9. Any royalty amounts that are customary for similar or comparable patented inventions;
10. The portion of the profit on sales that is due to the patented invention, as opposed to other factors, such as unpatented elements or processes, features, or improvements developed by Defendant;
11. Expert opinions regarding what would be a reasonable royalty.

Plaintiff is required to prove the amount of a reasonable royalty to a reasonable probability and may not recover amounts that are speculative. However, mathematical certainty is not required[, and if the reason Plaintiff has difficulty proving the amount of a reasonable royalty is that Defendant did not maintain adequate records, then you should resolve any doubts as to the amount of a reasonable royalty in Plaintiff's favor.]

Committee Comments

1. This instruction is adapted from Northern District of California Model Patent Instructions 5.6 and 5.7. *See also* 35 U.S.C. 284; *Crystal Semiconductor Corp. v. Tritech Microelectronics Int'l, Inc.*, 246 F.3d 1336 (Fed. Cir. 2001); *Fromson v. Western Litho Plate & Supply Co.*, 853 F.2d 1568, 1574 (Fed. Cir. 1998); *Minco, Inc. v. Combustion Eng'g, Inc.*, 95 F.3d 1109, 1119-20 (Fed. Cir. 1996); *Golight, Inc., v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1338 (Fed. Cir. 2004); *Maxwell v. Baker, Inc.*, 86 F.3d 1098, 1108-10 (Fed. Cir. 1996); *Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1579-81 (Fed. Cir. 1996); *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1554 (Fed. Cir. 1995) (*en banc*).

2. The factors to be considered originated in *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970). If the *Georgia-Pacific* factors are provided to the jury, it is the Committee's view that all factors should be set out and not simply those for which the parties presented affirmative evidence. Typically, patent damages experts will review each of the *Georgia-Pacific* factors and testify as to whether each factor supports a higher royalty rate, a lower rate, or is neutral. The Court should be sensitive not to highlight one or more of the factors in the instructions, to avoid any implication that the Court has endorsed certain of the evidence.

3. There may be circumstances in which a test other than, or in addition to, the *Georgia-Pacific* test is appropriate. *See TWM Mfg. Co. v. Dura Corp.*, 789 F.2d 895, 899 (Fed. Cir. 1986). In a case in which damages are sought based on an alternative theory, modification of this instruction may be appropriate so that the trial court does not unduly credit a particular methodology.

4. The "mathematical certainty" reference in the instruction is derived from *Apple, Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1315 (Fed. Cir. 2014), in which the Court stated:

This court has also recognized that estimating a "reasonable royalty" is not an exact science. As such, the record may support a range of "reasonable" royalties, rather than a single value. Likewise, there may be more than one reliable method for estimating a reasonable royalty. *See, e.g., In re Innovatio IP Ventures, LLC Patent Litig.*, MDL 2303, 2013 WL 5593609, at *30-*40 (N.D. Ill. Oct. 3, 2013) (undertaking a detailed evaluation of the different methods proposed by the parties of valuing the patents at issue). For example, a party may use the royalty rate from sufficiently comparable licenses, value the infringed features based upon comparable features in the marketplace, or estimate the value of the benefit provided by the infringed features by a comparing the accused product to non-infringing alternatives. All approaches have certain strengths and weaknesses and,

depending upon the facts, one or all may produce admissible testimony in a single case. It is common for parties to choose different, reliable approaches in a single case and, when they do, the relative strengths and weaknesses may be exposed at trial or attacked during cross-examination.

5. The reasonable royalty theory “seeks to compensate the patentee not for lost sales caused by the infringement, but for its lost opportunity to obtain a reasonable royalty that the infringer would have been willing to pay if it had been barred from infringing.” *Astrazeneca AB*, 782 Fed. Cir., at 1334.

6. A reasonable royalty award may be a lump sum that compensates the patentee for past infringement, as well as future infringement up to the expiration of the patent. *Summit 6, LLC v. Samsung Electronics Co.*, 802 F.3d 1283, 1300 (Fed. Cir. 2015).

11.4.6 SINGLE / MULTIPLE RECOVERIES FOR INFRINGING ACT

Committee Comments

The court and the parties must ensure that the jury does not duplicate lost-profits damages if several patents are infringed by the same accused product or process. 35 U.S.C. § 287; *Crystal Semiconductor Corp. v. Tritech Microelectronics Int'l, Inc.*, 246 F.3d 1336 (Fed. Cir. 2001); *Nike Inc. v. Wal-Mart Stores*, 138 F.3d 1437, 1443-44 (Fed. Cir. 1998); *Maxwell v. Baker, Inc.*, 86 F.3d 1098, 1008-09 (Fed. Cir. 1996); *American Med. Sys. v. Medical Eng'g Corp.*, 6 F.3d 1523, 1534 (Fed. Cir. 1993); *Devices for Med., Inc. v. Boehl*, 822 F.2d 1062, 1066 (Fed. Cir. 1987). On the other hand, if multiple products or processes are accused of infringing multiple patents, the patent holder may be entitled to recovery for multiple infringements.

In addition, when damages are based on reasonable royalties, infringement of multiple patents, even by a single infringing act, may warrant or require additive royalties for each patent that was infringed. *See Stickle v. Heublein, Inc.*, 716 F.2d 1550, 1561 n.8 (Fed. Cir. 1983); *see also, Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1310 (Fed. Cir. 2007).

Because of the variety of situations that may arise, the Committee elected not to propose a pattern instruction on this topic, leaving the matter to be addressed in light of the particular scenario in a given case.

11.4.7 TOTALING THE DAMAGE AWARD

Any amounts that you award for lost profits and for reasonable royalties should be set out separately on the verdict form that I will give you.

Committee Comments

1. Requiring the jury to separately identify the amounts awarded for lost profits and reasonable royalties makes review of the damage award in connection with JMOL's and appeals easier.

2. This instruction should be coordinated with any additional instructions provided by the court regarding the method to be followed in filling out the particular verdict form that the court decides to use.