PUBLIC VERSION

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MONOLITHIC POWER SYSTEMS, INC.,
Petitioner,

v.

GREENTHREAD, LLC,
Patent Owner.

IPR2024-00552
U.S. Patent No. 11,121,222

PATENT OWNER'S PRELIMINARY RESPONSE PURSUANT TO 35 U.S.C. § 313 AND 37 C.F.R. § 42.107

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Exhibit No.	Description	Submitted Previously?
Ex. 2001	*Greenthread, LLC v. Intel Corp.*, No. 6:22-cv-00105-ADA, Dkt. 1 (Complaint) (W.D. Tex. Jan. 27, 2022)	X
Ex. 2002	*Greenthread, LLC v. Intel Corp.*, No. 6:22-cv-00105-ADA, Dkt. 7 (summons returned executed) (W.D. Tex. Feb. 7, 2022)	
Ex. 2003	*Greenthread, LLC v. Intel Corp.*, 6:22-cv-00105-ADA, Dkt. 38 (First Amended Complaint for Patent Infringement) (W.D. Tex., filed Apr. 29, 2022)	X
Ex. 2004	*Greenthread, LLC v. Intel Corp.*, No. 6:22-cv-00105-ADA, Dkt. 113 (Redacted Memorandum Opinion and Order) (W.D. Tex. Dec. 27, 2022)	X
Ex. 2005	*Greenthread, LLC v. Intel Corp.*, 6:22-cv-00105-ADA, Dkt. 38-8 (Greenthread's Amended Preliminary Infringement Contentions) (W.D. Tex., filed Apr. 29, 2022)	X
Ex. 2006	*Greenthread, LLC v. Intel Corp.*, 6:22-cv-00105-ADA, Dkt. 38-12 (Exs. D-1, D-2, D-3, D-6 to Greenthread's Preliminary Infringement Contentions) (W.D. Tex., filed Apr. 29, 2022)	X
Ex. 2007	*Greenthread, LLC v. Intel Corp.*, 6:22-cv-00105-ADA, Dkt. 49 (Notice of Appearance of Additional Counsel) (W.D. Tex., filed June 9, 2022)	X
Ex. 2008	Petition (Paper 1) in *Sony Group Corp. v. Greenthread, LLC*, IPR2023-00376	X
Ex. 2009	*Greenthread, LLC v. Dell Inc.*, No. 6:22-cv-105-ADA, Dkt. 120 (Second Amended Complaint)	X

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Exhibit No.	Description	Submitted Previously?
Ex. 2010	*Greenthread, LLC v. Intel Corp.*, 6:22-cv-00105-ADA, Dkt. 135 (Motion for Admission Pro Hac Vice of L. Popovski on Behalf of Sony) (W.D. Tex., filed January 30, 2023)	X
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Ex. 2012	[SEALED] Confidential declaration	X
Ex. 2013	February 5, 2024 Neil Ozarkar email to the counsel regarding IPR2014-00468, -00469, -00470	X
Ex. 2014	February 21, 2024 Miguel Bombach email to counsel regarding IPR2014-00468, -00469, -00470	X
Ex. 2015	May 10, 2024 Neil Ozarkar email to the Board regarding IPR2014-00550, -00551, -00552, -00553	X
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Ex. 2017	Monolithic Power Systems, Inc., Investor/Analyst Day 2018 Presentation	X
Ex. 2018	Monolithic Power Systems, Inc. Q2 2021 Earnings Call Transcript	X
Ex. 2019	Monolithic Power Systems, Inc. Data Sheet MP2953B Intel VR12.5 Compliant Controller	X
Ex. 2020	Monolithic Power Systems, Inc. LinkedIn post regarding Sony PlayStation 5	X
Ex. 2021	May 2, 2015 Investor's Business Daily, "Sony PlayStation 4 Chipmaker Monolithic Power Systems Tops Q1 Views"	X

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Ex. 2022	Monolithic Power Systems, Inc. 2023 Form 10-K	X
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Ex. 2024	Petition (Paper 3) in *Sony Group Corp. v. Greenthread, LLC*, IPR2023-00325	
Ex. 2025	Petition (Paper 1) in *Sony Group Corp. v. Greenthread, LLC*, IPR2023-00375	
Ex. 2026	*Greenthread, LLC v. Monolithic Power Systems, Inc.*, No. 23-cv-579, Dkt. 1 (Complaint with accompanying exhibits) (D. Del. May 26, 2023)	
Ex. 2027	*Greenthread, LLC v. ON Semiconductor Corp.*, No. 23-443-RGA, Dkt. 24 (Scheduling Order) (D. Del. Sept. 11, 2023)	
Ex. 2028	Definition of "agent" in Black's Law Dictionary (11th ed. 2019) available from Westlaw at westlaw.com	

I. INTRODUCTION

The Challenged Patent discloses and claims a semiconductor device with (among other things) a "aid carrier movement from the first and second active regions towards an area of the substrate where there are no active regions" of the device.[1] The Petition should not be instituted, because (among other deficiencies) it fails to show that the prior art discloses the "aid carrier movement" claim limitation.

Rather than pointing to anything in the prior art that would teach this claim limitation, the Petition assumes that *any* "graded dopant concentration" would *necessarily* "aid carrier movement." The Petition contains no analysis explaining why the "graded dopant concentrations" in the prior art meet the "aid carrier movement" limitation, apart from the fact that they *are* "graded dopant concentrations." To the extent Petitioner's references discuss carrier movement at all, they describe using dopant concentration gradients to *prevent* the movement of carriers, not aid it. In other words, Petitioner reads the "aid carrier movement"

[1] Greenthread, LLC ("Patent Owner," "PO," or "Greenthread") submits this Preliminary Response in accordance with 35 U.S.C. § 313 and 37 C.F.R. § 42.107, responding to the Petition for *Inter Partes* Review ("Petition," Paper 1) of U.S. Patent No. 11,121,222 ("the Challenged Patent") filed by Monolithic Power Systems, Inc. ("Petitioner").

limitation out of the claims completely. Moreover, Petitioner's references do not pertain to carriers in what Petitioner maps to the "active region," but carriers much further down. Indeed, Petitioner's references teach that their semiconductor structures are *irrelevant* to carriers at in the active region and that those carriers can be "disregarded." Ex. 1046 at 29.

II. The Petition Fails to Set Out a Prima Facie Case that the Cited Art Discloses or Renders Obvious Any Claim (All Grounds).

The Board should deny institution because Petitioner fails to establish that the references identified in the Petition teach or render obvious at least the "aid carrier movement" or "from the first surface to the second surface" limitations which are found in Elements [1.5] and [1.6].

A. "Graded" does not mean "aided."

Petitioner's references do not teach the "aid carrier movement" claim limitation. Therefore, to locate that limitation in the prior art, Petitioner asserts that Greenthread has previously admitted that *any* "graded dopant concentration" will "aid carrier movement." That is not what Greenthread said and, as a matter of physics, it is wrong.

1. Greenthread never said all graded dopant concentrations aid the movement of carriers.

Petitioner argues that Greenthread said in prosecution that the "graded dopant concentration were known and created an 'inherent "built-in" unidirectional electric

field," citing Greenthread's discussion of the Kamins reference. Pet. at 15. But Petitioner does not quote Greenthread's full statement. In fact, Greenthread added that the movement of carriers "[*d*]*epend*[*s*] *on the particular slope* of the graded concentration of dopant[s]." Ex. 1002 at 289. Moreover, Greenthread was responding to an Office Action regarding a claim that required a "single static unidirectional electric drift field to aid the movement of carriers." Ex. 1002 at 286. Those additional claim limitations were, as Greenthread said, an "*additional parameter* for ensuring that all minority carriers are moved in one direction." Ex. 1002 at 290. The fact that an "additional parameter" *besides* the graded dopants is necessary to "ensur[e] that all minority carriers are moved" shows that Greenthread was not asserting that "graded" entails "aided."[2]

2. Other evidence confirms that "graded" does not mean "aided."

Even if there were any ambiguity in Greenthread's statements, the notion that Greenthread was claiming "graded" as necessarily "aided" is implausible. First, and most obviously, "aid carrier movement" is a separate claim limitation from "graded

[2] To the extent Petitioner tries to rely on Kamins itself that is improper. Petitioner does not use Kamins as grounds for rejection here or proffer a motive to combine them with its other references. The examiner allowed Greenthread's claims over those references, after extensive discussion.

dopant concentration." Petitioner's argument treats "aid carrier movement" as mere surplusage.

Second, the specification, like Greenthread's statements during prosecution, describes the *slope* of the dopant concentration, not merely its direction, as a relevant parameter for determining whether a concentration gradient will aid the movement of carriers. For example, the specification recites: "The gradient can be linear, quasi linear, exponential or complimentary error function. The relative slope of the donor concentration throughout the base creates a suitable aiding drift electric field, to help the" carriers move. Ex. 1001 at 14. Petitioner ignores what the specification says.

Third, during prosecution, the examiner said that in "a complex electronic device, movement of minority carriers is affected by multiple forces and fields" and that a "drift field may attempt to apply a force on all minority carriers in a specific direction" but that "without knowing other parameters of the device" one cannot say whether the field would aid the movement of carriers. Ex. 1002 at 270. The examiner's understanding above is consistent with Greenthread's and basic logic. If two forces are acting on an object in opposite directions, both forces cannot aid its movement. Either the opposing forces are equal—and there is no movement—or the two forces are not equal and the object moves in the direction of the larger force. The smaller force does not "aid" the movement of the object, because it is pushing

against the movement. Whether a gradient aids carrier movement, depends on circumstances besides the mere direction of the gradient as Petitioner assumes.

Finally, Petitioner's own references confirm that graded dopant concentrations do not necessarily *aid* carrier movement, because they teach using a graded concentration to *impede* carrier movement. Nishizawa and Kawagoe are both concerned with naturally occurring α-rays striking a semiconductor device and generating free electrons in the substrate. These free electrons can disrupt the operation of the device during a "single event upset" ("SEU"). Nishizawa says that "*to* <u>*prevent*</u> [*the*] *flow of electrons*, [during an α-ray strike] it is only necessary to form an impurity concentration gradient in the p+ type buried region…." Ex. 1046 at 28 (emphasis added). Kawagoe likewise describes a "concentration gradient" to "<u>*prevent*</u>[] [these SEU-generated carriers] from entering the p-well." Ex. 1007 at 28 (emphasis added). Petitioner's own references confirm that graded dopant concentrations can't *always* aid the movement of carriers, as Petitioner claims, because sometimes the "concentration gradient" can "prevent[]" carrier movement. *Id.*

[redacted]

B. The Petition fails to establish the "aid carrier movement" or "from the first surface to the second surface" limitations. (Elements [1.5], [1.6]).

For all of the asserted grounds, the Petition fails to show that any of the primary references disclose any of the claim elements requiring "aid carrier movement" or "from the first surface to the second surface."[3]

1. Petitioner's Onoda and Nishizawa Grounds (Grounds II & III) fail.

Petitioner points to Onoda (primary reference for Grounds II and III) for its disclosure of a graded dopant concentration. But Petitioner does not point to anything in Onoda describing how a graded dopant concentration affects carrier movement at all. Much less does Petitioner point to anything in Onoda that would meet the "aid carrier movement" or "from the first surface to the second surface" limitations.

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[3] Element [1.5]: "at least a portion of at least one of the first and second active regions having at least one graded dopant concentration to aid carrier movement from the first and second active regions towards an area of the substrate where there are no active regions," and Element [1.6]: "at least one well region adjacent to the first or second active region containing at least one graded dopant region, the graded dopant region to aid carrier movement from the surface towards the area of the substrate where there are no active regions."

For Ground II, to find these claim limitations in Onoda, Petitioner relies entirely on Greenthread's purported admissions that a downward slope "creates a 'built-in' electric field" "to aid carrier movement from the first surface to the second surface of the substrate." Pet. at 58. But as explained above, Greenthread made no such admission. *Supra* II.A. Moreover, during prosecution, the Office agreed that "without knowing other parameters of the device" one cannot say whether the gradient would aid the movement of carriers. Ex. 1002 at 270. Since neither the Petition nor Dr. Campbell analyze "other parameters" they cannot show whether Onoda's concentration gradient would "aid carrier movement" of carriers "from the first surface to the second surface." Therefore, Ground II fails to show how Onoda teaches this claim limitation.

Tacitly acknowledging the deficiency of Ground II, Petitioner tries to plug the hole in Onoda with Nishizawa in Ground III. But Nishizawa undercuts its argument even further. As discussed above, Nishizawa's dopant gradient is explicitly "to prevent [the] flow of electrons," not aid carrier movement. Ex. 1046 at 28. Petitioner offers no explanation of why or how Nishizawa's gradients aid carrier movement when they are expressly for the purpose of preventing it, except with resort (again) to Greenthread's purported admissions.

Furthermore, setting aside that deficiency, Petitioner does not explain how or why Nishizawa's gradients would move carriers "*from the first surface to the second*

surface." Far from being concerned with carriers at the "active region," Nishizawa expressly states that such carriers can be "disregarded." Ex. 1046 at 29.

When an α-ray strikes a semiconductor device it can create carriers in the substrate (annotated by Petitioner in gray below) which can travel upwards. Pet. at 81. However, Nishizawa says that "the probability of creation of electron-hole pairs [due to α-rays] is *extremely low near the surface*" of the device (blue). Ex. 1046 at 29 (emphasis added). Any carriers there can be "disregarded." *Id.*

Rather than trying to affect carriers in what Petitioner maps to the "active region" (the blue "channel" or red "source and drain") Nishizawa describes using graded dopants in the p+ layer (tan) "in order to *prevent* [the] flow of electrons," up into the active region.[4] Ex. 1046 at 28 (emphasis added); Pet. at 81. Simply put, Petitioner points to nothing in Nishizawa about moving carriers from the "active region" downward.

[4] As Petitioner notes, the text in Nishizawa applies to Figure 35, which is, for present purposes equivalent to Figure 16. Pet. at 81-82 n. 13. Regions 33 and 33a in the figures correspond to each other.

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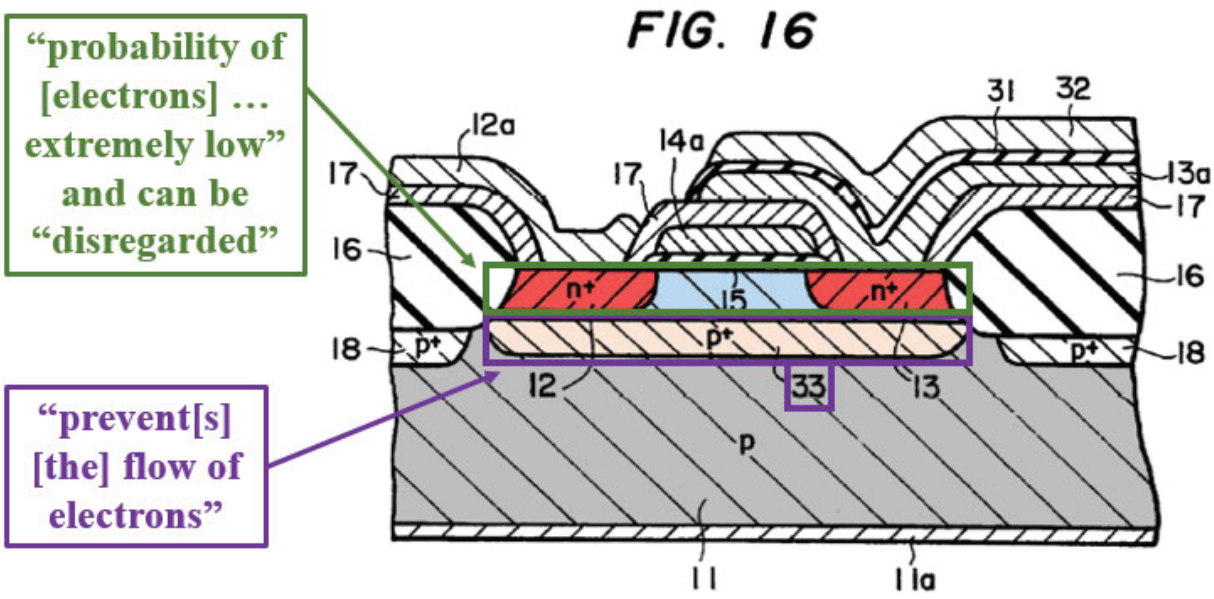

Pet. at 81 (further annotated by Greenthread).

2. Petitioner's Kawagoe Grounds (Ground I) fail.

The Petition fails to demonstrate that Kawagoe teaches the "aid carrier movement" or "from the first surface to the second surface" claim limitations for similar reasons to its Nishizawa grounds. Just like Nishizawa, Kawagoe actually teaches the use of graded dopant regions to *impede* movement of carriers caused by α-rays. Petitioner cuts off its quote from Kawagoe mid-sentence to conceal the parts of Kawagoe that discredit its argument.

Petitioner discusses Kawagoe, quoting:

> the impurity concentration of the p-well 6p is given such a gradient that it is gradually lowered in the depthwise direction from the surface of the epitaxial layer 2E, so that the influence to be caused by the carriers (or electrons) due to the α-ray is

> lowered. Specifically, the electrons produced by the α-ray are attracted to the substrate body 2S by that concentration gradient and ***prevented from entering the p-well 6p*** so that the soft errors can be reduced in case the MIS memory of the DRAM or the like is formed in the p-well 6p.

Petition, 28; *see also* Ex. 1007 at 28 (emphasis added). In other words, just like Nishizawa, Kawagoe "prevent[s]" the movement of carriers, rather than aids them. *Id.* Also like Nishizawa, the carriers that Kawagoe discusses are not in what Petitioner maps to the "active region." *Id.* They are far away from it.

The carriers Kawagoe describes are *below* "the p-well 6p"—the region that Petitioner identifies as the single drift layer—because Kawagoe says that they are "prevented from entering" 6p which is Petitioner's drift layer. (*See* Petitioner's further annotated figure 16 from Kawagoe below).[5]

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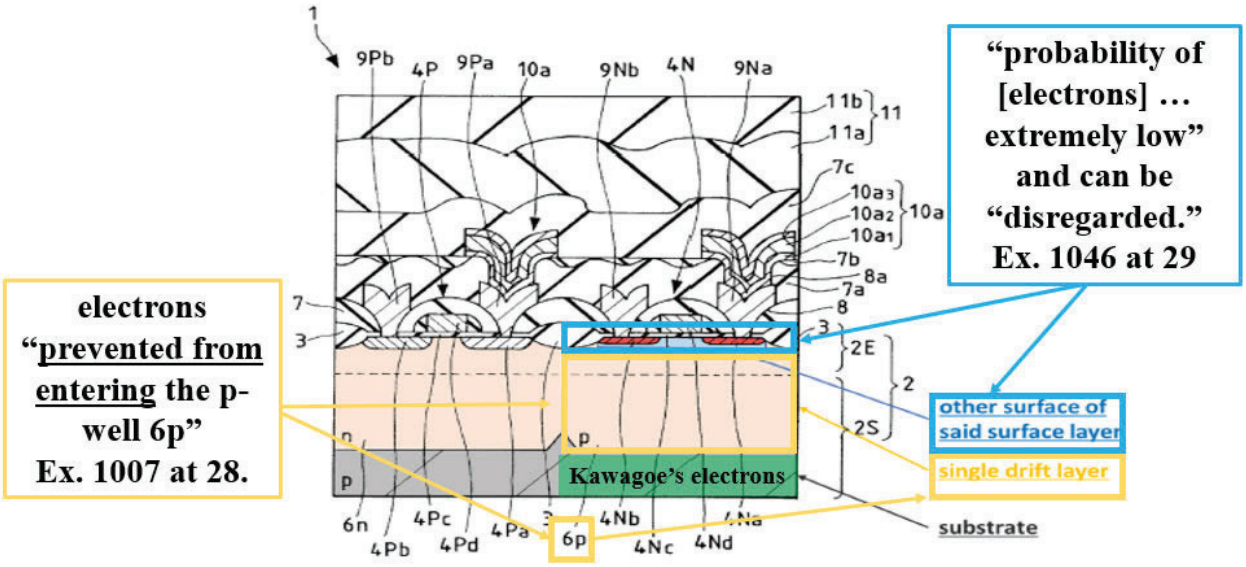
[5] Kawagoe's 6p extends to the very top of the device. Therefore, carriers travelling vertically could only enter 6p from below. Even if carriers could be located above 6p, those carriers would not satisfy the claim limitation. Those carriers would be in what Petitioner identifies as the active region. Since they are "prevented from entering" 6p, they would remain above 6p and Kawagoe's gradient would not aid their movement downward. Nishizawa also confirms that Kawagoe is discussing

[redacted]



Pet. at 28 (further annotated by Greenthread).

3. Dr. Campbell's declaration cannot make up for the gaps in the prior art.

Dr. Campbell's declaration cannot make up for what is lacking in Petitioner's references. Dr. Campbell merely observes that graded dopants would exert some force on carriers, without separately analyzing whether that force would "aid carrier movement." Dr. Campbell simply ignores this as a separate claim limitation, except

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carriers outside what Petitioner maps to the active region. Both Nishizawa and Kawagoe adopt dopant gradients as a solution to SEUs caused by α-ray strikes. Nothing in Kawagoe describes α-rays generating electrons in the active region of a device and Nishizawa says that possibility can be "disregarded." Ex. 1046 at 29. The carriers Kawagoe addresses are all below 6p.

when he points to Greenthread's purported admission that any concentration gradient aids carrier movement.

For example, Dr. Campbell does not offer an opinion regarding the strength of the force created by the dopant grading in Onoda, Nishizawa, or Kawagoe. He merely observes that a gradient creates an electric field exerting some force, and deems the claim limitation satisfied. For example, Dr. Campbell opines that "Kawagoe discloses that the impurity concentration of the p-well 6p (the graded dopant concentration curve with a maximum concentration of Nw at the top surface in FIG. 17) is designed to aid carrier movement of electrons from the top surface of the layer 2E of the substrate 2 by using the P-type graded dope concentration." Ex. 1003 at ¶ 174.

Since Dr. Campbell offers no opinion about the strength of the force created by the dopant gradients, Dr. Campbell necessarily cannot not compare it to other forces acting on carriers. To the extent Dr. Campbell identifies those other forces at all, he likewise does not assess their magnitude. Consequently, Dr. Campbell's analysis fails to determine whether the force exerted by the specific dopant gradients would actually aid carrier movement, or be overwhelmed by other forces in the device.

The closest Dr. Campbell comes to analyzing the forces on a carrier is his statement that the concentration profile in one reference (Onoda) can be considered

a "gaussian distribution." Ex. 1003 at ¶ 311. But Dr. Campbell's declaration does not say how these shapes are relevant to the "aid carrier movement" or "from the first surface to the second surface" limitations. Dr. Campbell does not describe what forces these curves exert on carriers much less does Dr. Campbell say how those forces compare with other forces acting on carriers. Dr. Campbell merely observes the shape of the downward curves and concludes that the claim limitation is met by anything having "a downward-sloping graded-dopant profile." *Id.* Accordingly, Dr. Campbell's averments cannot make up for the absence in Petitioner's references of any teaching that graded dopants should be used to "aid carrier movement from the first surface to the second surface" of a semiconductor device.

III. The Board should deny institution under *General Plastics*.

Under *General Plastic Industrial Co., Ltd. v. Kaisha*, MPS may not wait until related entities have initiated IPR proceedings to file its own IPR petition of the same patent claims with the advantage derived from having already seen Greenthread's arguments. IPR2016-01357, Paper 19 at 11 (PTAB Sept. 6, 2017) (precedential) ("[T]he filing of sequential attacks against the same claims, with the opportunity to morph positions along the way, imposes inequities on [Patent Owner]."). *General Plastic* and its progeny instructs the Board to deny institution of "serial" petitions in which petitioners assert new arguments to "cure the deficiencies that the Board identified in its first-filed petitions." *Id.* Here, MPS has filed modified version of

the IPRs MPS's co-defendants Semiconductor Components Industries d.b.a. "onsemi" ("OS"), Cirrus Logic Inc. ("CL") and Omnivision Technologies Inc. ("OV"), but with the benefit of having seen Greenthread's POPRs. MPS cannot deny that it is coordinating invalidity positions with these entities, because MPS, CL, OV, and another defendant/petitioner, Texas Instruments Inc. ("TI") have filed virtually identical invalidity contentions. MPS did not simply obtain publicly available alleged prior art, but cites to vast quantities of data about allegedly prior art Texas Instruments products that TI has treated as Highly Confidential Process Information. Greenthread must review the information on a standalone computer at a TI facility, but TI has provided it to its competitors. MPS did not even bother to change the bates numbers for the supporting documents, keeping the "TI-PI" prefix (referring to Texas Instruments-Process Information). The Board should deny institution because the Petition is an improper serial petition.

A. The *General Plastic* factors weigh in Greenthread's favor

General Plastic sets out seven factors the Board considers denying institution of serial petitions. Each factor weighs in favor of Greenthread:

> 1. whether the same petitioner previously filed a petition directed to the same claims of the same patent;
>
> 2. whether at the time of filing of the first petition the petitioner knew of the prior art asserted in the second petition or should have known of it;

> 3. whether at the time of filing of the second petition the petitioner already received the patent owner's preliminary response to the first petition or received the Board's decision on whether to institute review in the first petition;
>
> 4. the length of time that elapsed between the time the petitioner learned of the prior art asserted in the second petition and the filing of the second petition;
>
> 5. whether the petitioner provides adequate explanation for the time elapsed between the filings of multiple petitions directed to the same claims of the same patent;
>
> 6. the finite resources of the Board; and
>
> 7. the requirement under 35 U.S.C. § 316(a)(11) to issue a final determination not later than 1 year after the date on which the Director notices institution of review.

Id. at 9–10. These factors are not exhaustive, and under *Valve Corp. v. Electronic Scripting Prods., Inc.*, a sufficiently-related party qualifies the "same petitioner" for the purposes of the first prong. IPR2019-00062, Paper 11 at 2 (Apr. 2, 2019). ("[W]hen different petitioners challenge the same patent, we consider any relationship between those petitioners when weighing the *General Plastic* factors."). If the Board finds a "significant relationship" between Petitioners, the first factor weighs against institution. *Id.*

Greenthread has satisfied the first prong. MPS is a party to a Joint Defense Group ("JDG") in the current district court litigations in Delaware and Texas that shared and copied the same invalidity contentions. The JDG includes defendants OS,

OV, CL, and TI. The JDG has collectively filed *twenty-eight* IPR petitions against Greenthread's Challenged Patents, or more than four petitions per patent.[6] Greenthread has filed preliminary responses in ten of those fourteen IPR petitions. The instant IPR challenges the same patent and uses some of the same prior art as at least three of the JDG's petitions: IPR2023-01243 (onSemi); IPR2024-00016 (Cirrus and onSemi); and IPR2024-00672 (TI). Each of those IPRs challenges at least claims 1, 2, 4-9, and 12-18 of the '842 Patent and relies on the Kawagoe reference.

MPS knew of the prior art at the time of the first-filed petition, but waited until Greenthread had begun briefing the first-filed IPRs, satisfying the second and third *General Plastic* prongs. OS filed the first IPR petition of the '842 Patent on July 27, 2023. Cirrus and OV jointly followed suit on October 11, 2023. Greenthread

[6] IPR2023-01242; IPR2023-01243; IPR2023-01244; IPR2024-00016; IPR2024-00001; IPR2024-00017; IPR2024-00018; IPR2024-00019; IPR2024-00020; IPR2024-00021; IPR2024-00263; IPR2024-00264; IPR2024-00265; IPR2024-00266; IPR2024-00468; IPR2024-00469; IPR2024-00470; IPR2024-00672; IPR2024-00673; IPR2024-00674; IPR2024-00550; IPR2024-00551; IPR2024-00552; IPR2024-00553; IPR2024-00771; IPR2024-00772; IPR2024-00773; and IPR2024-00774.

filed its POPRs in each of these IPRs on November 14, 2023, and January 24, 2024, respectively. On March 12, 2024, TI filed its IPR of the ’842 Patent.

MPS nevertheless delayed filing the instant IPR until March 18, 2024—over seven months after onSemi filed the first IPR, and four months after Greenthread filed its first POPR. MPS’ protracted delay militates in favor of the Board finding for Greenthread on the fourth *General Plastic* prong. MPS offered no excuse for its belated filing, merely regurgitating the same conclusory statement it offered in six other IPR petitions, that “Petitioner is not barred or estopped from requesting IPR.” IPR2024-00468, Paper 1, § III.

Finally, General Plastic’s sixth and seventh factors weigh in favor of dismissing MPS’s petition. MPS has simply been dilatory and hearing MPS’ mostly duplicative challenges will simply delay resolution of the parties’ dispute, while giving MPS the undue advantage of having seen Greenthread’s responses to the IPRs. Adjudicating late-filed and duplicative IPRs is not a worthwhile use of the Boards limited resources.

B. MPS has significant relationships with the members of the JDG

As discussed above, MPS is so closely aligned with the other members of the JDG, which previously filed IPR petitions of the ’842 Patent, that the Board should consider them the same entity for the purposes of a *General Plastic* analysis. *See*

Valve Corp. v. Electronic Scripting Prods., Inc., IPR2019-00062, Paper 11 at 2 (Apr. 2, 2019) (precedential).

In *Valve Corp.*, petitioners had a "significant relationship" because they were co-defendants in a district court litigation, accused of infringing the same patent based on the same product. *Id.* at 9–10. This case is more compelling than *Valve Corp.*—not only are the members of the JDG accused of infringing the same patent in district court cases; they are actively coordinating their defense and sharing purportedly highly confidential information with competitors. They are thus more likely to be using the first-filed petitions as the type of "test cases" that Valve forbids. *Id.* at 12.

This is so even though the JDG members are not co-defendants in the district court cases. In *Ericsson Inc. v. Uniloc 2017, LLC*, the Board rejected an overly-narrow interpretation of *Valve* that would exclude petitioners who are not co-defendants in a district court litigation and who challenge a different set of patent claims. IPR2019-01550, Paper 8 at 12 (PTAB Mar. 17, 2020). There, the Board found that a petitioner can create an "implicit" significant relationship where none previously existed by "using the prior petitioners' work as a menu and picking and choosing from their work product." *Id.* Here, MPS has not just picked off the menu of the JDG members' work product; it has collaborated to create the menu.

The JDG has cooperated through the pendency of the district court litigations and the IPR proceedings and advanced nearly identical defenses. Not only does MPS not deny being a member of the JDG, and largely copied the IPRs of other members; MPS also served invalidity contentions that referenced invalidity contentions prepared by other defendants in other district court cases. The contentions were so similar they identified the same Bates number documents form prior cases in the Eastern District of Texas. MPS' invalidity contentions have further copied and included highly sensitive source code/process information from TI, guaranteeing that the petitioners of various IPRs and members of the JDG are sharing confidential information and coordinating strategy.

Finally, this case is inapposite to *General Motors LLC v. Neo Wireless LLC*, IPR2023-00962, Paper 16 (Mar. 22, 2024) (precedential). There, the Director vacated the Board's General Plastic analysis on the grounds that the parties were not sufficiently related. There, unlike here, "there [was] no evidence that [the parties] had any interactions or agreements regarding [the accused standard or product]." *Id.* at 3. In fact, the district court, not the parties, had ordered consolidation for the purposes of pretrial coordination. *Id.* By contrast, here, MPS and members of the JDG have voluntarily coordinated their efforts, easily clearing the "significant relationship" test of *General Plastic*.

[redacted]

IV. The Petition is Untimely under 35 U.S.C. § 315(b).

A. Background

1. Prior Litigation Involving the Challenged Patent

Greenthread owns a family of patents, which all claim priority to the same provisional application. Petitioner has filed IPRs challenging six of those patents.[7]

a. Intel-[redacted] Litigation

On February 1, 2022, Greenthread served Intel and [redacted] with a complaint filed in the Western District of Texas alleging infringement of the Challenged Patent and others. Ex. 2001 (Complaint), 1-4; Ex. 2002 (Returned Summons). After an additional patent issued, Greenthread filed a First Amended Complaint against [redacted] and Intel which it served via ECF on April 29, 2022. Ex. 2003. The cases against Intel and [redacted] were severed and the case against Intel was transferred to the District of Oregon. Ex. 2004, 22. The [redacted] litigation remained in Texas and continued in parallel with the *Intel* litigation.

[redacted] was a real-party-in-interest to the [redacted] litigation. Greenthread's allegations in the First Amended Complaint against [redacted] (i.e. the April 29 complaint) were based on, among other things, [redacted] components in [redacted] products. Ex. 2003,

[7] *See* IPR2024-00468, IPR2024-00469, IPR2024-00470, IPR2024-00550, IPR2024-00551, IPR2024-00552, and IPR2024-00553.

[redacted]

¶¶18, 60, 76-81; Ex. 2005, 7 ("[redacted] Accused Products"), 17-19 (section entitled "[redacted] Accused Products"); Ex. 2006, 1-34. After Greenthread served the April 29 complaint accusing [redacted] products, additional counsel stepped in to represent [redacted] with respect to [redacted] products. Ex. 2007. [redacted] then filed its own IPRs against the patents that had been asserted against [redacted] products. Ex. 2008 (IPR2023-00376, Petition), Ex. 2023 (IPR2023-00324, Petition), Ex. 2024 (IPR2023-00325, Petition), Ex. 2025 (IPR2023-00375, Petition). The [redacted] petitions named [redacted] as a real-party-in-interest. *E.g.*, Ex. 2008, 7; Ex. 2023, 7; Ex. 2024, 7; Ex. 2025, 8. Afterwards, Greenthread added [redacted] as a party to the [redacted] litigation. Ex. 2009. After [redacted] was added to the case, [redacted] counsel for [redacted] products appeared in the case for [redacted] Ex. 2010. [redacted] other counsel did not represent [redacted] Greenthread and Intel, [redacted], and [redacted] settled their disputes and Greenthread granted [redacted] and Intel licenses as described below.

b. Greenthread Licenses to Intel and [redacted]

As part of the settlements, Greenthread granted Intel and [redacted] releases for past infringement and a license to Greenthread's patents, by way of sublicense through RPX Corporation ("RPX") ("License"). Ex. 2011. Greenthread signed the agreement, licensing and Intel and [redacted] on April 7, 2023. *Id*. at 15. In a parallel IPR, RPX submitted an affidavit stating: "By operation of their membership agreements with RPX, Intel and [redacted] acquired the full scope of sublicensable rights

Greenthread granted to RPX at the time the RPX-Greenthread Agreement was executed." Ex. 2012, 2.

The License grants Licensees (i.e. Intel and [redacted] via RPX) the right "to make, have made, use, have used, sell, … offer for sale, have offered for sale, have sold, … import, have imported, own, order, … purchase, … obtain, keep, acquire, receive, … and otherwise exploit or dispose of any Licensed Product and Service." Ex. 2011, 3 (definition of "Patent License"); *see also* Ex. 2012.

The License defines "Licensed Product and Service" to include "any product … made, have made, used, purchased, provided, hosted, sold, leased, licensed, distributed, transmitted, exported, imported or offered for sale, lease, or import or otherwise exploited or disposed of by or on behalf of" Licensees. Ex. 2011, 2.

The License covers all of Greenthread's patents, including the Challenged Patent. *See* Ex. 2011, 3-4 ("'Patents' shall mean ….") and 17 (listing patents).

Accordingly, "any product" Licensees "have made" by Petitioner or "purchase" from Petitioner is a "Licensed Product or Service" which Licensees have the right to "use, … sell, … obtain, … acquire, … receive, … and otherwise exploit." Ex. 2011, 2-3.

2. The Current and Co-Pending Proceedings

On May 26, 2023, Greenthread filed a complaint in the U.S. District Court for the District of Delaware alleging that Petitioner infringes U.S. Patent Nos. U.S.

Patent Nos. 8,421,195 ("the '195 Patent"), 9,190,502 ("the '502 Patent"), 10,510,842 ("the '842 Patent"), 10,734,481 ("the '481 Patent"), 11,121,222 ("the '222 Patent"), and 11,316,014 ("the '014 Patent"). Ex. 2026. Greenthread has served only preliminary infringement contentions in the district court. Ex. 2016. The case is stayed, and Petitioner has not provided discovery regarding the infringing products.

On February 3, 2024, Petitioner filed the first petition in these proceedings, IPR2024-00468 ('195 patent). The -00468 petition contains no evidence or explanation regarding its timeliness and § 315(b), just the bald statement that Petitioner is not barred or estopped from requesting IPR. IPR2024-00468, Paper 1, §III. IPR2024-00469 ('502 patent) and -00470 ('222 patent) were filed on the same date with the same statement.[8] Two days later, Greenthread informed Petitioner that it "may be operating, in part, under" the License and that "the petitions are [therefore] time barred." Ex. 2013. Greenthread requested that Petitioner withdraw its petitions or at a minimum provide discovery into whether the petitions are time barred. *Id*. On February 6, 2024, Petitioner responded refusing to withdraw the petitions or provide any discovery. Ex. 2014.

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[8] Petitioner filed four additional IPRs on March 18, 2024 with the same statement. *See* IPR2024-00550, IPR2024-00551, IPR2024-00552, and IPR2024-00553.

[redacted]

3. Petitioner's Relationship with Licensees.

Public information confirms that Petitioner's chips are incorporated into Intel and [redacted] products. For instance, Petitioner announced during Investor/Analyst Day in 2018 that its technology would be used in Intel processors. *See* Ex. 2017, 18. Petitioner's Q2 2021 earnings call referred to its success including its technology in Intel products. Ex. 2018, 5. Petitioner's MP2953B is a digital multi-phase controller that provides power for the core of the Intel VR12.5 platform. Ex. 2019. Publicly-available information also confirms that Petitioner is a chip supplier for [redacted] Ex. 2020, 2021.

B. The Petition should be dismissed under 35 U.S.C. § 315(b).

1. Legal Standard for Privity

a. Control of prior litigation is not required to establish privity.

Section 315(b) provides that "[a]n inter partes review may not be instituted if the petition requesting the proceeding is filed more than 1 year after the date on which the petitioner, real party in interest, or privy of the petitioner is served with a complaint alleging infringement of the patent." 35 U.S.C. § 315(b). In its decision in a related IPR, the panel said that "the rationale behind § 315(b)'s time bar is 'to prevent successive challenges to a patent by those who previously have had the opportunity to make such challenges in prior litigation.'" *Semiconductor Components Indus., LLC v. Greenthread, LLC*, IPR2023-01242, Paper 35 at 19

(PTAB Feb. 21, 2024). Greenthread respectfully contends that the purpose of § 315(b) and the privity inquiry is not so narrow.

Whether two parties are privies with respect to one another is evaluated under the "common law" framework set forth in *Taylor v. Sturgell*, 553 U.S. 880 (2008). *WesternGeco LLC v. ION Geophysical Corp.*, 889 F.3d 1308, 1317 (Fed. Cir. 2018); *see also* Office Trial Practice Guide at 13 (citing *Taylor*). Control of the prior litigation is *sufficient* to establish privity between the parties. *See, e.g.*, *WesternGeco*, 889 F.3d at 1319. But control or even awareness of the prior litigation are *not necessary* to establish privity. Rather, *Taylor* identifies a "pre-existing 'substantive legal relationship'" as *one* reason to find privity and litigation via "proxy" or "control over the [prior] litigation" as *different* reasons to find privity. 553 U.S. at 894-95 (cleaned up). Preclusion based on a pre-existing substantive legal relationship is justified by the "needs of property law," *not* because a precluded party was adequately represented in prior litigation, controlled prior litigation, or served as a proxy. *Id.* "Preclusion is extended or denied in an effort to protect conflicting property interests *rather than an effort to implement concepts of participation or representation.*" *Wright & Miller* (3d ed.) § 4448 Persons Affected by Preclusion (emphasis added).

The Board also has distinguished between privity based on a proxy relationship and privity based on pre-existing substantive legal relationship. For

example, in the *Worlds* remand decision, the Board rejected the argument that the petitioner was not in privity when it "was not placed on notice of the infringement" previously and could not "control the [prior] District Court litigation." *Bungie Inc. v. Worlds Inc.*, IPR2015-01264, Paper 64 at 38, 44 (PTAB Jan. 14, 2020).

Therefore, *Taylor* and the Board have identified "a variety of pre-existing 'substantive legal relationship[s]' between" two parties that can create privity, even in the absence of control over the prior litigation. *Taylor*, 553 U.S. at 894 (alterations in original). For example, customer-supplier relationships can and frequently do create privity. *See, e.g.*, *Ventex Co., Ltd. v. Columbia Sportswear N. Am., Inc.*, IPR2017-00789, Paper 148 at 14 (PTAB Jan. 24, 2019) (precedential); *Volkswagen Grp. of Am. Inc. v. Argina Tech. Ltd.*, IPR2021-01263, Paper 16 at 5-12 (PTAB Jan. 21, 2022); *Ericsson Inc. v. Regents of Univ. of Minn.*, IPR2017-01197, Paper 56 at 8, 10 (PTAB Sept. 18, 2020). "[A]n indemnity relationship is [also] the type of relationship that can establish privity," particularly when the indemnity obligations "directly relate to the" accused products. *Ericsson*, IPR2017-01197, Paper 56 at 8, 10. A finding of privity is also appropriate when two parties are "preceding and succeeding owners of property" and when one party acts as the "agent" for the other. *Taylor*, 553 U.S. 894-95.

[redacted]

b. Petitioner bears the burden to show that its petition is timely—i.e. it is not in privity with a time-barred party.

"[T]he IPR petitioner bears the burden of persuasion to demonstrate that its petitions are not time-barred" under § 315(b). *Samsung Electronics Co. Ltd. v. Netlist, Inc.*, IPR2022-00615, Paper 40 at 2 (PTAB Feb. 3, 2023) (quoting *Worlds Inc. v. Bungie, Inc.*, 903 F.3d 1237, 1242 (Fed. Cir. 2018)). There is no "rebuttable presumption that formally shifts a burden of production to the patent owner" or a presumption that a petition is timely because a petitioner asserts that it is. *Worlds*, 903 F.3d at 1242. Such a presumption would be unfair, because it would "disfavor the party that likely has inferior access to potential sources of proof." *Id.* at 1244. As in this case, a patent owner is unlikely to know the details (or even existence) of a petitioner's relationships that might give rise to privity. Therefore, to dispute the timeliness of the petition, "a patent owner must produce *some* evidence that" a petition is time barred—but only "*some*." *Worlds*, 903 F.3d at 1244 (emphasis in original). Once the patent owner has "presented evidence sufficient to put" the timeliness of the petition "into dispute," "the Board c[an] no longer merely rely upon" the petitioner's assertion that its petition is timely. *Id.* at 1246. Throughout the proceeding, the "burden remains with the petitioner to establish" that its petition is timely. *Id.* at 1242.

[redacted]

Intel and [redacted] were served with a complaint alleging infringement of the Challenged Patent on February 1, 2022. Ex. 2002, 2, 4; Ex. 2001. [redacted] was an RPI to the First Amended Complaint against [redacted] (served by ECF on April 29, 2022). Ex. 2003; Ex. 2008, 7. Thus, the Petition is untimely if Petitioner is in privity with Intel or [redacted]. Greenthread has disputed the timeliness of the Petition with evidence showing that Petitioner is in privity with Licensees. *See* Ex. 2013. Petitioner has offered no evidence whatsoever to controvert Greenthread's evidence or demonstrate the timeliness of its Petition. Accordingly, the Petition should be dismissed.

2. The Petition should be dismissed, because Petitioner has not even attempted to carry its burden to show that the Petition is timely.

a. Greenthread has satisfied its "practical" burden under *Worlds*.

There can be no serious dispute that Greenthread here has met its initial "practical" burden under *Worlds*. *Worlds*, 903 F.3d at 1243-44. First, it is well-established that customer-supplier relationships can create privity and there is no dispute that Petitioner and the Licensees have such a relationship. *See supra* § III.A.3; Ex. 2013. The burden therefore falls on Petitioner to establish that the relationship does *not* create privity. Meeting its burden requires Petitioner to put into the record evidence about its relationships. The privity inquiry is a "highly fact-dependent question," "handled by the Office on a case-by-case basis.'" *Ventex Co.,*

Ltd. v. Columbia Sportswear N. Am., Inc., IPR2017-00651, Paper 148 at 6 (PTAB Jan. 24, 2019) (precedential). Therefore, in virtually every case where the Board has found that a petitioner met its burden, the Board examined the actual agreements and correspondence between the alleged privies. *See, e.g.*, *WesternGeco LLC v. ION Geophysical Corp*., 889 F.3d 1308, 1321 (Fed. Cir. 2018) ("the Board reviewed the purchase agreements"); *Samsung Electronics Co. Ltd. v. Netlist Inc.*, IPR2022-00615, Paper 64 at 14-15 (PTAB Jun. 30, 2023) (examining "indemnification correspondence" and contracts); *Assa Abloy AB v. CPC Patent Tech. Pty., Ltd.*, IPR2022-01093, Paper 20 at 18 (PTAB Feb. 2, 2023) (citing an "88-page agreement"). When the documents are *not* in the record the Board has consistently said that the absence of evidence "cuts against" the *petitioner*, not the patent owner. *Ventex Co., Ltd. v. Columbia Sportswear N. Am., Inc.*, IPR2017-00789, Paper 148 at 14 (PTAB Jan. 24, 2019) (precedential). Moreover, to the extent that control of the prior litigation is relevant, "the lack of evidence" regarding control should count against Petitioner, not Greenthread. *Bungie Inc. v. Worlds Inc.*, IPR2015-01264, Paper 64 at 35 (PTAB Jan. 14, 2020).

The only exception of which Greenthread is aware are recent decisions involving Greenthread. *See, e.g.*, *Semiconductor Components Indus., LLC v. Greenthread, LLC*, IPR2023-01242, Paper 31 (PTAB Feb. 5, 2024); *see also* IPR2023-01243, Paper 30 (PTAB Feb. 5, 2024); IPR2023-01244, Paper 31 (PTAB

Feb. 5, 2024). Greenthread respectfully urges the panel decide this case in accordance with the Board's other post-*Worlds* precedents.

b. Petitioner has done nothing to satisfy its burden under Section 315(b).

Here, institution should be denied because (1) Petitioner has the burden to show that its Petition is timely and (2) Petitioner has introduced no relevant evidence—absolutely none—to support such a finding. "Failure to prove [a] matter … means that the party with the burden of persuasion loses on that point—thus, if the fact trier of the issue is left uncertain, the party with the burden loses." *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378–79 (Fed. Cir. 2015). *Id.* Since Petitioner has not even attempted to meet its burden, it should "lose[]". *Id.*

The Petition simply asserts, without support or explanation, that "Petitioner is not barred or estopped from requesting IPR of the Challenged Claims on the grounds identified in this Petition." Pet. at 4. That is inadequate on these facts. Mere "attorney argument that itself fail[s] to cite evidence" cannot meet Petitioner's burden. *Worlds*, 903 F.3d at 1246. Further, Greenthread provided Petitioner the opportunity to come forward with evidence or explanation for the timeliness of its Petition—and even sought to compel the production of such evidence. Paper 7 (PO's Motion for Additional Discovery). However, Petitioner refused to provide any discovery whatsoever or put into the record a single piece of evidence. Therefore,

Petitioner cannot rely on its mere assertion, and in the absence of evidence to show that its Petition is timely, Petitioner "loses." *Dynamic Drinkware*, 800 F.3d at 1379.

Moreover, not only does Petitioner lose in the *absence* of any evidence, the "lack of evidence" that would presumably be in Petitioner's possession affirmatively "cuts against the party bearing the burden of proof on these issues." *Ventex Co., Ltd. v. Columbia Sportswear N. Am., Inc.*, IPR2017-00789, Paper 148 at 14, 2019 WL 858745, at *6 (PTAB Jan. 24, 2019) (precedential). Therefore, the Board can reasonably infer from Petitioner's resistance to providing evidence to meet its burden that the evidence (not in the record) is unfavorable to Petitioner.

Since Petitioner is "the party with the burden" and adduced no relevant evidence, Petitioner "loses." *Dynamic Drinkware*, 800 F.3d at 1379.

3. The Petition should be dismissed, because evidence of record shows that the Petition is time-barred.

The Board need not evaluate whether Greenthread's evidence suffices to show that the Petition is time-barred, because Petitioner bears the burden of proof on that issue and has not even attempted to meet its burden. If the Board chooses to look at the evidence of record, however, it is clear that the Petition is time-barred.

a. Petitioner and Licensees are "preceding and succeeding owners of property" and parties to sales of accused goods.

It is undisputed that Petitioner and Licensees are "preceding and succeeding owners of" the licensed and/or infringing products that Petitioner makes and supplies

to Licensees. *Taylor*, 553 U.S. at 894. Under the America Invents Act ("AIA"), privity "extend[s] to parties to transactions and other activities relating to the property in question," i.e., infringing goods. *WesternGeco*, 889 F.3d at 1318 (quoting legislative history of the AIA). Here, the "transactions … in question" are the sales Petitioner makes to Licensees and "the property in question" is the goods conveyed in those sales. *Id.* As parties to the same transactions involving the same property at issue in successive litigation, Petitioner and Licensees are unquestionably in privity.

b. Petitioner supplies accused goods to Licensees.

Licensees are Petitioner's customers, and in opposing Greenthread's motion for discovery or to withdraw or amend its petitions, Petitioner did not dispute that fact. *See* Ex. 2014.

Additionally, even if none of the products currently accused by model number were sold to Licensees, the district court litigation is in its early stages and has been stayed. *See* Ex. 2027. The prior litigation also settled in its early stages. Many more products are likely to be accused as the case progresses and would have been accused had the prior litigation continued. *Arigna Tech. Ltd. v. Volkswagen AG*, No. 2:21-cv-00054, 2022 WL 2761288, at *2 (E.D. Tex. Jan. 19, 2022) ("'It is expected that during [] discovery, infringement contentions may be clarified or refined' based upon information produced during discovery.").

[redacted]

c. Petitioner is a beneficiary of Licensees' "agreement[] directly related" to the accused products.

"[A]greements directly related to the product accused of infringing the patent at issue in this proceeding" satisfy *Taylor's* "pre-existing substantive legal relationship" test. *Ventex*, IPR2017-00651, Paper 148 at 12. Here, Petitioner operates under and is a beneficiary of Licensees' agreement with Greenthread. That agreement is "directly related to" the accused products, because it licenses some of them. *Id.*

Under the license "any product" Licensees "have made" by Petitioner or "purchase" from Petitioner is a "Licensed Product or Service" which Licensees have the right to "use, … sell, … obtain, … acquire, … receive, … and otherwise exploit." Ex. 2011, 2-3. Furthermore, the license grants a limited sublicense to Licensees' "have-made vendors" (for the limited purposes of making products for Licensees). *Id.*, 5. Petitioner is one such vendor and is therefore a (limited) sublicensee of Licensees under the license. Even if that were not the case, "have-made vendors" are entitled to a limited implied license. *See LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 73 (Fed. Cir. 2012). Therefore, Petitioner is a beneficiary of Licensees' "agreements directly related to the product accused of infringing the patent at issue in this proceeding" satisfying *Taylor's* "pre-existing substantive legal relationship" test. *Ventex*, IPR2017-00651, Paper 148 at 12.

[redacted]

d. Petitioner's licensed sales encumber otherwise infringing articles.

Under the doctrine of exhaustion, a licensed "sale is treated, for purposes of patent exhaustion, as if the patentee made the sale itself. The result: The sale exhausts the patentee's rights *in that item*." *Impression Prod., Inc. v. Lexmark Int'l, Inc.*, 581 U.S. 360, 376 (2017) (emphasis added). Therefore, after Petitioner sells products under the license, any downstream user of the article sold would have an exhaustion defense against Greenthread. Put differently, the "property" of which Petitioner and Licensees are "preceding and succeeding owners" becomes encumbered under the doctrine of exhaustion. *Taylor*, 553 U.S. at 894. Further, it does not matter whether the products were accused in the instant litigation *or whether Petitioner even asserts its license defense*. Petitioner still limits Greenthread's rights vis-à-vis the "property" it sells under the license by giving future owners an exhaustion defense. Thus, Petitioner is effectively providing rights to third-parties under the license and, therefore, is in privity with Licensees.

e. Petitioner acts as Licensees' "agent" for Licensees' "have made" rights.

It is well established that "agents and principals are in privity for res judicata purposes 'if the prior action concerned a matter within the agency.'" *Herrion v. Children's Hosp. Nat. Med. Ctr.*, 448 F. App'x 71, 73 (D.C. Cir. 2011). The D.C. Circuit is "hardly alone in this approach to privity between principals and their

agents." *Herrion v. Children's Hosp. Nat. Med. Ctr.*, 786 F. Supp. 2d 359, 371 n.9 (D.D.C.), *aff'd*, 448 F. App'x 71 (D.C. Cir. 2011). Courts around the country have held similarly and the leading treatise on Federal procedure agrees. *Id.* (citing cases from the Supreme Court, First, Second, Third, Fifth, Sixth, Seventh, Ninth, and Eleventh Circuits); *Wright & Miller* § 4460 (3d ed.).

For example, in *John St. Leasehold, LLC v. Cap. Mgmt. Res., L.P.*, 283 F.3d 73, 75 (2d Cir. 2002), the FDIC contracted with asset managers to exercise its rights as receiver for a failed bank. The Second Circuit held that the asset managers were the FDIC's agents, acting within "the scope of their agency," and thus "in privity with the" FDIC. *Id.* at 75.

Likewise in, *Fiumara v. Fireman's Fund Ins. Companies*, 746 F.2d 87, 87 (1st Cir. 1984), a motel operator sued his fire insurer for denying his claim in bad faith. The motel operator lost and then sued the *contractors* the insurer used to investigate his claim. *Id.* The First Circuit affirmed summary judgment for the contractors, holding that the contractors were "acting as agents of the" insurer and therefore "clearly qualify as persons in privity" for the purposes of collateral estoppel. *Id.* at 92.

Here, Petitioner is Licensees' contractor exercising their rights under the license, including by making accused products on their behalf under the "have

made" clause.[9] This is no different than the contract asset managers in *John St. Leasehold* acting on behalf of the FDIC or the contract investigators acting on behalf of the insurance company in *Fiumara*. *See also* Black's Law Dictionary (11th ed. 2019) (defining "agent" as "[s]omeone who is authorized to act for or in place of another"). Ex. 2028. Therefore, Petitioner is Licensees' agent and is in privity with Licensees. *Herrion*, 448 F. App'x at 73.

4. Basic fairness and the policy underlying the AIA support dismissing the petition.

a. Petitioner is trying to take inconsistent positions before the Board and in district court.

"[T]o protect the integrity of the judicial process," "courts have uniformly … prohibit[ed] parties deliberately changing [litigation] positions according to the exigencies of the moment." *New Hampshire v. Maine*, 532 U.S. 742, 750 (2001). That is what Petitioner is attempting here. Right now, Petitioner wants to claim that

[9] Petitioner has said that its products "typically require a highly technical sales and applications engineering effort" and Petitioner maintains a staff of "applications engineers who work directly with customers' engineers." Ex. 2022. "Work[ing] directly with" Licensees "engineers" indicates that Petitioner and Licensees may have an exclusive manufacturing agreement for some products and/or products are actually jointly designed.

it is a stranger to Licensees' agreement, and therefore not in privity with them. But, Petitioner refuses to produce any evidence to support that conclusion or to say whether it will later claim the benefit of the agreement to reduce the likely damages against it in district court. Petitioner is "playing fast and loose" with the Board and the district court. *Id.* Petitioner stepped into Licensees' shoes by making and selling products under their license. Petitioner should not be able to take those shoes off when standing before the Board, only to put them back on again when it appears in district court.[10]

b. Petitioner's other interests are irrelevant.

"Congress 'chose language that bars petitions where proxies or privies would *benefit* from an instituted IPR, even where the petitioning party might separately have its own interest in initiating an IPR.'" *Power Integrations, Inc. v. Semiconductor Comps. Indus., LLC*, 926 F.3d 1306, 1316 (Fed. Cir. 2019) (emphasis in original); *RPX Corp. v. Applications in Internet Time LLC*, IPR2015-01750, Paper 128 at 10 (PTAB Oct. 2, 2020) (precedential) (same). Therefore, the fact that the

[10] Patent Owner is not suggesting that Petitioner could make its Petition timely by disclaiming a license defense in district court. Petitioner cannot turn privity on and off at will. Patent Owner's point is simply that Petitioner's apparent strategy is unfair and the Board should not condone it.

Petitioner benefits from a license that does not cover *all* of Petitioner's sales is irrelevant. Petitioner *still benefits* from the license (and exercises Licensees' "have made" rights). Therefore, Petitioner is in privity with Licensees. Petitioner will have the opportunity to challenge the validity of the Challenged Patent in district court. The only question before the Board is whether Petitioner can avail itself of *additional* challenges here. The answer Congress provided in § 315(b) is "no."

V. CONCLUSION

For the foregoing reasons, institution of the Petition should be denied. If institution is denied, the Board could deny Greenthread's motion for additional discovery as moot.

Dated: July 15, 2024

Respectfully submitted,

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. §42.24(d), Petitioner hereby certifies that the word count for the foregoing **PATENT OWNER'S PRELIMINARY RESPONSE** is 8,170 words, which is within the limit set in 37 C.F.R. §42.24(b)(1). This word count does not include the table of contents, table of authorities, exhibit list, certificate of word count, and certificate of service. This word count was prepared using Microsoft Word.

Dated: July 15, 2024

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CERTIFICATION OF SERVICE

The undersigned hereby certifies that a copy of this **PATENT OWNER'S PRELIMINARY RESPONSE** has been served on Petitioner via email on the following counsel of record for Petitioner:

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