United States Court of Appeals for the Federal Circuit

VERSATA DEVELOPMENT GROUP, INC.,

Appellant

v.

SAP AMERICA, INC., SAP AG, Appellees

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY, DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE,

Intervenor
2014-1194

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board, in No. CBM2012-00001.

Decided: July 9, 2015

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Before NEWMAN, PLAGER, and HUGHES, *Circuit Judges*.

Opinion for the court filed by Circuit Judge Plager.

Opinion concurring in part and dissenting in part filed by *Circuit Judge* HUGHES.

PLAGER, Circuit Judge.

INTRODUCTION

This is a covered business method ("CBM") patent case, under § 18 of the Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112-29, 125 Stat. 284 (2011). It comes to us as an appeal of a final written decision of the

Patent Trial and Appeal Board ("PTAB"),¹ the recently-created adjudicatory arm of the United States Patent and Trademark Office ("USPTO" or "Government").² The case originated as a petition to the USPTO, submitted by appellees SAP America, Inc. and SAP AG (collectively, "SAP"), pursuant to the provisions of the AIA.

SAP requested that the USPTO institute review of the validity of certain claims in U.S. Patent No. 6,553,350 ("350 patent"). The '350 patent is owned by the appellant, Versata Development Group, Inc. ("Versata"), who had sued SAP for infringing the patent. In its petition to the USPTO, SAP alleged that the patent was a covered business method patent.

Covered business method patents are subject to the special provisions of AIA § 18. See 125 Stat. at 329–31.³ Section 18 establishes a separately-designated transition-

¹ For oral argument purposes, this case, denominated as *Versata I*, was consolidated with Case No. 2014-1145, on appeal from the United States District Court for the Eastern District of Virginia, involving the same parties, the same patent, and essentially the same issues. That case will issue as *Versata II*.

² The PTAB, established by § 7 of the AIA, is the successor to the Board of Patent Appeals and Interferences ("BPAI"). *Compare* 35 U.S.C. § 6 (2006) (concerning the BPAI) with 35 U.S.C. § 6 (2012) (concerning the PTAB).

³ In general, the AIA is codified in various parts of 35 U.S. Code. Section 18 of the AIA is not however codified; it is found in 125 Stat. References to § 18 in this opinion are to pages 329–31 of 125 Stat.

al program⁴ under which the USPTO conducts post-grant review proceedings concerning the validity of covered business method patents. As the title suggests, the special program provided by § 18 is available only for "covered business method patents," as that term is defined by the statute. However, for purposes of conducting proceedings thereunder, § 18 is considered a part of the broader chapter 32 provisions of title 35, U.S. Code, governing post-grant review ("PGR"), 35 U.S.C. §§ 321–329; § 18 expressly incorporates, with certain exceptions not relevant here, the standards and procedures found in that chapter.⁵ § 18(a)(1).

In addition to the merits of the decision rendered by the PTAB (which held the claims at issue invalid), the parties to the appeal dispute several predicate issues. These include:

⁴ The program is called 'transitional' because it is scheduled to 'sunset' eight years after implementing regulations are issued. § 18(a)(3)(A).

A note on terminology: The potential under the AIA for more than the usual confusion that accompanies new congressional mandates stems in part from incidental features of the AIA. In particular, various new procedures intersect with earlier procedures of a similarsounding kind, e.g., inter partes review ("IPR") has replaced inter partes reexamination, compare 35 U.S.C. §§ 311-318 (2006) (concerning inter partes reexamination), with 35 U.S.C. §§ 311–319 (2012) (concerning IPR). The statute also employs identical terminology to mean different things, e.g., the heading of AIA § 6 is entitled "Post-Grant Review Proceedings," 125 Stat. at 299, while one of the programs thereunder shares the same name— "Chapter 32—Post-Grant Review." It is not uncommon for the entirety of AIA proceedings to be referred to informally as 'post-grant review.'

- if the PTAB makes an initial determination under § 18 of the AIA that the patented invention qualifies for "covered business method" treatment under § 18, may a court review that issue when reviewing as part of a final written decision the invalidation of claims under the authority of § 18?
- if the answer is yes, for purposes of postgrant review by the USPTO how is the term "covered business method patent" to be understood, and does the patent at issue here qualify as a CBM patent?
- if the PTAB correctly determines that under § 18 of the AIA a patent comes within the definition of a CBM patent, what are the criteria for determining whether the patent is excluded from review under § 18 because the patent falls within the statutorily-excepted category of "technological invention," and how do those criteria apply to the '350 patent?
- if, in deciding the merits of the case—the validity of the challenged claims in the patent—the PTAB is called upon to engage in claim construction, does the PTAB apply the USPTO's general rule of the "broadest reasonable interpretation," or does it apply the judicial standard of the "one correct construction"?
- finally, on appeal at the final written decision stage to this court, during which we must decide whether the PTAB applied the substantive tests for validity correctly, may a court determine whether as an initial matter the PTAB chose the correct substan-

tive tests to apply, and did the PTAB apply them correctly here?

After determining the answers to these queries, contested by the parties, as explained below, we address their application to the '350 patent at issue.

BACKGROUND

The '350 Patent

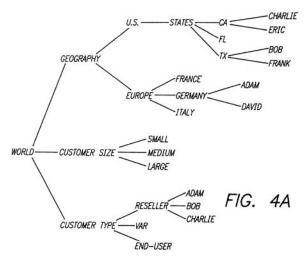
Versata owns the '350 patent, entitled "method and apparatus for pricing products in multi-level product and organizational groups." '350 patent, col. 1, ll. 1–3. The "invention operates under the paradigm of WHO (the purchasing organization) is buying WHAT (the product)." *Id.* at col. 3, ll. 24–25. An example of the WHO/WHAT paradigm, known in the prior art according to the patent, is depicted in Figure 1 of the '350 patent, reproduced below:

486/50 486/66 486/33 CPU CPU CPU WHO \$80 \$60 ADAM \$40 \$72 \$58 \$42 **BOB** \$44 \$68 \$92 CHARLIE

See id. at col. 4, ll. 17–18.

The '350 patent, however, states that prior art pricing tables for WHO/WHAT required large data tables. *See id.* at col. 1, ll. 52–59. The patent is said to improve upon the prior art and reduce the need for large data tables by,

inter alia, arranging customers (purchasing organizations) into a hierarchy of customer groups and products into a hierarchy of product groups. *Id.* at col. 3, ll. 24–27, 41–42, 66 – col. 4, l. 14. WHO is defined by the creation of an organizational hierarchy of organizational groups, where each group represents a characteristic of the organizational group. *Id.* at col. 3, ll. 24–27. Figure 4A of the patent, below, shows an example of an arrangement of an organizational group:



See id. at col. 4, ll. 24–25.

Similarly, a product group hierarchy is defined that can be applied to products (WHAT). *Id.* at col. 3, ll. 41–42. Pricing information is then associated with the customer and product groups. *Id.* at col. 8, ll. 17–25. Special pricing adjustments may be defined as applying to all members of a specific customer group or a specific product group. *Id.* at col. 3, ll. 26–49.

We are concerned with claims 17 and 26–29. Claim 17 recites a "method for determining a price of a product offered to a purchasing organization" comprising certain steps. *Id.* at col. 20, l. 66 – col. 21, l. 29. Claim 26 recites a "computer readable storage media comprising: computer

instructions to implement the method of claim 17." *Id.* at col. 21, ll. 61–62. Claim 27 recites a "computer implemented method for determining a price of a product offered to a purchasing organization" comprising certain steps. *Id.* at col. 21, l. 63 – col. 22, l. 12. Claim 28 recites a "computer readable storage media comprising: computer instructions to implement the method of claim 27." *Id.* at col. 22, ll. 13–14. Claim 29 recites an "apparatus for determining a price of a product offered to a purchasing organization" comprising certain limitations. *Id.* at col. 22, ll. 15–35.

Claim 17 is representative:

A method for determining a price of a product offered to a purchasing organization comprising: arranging a hierarchy of organizational groups comprising a plurality of branches such that an organizational group below a higher organizational group in each of the branches is a subset of the higher organizational group; arranging a hierarchy of product groups comprising a plurality of branches such that a product group below a higher product group in each of the branches in a subset of the higher product group; storing pricing information in a data source, wherein the pricing information is associated, with (i) a pricing type, (ii) the organizational groups, and (iii) the product groups; retrieving applicable pricing information corresponding to the product, the purchasing organization, each product group above the product group in each branch of the hierarchy of product groups in which the product is a member, and each organizational group above the purchasing organization in each branch of the hierarchy of organizational groups in which the purchasing organization is a member; sorting the pricing information according to the pricing types, the product, the purchasing organization, the hierarchy of

product groups, and the hierarchy of organizational groups; eliminating any of the pricing information that is less restrictive; and determining the product price using the sorted pricing information.

Id. at col. 20, l. 66 – col. 21, l. 29.

Prior Litigation

On April 20, 2007, Versata, along with Versata Software, Inc. and Versata Computer Industry Solutions, Inc., sued SAP for, inter alia, infringement of the '350 patent in the U.S. District Court for the Eastern District of Texas. The case proceeded to trial, and a jury found infringement and awarded damages. The district court upheld the infringement verdict but reversed other rulings unrelated to the '350 patent, resulting in a new trial on damages. A jury then found that SAP's post-patch software continued to infringe and awarded lost-profits damages and reasonable royalty damages. The district court upheld those awards.

SAP appealed the district court's final judgment to our court. In *Versata Software, Inc. v. SAP Am., Inc.*, 717 F.3d 1255 (Fed. Cir. 2013), we affirmed the jury's infringement verdict and damages award, but vacated as overbroad a permanent injunction entered by the district court. *Id.* at 1258. The case was remanded for the district court to enter an order conforming to our opinion. *Id.*; see also Versata Computer Indus. Solutions, Inc. v. SAP AG, 564 F. App'x 600 (Fed. Cir. 2014) (per curiam).

Covered Business Method Patent Review

While all that was going on, SAP on September 16, 2012, petitioned the PTAB to institute a covered business method review of Versata's '350 patent on the grounds that claims 17 and 26–29 of the patent were unpatentable for failure to comply with 35 U.S.C. §§ 101, 102, and 112,

1st and 2nd paragraphs. On January 9, 2013, the PTAB granted SAP's petition and instituted a covered business method review of the '350 patent. In accordance with the statutory standard for instituting a review, the PTAB determined that claims 17 and 26–29 were more likely than not unpatentable under 35 U.S.C. §§ 101 and 102. The PTAB declined to review the claims under § 112 because, in the PTAB's view, SAP had not met the standard in that regard. Versata did not seek rehearing of the decision to institute.

Subsequently, at SAP's request, the PTAB agreed to forego the § 102 review and expedite the § 101 review. On June 11, 2013, the PTAB issued its final written decision cancelling claims 17 and 26–29 as unpatentable under § 101. Versata sought rehearing of the final written decision, which the PTAB denied. Versata then appealed the final written decision to this court; that is the case we decide here.

Proceedings Before the District Court

Before turning to the case before us, there is one additional litigation to be noted which is of direct relevance to this case. On March 13, 2013, while the PTAB was conducting its CBM review, Versata sued the USPTO in the U.S. District Court for the Eastern District of Virginia, seeking to set aside the PTAB's decision to institute CBM review. SAP filed a motion to intervene, which the district court granted. On August 7, 2013, the district court granted the USPTO's motions to dismiss for lack of subject matter jurisdiction and failure to state a claim, and SAP's motion to dismiss for lack of subject matter jurisdiction.

The district court held that it lacked subject matter jurisdiction "because the AIA's express language, detailed structure and scheme for administrative and judicial review, legislative purpose, and nature of the administrative action evince Congress's clear intent to preclude subject matter jurisdiction over the PTAB's decision to institute patent reexamination [sic] proceedings." Versata Dev. Corp. v. Rea, 959 F. Supp. 2d 912, 915 (E.D. Va. 2013). The district court also held that "the decision to institute post-grant review is merely an initial step in the PTAB's process to resolve the ultimate question of patent validity, not a final agency action as contemplated by 5 U.S.C. § 704. . . . Plaintiff retains an alternative adequate remedy through appeal to the Court of Appeals for the Federal Circuit." Id. On October 5, 2013, the district court denied Versata's motion to alter or amend the judgment. Versata appealed the district court's judgment to this court; that appeal is pending as Versata II.

We have jurisdiction over this case, *Versata I*, pursuant to 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

Ultimately the issue to be decided on appeal concerns the substantive merits: whether the PTAB ruled correctly that the challenged earlier-issued claims of the '350 patent are invalid for the reasons given by the PTAB, namely, non-compliance with 35 U.S.C. § 101. Before addressing this ultimate merits issue, however, we must address the several predicate issues of process and procedure that the parties raise—issues that could have decisive effect on the outcome of the case regardless of its substantive merits.

Issue Number 1—Judicial Review

The initial decision to institute review in response to a petition is the first step in the post-grant review process. In this case, the PTAB at the initial decision to institute stage determined that the petition to review the '350 patent should be granted. In making that determination, the PTAB's three-judge panel concluded:

- that the '350 patent was a "covered business method patent" as that term is defined in the statute;
- that it was not a "technological invention," a statutorily-stated exception to that definition;
- that § 101 was applicable to patents reviewed under the CBM process;
- and that, as required by § 324(a), "it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable."

In its patent owner's preliminary response at the decision to institute stage, Versata had challenged each of these propositions. The PTAB addressed Versata's arguments and rejected them.

After a review is instituted, the review proceeds to a trial before the PTAB, and concludes with the PTAB's 'final written decision': "the [PTAB] shall issue a final written decision with respect to the patentability of any patent claim challenged by the petitioner." § 328(a). Section 329 further provides for appeal of that decision to the Court of Appeals for the Federal Circuit pursuant to §§ 141–144; section 144 provides that "[t]he United States Court of Appeals for the Federal Circuit shall review the decision from which an appeal is taken on the record before the Patent and Trademark Office."

Before us then are the merits of the final written decision rendered by the PTAB in this case. To be clear, it is the merits of the final written decision that are on appeal; we are not here called upon to review the determination by the PTAB whether to institute a CBM review, and indeed the statute expressly instructs that we may not:

The determination by the Director *whether to institute* a post-grant review under this section shall be final and nonappealable.

35 U.S.C. § 324(e) (emphasis added). As noted, this statute is applicable to post-grant reviews and CBM proceedings; the PTAB acts for the Director in deciding whether to institute a review, *see* 35 U.S.C. § 326(c); 37 C.F.R. § 42.4 (2014).

Turning to the merits, the PTAB, in its final written decision, held Versata's CBM patent claims 17 and 26–29 unpatentable under 35 U.S.C. § 101, and ordered them cancelled. Versata on appeal challenges that holding on multiple grounds:

- Versata's patent does not claim a "covered business method," and in any event falls within the safe harbor of a "technological invention";
- The PTAB does not have authority to review CBM patents for subject-matter eligibility under 35 U.S.C. § 101;
- The PTAB's claim construction is wrong, it applied the "broadest reasonable interpretation" to its claim construction, which it should not have, and had it correctly analyzed § 101 under the proper claim construction it would not have reached the holding it did.

SAP responds that, absent a finding that these issues are either non-appealable or waived, on the merits the USPTO correctly held that the '350 patent is a "covered business method patent" under § 18(a)(1)(E), and that the AIA authorizes § 101 subject-matter eligibility as a ground for CBM review.

The USPTO entered the case as intervenor, as authorized by § 143. The USPTO devotes a substantial part of its brief to the argument that this court lacks jurisdiction to review the Director's decision to institute a post-grant review of the '350 patent. On its face that argument would appear curious, since as earlier explained the issue on appeal before the court is only the merits of the final written decision. However, the USPTO makes the point that the question of whether the patent at issue here falls within the scope of the PTAB's authority under § 18 as a "covered business method patent" (not one claiming a "technological invention") was decided by the PTAB at the decision to institute stage, and on that basis it is immunized from later judicial review at the final decision stage.

SAP, but not the USPTO, makes the additional argument that, under the specific terms of the judicial review bar in § 324(e), *supra*, we do not have authority to review *any* questions decided by the PTAB in the course of making its initial decision to institute review, including whether ineligibility under § 101 is a permissible ground for invalidation under the CBM authority invoked by the PTAB.

Thus, the USPTO contends that the CBM-specific invalidation here must be upheld even if the PTAB incorrectly interpreted the statute regarding what is a CBM patent and the patent is not a CBM patent under the correct law, and SAP further contends that the invalidation under § 101 must be upheld even if the PTAB's CBM-invalidation authority does not permit invalidation under § 101.

This is the first case challenging the scope of § 324(e) at the final written decision stage. There are, however, several recent cases decided by this court construing a parallel statutory review bar—§ 314(d) under separate chapter 31 of the AIA, Inter Partes Review. With one

exception to be addressed later, these cases have arisen in the context of attempts at interlocutory review of PTAB IPR decisions to institute.

In St. Jude Medical, Cardiology Division, Inc. v. Volcano Corp., 749 F.3d 1373 (Fed. Cir. 2014), the first of the interlocutory review cases, the patentee had initiated an infringement suit. The defendant in the suit counterclaimed, asserting infringement of the defendant's patent by the initiating patentee. The initiating patentee then sought post-grant review of the defendant's patent under the IPR provisions. The PTAB decided not to institute review, a decision the patentee appealed directly to this court.

We held that the patentee's appeal of the PTAB decision was statutorily barred by § 314(d), and granted the motion by the defendant and the USPTO to dismiss the appeal. In its decision to deny direct review, our court examined the application of § 314(d) to the case. As noted, this section—314(d)—is the counter-part to the one with which we are concerned here—§ 324(e), except that 314(d) applies specifically to IPR cases, whereas 324(e) applies to PGR and CBM (§ 18) cases.

The court commented that § 314(d) "may well preclude all review by any route, which we need not decide. It certainly bars an appeal of the non-institution decision here." 749 F.3d at 1376. The court thus distinguished the question of the availability of immediate "appeal" under 35 U.S.C. §§ 141(c) and 319, which it was deciding, from the question of "review" (in the course of bringing other actions, such as appeals from final decisions or APA actions in district court), which it expressly said it was not deciding. The court based its holding "on the structure of the inter partes review provisions, on the language of section 314(d) within that structure, and on our juris-

dictional statute read in light of those provisions." *Id.* at 1375.

The same day the court issued St. Jude, we issued two other opinions reaching the same result under the same statute, though in different procedural contexts. See In re Dominion Dealer Solutions, LLC, 749 F.3d 1379 (Fed. Cir. 2014) (PTAB declined to institute IPR review; held, for the reasons explained in St. Jude, we did not have jurisdiction to hear petitioner's mandamus action challenging the PTAB's decision); In re Procter & Gamble Co., 749 F.3d 1376, 1377 (Fed. Cir. 2014) (PTAB granted rather than refused to institute IPR review; held, that for the same reasons, the difference between a denial and a grant of review made no difference to our mandamus jurisdiction—"immediate review of such a decision is not available in this court.").

In its opinion in *In re Procter & Gamble Co.*, the court explained what it was *not* deciding:

It is a separate question whether section 314(d) means that the decision to institute the review is unchallengeable later—if the Board reaches a decision under section 318(a) and an appeal is taken under section 319 [appeal to this court of the final written decision of the PTAB]. Perhaps section 314(d)'s broad language precludes all judicial review of the institution decision, even in an eventual section 319 appeal. We need not decide that question, which can be addressed in a section 319 appeal. Nor need we address whether an immediate challenge could be brought in district court [through an APA action].

749 F.3d at 1379.

Again, the statutory references are to the IPR ch. 31 provisions, which, though not directly applicable to CBM

cases, parallel those of the PGR ch. 32 provisions with which we are concerned here.

Two other recent opinions by this court warrant comment since they arise directly under chapter 32 and § 18, and, though they involve different fact settings from those discussed above, they cast light on how we are to understand § 18.6 In *VirtualAgility Inc. v. Salesforce.com, Inc.*, 759 F.3d 1307 (Fed. Cir. 2014), the issue was whether a district court had properly denied a request for a stay of previously-commenced litigation. The defendant in the district court litigation had petitioned the USPTO for post-grant review of an alleged CBM patent under § 18. The PTAB had instituted review, and trial by the PTAB of the validity of the patent claims was on-going when the stay was requested.

This court reversed the district court's denial of the stay. We noted that the district court had erred to the extent it had undertaken a review of the merits of the PTAB decision to institute review. We said:

Indeed, a challenge to the PTAB's "more likely than not" determination at this stage amounts to an improper collateral attack on the PTAB's decision to institute CBM review, and allowing it would create serious practical problems. . . . Congress clearly did not intend district courts to hold mini-trials reviewing the PTAB's decision on the merits of the CBM review. . . . The stay determination is not the time or the place to review the PTAB's decisions to institute a CBM proceeding.

⁶ See also GTNX, Inc. v. INTTRA, Inc., Nos. 15-1349, -1350, -1352, -1353, 2015 WL 3692319 (Fed. Cir. June 16, 2015) (a third case).

Id. at 1313.7

And in *Benefit Funding Systems LLC v. Advance America Cash Advance Centers Inc.*, 767 F.3d 1383 (Fed. Cir. 2014), the question was whether a district court decision to grant a stay of proceedings was proper pending the outcome of an on-going post-grant review at the PTAB.

The patentee's sole argument on appeal was that the USPTO could not institute review proceedings of a CBM patent on the grounds of a violation of § 101. Section 101 specifies the kinds of inventions that are patentable and is an issue in this case as well. In affirming the district court's stay determination, we said "[t]he stay determination is not the time or the place to review the PTAB's decisions to institute a CBM proceeding." *Id.* at 1386 (quoting *VirtualAgility*, 759 F.3d at 1313). We then added:

This is not to say that a patent owner could never attack the PTAB's authority to conduct CBM review. Indeed, Appellants might potentially challenge that authority in the context of a direct appeal of the PTAB's final decision. . . . They simply cannot mount such a challenge as a collateral attack in opposition to a stay. Having rejected Appellants' argument as an impermissible collateral attack, we do not address the underlying merits of that attack, namely whether § 101 is a valid ground for CBM review.

Id.

⁷ Judge Newman dissented on the ground that the district court in its decision was not given the deference to which it was entitled.

Returning to the case before us, Versata, as earlier noted, had brought an action in the U.S. District Court for the Eastern District of Virginia, under the Administrative Procedure Act ("APA"), to prevent the PTAB from proceeding with the § 18 CBM review of the '350 patent at issue in this case. Versata challenged the authority of the PTAB to have instituted the review of the '350 patent under § 18; SAP and the USPTO moved to dismiss the complaint.

In support of its motions to dismiss, the USPTO argued, consistent with the suggestion noted *supra* in *Benefit Funding*, that there was an available remedy under the AIA statute—the issues decided by the PTAB at the institution stage are preserved for review at the time of an appeal to the Federal Circuit of the PTAB's final written decision. The district court granted the USPTO's motions and SAP's motion and dismissed Versata's APA complaint on two alternative grounds, including that "an adequate remedy exists by way of direct appeal [of the final written decision] to the Federal Circuit." *Versata Dev. Corp.*, 959 F. Supp. 2d at 927.

The district court suit involved essentially the same parties, the same patent, and the same basic issues. Accordingly, based on the USPTO's representations to the district court, despite (or in accordance with) the provisions of § 324(e), this court should entertain and decide the predicate questions raised by the parties regarding the USPTO's authority over this patent, and whether the proper law was applied. This is so even though the challenged decisions were initially made at the decision to institute stage.

The USPTO, however, now represented in this appeal by the Department of Justice Civil Division Appellate Staff, advises the court that the Government has reconsidered its position. The Government now argues for what it characterizes as a "jurisdiction[al]" bar on this court's review of at least some of the issues decided at the initial decision to institute stage. Intervenor's Br. at 13. Some of the Government's language suggests a bar on reviewing any PTAB determination made when instituting review. This language would seem to cover even whether § 101 is an available ground of invalidation, but the Government does not expressly make that contention. Its nonreviewability argument is limited to the contention that we may not review whether the '350 patent is a CBM patent under § 18. (Judge Hughes likewise limits his Dissent in Part to the CBM question.)

In response to the Government's new position, Versata argues that the Government is estopped from reconsidering its position in the district court APA action, citing *New Hampshire v. Maine*, 532 U.S. 742, 749 (2001). The Government responds that it is better that it acknowledges its errors rather than compound them.

Ordinarily, the Government's willingness to confess error should be encouraged. However, given the fact that the district court action and this appeal share the same parties, the same patent, and the same contested issues, there is a 'bait-and-switch' aspect to the Government's newly-arrived-at position: when it helps the Government's position, a predicate issue, they argue, can be reviewed on appeal; but when it might hurt, the issue becomes not reviewable.

Fortunately, we need not judge the astuteness of the Government's confession. Nor, in deciding the question of reviewability, need we decide the strength of Versata's estoppel position. This is because the Government was right the first time—for the reasons we shall next explain, its original position on reviewability, with some clarification, was the correct one.

We have before us Versata's appeal from the final written decision of the PTAB invalidating Versata's patent under § 18 authority, an authority limited to CBM patents. On the reviewability issue that divides Versata and the Government, Versata argues that the invalidation must be reversed as beyond the § 18 authority because the '350 patent is not actually a CBM patent under the law if properly understood, and so is outside the PTAB's invalidation authority under § 18. The Government contends to the contrary: as a threshold matter, we may not review—indeed, we have no "jurisdiction" to decide—whether the '350 patent is a CBM patent since that was initially decided by the PTAB at the institution stage. Intervenor's Br. at 13.

To determine this reviewability issue, two related questions must be answered: *first*, does the § 324(e) judicial review bar permit judicial review, when conducted with regard to the final written decision, of PTAB compliance with any requirement that involves the ultimate authority of the PTAB to invalidate a patent; *second*, if yes, is the restriction of § 18 to CBM patents such a limit. We answer both questions in the affirmative, and therefore reject the contention that we may not review whether the '350 patent is a CBM patent covered by § 18.

As to the first question: what § 324(e) says is that "[t]he determination by the [PTAB] whether to institute a post-grant review under this section shall be final and nonappealable." 35 U.S.C. § 324(e) (emphasis added). That language does not by its terms apply to limits on the authority to enter a "final written decision" invalidating a patent. Institution and invalidation are two distinct actions by the PTAB. In addition to being deeply embed-

ded in federal administrative law,⁸ the distinction is built into the structure of this particular AIA statute, as explained above, and § 324(e) applies only to the decision to institute.

The distinct agency actions do not become the same just because the agency decides certain issues at both stages of the process. Nor do they become the same just because the agency chooses, or even follows a congressional directive, to decide an issue determining final-action authority at the initiation stage and then does not revisit the issue later. Early-stage decision of a basic authority question can make sense as an efficiency matter. There is no good reason to launch a proceeding if it is clear that the agency will have no authority to act at its conclusion. On the other hand, some determinations normally made at the initiation stage may not affect authority to render a final decision whenever made.

Overlap of issues is not determinative, neither is the timing determinative. Indeed, the Government implicitly agrees. Unlike SAP, it pointedly does *not* contend that

⁸ Under the APA, an agency initiation of proceedings is an agency action, 5 U.S.C. § 702, but it commonly is not a reviewable "final agency action," id. § 704. See Bennett v. Spear, 520 U.S. 154 (1997); FTC v. Standard Oil Co. of Cal., 449 U.S. 232 (1980); S. Ry. Co. v. Seaboard Allied Milling Corp., 442 U.S. 444, 452 (1979); Automated Merch. Sys., Inc. v. Lee, 782 F.3d 1376 (Fed. Cir. 2015) (adopting the Government's argument that even a decision to continue a proceeding is not a final agency action, which generally will occur only upon conclusion of the proceeding); see also Sackett v. EPA, 132 S. Ct. 1367 (2012); 16 Charles Alan Wright et al., Federal Practice & Procedure § 3942; 32 Charles Alan Wright et al., Federal Practice & Procedure § 8220.

§ 324(e) bars our review of whether § 101 is an available ground for invalidation under § 18, regardless of when the PTAB considered that issue.

It would not only run counter to the language of § 324(e) to read it as barring review of whether the PTAB exceeded statutory limits on its authority to invalidate. It would also run counter to our long tradition of judicial review of government actions that alter the legal rights of an affected person, a hallmark of the distinction between (generally reviewable) final agency action and (generally unreviewable) agency action that merely initiates a process to consider such an alteration. See Bennett, 520 U.S. at 177–78.

It has long been the law that "[a]dministrative determinations must have a basis in law and must be within the granted authority. . . . An agency may not finally decide the limits of its statutory power. That is a judicial function." Soc. Sec. Bd. v. Nierotko, 327 U.S. 358, 369 (1946). The Supreme Court has repeatedly emphasized "the strong presumption that Congress intends judicial review of administrative action," and that "[f]rom the beginning 'our cases [have established] that judicial review of a final agency action by an aggrieved person will not be cut off unless there is persuasive reason to believe that such was the purpose of Congress." Bowen v. Mich. Acad. of Family Physicians, 476 U.S. 667, 670 (1986) (quoting Abbott Labs. v. Gardner, 387 U.S. 136, 140 (1967)).9

More specifically, when doubt about congressional intent exists, the general presumption favoring judicial

⁹ See *Shalala v. Illinois Council on Long Term Care, Inc.*, 529 U.S. 1 (2000), for the Court's refinement of *Bowen's* application to specific Medicare statutes.

review of rights-changing administrative action is controlling. *Block v. Cmty. Nutrition Inst.*, 467 U.S. 340, 351 (1984). As a result, an agency seeking to overcome this strong presumption faces a "heavy burden" and must do so by "clear and convincing" evidence. *Bowen*, 476 U.S. at 671–72. The Supreme Court recently reiterated the agency's heavy burden to overcome the strong presumption against unreviewability. *See Mach Mining, LLC v. E.E.O.C.*, 135 S. Ct. 1645, 1651 (2015).

Congress explained the anomalous nature of a bar to judicial review of final agency action:

Very rarely do statutes withhold judicial review. It has never been the policy of Congress to prevent the administration of its own statutes from being judicially confined to the scope of authority granted or to the objectives specified. Its policy could not be otherwise, for in such a case statutes would in effect be blank checks drawn to the credit of some administrative officer or board.

S. Rep. No. 79-752, at 26 (1945); H.R. Rep. No. 79-1980, at 41 (1946) (same); *Bowen*, 476 U.S. at 671 (quoting same).

Here, nothing in § 324(e) meets the high standard for precluding review of whether the PTAB has violated a limit on its invalidation authority under § 18.

As to the second question implicit in the Government's nonreviewability contention: one of the limits on § 18 invalidation authority is that the patent at issue be a CBM patent. Congress created a special review regime, over and above any other authority the PTAB might have, for reviewing and invalidating patents that qualify as CBM patents. And it put a time limit (eight years) on the PTAB's authority under that regime. This requirement defines the PTAB's authority to invalidate under § 18. If a particular patent is not a CBM patent, there is no

proper pleading that could be filed to bring it within the PTAB's § 18 authority.

In so concluding, we need not and do not consider all of the various determinations the PTAB may make to initiate proceedings and which may constitute limits on ultimate invalidation authority, reviewable on appeal from a final written decision invalidating a patent. It is enough for us to determine here that the defining characteristic of a patent as a CBM patent, subjecting it to a special PTAB power to invalidate, is such a limit.¹⁰

The Government and SAP have not identified any reason to draw different conclusions. It is clear from the legislative history of the AIA that Congress purposely set out to create a relatively simple and expedited administrative process. See, e.g., H.R. Rep. No. 112-98, at 48 (2011). However, nothing in that purpose precludes or argues against this court, in an appeal of a final written decision, deciding contested questions regarding premises necessary to the agency's ultimate relied-on authority to take the action on appeal—here, invalidation of the patent claims under the CBM authorization—just because the agency first addressed those premises at the initiation stage of the proceeding. The appeal process, with its inherent delays, is already committed. Any further delay caused by having the court decide as part of the basic merits case a predicate issue such as raised here, would be limited. Indeed, when the answers to these predicate issues are decided as a matter of precedent, further delay, if any, will be minimal, if not essentially disappear.

¹⁰ The Government and SAP argue that the PTAB found Versata waived this issue during the trial. As we have explained, this is a predicate issue, and a necessary part of the record on appeal.

The parties, digging through the legislative record, come up with competing statements from various legislators with regard to the possible scope of the issues to be heard on appeal. Even assuming such statements are thought to be relevant, the variety of conflicting views illustrates why we must focus on the structure and language of the act, not on what its advocates and detractors may say about it.

Looking at the structure of § 18, the Government, in support of its new-found position against judicial review, notes that the only provision of the AIA that allows an appeal to this court from a post-grant review proceeding is § 329; that section authorizes judicial review of the "final written decision" of the PTAB made pursuant to § 328(a). The government reads this as limiting review to only the final written decision, and not anything in the initial decision to institute. But that of course begs the question—what aspects of the final written decision are subject to review?

The Government finds significance in the fact that § 328(a) directs the PTAB to issue a decision with respect to the patentability of any patent claim. Putting this provision together with § 329, the Government argues that on appeal the court is limited to only what the PTAB is directed to do. But that is a non-sequitur. The statutory description of an agency's decisional duties does not necessarily define the scope of an appellate court's ultimate merits considerations.

The Government also draws parallels between this issue under the AIA and the USPTO's practice in the priorestablished ex parte reexamination proceedings, and in its prior practice under the now-superseded provisions for interpartes reexamination. We do not find that either of those proceedings, established under different statutory provisions and dealing with different issues, is controlling

here. It is worth noting, however, that the pre-AIA case law made clear that limitations on the scope of reexamination authority were reviewable upon the final decision even though the USPTO considered such limitations solely at the initiation stage and initiation itself was long held to be unreviewable. See In re NTP, Inc., 654 F.3d 1268 (Fed. Cir. 2011); In re Hiniker Co., 150 F.3d 1362 (Fed. Cir. 1998); In re Portola Packaging, Inc., 110 F.3d 786 (Fed. Cir. 1997), superseded by statute as recognized in In re NTP, Inc., 654 F.3d at 1277; In re Recreative Techs. Corp., 83 F.3d 1394 (Fed. Cir. 1996).

In short, we do not find that the Government's arguments approach meeting the "heavy burden" of persuasion needed to overcome the "strong presumption" of judicial review. Congress, by limiting the scope of the review bar in § 324 as we have described, struck a balance between Congress's desire for a prompt and efficient review process at the USPTO, on the one hand, and, on the other, the necessary recognition of the traditional role of judicial review of final agency action. We find that balance carefully crafted and consistent with the roles the Constitution assigns to the Judicial and Executive Branches.

In re Cuozzo Speed Technologies, LLC, No. 14-1301 (Fed. Cir. July 8, 2015), decided by the court after the briefing had concluded in this case, is not to the contrary. The court in Cuozzo did not answer either of the two questions we decide in concluding that we may review whether Versata's patent is a CBM patent. That is clear

¹¹ The original opinion and dissent in *Cuozzo* issued on February 4, 2015. 778 F.3d 1271 (Newman, J., dissenting). A revised panel opinion and dissent issued on July 8, 2015. On the same day, the court denied a petition for rehearing en banc with a concurrence and two dissents to the denial.

even putting aside any difference there might be between § 314(d)—at issue in *Cuozzo*—and § 324(e)—at issue here.

To take the two questions in reverse order: *Cuozzo* did not decide whether status as a CBM patent was a limit on invalidation of authority under § 18. It could hardly have done so. *Cuozzo* did not involve a purported CBM patent or the PTAB's § 18 authority.

More broadly, *Cuozzo* did not address, and had no occasion to address, the question whether (despite § 314(d)) a final written decision can be reviewed for compliance with a limit on the PTAB's invalidation authority. Recognizing the distinction between initiation and final invalidation, *Cuozzo*, slip op. at 5–8, the court ruled only on review of the initiation decision itself, not about whether the final decision breached any limit on invalidation authority.

And that focus was inherent in the substance of the challenge, for a reason *Cuozzo* noted. The challenge was simply that the IPR petition at issue had not cited particular prior art the PTAB ultimately relied on for invalidation. A proper petition undisputedly could have cited it, thereby plainly giving the PTAB authority to invalidate the patent at issue in the IPR. *Id.* at 7–8. The alleged error in initiation was "irrelevant" because it was like the error that was "washed clean" in *Hiniker*. *Id.* The court in *Cuozzo* did not rule on or have before it an asserted violation of a limit on the PTAB's ultimate authority to invalidate that could not have been cured by a proper pleading. 12

¹² In that light, and following the issuance of the original opinion in *Cuozzo*, Versata, in a letter citing supplemental authority, requested that if necessary its

For the foregoing reasons, we hold that we have authority to review whether the '350 patent is within the PTAB's § 18 authority.

Issue Number 2—Is the '350 Patent a "Covered Business Method Patent"?

AIA section 18 establishes a post-grant review proceeding "for review of the validity of covered business method patents." § 18(a)(1). In case anyone wished to argue the question, Congress left no doubt about the scope of § 18: "The Director may institute a transitional proceeding [under § 18] only for a patent that is a covered business method patent." § 18(a)(1)(E).

The statute defines a "covered business method patent" as:

a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service

§ 18(d)(1).

A basic disagreement between the parties to this case is how broadly this language should be read, and accordingly, whether it encompasses the invention set out in the '350 patent.

In addition to the boundaries inherent in the statutory definition, Congress also provided a specific exception: "the term [covered business method patent] does not include patents for technological inventions." *Id.* Unhelpfully, Congress did not then define a "technological invention," but instead instructed the USPTO to "issue regulations for determining whether a patent is for a

appeal be treated as a mandamus petition. In view of our disposition of the case, the request is moot.

technological invention." § 18(d)(2). The USPTO has by regulation promulgated its version of a definition of a "technological invention." 37 C.F.R. § 42.301(b). The parties disagree as to whether the invention in this case is such an excepted "technological invention."

Congress, in addition to the specific authorization to the USPTO to adopt regulations defining the meaning of "technological invention," also gave the USPTO broad authority over the entire § 18 program—authority to "issue regulations establishing and implementing a transitional post-grant review proceeding for review of the validity of covered business method patents." § 18(a)(1). Pursuant to that broad authority, the USPTO adopted extensive regulations governing the § 18 program. See 37 C.F.R. §§ 42.300—.304. Thus the regulations, in addition to a definition of "technological invention," id. § 42.301(b), also contain a definition of "covered business method patent," id. § 42.301(a).

We first consider what, under the statute and the issued regulations, is a "covered business method patent," and whether the term applies to the patent at issue in this case. Subsequently we consider what the USPTO regulations, in the absence of a statutory definition, understand the exception for a "technological invention" to be, and again its application to this patent.

The Scope of the Term "Covered Business Method Patent"

We set out above the statutory definition of a "covered business method patent" found in § 18(d)(1). The USPTO's regulation, defining the same term, restates verbatim the statutory definition and nothing more. Though that avoids any question of whether the regulation is consistent with the statute, regrettably it adds nothing to our understanding of the scope question.

In response to Versata's objection that the '350 patent was not a covered business method patent, the PTAB was therefore left to its own devices. The PTAB undertook an analysis regarding whether Versata's claims 17 and 26–29 must necessarily be directed to "financial products or services," as these terms are used in the definition. The PTAB noted that, as part of the process of implementing § 18, the USPTO had published notices of proposed and final rulemaking, and that among the rules proposed and subsequently adopted was the definition of "covered business method patent" contained in 37 C.F.R. § 42.301(a), the definition described above.

The PTAB observed that in its notices the USPTO considered the legislative debates and history, as well as the overall transitional program itself. See J.A. 21–22 (citing Transitional Program for Covered Business Method Patents—Definitions of Covered Business Method Patent and Technological Invention, 77 Fed. Reg. 48734, 48735 (Aug. 14, 2012)). Also, the PTAB observed that in its final notice of rulemaking the agency explained that the legislative history supported the proposition that the definition be broadly interpreted to "encompass patents claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity." Id.

Further, in the Federal Register notice explaining the agency's decision to adopt its final rule, the agency notice observes that one commentator responding to the rule proposal suggested that the regulatory definition of covered business method should be limited specifically to the products and services of the financial services indus-

¹³ As noted earlier, this issue was addressed in the PTAB's decision to institute review, not in its final written decision.

try. 77 Fed. Reg. at 48736. Another suggestion was that the agency should make specific reference in the definition to Class 705 of the United States Classification System, used by USPTO examiners. *Id.* (This classification is generally considered to be focused primarily on financial institutions as such.)¹⁴

The PTAB noted that the agency summarily rejected these proposals. Instead, the USPTO stated that:

The suggestion to clarify that the term "financial product or service" is limited to the products or services of the financial services industry is not adopted. Such a narrow construction of the term would limit the scope of the definition of covered business method patents beyond the intent of section 18(d)(1) of the AIA.

Id.

The PTAB thus declined to interpret the statute as requiring that the patent's invention literally comprehend a financial product or service: "The term financial is an adjective that simply means relating to monetary matters." J.A. 23. The PTAB concluded that "Versata's '350 patent claims methods and products for determining a price and that these claims, which are complementary to a financial activity and relate to monetary matters, are considered financial products and services under § 18(d)(1)." *Id*.

There is a considerable amount of history regarding Class 705—the technology class associated with the volume of business method patents that issued in the early 2000s. *See*, *e.g.*, 157 Cong. Rec. 3432 (2011). Class 705 itself apparently served as the original template for the definition of a "covered business method," but was thought to be too narrow. *Id.* at 13167.

In its appeal here, Versata renews its argument against the PTAB position. Versata takes the position that Congress used the phrase "financial product or service" for a reason and that the plain meaning of the text of the statute limits the PTAB's jurisdiction to products or services from the financial sector—i.e., banks, brokerages, holding companies, insurance, and similar institutions with a finance focus. If Congress had intended the scope of the definition to capture other things incidental to commerce, it could have said so, and it would have used different words.

SAP responds that the '350 patent claims "[a] method for determining a price of a product offered to a purchasing organization." Appellees' Br. at 45 (quoting '350 patent col. 19, ll. 57–58). Under any interpretation of the statutory definition, argues SAP, price calculations plainly fall within the "practice, administration, or management of a financial product or service" language of AIA § 18(d)(1). Even if Congress's intent in this regard could be considered unclear, the USPTO's interpretation of § 18(d)(1) as broadly interpreted and "encompass[ing] patents claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity," is, according to SAP, entitled to deference under Cooper Technologies Co. v. Dudas, 536 F.3d 1330, 1337 (Fed. Cir. 2008). According to SAP, the patent claims a "method for determining price," '350 patent, col. 20, l. 66, not something Versata calls a "hierarchical pricing engine." Appellees' Br. at 49. The PTAB made specific findings that the claimed steps "could be performed . . . with pencil and paper," and "no specific, unconventional software, computer equipment, tools or processing capabilities are required." J.A. 27–28. These findings, argues SAP, support its determination.

The USPTO in its brief as intervenor notes that the PTAB's interpretation of "financial" as "relating to mone-

tary matters" comports with the dictionary definition, citing *The Random House Dictionary of the English Language* 719 (2d ed. 1987) (defining, according to the USPTO, "financial" as "pertaining or relating to money matters"). This interpretation, it is said, readily embraces the '350 patent which expressly claims a "method for determining a price of a product" in claim 17. '350 patent, col. 20, l. 66. According to the USPTO, nothing in the text of the statute limits AIA § 18(d)(1) to any one sector or industry. Further, the legislative history supports the broader definition. Thus, argues the USPTO, the PTAB's interpretation was not arbitrary or capricious.

We agree with the USPTO that, as a matter of statutory construction, the definition of "covered business method patent" is not limited to products and services of only the financial industry, or to patents owned by or directly affecting the activities of financial institutions such as banks and brokerage houses. The plain text of the statutory definition contained in § 18(d)(1)—"performing . . . operations used in the practice, administration, or management of a financial product or service"—on its face covers a wide range of finance-related activities. The statutory definition makes no reference to financial institutions as such, and does not limit itself only to those institutions.

To limit the definition as Versata argues would require reading limitations into the statute that are not there. This understanding of the text is reinforced by the scope of the entire § 18 program, and the general concern, including within the halls of Congress, regarding litigation abuse over business method patents. These concerns caused Congress to create a special program for these patents in the first place.

Furthermore, the expertise of the USPTO entitles the agency to substantial deference in how it defines its

mission. Congress recognized this by its broad delegation of rulemaking authority in the establishment and implementation of this transitional post-grant review proceeding. See § 18(a)(1). It might have been helpful if the agency had used that authority to elaborate on its understanding of the definition provided in the statute. Nevertheless, for the reasons we have explained, we conclude that the '350 patent and the invention it comprises fall well within the terms of the statutory definition of a "covered business method patent."

The Meaning of "Technological Invention"

Section 18(d) states that the term "covered business method patent" does not include patents for "technological inventions." The parties dispute whether the '350 patent is for a technological invention. This requires that we first determine what is meant by that term, and then whether the PTAB was correct in finding this patent is not such an invention. As earlier noted, Congress did not define the term, but left it to the USPTO to do. The USPTO followed Congress's instructions, and in 37 C.F.R. § 42.301(b) promulgated its definition.

According to the regulation, a "technological invention" is one in which "the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art; and solves a technical problem using a technical solution." *Id.* The regulation specifies that these criteria will be considered "on a case-bycase basis." *Id.* This definition is notable as much for what it does not say as for what it does say.

First, the requirement that a technological invention should be novel and nonobvious over the prior art could be said to be rather obvious, and not novel. This is because in order to be eligible for patenting in the first place, any invention must be novel (35 U.S.C. § 102) and nonobvious (35 U.S.C. § 103); presumably the invention under review,

since it has already been covered by an issued patent, was earlier determined by the USPTO to be novel and nonobvious. At this early stage of the process, when the USPTO is first determining whether the patent at issue is even a CBM, there would seem to be little cause to determine what will be one of the ultimate questions if review is granted—did the USPTO err in the first instance when it originally determined that the invention was novel and nonobvious?

Putting this part of the regulation's definition aside, we are left with a definition of a "technological invention" as essentially one having a "technological" feature that solves a "technical" problem using a "technical" solution. Defining a term in terms of itself does not seem to offer much help. In short, neither the statute's punt to the USPTO nor the agency's lateral of the ball offer anything very useful in understanding the meaning of the term "technological invention."

Thus the PTAB, in concluding that it had jurisdiction over the '350 patent as a covered business method patent that was not within the exception for a technical invention, had to craft its own understanding of what is meant by a "technological invention." First, the PTAB recited the fact that the USPTO had adopted a definition and had published a related notice, see Office Patent Trial Practice Guide, 77 Fed. Reg. 48756, 48763-64 (Aug. 14, 2012). The notice listed certain characteristics which, if present, did not help support a finding that the invention was within the "technological invention" exception from CBM treatment. These are: 1) mere "recitation of known technologies"; 2) "reciting the use of known prior art technology"; and 3) "combining prior art structures to achieve the normal, expected, or predictable result of that combination." Id. at 48764.

The PTAB, taking the position that the presence of a single qualifying claim is sufficient to institute covered business method review, selected claim 17 for closer analysis. (Claim 17 is set out in extenso in the 'Background' section, supra.) Versata, in its effort to avoid CBM review of the '350 patent, argued that claim 17, like all the claims in the patent, recited a novel and nonobvious technological feature. This was described as a "hierarchical data structure" used in combination with a software-implemented pricing procedure. Versata further contended that the claims all require the use of a computer and the use of "denormalized" numbers that are to be determined in "run time." SAP responded that claim 17 lacked a novel and nonobvious technological feature as the claim was merely directed to a business process of determining product prices that lack even minimal computer-related recitations. The PTAB concluded that claim 17 did not recite a technological invention.

We accept the PTAB's use of claim 17 as representative. As the PTAB correctly noted, even if the invention required the use of a computer, the claim did not constitute a technological invention. As we are now instructed, the presence of a general purpose computer to facilitate operations through uninventive steps does not change the fundamental character of an invention. See Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347 (2014).

The PTAB viewed the invention typified by claim 17 as basically a method of determining a price. This was a determination that could be achieved "in any type of computer system or programming or processing environment," and accordingly "no specific, unconventional software, computer equipment, tools or processing capabilities are required." J.A. 28 (citing *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012)).

We agree with the PTAB's determination that claim 17 does not solve a technical problem using a technical solution. Indeed, contrary to Versata's argument that the invention "leveraged the hierarchal data structures used by large companies to organize pricing information," we agree with the PTAB that this is not a technical solution but more akin to creating organizational management charts. *Id.* (citation omitted). Like the PTAB, and for many of the same reasons, we conclude that whatever may be the full sweep of the term "technological invention," the invention that comprises the '350 patent is essentially not a technological one as that term ordinarily would be understood.

Accordingly, we affirm the PTAB's conclusion that Versata's '350 patent is a covered business method patent, and that it does not fall within the exception for technological inventions, whatever that exception may otherwise mean. ¹⁵

Issue Number 3—Claim Construction Standards

When addressing the ultimate merits in this case—the question of compliance by the patent with the requirements of § 101—the PTAB faced an issue of claim construction. The PTAB applied its "broadest reasonable interpretation" ("BRI") standard to the issue, the standard adopted in 2012 by the USPTO for AIA post-grant proceedings, and generally used in USPTO office actions. Versata challenges application of that standard to its claims in this case. ¹⁶

See also Brief of The Internet Association as Amicus Curiae in Support of Appellees.

¹⁶ See also Amici Curiae Brief of 3M Company et al. in Support of Neither Party. But see Brief of Dell Inc. et al. as Amici Curiae in Support of Appellees and Interve-

The PTAB, in its final written decision, construed four claim terms of which the parties sought construction. On appeal, Versata points out, correctly, that the PTAB applied the BRI standard to each of its claim constructions. Versata consequently challenges generally the PTAB's use of the BRI standard, and in particular its effect on the meaning of the term "pricing information," and whether that term should be construed to require "denormalized numbers." ¹⁷

According to Versata, both Versata and SAP agreed at the outset of the proceedings that the term did require denormalized numbers. The PTAB declined to so construe the term, and, based on application of the BRI standard, decided that the invention in the '350 patent did not require denormalized numbers.

Versata argues that such a claim construction is not permissible for a number of reasons, and that its use adversely impacted the validity determination of the '350 patent under the PTAB's § 101 analysis. Accordingly, argues Versata, on appeal one alternative for the court is to reverse and remand for a new § 101 analysis under a proper claim construction.

SAP, whatever its position in the earlier litigation may have been, takes the position in this appeal that the PTAB, applying BRI, properly construed the claims broadly as not limited to "denormalized numbers." SAP points to the fact that the dependent claims recite

nor; Brief of Amici Curiae Intel Corp. et al. Supporting Intervenors and Affirmance of the Agency's Decision.

¹⁷ Denormalized numbers, according to Versata, do not have fixed units and may assume a different meaning and different units, determined by the software during run time and depending on the pricing operation that is being performed.

"denormalized numbers" and the independent claims do not, and the written description describes this feature as only "[o]ne aspect' of the purported invention." Appellees' Br. at 57–58 (quoting '350 patent, col. 8, l. 39). Further, argues SAP, even if the PTAB erred in its construction, the error is harmless because its correction would not change the result.

On the basic question of the propriety of the PTAB applying the BRI standard in its decision-making, this is an issue on which we need not elaborate here. In *Cuozzo*, a case that issued after argument in this case, the majority approved the USPTO's use of the BRI in PTAB claim construction. Slip op. at 10–19. As a general rule, we are bound by our own prior precedents, and, though the rules governing IPR matters at issue in *Cuozzo* will not necessarily govern all PGR/CBM matters, we see no basis for distinguishing between the two proceedings for purposes of the PTAB's use of BRI in claim construction here.

Furthermore, on careful review of the record in light of the parties' arguments, it is less than clear that the outcome in this case would be different under a different claim construction regime. This is because, even applying the usual court-utilized "one correct construction" formula, we conclude that the PTAB's interpretation of the claims, for the same reasons given by the PTAB after careful consideration, is correct. This is particularly the case regarding claim 17, which, in light of the principles of claim differentiation and the understandings derived from the written description, as described above, is not limited to denormalized numbers.

Thus, even without the guidance provided by *Cuozzo*, under either formulation of the claim construction standard the result is likely the same in this case. The PTAB's claim constructions are affirmed.

Issue Number 4—The Merits Determination

In its final written decision, the PTAB held that claims 17 and 26–29 of the '350 patent were unpatentable under 35 U.S.C. § 101 as "abstract ideas." In response, Versata first challenges whether, under the governing statutes, it is within the authority of the PTAB to invoke § 101 as a test of validity. In Versata's view, the statutes authorize the PTAB to test the validity of challenged claims in a CBM review on the basis of the requirements set forth in §§ 102, 103 and 112, but not on the basis of the requirements set forth in § 101. Second, even if § 101 is a permissible test, Versata argues that the PTAB erred in finding these claims nothing more than an "abstract idea," as that is understood in § 101 jurisprudence.

Is Section 101 of the Patent Act a Proper Referent in CBM Cases, and Is That Question Open to Judicial Review?

As a preliminary matter, we address the question of whether we can review, as a matter of law, whether the PTAB is authorized to invoke § 101 as a test of validity in CBM cases. It was at the decision to institute stage when the PTAB determined there was a § 101 issue. All the same arguments for and against judicial review of an issue first decided at the institution stage presumably are available. The question again is whether we can reach this issue now on appeal of the final written decision. The answer is yes, and for essentially the same reasons.

First, on an appeal of the PTAB's final written decision, all questions that relate to the ultimate merits of the case are before us. Since the merits of this case turn on an application of § 101 law, a first step in deciding those merits is necessarily satisfying ourselves that the PTAB's merits decision was based on a correct understanding of the law. Thus we must assure ourselves that compliance with § 101 is the applicable test for the PTAB to have

used in judging the validity of the claims in the '350 patent.

Second, for all the same reasons we discussed earlier, § 324(e) does not bar this court from reviewing and deciding this predicate issue when raised. The authority of the PTAB under the relevant statutes to apply § 101 law to the claims under review goes to the power of the PTAB to decide the case presented to it. Thus, like the issue we discussed in Issue Number 1, *supra*, it engages the same analysis as did that issue. And for the same reasons set forth there, the answer must be the same. We have jurisdiction to decide the question even though it is decided, as it was in this case, initially by the PTAB at the decision to institute stage.

We turn then to the more challenging question of whether the PTAB was within its statutory invalidation authority when it chose to apply § 101 jurisprudence in determining the validity of the challenged claims. Admittedly, the statutory text is subject to competing understandings. Under chapter 32, governing post-grant review and § 18 cases, the PTAB "shall issue a final written decision with respect to the patentability of any patent claim challenged" § 328(a) (emphasis added). At the same time, § 321(b), entitled "Scope," states that a petitioner in a PGR review "may request to cancel as unpatentable 1 or more claims of a patent on any ground that could be raised under paragraph (2) or (3) of section 282(b) (relating to invalidity of the patent or any claim)." (Emphasis added.)

Section 282(b) in turn specifies the defenses that may be raised in an action involving the validity or infringement of a patent. Among the defenses listed are:

(b)(2)—invalidity of the patent or any claim on any ground "specified in part II as a condition for patentability"; (b)(3)—invalidity of the patent or any claim for failure to comply with any requirement of § 112 (except best mode) or § 251.

Versata argues that a CBM post-grant review must be limited to a ground that could be raised under paragraph (2) or (3) of section 282(b). Versata then reasons that § 282(b)(2) authorizes defenses on any ground "specified in part II as a condition for patentability," and that the part II reference includes under the headings in the compiled statutes only "conditions for patentability," i.e., §§ 102 and 103, but not § 101. Based on the headings in part II of the statutes, Versata draws a distinction between the heading under which § 101 appears, "inventions patentable," and "conditions of patentability" under which §§ 102 and 103 are listed.

SAP counters that it is generally understood that § 101 is an invalidity defense under § 282, and that Versata's reliance on the headings is improper. SAP also argues that the legislative history suggests that any ground of validity may be raised, including § 101.

The USPTO echoes these arguments, and cites to *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966), for the statement that the Patent Act "sets out the conditions of patentability in three sections," 101, 102, and 103. The USPTO adds that this court rejected Versata's argument regarding § 101 in *Dealertrack, Inc.*, 674 F.3d at 1330 n.3, and adds that it would be particularly anomalous to conclude that Congress foreclosed consideration of § 101 issues in CBM reviews since the very purpose of the special CBM process was to permit the USPTO to reconsider the validity of a salient category of business method patents.

Versata is correct that a strict adherence to the section titles can support an argument that § 101 is not listed as a "condition of patentability," but rather has the

heading of "inventions patentable." However, as noted by the USPTO, both our opinions and the Supreme Court's opinions over the years have established that § 101 challenges constitute validity and patentability challenges. See also Standard Oil Co. v. Am. Cyanamid Co., 774 F.2d 448, 453 (Fed. Cir. 1985); Aristocrat Techs. Austl. Pty. Ltd. v. Int'l Game Tech., 543 F.3d 657, 661 n.3 (Fed. Cir. 2008).

It would require a hyper-technical adherence to form rather than an understanding of substance to arrive at a conclusion that § 101 is not a ground available to test patents under either the PGR or § 18 processes. Section 101 validity challenges today are a major industry, and they appear in case after case in our court and in Supreme Court cases, not to mention now in final written decisions in reviews under the AIA. The numerous cases in our court and in the Supreme Court need no citation; for a sample of PTAB cases, see, e.g., Search America, Inc. v. Transunion Intelligence, LLC, CBM2013-00037 (Feb. 3, 2015); U.S. Bancorp v. Retirement Capital Access Management Co., CBM2013-00014 (Aug. 22, 2014).

It is often said, whether accurate or not, that Congress is presumed to know the background against which it is legislating. Excluding § 101 considerations from the ameliorative processes in the AIA would be a substantial change in the law as it is understood, and requires something more than some inconsistent section headings in a statute's codification. We agree with the USPTO and SAP and we so hold that, looking at the entirety of the statutory framework and considering the basic purpose of CBM reviews, the PTAB acted within the scope of its authority delineated by Congress in permitting a § 101 challenge under AIA § 18.

Finally, the Merits of the PTAB Decision

Having determined that the PTAB had authority to test the validity of the challenged claims under § 101, we

turn now to the question of whether the conclusion reached with regard to that test was correct: that the challenged claims were invalid as constituting an "abstract idea" as that term is understood. The PTAB determined that "each of the challenged claims involves the use of an abstract idea: determining a price using organization and product group hierarchies, which are akin to management organizational charts." J.A. 72. According to the PTAB, Versata's concept of organizational hierarchies for products and customers is abstract because it represents a disembodied concept, a basic building block of human ingenuity—it is little more than determining a price, essentially a method of calculating.

The PTAB further analyzed whether the claims incorporated "sufficient meaningful limitations" to ensure that they recited more than an abstract idea, and determined that the claims did not add meaningful limitations beyond the abstract idea. As part of this analysis, the PTAB concluded that, although the claims were drafted to include computer hardware limitations, the underlying process "could also be performed via pen and paper." J.A. 73. The PTAB determined that the recitation of generic general purpose computer hardware in the claims represented routine, well-understood conventional hardware that failed to narrow the claims relative to the abstract The PTAB also credited the testimony of SAP's expert, Dr. Siegel, over that of Versata's expert, Dr. Liebich, and found that the additionally claimed steps of storing, retrieving, sorting, eliminating, and receiving were "well-known, routine, and conventional steps." J.A. 75-77.

We review questions concerning compliance with the doctrinal requirements of § 101 of the Patent Act (and its constructions) as questions of law, without deference to the trial forum. *Ultramercial*, *Inc.* v. *Hulu*, *LLC*, 772 F.3d 709, 713 (Fed. Cir. 2014). As a necessary predicate to our

conclusions, we must briefly summarize the applicable law.

Section 101 of the Patent Act defines patent-eligible subject matter: "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101. The Supreme Court has found in § 101 an implicit exception for laws of nature, natural phenomena, and abstract ideas. Alice, 134 S. Ct. at 2354 (citing cases dating to 1853).

Generally, the courts have found that the task of applying the first two of these judicially-crafted exceptions—laws of nature and natural phenomena—not particularly difficult; ¹⁹ there are a number of cases providing more or less clear guidance on how to apply these concepts. The third exception—abstract ideas—is more of a problem, a problem inherent in the search for a definition of an "abstract idea" that is not itself abstract.

Under current thinking about how to understand an "abstract idea," inventions that are thought to be based on an abstract idea as such are not per se unpatentable. All inventions, at some level, "embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract

¹⁸ The Supreme Court has alternately referred to the "three specific exceptions" to section 101, see Bilski v. Kappos, 561 U.S. 593, 601 (2010), or to "the [single] § 101 exception" encompassing all three exceptions together, see Alice, 134 S. Ct. at 2354.

¹⁹ But see Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107 (2013) (naturally occurring DNA segment is not patentable, but not naturally occurring DNA segment is patentable).

ideas." *Id.* (citation and quotation marks omitted). Consequently, determining whether the section 101 exception for abstract ideas applies involves distinguishing between patents that claim the building blocks of human ingenuity—and therefore risk broad pre-emption of basic ideas—and patents that integrate those building blocks into something more, enough to transform them into specific patent-eligible inventions. *Id.* at 2354–55.

Thus the Supreme Court has identified a two-step framework. First, determine whether the claims at issue are directed to one of the patent-ineligible concepts. *Id.* at 2355; see also Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1296–97 (2012) (setting forth the same two-step framework). Second, if the claims are directed to patent-ineligible subject matter, ask "[w]hat else is there in the claims before us?" Alice, 134 S. Ct. at 2355 (quoting Mayo, 132 S. Ct. at 1297).

To answer the second question, we consider the limitations of each claim both individually and as an ordered combination to determine whether the additional limitations transform the nature of the claim into a patent-eligible application of a patent-ineligible concept. *Id.* The Supreme Court has described this second step as a search for an inventive concept—a limitation or combination of limitations that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon an ineligible concept itself. *Id.*

In other words, a claim reciting an abstract idea must include additional features to ensure that the claim is more than a drafting effort designed to monopolize an abstract idea. *Id.* at 2357. This requires more than simply stating an abstract idea while adding the words "apply it" or "apply it with a computer." *See id.* at 2358. Similarly, the prohibition on patenting an ineligible concept cannot be circumvented by limiting the use of an

ineligible concept to a particular technological environment. *Id*.

This court in its efforts to make an "abstract idea" less abstract developed the machine-or-transformation test. The Supreme Court has said the test can serve as a useful clue for determining whether some inventions are eligible processes under section 101, but that this test is not the sole test for deciding whether an invention is a patent-eligible process. *Bilski*, 561 U.S. at 604.

In recent years the Supreme Court and this court have examined claims directed to abstract ideas on a number of occasions. Extensive discussion of these cases appears in many opinions, and we do not repeat that litany here. It may be helpful, nevertheless, to highlight briefly a few salient points as a means of comparison to the invention and claims in the '350 patent.

In *Alice*, the Court held that claims directed to the abstract idea of intermediated settlement were unpatentable, even though some of the claims required generic computer implementation. In *Bilski*, the Court held that claims directed to the abstract idea of risk hedging were unpatentable. In *Parker v. Flook*, 437 U.S. 584 (1978), the Court held that a mathematical formula for computer alarm limits in a catalytic conversion process was a patent-ineligible abstract idea. In *Gottschalk v. Benson*, 409 U.S. 63 (1972), the Court held that claims involving an algorithm for converting binary-coded decimal numerals into pure binary form were unpatentable since the patent was, in practical effect, a patent on the algorithm itself.

These cases may be contrasted with *Diamond v. Diehr*, 450 U.S. 175 (1981), in which the Court held that a computer-implemented process for curing rubber was patent eligible even though it employed a well-known mathematical equation. It used the equation in a process

to solve a technological problem in conventional industry practice.

Our court on numerous occasions has examined claims directed to abstract ideas. In *Content Extraction & Transmission LLC v. Wells Fargo Bank, National Ass'n,* 776 F.3d 1343 (Fed. Cir. 2014), we found that claims directed to the abstract idea of collecting data from hard-copy documents, recognizing certain information within the collected data, and storing that information in memory were ineligible. This was true despite noting that, if the claims were construed in the most favorable manner to the appellants, the claims would require scanning and processing technology.

In *Ultramercial*, we found that claims directed to the abstract idea of using an advertisement as an exchange or currency were ineligible even though the claims were tied to a general purpose computer and invoked the Internet. In *buySAFE*, *Inc. v. Google*, *Inc.*, 765 F.3d 1350 (Fed. Cir. 2014), we found that claims directed to the abstract idea of creating a contractual relationship—a transaction performance guaranty—were ineligible despite the recitation of a computer that received and sent information over a network.

In Bancorp Services, L.L.C. v. Sun Life Assurance Co. of Canada (U.S.), 687 F.3d 1266 (Fed. Cir. 2012), we found ineligible claims directed to the abstract idea of managing a stable value life insurance policy. And in CyberSource Corp. v. Retail Decisions, Inc., 654 F.3d 1366 (Fed. Cir. 2011), we found that a broadly worded method claim and a claim reciting a computer readable medium for executing the method claim were ineligible. We concluded the claims were drawn to a method of verifying the validity of credit card transactions over the Internet, and the steps in the method could be performed in the human mind or by a human using a pen and paper.

These cases may be contrasted with instances in which we have found patents directed to patent-eligible subject matter. For example, in *DDR Holdings*, *LLC v. Hotels.com*, *L.P.*, 773 F.3d 1245 (Fed. Cir. 2014), we found that claims reciting a solution that was necessarily rooted in computer technology to overcome a problem specifically arising in the realm of computer networks were eligible. We drew a distinction between the patent-eligible claims at issue and patent-ineligible claims in the past that had merely recited commonplace business methods aimed at processing business information, applying known business processes to particular technological environments. *Id.* at 1259.

Applying the first step of the *Alice/Mayo* framework, we agree with the PTAB's analyses of the claims at issue. Claims 17 and 26–29 of the '350 patent are directed to the abstract idea of determining a price, using organizational and product group hierarchies, in the same way that the claims in *Alice* were directed to the abstract idea of intermediated settlement, and the claims in Bilski were directed to the abstract idea of risk hedging. More specifically, claim 17 is directed to a method of determining a price. Claim 27 is directed to a computer-implemented method of determining a price, and claims 26 and 28 are directed to computer-readable storage media comprising computer instructions to implement the methods of claims Claim 29 is directed to an apparatus for 17 and 28. determining a price that includes computer program instructions capable of performing the same method steps recited in claim 27. Using organizational and product group hierarchies to determine a price is an abstract idea that has no particular concrete or tangible form or application. It is a building block, a basic conceptual framework for organizing information, similar to the claims involving collecting, recognizing, and storing data in Content Extraction and the claims in CyberSource.

Applying the second step of the *Alice/Mayo* framework, we agree with the PTAB that, after considering the limitations of each claim individually and as an ordered combination, none of the claims have sufficient additional limitations to transform the nature of any claim into a patent-eligible application of an abstract idea. Taking the claim limitations separately, the function performed by the computer at each step is purely conventional. For example, the limitations of claim 17 involve arranging a hierarchy of organizational and product groups, storing pricing information, retrieving applicable pricing information, sorting pricing information, eliminating less restrictive pricing information, and determining the price. All of these limitations are well-understood, routine, conventional activities previously known to the industry.

The same is true of the limitations in claims 26–29. The limitations are either inherent in the abstract idea of determining a price using organization and product group hierarchies—e.g., arranging the hierarchies—or conventional and well-known limitations involving a computer—e.g., storing pricing information. The PTAB specifically examined this issue and credited the testimony of SAP's expert over Versata's expert to determine that the additionally claimed steps of storing, retrieving, sorting, eliminating and receiving were "well-known, routine, and conventional steps." J.A. 77.

Similarly, when considered as an ordered combination, the components of each claim add nothing that is not already present when the steps are considered separately. Viewed as a whole, the claims simply recite the concept of price determination by using organizational and product group hierarchies as performed by a generic computer.

This court found similar claims to be ineligible despite the recitation of a general purpose computer or the Internet in *Content Extraction*, *Ultramercial*, *buySAFE*, *Ban-* corp, and CyberSource. See also Intellectual Ventures I LLC v. Capital One Bank (USA), Nat'l Ass'n, No. 14-1506, 2015 WL 4068798 (Fed. Cir. July 6, 2015); OIP Techs., Inc. v. Amazon.com, Inc., No. 12-1696, 2015 WL 3622181 (Fed. Cir. June 11, 2015). The Supreme Court found similar claims to be ineligible despite recitation of a general purpose computer in Alice, Flook, and Benson. Moreover, the claims at issue are not sufficiently similar to the claims in Diehr and DDR Holdings to demonstrate that Versata's claims are patent eligible.

Unlike *Diehr*, the claims at issue do not improve some existing technological process or solve some technological problem in conventional industry practice. Unlike *DDR Holdings*, the claims at issue are not rooted in computer technology to solve a problem specifically arising in some aspect of computer technology. Instead, the claims at issue are more like the claims we summarized in *DDR Holdings* as insufficient to reach eligibility—claims reciting a commonplace business method aimed at processing business information despite being applied on a general purpose computer.

Versata raises several arguments to support its position that its claims are patent eligible under section 101, but these arguments are not persuasive and are effectively countered by the USPTO and SAP. First, Versata argues that the PTAB erred by improperly dissecting the claims and by failing to consider the claims as a whole. The record reflects that this is not so. The PTAB in its analysis followed the dictates of the Supreme Court in *Alice* and *Mayo* by examining the claims as a whole and in terms of each claim's limitations.

Versata argues that its claims recite "a specific approach to determining the price of a product on a computer, using hierarchies so as to enable the desired benefit for the computing environment: fewer software tables and

searches, leading to improvements in computer performance and ease of maintenance." Appellant's Br. at 43–44. However, all of the parties—including Versata—recognize that these supposed benefits are not recited in the claims at issue. Versata contends that the benefits are relevant under *Genetics Inst.*, *LLC v. Novartis Vaccines & Diagnostics*, *Inc.*, 655 F.3d 1291 (Fed. Cir. 2011), but this case is inapposite since it does not concern section 101.

Examination of the claims—as a whole and in terms of each claim's limitations—reveals that the claims are not directed to improving computer performance and do not recite any such benefit. The claims are directed to price determination and merely use a computer to improve the performance of that determination—not the performance of a computer.

Versata argues that its claims are tied to a machine and that this favors patent eligibility. As we previously noted, the machine-or-transformation test can be a useful clue in determining the eligibility of method claims. However, the claims at issue do not transform a general purpose computer into a specific machine. The steps in Versata's claims (e.g., arranging, storing, retrieving, sorting, eliminating, determining) are conventional, routine, and well-known. They involve the normal, basic functions of a computer. "In order for the addition of a machine to impose a meaningful limit on the scope of a claim, it must play a significant part in permitting the claimed method to be performed, rather than function solely as an obvious mechanism for permitting a solution to be achieved more quickly, i.e., through the utilization of a computer for performing calculations." SiRF Tech., Inc. v. Int'l Trade Comm'n, 601 F.3d 1319, 1333 (Fed Cir. 2010); see also Bancorp, 687 F.3d at 1277–78. Versata's claims do not meet this test, and instead function solely as a mechanism for permitting the price determination to be performed more quickly.

Versata asserts that the PTAB construed the claim term "data source" in claim 17—and found in claims 17, 27, and 29—as a "computer storage medium" and that this is inconsistent with the PTAB's finding that the underlying process could be performed via pen and paper. However, there is no inconsistency. Courts have examined claims that required the use of a computer and still found that the underlying, patent-ineligible invention could be performed via pen and paper or in a person's mind. See, e.g., Benson; CyberSource, 654 F.3d at 1373 (noting, in the context of the claims in that case, that "a method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101.").

Versata's other arguments are similarly unavailing. The PTAB did not shift SAP's burden of proof onto Versata. The PTAB did not conflate the inquiries of §§ 102 and 103 with the inquiry of § 101, and the PTAB did not err by failing to consider any alleged commercial success of Versata's invention. Versata improperly conflates improvements to technologies with commercial success. Commercial success is not necessarily a proxy for an improvement in a technology nor does it necessarily indicate that claims were drawn to patent eligible subject matter.

Finally, both Versata and SAP cite *Ultramercial* to support their respective positions. Versata argues that its claims are not directed to an "entrepreneurial objective" and are instead "technological" because they use fewer tables and searches than prior-art software thereby, in Versata's words, "offer[ing] dramatic improvements in [computer] performance." Appellant's Citation of Supplemental Authority at 2 (citation omitted). The language

Versata cites is from *Versata Software*, 717 F.3d at 1259; however, as Versata knows, the word "computer" is not in the original quotation, and we did not address section 101 in that opinion. As we have already noted, the claims at issue do not recite any improvement in computer technology.

After weighing the arguments and evidence submitted by the parties, and following an oral hearing, the PTAB issued its final written decision on patentability. In its decision, the PTAB correctly applied the Supreme Court's test in *Alice* and *Mayo*. Versata identifies no persuasive basis for disturbing the PTAB's determination, which was amply supported by the record before it. The section 101 analysis applied by the PTAB was not legally erroneous under *Mayo* and *Alice*. And its underlying fact findings and credibility determinations are supported by substantial evidence in the record. *See Microsoft Corp. v. Proxyconn, Inc.*, Nos. 14-1542, -1543, 2015 WL 3747257, at *2 (Fed. Cir. June 16, 2015) (noting that as a general matter, we review the PTAB's findings of fact for substantial supporting evidence in the record).

We recognize that any given analysis in a § 101 "abstract idea" case is hardly a clear guidepost for future cases arising under § 101—each case stands on its own, and requires separate analysis by the judges who must make the decision. Taking that into account, and for the reasons we have explained, we affirm the decision of the PTAB that claims 17 and 26–29 of the '350 patent were unpatentable as abstract ideas under 35 U.S.C. § 101.

Additional arguments were raised by the parties regarding waiver and claim preclusion, potential issues arising in the long course of their litigation. We have examined these issues, and find nothing in them to persuade us that we should reach different conclusions than those expressed herein.

SUMMARY

With regard to the issues in the case, we conclude:

- On appeal in a § 18 case to this court of a final written decision by the PTAB, as a general principle we may review issues decided during the PTAB review process, regardless of when they first arose in the process, if they are part of or a predicate to the ultimate merits.
- The invention claimed in the '350 patent is a covered business method patent as that term is understood, and it does not fall within the meaning of a "technological invention."
- The PTAB's claim constructions are affirmed.
- The requirements of § 101 of the Patent Act apply in a § 18 review.
- The '350 patent claims at issue were properly held invalid under § 101.

CONCLUSION

For the reasons set forth herein, the decision of the PTAB in its final written decision is affirmed.

AFFIRMED

United States Court of Appeals for the Federal Circuit

VERSATA DEVELOPMENT GROUP, INC.,

Appellant

v.

SAP AMERICA, INC., SAP AG, Appellees

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY, DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE,

2014-1194	

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board, in No. CBM2012-00001.

HUGHES, Circuit Judge, concurring-in-part, dissenting-in-part.

I agree with the majority that the Patent Trial and Appeal Board properly held that the '350 patent claims at issue were invalid under § 101. I also agree that, in this case, we need not reach whether the Board is authorized to apply its "broadest reasonable interpretation" rule in a

post-grant review. Thus, I agree that we should affirm the Board's decision on the merits.

In reaching that conclusion, however, the majority impermissibly expands this court's jurisdiction and our scope of review to second-guess the Board's initial determination that the patent at issue is a "covered business method patent." Our review of that question is barred by the plain language, structure, and purpose of the postgrant review provisions; and by our recent precedent interpreting an identical statutory bar on review in the inter partes review provisions. I cannot agree with the majority's evasion of the statutory bar by its mere reframing of the issue for review as a question of the Board's "ultimate authority to invalidate." rather than the Board's authority to institute. That approach defeats Congress's clearly expressed intent. And the majority offers no compelling reason why its approach is desirable, other than its appetite for arrogating to the court the Board's statutory authority to finally decide which patents are "covered business method patent[s]" suitable for review. Because the statute precludes review of the Board's institution decision that Versata's patent is a "covered business method patent," I respectfully dissent-in-part.

T

At the outset, it is important to note that this is not a case about whether Congress has precluded "judicial review of government actions that alter the legal rights of an affected person." Maj. Op. at 24. To the contrary, the statute clearly provides for review of the Board's invalidity decision, which is the government action that alters the legal right of the patent holder. See 35 U.S.C. § 329. Rather, this case is about whether Congress can, and did, preclude review of whether the Board rightfully undertook that review in the first place. Our authority to review that type of decision, whether framed in terms of the Board's institution authority or its ultimately authori-

ty to invalidate, is separate and distinct from our authority to review the invalidation itself.

"To determine whether a particular statute precludes judicial review, we look to its express language, the structure of the statutory scheme, its legislative history and purpose, and the nature of the administrative action involved." *Pregis Corp. v. Kappos*, 700 F.3d 1348, 1357–58 (Fed. Cir. 2012) (citing *Block v. Cmty. Nutrition Inst.*, 467 U.S. 340, 345 (1984)).

The presumption of judicial review noted by the majority is not insurmountable. "Congress can, of course, make exceptions to the historic practice whereby courts review agency action." Bowen v. Mich. Acad. of Family Physicians, 476 U.S. 667, 672–73 (1984); see also 5 U.S.C. § 701 ("This chapter applies . . . except to the extent that ... statutes preclude judicial review"). To overcome the presumption of review, we must find "clear and convincing evidence" of legislative intent to preclude review. Abbott Labs. v. Gardner, 387 U.S. 136, 141 (1967). For example, the presumption may be overcome by "specific language or specific legislative history that is a reliable indicator of congressional intent, or a specific congressional intent to preclude judicial review that is fairly discernible in the detail of the legislative scheme." Bowen, 476 U.S. at 673 (internal quotation marks omitted); see, e.g., Lindhal v. Office of Pers. Mgmt., 470 U.S. 768, 779–80 n.13 (1985) (recognizing that 5 U.S.C. § 8128(b) precludes all review of the Secretary of Labor's compensation decision under the Federal Employee Compensation Act); Collins v. United States, 67 F.3d 284, 287–88 (Fed. Cir. 1995) (finding that the plain language of the Military Claims Act, which states that "the settlement of a claim under [the Act] is final and conclusive," provides clear and convincing evidence of legislative intent to preclude judicial review). Further, reviewability is not an all or nothing question: Congress may allow review of some issues underlying a decision, but prohibit review of others. See, e.g., Lindhal, 470 U.S. at 779–80 (holding 5 U.S.C. § 8347(c) bars review of agency's factual determinations, but not questions of law and procedure); Harris v. Shinseki, 704 F.3d 946, 948 (Fed. Cir. 2013) (noting that 38 U.S.C. § 7292 precludes review of the Veterans Court's factual determinations or applications of law to fact, but allows review of questions of law).

Whether the presumption of review is overcome in this case depends on two issues. The first is whether the bar on judicial review of the Board's institution decisions in 35 U.S.C. § 324(e) is limited to interlocutory appeals, as Versata argues, or whether it also applies to appeals from the Board's final written decision on the merits. The answer to that question should end the inquiry. But the majority has decided that some statutory requirements for instituting review can be reframed, which raises a second issue: whether an institution decision that falls within the scope of § 324(e) is nonetheless reviewable as a "predicate question" regarding the Board's ultimate authority to determine validity.

Α

The plain language of § 324(e) unambiguously bars judicial review—at any time—of the Board's decision to institute post-grant review. Section 324(e) states, "The determination by the Director whether to institute a post-grant review under this section shall be final and nonappealable." 35 U.S.C. § 324(e). Nothing in this language suggests the bar is limited to interlocutory appeals. There is no temporal limitation. Nor is there an exception for appeals from a final written decision. In other contexts, when Congress desired to prohibit only interlocutory appeals, it included express language to that effect. See, e.g., 8 U.S.C. § 1160(e) ("There shall be no . . . judicial review of a determination respecting an application of special status under this section except . . . in the judicial review of an order of exclusion of deportation"); 12

U.S.C. § 1818(i)(1) (barring review of the Federal Reserve's decision to proceed with an administrative enforcement action "except as otherwise provided in this section," including on review of a final cease-and-desist order).

The plain language of related provisions in §§ 329 and 328 supports this interpretation. Those provisions authorize a party to appeal the Board's final written decision to this court, but only refer to issues addressed exclusively during the merits phase of a post-grant review. Section 329 states, "A party dissatisfied with the final written decision of the [Board] under section 328(a) may appeal the decision [to the Federal Circuit]." U.S.C. § 329 (emphasis added). Section 328 defines the "final written decision" as "a final written decision with respect to the patentability of any patent claim challenged Id. § 328(a) (emphasis added). This language reinforces Congress's desire for this court to review the substantive issues of patentability addressed by the Board in a final written decision, not the various issues decided during the decision to institute—which § 324(e) deems "final and nonappealable."

The structure of the post-grant review process further clarifies the duration of the bar in § 324(e). Post-grant reviews are divided into two distinct phases. First, the Board determines whether to institute review, based on the information in the petition for review and any response by the patent owner. See id. § 324. Second, if the Board grants review, the Board considers the merits of the petitioner's challenge and issues a final written decision on the validity of the challenged claims. Under this divided structure, the requirements for instituting review are not revisited during the merits phase of review. Section 324(e) confirms that the decision to institute is "final." Id. § 324(e). In the same breath, § 324(e) states that the decision is "nonappealable." Id. To be consistent with the clear division between the two phases Congress

imprinted into the statute, "nonappealable" is best interpreted to maintain this division at the appellate level by insulating the various institution decisions from review, even on appeal from the separate and distinct merits phase.

This interpretation is also supported by the purpose of post-grant reviews. Congress intended post-grant reviews to provide a "quick and cost effective alternative[] to litigation." H.R. Rep. No. 112-98, pt. 1, at 47–48 (2011). If we interpret § 324(e) to allow this court to second-guess the Board's institution decisions on appeal from a final written decision, however, we will create the kind of "unnecessary and counterproductive litigation costs" that Congress intended these proceedings to avoid. Id. at 40 By the time the Board's final written decision reaches this court, the parties and the Board will have devoted considerable resources to resolving the validity issues in question. And district courts will often have stayed related proceedings, in anticipation of a simplification of the issues for trial. If this court has authority to reverse the Board's institution decision, thereby vacating its final written decision on validity, all of this time and expense will be wasted. The parties will have to return to district court to litigate the same validity issues that the Board decided—even if this court agrees with the Board's ultimate validity determination. Congress could not have intended this result. To avoid creating a more costly and less efficient process, we must interpret § 324(e) according to its plain language to bar review of the decision to institute even after a final written decision on the merits.

In sum, the plain language, structure, and purpose of the post-grant review provisions provide clear and convincing evidence that Congress did not intend to limit § 324(e) to interlocutory appeals. Congress intended § 324(e) to bar review of the Board's institution decisions at any time, even on appeal from the final written decision. One such decision is whether the patent challenged

is a "covered business method patent." America Invents Act (AIA), Pub. L. No. 112-29, § 18(a)(1)(E), 125 Stat. 284, 330 (2011) ("The Director may institute a transitional proceeding only for a patent that is a covered business method patent."). The Board makes this determination as part of its decision to institute, and does not revisit the issue during the merits phase. Thus, § 324(e) precludes review of the Board's covered-business-method determination in this appeal.

В

The majority agrees that § 324(e) bars review of the Board's decision to institute even after a final written decision. Maj. Op. at 13 ("[T]he statute expressly instructs that we may not [review the decision to institute]."). But the majority refuses to end the inquiry with Congress's plainly expressed intent. To keep the final say over the meaning of "covered business method patent," the majority reframes the issue as a "limit on [the Board's] invalidation authority under § 18," which falls outside the scope of § 324(e). Maj. Op. at 25. I cannot agree with this approach.

The statute describes the "covered business method patent" requirement (CBM requirement) as a limit on the Board's authority to institute review. Section 18 states that "[t]he Director may institute a transitional proceeding only for a patent that is a covered business method patent." AIA § 18(a)(1)(E). The statute then expressly bars our review of the institution decision: "The determination by the Director whether to institute a post-grant review under this section shall be final and nonappealable." 35 U.S.C. § 324(e). Thus, under the plain language of the statute, the Board has unreviewable authority to decide whether a patent is a "covered business method patent."

The majority proposes that if we call the CBM requirement something else—not only a limit on the Board's

authority to institute review, as the statute says, but also a limit on the Board's ultimate authority to invalidate the patent—then we can review the issue. But our task is to apply the language of the statute, not to rewrite it. And the language of the statute expressly ties the CBM requirement to the Board's unreviewable decision to institute, not the Board's ultimate authority to invalidate. By using different language than that which Congress employed, the majority expands the scope of our review to include the same substantive issue—whether a patent is a "covered business method patent"—that Congress barred from review in § 324(e).

The majority fails to identify a statutory basis for its proposed reframing of the issue. It summarily declares, without any supporting citation, that the CBM requirement should be treated as a limit on the Board's authority to invalidate because it "defines the PTAB's authority to invalidate under § 18." Maj. Op. at 25. But nowhere does the statute describe the CBM requirement as a limit on the Board's authority to invalidate. Cf. Timken U.S. Corp. v. United States, 421 F.3d 1350, 1357 (Fed. Cir. 2005) ("Not every agency violation of a statutory command results in the sanction of invalidating the agency action taken pursuant to the statute."). To the extent that statement is accurate, it is only because the statute provides that the Board "may institute a transitional proceeding only for a patent that is a covered business method patent." AIA § 18(a)(1)(E). And any limit on the Board's authority to institute review is indirectly a limit on its authority to invalidate a patent: If the Board cannot institute review in the first place, it cannot issue a final written decision.

This indirect relationship, however, cannot be enough to find that Congress intended this court to review an institution requirement as a limit on the Board's ultimate authority to invalidate. Taken to its logical conclusion, this approach would eviscerate § 324(e) in the context of

an appeal from a final written decision. All aspects of the Board's decision to institute would be fair game for review, because all statutory limits on the institution decision are also indirect limits on the Board's final authority to invalidate. As a result, § 324(e) would only bar review of the Board's decision to institute in an interlocutory appeal, before the final decision has issued. The majority agrees that § 324(e) is not so limited. Thus, the majority cannot justify treating the CBM requirement as a limit on the Board's ultimate authority to invalidate solely because that requirement limits the Board's authority to institute.¹

The requirement of a "covered business method patent" is a limit on the Board's institution decision. That is how the plain language of the statute frames the CBM requirement, not as a limit on the Board's ultimate authority to invalidate. The majority's reframing of the issue, while perhaps an interesting academic exercise, is plainly inconsistent with congressional intent. There is clear and convincing evidence that Congress intended § 324(e) to bar review of the Board's institution decisions at all times. And there is no evidence that Congress intended to exclude from this provision the institution decision of whether the patent is a "covered business method patent." Accordingly, I conclude that § 324(e) precludes our review of whether Versata's patent is a "covered business method patent."

¹ Indeed, Congress likely intended the term "covered business method patent" not as a limitation on the Board's invalidation authority, but as a means of focusing the Board's resources on "low-quality business[-]method patents," which were of central concern in passing the AIA. 157 Cong. Rec. 9952 (2011) (remarks of Rep. Grimm).

II

The majority's interpretation of § 324(e) to permit review of whether Versata's patent is a "covered business method patent" directly conflicts with our precedential decision in In re Cuozzo Speed Technologies, LLC, No. 14-1301, slip op. at 5–10 (Fed. Cir. July 8, 2015). In that case, we addressed the scope of the statutory bar on judicial review in § 314(d), which provides that "[t]he determination by the Director whether to institute an inter partes review under this section shall be final and nonappealable." 35 U.S.C. § 314(d). We held that this provision "bar[s] review of all institution decisions, even after the Board issues a final decision." Cuozzo, slip op. at 7. That holding controls our interpretation of the analogous bar on review in § 324(e), which states, "The determination by the Director whether to institute a post-grant review under this section shall be final and nonappealable." 35 U.S.C. § 324(e).

To avoid the holding in *Cuozzo*, the majority continues to rely on its reframing of the CBM requirement as a limit on the Board's authority to invalidate. But even if that reframing were appropriate, the holding in Cuozzo still could not be distinguished. The relevant provision in Cuozzo states that the Board may only institute an inter partes review if "the information presented in the petition ... and any response ... shows that there is a reasonable likelihood that the petition would prevail." Cuozzo, slip op. at 5 (quoting 35 U.S.C. § 314(a)). The appellant argued that the Board violated this provision by instituting review on the basis of prior art not "presented in the petition." Id. If the appellant was correct, then the Board exceeded its statutory authority to conduct an inter partes review and issue a final written decision, because it violated a statutory limit on instituting review in the first place. Thus, Cuozzo addressed just as much a predicate question of authority to invalidate as we are presented with here.

The majority makes too much of a note in *Cuozzo* that the alleged defect in that case could have been cured with proper pleading. See Maj. Op. at 29. For the purpose of determining whether *Cuozzo* involved a limit on the Board's authority to invalidate, it is irrelevant whether the alleged defect could have been cured. The fact remains that the pleading was actually defective and therefore the Board exceeded its statutory authority to institute review. Thus, under the majority's preferred framing, the Board violated an indirect limit on its ultimate authority to invalidate, at least to the same extent that the Board allegedly did so here.

More importantly, the potential for a proper pleading did not limit the holding in Cuozzo that the plain language of § 314(d) bars review of the Board's institution decisions. It only noted this fact to establish an alternative ground for declining to review the Board's decision to institute, specifically by aligning that case with In re Hiniker Co., 150 F.3d 1362 (Fed. Cir. 1998). In Hiniker, the appellant alleged that the PTO violated a statutory limit on its authority to institute ex parte reexamination. Id. at 1367. This court found that the PTO corrected the alleged error during the merits phase of review, and therefore "[a]ny error in [the institution] decision was washed clean during the reexamination proceeding." *Id.* Accordingly, though no statutory provision expressly barred review, the Court declined to review the PTO's institution decision. Id.The *Cuozzo* majority suggested that the same was true on the facts there. where "a proper petition could have been drafted." Cuozzo, slip op. at 8. But this comparison with *Hiniker* merely "confirm[ed] the correctness" that the Court could not review the Board's institution decision in that case. *Id.* at 7. It did not limit its prior interpretation of § 314(d) to bar review of all institution decisions. Thus, although the Board's error in assessing the CBM requirement may not be "washed clean" in the merits decision—and therefore may have been reviewable absent the express bar on review in § 324(e)—that does not distinguish this case from the unqualified holding in *Cuozzo* that the express bar in § 314(d) "bar[s] review of all institution decisions, even after the Board issues a final decision." *Id.* at 7.

In light of *Cuozzo*, we are bound to interpret § 324(e) to preclude review of the Board's assessment of the CBM requirement, even if we label that requirement a limit on the Board's ultimate authority to invalidate.

III

The bar on judicial review of institution decisions in § 324(e) does not mean that patent owners are without recourse in the extreme case. Even when a statute clearly demonstrates Congress intended to bar judicial review of agency action generally, courts have recognized an "implicit and narrow" exception for agency action that plainly violates an unambiguous statutory mandate. Hanauer v. Reich, 82 F.3d 1304, 1307 (4th Cir. 1996); see, e.g., Leedom v. Klyne, 358 U.S. 184 (1958); Key Med. Supply, Inc. v. Burwell, 764 F.3d 955, 962–65 (8th Cir. 2011); Am. Soc'y of Cataract & Refractive Surgery v. Thompson, 279 F.3d 447, 456 (7th Cir. 2002); Am. Airlines, Inc. v. Herman, 176 F.3d 283, 293-94 (5th Cir. 1999); Staacke v. U.S. Sec'y of Labor, 841 F.2d 278, 281–82 (9th Cir. 1988); Dart v. United States, 848 F.2d 217, 221–27 (D.C. Cir. 1988). In this case, however, the Board's finding that Versata's patent constitutes a "covered business method patent" does not violate an unambiguous mandate. The Board reasonably interpreted an unclear statutory term and properly applied its interpretation to Versata's patent. See Hanauer, 82 F.3d at 1311 ("Because the Jagency's interpretation of the statute is plausible, it does not violate a clear statutory mandate."). Accordingly, the clear statutory mandate exception does not apply. We do not have jurisdiction to review the Board's determination under 35 U.S.C. § 324(e).

IV

At the end of the day, the majority does a lot of hand waving about the presumption of judicial review and an agency's authority to take action. But nowhere does the majority actually suggest that it would be inappropriate for Congress to remove the CBM decision from our review. Nor could it, since courts have approved far more drastic limitations on our judicial review. *See supra* Part I.

But even if we could reasonably make the technical distinction the majority proposes and therefore preserve a narrow reading of the statutory bar, I cannot fathom why we would want to do so. Surely the concern is not to prevent the Board from instituting review of a patent so far outside the meaning of "covered business method patent" that it exceeds any reasonable interpretation of that term. As discussed in Part III, *supra*, courts have long recognized an exception to statutory bars on review when an agency plainly violates an unambiguous statutory mandate. And in any event, that is not even remotely the case here, where all three judges agree that the Board properly exercised its discretion to institute review of this CBM patent.

Rather, I fear the point of the majority's position is to wrest from the PTO the final authority to decide which patents are "covered business method patent[s]" appropriate for § 18 review. But that is not how Congress designed the AIA to work. Congress gave this court the authority to review the merits of the Board's validity determinations and to ensure those decisions are correct under prevailing law. And it gave the PTO authority to decide which patents merit review in the first place, and insulated that decision from our review.

The majority's desire to revisit the CBM requirement detracts from this statutory scheme and the intended benefits of § 18 reviews. As Congress recognized, § 18 was intended to "provide a cheaper, faster administrative

alternative for reviewing business method patents." *Intellectual Ventures II LLC v. JP Morgan Chase & Co.*, 781 F.3d 1372, 1380 (Fed. Cir. 2015) (Hughes, J. dissenting). If this court may vacate the Board's invalidity decision on the basis of a threshold decision, the time and resources spent by the parties and the Board in the administrative proceedings will have been squandered, and the parties will likely be forced to needlessly expend even more resources re-litigating the validity issue in district court. And that is true even if the Board's ultimate invalidity decision was correct.

Congress intended § 324(e) to apply at all times to avoid these consequences. That is why when addressing the issue, Congress plainly said that the Board's determination was "final" and "nonappealable." And nothing in the statute suggests § 324(e) applies with less force to the CBM requirement than any other institution requirements for § 18 reviews. We should not, therefore, employ an unwarranted technical distinction to find authority to review the Board's initial assessment that a patent is a "covered business method patent."

Because we do not have jurisdiction to review the Board's determination that Versata's patent is a "covered business method patent," AIA § 18(d), I respectfully dissent-in-part.