Portfolio Media. Inc. | 860 Broadway, 6th Floor | New York, NY 10003 | www.law360.com
Phone: +1 646 783 7100 | Fax: +1 646 783 7161 | customerservice@law360.com

How PTAB Is Addressing 'Inherent Anticipation'

Clinton Brannon

Law360, New York (February 11, 2015, 10:13 AM ET) -- For decades, parties accused of patent infringement in district court litigation have relied upon the doctrine of inherent anticipation to attack the validity of patent claims. Generally, such inherency arguments are supported by testimony from an expert witness. Because America Invents Act reviews before the U.S. Patent and Trademark Office's Patent Trial and Appeal Board allow parties to submit expert testimony and take limited depositions of fact witnesses, it is now possible for patent challengers in the PTO to develop inherency arguments to a greater extent than was practical under the prior inter partes re-examination framework. Likewise, the ability of patent owners to take depositions of expert witnesses in these new proceedings makes it possible for patent owners to more fully probe the underpinnings of any inherency arguments that are advanced against them. This article provides a brief overview of the law of inherent anticipation, and reviews how the PTAB has applied that doctrine in AIA proceedings to date.

As a general matter, anticipation of a patent claim requires that "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."[1] Thus, even if a claim element is not explicitly described in a prior art reference, that reference may still inherently disclose the element if it "make[s] clear that the missing descriptive matter is necessarily present in the thing described in the reference."[2]

However, a finding of inherent anticipation requires more than "probabilities or possibilities."[3] In other words, "[t]he mere fact that a certain thing may result from a given set of circumstances is not sufficient to establish inherency."[4]

Decisions Where the PTAB Found Inherent Anticipation

Although AIA proceedings are still relatively new, the board has addressed the issue of inherent anticipation several times. For example, the challenged patent in Sony Corporation v. Yissum Research Development Company Of The Hebrew University Of Jerusalem, IPR2013-00219, Paper 16 (Sept. 22, 2014) related to the field of recording and generating images.[5] The petitioner asserted that although the prior art patent did not expressly disclose the use of a processor (as required by claim 1), it must necessarily use (and therefore inherently disclose) a processor to generate the mosaics described therein.[6] The patent owner, on the other hand, argued that the reference failed to disclose or suggest "a processor [to] generate a plurality of mosaics … [that] provide a sense of depth of the scene," because the situations described in the reference were inapplicable to the patent-

at-issue.[7]

The PTAB agreed with the petitioner that a processor was inherently disclosed because "digital image data corresponding to each video frame [was] captured by a 320x240 pixel imager and digital processing steps including "template matching" [were] performed on the image data as part of the procedure for determining slit widths," steps that would require the use of a processor.[8] Accordingly, the PTAB found the challenged claim to be anticipated.[9]

Micron Technology Inc. v. The Board of Trustees of the University of Illinois, IPR2013-00006, Paper 48 (March 10, 2014) related to semiconductors and integrated circuit fabrication techniques.[10] The PTAB concluded that a prior art reference expressly disclosed a metal oxide semiconductor field effect transistor, or MOSFET.[11] It did not, however, expressly disclose all of the sub-structures of the MOSFET as recited in a challenged claim.[12] The Petitioner asserted that the missing limitations were necessarily present because all of the substructures are inherent to a MOSFET.[13] The petitioner supported that position with an expert's declaration that "all MOSFETs have a gate insulating layer interposed between a semiconductor substrate, typically silicon, and a gate electrode" and "[t]hese elements set forth above are necessarily present in a MOSFET such that the disclosure or discussion of a MOSFET in a reference would include the disclosure of each of its attendant elements."[14]

Importantly, the patent owner did not dispute whether the reference disclosed the limitation but that its application was limited and not applicable to the challenged limitation.[15] The patent owner supported its conclusion by citing to the cross-examination of the petitioner's expert.[16] Nevertheless, the PTAB disagreed with the patent owner's interpretation and found the petitioner's testimony was persuasive, holding that the limitation was necessarily present and that the challenged claims were anticipated by the prior art reference.[17]

In a case also involving electrical hardware, Motorola Solutions Inc. v. Mobile Scanning Technologies, IPR2013-00093, Paper 61 (April 24, 2014) the challenged patent concerned an adapter electrically coupled to a personal data assistant.[18] The adapter included a laser or other light source which emanates a light beam that can be modulated into a digital signal to download information to a PDA equipped with a photo detector or used as a presentation pointer.[19] The adapter also included a photo detector positioned so that light from the laser can be reflected from a bar code, received by the photo detector, and converted to a digital signal which is then forwarded to the PDA.[20]

One of the challenged claims was drawn to a PDA comprising a single embedded PDA design in which the PDA, and therefore its functionality, was conventional.[21] In respect to that claim, the Petitioner contended that the analog-to-digital converter and photo detector limitations, as recited in claim elements (d) and (e), were necessarily present in the prior art.[22] In support, the Petitioner cited to the expert's declaration as evidence that these components are necessary for the scanner to operate and are inherent in the prior art's disclosure of a bar code scanner connected to a microprocessor.[23] Notably, the patent owner response did not dispute any of these findings.[24] Thus the PTAB, finding no evidence to the contrary, agreed with the petitioner and determined that the prior art reference inherently disclosed an analog-to-digital converter electrically coupled to a photo-detector.[25]

The patent at issue in Athena Automation Ltd., v. Husky Injection Molding Systems Ltd., IPR2013-00290, Paper 45 (Oct. 23, 2014) related to injection molding machines.[26] The mold cavity of the machines was created by two halves of a mold, each mounted on a platen, closed against each other.[27] Once closed, the mold was held in that position by a clamp assembly, and the two platens were secured by a locking mechanism.[28] The petitioner, citing to an expert declaration, stated that some of the characteristics of the challenged claims, including a "relatively higher flex zone" and a "relatively lower flex

zone," were inherently disclosed in the prior art, and the patent owner argued to the contrary.[29]

The PTAB adopted the position advocated by the patent owner's expert that "a generally flat platen such as the platen 16 disclosed in [the reference] inherently experiences a non-uniform distribution of flex in zones adjacent to an affixed tie rod in response to a clamping force applied to the platen, with the highest flex zone being in the region of the platen's corners" and "the portion of the platen 16 adjacent the tie rod 22 and farthest from the center of the platen 16 ... exhibits the highest flex and therefore can be considered a 'relatively higher flex zone'"[30] The PTAB also adopted the petitioner's conclusions in regard to the "relatively lower flex zone" limitation, holding that claim 1 was anticipated by the reference.[31]

The challenged patent in Ricoh Americas Corporation and Xerox Corporation v. MPHJ Technology Investments LLC, IPR2013-00302, Paper 52 (Nov. 19, 2014) described a Virtual Copier (VC) system that enables a user to scan paper from a first device and copy an electronic version of it to another remote device, or integrate that electronic version with a computer application in the network.[32] Claim 7 recited that "the server module includes at least one server module application programmer interface," the petitioner, supported by expert testimony, argued that at least one application programmer interface (API) is necessarily present in the prior art reference.[33] Specifically, the petitioner's expert opined that "numerous application programming interfaces exist between the programs illustrated [in] FIG 2-4."[34]

The patent owner's expert responded with a general statement that "API's are not 'inherent' in software."[35] The PTAB was not persuaded by the patent owner's statement. It considered the record of the case, the specification of the challenged patent, and the trade dictionary's definition of API, and ruled that the reference anticipated the limitation because, as stated by the petitioner's expert, "application programming interfaces are necessary in order to link the various programs, layers, etc. so that they may interact as described throughout the XNS disclosure."[36]

The patent at issue in Ariosa Diagnostics v. Isis Innovation Ltd., IPR2012-00022, Paper 166 (Sept. 2, 2014) was directed to "prenatal detection methods using non-invasive techniques," and, in particular, "to prenatal diagnosis by detecting foetal nucleic acids in serum or plasma from a maternal blood sample."[37] One aspect of that patent was to "provide[] a detection method performed on a maternal serum or plasma sample from a pregnant female, which method comprises detecting the presence of nucleic acid of foetal origin in the sample."[38] The petitioner asserted that some of the characteristics of the challenged claims were inherently disclosed in the asserted prior art.[39] Particularly, that the prior art reference "inherently detected paternally inherited nucleic acid of fetal origin."[40] The petitioner supported its assertion with expert witness testimony, including a declaration of the prior art inventor, as well as declarations regarding the reliability of the tests performed by the prior art inventor.[41]

The patent owner, on the other hand, asserted that the prior art reference did not provide sufficient detail as to how to perform the experiments described therein, and that any data obtained from such experiments would be of poor quality.[42] Specifically, the patent owner asserted that because the likelihood of experimental errors in some or all the results reported by the reference was high, under the law of inherency, the reference cannot anticipate the claimed method.[43] Citing to the Federal Circuit's decision in SmithKline Beecham Corp. v. Apotex Corp., 403 F.3d 1331 (Fed. Cir 2005), the PTAB rejected that argument and stated that the focus should remain on the "natural result flowing from the operation as taught [in the prior art]."[44] Applying that test, the PTAB ultimately found that the prior art reference inherently and necessarily detected paternally inherited nucleic acid of fetal origin and exact duplication of the experiments in the prior art reference is irrelevant to the analysis.[45]

The challenged patent, in Cyanotech Corporation v. The Board Of Trustees Of The University Of Illinois, IPR2013-00401, Paper 65 (Dec. 12, 2014) related to methods of treating diseases and injuries to the central nervous system, especially the eyes, comprising administering a therapeutically effective amount of the medication astaxanthin.[46] The patent at issue further taught that astaxanthin is a highly effective antioxidant and ameliorates free radical induced eye damage.[47] The challenged claims were directed to a method of administering a therapeutically effective amount of astaxanthin to improve the vision of an individual suffering from retinal damage or retinal disease.[48]

The petitioner asserted that the prior art reference's disclosure of the administration of dietary astaxanthin to cure xerophthalmia ("dry eye") in vitamin A deficient rats anticipated the challenged claims.[49] The petitioner conceded, however, that the reference did not discuss whether vitamin A deficient rats exhibit retinal damage but nevertheless argued that the animals developing xerophthalmia due to vitamin A deficiency inherently suffered from retinal damage.[50] To support that position, the petitioner's expert opined that severe vitamin A deficiency causes degeneration in the retina that precedes dry eye and that the administration of astaxanthin, as described in the reference, necessarily treats retinal damage, because astaxanthin is converted in rat retina into vitamin A, which is then used to reconstruct the retina.[51]

The patent owner responded that the tests performed on albino rats, as taught in the reference, were unreliable.[52] In drawing that conclusion, however, the patent owner did not perform any other tests or evidence. Thus, the PTAB agreed with the petitioner's finding that "retinal damage is inherent to the condition of vitamin A deficiency-induced xerophthalmia."[53]

Decisions Where the PTAB Did Not Find Inherent Anticipation

The PTAB has also rejected arguments of inherent anticipation in certain cases. For example, the patent at issue in ZTE Corp. v. ContentGuard Holdings, Inc., IPR2013-00137, Paper 58 (July 1, 2014) related to distribution and usage rights enforcement for digitally encoded works and, more specifically, attaching usage rights to digital works by placing elements in repositories.[54] The petitioner argued that the prior art's disclosure of procedures to interrogate the right of access associated with a software program would necessarily include a digital certificate that authenticates the source of the software.[55] In other words, that the disclosed procedures ensure that digital works stored on database service center 1 are authorized before such software is loaded remotely onto microcomputer 2.[56] The PTAB held that although the prior art reference's procedures could allow usage of a digital certificate to authenticate the source of the software, mere probabilities or possibilities fall short of demonstrating that those procedures necessarily require using a digital certificate, and thus found it did not anticipate.[57]

The patent-at-issue in Avaya Inc., Dell Inc., Sony Corporation Of America, and Hewlett-Packard Co. v. Network-1 Security Solutions Inc., IPR2013-00071, Paper103 (May 22, 2014) was directed to "the powering of 10/100 Ethernet compatible equipment," specifically "automatically determining if remote equipment is capable of remote power feed and if it is determined that the remote equipment is able to accept power remotely then to provide power in a reliable non-intrusive way."[58]

The petitioner asserted that that the current generated from low voltage V2 (-48 V), as described in the prior art reference, corresponds to a "low level current" limitation, as recited in the challenged claim.[59] The PTAB construed that claim to mean a current (e.g., approximately 20 mA) that is sufficiently low that, by itself, it will not operate the access device.[60] The PTAB concluded that the Petitioner's prior art reference did not inherently disclose the "low level current" limitation because the reference never disclosed the specific amount of current that is generated nor whether the amount of current is sufficient or

insufficient for the device to operate.[61] The PTAB thus once again reaffirmed its position that mere probabilities or possibilities fall short of demonstrating anticipation by inherency.[62]

Conclusions and Recommendations

As the above discussion illustrates, the PTAB is willing to thoroughly consider and evaluate inherent anticipation arguments and counterarguments. Moreover, it is clear that the PTAB will review and pay special attention to expert testimony and declarations related to the issue of whether an alleged inherent claim limitation is "necessarily present," or instead merely a "possibility." Accordingly, petitioners seeking to prove inherent anticipation may find it effective to focus their efforts on developing expert testimony (and where appropriate supporting testing and experiments) that demonstrate that the alleged inherent feature is in fact present under all reasonable conditions.

Conversely, patent owners will want to show that the alleged inherent feature is only a mere possibility by proving with expert testimony and/or experiments and testing that it would be possible for the prior art to have a different structure and/or function than that advanced by the petitioner. Patent owners will also want to closely question the petitioner's expert witness regarding any assumptions in his or her analysis, as well as all conditions and parameters utilized for any testing or experiments.

In sum, AIA proceedings provide the mechanisms necessary for parties to argue for or against inherent anticipation far more effectively than under the prior inter partes re-examination regime.

—By Clinton H. Brannon and Michael Baumert, Mayer Brown LLP

Clinton Brannon is a partner and Michael Baumert is an associate in Mayer Brown's Washington, D.C., office.

[1] Verdegaal Bros. Inc. v. Union Oil Co. of Cal., 814 F.2d 628, 631 (Fed. Cir. 1987).

[2] Cont'l Can Co. USA v. Monsanto Co., 948 F.2d 1264, 1268 (Fed. Cir. 1991); Schering Corp. v. Geneva Pharms., Inc., 339 F.3d 1373, 1379 (Fed. Cir. 2003).

[3] Motorola Mobility LLC v. Int'l Trade Comm'n, 737 F.3d 1345, 1350 (Fed. Cir. 2013).

[4] In re Rijckaert, 9 F.3d 1531, 1534 (Fed. Cir. 1993).

[5] Final Dec. at 3.

[6] Id. at 16.

[7] Id. at 17.

[8] Id. at 16-17.

[9] Id. at 21.

[10] Final Dec. at 4.

[11] Id. at 13.

[12] Id.

[13] Id.

[14] Id. at 13-14.

[15] Id.

[16] Id. at 14-15.

[17] Id. at 14-17.

[18] Final Dec. at 2-3.

[19] Id. at 3.

[20] Id.

[21] Dec. to Institute at 23.

[22] Id. at 25.

[23] Id.

[24] Final Dec. at 10.

[25] Id. at 10-11.

[26] Final Dec. at 3.

[27] Id.

[28] Id.

[29] Id. at 21, 38, 41.

[30] Id. at 39, 41.

[31] Id. at 41.

[32] Final Dec. at 3.

[33] Id. at 46.

[34] Id.

[35] Id. 47.

[36] Id. 46-47.

[37] Final Dec. at 3-4.

[38] Id. at 4.

[39] Id. at 29.

[40] Id.

[41] Id. at 29-31.

[42] Id. at 32.

[43] Id. at 32-33.

[44] Id. at 33.

[45] Id. at 33, 36-37.

[46] Final Dec. at 3-4.

[47] Id. at 4.

[48] Id. at 11.

[49] Id.

[50] Id. at 12.

[51] Id.

[52] Id.

[53] Id. at 13-14.

[54] Final Dec. at 3-4.

[55] Id. at 24-25.

[56] Id. at 25.

[57] Id. at 26.

[58] Final Dec. at 4.

[59] Id. at 12-14.

[60] Id. at 16.

[61] Id.

[62] Id. at 21.