Via Electronic Mail PTABNPR2018@uspto.gov

Attention: Director Andrei Iancu Undersecretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office

Micron Technology, Inc. comments regarding "Changes to the Claim Construction Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board," 83 Fed. Reg. 21221 (May 9, 2018)

Micron Technology, Inc. ("Micron") thanks the United States Patent and Trademark Office ("Office") for the opportunity to offer comments on the Proposed Rulemaking for the Changes to the *Claim Construction Standard for Interpreting Claims in Trial Proceedings before the Patent Trial and Appeal Board*, published in the Federal Register on May 9, 2018.

Micron is a world leader in innovative memory solutions that transform how the world uses information. Based in Boise, Idaho, with more than 31,000 employees, for more than 40 years, Micron's memory solutions have enabled the world's most innovative computing, consumer, enterprise storage, data center, mobile, embedded and automotive applications. Today, Micron is the only company in the world that manufactures every major memory and storage technology: DRAM, NAND, NOR, and 3D XPointTM memory.

Micron has been involved in 61 *inter partes* reviews as the petitioner. On the whole, Micron's experience before the PTAB confirms that Congress's intent is being met. Post-grant review procedures have served as an adequate alternative for expensive, protracted litigation on invalid patent claims.

Micron is concerned about recent negative characterizations of the present post-grant review system. The reforms and procedures of the Leahy-Smith America Invents Act (AIA), as carefully and thoughtfully implemented by the Office, are serving to significantly improve patent quality and consistency, while strengthening protections and certainty of the patent grant for *meaningful* innovations. The Office is to be commended for the successful implementation of post-grant proceedings.

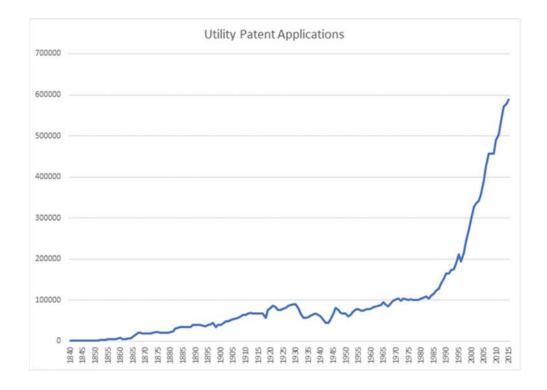
Micron therefore respectfully submits that the Proposed Rule to change claim construction standards is a solution in search of a problem. As envisioned and intended by Congress, post-grant proceedings have contributed to "a patent system that produces high quality patents, that limits counterproductive litigation over those patents, and that makes the entire system more streamlined and efficient." 157 Cong. Rec. S1348-S1352 (March 8, 2011) (Statement of Sen. Patrick Leahy). In particular, the *inter partes* review process has provided stability to the patent system by curbing abusive litigation and creating a more predictable environment for U.S. job creators. There is no justification for upending more than a century of

use by the Office of the broadest reasonable interpretation standard, recently ratified by both the U.S. Court of Appeals for the Federal Circuit and the Supreme Court. Micron opposes the proposed change in claim construction standard for post-grant proceedings.

The following comments are divided into three parts. The first part challenges criticisms directed toward the Office and the United States patent system as a whole, providing empirical data illustrating the role of the AIA post-grant review system in increasing patent quality and ensuring innovation investment. The second part explores the legal foundations, long history, and ratification by the Supreme Court of the broadest reasonable interpretation standard in post-grant proceedings, including the relationship between amendments, parallel proceedings, and the broadest reasonable interpretation standard. The third part explores the concept of conflict and uniformity in the patent system, including the division between the Office's role in ensuring intra-agency uniformity and the Federal Circuit's role in regulating intra-fora uniformity. The use of the broadest reasonable construction standard by the Office reduces complexity and conflict, and should be maintained.

I. IPRs Improve Patent Quality and Support Innovation

As demonstrated by the graph below, the number of U.S. patent filings has risen meteorically in the last forty years. While some of this dramatic increase is tied to real growth in innovation, some of the increase in patenting is—without question—due to the kind of dysfunctional and low-quality patents frequently skewered in the press.



These low-quality patents have real economic consequences. Once a low quality patent is granted, it does not sit idle in the system; broad or vague or non-novel claims are asserted against productive, practicing businesses. *Compare* U.S. Pat. No. 6,738,155 *with Eastman Kodak Co. v. CTP Innovations, LLC*, IPR2014-00788, Final Written Decision on Rehearing, Paper No. 44 (P.T.A.B. Jan. 13, 2017) (holding unpatentable a number of claims of U.S. Pat. No. 6,738,155, which was asserted in 89 litigations according to statistics as of June 1, 2018 from Lex Machina). Wasteful litigation means fewer resources available for research and development of new products and services.

It is not surprising, then, that corresponding to the increase in patent grant rates, the rate of litigation over patents also ballooned. Between 1990 and 2000, the number of patent cases roughly doubled. With the increase in the number of patents and the rise in litigation, the patent system transformed "from a shield that innovators could use to protect themselves, to a grenade that firms lob indiscriminately at their competitors, thereby increasing the cost and risk of innovation rather than decreasing it." Adam B. Jaffe & Josh Lerner, *Innovation and Its Discontents*, 6 Innovation Policy and the Economy 27, 28 (2006).

It was against this backdrop that Congress passed the America Invents Act. The *inter* partes review process in particular was designed as a way to improve the quality of patents and to curb the costs and abuses of litigation—in the process, promoting meaningful innovation and strengthening high quality patents. The *inter partes* review process allows the Office to reexamine the fractional percentage of overly broad, poor-quality patents that should not have been granted in the first place. Empirical data supports the contribution to patent quality made by *inter partes* review. See Love, at al., Determinants of Patent Quality: Evidence from Inter Partes Review Proceedings, U. Colo. L. Rev. 79 (forthcoming 2018) (available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3119871) (Feb. 7, 2018) ("Last, but not least, we believe that our findings tend to suggest that inter partes review is working as intended to eliminate low quality patents. Despite years of criticism from many in the patent bench and bar, we find that the patents flagged as problematic by the PTAB largely bear the traditional hallmarks of low quality identified by conventional wisdom and prior academic research.").

For example, inventors and innovative companies continue to invest in patenting at record levels. Since the enactment of the America Invents Act, patent application filings, patent grants, and research and development spending each continue to increase. Over the same period, the United States climbed from 10th to 4th in the rankings of the Global Innovation Index, which measures the innovation performance of 127 countries. *See* The Global Innovation Index 2011-2017 Reports (*available at* https://www.globalinnovationindex.org/aboutgii#framework). The United States ranks first as the overall most innovative nation in the U.S. Chamber's International IP Index. *See* "Create," U.S. Chamber International IP Index, February 2018 (*available at* https://www.uschamber.com/sites/default/files/023331_gipc_ip_index_2018_opt. pdf). Suggestion that the United States patent system is spiraling into decline is simply not supported by the evidence of the thriving innovation economy.

¹ This U.S. Chamber of Commerce ranking undermines its recent downgrades of the U.S. patent system.

From 2012 to 2016, patent application filings rose by 15%. In 2017 alone, more than 604,000 patent applications were filed. *See* U.S. Patent and Trademark Office, Performance and Accountability Report for Fiscal Year 2017, 168, (*available at* https://www.uspto.gov/sites/default/files/documents/USPTOFY17PAR.pdf). That same year, more than 340,000 utility patents were issued—the highest number ever.

Likewise, research and development spending in the United States has also risen significantly since enactment of the America Invents Act in 2012. The fifty U.S. companies with the highest R&D spends—which includes Micron and leading companies in high tech, pharmaceutical, automobile, and aerospace industries—collectively invested more than \$456.8 billion in R&D in FY 2017—a fifty-percent increase from 2012 levels. *See* PwC Global Innovation 1000 Methodology (*available at* https://www.strategyand.pwc.com/innovation1000#Methodology).

In sum, the empirical data from 2012-2017—overlapping with the existence of post-grant review proceedings—clearly contradicts any claim that patent reform or the availability of post-grant proceedings harms innovation. This is not surprising when the impact of post-grant review is considered system wide. Today, roughly 2.8 million patents are in force in the United States. See World Intellectual Property Indicators 2017 at 38. As of 2017, a fractional percentage of those 2.8 million patents—2,532 to be exact—were the subject of an institution decision in an inter partes review. See Love, at al., Determinants of Patent Quality: Evidence from Inter Partes Review Proceedings, U. Colo. L. Rev. (forthcoming 2018) (available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3119871) (Feb. 7, 2018). Of those patents, only 1,680 were instituted and subject to full review. In other words, inter partes review affects less than one tenth of one percent of all enforceable patents in the United States.

That is not to say that the post-grant system is not important or impactful in terms of supporting innovation. *Inter partes* review, as currently implemented and operating, is not a death squad or innovation killer, despite hyperbolic and frequent criticism. Empirical data unequivocally establishes that the Office successfully executed the mission of *inter partes* review by improving patent quality and eliminating wasteful litigation. The purpose of the patent grant, as enshrined in the Constitution, is to "promote the progress of [the] *useful* arts." U.S. Const. art. 1, § 8, cl. 8 (emphasis added). By that metric, the United States patent system continues to thrive.

II. The Broadest Reasonable Interpretation Claim Construction Standard is the Correct Standard as a Matter of Law and Agency Practice

While *inter partes* review has been described as a "surrogate" for litigation of invalidity challenges in the district court, it is clear that *inter partes* review is neither wholly adjudicatory nor wholly examinational. In implementing the AIA, the Office determined that "inter partes review of an unexpired patent is more closely analogous to initial examination than to infringement litigation." Brief of Respondent Michelle K. Lee at 14 n.3, *Cuozzo v. Lee*, 579 U.S.

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--- (2016). The Office thus adopted, defended, and successfully litigated the broadest reasonable interpretation standard for claim construction in *inter partes* review. No change in the law or regulation supports the sharp and unprecedented departure from the historical application—and recent Supreme Court ratification—of the broadest reasonable interpretation claim construction standard.

The use of the broadest reasonable interpretation standard is sound as a matter of law and agency practice. Less than two years ago, the Office represented to the Supreme Court that the broadest reasonable interpretation standard encourages additional clarity when claims are subject to amendment:

[T]he standard's applicability does not turn on whether a proceeding is adversarial, but on whether the language of the patent claim is still subject to amendment. The standard serves the same important functions in the post-issuance review context that it does in other PTO proceedings, and for the same fundamental reasons: because the statute contemplates the possibility of claim amendments to clarify the scope of the patent owner's exclusive rights, and because encouraging additional clarity is in the public interest. *See Yamamoto*, 740 F.2d at 1572 ("An applicant's ability to amend his claims to avoid cited prior art distinguishes proceedings before the PTO from proceedings in federal district courts on issued patents.").

Id. at 12. The Office additionally explained that the use of the broadest reasonable interpretation standard in the quasi-adjudicatory *inter partes* review context is consistent with historical Office practice in *inter partes* reexamination, reissue proceedings, *ex parte* reexamination, and interference proceedings. *See In re Baum*, 374 F.2d 1004 (C.C.P.A 1974) (reissue proceedings); *In re Tanaka*, 551 F.2d 855 (C.C.P.A .1977) (same); *In re Ehrreich*, 590 F.2d 902 (C.C.P.A .1979); *In re Yamamoto*, 740 F.2d 1579 (Fed. Cir. 1984) (*ex parte* reexamination proceedings); *In re Baxter*, 656 F.2d 679, 686 (C.C.P.A. 1981) (interference proceedings).

Both the Federal Circuit and the Supreme Court ratified the Office's adoption of the broadest reasonable interpretation standard in *inter partes* review, holding that the broadest reasonable interpretation standard was approved by Congress. In the panel opinion, the Federal Circuit held that "Congress implicitly approved the broadest reasonable interpretation standard in enacting the [America Invents Act]." *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1297, 1299 (Fed. Cir. 2015). Judge Dyk, in a concurrence to the denial of *en banc* rehearing stated that "[i]f the [claim-construction] standard is to be changed, that is a matter for Congress." *Id.*

Indeed, Congress has considered—and rejected—a number of bills that would do just that. *See* Innovation Act, H.R. 9, 114th Cong. § 9(b)(1)(C) (2015) (as reported by House Judiciary Committee on June 11, 2015, with Manager's Amendment in the nature of a substitute); PATENT Act, S. 1137, 114th Cong. § 11(a)(4)(A)(vii) (2015) (as reported by Senate Judiciary Committee on June 4, 2015, with Manager's Amendment in the nature of a substitute); STRONG Patents Act of 2015, S. 632, 114th Cong. § 102(a) (2015) (as introduced on March 3,

2015). In the absence of congressional intent or material change in the patent landscape, there is no reason to depart from the Office's historical practice.

The Office has not identified a motivating change to depart from "the approach it has uniformly applied . . . when it is interpreting 'claims' to assess patentability." In re Cuozzo Speed Techs., LLC, 793 F.3d 1268, 1279 (Fed. Cir. 2015), aff'd sub nom. Cuozzo Speed Techs., LLC v. Lee, 136 S. Ct. 2131, 195 L. Ed. 2d 423 (2016). Indeed, the Office seeks to jettison this intra-agency uniformity ratified by the Federal Circuit and Supreme Court. If the Office, however, implements the Phillips claim construction standard in post grant proceedings, it should also disallow claim amendments to align procedurally with the district courts. Indeed, the Office relied on this distinction in its justification of the broadest reasonable interpretation standard in its Cuozzo briefing. Brief of Respondent Michelle K. Lee at 12, Cuozzo v. Lee, 579 US --- (2016) (citing Yamamoto, 740 F.2d at 1572 ("An applicant's ability to amend his claims to avoid cited prior art distinguishes proceedings before the PTO from proceedings in federal district courts on issued patents.")).

III. The Patent Office is not the Gatekeeper of Uniformity

Despite the unmitigated success of *inter partes* review in accomplishing the goals set forth by Congress, the Proposed Rulemaking to move to the *Phillips* standard for claim construction purports to provide a solution to a problem that does not exist, and respectfully, is not within the province of the Office to solve.

Current 42 C.F.R. § 42.100, consistent with the long-standing practice of the Office, ties the application of the broadest reasonable interpretation standard to the availability of amendment:

(b) A claim in an unexpired patent that will not expire before a final written decision is issued shall be given its broadest reasonable construction in light of the specification of the patent in which it appears. A party may request a district court-type claim construction approach to be applied if a party certifies that the involved patent will expire within 18 months from the entry of the Notice of Filing Date Accorded to Petition. The request, accompanied by a party's certification, must be made in the form of a motion under § 42.20, within 30 days from the filing of the petition.

The Proposed Rule would amend § 42.100 to state:

(b) In an inter partes review proceeding, a claim of a patent, or a claim proposed in a motion to amend under § 42.121, shall be construed using the same claim construction standard that would be used to construe such claim in a civil action to invalidate a patent under 35 U.S.C. 282(b), including construing the claim in

accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent. Any prior claim construction determination concerning a term of the claim in a civil action, or a proceeding before the International Trade Commission, that is timely made of record in the inter partes review proceeding will be considered.

83 Fed. Reg. 21221 (May 9, 2018). The Office states that "[m]inimizing differences between claim construction standards used in the various for could lead to greater uniformity and predictability of the patent grant." *Id.* The task of ensuring the national and forum-wide uniformity of the patent system, however, has been entrusted by Congress to the Federal Circuit. In focusing on intra-forum uniformity, the Office abandons its responsibility to ensure intraagency uniformity.

The Office often has multiple pending proceedings concerning the same patent—for example, an *ex parte* reexamination, a request for reissue, and an *inter partes* review. In these situations of multiple, concurrent reviews, Congress has authorized the Office to create a single consolidated proceeding. *See* 35 U.S.C. 315(d). As the Office explained to the Supreme Court and in the initial Rulemaking, "[i]t would be anomalous for the Board to have to apply two different standards in the merged proceeding." 77 Fed. Reg. 48,698 (Aug. 14, 2012). Under the Proposed Rulemaking, a single patent being considered by the same agency in light of the same prior art in a single consolidated proceeding will be subject to different standards of claim construction. The Proposed Rule does not anticipate or otherwise explain how consolidated proceedings will operate when, for example, a patent is subject to *ex parte* reexamination and its attendant broadest reasonable interpretation standard at the same time as an *inter partes* review proceeding with the proposed *Phillips* interpretation standard for that same patent.

Ironically, during Director Iancu's May 22, 2018 testimony at an Oversight Hearing before the House Judiciary Committee, in response to questioning by Representative Lofgren, he explained:

[I]n order to have a predictable patent system that folks can rely on it seems that the meaning of a patent when one sits down to look at a patent and try to invest in it or invent around it—whether the owner or the public—it seems that the meaning of that patent or the boundaries of that patent, at least objectively, should not depend on the forum on which it might happen some years down the line that that patent is challenged in if one is to make predictable decisions based on that patent.

The intra-agency conflict in applicable claim construction standards that would be created at the Office by the Proposed Rule belies the Director's testimony before Congress on the stated need for the same claim construction standard in the PTAB as used by the district courts.

Nor is the choice of applicable claim construction standard without consequence. See Versata Dev. Group, Inc. v. SAP Am., Inc., 793 F.3d 1306, 1328 (Fed. Cir. 2015) (in a post-grant review proceeding involving a covered business method patent, the PTO rejected the district court's construction in favor of a construction under the broadest reasonable interpretation, which resulted in a finding of unpatentability); PPC Broadband, Inc. v. Corning Optical Communs. RF, LLC, 815 F.3d 747, 756 (Fed. Cir. 2016) ("If we were tasked with reviewing the Board's construction according to Phillips, and in fact if the Board had applied the Phillips standard rather than the broadest reasonable construction, this case would be straight-forward. PPC Broadband's construction is the only construction of the term consistent with the use of the same term throughout the specification. But this case is much closer under the broadest reasonable interpretation standard given the ordinary meanings attributable to the term at issue."). In PPC Broadband, for example, the Court narrowly found the Board's claim construction to be unreasonably broad and remanded for reconsideration of the Board's obviousness determination. Had a *Phillips* construction standard applied, the Federal Circuit's determination under the narrower construction would have allowed the challenged patent claims to survive. But on remand, the Board reviewed the record anew under the slightly narrowed construction consistent with the broadest reasonable interpretation. The Board concluded that even under the revised claim construction, the challenged claims were unpatentable. Corning Optical Commc'n RF, LLC v. PPC Broadband, Inc., IPR2013-00342, Decision on Remand, Paper No. 57 (P.T.A.B. Oct. 12, 2016).

Of course, the power to avoid this result was always the patentee's. It could have simply drafted narrower claims during prosecution under the applicable broadest reasonable interpretation standard. By changing the Board's claim construction standard to *Phillips*, the Office will ensure that claims which should never have issued will remain enforceable against industry innovators. That is the antithesis of what Congress intended with the AIA legislation.

In 1982, Congress created the Federal Circuit under the Federal Court Improvement Act of 1982 for the express purposes of creating national uniformity in the application of patent law. See S. Rep. No. 275, 97 Cong., 1st Sess. 5 (1981) (noting "[t]he creation of the Court of Appeals for the Federal Circuit will produce desirable uniformity in this area of ... [patent] law"). The creation of the court has been called "perhaps the single most significant institutional innovation in the field of intellectual property in the last quarter century." William M. Landes & Richard A. Posner, The Economic Structure of Intellectual Property Law 7 (2003). The Federal Circuit, with appellate jurisdiction over the diverse patent fora—district courts, the International Trade Commission, the PTAB, and the Court of Federal Claims—has been positioned by Congress as the arbiter of patent system uniformity.

In its role as arbiter, the Federal Circuit has blessed the kind of inconsistency the Proposed Rulemaking seeks to correct. In *Fresenius USA v. Baxter International*, for example, the Federal Circuit reviewed the same claims twice, once on appeal from the district court, and once on appeal from the PTO, each time with divergent outcomes. In reviewing the identical claim language in the same patent, the Federal Circuit upheld the validity of the patent under "plain and ordinary meaning" construction applied by a district court, *Fresenius USA, Inc. v. Baxter Int'l, Inc.*, 582 F.3d 1288, 1302 (Fed. Cir. 2009), and the Office's determination of invalidity made under a broadest reasonable interpretation construction, *In re Baxter*, 678 F.3d

1357, 1365-66 (Fed. Cir. 2012). The Federal Circuit expressly endorses departure—on reasoned decisionmaking—by the Office from the claim construction of a district court or the International Trade Commission. *See In re Trans Tex. Holdings Corp.*, 498 F.3d 1290, 1301 (Fed. Cir. 2007) ("We conclude that the Board was not bound by the district court's claim construction. . . ."); *Knowles v. Iancu*, 886 F.3d 1369, 1376 ("[T]he [PTAB] is not generally bound by a previous judicial interpretation of a disputed claim term. . . ." (internal citations omitted)).

Divergence between fora is ingrained in the patent landscape. The Federal Circuit has not required uniformity between the various avenues of patent litigation, and for good reason. The International Trade Commission, for example, another administrative tribunal, employs the *Phillips* standard accompanied by robust discovery procedures, including depositions, extensive witness testimony, and hearings with full trial procedures. The Proposed Rulemaking does not include any amendment to the discovery or hearing procedures that would convert the minimal discovery or brief hearings available in *inter partes* review into the full litigation procedures available at the International Trade Commission. *See Garmin Int'l, Inc. v. Cuozzo Speed Techs. LLC*, IPR2012-00001, *Precedential Decision on Motion for Additional Discovery*, Paper No. 26 (P.T.A.B. March 5, 2013) (imposing a five-factor test to deny a request for additional discovery in the form of a deposition which would otherwise be permissible under the Federal Rules of Civil Procedure applicable in district court). Given the immense workload of the Office, the kind of procedures necessary for full consideration of the evidence required for *Phillips* constructions would hinder the Office's ability to meet the statutory deadlines for rendering final written decisions.

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The implementation of the post-grant proceedings of the America Invents Act provides an efficient, effective way to challenge and narrow the fractional percentage of patents that are overbroad or improvidently issued. This alternative avenue for Office review of its prior decisions increases the strength and certainty of the patent grant for meaningful innovations, spurring a corresponding increase in future innovations and investments in patenting. Part of the success of the post-grant system is unquestionably the broadest reasonable construction standard. The use of the broadest reasonable construction standard in *inter partes* review reduces complexity and avoids conflict. The Office uses the same standard in parallel agency proceedings, including examination, reexamination, reissue, derivation, interference, and supplemental examination, reducing complexity and ensuring intra-agency consistency. On the other hand, potential conflict between constructions issued by a District Court and constructions issued by the Board are prevented, maintaining the judiciary's traditional role in construing claims under the *Phillips* standard post-issuance. The Proposed Rulemaking is therefore unnecessary and unwise.

Micron appreciates the opportunity to provide these comments on the Office's proposed amendments. We urge the Office to maintain the claim construction standard in post-grant proceedings. The empirical data belies any perceived harm to patent owners or the patent system. The *inter partes* review system as implemented has improved certainty and investment in innovation in the United States.

Respectfully submitted,

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