From the U.S. Court of Appeals for the Federal Circuit

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The CAFC continues to provide practical guidance to patent practitioners about advisable strategies to use during patent prosecution and litigation.





Recent Patent Prosecution Lessons

Every patent follows a similar path. First, a patent application is drafted. Once drafted, the application is filed and ready for examination. During examination, statements are typically made to examiners, the application may be

amended, and, hopefully, during prosecution these negotiations lead to allowance. Once allowed, the application can issue. Once issued, a patent is effective and ready to be enforced or licensed subject to a number of post-issuance responsibilities by the patentee and other events outside of the patentee's control.

Regarding each above-described stage, the U.S. Court of Appeals for the Federal Circuit (CAFC) has issued opinions providing important lessons to patent prosecutors and litigators. The CAFC continues to provide guidance on avoiding sometimes simple, yet costly, pitfalls during patent drafting, examination, and postissuance, pitfalls that may spell the difference between whether your client can enforce, make, use, or sell its patent.

Stage One: Drafting

Some CAFC decisions have offered important guidance about drafting applications and how to deal with certain important definitions and terms to protect clients and put them in good positions if they become involved in litigation.

Utility Patents and Claim Construction

During the drafting of utility applications, patent prosecutors have at their disposal what is known as the lexicographer rule. This rule offers patent prosecutors the unique opportunity to maximize their ability to control how claims will be construed during examination and litigation. When there are terms of art or generally specialized terms, prosecutors can include special definitions in the specification to control what those terms mean.

Several recent CAFC decisions emphasize the importance of this seemingly simple step. However, including specialized definitions in the specification can make the difference between successful enforcement and a costly drafting omission that

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can prevent allowance or permit would-be infringers to escape without having to pay their penance.

Include Specialized Definitions Where Feasible

In Meadwestvaco Corp., et al. v. Rexam Beauty & Closures, Inc., et al., 2012-1518 (Fed. Cir. Sept. 26, 2013), the plaintiffs

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owned patents in the perfume packaging industry. Meadwestvaco Corp. at 3. Specifically, the plaintiffs had developed a transparent dip tube for their packaging that tended to appear as invisible to a consumer when the tube was inside the fragrance dispenser. In the claims, certain specialized terms were included such as "transparency." The plaintiffs argued for a specialized definition to be applied to the construction of "transparency," maintaining that the term was clearly defined in the specification. Meadwestvaco Corp. at 14. This argument failed, however, because the support referenced by the plaintiffs did not clearly define this term; the cited passage simply referred to a single embodiment of the transparent tube in the packaging while other embodiments were not necessarily limited to the patentee's now asserted definition of "transparency." Meadwestvaco Corp. at 14.

The rub for patent prosecutors is that it is difficult to predict when examination or litigation will require definitions of claim terms. In *Meadwestvaco Corp.*, this would have required the prosecutor to consider including one narrow definition for the term "transparency" as it applied to the overall perfume packaging concept espoused in the application. When such a definition is not readily apparent, one strategy suggested by this decision would have been to define broader terms such as "transparency" while also including specialized definitions about types of transparency for single embodiments (*e.g.*, "substantially transparent" or "high transparency"). That means define a broad term and provide definitions of narrower limitations along with the broad term.

Not including such definitions in the specification unnecessarily risks that a patentee will be unable to control claim construction during examination or litigation. Therefore, many resources will be spent exploring a term's meaning in light of extrinsic evidence because the court's ultimate construction is difficult to predict at best.

In Rambus Inc. v. Rea, 2012-1634 (Fed. Cir. Sept. 24, 2013), the inventor appears to have had a clear understanding regarding the meaning of a specialized term and just how critical it was to include this specialized definition in the specification. In Rambus Inc., the invention at issue related to memory circuits known as dynamic random-access memory. Rambus Inc. at 2. The patent at issue, U.S. Pat. No. 6,260,097 ('097 patent), claimed a dual-edge/doubledata rate system configured to transfer data at twice the rate by using rising and falling edges of a clock signal. At issue was the meaning of the specialized term in the claims, "external clock signal." Rambus *Inc.* at 3.

During examination, the claims were rejected as being anticipated and obvious over two cited references. On appeal, the Patent Trial and Appeal Board upheld the examiner's rejections, finding the term "external clock signal" to mean a clock with a signal that is periodic during data input phases as opposed to being periodic during all system phases as argued by the petitioners. *Rambus Inc.* at 5. The board construed this term based on its plain meaning by concluding that the specification failed to describe clearly or define specifically "external clock signal" as being periodic during all system operations.

What is significant is that the inventor appears to have had a clear definition for the term "external clock signal," a definition the patentee argued was included in the drafted specification. For support, the patentee pointed out that the specification only disclosed "a periodic clock signal" and that art cited during prosecution was overcome by arguing that each reference "did not teach a periodic clock signal." *Rambus Inc.* at 5.

Given that the patentee had contemplated such a narrow definition for the signal to be periodic at all times, and given the arguments that appear in the '097 patent's prosecution history, a special definition should have been included in the specification that limited "external clock signal" as being periodic during all system operations. Since it was not included, the patentee could not control its destiny and was left to the term's plain meaning. As such, the definition that should have been included in the specification was not applied during claim construction, despite the prosecutor's attempts to impose the desired definition during prosecution. This decision further demonstrates how an omission during drafting cannot necessarily be cured during examination with arguments on the record.

Controlling Claim Construction When No Specialized Definition Is Available

Broadcom Corp. v. Emulex Corp., 2012-1309 (Fed. Cir. Oct. 7, 2013), demonstrates a potential strategy to govern claim construction when a specialized definition may not be available. In *Broadcom Corp.*, the defendants were accused of infringing U.S. Pat. No. 7,058,150 ('150 patent), which claimed a digital communication system with data transceivers capable of receiving multiple, analog, high-speed, serial data signals. *Broadcom Corp.* at 2. Whether the defendants had infringed turned on construction of the following clause:

the interpolator control module being adapted to cause the phase interpolator in each receive-lane to rotate the interpolated phase of the sampling signal in the receive-lane *at a rate corresponding to a frequency offset* between the sampling signal and the serial data signal associated with the receive-lane so as to reduce the frequency offset between the sampling signal and the serial data signal

Broadcom Corp. at 10 (emphasis added).

As to whether "corresponding to" was tantamount to "equal to" in terms of the

rate and the frequency offset, the applicant failed to lay out a clear definition of this limitation. However, the specification did describe that "the sampling frequency and serial data signal frequency need to be *related* to one another, but *not necessarily equal* to one another." *Broadcom Corp.* at 11. The applicant also disclosed embodiments in which the rate and the frequency offset were clearly not equal to each other. This disclosure included by the prosecutor ultimately controlled how the claims were constructed during litigation.

Consequently, *Broadcom Corp.* demonstrates an alternative strategy for patent prosecutors to consider when no specialized definition is available or warranted at the time of application drafting. In such a case, prosecutors should be certain to provide alternative embodiments and describe how special terms should function with the surrounding structure so that certain features are not unduly limited to a single embodiment.

Doing so will ensure that resources are conserved since claim construction will be facilitated by intrinsic evidence in the specification. In contrast, *Broadcom Corp.* teaches litigators to mine specifications for multiple embodiments or determine whether specialized terms are fully described in terms of how they function with other features.

To Means-Plus-Function or Not to Means-Plus-Function? That Is the Question

Claims are typically given their broadest reasonable interpretation unless a prosecutor decides to employ means-plus-function claims. When terms such as "means for" or "steps for" are included in a claim, a presumption arises that associated claim breadth will be limited to the structure disclosed in the specification that corresponds to that term. When this presumption arises, adequate structure must be provided or else the claims will not be patentable or may be easily invalidated during litigation. Prosecutors typically proceed with caution when incorporating meansplus-function claims since structure associated with the function of the meansplus-function expression must be included in the specification. If no such structure is disclosed, then patentability will be difficult if not impossible. If a broader claim is

sought, more structure must be included in the specification, which can lead to issues with obviousness by way of disclosing to the examiner how to combine references to achieve the claimed invention.

Tecsec, Inc. v. Int'l. Business Machines Corp., et al., 2012-1415 (Fed. Cir. Oct. 2, 2013), emphasizes just how much caution should be exercised when using meansplus-function language. The plaintiffs filed a lawsuit alleging infringement of several related patents. Claim terms at issue included "digital logic means" and "system memory means." Tecsec, Inc. at 5. The district court presumed these claims as meansplus-function expressions with insufficient associated structure in the specification. Therefore, because the means-plus-function terms lacked associated structure in the specification, infringement could not be proved. Tecsec, Inc. at 18.

But just as a presumption arises, it can be rebutted, and *Tecsec, Inc.* is a good example on how litigators can rebut this presumption. To rebut the presumption it was argued that the asserted meansplus-function expressions "recite[d] sufficient structure to avoid treatment" as means-plus-function since each expression included specific structural features. That means that the specification was not necessary to explore what structure was required to carry out the function of the asserted means-plus-function term. *Tecsec, Inc.* at 19. The CAFC agreed.

Therefore, Tecsec, Inc. teaches that this presumption may be rebutted if sufficient structure is disclosed within the asserted claim term to perform the general function of the presumed means-plus-function expression. Tecsec, Inc. at 21. When avoiding terms that trigger this presumption is not feasible, the prosecutor must be absolutely certain that sufficient structure is disclosed to perform the function of the claim term at issue. Tecsec, Inc. at 20. Note that use of the term "means for" even when rebutted still requires the issue to be litigated, which requires a certain amount of resources. Therefore, if means-plusfunction claims are not desired, prosecutors should avoid using terms that trigger the presumption.

In contrast, if an applicant wishes to use the means-plus-function presumption, *Bennett Marine, Inc. v. Lenco Marin, Inc.*, *et al.*, 2012-1336 (Fed. Cir. Sept. 19, 2013), demonstrates how an accused party can avoid infringement of means-plus-function claims by showing insufficient structure is disclosed for the function of the associated means-plus-function expression. In *Bennett Marine, Inc.*, the claimed invention related to a trim control system in a boat configured to retract trim tabs fully from

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the water when power is removed from the motor. The presumed means-plus-function expression on appeal recited "means coupled to said trimming means and to said engine, and responsive to removal of electrical power from said engine, for automatically moving said trimming means to a predetermined position with respect to said hull upon removal of power at said engine." *Bennett Marine, Inc.* at 9.

After identifying the function of the above limitation, the district court identified the corresponding structure of this expression as a "control circuit and equivalents thereof." *Bennett Marine, Inc.* at 10. The defendants believed that more functions should have been included in the district court's analysis thereby requiring additional structure to be disclosed aside from the single control circuit referenced by the district court. *Bennett Marine, Inc.* at 11.

The CAFC agreed that more functions should have been included in determining the required structure, and by requiring more functions, more structure needed to have been disclosed in the specification. *Bennett Marine Inc.* at 12. Consequently, the structure required in the means-plusfunction expression in the claims now required the control circuit "as well as the actuators and related components necessary" to carry out the revised function of this expression. *Bennett Marine*, *Inc.* at 12.

As such, because the defendants were able to show that more structure was required, the patent at issue was open to the argument that the specification did not disclose adequate structure for the claim's recited function. This is a reminder that

In another case

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using means-plus-function expressions in claims comes with the risk that all necessary structure be disclosed and described in the specification. In *Bennett Marine*, *Inc.*, only one control circuit was described, and this circuit did not contain the additional structure now required. Because the required structure was not described in the specification, no infringement was found.

One takeaway from these two decisions is that practitioners must be particularly careful when invoking the presumption of means-plus-function terms in claims. Even though the presumption is rebuttable by inclusion of structural components in the asserted expression, prosecutors should consider using alternative language to avoid expelling the many resources required to resolve the issue later on. To that end, when means-plus-function expressions are purposefully included, Bennett Marine, Inc. makes clear that all functions must be carefully considered during drafting so that adequate structure is described in the specification to the extent that arguments

regarding additional function or lack of disclosed structure can be avoided during litigation.

Design Patents

One consequence of the recent Apple and Samsung patent battles is that they have drawn attention to how valuable design patents can be in a patent portfolio. Design patents confer protection over the ornamental features of an article as opposed to the functional aspects that otherwise are protectable through utility patents. However, demarcating what is functional and ornamental is not always clear, and *High Point Design, LLC v. Meijer, Inc., et al.,* 2012-1455 (Fed. Cir. Sept. 11, 2013), provided important insight for understanding whether their designs are eligible for patent protection.

In *Meijer, Inc.*, the district court found the claimed design invalid because the design at issue—slippers – contained elements that performed functions since the slippers contained seams to connect material, curved portions to cover the foot, an opening for entry of a foot, and fleece for warming the foot, among other limitations.

In *Meijer, Inc.*, the CAFC reversed, taking the opportunity to further expound on the distinction between primarily functional designs versus primarily ornamental designs. *Meijer, Inc.* at 20. Specifically, this analysis must focus on the distinction that "exists between the functionality of an article or features thereof and the functionality of the particular design of such article or features thereof that perform a function." *Meijer, Inc.* at 21.

If this were not the case and if a design was rendered ineligible because certain design features carried out a function, it would essentially be impossible to obtain design protection on anything with utility. *Meijer, Inc.* at 21. Consequently, the analysis must focus on overall functionality of the design as opposed to the article's function itself or the individual features recited in it. *Meijer, Inc.* at 21.

Seemingly simple on its face, the defendants in *Meijer*, *Inc.* could have saved much time and resources if they had paid more attention to this important nuance: Slippers can still be worn and be eligible for design protection to the extent that the design itself is primarily ornamental, as opposed to the article on which the design is found.

Stage Two: Prosecution

During prosecution, arguments posed by prosecutors can have an enormous effect on the subsequently issued patents. Applications are often rejected during examination as being obvious with little or no objective evidence about why cited references would be combined. Another central issue in *Rambus Inc.*, discussed above, underscores how important arguments made during examination with regard to objective evidence of nonobviousness can be later in appeals or litigation. *Rambus Inc.* at 13.

In *Rambus Inc.*, when the applicant supplied arguments in response to obviousness focusing on objective evidence, the CAFC concluded that someone must consider factors such as long-felt need or industry praise despite an apparent lack of a nexus between the objective evidence and the claimed features. *Rambus Inc.* at 13. As such, "objective evidence of nonobviousness need only be reasonably commensurate with the scope of the claims," which means that applicants are not required to "produce objective evidence of nonobviousness for every potential embodiment of the claim." *Rambus Inc.* at 14.

This holding is significant for prosecutors and litigators since it confirms that arguments regarding obviousness do not necessarily require a nexus to the features of the claimed invention. Instead, arguments can be persuasive if they simply relate to the claimed invention as a whole in comparison to the functionality of the prior art. *Rambus Inc.* at 15.

Stage Three: Post-Issuance Obligations

The CAFC recently issued decisions that also highlight how it interprets inequitable conduct, maintenance fee obligations, and the obligation to cure declaration misstatements.

Inequitable Conduct and Maintenance Fees

Upon issuance, a utility patent in the United States must be maintained by paying maintenance fees. In *Network Signatures, Inc. v. State Farm Mutual Automobile Insurance Co.*, 2012-1492, (Fed. Cir. Sept. 24, 2013), at issue was whether the patentee's intentional decision to allow U.S. Pat. No. 5,511,122 (the '122 patent), to lapse and shortly afterward petition for it to be reinstated was tantamount to inequitable conduct. At the time of lapse, it was the patentee's policy to maintain only those patents that received "an expression of interest." *Network Signatures, Inc.* at 3. If no such interest was known, the patentee allowed the patents to go abandoned by nonpayment. *Network Signatures, Inc.* at 3.

Using the knowledge available at the time of lapse and understanding that no "expression of interest" had been communicated to the patentee regarding the '122 patent, the patentee did not pay the sevenand-a-half-year maintenance fee thereby causing the '122 patent to lapse. Two weeks later, an interested licensee finally reached the patentee regarding potential licensing and indicated that it had attempted to reach the patentee via e-mail and telephone several times through the patentee's technology transfer office before the maintenance fee deadline. However, for reasons unknown, those messages had not been relayed to the handling attorney. That same day, the handling attorney petitioned to reinstate the '122 patent. The U.S. Patent and Trademark Office (USPTO) granted the petition, and the '122 patent was revived and thus available to license.

When the defendant in *Network Signatures* was later sued for patent infringement, the defendant asserted that the '122 patent was invalid as a result of inequitable conduct, alleging that the patentee falsely represented to the USPTO that nonpayment of the maintenance fee was unintentional. *Network Signatures, Inc.* at 2. The district court agreed with the defendant.

The CAFC reversed because reinstatement of patents due to late payment of maintenance fees is permissible by statute at the discretion of the USPTO director. The USPTO provides a standard form for reinstatement specifically for those situations involving unintentional fee payment delays. *Network Signatures, Inc.* at 7. The form does not require details explaining why a maintenance fee payment was unintentionally delayed. A patentee can file a petition and pay the fee when a delay was actually unintentional.

According to the patentee's policy at the time of the lapse in Network Signatures, Inc., if the patentee had known of the interest before the lapse, it would have maintained it. The communications that pre-dated the lapse and that the patentee acted immediately after learning of the interest in the '122 patent offer further evidence to support this. Network Signatures, Inc. at 7. Because the USPTO does not require statements or details for nonpayment on its petition form and because the patentee acted promptly upon receipt of the information regarding interest in the '122 patent, the CAFC concluded that no inequitable conduct occurred.

Practitioners should understand just how broadly "unintentional" can be interpreted before defending on the grounds of inequitable conduct. Petitions to revive do not require statements explaining why unintentional delays occurred, and this decision makes clear just how much deference the courts will give to the USPTO director granting these petitions.

Inequitable Conduct and Curing Prosecution Defects Without Obscuring the Truth

In another case involving inequitable conduct regarding post-issuance conduct, Intellect Wireless, Inc. v. HTC Corp., et al., 2012-1658 (Fed. Cir. Oct. 9, 2013), the CAFC addressed the obligation to cure defects that occur during prosecution after a patent has issued. In this patent infringement lawsuit, the defendants argued that the patents at issue were invalid because of false statements submitted by the inventor during prosecution that were not cured. Before the America Invents Act patent law overhaul, if a reference was cited during examination, the applicant could swear behind the reference under 37 C.F.R. §1.131 to evidence reduction to practice prior to the cited reference.

During prosecution of the patents at issue in *HTC Corp.*, the inventor did just this and submitted a declaration stating that the invention had been reduced to practice prior to the cited reference. *HTC Corp.* at 4. However, the inventor had not actually reduced the invention to practice by the date that he alleged. The plaintiffs alleged that the inventor's misstatements, however, had been cured under a theory of "constructive reduction to practice" that was effective prior to the priority date of the cited reference. The plaintiffs argued that they accomplished this by submitting a second declaration in place of the defective original declaration.

This argument may have worked if not for the fact that "the original declaration was unmistakably false." *HTC Corp.* at

While a practitioner may not be able to control the veracity of what an inventor says in a declaration on the record, once misstatements come to light, in such a case a practitioner has an obligation to cure the misstatements. Electing to ignore this obligation can result in the loss of otherwise valuable intellectual property.

5. As such, the handling attorney had an obligation to cure the inventor's misstatements by expressly advising the USPTO of the misrepresentation's "existence, stating specifically where it resides." *HTC Corp.* at 5 (citing *Rohm & Haas Co. v. Crystal Chem. Co.*, 722 F.2d 1556, 1572 (Fed. Cir. 1983)).

The CAFC concluded that this obligation was not satisfied in the second declaration since the misstatements were not clearly pointed out to the USPTO. Instead, additional facts were included, such as prototypes displayed at a museum that were allegedly developed during certain time periods going back to the original invention date; product brochures about this; **Patents**, continued on page 87

Patents, from page 75

packing receipts; and evidence of commercialization that in totality suggested that the invention had been reduced to practice by the originally specified date. *HTC Corp.* at 6. The declaration, however, never stated the simple facts that the invention had never been reduced to practice. Moreover, there was no express indication that the first declaration was materially false as was legally required. *HTC Corp.* at 6.

This led the CAFC to conclude that the applicants and later patentees specifically intended to obscure the truth that the invention had never been reduced to practice. Accordingly, this "pattern of deceit" rendered the patents at issue "unenforceable due to inequitable conduct." *HTC Corp.* at 11.

While a practitioner may not be able to control the veracity of what an inventor says in a declaration on the record, once misstatements come to light, in such a case a practitioner has an obligation to cure the misstatements. Electing to ignore this obligation can result in the loss of otherwise valuable intellectual property. To cure misstatements on the record, such as the declaration in *HTC Corp.*, practitioners must be sure to clearly inform the USPTO what was misstated and do so with diligence, paying close attention to not obfuscate the truth. *HTC Corp.* at 6.

Simply put, ethical obligations during prosecution and post-issuance are serious. If a misstatement or other material defect is discovered in a client's patent, the practitioner representing the client must take steps to cure them diligently. This information must be expressed unambiguously to the satisfaction of the USPTO. Not doing so will risk invalidating a client's patent, expending resources hopelessly defending the patent, and the practitioner losing his or her license to practice.

Conclusion

As the decisions discussed here indicate, the CAFC continues to provide practical lessons to patent practitioners about advisable strategies to use during patent prosecution and litigation. This guidance emphasizes strategies that will maximize efficiency and quality during the representation of a client's patent estate and yield the favorable results that a client demands. This guidance also permits practitioners to develop approaches on how best to resolve common ethical quandaries before they arise. Practitioners also have to continue to monitor the CAFC for more decisions that shed light on these topics so that they can continue to represent their clients' patent interests zealously.