

Undefined “Ground”: Form or Substance in PTO Estoppel

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This Comment seeks to resolve a dispute among district courts on how to interpret the term “ground” in 35 U.S.C. § 315(e)(2), the America Invents Act’s (AIA) estoppel provision. The question of whether a party that asserts a printed publication or patent in an inter partes review (IPR) proceeding is estopped from asserting real-world prior art, such as a device, in a later civil action under § 315(e)(2) has resulted in a district court split. Some courts have construed the estoppel provision narrowly, reasoning that because a physical object like a device is not something that could have been raised during IPR, estoppel cannot apply. Under this interpretation, “ground” is interpreted to mean a piece of evidence. Because physical products are not the same type of evidence offered during IPR, litigants are not estopped from using them in later civil actions. On the other side of this, courts have determined that estoppel can apply, but does not in situations where the physical object being raised is either “superior and separate” or presents a “substantive difference” to the paper prior art raised in IPR. Here, “ground” is interpreted to mean argument, such that estoppel applies when the device offers no arguments other than those already put forth during IPR—in other words, when litigation would be duplicative. The resolution to this question carries significant consequences for the cost, efficiency, and institutional division of labor of the patent system.

This Comment argues that the AIA’s text and purpose support adopting the substantive difference approach. This approach strikes a workable balance in focusing on the legal arguments to ensure that litigants are not unduly relitigating the same arguments already decided by the Patent Trial and Appeal Board (PTAB). The substantive difference approach also advances the AIA’s purpose in offering IPR as a cheaper, faster alternative to district court litigation. It also promotes a reasonable division of responsibilities between the PTAB and district courts. Overall, as this Comment explains, this interpretation best aligns with the patent system’s goals.

INTRODUCTION	2174
I. LEGAL BACKGROUND.....	2181

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A. The Patent System	2181
1. The system in general.....	2181
2. The purpose of the PTAB.	2183
B. The District Court Split	2185
1. The form approach.....	2186
2. The substance approach.....	2189
II. STATUTORY INTERPRETATION AND MAKING SENSE OF THE SPLIT.....	2194
A. Undertaking a Textual Analysis.....	2195
1. Relevant statutory provisions.	2195
2. A textual analysis.	2196
B. The Purpose of Estoppel.....	2199
III. PRAGMATIC CONSIDERATIONS AND INSTITUTIONAL QUESTIONS	2201
A. Pragmatic Considerations.....	2201
B. The Relationship Between the PTAB and District Courts.....	2203
CONCLUSION.....	2209

INTRODUCTION

Imagine that Acme Camera Corporation (Acme) invents and patents a small, portable camera. The camera records professional-grade, high-definition video and features easy mounting for attaching the camera to helmets, motorcycles, cars, ATVs, jet skis, snowmobiles, boats, and virtually any other vehicles.¹ One of its main features is that it can be controlled remotely using GPS technology. Later, Acme’s rival company, Motorsport Cameras (Motorsport), is issued a patent for video cameras that can be controlled remotely, also using GPS. Motorsport Cameras brings suit in federal district court against Acme, alleging that Acme’s camera infringes its patent.

Of course, Acme is a major company that pioneered the sports camera market and believes that Motorsport’s patent is invalid because it is not novel—Acme invented the same thing first. Acme could make this argument as a defense to Motorsport Camera’s infringement claim. But Acme has another option as well: it could file for inter partes review (IPR)² with the Patent Trial and Appeal

¹ These facts are adapted from *Contour IP Holding, LLC v. GoPro, Inc.*, 2020 WL 109063 (N.D. Cal. Jan. 9, 2020).

² Inter partes review is a streamlined, trial-like proceeding conducted at the Patent Trial and Appeal Board (PTAB) in which the validity of a patent may be challenged by a third party who has not filed a civil action in federal court that challenges validity and who has not been sued for infringement of the patent more than one year earlier. Defendants in a patent infringement suit, like Acme, can choose whether and when to file an IPR petition, and request that the district court proceeding be stayed. However, they must file for IPR within one year of being served the summons. Only novelty and

Board (PTAB) at the United States Patent and Trademark Office (USPTO) to challenge the validity of Motorsport’s patent.³

An IPR proceeding allows “active participation by a third-party challenger in a trial-like proceeding before the PTAB,” and is an “adversarial proceeding[] that afford[s] the parties some discovery and an oral hearing, although both are more limited than in district court, and the timeline is much shorter.”⁴ By statute,⁵ Acme is only allowed to use “paper prior art”—defined as “printed publications and earlier patents”⁶—in an IPR proceeding. This means that Acme can submit the patent and the camera’s sales catalog—which it does—but not the physical camera itself. Acme loses in IPR, and the PTAB issues a final written decision stating that the disputed claims⁷ in Motorsport’s patent are not invalid on novelty or nonobviousness grounds.⁸ From Acme’s perspective, the PTAB has reached the wrong outcome. This brings Acme back to the district court, where it seeks to introduce the camera itself as a basis for the Motorsport patent’s invalidity while relying on the same legal arguments presented in IPR. The device, in this scenario, is nothing more than a physical manifestation of the paper prior art raised in IPR—a proceeding that Acme itself chose to initiate as an alternative to responding in the district court. Now, Acme, displeased with the result of IPR, hopes for a second bite at the apple.

But here is the wrinkle: the Leahy-Smith America Invents Act⁹ (AIA), the legislation through which Congress introduced major statutory change to the patent system, contains an estoppel

nonobviousness arguments that involve printed publications and earlier patents may be raised. See JONATHAN S. MASUR & LISA LARRIMORE OUELLETTE, *PATENT LAW: CASES, PROBLEMS, AND MATERIALS* 516 (2d ed. 2022).

³ See *GoPro*, 2020 WL 109063, at *1.

⁴ MASUR & OUELLETTE, *supra* note 2, at 515.

⁵ 35 U.S.C. § 311(b) (stating that a petitioner in an IPR may request to cancel as unpatentable one or more claims of a patent “only on a ground that could be raised under section 102 or 103 and *only on the basis of prior art consisting of patents or printed publications*” (emphasis added)).

⁶ MASUR & OUELLETTE, *supra* note 2, at 49 (defining “paper prior art” as “printed publications and earlier patents”). “Prior art” is a legal term for references disclosing elements of the invention. *Id.* at 47. In contrast, “real-world prior art” refers to prior art with physical embodiments. *Id.* at 70.

⁷ “Disputed claims” refers to the precise claims within Motorsport’s patents that Acme has attempted to show are invalid.

⁸ *GoPro*, 2020 WL 109063, at *2.

⁹ Pub. L. No. 112–29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.).

provision, according to which a final written decision from IPR means that the petitioner (from IPR) cannot in a later district court action assert that the claim¹⁰ in a patent is invalid “on any ground that the petitioner raised or reasonably could have raised during that inter partes review.”¹¹ Acme was only allowed to assert “paper prior art” during IPR,¹² and, accordingly, it raised the camera’s patent and sales catalog.¹³ Now, in district court, Acme seeks to assert the device itself—the camera—in order to relitigate.¹⁴ Is this permitted? Is the device itself a ground that Acme raised or reasonably could have raised during IPR?

Interpretation of the term “ground”¹⁵ has led to controversy, with disputes arising where a petitioner asserts paper prior art in the form of a patent or printed publication in an IPR proceeding, and later tries to assert the disclosed system (the device itself) in a district court proceeding as a basis for invalidity. This Comment asks whether 35 U.S.C. § 315’s IPR estoppel provision prevents the petitioner from doing so.

Section 315 of title 35 of the U.S. Code does not explicitly define “ground,” and district courts are currently split on how to interpret the term.¹⁶ If “ground” refers to the specific piece of prior art¹⁷—i.e., the particular documents, slides, manuals, manuscripts, etc. that allegedly constitute paper prior art—this

¹⁰ A claim is an element of a patent that defines, in technical terms, the patent’s subject matter. MASUR & OUELLETTE, *supra* note 2, at 11.

¹¹ 35 U.S.C. § 315(e)(2).

¹² 35 U.S.C. § 311(b).

¹³ As discussed *infra*, the facts of the actual *GoPro* case clearly enabled GoPro to argue that the camera itself disclosed arguments *not* covered by the sales catalog raised during IPR. 2020 WL 109063, at *6. This adapted example, by contrast, illustrates a situation in which a litigant is putting forth a device that exemplifies the same arguments already disclosed by printed publications raised in IPR.

¹⁴ *GoPro*, 2020 WL 109063, at *6. To be clear, in this example Acme seeks an opportunity to raise the same arguments again. This is separate from a situation where the physical product would offer new information.

¹⁵ 35 U.S.C. § 315(e)(2).

¹⁶ See *Wasica Fin. GmbH v. Schrader Int’l, Inc.*, 432 F. Supp. 3d 448, 454 n.6 (D. Del. 2020) (collecting cases), *appeal dismissed*, 2020 WL 8374870 (Fed. Cir. Sept. 24, 2020); see also Barbara Clarke McCurdy, Shannon M. Patrick & Stacy Lewis, *Form over Substance? Will the Real Ground Please Stand Up?*, 34 INTELL. PROP. & TECH. L.J. 20, 20 (2022). This split occurs within the district courts because patent cases are appealed directly to the Federal Circuit, which has not yet ruled on this issue. In patent law, a district court split is essentially the same as a circuit court split, as patent cases are not heard by circuit courts. Instead, the Federal Circuit is the unifying body, after which cases may be appealed to the Supreme Court. See 28 U.S.C. § 1295(a)(1).

¹⁷ For an example of this understanding of “ground,” see *Clearlamp, LLC v. LKQ Corp.*, 2016 WL 4734389, at *9 (N.D. Ill. Mar. 18, 2016).

opens the door for patent challengers to make arguments in district court that mimic the arguments that have already lost before the PTAB merely because real-world prior art is available. Crucially, parties cannot rely on real-world prior art¹⁸ in IPR. Therefore, if “ground” is taken to mean a piece of evidence, it will necessarily be the case that patent challengers will get two chances to litigate the same arguments in situations where, for example, they can raise a device itself as grounds in district court litigation, despite the device offering no arguments different from those already raised during IPR. This formalist interpretation—which this Comment terms the “form approach,” drawing from its focus on the actual form of the reference—has been adopted by some courts.¹⁹ Under this interpretation, arguments based on real-world prior art, like the camera from the Acme example, can be raised for the first time in district court—and this would always be the case when a party attempts to use a device to support its invalidity theory. This brings with it the incongruous possibility that district courts may rule opposite to the PTAB, and thus render the PTAB’s decision—which is supposed to be final—irrelevant.

If, however, “ground” instead refers to the substance of the reference²⁰—i.e., the invention that is embodied by and described in the documents, slides, manuals, manuscripts, etc., constituting paper prior art—then the device would be estopped if a publication describing the arguments being made was asserted or reasonably could have been asserted in IPR.²¹ This interpretation constitutes the other side of the split, which this Comment refers to as the “substance approach.”

There is also a further interpretive nuance. Even for those courts that take the substance approach, there is disagreement as

¹⁸ MASUR & OUELLETTE, *supra* note 2, at 49 (defining real-world prior art as “references that are in public use or on sale”). Acme’s camera would be an example of real-world prior art.

¹⁹ See *Zitovault, LLC v. Int’l Bus. Mach. Corp.*, 2018 WL 2971178, at *4 (N.D. Tex. Apr. 4, 2018) (holding that, despite the plaintiff’s arguments that defendants’ system did not raise previously undisclosed information during IPR, IPR is limited to invalidity grounds “that could be raised under section 102 . . . or 103 . . . and only on the basis of prior art consisting of patents or printed publications,” and, thus, “[d]efendants therefore could not have raised prior art systems, such as products and software, during IPR proceedings”); see also *Intell. Ventures II LLC v. Kemper Corp.*, 2016 WL 7634422, at *3 (E.D. Tex. Nov. 7, 2016) (explaining that “regardless of any estoppel, defendants have considerable latitude in using prior art systems (for example, software) embodying the same patents or printed publications placed before the PTO in IPR proceedings”).

²⁰ For an example of this understanding of “ground,” see *Wasica*, 432 F. Supp. 3d at 454 n.6.

²¹ See *Wasica*, 432 F. Supp. 3d at 453–55.

to under what conditions estoppel would not apply. For instance, some courts have applied a “superior and separate” standard that focuses on the reference itself and finds that a device could be estopped unless “it is not only different from, but also substantively stronger than, the patent or printed publication.”²² Other courts have instead required that there be a “substantive difference” between the device being asserted and the prior written art that is “germane to the invalidity dispute at hand.”²³ This substantive difference requirement asks that a different argument, pointing to a difference between the device and paper prior art, be raised in the district court proceeding that justifies the introduction of that device. To be clear, what courts confront here is a secondary disagreement within the overarching interpretive approach that an estoppel finding depends on substance.

Thus, on one side of the split courts using the form approach resolve this question on the narrow basis that petitioners are not estopped from asserting a device during district court proceedings because they simply could not have raised it during IPR,²⁴ and on the other side courts taking the substance approach sometimes do find estoppel.

Patent proceedings and the questions they raise have been in the legal spotlight, with both IPR proceedings²⁵ more generally and estoppel under 35 U.S.C. § 315 being a source of recent debate in the courts.²⁶ The official resolution of the estoppel question this

²² DMF, Inc. v. AMP Plus, Inc., 2021 WL 6499980, at *3 (C.D. Cal. May 5, 2021); see also Star Envirotech, Inc. v. Redline Detection, LLC, 2015 WL 4744394, at *4 (C.D. Cal. Jan. 29, 2015).

²³ Cal. Inst. of Tech. v. Broadcom Ltd., 2019 WL 8192255, at *8 (C.D. Cal. Aug. 9, 2019), *aff'd*, 25 F.4th 976 (Fed. Cir. 2022).

²⁴ See, e.g., Chemours Co. FC, LLC v. Daikin Indus., Ltd., 2022 WL 2643517, at *1–2 (D. Del. July 8, 2022).

²⁵ Recently, the Supreme Court asked the U.S. Solicitor General’s Office to weigh in on the question of whether arguments not raised during PTAB proceedings can later be used in patent litigation in district courts, a question that appears as the latest development in an Apple lawsuit. See Andrew Karpan, *High Court Wants SG’s Views on Apple IPR Estoppel Battle*, LAW360 (Jan. 17, 2023), <https://www.law360.com/articles/1566152/high-court-wants-sg-s-views-on-apple-ipr-estoppel-battle>.

²⁶ For example, the Supreme Court has, over the last few years, considered constitutional questions surrounding patent law, including whether IPRs violate the requisite separation of powers and whether unreviewable authority for Administrative Patent Judges, who adjudicate IPR proceedings, violates the U.S. Constitution’s Appointments Clause, U.S. CONST. art. II, § 2, cl. 2. See *Oil States Energy Servs., LLC v. Greene’s Energy Grp., LLC*, 138 S. Ct. 1365, 1370 (2018) (holding that IPR falls within the public rights doctrine and does not violate separation of powers); *United States v. Arthrex, Inc.*, 141 S. Ct. 1970, 1987 (2021) (holding that unreviewable authority for

Comment explores is one that will have tremendous consequences for the volume and scope of patent litigation.

An issue that has arisen in various cases, including the disagreement over interpreting § 315(e)’s estoppel provision, is the practical consequence of duplicative litigation. If a patent challenge is “simply swapping labels for what is otherwise a patent or printed publication invalidity ground in order to ‘cloak’ its prior art ground and ‘skirt’ estoppel,”²⁷ it would allow a litigant multiple bites of the same proverbial apple. Put simply, courts are concerned about strategic behavior by litigants. This worry about relitigation arises in part from cost concerns. The high cost of patent proceedings is a major factor that contributes to the position of some courts that the system should discourage relitigation of the same arguments. Patent lawsuits in district court “are often lengthy and expensive—a recent survey of patent practitioners estimated the median cost of litigation through appeal at \$675,000 when less than \$1 million is at stake and \$4 million when at least \$25 million is at stake.”²⁸ If duplicative proceedings became the norm, the overall costs associated with patent litigation would rise dramatically.

The sheer volume of IPRs and the interplay between district court litigation and IPRs also make this an important question for litigants and the patent system. Thus, in addition to the statutory interpretation question posed by the AIA’s estoppel provision, this Comment will explore the institutional questions at play by weighing the relationship between the PTAB and district courts and considering what the division of labor between these two adjudicative bodies should be. During fiscal year 2021, there were 1,401 total petitions filed with the USPTO.²⁹ Of these, 1,308 were IPRs, illustrating that IPR makes up the bulk of petitions the USPTO handles. Beyond this,

[t]he growth in IPR proceedings has also reshaped the Federal Circuit docket: in 2011, the court heard fewer than 150 appeals from the USPTO and over 400 appeals from patent infringement lawsuits in district courts; in 2021, there

Administrative Patent Judges violates the Appointments Clause, and suggesting that the Director of the USPTO be allowed to review all final written decisions, as the Director is a political appointee).

²⁷ *Caltech*, 2019 WL 8192255, at *7.

²⁸ MASUR & OUELLETTE, *supra* note 2, at 508.

²⁹ U.S. PAT. & TRADEMARK OFF., PTAB TRIAL STATISTICS FY21 END OF YEAR OUTCOME ROUNDUP IPR, PGR, CBM 3 (2021).

were over 500 USPTO appeals and fewer than 300 appeals from patent infringement suits. Over this same time, patent law has grown from 42% to 51% of the court's caseload.³⁰

The increased share of USPTO appeals in the Federal Circuit's docket indicates that IPR has been somewhat successful as an alternative to district court proceedings. Despite this, PTAB proceedings have arguably not yet achieved their intended function.

PTAB proceedings were intended to be a speedier, more cost-effective *substitute* for district court litigation.³¹ However, some argue instead that "rather than an absolute alternative to civil litigation, the AIA's new proceedings increase the likelihood of duplicative concurrent inter partes administrative and judicial adjudication of a patent's validity."³² Even in 2017, more than 86% of patents challenged in IPR were also litigated in federal courts.³³ The concern over creating an avenue for relitigation becomes clear, especially when one of the two possible resolutions to the district court split over estoppel—the form approach—would essentially allow a second chance to litigate the same claims as a rule.³⁴

This Comment proceeds in three parts. Part I provides legal background to the patent system and its use of IPR proceedings, and it explains the current district court split over how to interpret the estoppel provision. Part II conducts a statutory analysis of 35 U.S.C. § 315, utilizing textual and purposivist lenses to highlight the different arguments at play that have motivated the district court split. Part III explores pragmatic concerns and institutional issues regarding the relationship between the PTAB and the district courts. Both considerations

³⁰ MASUR & OUELLETTE, *supra* note 2, at 516.

³¹ See, e.g., 157 CONG. REC. 3429 (2011) (statement of Sen. Jon Kyl) ("Ideally, extending could-have-raised estoppel to privies will help ensure that if an inter partes review is instituted while litigation is pending, that review will completely substitute for at least the patents-and-printed-publications portion of the civil litigation.").

³² SARAH E. CRAVEN & MICHAEL J. FLIBBERT, LIMITS ON CONCURRENT ADMINISTRATIVE AND DISTRICT COURT PATENT CHALLENGES UNDER THE AIA'S NEW POST-GRANT PROCEEDINGS 1 (2013).

³³ Saurabh Vishnubhakat, Arti K. Rai & Jay P. Kesan, *Strategic Decision Making in Dual PTAB and District Court Proceedings*, 31 BERKELEY TECH. L.J. 45, 69 (2016).

³⁴ For example, courts tend to think about the benefits of estoppel in streamlining issues when considering whether to grant a stay. See, e.g., *Software Rts. Archive, LLC v. Facebook, Inc.*, 2013 WL 5225522, at *4 (N.D. Cal. Sept. 17, 2013) (reasoning that "[h]ere, the defendants are bound by the estoppel provisions of the AIA and thus cannot raise before this court any arguments that they raised or reasonably could have raised at the PTO, which heavily tips the scale in favor of granting the stay").

urge a reading that furthers Congress’s goals in establishing PTAB review: promoting efficiency and instituting a more cost-effective substitute for traditional patent litigation. Throughout these discussions, this Comment proposes resolving the district court split by utilizing the subset of the “substance approach” termed the “substantive difference” approach and underscores the reasons why it is the most compelling interpretation of the statute.

I. LEGAL BACKGROUND

This Part provides legal background on both the patent system and the district court split. Part I.A briefly sketches the contours of the patent system, offers a fuller explanation of IPR proceedings, and discusses the purpose of the PTAB and its administrative proceedings. Then, Part I.B presents the positions that district courts have taken on the interpretation of “ground,” elucidating the difference between the “form” and “substance” approaches in practice.³⁵

A. The Patent System

The patent system is unique. This Section explains the system’s structure and details the nature and function of IPR. This will ground the subsequent discussion of the PTAB’s purpose, which will allow for a better understanding of the institutional goals at play and provide more robust context for how the district court split at issue here fits within it.

1. The system in general.

In the United States, patent law is administered by two institutions.³⁶ One is the USPTO, an administrative agency within the Department of Commerce. The other is the federal district courts (and the Federal Circuit when patent cases are brought on appeal). Together, the USPTO and the federal district courts have exclusive jurisdiction over all patent cases.³⁷ Congress believed that having patent law differ from state to state or circuit to circuit would pose problems for inventors.³⁸ Thus, the principle behind limiting jurisdiction over patent cases to these fora was to

³⁵ 35 U.S.C. § 315(e).

³⁶ MASUR & OUELLETTE, *supra* note 2, at 19.

³⁷ 28 U.S.C. § 1338(a); *see also* MASUR & OUELLETTE, *supra* note 2, at 19.

³⁸ MASUR & OUELLETTE, *supra* note 2, at 16.

keep patent law uniform. The patent system has a distinct administrative structure, as litigation can occur in district courts or in PTAB proceedings, and litigation from both can be appealed to the Federal Circuit³⁹ and then to the Supreme Court.

It is also important to understand the basic mechanics of patent litigation. Before the AIA created IPR as an option, patent litigation occurred in federal district court, where a plaintiff accused a defendant of infringing one or more claims of its patent.⁴⁰ A defendant could argue that it did not infringe the patent's specific claims and, additionally or in the alternative, that the patent itself was invalid for failing to meet the requirements for receiving a patent⁴¹—that it be novel and nonobvious.⁴² A defendant in a patent suit thus may present prior art that was not raised to the USPTO by the patent holder at the time it granted the patent to establish that the patent at issue is not novel or nonobvious, and therefore invalid and inappropriately granted. Before the creation of the PTAB and its administrative proceedings, this was a costly process that occurred entirely within the federal district courts.

The AIA's introduction of administrative PTAB proceedings in 2012 provided a more accessible alternative to district court litigation by creating an administrative adjudicative body that

³⁹ Patent cases are appealed from district courts to the Federal Circuit. Other U.S. Courts of Appeal do not hear patent cases. 28 U.S.C. §§ 1292(c), 1295 (1982).

⁴⁰ 28 U.S.C. § 1338 (providing district courts jurisdiction over patent-based actions). A patent claim “defines the boundaries of an invention, and therefore lays down what the patent does and does not cover.” *Patent Claim*, CORNELL L. SCH. (Aug. 2020), <https://perma.cc/ESF4-7S9L>. A patent claim is “usually expressed as a statement of technical facts in legal terms.” *Id.* For example, a patent might have a claim for “[a] chair *consisting of* a back, a seat, and three legs.” Jon Schuchardt, *Basic Patent Law: III. How To Read a Patent*, DILWORTH IP (Mar. 1, 2013), <https://perma.cc/J5R8-F755> (emphasis in original). If someone else made a chair with a back, a seat, and three legs, they have infringed the patent; if the new chair has a back, a seat, and four legs, the individual has not infringed the patent. *See id.*

⁴¹ As is still the case, the initial determination of patentability is made by the USPTO, which examines prior art and issues the patent if appropriate. *See Patent Process Overview*, U.S. PAT. & TRADEMARK OFF. (Mar. 24, 2022), <https://perma.cc/R8YA-UV67>. “Prior art” is, broadly, a legal term for references that disclose elements of the invention. As explained *supra* in notes 6 and 18, this can be divided into prior art categories that scholars have termed “paper prior art” and “real-world prior art.”

⁴² 35 U.S.C. §§ 102, 103 (2012). To be patentable, an invention must be new, which the novelty requirement polices. The nonobviousness doctrine stands for the idea that it is unlikely a patent is necessary to incentivize the development of an invention that is so obvious that no true invention is required for its creation. Essentially, the idea is that patents are limited to innovative inventions. IPR is limited to arguments involving these two requirements to patentability and is thus focused on only these specific aspects of invalidity. *See MASUR & OUELLETTE, supra* note 2, at 516.

could hear a limited set of claims and thus relieving the burden on district courts. Among these proceedings, IPR has become the most commonly utilized administrative avenue to challenge a patent’s validity.⁴³ IPR is limited to novelty and nonobviousness arguments—an intentional choice, as these challenges are the two main reasons patent claims are invalidated in district court litigation.⁴⁴ The efficient resolution of these challenges before the PTAB allows for a more streamlined patent system. IPR’s popularity is likely due to the several advantages it provides in comparison to validity challenges brought solely during district court litigation. Among these advantages are a shorter timeline to reach a final disposition, lower cost, and a more favorable evidentiary standard for petitioners than is applicable in district courts.⁴⁵

The simplified mechanics of IPR are as follows: A petitioner wants to challenge the validity of another’s patent. The petitioner files for IPR by submitting a petition to the PTAB. The petitioner must identify how paper prior art invalidates the original findings of novelty and nonobviousness that allowed the patent to be granted.⁴⁶ A trial-like proceeding commences, allowing the patent holder to defend against the asserted invalidity. IPR culminates in a final written decision by the PTAB that determines whether the patent’s claims are invalid, at which point the estoppel provision becomes applicable. With this background in place, it is helpful to consider Congress’s intent in creating the PTAB—an intent that should inform how courts interpret the AIA’s IPR estoppel provision.

2. The purpose of the PTAB.

To understand the pragmatic considerations associated with the district court split explored by this Comment, it is also

⁴³ See U.S. PAT. & TRADEMARK OFF., PATENT TRIAL AND APPEAL BOARD STATISTICS 2 (2016).

⁴⁴ See John R. Allison & Mark A. Lemley, *Empirical Evidence on the Validity of Litigated Patents*, 26 AM. INTELL. PROP. L. ASS’N Q.J. 185, 209 tbl.2 (1998) (stating that in federal cases where anticipation (which means there was no novelty) was an affirmative defense, courts invalidated 40.7% of patents, and where obviousness was an affirmative defense, courts invalidated 36.3% of patents).

⁴⁵ IPR utilizes a preponderance of the evidence standard of proof instead of the more onerous clear and convincing evidence standard that would be applied in district court. *Inter Partes Review (IPR)*, MORGAN, LEWIS & BOCKIUS LLP (Apr. 21, 2021), <https://perma.cc/5UVD-9MDY>.

⁴⁶ See 37 C.F.R. §§ 42.101–42.106 (2014).

important to understand the intent behind the PTAB itself. The PTAB was created in 2012 by the AIA,⁴⁷ and it was a key part of the AIA's suite of reforms. The AIA was enacted against the backdrop of rapidly rising patent litigation costs.⁴⁸ The PTAB was intended to function as a cheaper, more efficient forum than district courts to litigate patent validity by focusing and limiting the scope of challenges that could be brought.⁴⁹ It is an administrative court comprised of specialized judges that are familiar with scientific and patent issues.⁵⁰ The AIA expanded litigation options to include filing a petition for review before the PTAB instead of costly district court litigation being the only available option. In essence, the AIA represented a compromise: the preexisting scheme that required petitioners in patent disputes to proceed through costly district court litigation was swapped for a scheme that provided such petitioners the option of an administrative proceeding, which in turn was made more accessible.

Section 315's "estoppel provision is, in many ways, the glue that holds this system together."⁵¹ If the PTAB invalidates patent claims *in IPR*, then they are no longer part of the patent, and infringement actions cannot be filed on those grounds.⁵² If the PTAB upholds the patent claims, then "the petitioner cannot later challenge the patent on the same grounds at the district court level if a patent holder sues the petitioner for infringement."⁵³ Examining the estoppel provision illustrates that "Congress recognized the need to draft the estoppel provision to prevent parties from asserting duplicative and wasteful arguments in future forums, yet also the need to encourage parties to use IPR

⁴⁷ *Patent Trial and Appeal Board: Preliminary Observations on Oversight of Judicial Decision-Making*, U.S. GOV. ACCOUNTABILITY OFF. (July 21, 2022), <https://perma.cc/3XND-4SBU>.

⁴⁸ See Joe Matal, *A Guide to the Legislative History of the America Invents Act: Part II of II*, 21 FED. CIR. B.J. 539, 600–01 (2012).

⁴⁹ See Janet Gongola, *The Patent Trial and Appeal Board: Who Are They and What Do They Do?*, U.S. PAT. & TRADEMARK OFF. (June 26, 2019), <https://perma.cc/2X7Y-D5AU>; see also Rebecca Gentilli, Note, *A Free Bite at the Apple: How Flawed Statutory Drafting Has Undermined the Purpose of the Patent Trial and Appeal Board*, 67 DUKE L.J. 1579, 1587 (2018).

⁵⁰ 35 U.S.C. § 6 (establishing the PTAB, and requiring that Administrative Patent Judges have "competent legal knowledge and scientific ability").

⁵¹ Gentilli, *supra* note 49, at 1589.

⁵² 35 U.S.C. § 315(e)(2); see also Gentilli, *supra* note 49, at 1589.

⁵³ Gentilli, *supra* note 49, at 1589.

while maintaining rights for future litigation.”⁵⁴ The intent was clearly to streamline litigation and prevent litigants from taking advantage of the system by ensuring they could not relitigate the same arguments in district court.⁵⁵ With this preliminary background information, the district court split can be explored in greater detail.

B. The District Court Split

This Section explains the case law surrounding the interpretive disagreement over the term “ground.” It is useful to examine the AIA’s text at this juncture. An invention can be represented both by a printed publication and by an actual device. The AIA, however, limits IPR proceedings to prior art consisting of patents or printed publications. Under § 311 of the AIA, “[a] petitioner in an inter partes review may request to cancel as unpatentable 1 or more claims of a patent only on a *ground* that could be raised under section 102 [novelty] or 103 [obviousness] and *only on the basis of prior art consisting of patents or printed publications.*”⁵⁶ A petitioner that asserts prior written art⁵⁷ in an IPR proceeding “may not assert either in a civil action . . . or in a proceeding before the International Trade Commission . . . that the claim is invalid on any *ground* that the petitioner *raised or reasonably could have raised* during that inter partes review.”⁵⁸

District courts have fallen into two general camps in interpreting the estoppel provision, each of which is explained below. One camp, utilizing the form approach, interprets

⁵⁴ Ann E. Motl, Note, *Inter Partes Review: Ensuring Effective Patent Litigation Through Estoppel*, 99 MINN. L. REV. 1975, 1984 (2015).

⁵⁵ See 157 CONG. REC. 2710 (2011) (statement of Sen. Chuck Grassley). Senator Chuck Grassley stated:

[The bill] also would include a strengthened estoppel standard to prevent petitioners from raising in a subsequent challenge the same patent issues that were raised or reasonably could have been raised in a prior challenge. The bill would significantly reduce the ability to use post-grant procedures for abusive serial challenges to patents.

⁵⁶ 35 U.S.C. § 311(b) (emphasis added).

⁵⁷ It is worth noting that IPR’s limitation to paper prior art could be an arbitrary line, and that it may make sense to allow devices to be introduced during IPR proceedings. The argument for this limitation is likely one based in efficiency concerns and the need for IPR to be a speedy proceeding. But allowing devices or other real-world prior art in IPRs would solve the confusion over estoppel in district courts. Though outside the scope of this Comment’s line of argumentation, this is a point that bears acknowledging.

⁵⁸ 35 U.S.C. § 315(e)(2) (emphasis added).

“ground” to refer to the specific piece of prior art.⁵⁹ In this situation, *real-world* prior art (like a device) takes a different form than the *paper* prior art (like a patent or catalogue) raised during IPR, and therefore estoppel does not apply. The other camp, utilizing the substance approach, interprets “ground” to mean argument.⁶⁰ These courts are not looking at the precise form of prior art being relied on—i.e., whether it is a printed publication versus a device—but rather whether a different argument is being made when the device is invoked for the first time as prior art in district court litigation.

To better understand this distinction, recall for a moment the camera example from the Introduction. In that scenario, the courts applying the form approach would hold that the “ground” raised during IPR was the product manual itself. In contrast, courts applying the substance approach would hold that the ground was the particular substantive argument made about whether the product manual had all of the elements of the patent and thus made the patent ineligible as non-novel. The second camp focuses on whether the real-world prior art supports an argument for invalidity not raised by the paper prior art previously assessed by the PTAB. Within this substance-based camp, some courts have required that a claim meet a “superior and separate” standard, while others have taken a “substantive difference” approach. The following sections highlight the form camp and the substance camp in turn. Within the substance camp, both subsidiary approaches will also be described and distinguished.

1. The form approach.

The form approach adopts a narrow reading of § 315(e)(2). The basic idea is that the “ground” is the particular piece of prior art—e.g., a product manual. What follows as a consequence of this interpretation is that, because real-world prior art cannot be raised in IPR, district courts cannot estop any argument for

⁵⁹ See, e.g., *Biscotti Inc. v. Microsoft Corp.*, 2017 WL 2526231, at *8 (E.D. Tex. May 11, 2017). In *Biscotti*, “Biscotti argue[d] that Microsoft intend[ed] to assert certain systems as prior art to the asserted claims, yet Biscotti characterize[d] this system prior art as printed subject matter in disguise, i.e., subject matter that could have been raised during IPR proceedings.” *Id.* at *8. The court pointed to § 311(b)’s language to reach the conclusion that “Microsoft therefore could not have raised a prior art ‘system’ during IPR proceedings.” *Id.*

⁶⁰ See, e.g., *Wasica Fin. GmbH v. Schrader Int’l, Inc.*, 432 F. Supp. 3d 448, 454–55 (D. Del. 2020), *appeal dismissed*, 2020 WL 8374870 (Fed. Cir. Sept. 24, 2020).

invalidity that is supported by real-world prior art. For example, in *Chemours Co. FC v. Daikin Industries, Ltd.*,⁶¹ the District Court for the District of Delaware concluded that, “[a]s a matter of statutory interpretation, estoppel does not apply to [] prior-art products . . . regardless of whether those products are ‘cumulative’”⁶² of the paper prior art used in IPR. The court held that “§ 315(e)(2) does not estop an IPR petitioner’s use in litigation of an invalidity theory that relies upon [real-world prior art] as a prior art reference because a prior art product cannot be used as a reference to challenge the validity of a patent claim in [] IPR,” and, thus, “any invalidity theory relying upon that [real-world prior art] as a prior art reference is not a ‘ground’ that reasonably could have been raised during IPR.”⁶³

The *Chemours* court also considered congressional purpose when interpreting the estoppel provision. The court noted that “[t]he statute at issue was the product of considered debate and careful thought,” and that Congress “could have broadened the categories of prior art on which IPR could be requested,” or specified that estoppel would apply to a device disclosing the same arguments covered by the paper art in IPR, but did not do so.⁶⁴ The court chose to adhere to “well-accepted canons of construction” while stating that “it is not for this Court to ignore Congress’s omission and create additional bases for estoppel.”⁶⁵ It is worth noting that the court did not specify what those well-accepted canons are.

Echoing the *Chemours* court’s reasoning, other courts taking the form approach have agreed that “[e]stoppel does not extend to other types of prior art, such as prior-art devices. . . . Therefore defendants can rely on the prior-art systems in their invalidity contentions to argue anticipation or obviousness.”⁶⁶ In *Medline Industries, Inc. v. C.R. Bard, Inc.*,⁶⁷ Medline sought to estop Bard

⁶¹ 2022 WL 2643517 (D. Del. July 8, 2022).

⁶² *Id.* at *1.

⁶³ *Id.* (citing *Medline Indus., Inc. v. C.R. Bard, Inc.*, 2020 WL 5512132, at *3 (N.D. Ill. Sept. 14, 2020)). An invalidity theory is a reason put forth to support the invalidity defense, an assertion that the “patent holder did not satisfy the basic requirements to obtain a patent, usually because the claimed invention was not novel or would have been obvious when it was invented.” Roger Allen Ford, *Patent Invalidity Versus Noninfringement*, 99 CORNELL L. REV. 71, 73–74 (2013).

⁶⁴ *Chemours*, 2022 WL 2643517, at *2.

⁶⁵ *Id.*

⁶⁶ *CliniComp Int’l, Inc. v. Athenahealth, Inc.*, 2020 WL 7011768, at *2 (W.D. Tex. Oct. 28, 2020).

⁶⁷ 2020 WL 5512132 (N.D. Ill. Sept. 14, 2020).

from pursuing any invalidity grounds that relied on its physical products, arguing estoppel on the basis of § 315(e)(2).⁶⁸ The District Court for the Northern District of Illinois read “ground” to mean the “specific piece of prior art or combination of prior art that a petitioner raised, or could have raised, to challenge the validity of a patent claim during an IPR.”⁶⁹ This reading again embraces the view that “any invalidity theory relying upon that product as a prior art reference is not a ‘ground’ that reasonably could have been raised during [] IPR.”⁷⁰

The *Medline* court made a similar argument to one in *Chemours* about congressional purpose, noting:

If Congress had wanted to estop an IPR petitioner from pursuing invalidity grounds that relied upon a physical product in a particular situation, such as where a patent or printed publication discloses the same claim limitations as the product, it could have provided language to that effect. Congress did not do so, and this failure indicates that Congress did not intend for the IPR estoppel provision to be that broad.⁷¹

Medline caveats that an IPR petitioner avoids statutory IPR estoppel only if actually relying on a product or product-related evidence, meaning that a litigant must demonstrate that it is making an argument based on the product.⁷²

These cases hold that the AIA’s text uses “ground” to reference a specific piece of prior art, and thus precludes an interpretation that would apply estoppel to real-world prior art, like devices. The use of the camera from the example in the Introduction would never be estopped in a district court because a party could not have raised it during IPR—even if, per the *Chemours* court’s interpretation, the camera revealed no new information from what had already been disclosed during IPR. A litigant that can raise a physical product like the camera would always be allowed to do so due to the limitation to patents and printed publications that constrains IPR.

⁶⁸ *Id.* at *3.

⁶⁹ *Id.* at *4 (emphasis added).

⁷⁰ *Id.*

⁷¹ *Id.*

⁷² *Medline*, 2020 WL 5512132, at *4.

2. The substance approach.

Courts that take the substance approach—meaning they generally agree that “ground” means argument rather than piece of prior art—fall into two camps. The first camp calls for a “superior and separate” standard, which requires that the new ground being asserted derives from a superior reference (meaning more probative) that is separate from that invoked during IPR. Under this approach, the court must determine whether “the physical product discloses features that are not included in the printed publication.”⁷³ The standard “requires certain claim limitations to be independently satisfied by prior art in a way that is different from an associated prior art patent or printed publication.”⁷⁴

The second camp is a “substantive difference” approach that asks for, as the name suggests, a relevant substantive difference between the arguments for invalidity deriving from the paper prior art and from the device being subsequently asserted.⁷⁵ The key point is that the superior and separate standard is about the reference itself—it asks whether the device discloses something above and beyond the references used in IPR. By contrast, the substantive difference standard is about the argument—the question is whether the argument being made in district court is in some way different than the argument made in IPR. This Section explains both standards and argues that the substantive difference approach is the better of the two.

a) Superior and separate. What the court looks for in a superior and separate determination is a demonstration that the “physical system [] establish[es] certain functionalities (or a lack thereof) that are not present in the printed publications.”⁷⁶ For example, if the sales catalog of the Acme camera from the Introduction contained a claim for a hyperresponsive on-off button, a court applying the superior and separate standard would apply estoppel if the camera had nothing more than that same on-off button in physical form. Under this standard, the

⁷³ Christian Karpinski, *Patent Owners Face Unknown Arguments as to Whether IPR Estoppel Attaches to Physical Products*, 19 UIC REV. INTEL. PROP. L. 328, 339 (2020).

⁷⁴ *Id.* Claim elements are also referred to as claim “limitations” because they add an element to the invention’s scope, and thus limit the class of infringing devices or processes to those that also have that limitation. See MASUR & OUELETTE, *supra* note 2, at 28.

⁷⁵ See *Cal. Inst. of Tech. v. Broadcom Ltd.*, 2019 WL 8192255, at *8 (C.D. Cal. Aug. 9, 2019), *aff’d*, 25 F.4th 976 (Fed. Cir. 2022).

⁷⁶ *Acceleron, LLC v. Dell, Inc.*, 2020 WL 10353767, at *3 (N.D. Ga. Mar. 30, 2020).

button itself simply represents a claim already raised by the sales catalog. By contrast, estoppel would not apply if the sales catalog did not describe the button, and the device was brought forth in district court to prove the hyperresponsive button functionality—this would be a new functional element, not present in the sales catalog. The focus is whether the device being asserted reveals some new element or function—perhaps, for example, upon physical deconstruction—that was not covered by any of the paper prior art in IPR.

The case most cited for the superior and separate standard is *Star Envirotech, Inc. v. Redline Detection, LLC*.⁷⁷ In *Star Envirotech*, the plaintiff alleged that the defendant, Redline, had infringed its '808 patent⁷⁸—a utility patent for its product, the LeakMaster, a machine that detects the presence and location of leaks in a fluid system (e.g., the evaporative or brake system of a motor vehicle).⁷⁹ Redline filed an unsuccessful petition for IPR, where it put forth the patent as paper prior art.⁸⁰ In the subsequent district court proceeding, Star Envirotech argued that though the LeakMaster itself could not have been admitted in IPR, Redline could have instead put forward the LeakMaster owner's manual, which Redline had in its possession at the time of IPR.⁸¹ The court disagreed with this argument, finding that “the physical machine itself discloses features claimed in the '808 Patent that are not included in the instruction manual, and it is therefore a superior and separate reference.”⁸² To substantiate this reasoning, the District Court for the Central District of California pointed to claim nine of the '808 patent, which requires “locating a heating element within a closed smoke producing chamber,” and noted that the LeakMaster instruction manual does not describe the smoke-producing closed chamber, but the device itself, “if disassembled, could shed light on whether it practices this claim limitation.”⁸³

*Contour IP Holding, LLC v. GoPro, Inc.*⁸⁴ illustrates another situation where a device was not estopped under this approach.

⁷⁷ 2015 WL 4744394 (C.D. Cal. Jan. 29, 2015).

⁷⁸ *Id.* at *1.

⁷⁹ U.S. Patent No. 6,526,808 (filed July 7, 1999) (issued Mar. 4, 2003).

⁸⁰ See *Star Envirotech*, 2015 WL 4744394, at *3–4.

⁸¹ *Id.* at *4.

⁸² *Id.*

⁸³ *Id.*

⁸⁴ 2020 WL 109063 (N.D. Cal. Jan. 9, 2020).

Contour alleged that GoPro improperly sought to “relabel prior art references in order to make the same invalidity arguments and circumvent the application of estoppel.”⁸⁵ GoPro, on the other hand, claimed that estoppel is not so broad and that it could assert prior art references used during IPR, so long as those were combined with art not reasonably available during IPR.⁸⁶ GoPro sought to raise the GoPro HD Motorsport HERO video camera, which it could not have raised during IPR. The court, citing *Star Envirotech*, agreed with GoPro that it was not estopped from using the real-world prior art, as “GoPro avers that the product itself has functionality that was not reflected in the GoPro Sales Catalog used during IPR,” and “[a]s long as this is true, GoPro is not estopped.”⁸⁷

b) Substantive difference. The substantive difference standard undertakes a more holistic inquiry that does not tie itself to specific patent claims, but instead analyzes whether some germane difference exists between the paper and real-world prior art. This approach operates at the level of the theory argued, while the superior and separate standard operates at the level of the piece of prior art.

Recall the hypothetical hyperresponsive on-off button included in the camera’s sales catalog. Now, imagine that the device is asserted to show that the hyperresponsive switch utilizes touch sensitivity and has a response time of one-eighth of a millisecond. Under the superior and separate standard, estoppel would still apply. The button on the camera is the button being described in the catalog. But estoppel might not apply under the substantive difference standard. This is because the catalog simply referenced the switch without explaining its features further, whereas the argument being made now is different—it focuses on sensitivity and response time. (Of course, sensitivity and response time would have to be germane to the case in some fashion or else the camera would not be *substantively* different.)

In *California Institute of Technology v. Broadcom Ltd.*,⁸⁸ a patent infringement case, the District Court for the Central District of California confronted the question of whether statutory IPR estoppel can preclude a party challenging a patent

⁸⁵ *Id.* at *6.

⁸⁶ *Id.*

⁸⁷ *Id.*

⁸⁸ 2019 WL 8192255 (C.D. Cal. Aug. 9, 2019), *aff’d*, 25 F.4th 976 (Fed. Cir. 2022).

from arguing that the patent was nonnovel or obvious using a reference related to a printed publication that could have been asserted in IPR.⁸⁹ The court declined to apply any standard “that would require, for instance, that certain claim limitations be independently satisfied by prior art in a way that is different from an associated prior art patent or printed publication,” noting that the “statute does not include such requirements, and they would likely extend the reach of statutory IPR estoppel beyond its intended scope.”⁹⁰ While the court did not believe that an invalidity theory needs to provide disclosure of an independent claim limitation not provided by the printed publication, it did clarify that “there must be *some substantive* difference between the two theories that is germane to the invalidity dispute at hand.”⁹¹ The court felt that the superior and separate standard went too far, as “redundant” prior art grounds do appear commonly in patent litigation.⁹² The focus should instead be on an attempt “to discern if a patent challenge is simply swapping labels for what is otherwise a patent or printed publication invalidity ground.”⁹³

Building on this, the court in *DMF, Inc. v. AMP Plus, Inc.*⁹⁴ provided reasoning similar to that used in *Caltech* and further explained that the question should be about what a party is trying to do through its challenge. In an infringement suit over a patent for recessed lighting, DMF argued that ELCO, the other party in this case, was estopped from asserting prior art invalidity grounds based on a physical product because ELCO did not show that the physical product raised any issues different from those that it did or could have raised in IPR.⁹⁵ In its analysis, a Central District of California court emphasized *Caltech*’s conclusion that the superior and separate reference standard “appears to apply a higher standard than is contemplated by the IPR statute.”⁹⁶

The *DMF* court found instead that the relevant question is whether the patent challenge was simply swapping labels in order to bypass estoppel and “cloak” its prior art ground, and thus

⁸⁹ *See id.* at *6.

⁹⁰ *Id.* at *7.

⁹¹ *Id.* at *8 (emphasis in original).

⁹² *Id.* at *7.

⁹³ *Caltech*, 2019 WL 8192255, at *8.

⁹⁴ 2021 WL 6499980 (C.D. Cal. May 5, 2021).

⁹⁵ *Id.* at *3.

⁹⁶ *Id.* at *4.

applied the substantive difference standard.⁹⁷ To the court, ELCO’s argument that it independently relied on its product was persuasive, because the catalog descriptions of the product did not disclose its features.⁹⁸ Under a superior and separate standard, the catalog descriptions would likely have been found to have disclosed the features arguably disclosed by the product, and the inquiry would have focused on whether the new argument spoke to something that had not been at all described in the catalog. Instead, applying the substantive difference standard, the court found that the product was “substantively, germanely different” for three of the disputed grounds.⁹⁹

Just as courts on the form side of the split have turned to the AIA’s text, so too have courts on the substance side. In *Wasica Finance GmbH v. Schrader International, Inc.*,¹⁰⁰ Wasica brought an action against a competitor, alleging infringement of a patent for a sensor that monitors air pressure in the air chamber of pneumatic tires.¹⁰¹ The court noted that 35 U.S.C. § 312(a)(3) “identifies as separate requirements to be included in an IPR petition ‘the *grounds* on which the challenge to each claim is based, and the *evidence* that supports the grounds for the challenge to each claim.’”¹⁰² This usage illustrates that “the Patent Act distinguishes between grounds and evidence,” and “[s]ince the estoppel provision, § 315(e)(2), applies to *grounds*, a petitioner is estopped from proceeding in litigation on those *grounds*, even if the *evidence* used to support those grounds was not available to be used in the IPR.”¹⁰³ In this case, the court found that estoppel applied because the products disclosed the same claim elements, and, thus, all of Schrader’s obviousness grounds reasonably could have been raised during IPR.¹⁰⁴ The *Wasica* court’s construction of the statute presents an excellent contrast to that in *Chemours*, as it comes out the other way utilizing the grounds-versus-evidence distinction.

These cases illustrate how courts considering whether a party is estopped from asserting a piece of real-world prior art,

⁹⁷ *Id.*

⁹⁸ *Id.* at *5.

⁹⁹ *DMF*, 2021 WL 6499980, at *5–6.

¹⁰⁰ 432 F. Supp. 3d 448 (D. Del. 2020), *appeal dismissed*, 2020 WL 8374870 (Fed. Cir. Sept. 24, 2020).

¹⁰¹ *Id.* at 451.

¹⁰² *Id.* at 454 (emphasis in original).

¹⁰³ *Id.* (emphasis in original).

¹⁰⁴ *Wasica*, 432 F. Supp. 3d at 455.

such as a device, undertake an individualized inquiry into whether there is a germane difference between the device and paper prior art. These courts appear to be attempting to limit the same infringement arguments from being litigated twice, while still allowing a device to be raised in the district court proceeding when it is bringing something useful and different to the litigation.

Where the superior and separate standard focuses on the *reference* itself and whether it discloses something beyond the paper prior art in IPR, the substantive difference standard is focused on the *argument*. The inquiry under the latter standard is whether the real-world prior art makes an argument that is in some way different than the argument made in IPR. To better understand how the substantive difference standard operates, a spin on the camera hypothetical is, once again, helpful.

Recall the hypothetical hypersensitive on-off switch included in the camera's sales catalog. Now, imagine that the device is asserted to show that the hypersensitive switch utilizes touch sensitivity and has a response time of one-eighth of a millisecond. This is a substantively different argument where estoppel would not apply, despite reference to the same hypersensitive on-off switch claim disclosed in the catalog. Per the superior and separate standard, this would not be a *separate* reference and estoppel would apply. But it is a different argument than what was made in IPR that presents a germane difference when compared to the catalog.

Courts have worried that the superior and separate standard's focus on the references themselves risks unduly expanding estoppel.¹⁰⁵ Indeed, the example above illustrates how a simple descriptor would, under the superior and separate standard, foreclose subsequent arguments that do present something relevantly different for a court to consider. The superior and separate standard "ignores a commonly found practice in patent litigation: using one prior art reference to meet the same claim limitations in a number of different invalidity arguments."¹⁰⁶ The substantive difference standard allows for a balancing of efficiency with litigants' interest in obtaining a fair review of their arguments.

II. STATUTORY INTERPRETATION AND MAKING SENSE OF THE

¹⁰⁵ *Caltech*, 2019 WL 8192255, at *7 ("The statute does not include such requirements, and they would likely extend the reach of statutory IPR estoppel beyond its intended scope.").

¹⁰⁶ Karpinski, *supra* note 73, at 342.

SPLIT

With the district court split explained, this Comment now examines the AIA itself to determine which approach should be adopted. The two main camps that district courts have fallen into on this question—form versus substance—are a product of the statutory ambiguity in defining the term “ground.”¹⁰⁷ Indeed, the AIA does not explicitly define it, thus allowing this issue to arise. This Part has two main objectives. The first is to conduct a textual analysis of the relevant statutory provisions that aims to elucidate how the text has led the district courts to arrive at opposite interpretations. The second is to explore the Act’s purpose. This Part concludes that a statutory interpretation supports the adoption of the substantive difference approach.

A. Undertaking a Textual Analysis

1. Relevant statutory provisions.

The primary provision at issue in this split is 35 U.S.C. § 315(e), which establishes estoppel in district court litigation after parties have gone through IPR proceedings. Section 315(e)(2) states:

The petitioner in an inter partes review of a claim in a patent under this chapter that results in a final written decision . . . or the real party in interest or privy of the petitioner, may not assert either in a civil action . . . that the claim is invalid on any *ground* that the petitioner raised or reasonably could have raised during that inter partes review.¹⁰⁸

An analysis of § 315(e)(2) benefits from a comparison to 35 U.S.C. § 312’s language and usage of the term “ground.” Section 312(a)(3), which outlines the requirements of an IPR petition filed under § 311,¹⁰⁹ states that a petition must identify

in writing and with particularity, each claim challenged, the *grounds on which the challenge to each claim is based*, and the *evidence that supports the grounds* for the challenge

¹⁰⁷ 35 U.S.C. § 315(e).

¹⁰⁸ 35 U.S.C. § 315(e)(2) (emphasis added).

¹⁰⁹ 35 U.S.C. § 311(b) states: “A petitioner in an inter partes review may request to cancel as unpatentable 1 or more claims of a patent only on a ground that could be raised under section 102 or 103 and only on the basis of prior art consisting of patents or printed publications.”

to each claim, including—(A) copies of patents and printed publications that the petitioner relies upon in support of the petition; and (B) affidavits or declarations of supporting evidence and opinions, if the petitioner relies on expert opinions.¹¹⁰

Courts, like the district court in *Wasica*, have utilized the language in § 312(a)(3) to conclude that “ground” should be interpreted based on substance, and understood to mean “argument,” because of the distinction made between grounds on which the challenge to each claim is based and the evidence that supports the grounds.

2. A textual analysis.

A textual analysis reveals two plausible interpretations of the term “ground,”¹¹¹ each of which aligns with the form or substance side of the split. This Section explains both and argues that the better interpretation—and the one taken by the substance-based camp—rests on an analysis of the text that takes into account the entirety of the text rather than just a single provision.

Courts on the form side of the split have narrowly interpreted the § 315(e) estoppel provision. Recall the *Chemours* court’s analysis of the estoppel provision: “any invalidity theory relying upon [a] product as a prior art reference is not a ‘ground’ that reasonably could have been raised during the IPR” because “a prior art product cannot be used as a reference to challenge the validity of a patent claim in an IPR.”¹¹² Here, the court interpreted “ground” as referring to what was presented during IPR. A device could not have been raised during IPR. Therefore, a device is not a ground that was raised, and nor could it reasonably have been raised. So, under this interpretation, estoppel never applies to real-world prior art like devices. This narrower, textualist reading has the strength of adhering closely to the provision’s words. Section 315 does not distinguish “ground” from anything else, and § 311 is clear that IPR is limited to “prior art consisting of patents or

¹¹⁰ 35 U.S.C. § 312(a)(3) (emphasis added).

¹¹¹ As a note, the AIA uses both “ground” (singular) and “grounds” (plural) in the various sections identified. For example, § 311(b) uses “ground” while § 312(a)(3) uses “grounds.” This Comment uses both in an effort to remain accurate to the relevant provision, and to references to court decisions.

¹¹² *Chemours*, 2022 WL 2643517, at *2 (citing *Medline*, 2020 WL 5512132, at *3).

printed publications.”¹¹³ The statute, then, does not explicitly provide an indication that real-world prior art is subject to estoppel, and a lack of support in the text for finding estoppel has made courts weary of extending it.

However, per the whole act rule, a canon of statutory interpretation used by courts, statutory text should be construed as a whole.¹¹⁴ Because a statute generally contains interrelated parts, the entirety of the document provides context for each of these individual—but interrelated—parts.¹¹⁵ Typically, “only one of the possible meanings that a word or phrase can bear is compatible with use of the same word or phrase elsewhere in the statute.”¹¹⁶ If this is true—and it makes good sense to take it as such, since a statute taken as a whole that uses the same word in different places to mean different things would likely be nonsensical—then the interpretation of §§ 311 and 312(a)(3) is relevant to the interpretation of § 315(e)(2).

The *Wasica* court’s statutory interpretation of § 312(a)(3) underscores how the substantive view takes on this more holistic interpretive methodology. According to *Wasica*, § 312(a)(3)

identifies as separate requirements to be included in an IPR petition “the *grounds* on which the challenge to each claim is based, and the *evidence* that supports the grounds for the challenge to each claim.” In this way, the Patent Act distinguishes between grounds and evidence. Since the estoppel provision, § 315(e)(2), applies to *grounds*, a petitioner is estopped from proceeding in litigation on those grounds, even if the evidence used to support those grounds was not available to be used in the IPR.¹¹⁷

As the statutory text shows, “grounds” and “evidence” are, in fact, distinguished. The phrase “grounds on which the challenge to each claim is based,” juxtaposed with “and the evidence that supports the grounds for the challenge to each claim,”¹¹⁸ indicates that “grounds” are arguments for which “evidence” is offered as support. Again, this would mean, in application, that the estoppel provision’s usage of “ground” refers to the arguments being raised.

¹¹³ 35 U.S.C. § 311(b).

¹¹⁴ See ANTONIN SCALIA & BRYAN A. GARNER, *READING LAW: THE INTERPRETATION OF LEGAL TEXTS* 167 (2011).

¹¹⁵ *Id.*

¹¹⁶ *Id.* at 168.

¹¹⁷ *Wasica*, 432 F. Supp. 3d at 454 (emphasis in original) (collecting cases).

¹¹⁸ 35 U.S.C. § 312(a)(3).

If estoppel applies to “any ground” (interpreted to mean “argument”), an assessment of substance in the later civil proceeding would be required. In essence, this all culminates in the question of whether “ground” means a piece of evidence or an argument.

In addition, § 311(b) states that “[a] petitioner in an inter partes review may request to cancel as unpatentable [one] or more claims of a patent only on a *ground* that could be raised under section 102 [novelty] or 103 [obviousness] and only on the *basis* of prior art consisting of patents or printed publications.”¹¹⁹ Section 311’s use of “basis,” read in light of § 312, should be understood as an *evidentiary* basis, and its use of “ground” should be read to mean *argument*. If this is the case, then “ground” would have a consistent meaning in §§ 311, 312, and 315 that is distinct from “evidence” or “basis.”

The distinction between “ground” and “evidence” should factor into how “ground” is interpreted in other sections of the statute. If “ground”—as it is used in §§ 311 and 315(e)(2)—is interpreted to mean evidence, then it would not be distinct from the word “evidence” used in § 312(a)(3). This provides a persuasive reason to believe that “ground” in § 315 means “argument” and should not be interpreted to mean “evidence.”

With all this in mind, the substantive difference approach is the most textually compelling method of resolving the district court split. Given the text’s differentiation of the terms, “ground” should be interpreted to mean “argument” rather than “evidence.” In contrast, the text of the AIA does not support the form approach. It would make little sense to equate “ground” and “evidence” when they are differentiated elsewhere in the statute—a differentiation that should inform how § 315(e)(2) is read. While it is true that parties cannot raise real-world prior art in IPR, § 311(b)’s language—“only on the basis of prior art consisting of patents or printed publications”¹²⁰—does not undermine the argument that if “ground” were interpreted to mean “evidence” rather than “argument,” the word “evidence” as it is used in the statute would no longer be distinct.

¹¹⁹ 35 U.S.C. § 311(b) (emphasis added).

¹²⁰ 35 U.S.C. § 311(b).

B. The Purpose of Estoppel

The AIA’s legislative history indicates that Congress wanted the estoppel provision to be drawn more broadly to avoid relitigation of the same arguments in federal court. Consequently, the form approach would not go far enough in furthering the purpose of estoppel. Two pieces of evidence support this idea: (1) that Congress applied estoppel to civil actions and (2) that it applied estoppel both to claims raised and that *could have been* raised in IPR proceedings. First, the provision at issue, § 315(e)(1)–(2), estops claims that have been decided by the PTAB in IPR from being raised once again both in front of the USPTO and in civil actions.¹²¹ If Congress had intended to allow the relitigation of arguments that had already been adjudicated in IPR, it would not have applied estoppel to civil actions. But under the form approach, even if there is no substantive difference between the paper prior art asserted during IPR and the real-world prior art a party seeks to use to substantiate a district court proceeding, then the same argument can be litigated twice. The inclusion of the “civil actions and other proceedings” subsection to the provision makes clear that written decisions resulting from IPR are meant to be a final say on that invalidity claim and to streamline proceedings.¹²² It seems unlikely that Congress, in crafting an act that was intended to promote efficiency, would have wanted such an inefficient and duplicative outcome.

Second, the AIA’s legislative history indicates that the estoppel provision’s inclusion of the “could have raised” phrase was both carefully considered¹²³ and emphasized, resulting in a strong estoppel provision that courts should maintain. Legislators proposed repealing the “could-have-raised” estoppel, which is a clearly expansive application of estoppel meant to reduce the likelihood of duplicative challenges.¹²⁴ But patent owners objected, and the AIA preserved that estoppel

¹²¹ 35 U.S.C. § 315(e)(1)–(2).

¹²² 35 U.S.C. § 315(e)(2).

¹²³ See Matal, *supra* note 48, at 616–20.

¹²⁴ See, e.g., 157 CONG. REC. 3375 (2011) (statement of Sen. Jeff Sessions) (“The bill also includes many protections that were long sought by inventors and patent owners. It preserves estoppel against relitigating in court those issues that an inter partes challenger reasonably could have raised in his administrative challenge.”).

application.¹²⁵ While the central concern of this Comment is the meaning of “ground,” the legislative discussion surrounding the “could have raised” language is instructive in construing the legislative intent driving the statutory construction. IPR itself was intended to provide a more efficient and cost-effective alternative to district court proceedings. The legislative history of the Act is littered with references to the stronger estoppel standard that made its way into the final version of the Act. For example, statements recorded in congressional records note the AIA’s “higher threshold for initiating a proceeding” and “strengthened estoppel standard.”¹²⁶

Given that the legislative history of the AIA indicates that the goal of the IPR system is to avoid relitigation of the same invalidity claims and same arguments, then “ground” should be interpreted to mean “argument.” And, with this, the substantive difference approach should be adopted to allow for determination of whether, in fact, the same *argument* is being raised twice. Construing the estoppel provision in a manner that would, as a bright-line rule, allow real-world prior art to be used in district courts to relitigate decided-on claims would run counter to what the AIA aimed to accomplish with its strengthened estoppel standard. Still, it is worth considering the point—as made in *Chemours*—that if Congress intended for estoppel to apply to real-world prior art, it would have or could have stated that. However, the *Chemours* court missed addressing the purpose of AIA estoppel. It is fair to say that the best resolution of this question would be congressional clarification. Absent that, however, courts should keep in mind the broad purpose of the statute: efficiency, which is supported by strong estoppel.

To be sure, estoppel should not be applied as a blanket rule. There are cases where the device being asserted does present something new for consideration and aids the party’s argument in a way that was not (and could not reasonably have been) addressed during IPR. This would, therefore, be a new argument—or, a new “ground”—to raise, and estoppel should not

¹²⁵ See 157 CONG. REC. 3420 (2011) (statement of Sen. Herb Kohl) (“Patent protection will be stronger with the inclusion of ‘could have raised’ estoppel [and] strong administrative estoppel.”).

¹²⁶ 157 CONG. REC. 2710 (2011) (statement of Sen. Chuck Grassley); see also *America Invents Act: Hearing on H.R. 1249 Before the Subcomm. on Intel. Prop., Competition, and the Internet of the H. Comm. on the Judiciary*, 112th Cong. 52 (2011) (statement of Rep. Zoe Lofgren) (“[T]here is significant disincentive to bring an action because in the litigation, anything that could have been raised can’t be used.”).

apply. The substantive difference approach results in both the most equitable interpretation and application of § 315(e)(2), and the distinction between “grounds” and “evidence” in the text ensures that new grounds can still be raised. The system should ensure that patent validity claims are fairly and thoroughly litigated. To the extent that a device may offer an analysis that would simply not be possible to conduct with paper prior art alone during IPR, a party will not unduly receive a second chance to litigate, but would instead be given the opportunity to fully flesh out its claim in the civil proceeding.

III. PRAGMATIC CONSIDERATIONS AND INSTITUTIONAL QUESTIONS

This Part explores the pragmatic and institutional questions implicated by the district court split over interpretation of “ground” as it applies to § 315(e)(2) estoppel. First, this Part highlights the difficulty in parsing out the division of labor between the district courts and the PTAB—a dynamic that is further complicated by the estoppel question that this Comment explores. To add further context to this discussion, this Part provides background on district courts’ practice of staying litigation¹²⁷ pending IPR. It then discusses how this practice connects to the estoppel question at hand and impacts the division of labor between the PTAB and the district courts, which, especially in the context of IPRs, is currently in a confused state. Finally, this Part argues that the substantive difference approach best adheres to the goals of the AIA and the patent system and contributes to a more workable division of labor that will provide appropriate deference to the PTAB’s expertise.

A. Pragmatic Considerations

Reading the AIA to differentiate between “grounds” and “evidence” in a manner that allows for estoppel to apply to devices that are substantively identical to previously raised paper prior art is the most efficient outcome for our legal system. Litigants should not be allowed to argue the same case twice—doing so would undermine the institutional effectiveness of both the PTAB and district courts.

¹²⁷ See MASUR & OUELLETTE, *supra* note 2, at 517.

From a pragmatic perspective, adoption of the substantive difference approach is also desirable for its alignment with the goals of IPR. Reading “ground” to mean “argument,” and reading the AIA in a manner that comports with its differentiation between “grounds” and “evidence,” allow estoppel to apply to devices that do not perform as new evidence for a new ground, resulting in an efficient outcome. This approach preserves IPR’s purpose of providing a cost-effective substitute for district court litigation. If the form approach were adopted, every patent litigant with the capacity to raise real-world prior art could use a federal court lawsuit to relitigate, which would dramatically increase the amount of litigation and diminish the strength of IPR as the substitute it was intended to be. At the PTAB, “[d]iscovery has been kept to a minimum and the PTAB has managed to keep within the time limits mandated.”¹²⁸ The “average pendency of IPR petitions within the PTAB is fifteen months. Given the three years it can take to try a patent case in popular jurisdictions, speed can be an important benefit to using these proceedings.”¹²⁹ The benefit brought by this speed is lost if litigants duplicate proceedings post-IPR in district courts.

A potential concern regarding the application of the substantive difference standard must also be considered. If the underlying purpose of IPR is to increase efficiency in patent litigation, there is a worry that the substantive difference approach will decrease efficiency insofar as courts will need to engage in hearings about whether a difference between paper prior art and an invention is “substantive.” The answer to this concern comes in the form of considering tradeoffs: the substantive difference standard strikes a workable balance between the form approach and the superior and separate standard. The form approach would drastically increase the amount of patent litigation and be more time consuming in the aggregate. Courts would have to go through a full reassessment of patent validity, rather than being able to terminate litigation earlier in many cases by finding that estoppel applies based on a preliminary substantive difference analysis. Meanwhile, the superior and separate standard would result in lengthier hearings deconstructing the real-world prior art to determine whether it is, in fact, superior and separate.

¹²⁸ Rochelle Cooper Dreyfuss, *Giving the Federal Circuit a Run for Its Money: Challenging Patents in the PTAB*, 91 NOTRE DAME L. REV. 235, 259 (2015).

¹²⁹ *Id.*

In comparison, the substantive difference standard would allow a court to determine whether to apply estoppel based on whether a device is being used to convincingly make a new argument. Rather than requiring a technical inquiry into whether it is truly separate from a reference asserted in IPR, as under the superior and separate standard, the substantive difference standard would only require examination of the arguments. Of the three possible interpretive options, it aligns most neatly with the goals of the patent system by presenting a more efficient option than the form approach and a fairer outcome for litigants than the superior and separate standard. There is no gain to efficiency by instituting a rule, as the form approach would, that allows real-world prior art to bypass estoppel—rather, there is objectively a loss.

B. The Relationship Between the PTAB and District Courts

This Section explains that the PTAB is the preferable forum for adjudicating this type of patent invalidity argument due to its efficiency and expertise. This Section explores the relationship between the PTAB and district courts through the context of district courts’ practice of staying proceedings pending IPR. When considering what the dynamic between these two entities should be, this practice proves instructive—it indicates that the PTAB’s expertise should be taken seriously and that its ability to maintain its efficiency goals should be strengthened rather than diminished. Lastly, this Section explains how the substantive difference approach helps address institutional problems by clarifying the reach of IPR and emphasizes that the PTAB should have responsibility over these issues.

IPR proceedings “trigger automatic stays of co-pending declaratory judgment litigation.”¹³⁰ However, “courts still have the discretion to stay existing infringement litigation brought by a patent owner pending the outcome of an IPR . . . proceeding.”¹³¹ In the event of a stay, PTAB proceedings provide considerable expertise. The USPTO is a specialized administrative body, and the PTAB is composed of specialized Administrative Patent Judges.¹³² Indeed,

¹³⁰ Vishnubhakat et al., *supra* note 33, at 62; *see also* 35 U.S.C. § 325(a)(1), (3); 35 U.S.C. § 315(a)(2).

¹³¹ Vishnubhakat et al., *supra* note 33, at 63.

¹³² 35 U.S.C. § 6 (“[A]dministrative patent judges shall be persons of competent legal knowledge and scientific ability.”).

the PTAB is staffed with experienced patent lawyers and each panel is meant to include someone with close knowledge of the field of the invention. The institution and final decisions reflect this expertise. The Board's opinions are extremely well written and closely reasoned; their fluidity suggests deep immersion in both the technical facts of the cases and the law to be applied.¹³³

By contrast, judges in the federal courts are often generalists, and litigants in district courts are faced with juries that are less equipped¹³⁴ to “address complex questions of law and science.”¹³⁵ Therefore, Article III judges might be particularly willing to grant stays given the potential for specialized direction from the PTAB. After all, Congress hoped that district courts, “[w]ith a workable procedure for issuing stays . . . could also streamline litigation and make what goes on in the courtroom more efficient.”¹³⁶

As Professors Jonathan Masur and Lisa Ouellette explain, “[m]ost IPR petitions are filed after a patent has been asserted in district court litigation, and district courts typically stay litigation pending the USPTO proceeding”¹³⁷ when requested by a defendant. This indicates that “many patent defendants prefer to litigate the validity of the patent in an IPR proceeding rather than in the course of the district court litigation.”¹³⁸ The reasons for this go back to the purpose of IPRs: they are a cheaper and faster alternative to civil litigation. Attorneys’ fees for IPR proceedings amount to a median total through appeal of \$450,000 to \$650,000, which is “less expensive than the millions of dollars it might cost to litigate in court.”¹³⁹ In the event that “litigation is not stayed, non-final judgments—including large damages awards—have sometimes been vacated in light of invalidations in parallel USPTO proceedings,”¹⁴⁰ illustrating the weight that the PTAB’s adjudications can carry. Another major advantage of IPR is the lower burden of proof at the PTAB—“invalidity is

¹³³ Dreyfuss, *supra* note 128, at 261.

¹³⁴ See Mark Lemley, *Why Do Juries Decide If Patents Are Valid?*, 99 VA. L. REV. 1673, 1705 (2013) (describing lawyers’ beliefs that technology was too complex for juries to understand).

¹³⁵ Vishnubhakat et al., *supra* note 33, at 53.

¹³⁶ Dreyfuss, *supra* note 128, at 258.

¹³⁷ MASUR & OUELLETTE, *supra* note 2, at 517.

¹³⁸ *Id.*

¹³⁹ *Id.*

¹⁴⁰ *Id.*; see also *Fresenius USA v. Baxter Int’l*, 721 F.3d 1330, 1347 (Fed. Cir. 2013); Paul R. Gugliuzza, *(In)valid Patents*, 92 NOTRE DAME L. REV. 271, 295 (2016).

established by a preponderance of the evidence rather than the higher standard of clear and convincing evidence.”¹⁴¹

The tendency of district courts to stay existing infringement litigation pending IPR also indicates that some courts themselves have a position on what their role should be relative to the PTAB’s role when it comes to patent validity issues.¹⁴² Some courts defer to the PTAB, finding that IPR proceedings simplify patent validity claims on their behalf. While “the question whether to stay proceedings pending inter partes review of a patent is a matter committed to the district court’s discretion,”¹⁴³ some courts have found that a stay is particularly justified when “the outcome of a PTO proceeding is likely to assist the court in determining patent validity or eliminate the need to try infringement issues.”¹⁴⁴ A number of stays “at the petition stage have similarly emphasized the greater potential for IPR to simplify the issues.”¹⁴⁵ “[I]f the PTO declines inter partes review, little time is lost, but if PTO grants inter partes review, the promise is greater for an important contribution by the PTO to resolution of the governing issues in the litigation.”¹⁴⁶

However, disagreement among courts bleeds into this realm as well. Some courts “have denied a stay at the IPR petition stage, concluding a stay is premature.”¹⁴⁷ In *Automatic Manufacturing Systems Inc., v. Primera Technology Inc.*,¹⁴⁸ the court “also found unduly prejudicial a six-month ‘limbo’ between the petition and the USPTO’s review decision, with the patentee unable to prosecute its claim and the case ‘languishing’ on the court’s docket.”¹⁴⁹

¹⁴¹ MASUR & OUELLETTE, *supra* note 2, at 517.

¹⁴² See USC IP P’ship, L.P. v. Facebook, Inc., 2021 WL 6201200, at *2 (W.D. Tex. Aug. 5, 2021).

¹⁴³ Multimedia Content Mgmt. LLC v. Dish Network L.L.C., 2019 WL 11706231, at *1 (W.D. Tex. May 30, 2019).

¹⁴⁴ NFC Tech. LLC v. HTC Am., Inc., 2015 WL 1069111, at *1 (E.D. Tex. Mar. 11, 2015) (citing Evolutionary Intel. LLC v. Millennial Media, Inc., 2014 WL 2738501, at *2 (N.D. Cal. June 11, 2014)).

¹⁴⁵ CRAVEN & FLIBBERT, *supra* note 32, at 4.

¹⁴⁶ Capriola Corp. v. LaRose Indus., LLC, 2013 WL 1868344, at *2 (M.D. Fla. Mar. 11, 2013)

¹⁴⁷ CRAVEN & FLIBBERT, *supra* note 32, at 4.

¹⁴⁸ 2013 WL 1969247 (M.D. Fla. May 13, 2013).

¹⁴⁹ CRAVEN & FLIBBERT, *supra* note 32, at 4, (citing *Automatic Mfg.*, 2013 WL 1969247, at *3); see also *Universal Elecs., Inc. v. Universal Remote Control, Inc.*, 943 F. Supp. 2d 1028, 1032 (C.D. Cal. 2013) (holding that “the undecided status of the petitions clouds the simplification inquiry”).

These differences in grants of stays pending IPR indicate the need for a clarification of the responsibility and division of labor between the PTAB and district courts. This is further illustrated by the volume of concurrent district court and IPR proceedings.¹⁵⁰ The “major normative argument for administrative ex post review is that it should be an efficient, accessible, and accurate *substitute* for Article III litigation over patent validity.”¹⁵¹ But, rather than acting as a substitute, “[c]ontemporaneous with petitions for IPR . . . in the USPTO, patent litigation in the federal courts has continued apace.”¹⁵² Data collected from patent cases filed in federal district courts between September 16, 2011, and June 30, 2015, showed that during this time, 14,218 patents were challenged in an IPR or covered business method¹⁵³ (CBM) petition, asserted in district court litigation, or both.¹⁵⁴ The breakdown is as follows: 13,557 were involved solely in litigation; 298 were involved solely in a USPTO proceeding; and 1,968 were involved in both.¹⁵⁵ Thus, “about 12.7% of litigated patents are also being challenged in the PTAB, and about 86.8% of IPR- or CBM-challenged patents are also being litigated in the federal courts.”¹⁵⁶

If the goal of the system is efficiency, the question remains: What do we do with these duplicative or parallel proceedings playing out in the USPTO and in district courts? Rather than decreasing cost and increasing efficiency, the system as it is now appears to do the opposite.¹⁵⁷ While “[t]he high cost of litigation would be less problematic if these great expenditures yielded great accuracy in judicial outcomes,” it is instead the case that

¹⁵⁰ See Vishnubhakat et al., *supra* note 33, at 69 (finding that the vast majority of patents challenged in IPR were also litigated in federal courts).

¹⁵¹ *Id.* at 49 (emphasis added).

¹⁵² *Id.* at 69.

¹⁵³ The “AIA also created a post-grant proceeding known as covered business method (CBM) review, which applied to non-technological financial product or service patents.” MASUR & OUELLETTE, *supra* note 2, at 515 n.1.

¹⁵⁴ Vishnubhakat et al., *supra* note 33, at 69.

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

¹⁵⁷ These issues around inefficiency and duplicative proceedings are also being considered by Congress. In 2023, the Senate proposed the Promoting and Respecting Economically Vital American Innovation Leadership (PREVAIL) Act. While several provisions aimed at reform are being contemplated, the Act proposes requiring “parties to choose whether to bring their action at the PTAB or in district court, but not both, in an effort to end duplicative proceedings.” Eileen McDermott, *PREVAIL Act Would Overhaul PTAB Practice*, IPWATCHDOG (June 22, 2023), <https://perma.cc/ST5B-NAAY>.

“decisions reached in Article III litigation may not be particularly accurate.”¹⁵⁸

It is clear that most IPR proceedings are litigated in parallel in district courts. As far back as 2015, there were a “number of cases” where a “given patent was challenged in a PTAB petition *before* that patent was asserted in litigation.”¹⁵⁹ Still, it was a “relatively rare occurrence” for a party to challenge a patent with the PTAB and then bring suit in district court, with 1,968 patents acting as the “subjects of both a PTAB challenge (either in IPR or CBM) and of district court litigation,” of which “[o]nly” fifty-eight were “challenged in district court litigation simultaneously with or after the first PTAB challenge, rather than before.”¹⁶⁰ However, “[t]heir small number notwithstanding, these cases arguably represent a challenge to the standard model of a PTAB challenge as a substitute for ongoing litigation.”¹⁶¹ Further, of those fifty-eight patents challenged “in the PTAB before any litigation, forty-seven patents (81.0%) were challenged by petitioners who were subsequently named as defendants in federal court litigation over the same patents.”¹⁶²

All of this points toward an allocation of responsibility between district courts and the PTAB that allows the PTAB to perform its specialized function. Most courts do tend to stay litigation pending IPR, indicating that district court judges see the value in having a final written decision from the PTAB on the claims litigated in that forum. Further, the strong estoppel provision streamlines district court litigation by settling claims that then cannot be relitigated in district court.

Even as it stands now, high litigation costs have not deterred litigants from carrying on proceedings both at the PTAB and in district courts. Opening these floodgates would push the system into an increasingly inefficient direction and would undermine the authority the AIA intended to provide to the PTAB. If IPR is intended to be a substitute for district court proceedings on patent

¹⁵⁸ *Id.* at 52 (citing David L. Schwartz, *Practice Makes Perfect? An Empirical Study of Claim Construction Reversal Rates in Patent Cases*, 107 MICH. L. REV. 223, 226 (2008)) (noting a high reversal rate for district court claim construction); *see also* Anup Malani & Jonathan S. Masur, *Raising the Stakes in Patent Cases*, 101 GEO. L.J. 637, 659 (2013) (conducting a survey of scholarly proposals to improve judicial accuracy in patent adjudication).

¹⁵⁹ Vishnubhakat et al., *supra* note 33, at 70 (emphasis in original).

¹⁶⁰ *Id.*

¹⁶¹ *Id.*

¹⁶² *Id.*

validity claims, then § 315(e)(2) should not be read in a manner that not only runs counter to that purpose but also exacerbates preexisting efficiency issues.

The form approach and the bright-line rule it results in appears to undermine the purpose and authority of the PTAB. The question of what the division of labor should be becomes further muddled and raises more questions: Would the AIA have to be amended to allow for real-world prior art to be raised during IPRs in order to address the confusion caused by this issue? The confusion this generates points toward returning to the purpose of IPR and keeping in mind the PTAB's status as a specialized administrative adjudicative body that is poised to efficiently resolve these issues and perform an expediting function for the system overall.

The AIA is clear that real-world prior art does not have a place in IPR proceedings.¹⁶³ There will, then, inevitably be situations where IPR does not provide an adequate assessment if the device reveals some functionality that patents and printed publications do not. In this situation, a district court can take up the issue and evaluate the claim's validity if there is a relevant, substantive difference. IPR will still have served the function of resolving the other claims raised, and the district court proceeding can undertake a narrower inquiry.

If the form approach is permitted to become dominant, this issue will be exacerbated by litigants' knowledge that not only can they move for a stay while IPR proceedings occur, but if they lose in front of the PTAB, they can also relitigate the same claims by bringing a device-based argument to the district court. District courts may decide against instituting a stay, knowing that the same case might reappear in front of them under a different guise, and will lose out on informative guidance from the PTAB.

The estoppel provision can only do its intended job through the substantive difference standard and its reading of "ground" as "argument"—otherwise, estoppel would be merely an easily circumvented formality.¹⁶⁴ This is also in line with the purpose of PTAB proceedings and the AIA overall.¹⁶⁵ If we are to promote efficiency within our system—as the goal of procedure demands—then the system should act in recognition of the best avenues to achieve that. Courts understand the value of IPRs and the PTAB

¹⁶³ See *supra* note 5.

¹⁶⁴ See *supra* Part II.A.

¹⁶⁵ See *supra* Part II.B.

in streamlining civil litigation, and often wait to take direction from the PTAB's decision in the event of concurrent litigation. This deference should be reinforced if the system is to reaffirm the position of the PTAB and value of these administrative adjudications. Overall, the substantive difference approach produces more efficient outcomes and clarifies these bodies' roles.

CONCLUSION

The question of whether a party that asserts a printed publication or patent in an IPR proceeding is estopped under § 315(e)(2) from asserting related real-world prior art, such as a device, in a later civil action has resulted in a district court split. The fundamental disagreement arises out of the ambiguity in the interpretation of the term "ground" as it is used in the estoppel provision.

Some courts have adopted a formalist interpretation that narrowly construes the statute's estoppel provision, under which real-world prior art, like devices, in district court litigation cannot be estopped because a party cannot assert a piece of real-world prior art during IPR. On the other side of this split is an interpretation that focuses on the substance of the reference, one that interprets "ground" to mean "argument" rather than "evidence." Within this side of the split, courts either require that the real-world prior art be superior and separate to the paper prior art used in IPR or simply ask if there is a substantive difference between arguments raised during IPR and those supported by the real-world prior art in the district court action. If there is a substantive difference or the real-world prior art is superior and separate, then whether estoppel applies is determined on a case-by-case basis.

This Comment argues that the substantive difference approach is the best way to resolve the split. Such an approach focuses on the legal arguments instead of limiting itself to the strict physical difference between paper art and physical products. It aligns with the text of the AIA, as well as with its purpose in using IPR as a cheaper, faster alternative to district court litigation. It also serves pragmatic goals of promoting efficiency and a sensible division of responsibilities between the PTAB and district courts, which, as it stands right now, is muddled. Ensuring efficiency and better allocating institutional responsibilities carry significant benefits both in terms of furthering the goals of the patent system as a whole and

managing the high costs involved in it while creating clarity for litigants. Finally, the substantive difference approach avoids creating negative incentives for litigants by closing the opportunity for duplicative litigation.