UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MONOLITHIC POWER SYSTEMS, INC.,

Petitioner,

v.

GREENTHREAD LLC,

Patent Owner.

IPR2024-00551
US PATENT NO. 10,734,481

PETITIONER'S OPPOSITION TO PATENT OWNER'S MOTION FOR ADDITIONAL DISCOVERY

Monolithic Power Systems, Inc. ("Petitioner" or "MPS") respectfully requests that the Board deny Patent Owner's Motion for Additional Discovery ("Motion").

Patent Owner sued larger electronic integrators on patents generally related to the physics of semiconductor doping. Those parties filed IPRs and later settled. Patent Owner has since sued smaller component manufacturers (like MPS) and is now seeking to prevent IPRs based on theories that component makers are time-barred under § 315(b) and that their shared interest in invalidating the patent warrants discretionary denial under § 314(a). Both suppositions are baseless.

First, Patent Owner's arguments—and evidence—do not support its privity argument and, as a consequence, its discovery requests. For privity, at a minimum, Patent Owner must demonstrate that MPS somehow participated in the prior IPRs, participated in the litigation, or that MPS is acting as [redacted] proxy in this IPR. Patent Owner has not demonstrated that this situation is plausible.

Patent Owner's evidence falls short and shows, at most, that MPS makes relatively inexpensive components and that other companies buy them. For example, Patent Owner's supportive evidence [redacted] In addition, Patent Owner's other evidence that MPS made an inexpensive power chip that complied with Intel's processor standards only means that MPS—like countless other component manufacturers—made a chip that works with expensive Intel processors. To argue that MPS controls these parties is untethered to industry realities and is disconnected from the proper privity analysis for the purposes of 35 U.S.C. § 315(b).

Second, Patent Owner has not demonstrated any basis for its apparent assertion

that MPS and the other component manufacturer petitioners have a "substantial relationship" warranting discretionary denial under *General Plastic* and *Valve.*[1] Patent Owner cannot deny that MPS and the other component manufacturers, which are MPS's direct competitors, are not co-defendants in the same district court proceedings and they are not accused of infringement based on the same products. MPS has no relationships with them whatsoever related to the MPS accused products. The only "relationship" here is one premised on petitioners' shared interest in invalidating the patent at issue, which is not enough for discretionary denial under § 314(a).

Tellingly, Patent Owner's motion is a rehash of an already-rejected motion it made against another component manufacturer. There, the Board rejected Patent Owner's discovery requests as purely speculative. It should do the same here.

I. PATENT OWNER'S REQUEST IS UNJUSTIFIED

Patent Owner's request departs from clear and well-established precedent that discovery will only be allowed in special circumstances. *Garmin International, Inc. et al. v. Cuozzo Speed Tech.*, IPR2012-00001, pg. 5, Paper No. 26 (Precedential); 37 C.F.R. § 42.51(b)(2) ("Patent Owner, as the moving party, bears the burden of demonstrating that its additional discovery is 'in the interests of justice'").

Patent Owner's privity theory is untenable on its face. The time-bar privity question is "whether the relationship between the purported 'privy' and the relevant

---

[1] *General Plastic Industrial Co. Ltd. v. Canon Kabushiki Kaisha*, IPR2016-01357-31, Paper No. 19 (PTAB Sept. 6, 2017) (precedential); *Valve Corp. v. Elec. Scripting Prods., Inc.*, IPR2019-00062, Paper 11 (Apr. 2, 2019) (precedential).

other party is sufficiently close such that both should be bound by the trial outcome and related estoppels." *See* Consolidated Trial Practice Guide November 2019 ("CTPG") at 14–15.[2] The concern is to protect a patent holder from successive attacks while still ensuring that a petitioner is not unfairly limited in its ability to lodge challenges before the PTAB when it has not already had the opportunity to do so. *Power Integrations, Inc. v. Semiconductor Components Indus., LLC*, 926 F.3d 1306, 1315 (Fed. Cir. 2019). The evidence here leads to the rational conclusion that MPS is not in privity with [redacted]

MPS manufactures and designs small components that other electronic companies purchase and incorporate into larger and expensive integrated electronic systems. This is apparent from Patent Owner's examples ([redacted], EX2020; and MP2953 that is compliant with the INTEL VR12.5 platform, EX2019). [redacted],[3] [redacted].[4] Similarly, the MP2935 is a relatively inexpensive power chip available on the public market.[5] It is designed to work with Intel processors according to Intel's standards for voltage regulation (which have

---

[2] Available at https://www.uspto.gov/TrialPracticeGuideConsolidated.

[3] EX1050 (DigiKey Website listing for MP6924 as low as 86 cents a chip).

[4] EX1051 (Sony website listing for the PlayStation at $449 / $499).

[5] EX1052 (Digikey website listing for MP2935).

nothing to do with the challenged patent, which is directed to semiconductor doping). Countless other companies provide similar components that work with Intel's standards.[6] To argue, as Patent Owner does, that a commodity component supplier jointly designs or otherwise mandates how the [redacted] is made or how Intel designs its processors to such an extent that it should be timed barred here is untethered to industry reality.[7]

Patent Owner's privity argument is far afield from PTAB practice. Patent Owner's argument is, in effect, that every single manufacturer that makes small components is in privity with component purchasers and, as a consequence, is subject to discovery and a time bar under 35 U.S.C. § 315(b). Patent Owner's arguments would subject component manufacturers to extensive discovery by default. Moreover, Patent Owner's privity argument would result in component manufacturers being unable to seek recourse before the PTAB whenever a patent owner sued a larger systems integrator, settled before IPRs were decided, then thereafter sued all component suppliers. In sum, Patent Owner's position is to deprive component manufacturers the opportunity to seek economical resolution of invalidity via the PTAB, going against the purpose of IPRs. H.R. Rep. No. 112–98, pt. 1, at 40 (2011), 2011 U.S.C.C.A.N. 67, 69 (it was congressional intent that IPRs were meant to be "quick and cost effective

---

[6] EX1053 (Digikey website search for chips compliant with Intel VR 12.5 Platform, showing 167 products from various suppliers with per-chip cost at below $1).

[7] Patent Owner does not make an evidence-based allegation with respect to how [redacted] could be in privity with MPS.

alternatives to litigation.”).

Tellingly, Patent Owner’s argument—raised in an identical motion against a similarly situated component supplier—was strongly repudiated based on similar facts[8] in a case that Patent Owner failed to bring to the Board’s attention in its motion. *See Semiconductor Components Industries, LLC, v. Greenthread, LLC,* IPR2023-01242-44, Paper 31; *see also id.* at EX3100 (Patent Owner requesting director review on its privity arguments); *see also id.* at Paper 44 (director denying Patent Owner’s review request). Patent Owner’s discovery requests mirror those in the denied case.[9] *Compare* IPR2023-01242-44, Paper 31 at 3 *with* Mot. at 6. Furthermore, Patent Owner’s arguments here are identical to those previously presented (and rejected). *Compare* IPR2023-01242-44, Paper 31 at 6-7 (denying Patent Owner’s privity arguments of manufacturing for a party as mere speculation) *with* Mot. at 7-8 (arguing the same speculative privity arguments); *compare* IPR2023-01242-44, Paper 31 at 13 (denying Patent Owner’s arguments of unfairness due to purported inconsistent litigation positions) *with* Mot. at 9 (arguing unfairness due to same purported inconsistent litigation positions). Patent Owner’s mirrored requests should be denied here as well.

---

[8] Patent Owner appears to have presented more evidence in *Semiconductor Component Industries* against that Petitioner than it does in this motion against MPS. *See, e.g., Semiconductor Components,* IPR2023-01242-44, pg. 9 Paper 31 (Patent Owner presenting indemnity agreements which also failed to establish burden for discovery).

[9] A large portion of this order is redacted, but it appears that the requests there are identical to those presented here.

Patent Owner's request for communications with other petitioners is futile. MPS has not previously filed a petition challenging the '481 patent, and MPS does not have a "significant relationship" with any entities that have. MPS and the other component manufacturer petitioners are competitors with different accused products sued in different district court proceedings. *See Greenthread, LLC v. Cirrus Logic, Inc.*, Case No. 1-23-cv-00369 (W.D. Tex. Mar. 31, 2023) (Cirrus Logic CLI1793B1 power management integrated circuit); *Greenthread, LLC v. ON Semiconductor Corporation et al.*, Case No. 1-23-cv-00443 (D. Del. Apr. 21, 2023) (ON Semiconductor AR0820AT); *Greenthread, LLC v. OmniVision Technologies, Inc.*, Case No. 2-23-cv-00212 (E.D. Tex. May 10, 2023) (OmniVision OV24A1Q); *Greenthread, LLC v. Monolithic Power Systems, Inc.*, Case No. 1-23-cv-00579 (D. Del. May 26, 2023) (MPS MP86905 monolithic half-bridge). MPS did not contribute to any other petitioners' IPR filings, and no other petitioner contributed to MPS on the Petition here. Under these circumstances, *General Plastic* does not apply to permit discretionary denial. *See Ford Motor Co. v. Neo Wireless LLC*, No. IPR2023-00763, 2024 WL 1406441, at *4 (Vidal Mar. 22, 2024) (finding that Board erred in finding a "significant relationship" under *Valve* where petitioners were competitors with different accused products and vacating decision denying institution); *Google Inc. v. Uniloc 2017*, IPR2020- 00396, Paper 11 at 10-11 (PTAB Aug. 3, 2020); *Toshiba Am. Info. Sys. v. Walletex Microelectronics Ltd.*, IPR2018-01538, Paper 11 at 22 (PTAB Mar. 5, 2019); *see also Videndum Prod. Sols., Inc. v. Rotolight Ltd.*, IPR2023-01218, Paper 12 at 5–6 (Vidal Apr. 19, 2024) ("Under USPTO policy and precedent, *General Plastic* has not been extended to any cases in which the first and second petitioners do not have a significant

relationship.”).

Patent Owner’s requests are futile and should be denied.

II. THE *GARMIN* FACTORS WARRANT DENIAL OF THE MOTION

For completeness, provided below is specific analysis under the *Garmin* Factors, all of which weigh heavily towards denying Patent Owner’s request.

A. *Garmin* Factor 1: More than a mere possibility of finding something useful

Garmin Factor 1 weighs heavily in MPS’s favor.

Factor 1 considers whether the requested discovery provides more than the mere possibility that something useful will be found, and further requires that the requesting party be in possession of evidence showing—beyond speculation—that something useful will be uncovered. *Garmin*, IPR2012-00001, at 6. Here, Patent Owner’s evidence demonstrates nothing more than pure speculation, and the Board should deny Patent Owner’s request as failing under *Garmin* Factor 1 as it has done before. *See Semiconductor Components,* IPR2023-01242-44, Paper 31 (weighing factor 1 against Patent Owner, stating “Patent Owner’s assertion is speculative and does not show more than a mere possibility that its discovery requests will uncover useful information”).

For Requests 1–3, Patent Owner presented no evidence that indicates MPS is—or would plausibly be—in privity with [redacted] To find privity for a time-bar, Patent Owner must demonstrate evidence showing that MPS either participated in the prior litigations/IPRs or that MPS is acting as a proxy for time-barred entities [redacted]. *Semiconductor Components,* IPR2023-01242-44, at pg. 6, Paper 31 (citing *WesternGeco LLC v. ION Geophysical Corp*., 889 F.3d 1308, 1319 (Fed. Cir. 2018)

for the proposition that the proper inquiry is whether "petitioner had a full and fair opportunity to litigate the validity of the patent"). Rather than present supportive arguments and evidence, Patent Owner focuses on supposed commercial and engineering relationships between MPS as a smaller component manufacturer and [redacted], and [redacted] purchase of commodity components. *See generally* Mot. at 6-8. Whether other parties purchased MPS's components or whether there is a commercial relationship does not establish an agency relationship relevant to the privity analysis for 35 U.S.C. § 315(b). *Semiconductor Components,* IPR2023-01242-44, at 12-13, Paper 31. Patent Owner's requests accordingly fail under *Garmin* Factor 1.

Patent Owner's discovery requests demonstrate how far afield its arguments are from the proper privity analysis. Patent Owner seeks agreements relating to MPS's products (RFP No. 1) and communications relating to MPS's products and Patent Owner (RFP No. 2); these discovery requests relating to commercial relationships do not support the argument of privity. *Semiconductor Components,* IPR2023-01242-44, at pg. 11-12, Paper 31. Even worse, Patent Owner's interrogatory (Rog. 1) transparently seeks MPS's litigation position, *i.e.*, whether MPS contends that it is licensed, which bears no relationship to the privity analysis. *Semiconductor Components,* IPR2023-01242-44, at pg. 10, Paper 31. Patent Owner's requests seek discovery that is tangential to privity; its requests are a pure fishing expedition.

The discovery requests Patent Owner opted not to propound further demonstrate the impropriety of its motion. Patent Owner does not request discovery on the operative privity question (*i.e.*, MPS's participation in prior litigations/IPRs involving [redacted] *See, e.g., Wi-Fi One, LLC v. Broadcom Corp.*, 887 F.3d 1329, 1339

(Fed. Cir. 2018) (the privity inquiry "requires sufficient proof that the party in question had sufficient control over the prior proceeding that it could be bound by the results of that proceeding."). This is because Patent Owner knows MPS did not participate in those prior litigations/IPRs.[10] Indeed, Patent Owner has not alleged that MPS participated in—or was even aware of—the prior litigations/IPRs. (EX1048, *Greenthread, LLC v. Monolithic Power Systems, Inc.*, Case No. 1-23-cv-00579 (complaint); *see also Semiconductor Components,* IPR2023-01242, at pg. 12-13, Paper 31 (finding Patent Owner's failure to do so weighs heavily in favor of denial under Factor 1).) Nor do Patent Owner's requests seek discovery into [redacted]s participation in MPS's current IPR. Again, this is because Patent Owner knows [redacted] did not participate in MPS's IPRs. As Patent Owner's licensees, [redacted]l would have no reason to undertake the expense to invalidate Patent Owner's patents using MPS as a proxy. Here, Patent Owner makes no plausible allegation that MPS had any control over the prior proceedings, and there is no evidence tending to demonstrate that MPS was in privity with [redacted].

Finally, Patent Owner's caselaw citations are inapplicable. *In re Google LLC,* 949 F.3d 1338, 1346 (Fed. Cir. 2020) dealt with patent venue, and whether privity exists for a specific server installation in Texas. *Herrion v. Children's Hosp. Nat. Med. Ctr.*, 786 F. Supp. 2d 359, 371 (D.D.C.), aff'd, 448 F. App'x 71 (D.C. Cir. 2011) dealt with *res judicata* for a specific party (security guards) when plaintiff brought a

---

[10] MPS represented to Patent Owner that no such agreements or awareness of the prior lawsuit exist. (EX1049, Apr. 23 Patent Owner E-Mail to Board.)

subsequent suit against the security guards' employer (Children's National) on the same operative act. The fact patterns of *Google* and *Herrion* are inapplicable to the privity analysis for 35 USC § 315(b) to determine whether there is a time-barred petitioner. *Ventex Co. v. Columbia Sportswear North America, Inc.*, involved an exclusive supplier—with exclusive manufacturing agreements—for a time-barred party's product. IPR2017-00651, Paper 152[11] at 12 (PTAB Jan. 24, 2019) (stating that Petitioner in *Ventex* "had a preexisting substantive legal relationship in the form of two contracts, a Supplier Agreement with an obligation to indemnify and defend, and an Exclusive Manufacturing Agreement."). *Bungie Inc. v. Worlds Inc.* involved a developer (Bungie) that provided a video game (the game Destiny) to a time-barred game publisher (Activision) who was sued on that very same video game. IPR2015-01264, Paper 64 at 9-10 (PTAB Jan. 14, 2020). Here, MPS provides commodity-level components, one of scores, if not hundreds, of such components incorporated into larger products sold to end users—not the complete, finished product as in *Bungie* and *Ventex*. Finally, Patent Owner's argument regarding *Taylor v. Sturgell,* 553 U.S. 880 (2008) has been recognized by the Board as "self-contradictory" because the sale of licensed components "cannot give rise to infringement liability." *Semiconductor Components,* IPR2023-01242-44, at pg. 12, Paper 31. None of PO's cases support its motion.

For Request 4, Patent Owner presented no evidence that indicates that MPS has a significant relationship with On Semiconductor Corporation ("On Semi"), OmniVision Technologies ("OV"), or Cirrus Logic, Inc. ("Cirrus"). Patent Owner argues

[11] Paper 148 is dismissed. Paper 152 is the version available on PTACTs.

that MPS and the other component manufacturers are in a joint-defense group, but that would not establish "a significant relationship between the parties that counsels for denying institution." *Qualcomm Inc. v. Monterey Research*, No. IPR2020-01493, 2021 WL 861760, at *7 (PTAB Mar. 8, 2021); *see Sony Mobile Commc'ns. AB v. Ancora Tech., Inc.*, IPR2021-00663, Paper 17 at 10 (PTAB June 10, 2021) ("A common desire to challenge the validity of the asserted patent without more is insufficient to establish that Petitioner Sony has a significant relationship with the other prior petitioners."). Nor would any evidence that MPS evaluated prior petitions challenging the same patent or reviewed another component manufacturer's invalidity contentions establish a significant relationship. *See Qualcomm,* 2021 WL 861760, at *7; *Ford*, 2024 WL 1406441, at *5.

MPS filed its Petition based on its own independent analysis of the art, and based on grounds developed on its own. MPS did not coordinate with the other petitioners on the timing of their petitions challenging the same patent, and Patent Owner fails to identify any evidence of such coordination. Patent Owner notes only that MPS filed its Petition after the others did—but that is no surprise where Patent Owner filed successive lawsuits against multiple component manufacturers and its lawsuit against MPS was the last filed. Moreover, PO filed all its preliminary responses under seal outside of MPS's access, so any alleged benefit gained from successive Petitions is wholly illusory. Patent Owner also cites no authority for the proposition that mere timing coordination, if it had occurred, would establish a substantive relationship. Patent Owner's sole cited decision, *Mitek Sys., Inc. v. United Servs. Auto. Ass'n*, IPR2020-00882, 2020 WL 3884733, at *1 (PTAB July 9, 2020), only granted ***leave to***

brief a request for additional discovery—ultimately, the Board ***denied*** the patent owner's request for communications with a prior petitioner regarding the patents at issue in those proceedings. *See id*., Paper 19 at 19–26 (PTAB July 30, 2020).

Factor 1 weighs heavily in favor of denying Patent Owner's motion.

B. *Garmin* Factor 2: Whether the request seeks the litigation positions of the other party

Garmin Factor 2—which considers whether a party is attempting to use PTAB discovery as a pre-text to obtain litigation positions—weighs heavily in favor of MPS. *Garmin*, IPR2012-00001, at 6.

Patent Owner concedes that it is requesting Petitioner's litigation position and wrongly asserts the request is for the interest of fairness. (Mot. at 9.) Naturally, this argument has been flatly rejected as blatantly looking for a litigation position. *Semiconductor Components,* IPR2023-01242-44, at pg. 13, Paper 31. Furthermore, Patent Owner has not provided any law or facts that establish that a license defense—especially one to which Petitioner was not a party—establishes any basis for privity. Patent Owner's position reduces to the argument that a license, by its mere existence, establishes privity. This red-line rule contradicts the law. As to Patent Owner's request for all "communications and agreements related to the JDG or coordination between Petitioner … and other current or former petitioners that have filed IPR petitions against Greenthread," the demand is so broad and untethered to the *Valve* "substantial relationship" test that it could be nothing other than an attempt to use PTAB discovery to obtain MPS's communications about litigation positions and should be flatly rejected.

Factor 2 weighs heavily in favor of denying Patent Owner's motion.

C. *Garmin* Factor 3: Ability to generate equivalent information by other means

The Board did not analyze Factors 3-5 in the *Semiconductor Components* case because *Garmin* Factors 1 and 2 weighed so heavily against Patent Owner. *Semiconductor Components,* IPR2023-01242-44, at pg. 13, Paper 31; *see also Videndum Prod. Sols*., IPR2023-01218, Paper 12 at 5–6 ("Under USPTO policy and precedent, *General Plastic* has not been extended to any cases in which the first and second petitioners do not have a significant relationship."). However, for the sake of completeness, Factors 3-5 are addressed briefly below.

Garmin Factor 3—which considers the parties' ability to obtain the information absent PTAB interference—weighs heavily in favor of MPS. *Garmin*, IPR2012-00001, at 5. Patent Owner already has the information it needs. Patent Owner relies on its own previous litigations and its own licenses (to which it concedes Petitioner was not a party). Moreover, Greenthread can only point to its filing of suit against MPS to demonstrate MPS's awareness of Patent Owner. (Mot. at 5.) Further, MPS already informed Patent Owner that it was unaware of, and did not participate in, the prior litigations or IPRs. (EX1049, Patent Owner Apr. 23, 2024 Board E-Mail.) There is also no new information bearing on the *General Plastic* / *Valve* "substantial relationship" analysis to be gained from Patent Owner's "communications regarding … coordination" request and Patent Owner already possesses information relevant to the remaining *General Plastic* factors. The relevant facts necessary to determine the existence of a privity relationship related to the licenses, MPS's awareness of the Greenthread litigations, and the relationship between MPS and the other component manufacturer petitioners have already been established, and Patent Owner cannot receive

additional discovery based on pure speculation.

Factor 3 weighs in favor of denying the Motion.

D. *Garmin* Factor 4: understandability and complexity of requests

Factor 4—which considers the understandability and complexity of requests—weighs in favor of MPS. *Garmin*, IPR2012-00001, at 5-6. Although the requests are clear in their language, they ask for all communications with [redacted] on all MPS products and all communications related to coordination with any other petitioners that have filed IPR petitions against any Greenthread patents. (RFPs 2 and 4.) This is, on its face, is overbroad (*see* Factor 5) and cannot possibly match any need in this proceeding. This factor weighs in favor of MPS.

E. *Garmin* Factor 5: Burden of the requests

Factor 5—which considers burden—weighs in favor of MPS. *Garmin*, IPR2012-00001, at 5-6. Patent Owner requests all agreements and communications relating to [redacted] and coordination with other petitioners. RFP 2's request for communications would require MPS to scour all its employees' communications (including its engineering team) with anyone at [redacted] RFP 1's request for agreements appears to encompass, *inter alia*, any and all types of purchase orders, specifications, drawings, and/or test results. None of these documents bear any relevance to whether there is a privity to invoke a time-bar. RFP 4's request for all communications regarding coordination with any other petitioners that have filed IPRs against Greenthread patents is overbroad, encompassing communications related to many patents not at issue in these proceedings and petitioners other than the component manufacturers identified in Patent Owner's Motion. RFP 4 is also not amenable to a

simple keyword searching—MPS would have to carefully review the substance of each communication with any other petitioners and parse out whether it related to the vague issue of "coordination." Finally, substantially all such communications are likely to be subject to common-interest privilege, and the burden of requiring MPS to review each and every one of those communications and log the privileged ones would be significant and unjustified. Particularly in light of RFP 4's lack of relevance to the *General Plastic* factors, Factor 5 weighs heavily in favor of denying the Motion.

Dated: September 25, 2024

Respectfully submitted,

/Miguel Bombach/

Lead Counsel
Miguel Bombach, Reg. No. 68,636

Back-up Counsel
Bing Ai, Reg. No. 43,312
John D. Esterhay, Reg. No. 73,512
John P. Schnurer, Reg. No. 52,196
Brianna Kadjo, Reg. No. 74,307
Runkun (Justin) Jiang, Reg. No. 78,118

Attorneys for Petitioner

PERKINS COIE LLP
11452 El Camino Real, Ste 300
San Diego, California 92130-2080
858.720.5700 (phone)
858.720.5799 (fax)

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true copy of the foregoing PETITIONERS' OPPOSITION TO MOTION FOR ADDITIONAL DISCOVERY was served in its entirety this 25th day of September, 2024 by electronic mail on the Patent Owner via its attorneys of record:

Alan L. Whitehurst
Archis Ozarkar
Arvind Jairam
Nicholas T. Matich
Greenthread-Monolithic-MS@mckoolsmith.com

Dated: September 25, 2024

Respectfully submitted,

/Anita Chou /
Anita Chou
Paralegal

PERKINS COIE LLP
11452 El Camino Real, Ste 300
San Diego, California 92130-2080
858.720.5700 (phone)
858.720.5799 (fax)