



Patent Infringement Claims and Defenses

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A Practice Note discussing patent infringement claims and defenses in the US federal courts. It provides an overview of direct and indirect infringement claims, claim construction and key defenses under US patent law, as modified by the Leahy-Smith America Invents Act (AIA). It also includes a brief discussion of procedural considerations, remedies and alternative forums for patent dispute resolution, including post-grant and pre-issuance proceedings in the USPTO under the AIA.

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A patent infringement claim is a federal cause of action that may be brought by a US patent owner (or an entity with sufficient rights in a US patent) against another party that the patent holder asserts is practicing the patented invention without its authority.

This Note highlights key legal issues involving claims and defenses in patent infringement litigation in the US federal courts. It also includes a brief discussion of remedies, procedural considerations and forums for patent dispute resolution outside of US courts. In particular, it discusses:

- The US federal courts framework for patent infringement cases (see *Patent Infringement in US Federal Courts*).
- The types of patent infringement claims (see *Patent Infringement Claims*).
- The process of patent claim construction (see *Patent Claim Construction*).
- A summary of the key defenses to patent infringement claims (see *Key Patent Infringement Defenses*).
- A brief overview of available remedies for patent infringement (see *Patent Litigation Remedies*).
- Key procedural considerations before and in response to a patent infringement claim (see *Procedural Considerations*).
- A brief summary of non-federal court patent dispute resolution forums (see *Non-federal Court Patent Dispute Resolution*), including:
 - the International Trade Commission (ITC) (see *International Trademark Commission*);
 - ex parte patent reexamination proceedings that are presently available before the US Patent and Trademark Office (USPTO), and inter partes reexaminations, which were available before September 16, 2012 (see *USPTO Reexaminations*);
 - post-grant and pre-issuance proceedings before the USPTO

provided by the Leahy-Smith America Invents Act (AIA), Pub. L. No. 112-29 (2011), which have been available as of September 16, 2012 (see *New Patent Review Procedures under the AIA*); and

- alternative dispute resolution (see *Alternative Dispute Resolution*).

PATENT INFRINGEMENT IN US FEDERAL COURTS

Trial Level

In the US, federal district courts have exclusive subject matter jurisdiction over patent infringement claims (*28 U.S.C. § 1338*). All patent infringement claims must therefore be brought in federal district court. Any federal district court in any jurisdiction may preside over the case, so long as the requirements of personal jurisdiction and venue are met. Either party may request a jury trial.

The success rates of patent owners and alleged infringers in district court cases vary significantly from jurisdiction to jurisdiction. This variation may result from factors that include:

- The education level and cultural attitudes of the jury pool.
- The experience level of the particular judges in handling patent infringement cases.
- The average time to trial.

Popular jurisdictions for patent suits include the US district courts for the:

- Eastern District of Texas.
- Northern and Central Districts of California.
- Eastern District of Wisconsin.
- District of Delaware.
- Southern District of New York.

Patent Cases on Appeal

Unlike non-patent cases, which are appealed to the appropriate circuit court of appeals depending on the district court's geographic location, all appeals of patent infringement claims are heard by the US Court of Appeals for the Federal Circuit (Federal Circuit), which sits in Washington, DC.

As with the other circuit courts of appeals, the decisions of the Federal Circuit can be appealed to the US Supreme Court (see *Box, Recent Supreme Court Patent Decisions*).

PATENT INFRINGEMENT CLAIMS

A patent infringement claim is an assertion by the patent holder that an alleged infringer's product or process practices the patent holder's patented invention without authorization.

Types of Infringement

There are two types of infringement:

- **Direct infringement.** The accused infringer practices each element of the patent holder's patent claim (see *Direct Infringement and All Elements Rule*).
- **Indirect infringement.** The accused infringer does not practice each element of the patent holder's patent claim but either:
 - contributes to direct infringement by another party (see *Contributory Infringement*); or
 - induces another party to engage in direct infringement (see *Inducement*).

A party can only be liable for indirect infringement if another party is a direct infringer.

Direct Infringement

A party is liable for direct infringement if, without authority, it either:

- Makes, uses, offers to sell or sells a patented invention within the US.
- Imports a patented invention into the US.

(35 U.S.C. § 271(a).)

Direct patent infringement is a strict liability offense, meaning that intent to infringe the patent is not needed for a finding of direct infringement. An alleged infringer does not have to copy a patented invention or even know about the patent to be held liable for infringement. The alleged infringer must only have performed one of the prohibited acts listed in Section 271(a) (making, selling, using, offering to sell or importing into the US) with respect to a product or process that is covered by the patent.

To be covered by the patent, however, the allegedly infringing device or process must include each element of a patented claim either literally or under the "doctrine of equivalents" (see *All Elements Rule*). If not, the alleged infringer is not liable for infringement.

Contributory Infringement

A party is liable for contributory infringement if both of the following requirements are met:

- The party sells or offers to sell within the US, or imports into the US, a component of a patented invention or a material or apparatus for practicing a patented process.
- The only use of the component, material or apparatus is in the patented product or in practicing the patented process.

(35 U.S.C. § 271(c).)

In light of the second requirement, a key inquiry for evaluating contributory infringement is whether a component, material or apparatus has a "substantial non-infringing use," and therefore falls outside the bounds of the statute.

Unlike direct infringement (see *Direct Infringement*), the standard for contributory infringement imposes a knowledge requirement. The contributory infringer must have known that the component, material or apparatus was either:

- Used to infringe a patent.
- Designed for infringing use.

(35 U.S.C. § 271(c).)

This standard inherently requires knowledge of the patent.

A further prerequisite of contributory infringement liability is that a third party directly infringe the patent in the US (see also *Direct Infringement*).

Inducement

A party who actively induces direct infringement by another party may also be liable for infringement (35 U.S.C. § 271(b)). Like contributory infringement, a prerequisite for inducement liability is direct infringement by a third party.

A patent holder claiming inducement must establish that the alleged infringer both:

- Engaged in the conduct of inducing or encouraging a third party to take infringing action.
- Had knowledge that the induced acts comprise patent infringement.

(See *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S.Ct. 2060 (2011) (*Global-Tech*).

A patent holder must therefore demonstrate not only that the defendant had knowledge of the patent, but that it knowingly intended to persuade another party to take the infringing actions. This requirement is usually met by demonstrating the defendant's actual knowledge. However, it may also be satisfied by a showing of willful blindness, where the defendant both:

- Believes there is a high probability that infringement exists.
- Takes deliberate actions to avoid confirming that fact.

A defendant's mere recklessness or negligence is insufficient for knowledge to be imputed under a willful blindness theory (see *Global-Tech*, 131 S.Ct. at *26-27).

All Elements Rule

To prevail on a patent infringement claim, a patent owner must show by a preponderance of the evidence that each asserted patent claim limitation is found in the accused product or process, either:

- Literally (see *Literal Infringement*).
- Under the doctrine of equivalents (see *Doctrine of Equivalents*).

The requirement that each claim limitation be found in the accused product or process is often called the "all elements rule."

Literal Infringement

Literal infringement means that each claim limitation is literally found in the accused product or process.

For example, assume that a patent claims a chair as an apparatus for sitting, having four legs attached to a seating member, and a curved back member attached to said seating member. In order to literally infringe this patent, the accused chair must have both:

- Four legs, which are attached to a seating member.
- A curved back member, which is attached to the seating member.

Doctrine of Equivalents

Under the doctrine of equivalents, a patent holder can prove infringement, even if one or more asserted patent claim limitations are not literally present in the accused product or process. For any limitation that is not literally present, the patent holder must show that the differences from the literal claim requirement are insubstantial.

A common method used to determine whether the equivalent of a claim limitation is present in the accused product or process is the function-way-result test. This test asks whether an element of an accused product or process "performs substantially the same function in substantially the same way to obtain the same result" as an element of the patented invention (*Siemens Med. Solutions USA, Inc. v. Saint-Gobain Ceramics & Plastics, Inc.*, 637 F.3d 1269, 1279 (Fed. Cir. 2011)).

For example, with reference to the above chair invention, the patent holder would have to argue infringement under the doctrine of equivalents if the accused chair has a straight back or a back member that is not directly attached to the seat.

PATENT CLAIM CONSTRUCTION

Claim construction plays a pivotal role in most patent infringement cases. A patent's claim language defines the scope of a patent owner's right to exclude others (see *Box, Anatomy of a US Patent*). Therefore, the meaning of key disputed claim limitations must often be ruled on to determine both:

- Infringement of a patent claim.
- Validity of a patent claim over prior art (see also *Prior Art Invalidity*).

The process of resolving disputes between the parties concerning the meaning of disputed patent claim terms is referred to as the claim construction or *Markman* process.

Markman Process

In *Markman v. Westview Instruments, Inc.*, the Supreme Court ruled that the responsibility for claim construction determinations falls on a judge and not on a jury (517 U.S. 370 (1996)). After completing the *Markman* process, the judge provides instructions to the jury on the meaning of disputed patent claim terms. This is similar to the manner in which the judge instructs the jury on issues of law. The jury then applies the court's claim construction in making its factual findings on the issues of infringement and invalidity.

The claim construction process generally includes:

- Each party's identification of the claim terms that they would like the court to construe.
- Each party's proposals on claim construction.
- Each party's submission of briefing on claim construction, where it presents its arguments to the court.
- The *Markman* hearing.

At the *Markman* hearing, the court may allow either party to present expert testimony or limit the hearing to attorney argument. Following the *Markman* hearing, the court issues a *Markman* Order, ruling on the construction of the disputed claim limitations. The court's construction of the disputed claim limitations becomes part of the jury instructions at the conclusion of the trial.

For an overview on claim construction and *Markman* hearings, see *Practice Note, Patent Claim Construction: Overview* (<http://us.practicallaw.com/6-524-1100>).

Timing

If the district court does not have local patent rules that govern when a *Markman* hearing should be held (see *Local Patent Rules*), it can decide to hold the *Markman* hearing before or after fact or expert discovery.

Generally, performing claim construction before expert discovery is more efficient for the parties. During expert discovery, the parties' experts present their positions on infringement and validity issues. If those issues depend on claim construction disputes that are not yet resolved, the experts must outline alternative opinions under each party's proposed claim constructions.

In addition, where the accused infringer believes that simple, case-dispositive issues exist that turn on claim construction, it may seek an early claim construction hearing. If the court agrees with the accused infringer, an early claim construction hearing can set the stage for the filing of summary judgment motions and lighten the burden of discovery.

Local Patent Rules

Certain jurisdictions that frequently hear patent infringement suits (including the Eastern District of Texas and Northern District of California) have supplemented their general local rules with specific rules for patent cases. These local patent rules generally specify the timing of the key events in the patent litigation process, including the claim construction procedure.

Generally, local patent rules also require at a relatively early stage in the litigation that:

- The patent holder specifies its "infringement contentions," which are written explanations identifying the accused product or products, or process or processes it asserts infringe its patent claims and why.
- The alleged infringer specifies its "invalidity contentions," which are written explanations outlining the prior art it claims invalidate the asserted patent claims and why.

Disclosure of the infringement and invalidity contentions helps to crystallize the disputed claim terms for claim construction.

Methodology

The proper methodology for claim construction is set out in *Vitronics* and more recently in *Phillips* (see *Vitronics Corp. v. Conception, Inc.*, 90 F.3d 1576 (Fed. Cir. 1996) and *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc)).

Intrinsic versus Extrinsic Evidence

The public materials that comprise the patent's "intrinsic record" provide the most important evidence for construing a claim. These consist of:

- The claims themselves.
- The patent's specification (see *Box, Anatomy of a US Patent*).
- The prosecution history (the record of communication between the patent applicant and the USPTO during the patent application process).

(See *Phillips*, 415 F.3d at 1317.)

The policy rationale for primary reliance on the intrinsic record stems from its public notice function. In theory, a third party reviewing the intrinsic record should be able to determine whether it infringes the patent or not. In addition, the contemporaneous intrinsic record generally is considered more reliable than other types of evidence, including after-the-fact testimony of paid experts.

Although intrinsic evidence is given significant weight, courts can also evaluate extrinsic evidence, including:

- Expert testimony.
- Dictionaries.
- Learned treatises.

(See *Phillips*, 415 F.3d at 1317.)

In *Phillips*, the Federal Circuit advised courts to consider extrinsic

evidence with caution and in the context of the intrinsic evidence. It warned that extrinsic evidence alone, particularly dictionary definitions, can focus "the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent." In addition, after-the-fact expert or inventor testimony is less reliable than the contemporaneous intrinsic evidence (*Phillips*, 415 F.3d at 1321).

Evaluating Claim Terminology

The words of a claim are generally given their ordinary and customary meaning. This is the meaning that the terms would have to "a person of ordinary skill in the art in question at the time of invention" (*Phillips*, 415 F.3d at 1312-13).

The following factors can also provide insights into the intended meaning of a term:

- The term's context within a claim.
- The differences among a patent's claims.
- The use of the same terms in different claims of the same patent on the theory that terms within a patent are typically used in a consistent manner.

However, the claim terms should also be understood in the context of the specification, because "the best source for understanding a technical term is the specification from which it arose, informed, as needed, by the prosecution history" (*Phillips*, 415 F.3d at 1315). The inventor can also expressly define terms in the specification. In these cases, the inventor's express definition governs.

Disclaimer Rule

Under the "disclaimer" rule, any claim interpretation that was disclaimed when the patent was prosecuted should be excluded from the claim construction process (see *Vitronics*, 90 F.3d at 1583).

During prosecution, the patent applicant may need to explain or narrow the scope of the claimed invention in response to prior art that is cited by the patent examiner and used to reject the pending claims. Where the patent applicant narrowed its claims or disclaimed a certain interpretation in order to get the claims allowed, it is unfair to later allow a broader interpretation in litigation.

KEY PATENT INFRINGEMENT DEFENSES

An alleged infringer can assert a number of common defenses in response to a patent infringement claim, including:

- A defense of non-infringement (see *Non-infringement*).
- Invalidity defenses based on prior art (see *Prior Art Invalidity*). These include:
 - anticipation (see *Anticipation Defense*); and
 - obviousness (see *Obviousness Defense*).
- Invalidity defenses based on the patent holder's failure to meet statutory requirements (see *Non-prior Art Invalidity*).

- The equitable defense of inequitable conduct arising from the patent holder's conduct during the prosecution process (see *Inequitable Conduct*).

Defenses based on the patent holder's express or implied authorization to use the patent (see *Licenses and Patent Exhaustion*).

General equitable defenses that bar the patent holder from making a claim (see *Laches and Equitable Estoppel*).

Non-infringement

The most common defense to a patent infringement claim is that the accused product or process does not include or perform one or more of the required claim limitations and therefore does not infringe the asserted patent claim. That is, the accused product or process is not the same as the patented invention.

One special sub-category of the non-infringement defense is a claim of divided or joint infringement. Where the accused infringement occurs through multiple entities' use of a claimed system or method (rather than a single entity), a theory of divided infringement (also called joint infringement) can support a non-infringement defense (see *Box, Divided or Joint Infringement*).

Prior Art Invalidity

Another common defense to patent infringement is showing that the asserted patent claim is invalid.

Because a patent is granted only after the USPTO examines it, each issued patent claim is presumed to be valid (35 U.S.C. § 282). A party seeking to invalidate a patent claim must therefore prove invalidity by clear and convincing evidence (see *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S.Ct. 2238 (2011) (*Microsoft*)). This is a higher evidentiary standard than the preponderance of evidence standard required to prove infringement.

When relying on prior art (see *Prior Art*), an invalidity defense can take the form of either:

- An anticipation defense, asserting that the claim is not novel (someone else came up with the exact claimed invention first) (see *Anticipation Defense*).
- An obviousness defense, asserting that the claim is obvious (a person of skill in the art at the time of filing of the patent application would have considered the claimed invention to be obvious based on the state of the art at that time) (see *Obviousness Defense*).

Prior Art

Anticipation and obviousness defenses rely on prior art, which are disclosures made to the public either before the invention date or before the patent filing date.

The AIA, enacted on September 16, 2011, transitioned the US from a "first-to-invent" to a "first-inventor-to-file" patent system. It includes changes to the definition of prior art for patent applications having an effective filing date on or after

March 16, 2013 (see *AIA § 3 (2011)* and *Leahy-Smith America Invents Act: Overview: First-inventor-to-file Patent System* (<http://us.practicallaw.com/6-508-1601>)). It is therefore now necessary to distinguish:

- Prior art for patents and patent applications having an effective filing date before March 16, 2013 (pre-AIA prior art).
- Prior art for patents and patent applications having an effective filing date on or after March 16, 2013 (AIA prior art).

For both pre-AIA and AIA-prior art, Section 102 of the Patent Act specifies the categories of prior art that can be used to demonstrate invalidity. Prior art includes any disclosure meeting Section 102's requirements.

Pre-AIA prior art is generally defined with reference to the patent holder's date of invention, rather than the patent's application filing date. The date of invention can depend on the date of the inventor's conception and whether the inventor was diligent in reducing the invention to practice, either by itself or another entity making a working prototype or filing a patent application. There are four main categories of pre-AIA prior art:

- **Section 102(a) prior art** references are disclosures occurring before the patent holder's date of invention. The patent holder can overcome Section 102(a) prior art by "swearing behind" it. This is proving that the patented invention was invented before the date of the prior art reference. These disclosures can be:
 - US or foreign patents or printed publications that describe the invention; or
 - evidence that the invention was known or used by others in the US.

(35 U.S.C § 102(a) (2011).)

- **Section 102(b) prior art** references are disclosures occurring more than one year before the US patent filing date (the "critical date" or "statutory bar date"). This category of pre-AIA Prior Art is alone in being defined by the patent application filing date, not the date of invention, and cannot be sworn behind. These disclosures can be:
 - US or foreign patents or printed publications that describe the invention; or
 - products that were in public use or on sale in the US.

(35 U.S.C § 102(b) (2011).)

- **Section 102(e) prior art** references are disclosures that were filed before the patent holder's date of invention, even if they are not published until after the date of invention. Like Section 102(a) prior art references, the patent holder can overcome Section 102(e) prior art by swearing behind it. These disclosures can be:
 - patents and patent applications filed by a third party in the US before the date of the patent holder's inventions; and
 - patent applications filed under the Patent Cooperation Treaty (PCT) that designate the US and are published in English.

(35 U.S.C § 102(e) (2011).)

- **Section 102(g)(2) prior art** references are inventions of a third party before the patent holders' date of invention that were not "abandoned, suppressed, or concealed" (*35 U.S.C. § 102(g)(2) (2011)*). For example, where a prior art invention is ultimately commercialized in a product, this may evidence that the prior invention was not abandoned, suppressed, or concealed. Like Section 102(g)(2) prior art references, the patent holder can overcome Section 102(g)(2) prior art by swearing behind it.

AIA prior art is defined with reference to the effective filing date of the relevant patent application. It may include any public disclosure if it occurs before the effective filing date of the relevant patent application. This may include:

- Patents and published patent applications.
- Scientific articles.
- Product brochures and specifications.
- Instruction manuals.
- Actual products (public demonstrations, offers for sale or sales).
- Textbooks.

(See *35 U.S.C. § 102(a)*, *AIA § 3 (2011)* and *Leahy-Smith America Invents Act: Overview: Scope of Prior Art* (<http://us.practicallaw.com/6-508-1601>)).

However, the AIA excludes from the definition of prior art:

- Disclosures made one year or less before the effective filing date of the relevant patent application and that are made either:
 - by the inventor or someone who obtained the disclosed subject matter from the inventor; or
 - after a public disclosure by the inventor or someone who obtained the disclosed subject matter from the inventor.
- Certain disclosures in earlier patents or published patent applications where the subject matter of the disclosure:
 - contains subject matter obtained from the inventor;
 - was previously disclosed by the inventor; or
 - was owned by the same person or under an obligation of assignment to the same person as the relevant patent application.

(See *35 U.S.C. § 102(b)*, *AIA § 3 (2011)* and *Leahy-Smith America Invents Act: Overview: Statutory Exceptions to Prior Art* (<http://us.practicallaw.com/6-508-1601>)).

Consistent with its goal of moving the US to a "first-inventor-to-file" patent system, the AIA eliminates prior invention as a category of prior art (see *35 U.S.C. § 102(a)*, *AIA § 3 (2011)* and *Leahy-Smith America Invents Act: Overview: Categories of Prior Art* (<http://us.practicallaw.com/6-508-1601>)).

Anticipation Defense

Anticipation refers to the defense that a patent is invalid because it is not novel. This means that the exact claimed invention was invented earlier by another.

The "strict identity" test for anticipation mirrors the all elements test for infringement (see *All Elements Rule*). However, instead of comparing each element of the patent claim to an accused product, each element of the patent claim is compared to the disclosure of a single prior art reference. For a patent claim to be invalid as anticipated, that prior art reference must disclose each element, either explicitly or inherently, as arranged in the claim. An inherent disclosure occurs where the element is not expressly disclosed but the practice of the prior art reference would inevitably include the element.

Obviousness Defense

An accused infringer may also assert an obviousness defense, generally by presenting a combination of prior art references. Obviousness means that in view of the prior art references, the claimed invention would have been obvious to a person of ordinary skill in the art.

The inquiry on whether a patent claim is obvious involves determining:

- The scope and content of the prior art.
- The difference between what is taught by the prior art and the claimed invention.
- Whether that patent claim would have been obvious to one of ordinary skill in the art at the time of the invention.

(*Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).)

Generally "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results" (see *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 416 (2007) (*KSR*)).

Non-prior Art Invalidity

An alleged infringer may also assert that a patent is invalid based on the patent's failure to meet certain statutory requirements. Like any invalidity defense, invalidity on these grounds requires proof by clear and convincing evidence.

Compliance with Specification Requirements

Most non-prior art invalidity defenses are based on the patent specification's failure to meet certain requirements of Section 112 of the Patent Act (*35 U.S.C. § 112*). These requirements include:

- **The written description requirement.** The specification must include a complete written description of the claimed invention.
- **The enablement requirement.** The specification must include sufficient specificity and detail so that after reading the specification a person of ordinary skill in the relevant art can practice the invention without undue experimentation.

- **The best mode requirement.** The specification must set out the best way known to the inventor of practicing the invention. This defense may only be raised in proceedings filed before September 16, 2011. In all other proceedings, a failure to disclose the best mode is not a basis on which a patent claim can be held invalid (see *35 U.S.C. § 282, AIA § 15 (2011)* and *Leahy-Smith America Invents Act: Overview: Best Mode Requirement* (<http://us.practicallaw.com/6-508-1601>)).

Section 112 also requires that the inventor distinctly claim the invention in the patent claims. If a claim is ambiguous or indeterminate, then the claim may be found to be invalid.

Except as set out above with respect to the best mode requirement, the failure to meet any Section 112 requirement can provide a basis for invalidity (see, for example, *Ariad Pharm., Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1341 (Fed. Cir. 2010) (*en banc*)).

Patent Eligible Subject Matter

Another statutory prior art invalidity defense is based on the requirement that, to be patentable, the subject matter of the invention must be a "new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof" (*35 U.S.C. § 101*). The following therefore are not patentable subject matter:

- The laws of nature.
- Mathematical formulae.
- Physical phenomena.
- Abstract ideas.

In addition, the AIA specifically prohibits patent protection for the following subject matter:

- Strategies that reduce, avoid or defer tax liability (see *AIA § 14 (2011)* and *Leahy-Smith America Invents Act: Overview: Tax Strategies* (<http://us.practicallaw.com/6-508-1601>)).
- Human organisms (see *AIA § 33 (2011)* and *Leahy-Smith America Invents Act: Overview: Human Organisms* (<http://us.practicallaw.com/6-508-1601>)).

Patentable subject matter challenges under Section 101 recently have been made to patents directed at:

- Life-science-related inventions (see, for example, *Practice Notes, In Dispute: Mayo Collaborative Services v. Prometheus Laboratories and In Dispute: Ass'n for Molecular Pathology v. Myriad Genetics* (<http://us.practicallaw.com/5-518-2460>)).
- Computer and internet-related methods (see, for example, *CyberSource Corp. v. retail Decisions, Inc.* 654 F. 3d 1366 (Fed. Cir. 2011), and *Practice Notes, In Dispute: Ultramercial v. Wildtangent* (<http://us.practicallaw.com/9-520-8528>) and *In Dispute: CLS Bank International v. Alice Corporation* (<http://us.practicallaw.com/3-522-8237>)).

For more information on patent subject matter eligibility, see *Practice Note, Patent-eligible Subject Matter* (<http://us.practicallaw.com/1-525-8503>).

Inequitable Conduct

Inequitable conduct is an equitable defense (a defense not based in the Patent Act) where the alleged infringer claims that a party associated with obtaining the asserted patent breached its duties of disclosure or candor to the USPTO when the patent was prosecuted. Because the patent application process is an ex parte process, applicants and their counsel must:

- Cite all known material prior art to the patent examiner.
- Deal truthfully and with candor in making arguments or taking positions during prosecution.

A successful inequitable conduct defense can render all of a patent's claims unenforceable and therefore provide a complete defense to infringement.

A claim for inequitable conduct is in the nature of fraud and therefore must be pled with particularity (*Fed. R. Civ. P. 9(b)*). This means the complaint or answer must specifically identify the circumstances of the alleged misconduct.

Therasense

The Federal Circuit, sitting en banc, addressed the standard for inequitable conduct in *Therasense, Inc. v. Becton, Dickinson and Co.*, 649 F.3d 1276 (Fed. Cir. 2011) (*en banc*) (*Therasense*). It found that inequitable conduct requires separate proof of two elements:

- **Intent to deceive the USPTO.** The accused infringer must show that the applicant or its counsel:
 - knew of the prior art reference;
 - knew that it was material; and
 - made a deliberate decision to withhold the information.
 Mere negligence, gross negligence and even suspicious omission is insufficient to show intent.
- **Materiality of the withheld information.** The test for materiality is a "but-for" test, meaning if the USPTO had been aware of the undisclosed prior art it would not have allowed the claim (*Therasense*, 649 F.3d at *1291).

The Federal Circuit in *Therasense* found there can be exceptions to the but-for test in cases of egregious misconduct (*Therasense*, 649 F.3d at *1292). However, the Federal Circuit has not yet affirmatively developed the particulars of this exception.

The alleged infringer must prove both elements by clear and convincing evidence. This evidentiary standard derives from the connection to fraud.

Supplemental Examination to Avoid Inequitable Conduct

As of September 16, 2012, a patent owner may request supplemental examination of a patent in the USPTO to consider, reconsider or correct information believed to be relevant to the patent (see *35 U.S.C. § 257, AIA § 12 (2011)* and *Leahy-Smith America Invents Act: Overview: Supplemental Examination Requests by Patent Owners* (<http://us.practicallaw.com/6-508-1601>)).

A key feature of supplemental examination is that the patent cannot later be held to be unenforceable on the basis of information that had not been considered or was inadequately or incorrectly considered in an earlier examination of the patent if the information was considered, reconsidered or corrected during the supplemental examination.

Licenses and Patent Exhaustion

If an alleged infringer can demonstrate that it has the patent holder's permission to practice the patent, the alleged infringer has a complete defense to the patent holder's claim of infringement.

The patent's holder's permission can be either:

- Expressly granted to the alleged infringer (see *Express License*).
- Implied through its purchase of the accused product from the patent holder or its licensee (see *Implied License*).
- If the accused product was sold or licensed for sale by the patent holder, the patent holder may also be barred from enforcing its claim for patent damages under the doctrine of patent exhaustion (see *Patent Exhaustion*).

Express License

The clearest case of permission can be asserted by an alleged infringer based on either:

- A patent license agreement between the parties.
- A patent license agreement that otherwise covers the alleged infringer.

Often, when the alleged infringer asserts an express license defense, the parties dispute whether the license agreement covers one or more of the following:

- The alleged infringer.
- The allegedly infringing product.
- The patent at issue.

These disputes are resolved using general contract interpretation principles.

Implied License

An alleged infringer may also rely on an implied license defense. This is typically available where:

- A patent holder or its licensee sells an article to the alleged infringer.
- The alleged infringer then uses the article or resells it.

The alleged infringer can then show an implied license if:

- The article has no non-infringing uses.
- The sale's circumstances indicate that a license to practice should be inferred.

That is, the alleged infringer can argue that the sale carries with it a license to engage in conduct that would otherwise infringe the patent holder's rights (see *Zenith Elecs. Co. v. PDI Commc'ns*

Sys., 522 F.3d 1348 (Fed. Cir. 2008)).

Because the implied license defense relies on an inference, it may be negated if the sale agreement plainly indicates that no further licenses are implied.

Patent Exhaustion

The patent exhaustion doctrine prevents a patent holder from "double-dipping" by collecting payment from multiple entities in a supply chain for use of the same patented invention. The defense of patent exhaustion is available where the accused infringer's upstream supplier has either:

- Purchased a patented article from the patent holder or licensee of the patent holder.
- Been granted a license or authority from the patent holder to sell the patented article.

For example, if a patent holder licenses its patent covering a computer processing chip to a chipmaker, patent exhaustion prevents the patent holder from collecting additional license payments from computer manufacturers that make end-products incorporating the licensed chipmaker's chip. In this case, the patent is "exhausted" by the authorized first sale of the patented article.

Specifically, in *Quanta Computer, Inc. v. LGE Electronics, Inc.*, the Supreme Court held that the "authorized sale of an article that substantially embodies a patent exhausts the patent holder's rights and prevents the patent holder from invoking patent law to control post-sale use of the article" (553 U.S. 617 (2008)). In addition, in *TransCore, LP v Electronic Transaction Consultants Corp.*, the Federal Circuit held that an unconditional covenant not to sue likewise triggers patent exhaustion, just like an unconditional sale or license (563 F.3d 1271 (Fed. Cir. 2009)).

More recently, in *Bowman v. Monsanto*, the Supreme Court held that the patent exhaustion doctrine does not allow a farmer to reproduce patented seeds through planting and harvesting without the patent holder's permission (133 S.Ct. 1761 (2013)). However, the court limited the holding to the facts of the case, noting that in another case, the article's self-replication might be outside of the purchaser's control or a necessary but incidental step in using the item for another purpose. For more information on this decision, see *Practice Note, In Dispute: Bowman v. Monsanto* (<http://us.practicallaw.com/0-520-1423>).

In contrast to the implied license defense (see *Implied License*), patent exhaustion cannot be negated by simply indicating in a sale agreement that downstream licenses are not implied.

Laches

Laches is another equitable defense. If successful, the defense of laches eliminates past damages for infringement occurring before the lawsuit.

A laches defense requires proof by a preponderance of the evidence that:

- The patent holder delayed in filing the lawsuit for an unreasonable length of time.
- The delay operated to the prejudice of the accused infringer. (See *Gasser Chair Co. v. Infanti Chair Mfg. Corp.*, 60 F.3d 770, 773 (Fed. Cir. 1995).)

The delay period is measured from the time that the patent holder knew or should have known of the infringement but not before the patent issued. The determination of whether delay is unreasonable depends on the circumstances. However, a delay of six years leads to a presumption of laches, shifting the burden to the patent holder to rebut the presumption.

The prejudice to the accused infringer can be either:

- Evidentiary prejudice, resulting, for example, from:
 - deaths of critical witnesses;
 - dimming of memories; or
 - loss of documents.
- Economic prejudice, where the accused infringer invested in and expanded its business because it was not accused of infringement during the delay period.

Equitable Estoppel

Equitable estoppel is another equitable defense. It can apply where the alleged infringer was both:

- Led to believe that the patent holder did not intend to enforce a patent because of the patent holder's:
 - assurances; or
 - non-enforcement activity.
- Relied on that belief to its detriment, for example, by choosing to continue its allegedly infringing activities.

Under these circumstances, the alleged infringer may argue that the patent holder is estopped (precluded) from bringing the infringement action.

The defense of equitable estoppel often arises in patent cases involving standards bodies. Groups that create technical standards, such as Ethernet, Wi-Fi or 3G, often require their participants to make assurances about any patented technology that may be adopted into the technical standard. Where a patent holder agrees to freely license a patent that is adopted in a technical standard, equitable estoppel may be a viable defense to a later patent infringement claim by that patent holder or its successor-in-interest.

PATENT LITIGATION REMEDIES

Two basic remedies may be obtained by a patent holder who succeeds on its patent infringement claim:

- Monetary damages (see *Monetary Damages*).
- Injunctive relief (see *Injunctive Relief*).

Monetary Damages

Monetary damages in patent infringement can include:

- Compensatory damages in the form of:
 - minimum damages based on a "reasonable royalty" (see *Reasonable Royalty Damages*); and
 - lost profits-type of damages (see *Lost Profits*).
- Enhanced damages up to three times the compensatory damages, in extraordinary cases (see *Enhanced Damages*).
- Attorney fees (see *Attorney Fees*).

Reasonable Royalty Damages

The minimum statutory compensatory damages award that is owed to the patent holder by the infringer is a reasonable royalty. This is the royalty amount that a reasonable patent holder and reasonable accused infringer would arrive at if they were to engage in arms-length license negotiations at a time just before infringement began.

A non-exhaustive set of factors set out in *Georgia-Pacific Corp. v. United States Plywood Corp.* (*Georgia-Pacific*) is often used to determine a reasonable royalty parties would have reached through a hypothetical negotiation at the time the infringement began. A court considers evidence, usually from patent licensing experts, on the following factors:

- The royalties the patent holder receives for licensing the relevant patent. This may demonstrate an established royalty.
- The rates paid by the accused infringer for the use of other comparable patents.
- The nature and scope of license in terms of:
 - exclusivity;
 - territory; or
 - customer restrictions.
- Whether the patent holder has an established policy and marketing program to maintain its patent rights by not licensing the invention or granting licensees under special conditions.
- The commercial relationship between the parties, including whether they are competitors.
- The effect and value of selling patented items in promoting sales of the licensee's non-patented products.
- The duration of patent and license term.
- The patent holder's commercial success in making a profit for products made under the patent and their current popularity.
- The utility and advantages of the patented invention compared to older modes and devices.
- The nature of the patented invention, including:
 - the character of its commercial embodiment as owned and produced by the licensor; and
 - the benefit to those who have used the invention.
- The extent to which the infringer has made use of the invention and the value of this use.

- The portion of profit or selling price customarily received for the use of the invention.
- The portion of realizable profits attributable to the invention as distinguished from:
 - non-patented elements;
 - significant features or improvements added by the infringer;
 - the manufacturing process; and
 - business risks.
- Expert opinion testimony.

(318 F. Supp. 1116, 1119-20 (S.D.N.Y. 1970).)

Rules of thumb, such as "the 25% rule" (a reasonable royalty would pay 25% of the expected profits), were previously used to arrive at a reasonable royalty figure. However, the Federal Circuit has rejected these rules as improper (see *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292 (Fed. Cir. 2011)).

In addition, a number of recent Federal Circuit cases have targeted high-damages awards by juries and required a more rigorous damages analysis. These cases demonstrate enhanced scrutiny for patent holders that seek high reasonable royalty-based damages awards based on:

- The use of previous licenses of either the patent holder or the alleged infringer (see *Lucent Techs. v. Gateway, Inc.*, 580 F.3d 1301 (Fed. Cir. 2009) (*Lucent*) and *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860 (Fed. Cir. 2010) (*ResQNet*)). In both *Lucent* and *ResQNet*, the Federal Circuit rejected a reasonable royalty damages theory on the basis that the prior licenses on other technologies were:
 - not related to the patented technology; and
 - therefore not probative of a reasonable royalty for the patent in suit.
- The sales price of an end product (rather than that of the claimed component) (see *Lucent and LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51 (Fed. Cir. 2012); see also *Cornell Univ. v. Hewlett Packard Co.*, 609 F. Supp. 2d 279 (N.D.N.Y. 2009) (*Rader, C.J. of Fed. Cir., sitting by designation*)). This is known as the "entire market value rule." In both *Lucent* and *LaserDynamics*, the Federal Circuit strictly limited the application of the entire market value rule to where the patent holder can provide specific economic evidence that consumer demand for the entire product (rather than the component containing the accused technology) is linked to the claimed invention.

Lost Profits

In addition to damages based on a reasonable royalty, a patent holder who competes with the accused infringer in the market for the patented product or process may also seek "lost profits" type damages. These damages compensate the patent holder for lost sales or price erosion resulting from the infringer's presence in the market.

To receive lost profits, "the patent holder must demonstrate that

there was a reasonable probability that, but for the infringement, it would have made the infringer's sales." After the patent holder meets this but-for standard, the burden shifts to the accused infringer to show that the patent holder's but-for causation claim is unreasonable for some or all of the alleged lost sales (*Grain Processing Corp. v. Am. Maize-Prods. Co.*, 185 F.3d 1341, 1349 (Fed. Cir. 1999)).

Courts apply the test outlined in *Panduit Corp. v. Stalin Bros. Fibre Works, Inc.* to assess whether a patent holder is entitled to lost profits type damages (575 F.2d 1152, 1156 (6th Cir. 1978) (*Panduit*)). For the patent holder to obtain as damages the profits on sales it would have made absent the infringement (the sales made by the infringer), it must prove:

- Demand for the patented product.
- Absence of acceptable non-infringing substitutes.
- Its manufacturing and marketing capability to exploit the demand.
- The amount of profit it would have made.

(See *Panduit*, 575 F.2d at 1156.)

Enhanced Damages

Enhanced damages are also authorized by Section 284 of the Patent Act (35 U.S.C. § 284). The court has discretion whether to award enhanced damages and may award up to three times the damage award.

Section 284 does not identify the circumstances under which enhanced damages are available. However, case law has established that enhanced damages are available in "exceptional cases," for example where the court finds willful infringement.

In order to establish that an infringer is liable for willful infringement, the patent holder must demonstrate by clear and convincing evidence that:

- The infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent. In other words, the infringer's actions were "objectively reckless."
- The objectively defined risk "was either known or so obvious that it should have been known to the accused infringer."

(*In re Seagate Tech., LLC*, 497 F.3d 1360, 1369 (Fed. Cir. 2007) (*en banc*)).

The failure to obtain advice of counsel regarding the infringing conduct may not be relied on as a basis for finding willful infringement. This rule is specifically set out in the AIA for patents issued on or after September 16, 2012 (see 35 U.S.C. § 298, AIA § 17 (2011) and Leahy-Smith America Invents Act: Overview: Advice of Counsel).

Willful infringement claims are complex and further details on this subject are beyond the scope of this Note.

Statutory Limitations on Monetary Damages

There are two pertinent statutory limitations on the time period used to calculate monetary damages:



- The Patent Act limits the period for collecting past damages to six years before the filing of the patent infringement lawsuit (35 U.S.C. § 286).
- If the patent holder (or its licensees) makes or sells a product that is covered by the patent and does not provide notice to the public by marking the patented product with the patent number, the patent holder cannot collect damages for the period before actual notice of infringement is provided to the alleged infringer (35 U.S.C. § 287(a)).

Attorney Fees

In addition to compensatory damages, a court may award reasonable attorney fees to either the patent holder or alleged infringer as a prevailing party (35 U.S.C. § 285). However, this is reserved for exceptional cases, unlike copyright infringement actions, where the Copyright Act requires the losing party to pay attorney fees. Cases may be found to be exceptional where they involve circumstances of:

- Inequitable conduct (see *Inequitable Conduct*).
- Willful infringement (see *Enhanced Damages*).
- Bad faith litigation tactics.

INJUNCTIVE RELIEF

A patent provides its owner with the right to exclude others from practicing the claimed invention without permission (see *Box, Anatomy of a US Patent*). Therefore, the most powerful remedy available to a patent owner is a preliminary or permanent injunction that prevents the accused infringer from importing, making, using, selling, offering for sale or importing into the US any product that infringes the patent.

An injunction is no longer an automatic remedy awarded to the patent holder. Instead, because it can be devastating to the infringer, a court may award injunctive relief only on consideration and balancing of the following equitable factors:

- Whether the patent holder has suffered an irreparable injury.
- Whether remedies available at law, including monetary damages, are inadequate to compensate for that injury.
- After considering the balance of hardships between the parties, whether an injunction is warranted.
- Whether an injunction may be a disservice to the public interest.

(See *MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006) (*MercExchange*).

If the patent holder and the adjudged infringer compete in the same marketplace, the likelihood of obtaining injunctive relief is high. In contrast, it may be difficult for the patent holder to show that injunctive relief is appropriate where any of the following apply:

- The patent holder does not make a product.
- The patent holder does not compete with the infringer.

- The patent holder has freely licensed the patent to others in the field.

PROCEDURAL CONSIDERATIONS

Complaint and Pre-filing Inquiries

Before filing an infringement claim, a patent holder must conduct sufficient analysis of the accused product or process to have a good faith belief that infringement of its patent exists (*Fed. R. Civ. P. 11*). As part of its pre-filing investigation, the patent owner should evaluate:

- The coverage of the patent and its claims.
- The accused product or process.
- Any known prior art.

Post-filing Response

After receiving notice of an infringement claim, an accused infringer should:

- Develop objectively reasonable good faith defenses, primarily defenses of non-infringement or invalidity based on a review of prior art (see *Key Patent Infringement Defenses*).
- Evaluate its exposure to develop a position on damages (see *Monetary Damages*).
- Consider seeking reexaminations in the USPTO for the asserted patents if a strong argument for invalidity based on printed prior art exists (see *Prior Art Invalidity*).
- Consider whether it has counter-patents or other counter-claims that it can assert against the patent holder.

Joinder and Intervention

Third-party issues may arise in patent infringement litigation, particularly where the customers or users of a producer or supplier of goods are accused of infringement. A producer or supplier can move to intervene in an infringement lawsuit, to protect customers or users or fulfill indemnification obligations (*Fed. R. Civ. P. 24*). This can give the producer or supplier control over the defense of the litigation involving its products or components.

An alleged infringer wishing to bring a producer or supplier into the suit through joinder must be able to:

- State a claim against the producer or supplier, for example:
 - a contractual claim under an indemnification or defense of suit provision; or
 - a claim for breach of the implied warranty against infringement claims under Section 2-312 of the Uniform Commercial Code.
- Satisfy jurisdictional requirements.

In addition, for any action commenced on or after September 16, 2011, the patent owner may only join multiple defendants in a single patent litigation action where:

- The alleged infringement is based on the same transaction, occurrence or series of transactions or occurrences relating to the same accused product or process.
- There are questions of fact common to all defendants or counterclaim defendants that will arise in the action.

It is therefore now impermissible to join multiple defendants in a single patent litigation on the sole basis that all of the defendants are infringing the same patent(s) (see *35 U.S.C. § 299(b)*, *AIA § 19 (2011)* and *Leahy-Smith America Invents Act: Overview: Joinder of Parties* (<http://us.practicallaw.com/6-508-1601>)).

Declaratory Judgment Jurisdiction

While a patent holder usually first sues an alleged infringer for patent infringement, a potential defendant to a patent infringement suit may also seek a declaratory judgment that a patent is one or more of the following:

- Not infringed.
- Invalid.
- Unenforceable.

This can allow a potential defendant to select the forum and timing of a lawsuit. However, subject matter jurisdiction for a declaratory judgment action requires the existence of a case or controversy between the parties.

Before the Supreme Court's decision in *MedImmune, Inc. v. Genentech, Inc.*, the Federal Circuit required that the requesting party have a "reasonable apprehension" of being sued (*549 U.S. 118 (2007) (MedImmune)*). In *MedImmune*, the Supreme Court widened the circumstances for finding declaratory judgment jurisdiction. It outlined a general "all-the-circumstances" test (whether all of the facts alleged demonstrate a substantial controversy between the parties). The Federal Circuit later clarified that a reasonable apprehension of suit is one way to satisfy the all-the-circumstances test (see *Caraco Pharm. Labs., Ltd. v. Forest Labs, Inc.*, *527 F.3d 1278 (Fed. Cir. 2008)*).

While it is clear that the test for declaratory judgment jurisdiction has been broadened, more recent Federal Circuit decisions have set forth some limitations. For example, in *Matthews Int'l Corp. v. Biosafe Eng'g, LLC*, the Federal Circuit found there to be no declaratory judgment jurisdiction where the technology to be used product at issue was not "substantially fixed" (*695 F.3d 1322 (Fed. Cir. 2012)*).

Notice Letters

The Supreme Court's *MedImmune* decision has had a significant impact on the practice of sending pre-suit notice of infringement or "cease-and-desist" letters.

Before *MedImmune*, a patent owner could write a letter to a potential infringer bringing a particular patent to their attention but not making a specific infringement accusation. This letter would put the potential infringers on notice so that the damages period could start running, but it would not be sufficient to create a case

or controversy for declaratory judgment purposes.

After *MedImmune*, letters of this nature are more likely to be found sufficient to satisfy declaratory judgment jurisdiction. For example, the Federal Circuit found declaratory judgment jurisdiction was triggered by correspondence from a patent holding company asserting a patent as relevant to the recipient's product line (*Hewlett-Packard Co. v. Accelaron LLC*, *587 F.3d 1358 (Fed. Cir. 2009)*). The Federal Circuit has also found that failed licensing negotiations can be the basis for declaratory judgment jurisdiction (*SanDisk Corp. v. STMicroelectronics, Inc.*, *480 F.3d 1372 (Fed. Cir. 2007)*).

NON-FEDERAL COURT PATENT DISPUTE RESOLUTION

There are several non-federal court forums for the resolution of patent-related disputes, including:

- Section 337 Actions brought before the International Trade Commission (ITC) (see *International Trade Commission*).
- Patent reexamination proceedings before the USPTO (see *USPTO Reexaminations*).
- Other administrative proceedings before the USPTO provided in the AIA as of September 16, 2012, including:
 - post-grant reviews (see *Post-grant Review*);
 - inter partes reviews (see *Inter Partes Review*);
 - transitional business method patent post-grant reviews (see *Transitional Procedure for Business Method Patent Review*);
 - pre-issuance submission procedures (see *Pre-issuance Submissions*); and
 - other third-party submission procedures (see *Other Submissions*).
- Alternate dispute resolution, including mediation and arbitration (see *Alternative Dispute Resolution*).

International Trade Commission

The ITC is a federal agency with the authority under Section 337 of the Tariff Act of 1930 (*19 U.S.C. § 1337*) to hear cases between companies domestically exploiting US intellectual property rights and those who import allegedly infringing products.

In recent years, the ITC has become an increasingly popular forum to litigate patent infringement claims, due to:

- The speed of its proceedings.
- Its power to issue "exclusion orders," which prevent the importation of infringing products into the US.

For more on the benefits of Section 337 investigations involving patent infringement allegations and the substantive and procedural differences between ITC proceedings and district court patent litigation, see *Practice Note, ITC Section 337 Investigations: Patent Infringement Claims* (<http://us.practicallaw.com/2-505-6571>).

USPTO Reexaminations

Any third party, including a potential or accused infringer in a patent infringement litigation, can petition the USPTO to reexamine the validity of an asserted patent based on printed prior art. A patent holder can also initiate a reexamination of its own patents to argue against invalidity issues raised by third parties based on potential prior art.

These *ex parte* USPTO reexamination proceedings are similar to the patent prosecution process (see *Ex Parte Reexaminations*) A reexamination can result in:

- The cancellation of one or more patent claims.
- Issuance of amended or additional claims (if the reexamination patent has not expired).
- Confirmation of the patentability of the original claims.

Inter partes reexaminations were previously available for patents that were filed on or after November 29, 1999 and must have been filed before September 16, 2012 (35 U.S.C. §§ 311-318 (2011)). Under the AIA, on September 16, 2012, *inter partes* reexaminations were replaced by the new *inter partes* review (see 35 U.S.C. §§ 311-319, AIA § 6 (2011), *Inter Partes Reexaminations* and *Leahy-Smith America Invents Act: Overview: Inter Partes Review* (<http://us.practicallaw.com/6-508-1601>)).

Ex Parte Reexaminations

Anyone can initiate an *ex parte* reexamination by filing a request for reexamination with the USPTO (35 U.S.C. §§ 302-307). The request must identify a "substantial new question of patentability" concerning the patent claims based on published prior art references (35 U.S.C. § 304).

If the request is granted by the USPTO, the requesting party generally cannot continue to participate in the proceedings, which continue between the USPTO examiner and the patent holder. The patent holder may:

- Make arguments in defense of the patent's claims.
- Amend the patent's claims to distinguish them over the cited prior art, add new patent claims, or both.

As of September 30, 2012, for all *ex parte* reexaminations granted since July 1, 1981 with certificates issued:

- 21% resulted in all claims confirmed.
- 11% resulted in all claims canceled.
- 68% resulted in some claim changes.

(USPTO, *Ex Parte Reexamination Filing Data - Sept. 30, 2012.*)

Impact of Reexaminations on Patent Litigation

If a reexamination request is filed on a patent that is the subject of an ongoing patent infringement litigation, the defendant may move to stay the litigation until the USPTO rules on the patent's validity.

The decision of whether to stay the litigation is within the court's discretion (see *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1426-27

(*Fed. Cir. 1988*)). The success of a motion to stay the proceedings varies greatly based on the judge and jurisdiction and may depend on factors that include:

- How early in the case the reexamination was filed.
- Whether a stay would unduly prejudice the patent holder.

Inter Partes Reexaminations

Under the AIA, as of September 16, 2012, the *inter partes* reexamination procedure, which enabled a requesting party to remain involved in the proceedings on a continuing basis, has been replaced by an *inter partes* review procedure (see *Inter Partes Review*).

An *inter partes* reexamination allowed for the requesting party's participation throughout the reexamination process. *Inter partes* reexamination requests between September 16, 2011 through September 15, 2012 were granted only if the requestor showed that there was a reasonable likelihood that it would prevail on at least one of the challenged claims. Before September 16, 2011, the requestor had to show that a substantial new question of patentability existed.

An important distinguishing feature of an *inter partes* reexamination was that the requesting party could not assert at a later time in any civil action the invalidity of any claim finally determined to be valid and patentable on any ground which it raised or could have raised during the *inter partes* reexamination proceedings.

New Patent Review Procedures under the AIA

The AIA provides several new administrative procedures for a party to challenge the validity of another's patent, including:

- Post-grant review (see *Post-grant Review*).
- *Inter partes* review (see *Inter Partes Review*).
- A transitional procedure for business method patent review (see *Transitional Procedure for Business Method Patent Review*).
- Pre-issuance submissions (see *Pre-Issuance Submissions*).
- Other submissions (see *Other Submissions*).

These new procedures were effective as of September 16, 2012 (see AIA §§ 6, 8, 18 (2011) and *Leahy-Smith America Invents Act: Overview: USPTO Procedures for Patent Challenges* (<http://us.practicallaw.com/6-508-1601>)). However, as described below, the availability of each procedure may depend on the patent's filing or issuance date.

The USPTO has adopted rules of practice concerning post-grant review, *inter partes* review and the transitional program for covered business method patents. For more information on these rules, see *Practice Notes, PTAB Trial Practice Rules* (<http://us.practicallaw.com/7-518-0120>) and *Road Map to USPTO Leahy-Smith America Invents Act Implementing Rules* (<http://us.practicallaw.com/8-517-0658>).

Post-grant Review

A post-grant review allows a third party to challenge the validity of a patent having an effective filing date on or after March 16, 2013 (see *35 U.S.C. §§321-329, AIA § 6 (2011)* and *Leahy-Smith America Invents Act: Overview: USPTO Procedure for Post-grant Review* (<http://us.practicallaw.com/6-508-1601>)). A petition to the USPTO to institute a post-grant review may be based on any grounds allowed under patent law to challenge a patent's validity. However, post-grant review petitions must be filed no later than nine months after the patent issue or reissue date.

A petition for post-grant review must demonstrate that either:

- It is more likely than not that at least one claim is unpatentable.
- A novel or unsettled legal question exists that is important to other patents or patent applications.

The USPTO will apply a preponderance of the evidence standard to determine the validity of patent claims during a post-grant review.

After a final post-grant review decision concerning a patent claim, the petitioner may not:

- Request or maintain another USPTO proceeding concerning the patent claim on any ground that the petitioner raised or reasonably could have raised in the post-grant review.
- Assert in a civil action or ITC proceeding that the patent claim is invalid on any ground that the petitioner raised or reasonably could have raised during the post-grant review.

The USPTO has adopted regulations for the conduct of post-grant reviews, including regulations specifying standards and procedures for discovery and an opportunity for either party to request an oral hearing (see *Practice Note, PTAB Trial Practice Rules: Post-grant Review* (<http://us.practicallaw.com/7-518-0120>)). The AIA also provides that the USPTO may limit the number of post-grant reviews during each of the first four years in which the procedure is available.

Impact of Post-grant Review on Litigation

Post-grant review is disallowed where the petitioner seeking post-grant review previously filed an action in court challenging the relevant patent's validity (see *35 U.S.C. § 325, AIA § 6 (2011)* and *Leahy-Smith America Invents Act: Overview: Related Litigation Issues* (<http://us.practicallaw.com/6-508-1601>)). However, if a petitioner makes a counterclaim challenging the validity of a patent, it is not prevented from initiating a post-grant review proceeding.

If the petitioner files an action challenging the relevant patent's validity on or after the date the petitioner files a petition for post-grant review, the action is stayed until any of the following occur:

- The patent owner files a motion to lift the stay.
- The patent owner files an action or counterclaim alleging that the petitioner infringed the patent.
- The petitioner files a motion to dismiss the action.

If a patent infringement action is filed within three months after patent issuance, the court may not stay its consideration of the patent owner's motion for a preliminary injunction on the basis of a post-grant review proceeding. Unlike *ex parte* and *inter partes* reexaminations, the USPTO will terminate a post-grant review on agreement by the parties, unless the USPTO has already made a decision on the merits.

Inter Partes Review

As of September 16, 2012, the AIA eliminated *inter partes* reexaminations and created a new *inter partes* review procedure (see *35 U.S.C. §§ 311-319, AIA § 6 (2011)* and *Leahy-Smith America Invents Act: Overview: Inter Partes Review* (<http://us.practicallaw.com/6-508-1601>)). A petition to the USPTO for *inter partes* review may only be brought on the grounds that the challenged patent claims are invalid as anticipated or obvious under Sections 102 or 103 of the Patent Act (*35 U.S.C. §§ 102 and 103*) based on prior art patents or printed publications.

Petitions for *inter partes* review may be filed after the later of:

- Nine months after the patent issue or reissue date.
- The date of termination of any post-grant review relating to the challenged patent.

A petition must demonstrate a reasonable likelihood that the petitioner would prevail on at least one of the challenged claims.

The USPTO will apply a preponderance of the evidence standard to determine the validity of patent claims during an *inter partes* review.

Inter partes review applies to patents issued before, on or after September 16, 2012. Unlike *ex parte* and *inter partes* reexaminations, the USPTO will terminate an *inter partes* review on agreement by the parties, unless the USPTO has already made a decision on the merits.

The USPTO has adopted regulations for the conduct of *inter partes* reviews, including regulations specifying standards and procedures for discovery and an opportunity for either party to request an oral hearing (see *Practice Note, PTAB Trial Practice Rules: Inter Partes Review Procedures* (<http://us.practicallaw.com/7-518-0120>)). The AIA also provides that the USPTO may limit the number of *inter partes* reviews during each of the first four years in which the procedure is available, if the number in each year equals or exceeds the number of *inter partes* reexaminations in the last fiscal year before being implemented.

The estoppel and impact on patent litigation issues applicable to post-grant reviews also apply to *inter partes* review, except for the limitation regarding preliminary injunctions (see *Impact of Post-grant Review on Litigation*).

Transitional Procedure for Business Method Patent Review

The AIA provides for a temporary administrative procedure allowing a third party to petition the USPTO to review a business method patent if the owner of the business method patent has asserted an infringement claim against the petitioner seeking review (see *37 C.F.R. §§ 42.300-304, AIA § 18 (2011)* and *Leahy-Smith America Invents Act: Overview: Transitional Procedure For Business Method Patent Review* (<http://us.practicallaw.com/6-508-1601>)). This procedure began on September 16, 2012 and will expire on September 16, 2020. It applies to business method patents issued before, on or after September 16, 2012, except for patents having an effective filing date on or after March 16, 2013 during the nine-month period in which a petition for post-grant review can be filed.

This procedure is limited to covered business methods, which are defined as patents for method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service. However, patents for technological inventions do not qualify. To evaluate whether a patent is for a technological invention, the USPTO will consider both whether:

- The claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art.
- Solves a technical problem using a technical solution.

Pre-issuance Submissions

Pre-issuance submissions allow a third party to submit certain potentially relevant information in writing for the USPTO to consider and include in a patent application file history (see *35 U.S.C. § 122, AIA § 8 (2011)* and *Leahy-Smith America Invents Act: Overview: Pre-issuance Submission* (<http://us.practicallaw.com/6-508-1601>)). This submission must be made before the earlier of either:

- The date of a notice of allowance in the patent application.
- The later of:
 - six months after the publication date of the patent application; or
 - the date of the first office action rejecting any claim in the patent application.

The submission is limited to patents, patent applications and printed publications.

Pre-issuance submissions apply to any patent application filed before, on or after September 16, 2012.

Other Submissions

Any person at any time may cite to the USPTO in writing for inclusion in the official file of a patent any:

- Prior art consisting of patents or printed publications which that person believes to have a bearing on the patentability of any claim of the particular patent.
- Statements of the patent owner filed in a proceeding before

a federal court or the USPTO in which the patent owner took a position on the scope of any claim of the particular patent. However, this statement can only be used to determine the proper meaning of that claim.

This provision applies to any patent issued before, on or after September 16, 2012 (see *35 U.S.C. § 301, AIA § 6 (2011)* and *Leahy-Smith America Invents Act: Overview: Other Submissions* (<http://us.practicallaw.com/6-508-1601>)).

Alternative Dispute Resolution

Mediation or arbitration are other mechanisms parties can use to resolve patent infringement disputes. These alternative dispute resolution procedures are often specified as required dispute resolution in license and settlement agreements. Arbitration is specifically referred to in the Patent Act (see *35 U.S.C. § 294*).

The perceived benefits of these procedures include:

- Reduced costs, as compared to the cost of a full-blown district court litigation.
- Speed of resolution.
- Resolution of disputes by "expert" fact-finders, instead of a jury.
- Privacy and confidentiality for the proceedings and the results.

RECENT SUPREME COURT PATENT DECISIONS

In recent years, the Supreme Court has accepted a number of appeals from the Federal Circuit and issued rulings on key issues in patent law, including:

- The obviousness invalidity defense (see *KSR, 550 U.S. 398 (2007)*; for more information, see also *Obviousness Defense*).
- Declaratory judgment jurisdiction in patent cases (see *Medimmune, 549 U.S. 118 (2007)*; for more information, see also *Declaratory Judgment Jurisdiction*).
- The remedy of permanent injunctions (see *Mercexchange, 547 U.S. 388 (2006)*; for more information, see also *Injunctive Relief*).
- The presumption of patent validity and the evidentiary standard required to prove invalidity (see *Microsoft, 131 S.Ct. 2238 (2011)*; for more information, see also *Prior Art Invalidity*).
- Patent eligibility of personalized medicine-related claims (see *Practice Note, In Dispute: Mayo Collaborative Services v. Prometheus Laboratories* (<http://us.practicallaw.com/5-518-2460>)).
- Patent eligibility of composition of matter and method claims relating to human genetics (see *Practice Note, In Dispute: Ass'n for Molecular Pathology v. Myriad Genetics* (<http://us.practicallaw.com/2-518-6638>)).
- The application of patent exhaustion doctrine applies to patented replicating technologies (see *Practice Note, In Dispute: Bowman v. Monsanto* (<http://us.practicallaw.com/0-520-1423>)).

ANATOMY OF A US PATENT

Right to Exclude

US patents are granted by the USPTO for novel and non-obvious useful inventions. For US products covered by the patent's claims, the patent holder has the right to exclude others from:

- Making the patented invention.
- Using the patented invention.
- Selling the patented invention.
- Offering to sell the patented invention.
- Importing the patented invention into the US.

Type and Duration

There are three types of patents:

- **Utility patents.** Protect new and useful inventions and are usually referred to simply as patents.
- **Design patents.** Protect ornamental non-functional designs similar in nature to trade dress.
- **Plant patents.** Protect distinct and new varieties of plants which have been asexually reproduced.

An issued US utility patent has a lifespan of 20 years from its earliest effective filing date. However, patents filed before June 8, 1995, have a lifespan that is the longer of:

- 20 years from their earliest effective filing date.
- 17 years from their issue date.

In contrast, design patents have a lifespan of 14 years from their grant date.

The term of a plant patent is the same as the term for a utility patent.

Patent Cover Page

The cover page of a US patent includes the patent's:

- Filing date.
- Issuance date.
- Title.
- Named inventors.

It may also identify the assignee (owner).

The following is an example of a cover page.

United States Patent [19]		[11] Patent Number: 4,864,593
Kasdan		[45] Date of Patent: Sep. 5, 1989
[54] METHOD OF MEASURING PLASMA DENSITIES AND TEMPERATURES	[56] References Cited	
[75] Inventor: Abraham Kasdan, Englewood Cliffs, N.J.	FOREIGN PATENT DOCUMENTS	
[73] Assignee: North American Philips Corporation, New York, N.Y.	0175553 8/1986 Japan 378/4	
[21] Appl. No.: 125,024	<i>Primary Examiner</i> —Carolyn E. Fields	
[22] Filed: Nov. 24, 1987	<i>Assistant Examiner</i> —Joseph A. Hynds	
[51] Int. Cl.⁴ G01N 23/04	<i>Attorney, Agent, or Firm</i> —Jack E. Haken	
[52] U.S. Cl. 378/4; 378/54	[57] ABSTRACT	
[58] Field of Search 378/4, 17, 6, 901, 54	An X-ray computed tomography (CT) scanner is used to measure the density of mercury plasma in an operating arc lamp.	
	12 Claims, 2 Drawing Sheets	



Specification and Claims

Specification

The body of the patent is called the patent specification. It includes a description of the technological background and a detailed description of the invention, including figures (drawings showing various embodiments of the claimed invention). Design patents include only figures and need not include a textual description.

Claims

A utility patent's claims define the scope of the patent holder's invention and therefore its right to exclude others. The claims are found at the end of the patent, after the specification. Each patent claim describes the invention in words, specifying each of the elements (or limitations) of the patented apparatus or method.

The following is an example of a patent claim.

We claim:

1. A computer system for extracting, from three-dimensional graphics data generated to display three-dimensional images on a two-dimensional monitor, data used to display said three-dimensional images on a three-dimensional volumetric display, comprising:

a graphics application;

a graphics application programming interface (API) module for rendering said three-dimensional images in response to instructions received from said graphics application; and

an interceptor module interposed between said graphics application and said graphics API module for intercepting said instructions to extract data for use by said three-dimensional volumetric display.

DIVIDED OR JOINT INFRINGEMENT

Where an accused infringement occurs through multiple entities' use of a claimed system or method, a theory of divided infringement (also called joint infringement) can support a non-infringement defense (see *Non-infringement*).

The Federal Circuit has held that to "use" a **system** for infringement purposes, a party must "put the invention into service," that is, the party must both:

- Control the system as a whole.
- Obtain benefit from it.

(*Centillion Data Sys., LLC v. Qwest Commc'ns Intl*, 631 F.3d 1279, 1284 (Fed. Cir. 2011).)

This decision may weaken the divided infringement defense because to infringe a system a party does not need to physically control each element of the system. Instead, it only needs to control the system in the sense of putting the entire system into service.

With respect to **method** claims, the Federal Circuit held, in a split en banc decision, that it is possible to prove infringement of a method claim by showing that a party induced multiple entities to jointly or collectively perform all the steps of a patented method without any one of them practicing all of those steps (*Akamai Technologies, Inc, et al v Limelight Networks, Inc, and McKesson Technologies, Inc v Epic Systems Corp.*, 692 F. 3d 1301 (Fed. Cir. 2012)). This decision explicitly overruled Federal Circuit precedent and reversed a trend that had made it more difficult to prove that someone induced multiple actors to infringe a method claim.

However, the decision in *Akamai*, in addition to being sharply divided (6-1-4), did not address under what circumstances multiple parties performing separate steps of a method claim may be liable for either direct infringement or contributory infringement. In particular, the limitation to inducement claims is notable because a patent holder must establish intent on the part of the alleged infringer to claim inducement, as opposed to direct infringement (see *Inducement*).

The US Supreme Court has granted a certiorari petition in *Akamai* and will likely make a decision during its 2013–14 term. While the case is pending before the Court, parties should consider the following issues post-*Akamai*:

- How courts apply the new test for inducement infringement, including the application of the intent standard.
- Whether and how courts extend the framework of liability for multiple actors to direct or contributory infringement.

For more information, search for the following resources on our website.

Topics

- Intellectual Property Litigation (<http://us.practicallaw.com/topic5-521-5540>)
- Patents (<http://us.practicallaw.com/topic2-103-1306>)

Practice Note: Overview

- Intellectual Property: Overview (<http://us.practicallaw.com/8-383-4565>)
- Leahy-Smith America Invents Act: Overview (<http://us.practicallaw.com/6-508-1601>)
- Patent Claim Construction: Overview (<http://us.practicallaw.com/6-524-1100>)
- Patent: Overview (<http://us.practicallaw.com/8-509-4160>)

Practice Notes

- Advertising Injury Insurance Coverage for Patent, Copyright and Trademark Claims (<http://us.practicallaw.com/7-521-7901>)
- In Dispute: Ass'n for Molecular Pathology v. Myriad Genetics (<http://us.practicallaw.com/2-518-6638>)

- In Dispute: Bowman v. Monsanto (<http://us.practicallaw.com/0-520-1423>)
- In Dispute: CLS Bank International v. Alice Corporation (<http://us.practicallaw.com/3-522-8237>)
- In Dispute: Mayo Collaborative Services v. Prometheus Laboratories (<http://us.practicallaw.com/5-518-2460>)
- In Dispute: Ultramercial v. Wildtangent (<http://us.practicallaw.com/9-520-8528>)
- Intellectual Property Rights: The Key Issues (<http://us.practicallaw.com/2-500-4365>)
- ITC Section 337 Investigations: Patent Infringement Claims (<http://us.practicallaw.com/2-505-6571>)
- Patent Litigation: Mapping a Global Strategy (<http://us.practicallaw.com/7-521-8726>)
- Patent-eligible Subject Matter (<http://us.practicallaw.com/1-525-8503>)
- PTAB Trial Practice Rules (<http://us.practicallaw.com/7-518-0120>)

Checklist

- Leahy-Smith America Invents Act: Key Effective Dates Chart (<http://us.practicallaw.com/3-508-1711>)

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For the links to the documents referenced in this note, please visit our online version at <http://us.practicallaw.com/0-507-2685>

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