United States Court of Appeals for the Federal Circuit

SHAW INDUSTRIES GROUP, INC., Appellant

v.

AUTOMATED CREEL SYSTEMS, INC.,

Cross-Appellant

2015-1116, 2015-1119

Appeals from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Nos. IPR2013-00132, IPR2013-00584.

Decided: March 23, 2016

THAD CHARLES KODISH, Fish & Richardson, P.C., At-

lanta, GA, argued for appellant. Also represented by ERIN ALPER; JOHN A. DRAGSETH, Minneapolis, MN.

SCOTT D. SMILEY, The Concept Law Group, P.A., Fort Lauderdale, FL, argued for cross-appellant. Also represented by MARK C. JOHNSON.

MONICA BARNES LATEEF, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, argued for intervenor Michelle K. Lee. Also represented by Nathan K. Kelley, Scott Weidenfeller, William LaMarca.

Before MOORE, REYNA, and WALLACH, Circuit Judges.

Opinion for the court filed by Circuit Judge MOORE.

Opinion concurring specially in the judgment filed by Circuit Judge REYNA.

MOORE, Circuit Judge.

Shaw Industries Group, Inc. appeals from the United States Patent and Trademark Office's ("PTO") Patent Trial and Appeal Board's ("Board") final written decision in consolidated inter partes reviews ("IPR") of claims 1–21 of U.S. Patent No. 7,806,360. Shaw also petitions for writ of mandamus. Automated Creel Systems ("ACS") crossappeals. We affirm-in-part, vacate-in-part, and remand. We deny Shaw's petition for writ.

BACKGROUND

ACS is the owner of the '360 patent, which relates to "creels" for supplying yarn and other stranded materials to a manufacturing process. '360 patent, col. 1, ll. 14–17. An exemplary creel supply system of the patent comprises creel magazines with a stationary frame and two movable carts. *Id.* at figs. 1, 12; col. 3, ll. 18–19, 59–61. The carts carry multiple levels of spools (or packages) of stranded material that can be routed using guides. *Id.* at col. 3, ll. 62–63. Continuous runtime can be achieved by (1) tying the material from various packages together, and (2) replenishing empty packages on one cart while packages on the opposite cart are used. *Id.* at col. 8, ll. 32–41; col. 9, l. 64 to col. 10, l. 16; col. 11, l. 1 to col. 12, l. 16.

Claims 1-5, 8-12, 14, 19, and 20 ("the non-interposing claims") involve creel magazines with two packages of

stranded material at each level. They allow for transfer of stranded material from one package to another across the frame. For example, claim 5 recites:

5. A creel magazine for feeding stranded material to a manufacturing process comprising:

a magazine having a stationary magazine frame comprising a common guide for said stranded material:

a first and a second removable cartridge positioned adjacent said magazine frame on respective opposite sides of said magazine frame,

said first removable cartridge having at least one support arm supporting an active package of stranded material thereon;

said second removable cartridge having at least one support arm supporting a ready package of stranded material thereon wherein a trailing end of said stranded material carried by said active package is connected to a leading end of said stranded material carried by said ready package;

wherein said common guide is an annular turning surface and said stranded material is sequentially fed to said common guide from said active package then from said ready package.

Claims 6, 7, 13, 15–18, and 21 ("the interposing claims") involve creel magazines with more than two packages of stranded material at each level. They allow for transfer of stranded material from one package to another across the frame (like the non-interposing claims), as well as on the same side of the frame. For example, claim 6 recites:

6. The creel magazine of claim **5**, further comprising an additional support arm supported adjacent to said at least one support arm for supporting an additional ready package on said removable cartridge, to be selectively interposed between said active package and said ready package on said second removable cartridge to feed said stranded material.

In February 2012, ACS sued Shaw for infringement of the '360 patent in the U.S. District Court for the Northern District of Georgia. Automated Creel Sys., Inc. v. Shaw Indus. Grp., Inc., No. 1:12-cv-00424-RWS (N.D. Ga. 2012). ACS voluntarily dismissed the suit without prejudice. Within one year of service of the complaint, see 35 U.S.C. § 315(b), Shaw petitioned for IPR of all twenty-one of the '360 patent claims. Shaw proposed fifteen grounds of rejection. Most of the grounds were directed to the noninterposing claims. There were only three grounds directed at the interposing claims: (1) ground 3, alleging that all of the interposing claims would have been obvious over German Patent Application Publication DE 3429153 A1 ("Munnekehoff") in view of U.S. Patent No. 5,624,082 ("Ligon"); (2) ground 8, alleging that all of the interposing claims would have been obvious over German Patent DE 7413531 ("Barmag") in view of Ligon; and (3) ground 11, alleging that all of the interposing claims were anticipated by U.S. Patent No. 4,515,328 ("Payne") ("the Payne-based ground"). The Board instituted IPR on all claims except claim 4.1 It did not, however, institute IPR on all fifteen grounds argued by Shaw. With regard to the interposing claims, the Board instituted IPR on the grounds that these claims would have been

¹ The Board held that Shaw did not demonstrate a reasonable likelihood of prevailing on its grounds with regard to claim 4.

obvious over Munnekehoff or Barmag in view of Ligon (grounds 3 and 8, respectively). Shaw Indus. Grp., Inc. v. Automated Creel Sys., Inc., No. IPR2013-00132, 2013 WL (P.T.A.B. July 25, 2013) ("First Institution 8563792 Decision"). The Board denied Shaw's petition on the Payne-based ground. The Board explained that the Payne-based ground was "denied as redundant in light of [its] determination that there is a reasonable likelihood that the challenged claims are unpatentable based on the grounds of unpatentability on which we institute an *inter* partes review." Id. at *20 (citing 37 C.F.R. § 42.108). There were no substantive determinations of the Paynebased ground in the Board decision.

In September 2013 (over one year after service of the complaint), Shaw filed a second petition, requesting IPR of claim 4. The Board instituted IPR based on two of the six grounds proposed by Shaw—alleged obviousness over Munnekehoff in view of U.S. Patent No. 4,572,458 ("Bluhm") (ground 3) and alleged obviousness over Barmag in view of Bluhm (ground 6). Shaw Indus. Grp., Inc. v. Automated Creel Sys., Inc., No. IPR2013-00584, 2013 WL 8595536 (P.T.A.B. Dec. 31, 2013) ("Second Institution Decision"). It denied the other proposed grounds, writing that it "exercise[d] [its] discretion under 37 C.F.R. § 42.108 to institute an *inter partes* review based solely on the asserted grounds directed to combinations with Bluhm and deny the remaining grounds as redundant." Id. at *12–13. It rejected ACS's argument that 35 U.S.C. § 315(b) precluded it from instituting IPR. It determined that because ACS had voluntarily dismissed the suit without prejudice, it "nullifie[d] the effect of the alleged service of the complaint on Petitioner." *Id.* at *6.

The two IPRs proceeded in parallel. The Board then consolidated them and issued one final written decision, concluding that Shaw (1) had not shown by a preponderance of the evidence that the interposing claims were unpatentable based on the instituted grounds, and (2) had

shown by a preponderance of the evidence that the non-interposing claims (including claim 4) were unpatentable based on the instituted grounds. *Shaw Indus. Group, Inc. v. Automated Creel Sys., Inc.*, Nos. IPR2013-00132, IPR2013-00584, 2014 WL 3725531 (P.T.A.B. July 24, 2014) ("Final Decision"). Shaw appeals as to the interposing claims and ACS appeals as to claim 4. The PTO submitted a brief ("PTO Br.") and presented oral argument as intervenor. *See* 35 U.S.C. § 143.

DISCUSSION

I. SHAW'S APPEAL AND PETITION FOR WRIT

A

Under 28 U.S.C. § 1295(a)(4), we have jurisdiction to review the Board's final written decisions in IPRs. Jude Med., Cardiology Div., Inc. v. Volcano Corp., 749 F.3d 1373, 1376 (Fed. Cir. 2014); see also 35 U.S.C. § 141(c) ("A party to an inter partes review who is dissatisfied with the final written decision of the Patent Trial and Appeal Board under section 318(a) or 328(a) may appeal the Board's decision only to the United States Court of Appeals for the Federal Circuit."); id. § 319 ("A party dissatisfied with the final written decision of the Patent Trial and Appeal Board under section 318(a) may appeal the decision pursuant to sections 141 through We lack jurisdiction, however, to review the 144."). Board's decisions instituting or denying IPR. St. Jude, 749 F.3d at 1376; see also 35 U.S.C. § 314(d) ("The determination by the Director whether to institute an inter partes review under this section shall be final and nonappealable."). This is true regardless of whether the Board has issued a final written decision. In re Cuozzo Speed Techs., LLC, 793 F.3d 1268, 1273 (Fed. Cir. 2015), cert. granted sub nom. Cuozzo Speed Techs., LLC v. Lee, 136 S. Ct. 890 (U.S. Jan. 15, 2016) (No. 15-446).

Shaw argues we have jurisdiction to review the Board's final written decision, including its decision not to consider the Payne-based ground as redundant. Appellant's Opening Br. 58. It argues that § 314(d) is inapplicable because it is not seeking review of the Board's institution decision, but rather asking us "to review the Board's authority, and correctness in exercising the same, in deeming a subset of asserted grounds redundant of instituted grounds." Appellant's Reply Br. 65. It argues that "whether the Board can deem grounds 'redundant,' and whether the Board properly exercised that authority, is not a decision whether to institute." *Id*.

We disagree. As we recently explained, Congress authorized the PTO to prescribe regulations regarding institution and governance of inter partes reviews. *Harmonic Inc. v. Avid Tech.*, *Inc.*, No. 15-1072, 2016 WL 798192, at *8 (Fed. Cir. Mar. 1, 2016). The PTO exercised this authority in promulgating 37 C.F.R. § 42.108, which allows the Board to institute IPR on only some of the challenged claims and to institute IPR of a given claim based on only some of the proposed grounds. *Id.* (citing 37 C.F.R. § 42.108(a), (b)).

We can see benefit in the PTO having the ability to institute IPR on only some of the claims and on only some of the proposed grounds, particularly given the Board's statutory obligation to complete proceedings in a timely and efficient manner. 35 U.S.C. § 316. For example, in Liberty Mutual Insurance Co. v. Progressive Casualty Insurance Co., No. CBM2012-00003, 2012 WL 9494791, at *1 (P.T.A.B. Oct. 25, 2012), the petitioner presented over four-hundred grounds of unpatentability for twenty patent claims. The Board determined that "numerous redundant grounds would place a significant burden on the Patent Owner and the Board, and would cause unnecessary delays." It wrote that "multiple grounds, Id.which are presented in a redundant manner by a petitioner who makes no meaningful distinction between them, are contrary to the regulatory and statutory mandates, and therefore are not all entitled to consideration." *Id.* at *2. The Board made specific findings that certain groups of grounds were redundant. It ordered the Petitioner to choose which ground in each group to maintain, and even explained which ground it would proceed with if the Petitioner did not choose. The PTO has made similar constraints in prosecution by requiring applicants to narrow the number of claims they wish to prosecute. *See, e.g., Hyatt v. U.S. Patent & Trademark Office,* 797 F.3d 1374, 1376 (Fed. Cir. 2015) (discussing the PTO's requirement that the patentee select some of the hundreds of thousands of claims to prosecute, absent a showing that more claims were necessary).

Here, Shaw proposed three grounds of unpatentability for the interposing claims: the Payne-based anticipation ground and two other multiple reference obviousness grounds. The Board did not consider the substance of the Payne reference or compare it to the art cited in the other two proposed grounds.² It made no specific findings that the three grounds overlapped with one another or in-

We understood the Board's "redundancy" denial to amount to nothing more than a choice by the Board for efficiency purposes not to review three different grounds as to the interposing claims. Though it is not entirely clear, we did not read the Board's opinion as deciding any substantive issues with regard to the Payne grounds. For example, the denial is not a determination that the IPR standard is not met as to the Payne grounds. Nor is it a determination of substantive redundancy with regard to Payne and Munnekehoff or Barmag. The PTO confirmed our understanding of the denial of the Payne-based grounds during oral argument. Oral argument at 31:23–32:59, 38:18–38:21, available at http://oralarguments.cafc. uscourts.gov/default.aspx?fl=2015-1116.mp3.

volved overlapping arguments. It did not order Shaw to either choose which ground to maintain or show that the grounds were not, in fact, redundant.³ Instead, the Board merely denied IPR of the claims based on the Payne-based ground, writing without making any specific findings that the ground was "redundant" of the other two grounds. We cannot say we agree with the PTO's handling of Shaw's petition. We also cannot say that the PTO's decision made the proceeding more efficient, particularly given that the Payne-based ground was alleged anticipation by a single reference while the two instituted grounds were alleged obviousness over combinations of references.

We have no authority, however, to review the Board's decision to institute IPR on some but not all grounds. "Denial of a ground is a Board decision not to institute inter partes review on that ground." 37 C.F.R. § 42.108(b). We thus lack jurisdiction to review the Board's decision not to institute IPR on the Payne-based ground, which includes its decision not to consider the Payne-based ground in its final written decision.

В

Shaw alternatively petitions for a writ of mandamus instructing the PTO to reevaluate its redundancy decision and to institute IPR based on the Payne-based ground. A

In its second IPR petition, Shaw preemptively argued that the proposed grounds there were not redundant. Petition for IPR, Shaw Indus. Grp., Inc. v. Automated Creel Sys., Inc., No. IPR2013-00584 (Sept. 13, 2013) (J.A. 1085–132). The Board did not address the argument. As in the first institution decision, the Board merely denied IPR on four of the proposed grounds, writing without any specific findings that they were "redundant" of the other two. Second Institution Decision, 2013 WL 8595536, at *12.

writ of mandamus is a "drastic and extraordinary remedy" that can only be used in "exceptional circumstances amounting to a judicial usurpation of power or a clear abuse of discretion." *Cheney v. U.S. Dist. Court for D.C.*, 542 U.S. 367, 380 (2004) (internal quotations omitted). A writ requires (1) that the petitioner have no other adequate means to attain the desired relief, (2) that the petitioner have a "clear and indisputable" right to the writ, and (3) that the issuing court, in the exercise of its discretion, be satisfied that the writ is appropriate under the circumstances. *Id.*

Shaw argues that these three conditions are satisfied. First, it argues it has no other means to attain the desired relief "since review by appeal is unavailable." Pet. 5 (quoting *Cuozzo*, 793 F.3d at 1275). It argues that because it brought the Payne-based ground in its petition and the PTO denied IPR on that ground, it may be estopped from arguing the ground in any future proceedings. Second, Shaw argues that it has a "clear and indisputable right" to have the PTO consider a reasonable number of grounds and references given the "estoppel rules." *Id.* at 4 (quoting *Cheney*, 542 U.S. at 380). Third, it argues that we should find in our discretion that the writ is appropriate.

Shaw's argument is predicated on its concern that the statutory estoppel provisions would prevent it from raising the Payne-based ground in future proceedings. Section 315(e) of Title 35 provides:

(1) Proceedings before the Office.—The petitioner in an inter partes review of a claim in a patent under this chapter that results in a final written decision under section 318(a)... may not request or maintain a proceeding before the Office with respect to that claim on any ground that the petitioner raised or reasonably could have raised *during* that inter partes review.

(2) Civil actions and other proceedings.—The petitioner in an inter partes review of a claim in a patent under this chapter that results in a final written decision under section 318(a)... may not assert in either a civil action arising in whole or in part under section 1338 of title 28 or in a proceeding before the International Trade Commission under section 337 of the Tariff Act of 1930 that the claim is invalid on any ground that the petitioner raised or reasonably could have raised during that inter partes review.

35 U.S.C. § 315(e) (emphasis added). The PTO argues that Shaw's statutory interpretation of the estoppel provision is incorrect because "the denied ground never became part of the IPR." PTO Br. 38. We agree with the PTO that § 315(e) would not estop Shaw from bringing its Payne-based arguments in either the PTO or the district courts. Both parts of § 315(e) create estoppel for arguments "on any ground that the petitioner raised or reasonably could have raised during that inter partes review." Shaw raised its Payne-based ground in its petition for IPR. But the PTO denied the petition as to that ground, thus no IPR was instituted on that ground. The IPR does not begin until it is instituted. See Cuozzo, 793 F.3d at 1272 ("IPRs proceed in two phases. In the first phase, the PTO determines whether to institute IPR. In the second phase, the Board conducts the IPR proceeding and issues a final decision." (citations omitted)). Thus, Shaw did not raise—nor could it have reasonably raised—the Payne-based ground during the IPR. plain language of the statute prohibits the application of estoppel under these circumstances. In light of our construction of the statute, mandamus is not warranted. Thus, we deny Shaw's petition for writ of mandamus.

C

We turn now to Shaw's challenges to the Board's determination that Shaw had not shown by a preponderance of the evidence that the interposing claims would have been obvious over Munnekehoff or Barmag in view of We review the Board's ultimate conclusion of obviousness de novo and its factual findings for substantial evidence. In re Gartside, 203 F.3d 1305, 1316 (Fed. Cir. 2000). The parties do not dispute that Munnekehoff taught all of the limitations of the interposing claims except the transfer of stranded material from one package to another on the same side of the frame. Shaw argues that this limitation was taught by Ligon. The Board rejected Shaw's argument, finding that adding a second package as taught in Ligon to either side of the frame in Munnekehoff would cause tangling and result in an inoperable assembly, absent complete redesign. In making this finding, the Board considered the explanation by Shaw's expert, Dr. Youjiang Wang, that "tube Q" could be used to prevent tangling. The Board wrote that "[t]he use of tube Q... is not disclosed in the cited references" and that Dr. Wang did not "provide any basis (in Ligon or otherwise) for adding the additional tube to the Munnekehoff assembly in the manner proposed." Final Decision, 2014 WL 3725531, at *11.

Shaw argues that the Board found that Munnekehoff did not disclose the "tube Q" relied on by Dr. Wang. Such a finding would be undisputedly erroneous, as ACS admits that Munnekehoff has a structure corresponding to Dr. Wang's "tube Q." ACS argues, however, that the Board did not make such a finding. ACS argues that instead, the Board found that Munnekehoff did not disclose "tube Q" the same way that Dr. Wang illustrated, i.e., as a structure that an artisan would have used to prevent tangling.

The language of the Board's decision as to "tube Q" is ambiguous at best. If the Board found that "tube Q" was not disclosed in Munnekehoff, it was an undisputed error. The parties dispute what impact the error would have on the Board's ultimate conclusion, but given the factual nature of the teachings of a reference, we leave to the Board such fact findings in the first instance. Thus, we vacate-in-part and remand.

II ACS'S CROSS-APPEAL

Α

ACS challenges the Board's decision that the second IPR was not barred pursuant to 35 U.S.C. § 315(b). This section provides:

An inter partes review may not be instituted if the petition requesting the proceeding is filed more than 1 year after the date on which the petitioner, real party in interest, or privy of the petitioner is served with a complaint alleging infringement of the patent.

It argues that we have jurisdiction to review the decision because it is not challenging the Board's institution decision but rather the Board's interpretation of § 315(b).

Our court recently faced a similar challenge in *Achates Reference Publishing, Inc. v. Apple Inc.*, 803 F.3d 652 (Fed. Cir. 2015). We held that we lack jurisdiction to review "the Board's determination to initiate IPR proceedings based on its assessment of the time-bar of § 315(b), even if such assessment is reconsidered during the merits phase of proceedings and restated as part of the Board's final written decision." *Id.* at 658 (citing 35 U.S.C. § 314(d)). We noted that a "narrow exception to the bar on judicial review exists for claims that the agency exceeded the scope of its delegated authority or violated a clear statutory mandate." *Id.* (quoting *Hanauer v. Reich*, 82 F.3d 1304, 1307 (4th Cir. 1996)). Section 315(b) keys

the time bar at issue to the service of the patent infringement complaint. The Board decided that ACS's voluntary dismissal of the suit without prejudice "nullifie[d] the effect of the service of the complaint." Second Institution Decision, 2013 WL 8595536, at *6. The Board reasoned that we "consistently ha[ve] interpreted the effect of dismissals without prejudice as leaving the parties as though the action had never been brought." *Id.* (citing, e.g., *Graves v. Principi*, 294 F.3d 1350, 1356 (Fed. Cir. 2002); *Bonneville Assocs.*, *Ltd. v. Barram*, 165 F.3d 1360, 1364 (Fed. Cir. 1999)). Thus, the Board concluded that Shaw's petition was not time barred.

It is true we have held in other cases that dismissals without prejudice leave the parties as though the action had never been brought. While these cases did not address § 315(b) or whether service of a complaint can be nullified, based on Achates, we lack jurisdiction to review this aspect of the Board's decision. We note that the Supreme Court's decision to grant certiorari as to the second question in Cuozzo Speed Technologies, LLC v. Lee, 136 S. Ct. 890 (2016) may affect this court's holding regarding the reviewability of the decision to institute in Achates. As of now, we are constrained by our earlier precedent.

 \mathbf{B}

As to the merits, the Board determined that Shaw showed by a preponderance of the evidence that claim 4 would have been obvious over Munnekehoff or Barmag in view of Bluhm. The Board's factual findings are supported by substantial evidence and we see no error in its conclusion of obviousness. Thus, we affirm the Board's decision with regard to claim 4.

CONCLUSION

We affirm-in-part, vacate-in-part and remand the Board's decision. We deny Shaw's petition for writ.

$\begin{array}{c} \textbf{AFFIRMED-IN-PART, VACATED-IN-PART, AND} \\ \textbf{REMANDED} \end{array}$

Costs

No costs.

United States Court of Appeals for the Federal Circuit

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REYNA, Circuit Judge, concurring specially.

I fully join the panel opinion. I write separately on the Patent Trial and Appeal Board's ("Board") application of the so-called "Redundancy Doctrine." The Board's improper, conclusory statements declining to implement inter partes review ("IPR") of grounds it found to be "redundant" leave me deeply concerned about the broader impact that the Redundancy Doctrine may have on the integrity of the patent system. In particular, other tribunals will be tasked with deciding whether estoppel applies based on cryptic statements the U.S. Patent and Trademark Office ("PTO") makes under the guise of its presumed "complete discretion" over IPR institution.

I

In both petitions, the Board implemented one ground for each claim-at-issue and declined to implement all additional grounds as "redundant." In the first petition the Board stated, in full: "With respect to claims 1-3 and 5-21, the additional asserted grounds are denied as redundant in light of our determination that there is a reasonable likelihood that the challenged claims are unpatentable based on the grounds of unpatentability on which we institute an inter partes review. See 37 C.F.R. Shaw Indus. Grp., Inc. v. Automated Creel § 42.108." Sys., Inc., IPR2013-00132, 2013 WL 8563792, at *20 (PTAB July 25, 2013). As is apparent, the Board's only basis for not instituting the additional grounds was that those grounds are "redundant" of the instituted grounds, without any reasoned basis why or how the denied grounds are redundant. In the second petition, the Board discussed Shaw's arguments, made no findings about the grounds and concluded, "we exercise our discretion under 37 C.F.R. § 42.108 to institute an inter partes review based solely on the asserted grounds directed to combinations with Bluhm and deny the remaining grounds as redundant." Shaw Indus. Grp., Inc. v. Automated Creel Sys., Inc., IPR2013-00584, 2013 WL 8595536, at *13 (PTAB Dec. 31, 2013). Shaw Industries argues these statements apply the "Redundancy Doctrine" through which the Board arbitrarily and capriciously denies some grounds but not others. Appellant's Opening Br. 62–75.

The PTO emphatically denies that any such Redundancy Doctrine exists. *E.g.*, PTO Br. 17 ("As an initial matter, there is no 'redundancy doctrine,"); Oral Argument 40:25 ("There is no Redundancy Doctrine.") (hereinafter "Hr'g"), *available at* http://oralarguments.cafc. uscourts.gov/default.aspx?fl=2015-1116.mp3. Because no explanation other than the redundancy finding was provided by the Board, the lack of a doctrine on redundancy deprives the Board's decisions of any basis. But the

PTO has a ready answer: it need not provide *any* basis for its institution decisions. Hr'g at 46:13 ("We do not even have to state in our institution decisions why we're choosing not to go forward."). The PTO argues this is so because "the Director [of the PTO] has complete discretion to deny institution." PTO Br. 20 (capitalization altered).

H

The PTO's claim to unchecked discretionary authority is unprecedented. It bases this claim on the statute that makes institution or denial of inter partes review "final and nonappealable." See 35 U.S.C. § 314(a), (d). less of appealability, administrative discretion is not and never can be "complete" because it is always bounded by the requirement that an agency act within the law and not violate constitutional safeguards. See 35 U.S.C. § 2(b)(2) (PTO "may establish regulations, not inconsistent with law"). There is good reason for this. "Expert discretion is the lifeblood of the administrative process, but unless we make the requirements for administrative action strict and demanding, expertise, the strength of modern government, can become a monster which rules with no practical limits on its discretion." Burlington Truck Lines, Inc. v. United States, 371 U.S. 156, 167 (1962) (internal quotation marks omitted).

Indeed, regardless of whether the Board's institution decisions can be appealed, the Board cannot create a black box decisionmaking process. Conclusory statements are antithetical to the requirements of the Administrative Procedures Act ("APA"), which the PTO and its Board are subject to. 35 U.S.C. § 2(b)(2)(B); see also Dickinson v. Zurko, 527 U.S. 150, 154 (1999). The APA requires "reasoned decisionmaking" for both agency rulemaking and adjudications because it "promotes sound results, and unreasoned decisionmaking the opposite." Allentown Mack Sales & Serv., Inc. v. N.L.R.B., 522 U.S. 359, 374–75 (1998) (citation omitted). The APA requires that Board

decisions evince both its authority to render the decision and a reasoned basis for rendering that decision. *Id.* at 372 ("Not only must an agency's decreed result be within the scope of its lawful authority, but the process by which it reaches that result must be logical and rational."). The problem here is not that the Board's reasoning is illogical or irrational; the problem is that there is no reasoning at all.

Both Board decisions only cite 37 C.F.R. § 42.108 as its authority for denying institution of certain grounds, and the PTO maintains this position on appeal. PTO Br. 19–32. The regulation allows for selective institution of certain grounds and not others. 37 C.F.R. § 42.108(a); Harmonic Inc. v. Avid Tech., Inc., No. 15-1072, 2016 WL 798192, at *7 (Fed. Cir. Mar. 1, 2016). The regulation, however, does not itself provide a reason to deny some grounds and institute others, it only provides the authority to do so. This authority neither satisfies nor exempts the Board from its obligation to include "findings and conclusions, and the reasons or basis therefor, on all the material issues of fact, law, or discretion presented on the record." 5 U.S.C. § 557(c) (emphasis added); Burlington Truck Lines, 371 U.S. at 167. The sole basis advanced by the Board is that the additional grounds are redundant.

Despite repeatedly denying any Redundancy Doctrine exists, the PTO argues the decision is supported by reasoning not articulated in the Board's final written decision. Before this Court, the PTO argues efficiency; that is, the Board may choose among the grounds asserted because a particular ground may resolve the case and a multiplicity of grounds would increase the Board's workload and make it difficult to meet its statutory deadlines. PTO Br. 26–32; Hr'g at 39:35–46:20.1 The Board's insti-

¹ The PTO cites the considerations Congress instructed the PTO to take into consideration in regulating

tution decisions, however, say nothing about efficiency so we, normally, would deem it improper for the PTO to make these arguments on appeal. Burlington Truck Lines, 371 U.S. at 168–69 ("The courts may not accept appellate counsel's post hoc rationalizations for agency action; Chenery requires that an agency's discretionary order be upheld, if at all, on the same basis articulated in the order by the agency itself"). But the Redundancy Doctrine exists, as articulated repeatedly in the Board's other decisions, and we assume that the word "redundant" here means that Doctrine was applied, even if no citation was provided. For the PTO to deny that a Redundancy Doctrine exists in light of its caselaw development strains credulity.

In a prior Order issued by the Chief, Vice Chief, Lead, and six other Administrative Patent Judges from the Board, the Board devoted seventeen pages exclusively to discussing and applying two "types of redundancy." *Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co.*, CBM-2012-00003, 2012 WL 9494791, at *2 (Oct. 25, 2012). Both types of redundancy discussed were *substantive* redundancies between grounds with "essentially the same teaching to meet the same claim limitation" or exactly the same references combined in different ways. *Id.* Shaw Industries directs us to numerous other Board decisions

IPRs as the statutory basis for applying 37 C.F.R. § 42.108(a) in this fashion, namely that it "consider . . . the efficient administration of the Office, and the ability of the Office to timely complete proceedings instituted under this chapter." 35 U.S.C. § 316(b).

² Notably, this Order is listed among the Board's "Representative Orders, Decisions and Notices" at http://www.uspto.gov/patents-application-process/appealing-patent-decisions/decisions-and-opinions/representative-orders.

discussing, relying on and further developing the Redundancy Doctrine born in *Liberty Mutual*. See Appellant's Opening Br. 59–62.³ In some of these decisions the Board appears to find redundancy not on any substantive basis, but rather on the basis that it need only hear one ground for each claim and that hearing multiple grounds might require "redundant" effort on its part. See, e.g., EMC Corp. v. PersonalWeb Techs. LLC, IPR2013-00087, 2013 WL 6514050, at *2 (June 5, 2013) ("the references are redundant insofar as each ground of unpatentability is sufficient to invalidate the claims.") (quotation omitted).

The Board's invocation of the Redundancy Doctrine represents, at least in some instances, a substantive Even here, despite the PTO insistence that labeling of grounds as "redundant" doesn't reflect a substantive determination, the PTO's own statements and arguments seem to indicate the contrary conclusion. The PTO insists that the Board did consider the rejected grounds in making its institution decision and cannot say efficiency was the sole basis that the redundant grounds were not instituted. E.g., Hr'g at 50:48 ("I wouldn't say that it's not that they're considered, the Board is going to do their job "); Hr'g at 51:20 ("[The Board] may be choosing not to go forward on the Payne ground for reasons other than likelihood of success."). The statutory scheme's estoppel provisions make such ambiguity about whether substantive determinations were made problematic.

The effects of estoppel are profound. Under 35 U.S.C. § 315(e)(2), "[t]he petitioner in an inter partes review of a

³ Particularly troubling are instances where, as here, the Board found Section 102 anticipation grounds redundant of Section 103 obviousness grounds without explanation. *See, e.g., Oracle Corp. v. Clouding IP*, IPR2013-00088, 2013 WL 8595567, at *7 (May 14, 2013).

claim in a patent under this chapter that results in a final written decision . . . 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." (emphasis added). Indeed, the potential for estoppel is one of the important considerations for defendants in deciding whether or not to file an IPR petition.⁴

The PTO asserts that estoppel will not attach to redundant grounds because grounds that are not instituted are not those the petitioner "raised or reasonably could have raised." See, e.g., PTO Br. 32 n.20, 37-39; Hr'g at 32:38-44. ("We would not find estoppel on that Paynebased ground because we did not institute on it."). Whether estoppel applies, however, is not for the Board or the PTO to decide. Nor is it for us to decide in the first instance, despite the invitation from Shaw Industries, because the issue is not properly before us. See Appellant's Opening Br. 75–76. Instead, whether the "redundant" grounds are subject to estoppel must be determined in the first instance by the district court or the U.S. International Trade Commission. 35 U.S.C. § 315(e)(2). These tribunals should not have to parse cryptic statements or search out uncited doctrines to make this determination.

⁴ E.g., Saurabh Vishnubhakat, Arti K. Rai, Jay P. Kesan, Strategic Decision Making in Dual PTAB and District Court Proceedings, BERKELEY TECH, L.J. (forthcoming 2016) (manuscript 15), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=27310 02.

III

The Board should, at a minimum, provide a reasoned basis how or why grounds are "redundant." The PTO claims the Board's statement *here* refers to efficiency concerns, but in failing to clearly articulate the basis of its decision, the Board's final written decision fails to satisfy its obligations under the APA. Regardless of the reviewability of that decision, the lack of a reasoned basis deprives future tribunals of the necessary basis to determine whether estoppel should apply. The PTO has lost sight of its obligation to "consider the effect of" its implementation of the IPR process on "the integrity the patent system" as a whole. 35 U.S.C. § 316(b).