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Re: USPTO Request for Comments on Discretion to Institute Trials Before the Patent Trial and Appeal Board, Docket No. PTO–C–2020–0055

Dear Under Secretary Iancu:

We write in response to your October 20, 2020 request for comments on the USPTO's discretionary denial rules for Patent Trial and Appeal Board (PTAB) proceedings. Specifically, we write in response to Question 7 to inform you about the deleterious effect that the USPTO's discretionary denials have on our ability to defend our customers and ourselves against lawsuits based on patents that never should have issued.

TSMC's manufacturing and innovation

Taiwan Semiconductor Manufacturing Company, Limited (TSMC) is the world's largest semiconductor foundry, manufacturing over 10,000 different products for approximately 500 different customers. Our customers include many of America's leading high-tech companies—businesses such as Advanced Micro Devices, Inc., Broadcom Limited, Intel Corporation, NVIDIA Corporation, Qualcomm Inc., and Xilinx Inc. TSMC currently makes the world's most advanced semiconductors, which have features that are 5 nanometers in size (as much as 20,000 times thinner than the width of a human hair). This May, TSMC announced plans to invest approximately $12 billion to build and operate a fab in Arizona with support from the U.S. Department of Commerce and the State of Arizona. The Arizona plant will create an estimated 1,600 high-tech jobs and thousands of additional jobs in the broader semiconductor ecosystem. The plant will utilize 5-nanometer technology to produce leading-edge chips that are critical to U.S. economic growth and national security. Just this past month TSMC approved an initial investment of $3.5 billion to establish a wholly owned subsidiary in Arizona.

To maintain its technology leadership, TSMC invests heavily in research and development. In 2019, we spent nearly $3 billion on R&D, and we anticipate spending at least that much on R&D each year until 2030. TSMC relies heavily on the U.S. patent system to protect its innovations. We consistently rank among the top filers at the USPTO, having filed more than 33,600 U.S. patent applications and obtained over 25,000 U.S. patents. In 2019 alone, TSMC filed 2,996 U.S. patent applications, and in 2020, TSMC is #3 in pre-grants with 3,606 published U.S. patent applications as of the end of November. TSMC has had a 99% allowance rate for its U.S. applications over the last five years, ranking first among global top 20 U.S. patent assignees in 2019. TSMC also relies heavily on *inter partes* reviews (IPRs) before the PTAB to defend its customers and itself against meritless patent assertions and lawsuits, having filed 67 IPR petitions. For petitions that reached an institution decision, we have a 91% institution rate. For petitions that reached a final written decision, we have a 100% success rate of having at least one claim cancelled.

As one of the largest U.S. patent holders, TSMC strongly believes in the patent system. We support strong patents. We also support the IPR system, even though IPR can be used to

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challenge TSMC's own patents. Only high-quality patents—those that represent a true technological advance—fulfill the patent system's goal of fostering innovation. Improperly issued patents are inefficient, wastes resources, stifle innovation, and increase prices for consumers. By eliminating patents that never should have been granted, the IPR process provides a necessary check that ensures the patent system promotes technological innovation rather than litigation.

The IPR process is needed to counter NPEs' unfair targeting of manufacturers' customers

Non-practicing entities (NPEs) routinely sue manufacturers' customers rather than manufacturers such as TSMC. One reason NPEs do so is to avoid a serious validity challenge to their patents. When a manufacturer's product is accused of infringing a low-quality patent, the manufacturer has a strong motivation to challenge the patent's validity. The manufacturer faces exposure for every accused product that it makes, and its business is placed under a cloud by the accusation. With its industry knowledge and expertise, the manufacturer is also best positioned to contest the patent's validity. For manufacturers' customers, on the other hand, the incentives often are very different.[1] Defending against a claim of infringement is expensive[2] and the accused product supplied by the manufacturer may only make up a small part of an individual customer's business. The customer may also have the option of simply switching to a new component product for less than it would cost to fight a lawsuit. As a result, the customer frequently will be inclined to settle a patent suit[3] and leave an invalid patent unchallenged for the NPE to assert against others.

NPEs also target manufacturers' customers to inflate their damages demands. Often, the accused product is a component incorporated into a more lucrative consumer electronic. Bringing suit against the integrated product rather than the component that is the source of the infringement allegation expands the royalty base from which damages are calculated.[4]

District court jurisdiction does not allow manufacturers to protect their customers

To protect their business and investments, manufacturers such as TSMC routinely seek to defend their customers against patent assertions. Before the existence of the IPR process, however, it often was not possible for the manufacturer to challenge a patent that was asserted against its customers. The courts have consistently ruled that a manufacturer's interest in defending its customers does not satisfy the standing requirement for bringing a declaratory

[1] *See* Scott Partridge & David Mika, *Looking Upstream: Weighing Proposed Changes to Customer Stays in Patent Litigation*, 4 Houston L. Rev. 81, 84-86 (2014).
[2] According to the American Intellectual Property Law Association, in high stakes litigation the *median* cost of a defense is $5,000,000—which means that half of such suits cost even more. *See* Samson Vermont, *AIPLA Survey of Costs of Patent Litigation and Inter Partes Review* (Jan. 30, 2017), http://tinyurl.com/ybnpne3c
[3] *See* Colleen V. Chien & Edward Reines, *Why Technology Customers Are Being Sued En Masse for Patent Infringement and What Can Be Done*, 49 Wake Forest L. Rev. 235, 243 (2014).
[4] *See, e.g., Glenayre Elecs., Inc. v. Jackson*, 443 F.3d 851, 861 (Fed. Cir. 2006) (plaintiff "succeeded" at "steer[ing] the jury away from the relatively low royalty base of $40 million to the relatively high royalty base of $250 million, which was based on customer use.").

judgment action—even when it is clear that the customer has been targeted because of its use of the manufacturer's products.[5]

This problem is compounded by the rise of foreign NPEs and sovereign patent funds.[6] A foreign-based NPE is generally not subject to personal jurisdiction in a U.S. district court until it has filed its own lawsuit.[7] As a result, a foreign NPE can send threatening demand letters to a manufacturer's U.S. customers, accusing them of infringement and alleging accrual of large damages, all the while secure in the knowledge that no one can challenge the patent in a U.S. district court unless and until the NPE chooses to file an infringement suit.

IPR provides an effective mechanism for manufacturers to protect their customers

The IPR process has been an effective tool for manufacturers to defend their customers against meritless patent assertions. As noted previously, TSMC has made robust and effective use of the IPR process, filing 67 petitions, many of which arose out of suits against our customers.

TSMC's IPR proceedings against the foreign NPE Godo Kaisha IP Bridge are exemplary. In early 2017, IP Bridge sued TSMC's customer Xilinx in the Eastern District of Texas for infringement of two patents related to semiconductor manufacturing technology.[8] Xilinx did not manufacture the accused devices; rather, it relied on TSMC to fabricate the products.[9] TSMC petitioned for IPR and the PTAB granted review for both patents.[10] Xilinx successfully transferred the case to the North District of California,[11] which stayed the case pending resolution of the IPRs.[12] Thereafter, the Xilinx parties settled and jointly moved to dismiss the

[5] Courts have prevented manufacturers from challenging a patent's validity even when a customer has asked the manufacturer for indemnification for the alleged infringement, *see, e.g.*, *Microsoft Corp. v. DataTern, Inc.*, 755 F.3d 899, 904 (Fed. Cir. 2014); *Proofpoint, Inc. v. InNova Patent Licensing, LLC*, No. 5:11-CV-02288-LHK, 2011 WL 4915847, at *5 (N.D. Cal. Oct. 17, 2011)—or even when the manufacturer *does* agree to indemnify the customer for any liability. *See Ours Tech., Inc. v. Data Drive Thru, Inc.*, 645 F. Supp. 2d 830, 840 (N.D. Cal. 2009); *Shuffle Tech Int'l, LLC v. Sci. Games Corp.*, Case No. 15 C 3702, 2015 WL 5934834, at *8 (N.D. Ill. Oct. 12, 2015). Case after case has made clear that manufacturers cannot rely on the courts for relief when their customers are targeted with harassing lawsuits and accusations based on invalid patents. *See, e.g.*, *Allied Mineral Prods., Inc. v. Osmi, Inc.*, 870 F.3d 1337, 1339-40 (Fed. Cir. 2017); *Cisco Sys., Inc. v. Alberta Telecomms. Research Ctr.*, 538 F. App'x 894 (Fed. Cir. 2013); *Creative Compounds, LLC v. Starmark Labs.*, 651 F.3d 1303, 1316 (Fed. Cir. 2011); *Matthews Int'l Corp. v. Biosafe Eng'g, LLC*, 695 F.3d 1322, 1327 (Fed. Cir. 2012); *Innovative Therapies, Inc. v. Kinetic Concepts, Inc.*, 599 F.3d 1377, 1382, 1383 (Fed. Cir. 2010); *Benitec Australia, Ltd. v. Nucleonics, Inc.*, 495 F.3d 1340, 1343, 1348-49 (Fed. Cir. 2007).

[6] *See* Josh Landau, *IPR Successes: A Bridge to Sovereign Patent Funds*, Patent Progress (Oct. 9, 2017), http://tinyurl.com/ydew9j8g

[7] *See Autogenomics, Inc. v. Oxford Gene Tech. Ltd.*, 566 F.3d 1012, 1021 (Fed. Cir. 2009) (holding that a foreign patent holder was not subject to personal jurisdiction in a declaratory judgment action).

[8] *See Godo Kaisha IP Bridge 1 v. Xilinx, Inc.*, No. 2:17-cv-00100-JRG-RSP (E.D. Tex. Jan. 31, 2017), Dkt. 1, Complaint.

[9] *See Xilinx, supra* n.8, Dkt. 18, Motion to Dismiss at 3-4.

[10] *See* IPR2017-01862 (U.S. Patent No. 7,265,450); IPR2017-01841, -01842, -01843, -01844 (U.S. Patent No. 7,893,501).

[11] *See Xilinx, supra* n.8, Dkt. 72, Memorandum Order Granting Motion to Transfer at 12.

[12] *See Godo Kaisha IP Bridge 1 v. Xilinx, Inc.*, Case No. 3:17-cv-06376-JD (N.D. Cal. Mar. 15, 2018), Dkt. 116, Order for Stay.

lawsuit.[13] Without the IPR process, TSMC would not have been able to defend its customer because IP Bridge is a foreign NPE and it did not directly sue TSMC.

USPTO's discretionary denial rules unduly restrict TSMC's ability to defend its customers

The USPTO's discretionary denial rules are not part of the America Invents Act (AIA). Indeed, in many ways these rules conflict with the statute: they override provisions that set time limits and require petitions to be considered on their merits. Specifically, the AIA allows a party to challenge a patent if it can show that there is a "reasonable likelihood" that a claim is invalid[14] and if the party files its petition within one year after it is sued.[15] The denial policies, by contrast, allow NPEs to prevent a timely filed IPR petition from being considered on its merits. Under these polices, if an NPE forum shops for a district that sets an early trial date, or if it targets only TSMC's customers and avoids suit against TSMC itself, it can eliminate TSMC's access to PTAB review.

The discretionary denial rules have largely taken two forms, neither of which has a basis in the statute: denying review based on the status of a district court case, and denying review based on an earlier IPR filing by a third party.

Discretionary denial of petitions with parallel litigation

Under the rule that the USPTO created in *Apple Inc. v. Fintiv, Inc.*,[16] the PTAB can deny a timely-filed IPR petition based on a district court's ***scheduled*** trial date. This rule allows and encourages NPEs to forum shop for districts with fast trial schedules. By picking a court that schedules early trials, an NPE can unilaterally cut off a defendant's ability to use congressionally authorized PTAB review.

It is well-known that some district courts propose aggressive trial schedules. One learned commentator, for example, has described a district judge in Texas who has "created a set of local patent rules designed to result in extremely quick times to trial," and who has "publicly stated that he will not stay cases pending IPR absent exceptional circumstances."[17] As a result, if an NPE files its case before this judge, the *Fintiv* rule means that it "can rest easy in the knowledge that . . . [it will] almost definitely never face an IPR."[18]

Moreover, the *Fintiv* rule does not even achieve its own purported goal of "speed" that supposedly justifies barring a defendant's access to IPR. Courts often postpone early scheduled trial dates. For example, one IPR commentator has noted that in the District of Delaware, 100% of the IPR petitions that were denied by the PTAB because of an earlier trial date have had those

[13] *See Xilinx, supra* n.12, Dkt. 118, Stipulation of Dismissal.
[14] *See* 35 U.S.C. § 314(a).
[15] *See* 35 U.S.C. § 315(b).
[16] Case No. IPR2020-00019 (Mar. 20, 2020).
[17] *See* Josh Landau, "Meet the Western District of Texas—NPEs Certainly Have," Patent Progress, May 27, 2020, https://tinyurl.com/yynpwu9x
[18] *Id.*

trial dates delayed, and in the Western District of Texas, 70% of the cases denied under *Fintiv* had their trial dates delayed.[19]

Discretionary denial of serial petitions

Under the rule that the USPTO created in *Valve Corp. v. Electronic Scripting Products, Inc.*,[20] the PTAB will deny an IPR petition simply because a different party filed a petition earlier. Contrary to the statute, *Valve* denials are applied even when the petitioner is not a real party in interest or privy of a party that is barred from filing a petition. Instead, the petition can be refused whenever any third party previously filed a petition.

Valve is very problematic in the situation where an NPE avoids a manufacturer and instead asserts its patents against the manufacturer's customers. A manufacturer such as TSMC often may not be aware of these accusations until long after they occur. A customer may not seek help from TSMC because the customer wishes to control the negotiations or litigation, or because it is afraid of creating privity issues. Without our assistance, the IPR prepared by the customer may be flawed because the customer does not understand the accused technology as well as we do. As TSMC's high success rate in its IPRs demonstrates, TSMC's manufacturing knowledge helps it to file petitions that identify the most relevant prior art and that put forth the strongest arguments. But under *Valve*, if a customer files an IPR petition first, TSMC may later be barred from filing its own IPR petition.[21] Even if other customers are later sued, or if TSMC itself is sued, TSMC may be blocked from challenging the validity of the patent. Like *Fintiv*, the *Valve* rule allows the plaintiff's actions to largely determine whether a manufacturer whose technology has been accused of infringement will have access to PTAB review.[22]

Valve is also contrary to the intent and spirit of the law. The AIA limits the restrictions that it applies to third parties to those that are either real parties in interest or privies of a party that cannot file a petition.[23] Privity is an equitable doctrine that weighs the actions of the parties and aims for fairness and common sense. It is not fair or equitable, however, to curtail a manufacturer's ability to defend its products through the IPR process simply because another unrelated party filed an earlier IPR petition that the manufacturer did not know about or control. Nor is it sensible to prevent the party with the best understanding of the technology from protecting itself and its customers against assertions of invalid patents.

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[19] *See District Court Trial Dates Tend to Slip After PTAB Discretionary Denials*, Scott McKeown (July 24, 2020) (noting that in cases where early trial dates have been used to block IPRs under *Fintiv*, 100% of those trial dates were later delayed in the District of Delaware and 70% were later delayed in the Western District of Texas), https://www.patentspostgrant.com/district-court-trial-dates-tend-to-slip-after-ptab-discretionary-denials/#page=1

[20] Case No. IPR2019-00062 (Apr. 2, 2019); *Valve Corp. v. Elec. Scripting Prods., Inc.*, Case No. IPR2019-00064 (May 1, 2019).

[21] This is exactly what happened in the *Valve* case itself: the USPTO denied review to the manufacturer of an accused component product because its customer had been sued and filed its petition earlier. *See Valve Corp.*, Case No. IPR2019-00064, at *5 *see also Mitek Sys., Inc. v. United Servs. Automobile Assoc.*, Case No. IPR2020-00882 (Nov. 6, 2020) (manufacturer barred by *Valve* because of prior petition filed by customer).

[22] As a dissenting PTAB judge noted in one of these cases, petitioners are "denied a chance to present their own case to the Board, and must depend on others whose interests may not align fully with theirs." *Google LLC v. Uniloc 2017 LLC*, Case No. IPR2019-01584, at *8 (Mar. 24, 2020).

[23] *See* 35 U.S.C. § 315(a), (b), (e).

Please protect TSMC's ability to defend its customers

The *Valve* and *Fintiv* rules undermine TSMC's ability to defend its customers and itself. TSMC is consistently the party with the best understanding of its technology and with the most incentive to defend it, and is thus in the best position to challenge a low-quality patent and remove it from the system. But discretionary denials allow NPEs to evade TSMC's validity challenges by targeting its customers and by forum shopping for courts that schedule early trials. These USPTO policies leave invalid patents in place, available to be asserted against other customers and manufacturers and to place a tax on technological innovation.

We strongly recommend that you withdraw the *Fintiv* and *Valve* rules and not restrict our access to PTAB review. TSMC believes that a timely filed IPR petition should be considered on its merits.

Respectfully submitted,

TSMC

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