The Chair's Comments

A Word from
Robert N. Crouse

I encourage everyone to consider attending the CLE program of the IP Section’s annual meeting on April 9, 2010, at the Grandover Resort in Greensboro. This year’s program offers a wide variety of subject matter including licensing for pharmaceuticals, biotech, and open source/free software, patent exhaustion, and 112 issues. We will also feature a punt/counterpoint discussion on patentable subject matter in view of Bilski v. Kappos and as well as a presentation on developments in Trademark protection, and more. We are excited about providing this year’s CLE to the membership and hope that everyone can attend. See you on April 9th!

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Court of Appeals Clarifies False Marking Damages

by Tiffany Norris

On Dec. 28, 2009, the Court of Appeals handed down a much anticipated decision on the contested issue of damages in a patent false marking suit. According to the court’s interpretation of 35 U.S.C. § 292 in Forest Group v. Bon Tool Company, No. 2009-1044 (Fed. Cir. Dec. 28, 2009), the false marking statute requires a penalty for false marking on a per article basis of up to $500 per article, rather than imposing a single $500 fine for each decision to falsely mark.

In this case, Forest Group, the assignee of a patent claiming an improved spring-loaded parallelogram stilt, brought an infringement action against a competitor, Bon Tool, who had begun importing a duplicate stilt version from a Chinese manufacturer. Bon Tool counterclaimed alleging false marking and seeking a declaratory judgment of patent invalidity.

On Dec. 28, 2009, the Court of Appeals handed down a much anticipated decision on the contested issue of damages in a patent false marking suit. According to the court’s interpretation of 35 U.S.C. § 292 in Forest Group v. Bon Tool Company, No. 2009-1044 (Fed. Cir. Dec. 28, 2009), the false marking statute requires a penalty for false marking on a per article basis of up to $500 per article, rather than imposing a single $500 fine for each decision to falsely mark.

In this case, Forest Group, the assignee of a patent claiming an improved spring-loaded parallelogram stilt, brought an infringement action against a competitor, Bon Tool, who had begun importing a duplicate stilt version from a Chinese manufacturer. Bon Tool counterclaimed alleging false marking and seeking a declaratory judgment of patent invalidity. After claim construction, summary judgment of noninfringement was granted in favor of Bon Tool. Interestingly, claim construction was such that Forest Group’s patent no longer covered their own product. This claim construction ruling coincided with a copending litigation between Forest Group and Warner Manufacturing, where the District of Minnesota had reached a nearly identical claim construction and also granted judgment of noninfringement in favor of Warner on Nov. 15, 2007. This November ruling was central to Bon Tool’s false marking counterclaim as Bon Tool argued that Forest Group knew that their own product was not covered by the patent pursuant to the Nov. 15, 2007 order and that any sale of a product marked with the patent number occurring after that date gave rise to false marking claims.

The United States District Court for the Southern District of Texas agreed with Bon Tool’s false marking counterclaim and found that Forest Group had falsely marked its stilts after the November order. However, the District Court determined that the statute provided for a penalty based only on each decision to mark an article rather than on a per article basis. Accordingly, Forest Group was only liable for a penalty of up to $500 for the entire false marking offense, regardless of the number of articles that were falsely marked. Bon Tool appealed to the Court of Appeals for the Federal Circuit, seeking clarification on the issue of damages and arguing that each marked article constituted an “offense” under § 292. According to the statute,

Whoever marks upon, or affixes to, or uses in advertising in connection with any unpatented article, the word “patent” or any word or number importing that the same is patented, for the purpose of deceiving the public . . . Shall be fined not more than $ 500 for every such offense. 35 U.S.C. § 292(a) (2007).
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Upon review, the Court of Appeals held that the plain language of the statute did not support the District Court’s penalty of $500 for one decision to mark multiple articles. Rather, the Court of Appeals reasoned that the statute’s plain language requires the penalty be imposed on a per article basis. In particular, the statute prohibits false marking of “any unpatented article,” and it imposes a fine for “every such offense.” Thus, the court concluded that the statute requires that each article that is falsely marked constitutes an independent offense under 35 U.S.C. § 292.

False marking has become an increasingly interesting topic because the false marking statute is a qui tam statute allowing a private citizen to sue on behalf of the government and split any damages received from the suit with the government. With damages of up to $500 per article, these suits could allow a private citizen to pocket millions if a company falsely marked a large numbers of products. In several instances, patent attorneys have filed suit as private citizens against companies accused of false marking. Accordingly, patentees have had to become aware of false marking claims by competitors and profit-seeking private citizens.

In order to avoid false marking claims, several practical considerations can be discerned as a result of Forest Group and other recent false marking cases. For example, monitoring the expiration dates of existing patents, distinguishing between products that are patented versus patent pending, avoiding a “catch all” approach to patent marking, and revisiting any products and articles that are marked with patents that have been subject to claim construction are all important considerations that have been touched upon by various courts.

Monitoring the expiration dates of patents can help to avoid false marking claims, as marking a product with an expired patent number can give rise to a...
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false marking claim. Pequinot v. Solo Cup, 540 F. Supp. 2d 649 (E.D. Va. 2008) (Suit initiated by private citizen patent attorney alleging false marking with expired patent numbers). In addition, marking products as patented when they are, in fact, only patent pending or have no existing application may also constitute false marking. Bibow v. Am. Saw & Mfg. Co., 490 F.Supp.2d 128, 2007 WL 1667043, (D. Mass. June 11, 2007) (Press release saying product was patented when actually only patent pending could give rise to false marking claims). Sadler-Cisar, Inc. v. Commercial Sales Network, Inc., 786 F. Supp. 1287, 1296 (N.D. Ohio 1991) (Defendant liable under false marking statute for marking a product as patent pending when no application had been filed). Marking a product with a “catch all” phrase followed by a list of patents can also give rise to false marking claims. Astec Am., Inc. v. Power-One, Inc., 2008 U.S. Dist. Lexis 20265 (E.D. Tex. April 11, 2008) (The phrase “[t]hese products are protected by one or more of the following US Patents” followed by 17 patent numbers could constitute false marking). Finally, patentees should revisit products marked with a patent number that has been involved in litigation and claim construction such as in Forest Group.

While Forest Group should cause concern for patentees, it is important to note that a false marking claim requires intent to deceive the public. Furthermore, the damages statute provides for damages of “not more than $500 for every such offense.” It follows that any false marking claimant must first prove intent and then asks for meaningful damages if they are to profit from this qui tam statute. As a result, patentees must balance their obligation to notify infringers of the patentee’s patented product, while carefully staying within the bounds of § 292. Failure to do so could result in defending against a suit for false marking and facing the potential for substantial false marking damages.

Tiffany Norris is a second-year student at the North Carolina Central University School of Law and an intern that the Olive Law Group in Cary, NC. She thanks Bentley Olive, Esq., and Justin Nifong, Esq.

Patenting Nanotechnology

Is There Really Plenty of Room at the Bottom?

by Jack B. Hicks, Gregory Grisett & Bernard Brown III

Introduction

In 1959, Richard Feynman presented his famous talk “There’s Plenty of Room at the Bottom” to the American Physical Society at California Institute of Technology and forecast, if not initiated, the field of nanotechnology. Now, 50 years later, nanotechnology is a multi-disciplinary subject area that encompasses physics, chemistry, engineering, materials science, electronics, textiles, biotechnology, and pharmaceuticals. Indeed, nanotechnology has contributed to innovations that continue to impact our lives. Extending battery life (http://www.a123sys-tems.com/), making fabrics more stain repellant, soil resistant, and wash durable for apparel uses (http://www.nano-tec.com/), and delivering biologics via plant virus nano-particles to specific cells in the human body (http://www.nanowerk.com/news/newsid=8462.php), are just a few of the innovations that have developed recently.

To address the flurry of activity by various interests seeking patent protection for nanotechnology inventions, the United States Patent and Trademark Office (USPTO) created a new class for “nanotechnology” inventions – Class 977 Nanotechnology. See http://www.uspto.gov/web/patents/biochempharm/crosref.html. This new class defines “nanotechnology” as areas “related to research and technology development at the atomic, molecular or macromolecular levels, in the length of scale of approximately 1-100 nanometer range in at least one dimension, and that provide a fundamental understanding of phenomena and materials at the nanoscale and to create and use structures, devices, and systems that have novel properties and functions because of their size.”

To many commentators, nanotechnology is seen as the first new discipline in nearly a century where the foundational concepts and “building blocks” are being patented early in the developing stages of the field. Mark A. Lemley, Patenting Nanotechnology, 58 Stan. L. Rev. 601 (2005). Various developers and universities are actively engaged in a “race to the Patent Office” to secure protection for inventions thought to be basic to further development. Thus, Feynman’s “bottom” has become crowded with patents covering fundamental developments and created a virtual patent “thicker” that could be a serious hindrance to future nanotechnology innovation, commercialization, and marketing.

Those seeking to commercialize nanotechnology while seeking patent protection through the USPTO will have challenges in the years to come. The USPTO has the difficult position of dealing with a growing technology in face of shrinking budgets and a lack of qualified people to effectively examine patent applications. In recognition that nanotechnology is interdisciplinary, the USPTO created the new cross-reference class to try to capture the disparate and arguably haphazard system of categorizing previous patents in this technical area. Hence, the task of even finding prior, relevant patents with which to compare new applications is less than straightforward. To make matters worse, early nanotechnology patents contain broad claims that likely overlap in scope because they were examined in different art units. The result is a morass of overlapping patents of questionable validity that either poses a risk of commercialization, i.e., a risk for business developing a technology that infringes a claim, or a hindrance to obtaining patent protection for a new invention. As a result, the outlook of capitalizing on such
nanotech patents may be uninviting.

This article serves as a primer in patent law for nanotechnology scientists and developers. The goal is to provide a basic understanding of the U.S. patent system, to highlight the requirements for obtaining a patent, and to describe some of the potential patenting issues relevant to nanotechnology.

Overview of the United States Patent System

A. Policy Rationales

The patent system in the United States is based on the premise that providing an exclusive right to an invention provides an incentive for artisans to engage in creative pursuits. As author Ben Ikenson stated, “A patent protects a person’s idea so that he might rightly profit from it, thereby encouraging innovation as a means to prosperity.”

Patents are effectively agreements between the inventor and the public; the inventor retains a property right over his or her work for some limited amount of time in exchange for timely public disclosure. A patent provides a limited, temporary monopoly for the inventor to prevent others from making, using, or selling an invention. In return for this monopoly, the public gains knowledge of how to make and use the invention. At the end of the patent term, the invention becomes public and anyone may practice the invention. This quid pro quo system strives to prevent unnecessary duplication of inventions and promotes the beneficial exchange of products, services, and technological information within and across national boundaries.

There are other forms of intellectual property, such as copyrights, trade secrets, trademarks, and sui generis mask works that may also be applicable to some nanotech developments, but these are not the focus of this article.

Three general types of patents exist, including utility, plant, and design patents. Design patents protect the ornamental design of an object of manufacture, whereas plant patents protect distinct and new varieties of plants. Utility patents are granted to inventors of any new and useful process, machine, article of manufacture, or compositions of matter, or any new useful improvements thereof and are the primary focus of this article.

B. Sources of Patent Law

For an invention to be patentable, it must comply with the requirements of the U.S. patent laws. The source of these laws is the United States Constitution, which authorizes Congress to award exclusive rights to authors and inventors for their writings and discoveries. U.S. Constitution, Article I, § 8, cl. 8. The patent laws are codified in Title 35 of the United States Code and the corresponding rules are organized in Title 37 of the Code of Federal Regulations. 35 U.S.C. §§ 101 et seq. and 37 C.F.R. §§ 1.1 et seq. Section 101 of the Patent Laws provides the statutory framework for the patent system in the United States. This body of law sets forth, among other things, the requirements of patentability, the process for obtaining a patent, and the standards that courts apply when a patent owner seeks to enforce their patent. Another important source of information on patents and the examination process is the USPTO Manual of Patent Examining Procedure, known officially as the “MPEP,” which interprets the patent laws and rules and informs patent office examiners how to examine applications, issue patents, and conduct other administrative matters. U.S. Patent and Trademark Office Manual of Patent Examining Procedure, 8th ed., Revision 7 (2008) (“MPEP”).

To obtain a patent, an inventor must submit a patent application to the United States Patent and Trademark Office. The process of submitting and obtaining a patent is called “prosecution.” Patent applications are typically drafted and prosecuted by patent attorneys or patent agents. A patent agent is a person with at least a bachelor’s degree in a technical field, such as science or engineering, who has passed a qualification examination and become registered to practice before the USPTO. Likewise, a patent attorney has a technical undergraduate degree, and has passed both the USPTO registration examination and a state attorney licensing exam. Inventors themselves may also submit and prosecute patent applications, although this is seldom recommended due to the complexity of the patent system.

C. Parts of a Patent Application

A patent application consists of several independent parts, including a list of the inventors; an oath or declaration; a specification; claims; drawings; a brief abstract; an information disclosure statement, and a fee. See generally, MPEP § 600. Inventors listed on the application are only those individuals who have materially contributed to the conception and reduction to practice of the invention. In the U.S., the inventor must be a human person; corporations or entities like universities cannot be inventors. Further, unlike author bylines of scientific publications, which may contain individuals who peripherally contributed to the study, the inventors of a patent must have significantly contributed to both the conception and reduction to practice of the invention. The inventors must all sign a declaration (or take an oath administered by a notary) that they are the true inventors of the invention.

The specification, drawings, and figures describe and illustrate the invention, demonstrate how it works, and show others how to make and use the invention. These parts of the application, and the content of these sections, form the bulk of the inventor’s bargain with the U.S. government, i.e. the disclosure in detail of the invention exchange for the patent monopoly.

The most important part of a patent application is the claims. The claims of a patent define what the patent holder has a right to exclude others from doing. The claims precisely define the scope of the property right conferred by the patent. Claims are analogous to the “metes and bounds” or boundaries recited on a deed for a parcel of real property.

Importantly, there is a duty of candor and good faith expressly imputed to every individual involved in the filing and prosecution of a U.S. patent application. MPEP § 2001. This duty requires disclosure of all information known by that individual to be material to the patentability of the invention and the duty continues throughout prosecution. A patent will not be enforceable if fraud was attempted or carried out or the duty of disclosure was violated through bad faith or intentional misconduct during prosecution.

An information disclosure statement may be filed with the USPTO that lists prior art references, i.e., publications or other patents, that are material to patentability of the invention. Filing this statement discharges the inventors or patent attorney’s duty of good faith and candor to the USPTO. The intentional withholding of material information from the Patent Office can constitute inequitable conduct, and render the resulting patent unenforceable.
Unlike many other patent systems in the world, the U.S. is a first-to-invent system, rather than a first-to-file system. The U.S. system is based on the premise that the inventor who conceived and diligently reduced to practice an invention should be the one to whom a patent is awarded. In contrast, the patent systems of other countries reward the inventor who was first to file a patent application.

To begin patent prosecution, the patent application is assembled and submitted to the USPTO. The date the application is received at the patent office is the priority date. This is the date that is compared with potential prior art references or other patent applications to determine whether the applicant’s invention is indeed novel. Consistent with the U.S. policy of respecting the date of invention, the USPTO will permit the inventor to file an affidavit indicating that the actual date of invention was earlier than the filing date should a conflict with a prior art reference arise.

An applicant can establish early priority for a forthcoming patent application by filing a provisional application. See MPEP § 201.04(b). A provisional application differs from a regular utility application in that it has no oath or declaration and no claims; it also is not examined. A provisional application is effectively a place holder at the USPTO from which an applicant can claim priority when filing a regular utility patent within one year. After one year, a provisional application will abandon.

There are several types of regular utility patent applications, including divisionals, continuations, and continuations in part (CIPs). MPEP § 200. If an examiner determines that there is more than one invention claimed in an application, a restriction may be required. A restriction forces the applicant to elect one of the claimed inventions for examination. The other non-elected invention(s) may be pursued in a divisional application. A divisional application is a separate and new application that claims priority from the originally filed application or “parent” (which may claim priority from a provisional application) and must be co-pending with and reference the parent application.

A continuation application is similar to a divisional application except that it is not made in response to a restriction requirement. A continuation application basically allows continued examination of an application while the parent application issues or abandons. A continuation in part (CIP) application is similar to a continuation application, except that new matter can be added to the specification. The new matter and any claims that are dependent on that new matter do not retain the priority benefit from the earlier filing date of the parent. Thus, the application effectively has two priority dates—that of the parent and that of the date when the CIP was filed. Any claims depending on information in the parent application are examined with respect to that original priority date. Claims in the CIP that incorporate new matter will be examined with respect to the newer CIP priority date.

E. Non-U.S. and International Applications

An inventor may decide to seek patents in other countries where the invention will be manufactured or sold. Most developed countries have patent systems. As mentioned earlier, all countries other than the U.S., base priority on the date the application was filed, regardless of the date of invention. Each country has specific patent rules, so foreign patent counsel is typically required to assist with prosecution of the so-called “national” applications prosecuted directly in a country’s patent office.

A separate type of application is an “international” application under the Patent Cooperation Treaty (PCT) promulgated by the World Intellectual Property Organization (WIPO). See generally MPEP § 1800. An international application allows an applicant to file a single application in an international receiving office and then designate countries where foreign patent applications are desired. The advantage of a PCT application is convenience and delay in entering “national” prosecution.

F. Examination of a Patent Application

After the patent application is filed at the USPTO, the application placed in line to be “examined” by USPTO examiners. Examiners are scientists or engineers presumably technically trained in the disciplinary area of the particular invention. There are roughly 18 examination units and over 6000 patent examiners employed by the USPTO. Despite the number of examiners employed by the USPTO, there remains a backlog of patent applications at the USPTO. In some art units the initial examination may not occur for two or more years.

The patent examiners evaluate whether the claims of the patent application comply with the patent laws, i.e. that the claims are patentable. As will be discussed below, the major requirements for patentability include: (1) utility; (2) subject matter eligibility, i.e. is the subject matter of the claim eligible for patenting; (3) novelty; (4) non-obviousness (i.e. the invention must not be obvious to a person having ordinary skill in the art); and (5) the patent application must adequately describe and enable such that one having ordinary skill in the art can make and use the invention. See 35 U.S.C. §§ 101,102, 103, and 112; MPEP §§ 700 and 2100.

As part of the substantive examination process by the USPTO, the examiner first performs a prior art search on the claims of the application and then makes a determination of the invention’s patentability. Typically, the examiner issues an “office action” that “rejects” the claims of the invention based on prior art references uncovered by the search. Alternatively, the examiner may “allow” one or more claims, finding that the claims comply with all requirements for patentability.

If the claims are rejected, the patent applicant can amend the claims. Alternatively, the prior art reference may be distinguished by persuasively arguing that the reference does not preclude patentability of the applicant’s invention. The majority of time and expense associated with obtaining a patent is often incurred through the iterative process of amending the application’s claims, submitting these amendments to the examiner, having the examiner reject the claims, and then repeating the process. Amendments are permitted until the examiner issues a “final rejection,” which may occur in the second office action.

If the application fails to gain allowance, and the “final rejection” stage is reached, the applicant has several choices under current law and regulations. The applicant may appeal the examiner’s rejection to the Board of Patent Appeals and Interferences; the applicant may file a continuation or CIP application, or the applicant may file a request for continued examination (RCE), which, by paying a fee to the patent office, allows examination of the application to continue. Prosecution of an application ends when the application is allowed or abandoned.

In recent years, allowance rates have dropped from a 1996-2001 high of over 70%, to a 2008 figure of 44.2%. Hence, the USPTO has severely limited allowance in recent years. Commentators point to reasons that include recent limiting court decisions concerning obviousness, negative press.
resulting from ill-advised issuance of certain technology patents, and a mis-directed view that quality prosecution results from high rejection rates. But see Recent Comments by new USPTO Director David Kappos (“On the subject of quality, there has been speculation in the IP community that examiners are being encouraged to reject applications because a lower allowance rate equals higher quality. Let’s be clear: patent quality does not equal rejection.”).

G. Allowance, Issue, Term, and Maintenance Fees

If an Examiner “allows” a patent, the applicant is required to pay the issue fee and the patent is issued and published in the Patent Gazette. Patent applications filed on or after June 8, 1995, have patent terms of 20 years from the filing date. Thus, the amount of time that an application spends in prosecution can have a substantial negative impact against its patent term. Applications filed prior to June 8, 1995, have a term of 17 years from the issue date or 20 years from the filing date, whichever is longer. Patent maintenance fees are due at 3.5 years, 7.5 years, and 11.5 years after granting to prevent abandonment of the patent. MPEP § 2500.

During the patent term, the patentee can sue anyone in Federal District court for the unauthorized making, using, selling or importing of the patented invention. Thus, as described above, a patent is an exclusionary right. After a patent expires, anyone may make, use, or sell the formerly-patented invention without repercussions from the expired patent.

Major Requirements for Patentability

A patent application is examined to ensure compliance with the patent laws. The major requirements for patentability are (1) utility and statutory subject matter; (2) novelty; (3) non-obviousness; (4) adequate written description and enablement; and (5) proper claim form. Even though the requirements for patentability are the same for all technologies, each of these hurdles poses specific issues for nanotechnology patent applications.

A. Utility

In order for a patent to be granted, the invention must have specific utility. Section 101 of the Patent Act specifically recites: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. Thus, an invention must be useful – i.e., it must fulfill some particular need or perform a specific task. Typically, lack of utility is not an issue for patenting a nanotechnology invention and inventions that have questionable utility can often be patented by imaginatively drafting the patent application.

B. Statutory Subject Matter

An invention also must be of a “type” or “class” that will be considered for patenting. As quoted above, section 101 of Title 35 of the United States Code lists several types of patentable subject matter including processes, machines, objects of manufacture, compositions of matter, or improvements thereof: 35 U.S.C. § 101. In the seminal case Diamond v. Chakrabarty, the United States Supreme Court extended patentable “statutory subject matter to ‘include anything under the sun that is made by man.’” Diamond v. Chakrabarty, 447 U.S. 303, 309, 206 U.S.P.Q. 193 (1980). Resulting from this case, living organisms that are produced by genetic engineering such as recombinant bacteria can be patented. The types of “inventions” that cannot be patented include ideas, artistic achievements, scientific principles, laws of nature, physical phenomenon, naturally occurring items, and atomic weapons.

The landscape of patentable subject matter is changing. In a recent en banc opinion, the Federal Circuit held that a “machine or transformation test” is an applicable standard to determine whether claims to a particular method are patent eligible. In re Bilski, 545 F.3d 943 (Fed. Cir. 2008), cert granted. If the claims are tied to a particular machine, or brings about a particular transformation of a particular article, the claims likely comply with 35 U.S.C § 101. The U.S. Supreme Court, however, has granted cert review of this decision, casting uncertainty on the continued viability of the “machine or transformation test.” Bilski v. Doll, 129 S.Ct. 2735 (U.S. Jun 01, 2009). Nanotechnology as a broad discipline is not likely impacted by recent developments in this area of the law. For example, nanomaterials are at least “objects of manufacture” or “compositions of matter” and many nanotechnology methods are tied to a machine, or transform materials from one form to another.

C. Novelty

One of the key barriers to patentability of an invention is novelty. If an invention is anticipated by prior art, then it is not patentable. In addition, an invention must not have been publicly known, used, or sold in the U.S. for more than one year before the inventor files a patent application. See MPEP § 2131. The requirement for novelty is embodied in 35 U.S.C. § 102. An abbreviated version of the statute is provided:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or

(b) the invention was patented or described in a printed publication in this or a foreign country in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or

(c) he has abandoned the invention, or

(d) the invention was first patented . . . or was the subject of an inventor’s certificate . . . in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor’s certificate filed more than 12 months before the filing of the application in the United States, or

(e) he did not himself invent the subject matter sought to be patented. 35 U.S.C. § 102.

The excerpt of the statute lists five conditions that must be satisfied in order to obtain a patent. First, section 102(a) states that the invention must not have been known or used by others in the U.S. or patented or disclosed in a printed publication anywhere in the world before the applicant applies for a U.S. patent. The printed publications are referred to as prior art references. These consist of any published written material, in any language, anywhere in the world, including journals, white papers, graduate theses, patents, published patent applications, Web pages, and poster presentations given at meetings. Even an un-opened book shelved in an obscure but accessible public library can serve as a prior art reference if it discloses the invention. A prior art reference must
disclose every element of a claimed invention in order to anticipate it.

A prior art reference can also defeat patentability without expressly disclosing all of the elements in a claim. The elements of the claimed invention may be in a disclosed composition or process. MPEP § 2112. This type of prior art reference is said to anticipate the claimed invention under the doctrine of “inherent anticipation.” Inherent anticipation, however, does not apply if the prior art accidentally or unwittingly discloses the claimed subject matter. Importantly, the anticipatory inherent feature, process, or result must be consistent, necessary, and inevitable in the prior art and not merely “possible” or “probable.” The policy behind inherent anticipation is that an inherent anticipatory prior art feature, process, or result was, in fact, within the public domain, even though neither the inventor nor the public recognized the inherent feature.

Second, section 102(b) recites that if the invention was patented or described in a printed publication anywhere in the world, or was publicly used or sold in the U.S. more than one year prior to an applicant filing a patent, then patentability is forbidden. MPEP § 2133. The scope of 102(b) is broad in that it encompasses publications describing the invention, public use of the invention, sales of the invention, offers for sale, and exclusive licensing of the invention by the inventor. Publications can include peer-reviewed journals, poster presentations, oral talks where summary handouts are distributed, and Internet Web pages. This section of the statute is typically referred to as a “statutory bar,” because it bars patentability when the inventor delays in filing a patent application. Note that 102(b) focuses on an inventor’s conduct rather than that of “others.” The policy encourages filing a patent application within one year after discovering a potential invention rather than delaying.

Third, section 102(c) bars patentability if an inventor abandons his or her invention. This may occur when an inventor disparages his or her own work in a peer reviewed journal or white paper. MPEP § 2134.

Fourth, section 102(d) prevents an inventor from filing a patent application in a foreign country more than one year prior to filing a U.S. application. MPEP § 2135.

Finally, section 102(f) forbids patentability if the inventor did not invent the invention. An “inventor” cannot patent an invention that was copied from someone else because the “inventor” did not in fact invent the invention. MPEP § 2137.

D. Non Obviousness
Perhaps the most difficult barrier to patentability is “non obviousness.” Section 103(a) of the Patent Act recites in part:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. 35 U.S.C. § 103(a).

This statute bars patentability if an invention claimed in a patent application would have been obvious to a person having ordinary skill in the art at the time the invention was made. The phrase “person having ordinary skill in the art” refers to a hypothetical individual who has ordinary skill in the discipline of the invention. In some art areas this may be mere general knowledge, whereas in other disciplines, it may be a Ph.D. or equivalent industry experience. Significantly, a person of ordinary skill has only ordinary technical skill in the art, but is imputed to have extraordinary knowledge of all the literature or prior art in a given field at the time of the invention.

Unlike 35 U.S.C. § 102, where a single prior art reference must disclose every element of a claimed invention in order to be anticipatory, section 103 permits the combination of several references to create the claimed invention if it would have been obvious to a person of ordinary skill. MPEP § 2141. The policy rationale is that if an invention is so obvious that one having ordinary skill in the art would have thought of it, then it does not deserve to be patented.

The analytical framework for determining whether a patent application’s claims are obvious was articulated by the Supreme Court in Graham v. John Deere Co. 383 U.S. 1, 17 (1966). According to the Supreme Court, obviousness is a question of law based on underlying factual inquiries. The Graham factual inquiries include: (1) determining the scope and content of the prior art; (2) ascertaining the differences between the claimed invention and the prior art; (3) resolving the level of ordinary skill in the pertinent art; and (4) evaluating evidence of secondary considerations. The Supreme Court reaffirmed these factual inquiries in an important 2007 decision. KSR International Co. v. Teleflex Inc., 550 U.S. 398, 417, 82 U.S.P.Q.2d 1385 (2007). In addition to the factors recited above, the following criteria must be examined in order to establish a proper prima facie case of obviousness: (1) the prior art reference (or references, when combined) must teach or suggest all the claim limitations; (2) the combination of references must teach the predictable use of prior art elements according to their established functions; and (3) there must be a reasonable expectation of success in combining the teachings of the references. Id.

E. Requirements of the Specification – Written Description, Enablement and Best Mode
In addition to examining the claims for patentability, the specification of a patent application must provide an adequate written description of the invention; it must show how to make and use the invention; and it must describe the best mode of the invention. Title 35 U.S.C. § 112, ¶1 outlines the broad requirements for disclosure, that

[t]he 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 purpose of the written description requirement is to ensure that a person having ordinary skill in the art could reasonably conclude that the inventor had possession of the claimed invention as of the date the patent application was filed. MPEP § 2164.08. Furthermore, the specification should provide sufficient disclosure to enable a person having ordinary skill in the art to make and use the claimed invention without undue experimentation. MPEP § 2164. The specification should describe what the inventor believes is the best mode of the invention. The best mode safeguards against inventors who attempt to obtain patent protection without making a full disclosure as required by the statute. MPEP § 2164. The

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best mode requirement prevents inventors from disclosing what they believe to be their second-best embodiment, while retaining the best for themselves. In re Nelson, 280 F.2d 172 (CCPA 1960).

F. Claims Must Describe the Subject Matter & Distinctly Define the Invention

The most important section of a patent application is the claims because the claims are what define the invention that is protected by the patent. “The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.” 35 U.S.C. § 112, ¶2. According to the statute, the claims must fulfill two requirements. First, the claims must set forth the subject matter that applicants regard as their invention. MPEP § 2171. Second, the claims must particularly point out and distinctly define the “metes and bounds” of the subject matter that will be protected by the patent grant. Id. In other words, the words of the claims define the invention and consequently give rise to what is legally protected by the patent. Importantly, the claims should be written broadly enough to adequately protect the invention, but narrow enough to avoid encompassing potential prior art references, or risk invalidity.

Patentability Issues for Nanotechnology Inventions

A. Patent Office Issues

The emerging field of nanotechnology differs from many of the classical art areas in the patent office because nanotechnology encompasses many different disciplines. Nevertheless, the pace of nanotech patenting has been dramatic over the past several decades. Thus, it is difficult to search for prior art references because they may be located in various topical areas. Further, patent applications may be examined by different art units and may be issued with overlapping claims. The USPTO has responded to these issues by creating a new nanotechnology subclass, 977. This class contains 263 subclasses and allows organization of most nanotechnology subject matter in a logical manner. Blaise Mouttet, Nanotech and the U.S. Patent & Trademark Office: The Birth of a Patent Class, 2 Nanotechnology Law & Business 260 (2005); compare to European Patent Office Tags Y01N2, N4, N6, N8, N10 and N1. The new USPTO class is not designed around a topic or technology because nanotech is multiple disciplinary art and prior art is scattered throughout the patent classification system. Technology class 977 is a cross-referenced classification. Patents are first referenced in an area related to specific technology, then a secondary nanotech classification is also assigned to provide a supplemental search resource.

Several authors have examined the statistics of nanotech patents. A study published in 2006 collected statistical data on the number of nanotechnology patent applications filed per year in the USPTO and examined which countries and what types of entities were filing the most nanotech patent applications during the 2000-2004 period. Blaise Mouttet, Nanotechnology and U.S. Patents: A Statistical Analysis, 3 Nanotechnology Law & Business 309 (2006). This study concludes that the relative application filing rates in nanostructures and medical areas were declining over this period while electronic applications, fullerenes, and nanotube filings were on the rise. Further, U.S. entities filed the most applications in the USPTO, followed by Japan, Germany, South Korea, and France. The majority of the U.S. entities were corporations, followed by government or military assignees, universities, and individuals, respectively.

Another recent study examined nanotechnology patents granted over the past 30 years by the USPTO, the European Patent Office (EPO), and the Japan Patent Office (JPO) between 1976 and 2006. Hsinchun Chen, Mihail C. Roco, Xin Li and Yiling Lin, Trends in Nanotechnology Patents, 3 Nature Nanotechnology 123 (2008). This study identified issued patents related to nanotechnology using specific keywords rather than relying on patent classification schemes. According to the results, the USPTO granted 7,406 nanotechnology patents between 1976 and 2006; the EPO and JPO granted 3,596 and 1,150 patents, respectively. The majority of the patents granted by the USPTO were filed by U.S. entities. Interestingly, U.S. entities also led in the number of filings in the EPO. Seven other countries, including Japan, Germany, France, South Korea, Switzerland, the UK, and the Netherlands were among the top 10 countries in both the USPTO and EPO filings. IBM had the most U.S. patents issued during this period (209), followed by the University of California (184), the U.S. Navy (99), Eastman Kodak (90), and the Massachusetts Institute of Technology (76). There was very little overlap in the top ten entities who were granted patents by each patent office, but IBM and Eastman Kodak were featured in the top ten of both the USPTO and EPO and the Japan Science and Technology Agency and Matsushita Electric Industrial were both in the EPO and JPO top ten lists.

The authors performed a cursory survey of the number of U.S. patent applications that were assigned to class 977 and the number that were granted over the past 10 years using the Delphion patent database (Thomson Reuters). The results are listed in Table 1. There was a striking increase in the number of nanotechnology applications filed between 2006 and 2007, with the number roughly doubling. The number of applications filed in 2008 declined slightly, and it appears that this value will be at least matched by the end of 2009. The number of patents granted in class 977 rapidly increased from 2004 through 2006, almost doubling each year. Since 2006, about 100 additional nanotechnology patents have been granted each year. Thus far in 2009, about 300 patents have been granted. Overall, the number of nanotech patent applications and issued patents appears to have leveled off from the rapid growth seen during the 2005-2007 period. (See table, Page 9)

Another issue impeding nanotechnology patenting is the patent backlog. In 2008, the USPTO took an average of 25.6 months to issue a first office action and the average total pendency from filing to issuance or abandonment is 32.2 months. United States Patent and Trademark Office Performance and Accountability Report Fiscal Year 2008. This problem is compounded by the shortage of examiners. The USPTO hired 1,211 new examiners in 2008 and planned to hire about 1,200 examiners per year in FY 2009. However, fear of budget shortfalls forced the USPTO to impose a hiring freeze and reduce expenditures in June 2009. Amy Schatz, Backlog, Budget Woes Await Patent Chief, The Wall Street Journal, July 21, 2009 at B5. As of the end of 2008, the total number of examiners was around 6,300 and there was a backlog of about 740,000 applications awaiting examiner action. In the 2008 calen-
dar year, there were over 1.2 million pending patent applications. United States Patent and Trademark Office Performance and Accountability Report Fiscal Year 2008.

Patent filings all over the world are down which may improve the backlog. Seeing the Forrest: Considering Worldwide Patent Trends (http://www.patentlyo.com/patent/2009/08/seeing-the-forrest-considering-worldwide-patent-trends.html). However, the decrease in patent filings at the USPTO for 2009 have been reported as high as 16 %. (http://www.patentlyo.com/patent/2009/03/index). This drop only exacerbates the budget problems described above. It is not clear, however, if nanotechnology patent filings are down substantially compared to other art units.

In the nanotech area, another problem has been finding qualified examiners with sufficient knowledge and experience of the technology to examine applications. Moreover, high examiner workloads often lead to attrition. The U.S. Government Accountability Office determined in 2007 that for the years 2002-2006 approximately one patent examiner left the USPTO for every two that were hired. U.S. Government Accountability Office, Report to the Ranking Member, Committee on Oversight and Government Reform, House of Representatives, U.S. Patent And Trademark Office: Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog GAO-07-1102 (2007). Further, over 70 percent of the examiners left the USPTO with less than 5 years of experience and those are typically the examiners who are responsible for examining applications to reduce the backlog. Consequently, the current backlog increases as examiners leave. Collectively, the mounting workload caused by the backlog of applications and the shortage of examiners with appropriate experience means that applications for patents in nanotechnology typically have long prosecution times. And, the backlog continues growing as more applications are filed.

The following sections provide suggestions and strategies for inventors and patent practitioners to effectively prosecute nanotech patent applications.

### B. Specification and Claims

An inherent difficulty with nanotech inventions is that they are submicroscopic. Consequently, such inventions may be difficult to describe in terms that are applicable to traditional mechanical inventions, material, or compositions. However, it is important to use general, well-known terms of art to describe the invention. Any unclear terms in the specification should be defined and clear statements of the intended scope of such terms should be provided. Of course the term “nano-sized” or “nanoparticle” itself will need clear definition in the specification. Inventors should avoid acting as their own lexicographer and define novel terms unless it is necessary. Likewise, using poorly defined terms to introduce breadth into the specification and claims is not recommended. M. Henry Heines, “Nano-Aerobics and the Patent System,” Nanotechnology Law & Business 355 (2005).

Another issue is that a nanotech invention may have several potential uses. The key to drafting an effective specification that will support a variety of patentable claims is to take a broad, forward-looking, interdisciplinary perspective. Patent drafters should envision alternative uses and future applications for which the invention may be relevant. At the same time, the drafter should balance this goal with the objective of only disclosing enough information to enable the invention(s) being claimed.

The specification should clearly address how to make and use all embodiments of the invention and how the embodiments may differ from each other. The specification should demonstrate how to make, use, and test the invention so that it is enabling without undue experimentation. Further, ensure that there is adequate written description and enablement for all embodiments. Examples and representative data should be included to support the best mode of the invention and the most important independent claims. Leonard P. Diana, Lawrence S. Perry, John C. Heuton, and Rita S. Wu, Untangling the Nanothreads Between the Enablement and Written Description Requirements, 4 Nanotechnology Law & Business 41 (2007).

Enablement could be a substantial problem with several nanotechnology patents. As commercialization significantly lags development, often inventions exist on “paper” and not yet in the lab. Hence, the invention may not be enabled. Furthermore, the lack of availability of certain nanoparticles, e.g., pure single wall and double wall carbon nanotubes, leave inventors to only speculate on how they will behave in structures. Just as the USPTO and courts would reject a patent to a Star Trek® transporter (see www.filmjunk.com/2009/02/26/treknobabble-55-top-10-star-trek-invention-yet-to-be-invented/ (last visited Sept. 1, 2009)), no matter how articulately described, a patent directed to a nanostructure conceived but not yet capable of reduction to practice will fail.

When drafting the claims, include many types, such as those describing the invention itself, the method of making the invention, the methods of using, kits, etc. In material, chemical, or pharmaceutical inventions, make sure to claim intermediates and downstream products, such as metabolites. This provides a wide zone of protection around the primary invention. However, ensure that all types are adequately described and enabled in the specification. Avoid using broad, non-specific claims because these can lead to invalidity. Use narrow claims directed to specific embodiments that are provided as examples in the application and that are supported with data. See Laurie A. Axford, Patent Drafting Considerations for Nanotechnology Inventions, 3 Nanotechnology Law & Business 305 (2006).

See NANOTECHNOLOGY page 10
C. Utility and Statutory Subject Matter

A nanotech invention may not be patentable solely because it is small. Just like any other invention, a product of nanotechnology must have a realized use to be patented. When drafting an application a useful practice is to clearly show how the invention and its various embodiments solve particular problems. Without including unnecessary words of limitation, try to make the patent application “tell a story” by discussing what problems the nanotech invention could solve and showing how the invention will accomplish these goals. Attempt to make the application engaging and appealing to an examiner. Laurie A. Axford, *Patent Drafting Considerations for Nanotechnology Inventions*, 3 Nanotechnology Law & Business 305 (2006).

In addition, it is important to emphasize the human intervention and processing of naturally occurring materials. Such processing can transform a naturally occurring material into an object of manufacture that is patentable. Further note that abstract ideas, natural phenomena, and laws of nature are not eligible for patenting. For example, novel quantum circuits may be patentable, but the quantum mechanic process underlying the circuit is not.

D. Novelty and Non-obviousness: Not Much Room at the Bottom.

One of the most challenging areas for nanotech inventors (or any inventor today) are the novelty and non-obviousness barriers to patentability. The glut of nanotech patents, published patent applications, and scholarly publications has created obstacles to patenting current nanotechnology inventions. Depending on the claims sought, the particular area of nanotechnology, these prior art references may bar a new patent application from maturing to a patent. As described above, many fundamental “building blocks” of nanotechnology were patented soon after discovery. Mark A. Lemley, *Patenting Nanotechnology*, 58 Stan. L. Rev. 601 (2005). The patent thicket that has emerged has created an overlapping patent landscape that must be negotiated in order to patent current nanotech inventions.

While novelty and non-obviousness are difficult standards to meet, there remain opportunities to protect nanotechnology inventions. The same recent court decisions that are creating high hurdles to patentability, also will be used to strike down some of the overly broad early patents in this area. Courts also have held that discovery of a previously unappreciated property of prior art, or of a scientific explanation for the prior art’s functioning by a latecomer, does not render the old invention patentably new. *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 U.S.P.Q.2d 1943, 1947 (Fed. Cir. 1999). As suggested, it is important to note that nanotech inventions are not novel because they are small, unless the process used to make the invention is novel and non-obvious. Further, a nanotech invention is not novel if the elements and features perform the same function as those in the prior art without giving an unobvious and unexpected result. See *In re Rose*, 220 F.2d 459, 105 U.S.P.Q. 237 (B.P.A.I. 1984). But where the nanotech invention yields unanticipated results not recognized before, there are strong arguments that the invention is novel, and non-obvious to a person of ordinary skill in the art.

These principles of non-obviousness are informative for the nanotechnology inventor. While the “thicket” of fundamental patents in nanotechnology has not prevented innovation in nanotechnology, it remains very important to document and emphasize unexpected results. To the extent possible, patent owners can distinguish their invention by distinguishing prior art references as non-anticipating or even non-enabling the nanotech invention. See Louis M. Troilo, *Patentability and Enforcement Issues Related to Nanotechnology Inventions*, 2.1 Nanotechnology Law & Business 36 (2005).

E. Infringement

Patent infringement requires a person to make, use and sell an invention in the United States. The activity must fall within the claims of the U.S. patent, whether literally, or equivalently. While the claims define the scope of the invention, the claims provide notice to the public as to the nature and scope of the invention. In the United States, a judge, opposed to jury, decides what the claims of a patent mean. A problem with some nanotech inventions may pertain to detectability, because detection means may not prove with certainty the existence of infringing activity. The inability to ascertain potential infringers may undermine the value of such patents to the patent holder. Similarly, the ability to determine overlap with previously existing patents may also hinder developers seeking to “design around” issued patents. See generally Louis M. Troilo, *Patentability and Enforcement Issues Related to Nanotechnology Inventions*, 2.1 Nanotechnology Law & Business 36 (2005).

Nevertheless, nanotechnology companies seeking to exploit the promise of nanotechnology are faced with the risk of patent infringement for products that appear to encroach the patent thicket discussed above.

Conclusion

In many perspectives, patenting a nanotechnology invention is no different than patenting an invention from other fields. Commercial research and development has always been conducted in the context of boundaries, e.g., needs, cost constraints, etc. Managing risk in research development is a constraint scientists have addressed long before nanotechnology was a recognized discipline.

Nevertheless, barriers to patentability do exist for developers of nanotechnology, and inventors and patent drafters will have to remain alert to issues of enablement and non-obviousness, while the existing thicket of prior art patents are cut down or circumnavigated. At the same time, issues will be compounded by the backlog of applications and the shortage of examiners with training in nanotechnology. Perseverance, tenacity and dedication will be required to obtain the rewards of innovation and to further incentivize inventors to obtain the just reward for their efforts.

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Bernard Brown II, Ph.D. (Biochemistry), is a patent agent and third-year law student at Elon Law, for their help and assistance with this article.
The summaries below summarize patent-related opinions of interest issued by the Court of Appeals for the Federal Circuit from June 2009 to September 2009. These summaries were edited by Robin McGrath, a partner in Alston & Bird’s Atlanta office; and Lance Lawson and Mike Connor, partners, and Ross Barton, an associate, in Alston & Bird’s Charlotte office.

Patent Case Summaries

by Robin McGrath, Lance Lawson, Mike Connor & Ross Barton

Patentable Invention:
Obviousness: Secondary Considerations of non-obviousness
Infringement: Doctrine of Equivalents: Prosecution History Estoppel: Generally
Infringement: Doctrine of Equivalents: Hypothetical
Claim Analysis
Infringement: Doctrine of Equivalents: Willful
Infringement Defenses:
Remedies: Damages: Lost Profits
Remedies: Damages: Reasonable
Royalty
Remedies: Damages: Attorneys’ Fees
Remedies: Damages: Exceptional Case (Enhanced Damages)


The Federal Circuit (1) reversed the district court and significantly reduced the damages award based on lost profits by excluding unpatented “pull-through” products from the analysis, as they did not compete or function with the patented products; (2) affirmed the district court’s denial of the Appellant’s judgment as a matter of law (“JMOL”) on lost profits based on the patented products; (3) affirmed the district court’s denial of the Appellant’s ensnarement defense, holding that the defense was a legal limitation to be decided by the court; (4) upheld the district court’s denial of DePuy’s motion for a new trial on reasonable royalty damages; (5) upheld the district court’s grant of Appellant’s JMOL of no willfulness given, in part, that the Federal Circuit previously affirmed a grant of summary judgment of no literal infringement; and (6) reversed the district court’s erroneous imposition of sanctions and attorneys’ fees predicated on the assertion of the reverse doctrine of equivalents.

DePuy Spine, Inc. and Biedermann Motech GmbH (collectively “DePuy”) sued Medtronic Sofamor Danek, Inc. and Medtronic Sofamor Danek USA, Inc. (collectively “Medtronic”) alleging infringement of U.S. Patent No. 5,207,678. During a first appeal, the Federal Circuit affirmed the district court’s erroneous imposition of summary judgment of no literal infringement, but reversed the grant of summary judgment of non-infringement under the doctrine of equivalents and remanded.

On remand, Medtronic raised an ensnarement defense against the doctrine of equivalents, arguing that the asserted scope of equivalency would encompass the prior art. The district court took the question from the jury and held that ensnarement, like prosecution history estoppel, is a legal limitation. The jury found that Medtronic infringed and awarded DePuy $149.1 million in lost profits on the patented screws and $77.2 million in lost profits on the unpatented “pull-through” products. The jury also determined that a 0% royalty rate was inconsistent with its award that was based on unpatented "pull-through" products, holding that "the Rite-Hite ‘functional unit’ test set[s] forth the key criterion for lost profits of unpatented materials," namely, whether the products are sold with or separately from the patented item. DePuy’s pull-through products fell short of being a functional unit with the patented products. Even DePuy’s damages expert admitted that the pull-through products were related to the patented products only by virtue of the business relationship that is created when customers buy the patented screws.

On cross-appeal, DePuy challenged the district court’s denial of a motion for a new trial on the issue of reasonable royalty damages. The Federal Circuit held that the district court correctly ruled that the jury award of a 0% royalty was inconsistent with its other findings, and that DePuy failed to timely object to the inconsistency. The Federal Circuit thus affirmed the district court’s application of the First Circuit’s “iron-clad” rule barring untimely inconsistency objections.

DePuy also challenged on cross-appeal the grant of Medtronic’s JMOL of no willful infringement. On appeal, the Federal Circuit, in affirming the grant of Medtronic’s JMOL on no willfulness, applied the willfulness standard from In re Seagate Technologies and ruled that there was no legally sufficient evidentiary basis to find an objectively high likelihood that the Medtronic products infringed because, most notably, the Federal Circuit had previously

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affirmed the grant of summary judgment of no literal infringement and remanded for a determination of infringement by equivalents, indicating that the issue of infringement was a close call.

Finally, the Federal Circuit reversed the award of attorneys’ fees and the imposition of sanctions. The Federal Circuit held that the district court had no basis for finding misconduct other than the mere fact that Medtronic raised an unusual defense – the reverse doctrine of equivalents – that tangentially implicated issues already resolved against Medtronic by the Federal Circuit during the first appeal. The Federal Circuit held that the issue of the application of the reverse doctrine of equivalents was not decided in the earlier appeal and, further, that although it is not a common defense, absent a finding of “ vexations or unjustified litigation,” “frivolous suit,” or some other type of “bad faith,” it was improper to impose sanctions.


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Defenses: Invalidity
Remedies: Injunctions:
Preliminary Injunction


In a design patent case, the Federal Circuit affirmed the district court’s denial of the patentee’s motion for a preliminary injunction because the district court did not abuse its discretion when it applied the “likelihood of success” standard and considered and weighed both parties’ arguments on the issue of obviousness. The Federal Circuit explained and clarified at length the applicable standards and burdens associated with a motion for preliminary injunction in a patent case.


In May 2007, Titan filed a motion for preliminary injunction to stop the defendants from selling the allegedly infringing tires. The district court denied the motion because it found that Titan was not likely to withstand Case’s challenge to the patent’s validity on obviousness grounds. The court did, however, find that Titan was likely to succeed in showing infringement and that the other three preliminary injunction factors all weighed in Titan’s favor. Despite that, the district court ruled that the validity issue alone was sufficient to defeat the motion for preliminary injunction.

On appeal, the Federal Circuit first carefully explained how the burdens at the preliminary injunction stage differ from the burdens at trial. Unlike during trial, at the preliminary injunction stage, the patentee as the movant must persuade the court that the patentee is likely to succeed at trial on the validity issue despite the accused infringer’s challenge to validity. Next, the Federal Circuit noted that district courts have differing meanings of a “substantial question” of invalidity. Federal Circuit precedent establishes that the phrase refers to a conclusion reached by the trial court after considering the evidence on both sides of the validity issue, not just the challenges from the accused infringer. That means that after the accused infringer presents evidence on invalidity to raise a substantial question, the trial court must also consider the patentee’s evidence that the validity defense lacks substantial merit. After considering that evidence, the trial court must determine whether it is more likely than not that the accused infringer will be able to prove at trial, by clear and convincing evidence, that the patent is invalid. Finally, the Federal Circuit reemphasized that the ultimate issue is whether the plaintiff established a likelihood of success on the merits. After determining a likelihood of success on the merits, the trial court must determine, in light of that and the other three factors, whether a preliminary injunction should issue.

After applying a sound obviousness test under existing Federal Circuit precedent set forth in Durling v. Spectrum Furniture Co., 101 F.3d 100 (Fed. Cir. 1996), the Federal Circuit held that the district court did not abuse its discretion in finding the ‘862 patent obvious in light of the prior art. Additionally, the district court applied the proper preliminary injunction standard and properly weighed both parties’ arguments on the issue of obviousness.


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Patentable Invention:
Anticipation: Generally
Patentable Invention:
Obviousness: Teaching, Suggestion, or Motivation in Prior Art
Claim Interpretation: Generally
Claim Interpretation:
Intrinsic Evidence:
Prosecution Disclaimer
Infringement: Contributory and Induced Infringement
Remedies: Injunctions:
Permanent Injunction
Remedies:
Damages:
Other Damages
Litigation Practice and Procedure:
Procedure: JMOL Procedure

Ecolab, Inc. v. FMC Corp., No. 08-1228, -1252 (Fed. Cir. (D. Minn.) June 9, 2009). Opinion by Gajarsa, joined by Rader and Dyk.

The Federal Circuit affirmed the trial court’s denial of post trial motions on claim construction and no inducement, but reversed the denial of motions relating to certain invalidity findings. The court then remanded the case for a determination on injunctive relief and prejudgment interest.

Ecolab, Inc. (“Ecolab”) and FMC Corporation (“FMC”) each own patents relating to chemical products used by beef and poultry processors. At issue were
Ecolab’s U.S. Patent Nos. 6,010,729 (“the ‘729 patent”) and 6,113,963 (“the ‘963 patent”) and FMC’s U.S. Patent No. 5,632,676 (“the ‘676 patent”), which relate to Ecolab’s Inspexx brand products and FMC’s FMC-323 brand product. Ecolab sued FMC, alleging that FMC-323 infringed the ‘729 and ‘963 patents. FMC counterclaimed that Ecolab infringed the ‘676 patent. Both parties argued that its opponent’s asserted claims were invalid. The jury found that certain claims of Ecolab’s asserted patents were invalid as anticipated or obvious; FMC’s ‘676 patent was not invalid; each party infringed certain claims of the opponent’s asserted patents; and neither party induced infringement. The jury awarded reasonable royalties to both parties. All posttrial motions filed by the parties were denied. Ecolab then appealed the denial of its motions for Judgment as a Matter of Law (“JMOL”), contending that it did not infringe the ‘676 patent and that FMC induced infringement of Ecolab’s patents. FMC also appealed the denial of its JMOL motions, contending that Ecolab’s asserted claims were invalid, that Ecolab induced infringement, and that FMC did not infringe Ecolab’s patent claims.

On appeal, the Federal Circuit held that asserted Claim 7 of the ‘729 patent was invalid as anticipated because the jury’s verdict was not supported by substantial evidence. Specifically, the court held that FMC’s expert testimony demonstrated that each claim element was disclosed in the prior art and that Ecolab’s arguments regarding prosecution disclaimer were unpersuasive because the arguments made during prosecution did not limit the “consisting essentially of” language in the claims to mean that peracetic acid was the sole antimicrobial agent that could be included in the composition. Additionally, citing KSR Int’l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1739, 1741 (2007), the court held that, since the advantages of spraying antimicrobial solutions onto meat at high pressure were known and methods for sanitizing meat with PAA were known, Claims 25-28 of the ‘963 patent were invalid as obvious because “there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue,” and the patent was “merely the combination of familiar elements [that] yield predictable results.” The court ultimately upheld the district court’s finding that FMC’s patent was not invalid. However, the court affirmed the district court’s denial of FMC’s motion that Ecolab induced infringement, holding that “the jury could have reasonably concluded that Ecolab lacked the required intent” since Ecolab presented evidence that it reasonably believed it did not infringe.

The Federal Circuit further held that the district court’s denial of FMC’s motion for permanent injunction without explanation was an abuse of discretion and remanded the issue to be determined based on the factors expressed in eBay Inc. v. MercExchange, LLC, 547 U.S. 388, 391 (2006). Similarly, the court held that the district court’s denial of FMC’s motion for prejudgment interest without explanation was also an abuse of discretion, and the Federal Circuit instructed the district court to award interest or provide a valid justification for withholding it.

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Claim Interpretation: Ordinary Meaning
Claim Interpretation: Intrinsic Evidence: Specification
Claim Interpretation: Means-Plus-Function
Infringement: Generally


In affirming the district court’s grant of a permanent injunction against Saint-Gobain Corporation for infringement of Gemtron Corporation’s patent, the Federal Circuit held that the district court correctly construed the claim, such that the product in question had to meet every element of the claim only at the time of manufacture based on the disclosure in the patent specification, to be an infringing product. The Federal Circuit also held that Saint-Gobain infringed even though the product in question was manufactured outside the United States because the infringed claims recited an apparatus, and the presence of functional language did not de-facto make the claim a product-by-process claim.

Gemtron Corporation (“Gemtron”) is the assignee of U.S. Patent No. 6,422,673 (the ‘673 patent) directed to a refrigerator shelf having a frame with “relatively resilient” fingers that allow the glass panel of the shelf to be “snap-secured” into place, rather than adhered with an adhesive, as in the prior art. Saint-Gobain Corporation (“Saint-Gobain”) sued Gemtron in district court seeking a declaratory judgment of noninfringement and invalidity of the ‘673 patent and a related patent. Gemtron counterclaimed for infringement. The district court construed the claim phrase “relatively resilient end edge portion which temporarily deflects and subsequently rebounds to snap-secure” to mean that “the end edge portion is sufficiently resilient that it can temporarily deflect and subsequently rebound when glass is being inserted into the frame.” Based on this claim construction, the district court granted partial summary judgment of infringement.

Saint-Gobain appealed, arguing that the claim required the “end edge portion” to be relatively resilient “always” or “at all temperatures,” or “when in use in a refrigerator.”

In holding that the district court correctly construed the claims, the Federal Circuit ruled that the plain language of the claims, as supported by the specification, could be properly construed to mean that the frame only had to exhibit the required resiliency that enabled the snap-secure assembly at the time of assembly, even if increased temperature was needed to achieve the required resiliency. Furthermore, in response to Saint-Gobain’s arguments, the Federal Circuit ruled that the construction requiring that the frame only deflect at the time the glass is being inserted did not transform the claim limitation into a product-by-process limitation because defining a structural component by its functional as well as its physical characteristics is different from defining a structure solely by the process by which it is made.

The Federal Circuit rejected Saint-Gobain’s non-infringement arguments, ruling that video evidence of Saint-Gobain’s manufacturing process unambiguously showed that the shelf is inserted into the frame while the frame is still warm from its molding process and will temporarily deflect to accept the glass shelf and then rebound into place to snap-secure the glass into the receiving channel. The court also ruled the claims were infringed even though the shelves in question were manufactured in Mexico because the infringed claims were
directed to an apparatus, not a process, and Saint-Gobain admittedly used and sold the shelves in the United States.


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Claim Interpretation: Generally
Patentable Invention: Anticipation
Litigation Practice and Procedure: Courts:
Procedure: JMOL Procedure
Claim Interpretation: Means-Plus-Function

Blackboard, Inc. v. Desire2Learn Inc.,
Nos. 08-1368, -1396, -1548 (Fed Cir. (E.D. Tex.) July 27, 2009). Opinion by Bryson, joined by Moore and Cudahy.

The Federal Circuit affirmed the judgment of the United States District Court for the Eastern District of Texas that certain claims were invalid as indefinite and reversed the district court's failure to grant Judgment as a Matter of Law (“JMOL”) on the issue of anticipation of other claims.

Blackboard, Inc. ("Blackboard") sued Desire2Learn, Inc. ("Desire2Learn"), alleging infringement of U.S. Patent No. 6,988,138 ("the ‘138 patent"). The district court entered partial summary judgment for Desire2Learn at a Markman hearing, holding certain claims invalid for indefiniteness. In a subsequent jury trial for infringement of other claims of the ‘138 patent, Desire2Learn asserted by way of defense that the claims were anticipated and obvious in light of prior art that predated the patent’s priority date. The jury disagreed and the court held that the claims were neither anticipated nor obvious, and that Desire2Learn had infringed the claims. Desire2Learn filed a motion for JMOL, which was denied, and subsequently appealed. Blackboard cross-appealed the court's summary judgment ruling on indefiniteness of certain claims of the ‘138 patent.

The ‘138 patent is directed to an Internet-based educational course management system. Of particular importance is whether the claims require that a person using the claimed method be able to use a “single login” to access multiple courses and multiple roles in those courses (e.g., student in one course, teacher in another course), because the prior art cited by Desire2Learn does not teach methods providing for a single login. The Federal Circuit rejected multiple arguments by Blackboard that a single login was a required limitation of the claims, reasoning in part that such an interpretation of the first independent claim would render a subsequent dependent claim redundant. The court disagreed with Blackboard's argument that Desire2Learn had waived its arguments regarding claim interpretation, holding that although Desire2Learn took a position during the Markman hearing that was different from the position it later took at trial, the later argument was not waived because the court did not rely on Desire2Learn’s interpretation and Desire2Learn made its position sufficiently clear in time so as not to mislead the court.

In light of its finding that the claims did not require a single login, the court held the claims of the ‘138 patent invalid for anticipation over two prior art references. Blackboard argued that because Desire2Learn’s JMOL motions during trial were cursory and failed to specify the judgment sought and the law and the facts that entitled it to that judgment, Desire2Learn waived its right to file a JMOL motion after trial. The court held that, based on the context in which the motions were made rendered, Desire2Learn’s motion during trial was sufficient to alert the court and the opposing party of its position.

Finally, the court considered Blackboard’s cross-appeal of the district court’s ruling that certain claims of the ‘138 patent were indefinite. The claims contain “means-plus-function” clauses, which require an adequate disclosure of the structure that corresponds to the claimed function. The specification of the ‘138 patent describes the tasks of an access control manager, which assigns various levels of access to a user’s role in a course, but does not describe how this is accomplished. The court rejected Blackboard’s argument that one of skill in the art could devise some means for carrying out the recited function, reasoning that a patentee cannot avoid providing specificity as to structure simply because one of ordinary skill in the art would be able to devise a means to carry out the claimed function. To hold otherwise would allow pure functional claiming, which is intended to be prevented by Section 112, paragraph 6.


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Claim Interpretation: Generally


The Federal Circuit affirmed the U.S. District Court's holding of no infringement, agreeing to construe the claims for the first time where 1) the district court did not construe the claims, but referenced claim construction and where it was apparent that court's views on the matter had been exhausted; 2) the parties agreed that the court should do so; and 3) the record was sufficiently developed to enable the court to construe the claim terms without prejudicing either party.

Wavetronix LLC ("Wavetronix") sued EIS Electronic Integrated Systems ("EIS"), alleging infringement of U.S. Patent No. 6,556,916 ("the ‘916 patent"). The ‘916 patent is directed to an automated system for identifying traffic lane positions for sensor devices monitoring vehicle traffic across several lanes. The district court entered an order granting summary judgment of noninfringement and granted summary judgment to Wavetronix on EIS's counterclaims of invalidity and unenforceability. The court did not enter a claim construction order at any point. Wavetronix appealed and EIS cross-appealed.

On appeal, only one independent claim of the ‘916 patent was in dispute and there were no material issues of fact as to how the accused system works. The key issue for the court was construction of the claim to determine infringement. Specifically, the parties disagreed as to the meaning of the term “probability density function estimation” as used in the claim to describe the method by which data from a traffic sensor is used to
define traffic lane positions. The Federal Circuit construed the term “probability density function estimation” based on the disclosure in the specification and the recitation of the term within the claim language. The court held that based on its construction of the claims, the identification of traffic lane positions performed by EIS’s instrument does not infringe the ’916 patent, either literally or under the doctrine of equivalents. Finally, the court affirmed the district court’s grant of summary judgment on the counterclaims.

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Litigation Practice and Procedure: Jurisdiction: Personal Jurisdiction


The Federal Circuit reversed the district court’s dismissal, for lack of personal jurisdiction, of a patent malpractice action against a Canadian firm. The Court of Appeals held that filing a U.S. patent application subjects the filing attorney to personal jurisdiction in federal court for a malpractice claim based upon the patent application.

Touchcom retained an attorney from the Canadian firm of Bereskin & Parr (collectively “B&P”) to pursue patent applications for a pump system invention. B&P filed a Canadian application followed by a PCT national phase application in the U.S. The U.S. application lacked a portion of source code included in the Canadian application. Touchcom later brought a U.S. infringement action where the district court found Touchcom’s patent invalid for indefiniteness, based in part on the missing source code.

The court held that the missing source code included in the Canadian application followed by a PCT application subjects the filing attorney to personal jurisdiction in federal court for a malpractice action where the district court found Touchcom’s patent invalid for indefiniteness, based in part on the missing source code.

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Touchcom sued B&P for malpractice. The district court dismissed the case for lack of personal jurisdiction. The Federal Circuit agreed that the district court lacked jurisdiction under Fed. R. Civ. P. 4(k)(1)(A) and Virginia’s long-arm statute because B&P lacked constitutional minimum contacts with Virginia.

The Court of Appeals reversed, however, under Rule 4(k)(2), which provides jurisdiction for federal claims when a defendant is not subject to jurisdiction in any state and the exercise of jurisdiction comports with due process. The Federal Circuit noted that federal jurisdiction extends to malpractice cases where it is necessary for the court to analyze patent claims and proof of invalidity. Regarding the requirement of showing that the defendant is not subject to jurisdiction in any state, the Court of Appeals adopted the approach of several other circuits in opining that the burden should be on the defendant to name a state in which the suit can proceed in order to avoid jurisdiction under Rule 4(k)(2). Finally, the Federal Circuit concluded that exercising personal jurisdiction would not violate due process because (1) the defendant purposefully sought and obtained a property interest in the United States; (2) the malpractice claim directly arises from the defendant’s act of obtaining U.S. patent protection; and (3) the exercise of personal jurisdiction is reasonable and fair because the United States has a strong interest in adjudicating cases involving malpractice before the U.S. Patent and Trademark Office and the burden on the defendant is minimal.

Judge Prost dissented, arguing that although there were minimum contacts with the United States, this was a rare case in which exercise of personal jurisdiction would nevertheless violate due process. In balancing the factors involved, she observed, for example: (1) the burden on B&P was significant, (2) the interest of the United States in the dispute was minimal, and (3) there was an alternative forum available in Canada.

On Aug. 4, 2009, the court issued a revised opinion that did not alter its substance.

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Patentable Invention: Anticipation
Patentable Invention: Anticipatory
Infringement: Literal
Infringement
Infringement: Contributory and
Induced Infringement: Generally
Defenses: Fraud and Inequitable
Finally, the Federal Circuit affirmed the district court’s denial of SAAT’s motion to add inequitable conduct allegations based on failure to cite certain prior art patents and allegedly misleading arguments made during prosecution, holding that the proposed allegations failed to meet Rule 9(b) pleading standards. The Court of Appeals held that the factual allegations lacked specificity, and that allegations of scienter on “information and belief” were insufficient without a factual basis from which scienter could be inferred. In particular, the Court of Appeals noted that the pleadings failed to provide sufficient factual details needed to support the allegations, such as who knew of the material information and deliberately withheld or misrepresented it, and which claim limitations were impacted by the allegedly material information.

http://www.cafc.uscourts.gov/opinions/06-1491.pdf

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Patent Office Procedures:
Prosecution Before the Office: Examination of Applications: Rejections

Patent Office Procedures:
Prosecution Before the Office: Prosecution of Applications: Appeals

Litigation Practice and Procedure:
Procedure: Admissibility of Evidence

Litigation Practice and Procedure:
Procedure: Appellate Jurisdiction and Procedure


The Federal Circuit affirmed the U.S. District Court for the District of Columbia’s summary judgment ruling that sustained a Board of Patent Appeals and Interferences (“Board”) decision. The Board upheld an examiner’s rejection of seventy-nine of the one-hundred seventeen claims of Mr. Hyatt’s U.S. Patent Application 08/471,702 (“the ‘702 application”) as not supported by adequate written description. Mr. Hyatt presented evidence to the district court that was not previously disclosed, despite a duty to do so, and thus that evidence was excluded from consideration at summary judgment. Because Mr. Hyatt offered no other evidence, the Federal Circuit affirmed the district court’s granting of summary judgment.

Mr. Hyatt’s ‘702 application relates to computer and software technology and, as originally filed in 1995, included fifteen claims, a 238-page specification, and 40 pages of drawings. After several amendments, including a claim of priority back to 1975, Mr. Hyatt cancelled the original claims and added 117 new claims, which were summarily rejected by the examiner for lack of written description and enablement, double patenting, anticipation, and/or obviousness.

On appeal to the Board and continuing to represent himself, except for two limitations, Mr. Hyatt did not separately address or indicate where in the specification support could be found for the numerous claim limitations the examiner determined lacked support. As a result, the Board sustained the written description and enablement rejections for seventy-nine claims. A request for rehearing was denied by the Board.

Afterwards, and acting through counsel, Mr. Hyatt filed a district court action under 35 U.S.C. § 145 against the Director. In response, the Director moved for summary judgment, arguing principally that the Board’s decision to reject all of the claims of the ‘702 application was supported by substantial evidence. Mr. Hyatt provided a declaration as well as briefing from his request for rehearing as purported evidence in opposition to the Director’s motion for summary judgment. The Director objected to Mr. Hyatt’s declaration on the ground that Mr. Hyatt had failed to timely submit it to the Board. The district court agreed with the Director, and excluded the Hyatt declaration from consideration because of Mr. Hyatt’s negligent failure to submit it to either the U.S. Patent and Trademark Office (“PTO”) during examination or the Board on appeal. Because the district court found no genuine issues of material fact were raised by Mr. Hyatt, it granted summary judgment in favor of the Director.

The Federal Circuit addressed the standard that governs a district court in § 145 actions when ruling on the admissibility of evidence withheld during patent examination in the PTO. Mr. Hyatt requested a de novo trial and argued that the only limitations imposed were those of the Federal Rules of Evidence. In contrast, the Director argued that § 145 actions are at least partly a form of appeal of PTO decisions; thus, evidence not submitted to the PTO through the negligence of the applicant is properly excluded at the district court level. In holding that the district court properly excluded Mr. Hyatt’s declaration, the Federal Circuit relied on the 80-year-old practice of federal courts excluding evidence that a party could and should have introduced to the PTO. Moreover, the Federal Circuit held that the admission of new evidence in a § 145 action is limited by the Administrative Procedure Act. Thus, the Federal Circuit dismissed Mr. Hyatt’s arguments for a de novo trial.

In dissent, Judge Moore criticized the majority for taking away this patent applicant’s fundamental right to a civil action to obtain a patent as provided by § 145. Specifically, Judge Moore stated there was no affirmative duty or obligation for Mr. Hyatt to fulfill. Further, if there was such a duty or obligation, the withholding of the evidence should be accompanied by willful withholding or intentional suppression before the trial court can exclude the evidence.


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Patentable Invention:
Anticipation: Prior Publication

Patentable Invention:
Obviousness: Generally
Claim Interpretation:
Generally
Infringement: Generally
Defenses: Invalidity
Remedies: Injunctions: Permanent Injunctions

The Federal Circuit reversed the U.S. District Court for the District of Delaware's entry of summary judgment because Acushnet Co. ("Acushnet") had raised a genuine question of material fact concerning the anticipation of four golf ball patents owned by Callaway Golf Company ("Callaway"). U.S. Patent Nos. 6,210,293 ("the '293 patent"); 6,503,156; 6,506,130; and 6,595,873 (the "Sullivan Patents"). Moreover, the Federal Circuit affirmed the district court's determination that Acushnet was not entitled to judgment as a matter of law that the asserted claims of the Sullivan Patents are invalid for obviousness. Further, because the result of the jury on obviousness was based on an irreconcilably inconsistent verdict, the Federal Circuit vacated the district court's judgment and remanded for a new trial.

The Sullivan Patents claim similar inventions of a multi-layer polyurethane-covered golf ball. Callaway sued Acushnet for infringement of the Sullivan Patents in the District of Delaware over Acushnet's Titleist Pro V1 golf balls. The Pro V1 is a "dual-core" ball that has an inner core, an outer core, an ionomer inner cover, and a polyurethane outer cover. The court then construed various terms of the Sullivan Patents, including "cover layer having a Shore D hardness." Shore D is a standard hardness scale that is known in the art. The court construed that term to require a Shore D hardness measurement of the cover layer be taken on the ball itself. Based on that construction, Acushnet stipulated that its accused products infringed all of the asserted claims of the Sullivan patents.

Subsequently, Acushnet moved for summary judgment on both obviousness and anticipation of the Sullivan Patents. Acushnet's arguments were based on U.S. Patent 4,431,193 to Nesbitt ("the '193 patent"), allegedly incorporating U.S. Patent 4,274,637 to Molitor ("the '637 patent"). Callaway filed a cross motion of no anticipation, arguing that the '193 patent did not incorporate the '637 patent and thus failed to disclose the necessary Shore D limitation.

The district court granted Callaway's motion for summary judgment of no anticipation. Regarding obviousness, Acushnet relied on the '193 patent, the '637 patent, and three additional patents. At the conclusion of a jury trial on obviousness, the jury returned a verdict that eight asserted claims, including independent Claim 4 of the '293 patent, were not obvious, but that Claim 5 of the '293 patent, which depends on Claim 4, was obvious. The district court granted a permanent injunction against Acushnet after denying a motion for judgment as a matter of law on the eight claims held not invalid.

Five issues were addressed on appeal. First, the Federal Circuit rejected Acushnet's claim construction argument that Shore D hardness had to be determined on a flat surface unlike a golf ball, citing portions of the specification of the '293 patent that evidenced testing Shore D hardness on the ball itself and Acushnet's own trial testimony. Second, regarding obviousness, the Federal Circuit affirmed the district court's ruling that a jury could have reasonably concluded that Acushnet failed to prove invalidity due to obviousness, particularly concerning the claimed hardness limitation. Third, the Federal Circuit held that two evidentiary rulings by the district court, one excluding testimony concerning measurements performed on golf balls and the other evidence of parallel inter partes reexamination, were proper as they related to the issue of obviousness. Fourth, the Federal Circuit determined that the jury verdicts with respect to the obviousness of Claim 4 of the '293 patent and non-obviousness of dependent Claim 5 were inconsistent and required a new obviousness trial on those claims. Finally, concerning anticipation, the Federal Circuit held that the '193 patent incorporated the compositions taught by the '637 patent, and thus reversed the district court's granting of summary judgment to Callaway.

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Dissenting from the en banc opinion, Judge Newman argued that the statute’s unambiguous language makes clear the statute applies to all patented inventions, including methods; hence, the majority’s opinion opens a loophole in the statute not intended by Congress.


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Litigation Practice and Procedure: Jurisdiction: Standing
Character of a Patent: Attributes of Ownership: Generally


The Federal Circuit affirmed the district court’s denial of a motion to dismiss for lack of standing, holding that transfers of patent ownership by operation of law may occur without a written agreement. In so holding, the Federal Circuit clarified that the Patent Act requires only that assignments of patents be in writing.

Sky Technologies LLC (“Sky”) sued SAP AG and SAP America, Inc. (“SAP”) for infringement of various U.S. patents. The patents at issue were part of a portfolio of patents obtained by a predecessor company of Orzo, Inc. (“Orzo”), a company founded by Sky’s founder in 1996. Upon obtaining the patents, Orzo executed two IP security agreements. The later of the two agreements was entered into with Cross Atlantic Capital Partners, Inc. (“XACP”). The former agreement was entered into with another bank and later assigned to XACP. Both agreements provided XACP with the right to sell the patent portfolio at a public or private sale and, additionally, the right to purchase the patents at a public sale. In 2003, Orzo defaulted on its loan obligations and, pursuant to the agreements, XACP foreclosed on its security interests at public auction. XACP purchased all of the patents and subsequently assigned the patents to Sky. At no point after the foreclosure, however, did Orzo execute a written agreement assigning its rights in the patents to XACP. In 2006, Sky sued SAP alleging infringement of patents it acquired from XACP.

The U.S. District Court for the Eastern District of Texas denied a motion by SAP to dismiss Sky’s complaint for lack of standing. SAP argued that Sky did not hold legal title to the patents-in-suit because no writing existed transferring title in the patents to XACP. The district court held that, because XACP complied with the relevant Massachusetts Uniform Commercial Code requirements, title was properly transferred to XACP on the date of the foreclosure and, accordingly, Sky was the proper title-holder of the patents. The district court did, however, grant SAP’s motion for certification of question for interlocutory appeal regarding whether “a transfer of title through operation of law without a written assignment may apply in situations that do not involve heirs or probate law.”

Affirming the district court’s ruling, the Federal Circuit held that transfers of patent ownership by operation of law may occur without a writing. In so holding, the court ruled that, although its prior decision to the same effect in Akazawa v. Link New Tech. Infrl, Inc., 520 F.3d 1354 (2008) was directed to the transfer of patent ownership by operation of law to heirs, neither Akazawa nor 35 U.S.C. § 154 restrict transfers of patent ownership by operation of law to a certain class of individuals. The court emphasized that while the Patent Act requires that all assignments of patent interest be in writing, it does not require the same of other means for transferring patent ownership, such as by operation of law. Accordingly, the court noted that 35 U.S.C. § 261 does not preempt Massachusetts state law on the issue as § 261 applies only to assignments of patents. Agreeing with the district court that XACP complied with Massachusetts state law in acquiring the patent rights, the Federal Circuit held that Sky had proper title to the patents-in-suit.

http://www.cafc.uscourts.gov/opinions/08-1606.pdf

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Patentable Invention: Anticipation: Generally

In reversing a finding of anticipation, the Federal Circuit ruled that use of the transition term “comprising” does not render a claim anticipated by a device that contains less (rather than more) than what is claimed, and such finding of anticipation by the Board of Patent Appeals and Interferences (“Board”) cannot be justified under the examination expedient of “giving claims their broadest reasonable interpretation.” The Federal Circuit also reversed the Board’s findings of indefiniteness and lack of written description, ruling the rejections had been improperly applied since the combination of the specification and the figures provided sufficient support for the claim language in a case around the mechanical arts.

Robert Skvorecz is the owner of U.S. Patent No. 5,996,948 (“the ’948 patent”), which is directed to a wire chafing stand. Claim 1 of the ’948 patent recites that “each wire leg has an offset permitting nesting of multiple stands without the stands becoming inseparably wedged.” It also states that the “wire leg” has a displacement of each wire leg. The case was filed around the mechanical arts.

The court noted that Figures 12 and 13, even though only partial figures, sufficiently described the offsets because other figures of various embodiments illustrated the full structure in sufficient detail so that a skilled person in the mechanical arts would understand the specification, including the drawings, as showing the offsets and the lateral displacement of each wire leg. The case was then reversed and remanded for further proceedings.


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Patentable Invention:
Anticipation: Corroboration
The Patent Application:
Specification: Written Description
The Patent Application:
Specification: Enablement Requirement
Claim Interpretation: Generally
Claim Interpretation: Intrinsic Evidence: Specification
Claim Interpretation: Intrinsic Evidence: Prosecution
vided evidence supporting the jury’s conclusions. The Federal Circuit, however, reversed the grant of JMOL that Claims 4 and 5 of the ’567 patent were invalid for lack of enablement holding that Nutrinova failed to present proper evidence that undue experimentation would be required to practice the invention recited in said claims.

The Federal Circuit affirmed the denial of JMOL that the ’281 patent was not infringed, holding that testimony by Martek’s two experts provided proper evidence to support the jury’s conclusions. In so holding, the Federal Circuit rejected Nutrinova’s argument that proving infringement, as a matter of law, required actual comparative testing.

The Federal Circuit affirmed the district court’s exclusion of Nutrinova’s prior inventorship evidence holding that an abandoned patent application by the purported prior inventor was insufficient to corroborate the alleged prior inventor’s testimony. The Federal Circuit also affirmed the claim construction of the term “non-chloride sodium salt” to include NaOH, noting that mixed statements in the prosecution history do not provide the clear and unmistakable disavowal of claim scope required for prosecution disclaimer. The Federal Circuit, however, reversed the district court’s claim construction of the term “animal” in the ’244 patent holding that an express definition of the term in the specification was controlling, even though contrary to the proposed conventional meaning. The case thus was affirmed in part, reversed in part, and remanded for further proceedings.

The dissent disagreed with the decision around the claim term “animal” and argued that the specification, when read as a whole, created a distinction between humans and animals when explaining the acid extraction process from animals for human intake. They thus argued that the claim term should have been read in a manner comporting with the specification as a whole and not simply with a single sentence, even one purporting to be a definition that is inconsistent with the remainder of the specification.


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To: NCBA Intellectual Property Law Section Members
From: Darrell Fruth, Chair, Pro Bono Committee
Re: PRO BONO AWARD NOMINATIONS

Nomination form and additional details regarding the award process can be accessed at http://intellectualpropertylaw.ncbar.org/media/2280597/outstandingachievement-probonoaward.pdf

It’s that time of year again that we ask you to PLEASE take a moment and consider whether you feel that you, or any of your colleagues, or any firm, corporate legal department or other organization are deserving of this year’s Outstanding Achievement Pro Bono Award. The award is given annually by the IP Section of the North Carolina Bar Association to an IP Section member individual and to an organization who devoted considerable and substantive pro bono time and effort during the previous year. If you know of any candidates that may be deserving, please take a few minutes to nominate them now. The deadline for nominations is Friday, March 5, 2010. Please submit all nominations to Lynda B. Imhoff, NC Bar Association, P O Box 3688, Cary, NC 27519-3688; E-mail: limhoff@ncbar.org; fax (919) 677-0761.

The awards will be presented at the Section’s annual meeting on Friday, April 9, 2010 at the Grandover Resort in Greensboro, NC. A commemorative plaque will be given to each winner and a donation in each winner’s name will be made by the IP Section to Legal Services of North Carolina.

Please feel free to submit nominations using any convenient method, generally following the format of the nomination form at the following link:
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Thanks for your time and consideration!
Much of the work of the N.C. Bar Association/Foundation is accomplished through their committees, and it will soon be time to begin the committee appointment process for the 2009-10 FY.

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