

**United States Court of Appeals  
for the Federal Circuit**

---

**SYNQOR, INC.,**  
*Appellant*

v.

**VICOR CORPORATION,**  
*Appellee*

---

2019-1704

---

Appeal from the United States Patent and Trademark  
Office, Patent Trial and Appeal Board in No. 95/001,702.

---

Decided: February 22, 2021

---

STEVEN J. HOROWITZ, Sidley Austin LLP, Chicago, IL,  
argued for appellant. Also represented by THOMAS D. REIN;  
MICHAEL D. HATCHER, Dallas, TX.

MATTHEW A. SMITH, Smith Baluch LLP, Menlo Park,  
CA, argued for appellee. Also represented by ELIZABETH  
LAUGHTON; ANDREW BALUCH, Washington, DC.

---

Before DYK, CLEVINGER, and HUGHES, *Circuit Judges*.

Opinion for the court filed by *Circuit Judge* HUGHES.

Dissenting opinion filed by *Circuit Judge* DYK.

HUGHES, *Circuit Judge*.

SynQor, Inc. appeals the inter partes reexamination decision of the Patent Trial and Appeal Board holding unpatentable as obvious original claims 1–19, 28, and 31 of SynQor’s patent, U.S. Patent No. 7,072,190, as well as newly presented claims 34–38, which were proposed during the reexamination proceeding. Because decisions the Board made in previous reexamination proceedings preclude finding claims 1–19, 28, and 31 obvious based on the grounds relied upon by the Board, we vacate the Board’s decision as to those claims. And because the expiration of the ’190 patent renders any appeal of the Board’s decision regarding claims 34–38 moot, we also vacate the Board’s decision as to those claims.

## I

The ’190 patent, entitled “High Efficiency Power Converter,” issued on July 4, 2006, with a lineage of parent applications dating back to a January 1997 provisional application. The ’190 patent counts itself part of an extensive family including two other patents that have been involved in litigation reaching this court: U.S. Patent Nos. 7,564,702 and 8,023,290. *See* Appellant’s Br. vi–viii. These patents disclose technology for DC-DC power converters used in large computer systems and telecommunication and data communication equipment to convert direct electric current from one voltage to another. *See SynQor, Inc. v. Artesyn Techs., Inc.*, 709 F.3d 1365, 1372–73 (Fed. Cir. 2013) (*SynQor I*). The patents claim a technology SynQor dubs “Intermediate Bus Architecture,” which SynQor claims “improve[s] prior art systems by separating the isolation and regulation functionality of DC-DC converters into two steps and using a single isolation stage

to drive multiple regulation stages.” *Vicor Corp. v. SynQor, Inc.*, 869 F.3d 1309, 1313–14, 1316–17 (Fed. Cir. 2017) (*SynQor II*).

The ’190 patent has a lengthy litigation history with multiple board decisions and appeals in this court. Only the portions relevant to this appeal are recited here.

In 2011, SynQor asserted the ’190 patent, the ’702 patent, and the ’290 patent, among others, against Vicor. See *SynQor, Inc. v. Cisco Sys., Inc.*, No. 2:11CV54, 2014 WL 1338712 (E.D. Tex. Jan. 2, 2014). Vicor petitioned for reexamination of the ’190, ’702, and ’290 patents, arguing that the claims of the ’190 patent were unpatentable over two references: “Steigerwald,” U.S. Patent No. 5,377,090, including the text and drawings of U.S. Patent No. 5,274,539 incorporated by reference, and “Cobos,” Cobos et al., “*Low Output Voltage DC/DC Conversion*,” 20th Int’l Conf. Indus. Electronics, Control and Instrumentation (Sept. 5–9, 1994) pp. 1676–81. In response, SynQor argued that an artisan would not have combined Steigerwald and Cobos because they taught circuits that operated at incompatible frequencies.

On appeals from the reexaminations of the ’702 and ’290 patents, the Board affirmed that the challenged claims of the ’702 patent were not unpatentable, finding that “there are incompatibilities in frequency between [Cobos and Steigerwald].” *Vicor Corp. v. SynQor, Inc.*, No. APPEAL 2014-007362, 2015 WL 1871498, at \*12 (P.T.A.B. Apr. 20, 2015). The Board likewise found the challenged claims of the ’290 patent not unpatentable based on a combination of Steigerwald, Cobos, and another reference. *Vicor Corp. v. SynQor, Inc.*, No. APPEAL 2015-004509, 2016 WL 2344380, at \*6–7 (P.T.A.B. May 2, 2016). The Board reasoned that SynQor’s evidence that Steigerwald and Cobos operated at incompatible frequencies was more credible than Vicor’s evidence to the contrary. *Id.*

SynQor and Vicor appealed the decisions of the Board in the reexaminations of the '702 and '290 patents to this court. This court affirmed the patentability of the challenged claims of the '290 patent, holding that substantial evidence supported the Board's finding that an artisan would not combine Steigerwald and Cobos because of their frequency incompatibility. *SynQor II*, 869 F.3d at 1320. The court also affirmed the Board's decision finding the '702 patent not unpatentable but was not asked to review and therefore did not reach the Board's finding that Steigerwald and Cobos were incompatible. *See generally Vicor Corp. v. SynQor, Inc.*, 706 F. App'x 673 (Fed. Cir. 2017).

But as to the patent at issue here, the '190 patent, the Board found instead that Steigerwald and Cobos were *not* incompatible. In concluding that the challenged claims of the '190 patent were unpatentable over Steigerwald and Cobos, the Board was "not persuaded that the switching frequency differential is sufficient to render the combination unsuitable." *Vicor Corp. v. SynQor, Inc.*, No. APPEAL 2014-001733, 2016 WL 2344371, at \*6 (P.T.A.B. May 2, 2016). It found claim 34 unpatentable based on a new ground of rejection, *see id.* at \*15, and SynQor opted to re-open prosecution of claim 34.

The '190 patent expired in January 2018. A year later, the Board issued its decision regarding the claim in the '190 reexamination. The Board again rejected SynQor's argument that Steigerwald and Cobos had incompatible frequencies, concluding that "the evidence points strongly to the *lack* of a frequency range discrepancy between Cobos and Steigerwald." *Vicor Corp. v. SynQor, Inc.*, No. APPEAL 2018-000038, 2019 WL 852075, at \*4 (P.T.A.B. Feb. 19, 2019).

SynQor timely appealed the Board's final decision in the '190 patent reexamination. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

## II

SynQor makes four arguments on appeal. First, SynQor argues that common law issue preclusion arising from the '702 and '290 patent reexaminations should have collaterally estopped the Board from finding that an artisan would be motivated to combine Steigerwald and Cobos.<sup>1</sup> Second, SynQor argues that the Board's findings on the frequency (in)compatibility in the '190 patent reexamination exhibit inadequately explained inconsistencies with the '290 patent reexamination decision and within the two decisions issued in the '190 patent reexamination, requiring vacatur under principles of administrative law. Third, SynQor argues that an additional obviousness ground under which the Board found claims 2–4 obvious, combining Steigerwald, Cobos, and a third reference, lacked substantial evidence that an artisan would combine Steigerwald with the third reference. Finally, SynQor argues that its appeal of the Board's decision on newly presented claims 34–38 became moot through the happenstance of patent expiration, so the Board's decisions regarding those claims should therefore be vacated.

---

<sup>1</sup> Vicor argues that SynQor forfeited its issue preclusion argument by not raising it before the Board despite having the opportunity to do so. Appellee's Br. 30. But SynQor could not have raised issue preclusion because neither the '702 nor '290 patent reexaminations became final until after the Board's decision regarding claims 1–19, 28, and 31. “[I]ssue preclusion applies even though the precluding judgment . . . comes into existence while the case as to which preclusion is sought (this case) is on appeal.” *MaxLinear, Inc. v. CF CRESPE LLC*, 880 F.3d 1373, 1376 (Fed. Cir. 2018) (quoting *Soverain Software LLC v. Victoria's Secret Direct Brand Mgmt., LLC*, 778 F.3d 1311, 1315 (Fed. Cir. 2015)).

Because we agree with SynQor as to its first argument that issue preclusion compelled a finding that an artisan would not combine Steigerwald and Cobos—which resolves the parties’ dispute for claims 1–19, 28, and 31—we address only this argument and SynQor’s fourth argument as to the mootness of the Board’s decisions regarding claims 34–38.

## A

“[T]he determination of a question directly involved in one action is conclusive as to that question in a second suit.” *B & B Hardware, Inc. v. Hargis Indus., Inc.*, 575 U.S. 138, 147 (2015) (quoting *Cromwell v. County of Sac*, 94 U.S. 351, 354 (1877)). “It is well established that collateral estoppel, also known as issue preclusion, applies in the administrative context.” *MaxLinear, Inc.*, 880 F.3d at 1376. In fact, “because the principle of issue preclusion was so ‘well established’ at common law, in those situations in which Congress has authorized agencies to resolve disputes, ‘courts may take it as given that Congress has legislated with the expectation that the principle [of issue preclusion] will apply ‘except when a statutory purpose to the contrary is evident.’” *B & B Hardware*, 575 U.S. at 148 (quoting *Astoria Fed. Sav. & Loan Ass’n v. Solimino*, 501 U.S. 104, 108 (1991)).

Thus, administrative decisions have preclusive effect “[w]hen an administrative agency is acting in a judicial capacity and resolves disputed issues of fact properly before it which the parties have had an adequate opportunity to litigate.” *B & B Hardware*, 575 U.S. at 148–49 (quoting *Univ. of Tenn. v. Elliott*, 478 U.S. 788, 797–98 (1986)). “Although administrative estoppel is favored as a matter of general policy, its suitability may vary according to the specific context of the rights at stake, the power of the agency, and the relative adequacy of agency procedures.” *Astoria*, 501 U.S. at 109–10.

Applying these principles, we have already held that issue preclusion applies to inter partes reviews. *See Papst Licensing GmbH & Co. KG v. Samsung Elecs. Am., Inc.*, 924 F.3d 1243, 1250–51 (Fed. Cir. 2019). Accordingly, we must decide “whether there is an ‘evident’ reason why Congress would not want [inter partes reexamination] decisions to receive preclusive effect, even in those cases in which the ordinary elements of issue preclusion are met.” *B & B Hardware*, 575 U.S. at 151. In doing so, we apply a “lenient presumption in favor of administrative estoppel.” *Astoria*, 501 U.S. at 112. If Congress did not foreclose the application of issue preclusion, we then “turn to whether there is a categorical reason why [inter partes reexamination] decisions can never meet the ordinary elements of issue preclusion, *e.g.*, those elements set out in § 27 of the Restatement (Second) of Judgments.” *B & B Hardware*, 575 U.S. at 153. Absent any such categorical reasons, we turn to whether the elements of collateral estoppel are met in the specific factual circumstances here.

The application of issue preclusion presents a question of law that we review *de novo*. *See Shell Petroleum, Inc. v. United States*, 319 F.3d 1334, 1338 (Fed. Cir. 2003).

1

The statutory scheme governing inter partes reexamination shows no evident intent to foreclose common law estoppel.<sup>2</sup> To the contrary, Congress enacted statutory

---

<sup>2</sup> The inter partes reexamination procedure ended with the passage of the America Invents Act. Pub. L. No. 112-29, 125 Stat. 284 (2011). As a consequence, our holding today is necessarily limited to remaining inter partes reexaminations. As of November 2020, only eight appeals and two requests for rehearing from inter partes reexaminations remained pending before the Board. *See* <https://www.uspto.gov/dashboard/ptab/>.

estoppel provisions considerably more muscular than common law collateral estoppel. *In re Affinity Labs of Tex., LLC*, 856 F.3d 883, 890 (Fed. Cir. 2017) (“Congress enacted measures in the *inter partes* reexamination statute to ‘prevent abusive reexamination requests, including broad estoppel provisions.’” (quoting 145 Cong. Rec. 26,984 (1999) (statement of Sen. Hatch))).

The core estoppel provisions come from 35 U.S.C. §§ 315(c), 317(b) (2006). Section 315(c) prevents third-parties who successfully requested *inter partes* reexamination, when sued for patent infringement under 28 U.S.C. § 1338, from asserting “the invalidity of any claim finally determined to be valid and patentable on any ground which the third-party requester raised or could have raised during the *inter partes* reexamination proceedings.” Section 317(b) provides for the converse of § 315(c), estopping “further validity challenges—using *inter partes* reexamination—to the specific claims the validity of which had been previously resolved against the requester” in district court or in a prior *inter partes* reexamination. *Affinity Labs*, 856 F.3d at 893. The provision implements a further codification of common law claim preclusion principles.

Uncodified § 4607 of the session law that enacted *inter partes* reexamination, the Optional *Inter Partes* Reexamination Procedure Act of 1999, provides for even more sweeping issue preclusion. Section 4607 estops “[a]ny party who requests an *inter partes* reexamination” from “challenging at a later time, *in any civil action*, any fact determined during the process of such reexamination, except with respect to a fact determination later proved to be erroneous based on information unavailable at the time of the *inter partes* reexamination decision.” Optional *Inter Partes* Reexamination Procedure Act of 1999, Pub. L. No. 106-113, 113 Stat. 1501A-567, 1501A-571, sec. 4607 (emphasis added). Perhaps recognizing the breadth of this provision, Congress included a severability clause in this section. *Id.*



Admittedly, this provision does not facially establish the applicability of this preclusive factfinding to future inter partes reexaminations. But it is unlikely that a Congress amenable to precluding federal courts from considering fact questions traditionally submitted to a jury would object to those same conclusions binding the administrative agency that resolved the factual questions. That Congress failed to expressly apply this provision to “any civil action or subsequent reexamination” makes no difference when “courts may take it as given that Congress has legislated with the expectation that the principle [of issue preclusion] will apply except when a statutory purpose to the contrary is evident.” *Astoria*, 501 U.S. at 108.

Vicor argues that Congress evinced its intent to foreclose common law estoppel in certain exceptions to §§ 315, 317, and 4607 for challenges based on newly discovered prior art or information, and in Congress’s edict in 35 U.S.C. § 312(a) (pre-AIA) that “[t]he existence of a substantial new question of patentability is not precluded by the fact that a patent or printed publication was previously cited by or to the [Patent and Trademark] Office or considered by the Office.” Vicor argues that common law estoppel would subsume these exceptions. But common law preclusion would not apply to newly discovered prior art, as the import of that prior art necessarily cannot have been “actually litigated.” Similarly, preclusion based on prior art previously cited to the PTO or considered by the PTO would only be appropriate when “actually litigated”—in which case, by definition, the assertion of that prior art could not raise a “substantial new question of patentability.” The statutory scheme governing inter partes reexaminations is fully consonant with common law estoppel.

That leaves the question of whether inter partes reexaminations categorically fail to meet the ordinary elements of issue preclusion. We follow the Supreme Court in

looking to the Restatement (Second) of Judgments for guidance to determine whether “categorical reason[s]” exist that inter partes reexamination cannot satisfy the ordinary elements of issue preclusion. *B&B Hardware*, 575 U.S. at 152–53; see *Power Integrations, Inc. v. Semiconductor Components Indus., LLC*, 926 F.3d 1306, 1311–12 (Fed. Cir. 2019) (applying the Restatement (Second) of Judgments to evaluate the preclusive effect of a prior IPR).

Section 83 of the Restatement gives five non-exclusive factors to evaluate whether an administrative tribunal’s decision meets the “essential elements of adjudication.” See Restatement (Second) of Judgments § 83(2) (1982). These factors “include”

[1] Adequate notice to persons who are to be bound by the adjudication . . . ;

[2] The right on behalf of a party to present evidence and legal argument in support of the party’s contentions and fair opportunity to rebut evidence and argument by opposing parties;

[3] A formulation of issues of law and fact in terms of the application of rules with respect to specified parties concerning a specific transaction, situation, or status, or a specific series thereof;

[4] A rule of finality, specifying a point in the proceeding when presentations are terminated and a final decision is rendered; [and finally, a catch-all,]

[5] Such other procedural elements as may be necessary to constitute the proceeding a sufficient means of conclusively determining the matter in question, having regard for the magnitude and complexity of the matter in question, the urgency with which the matter must be resolved, and the opportunity of the parties to obtain evidence and formulate legal contentions.

*Id.* Inter partes reexamination indisputably meets factors one, three, and four.

Vicor argues that inter partes reexamination cannot satisfy factor two because it is an “examinational” or “inquisitorial” proceeding. Appellee’s Br. 23 (quoting *Abbott Labs. v. Cordis Corp.*, 710 F.3d 1318, 1326 (Fed. Cir. 2013) and *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348 (2018)). Vicor argues that, accordingly, “the examiner—not the third-party requester—is the person who frames the challenge and drives the *inter partes* reexamination proceeding,” inhibiting Vicor’s ability to present evidence and argument and rebut SynQor’s evidence and argument. Appellee’s Br. 24.

We disagree with Vicor’s contention that inter partes reexamination’s fundamental nature does not afford Vicor the opportunity “to present evidence and legal argument in support of [its] contentions and fair opportunity to rebut evidence and argument by [SynQor.]” Restatement (Second) of Judgments § 83(2)(b). “In contrast to *ex parte* reexamination, Congress specifically provided the third party reexamination requester the opportunity to fully participate in the *inter partes* proceeding.” *Affinity Labs*, 856 F.3d at 890.

35 U.S.C. § 314(b)(2) (pre-AIA) provides that “[e]ach time that the patent owner files a response to an action on the merits from the [PTO], the third-party requester shall have one opportunity to file written comments addressing issues raised by the action of the Office or the patent owner’s response thereto.” *See also* 37 C.F.R. § 1.947 (“Each time the patent owner files a response to an Office action on the merits pursuant to § 1.945, a third party requester may once file written comments within a period of 30 days from the date of service of the patent owner’s response.”). The patent owner and requester must serve all papers on one another, 37 C.F.R. § 1.903, and the patent owner may not have an *ex parte* discussion of the merits of

the reexamination with the examiner, *id.* § 1.955. In addition, a third-party may “appeal [to the Board of Patent Appeals and Interferences] . . . with respect to any final decision favorable to the patentability of any original or proposed amended or new claim of the patent” or “be a party to any appeal taken by the patent owner [to the BPAI].” 35 U.S.C. § 315(b) (pre-AIA). Through these processes, both parties may present and rebut one another’s legal arguments.

The parties also can present and rebut evidence—even expert testimony. *See* 37 C.F.R. §§ 1.937(b) (“The inter partes reexamination proceeding will be conducted in accordance with [37 C.F.R.] §§ 1.104 through 1.116 . . . [.]”), 1.116(e)–(g) (limiting the filing of “affidavits or other evidence” only after final rejection, an action closing prosecution, the filing of an appeal, or the like). *Cf. Abbott*, 710 F.3d at 1320 (describing the submission of competing expert affidavits in an inter partes reexamination).

This participation of the requester to provide both argument and evidence distinguishes the “examinational” nature of inter partes reexamination from the initial examination process or ex parte reexamination. Even if this process is not formally adversarial in the manner of inter partes review, it provides adequate adversarial participation for both the patent owner and requester, facilitating a reasoned judgment on the issue before a neutral factfinder.

Vicor argues, however, that as part and parcel of inter partes reexaminations’ “inquisitorial” nature, parties do not have rights to discovery or subpoena power, depriving parties of the power to depose witnesses and foreclosing them from “submit[ting] transcribed testimony, taken under oath and subject to cross-examination.” Appellee’s Br. 26 (quoting *B&B Hardware*, 575 U.S. at 144). But Vicor presents too rigid a view of the considerations at play in allowing one administrative tribunal to bind itself in later decisions. Chiefly, the Restatement provides that the

opportunity to present evidence without compulsory process may be inadequate, “for example,” “depending on the nature of the matter in controversy, the legal capability and stature of the tribunal, and applicable constitutional requirements.” Restatement (Second) of Judgments § 83 cmt. c. But compulsory process is hardly dispositive, as other factors may weigh for and against the preclusivity of an administrative decision, such as the right to obtain judicial review. *Id.*; see also *Banner v. United States*, 238 F.3d 1348, 1354 (Fed. Cir. 2001) (“In determining whether a party has had a ‘full and fair’ opportunity to litigate an issue, a court should look at [as relevant here] whether there were significant procedural limitations in the prior proceeding . . . .”); Wright & Miller, *Administrative Action Precluding Judicial Decision*, 18B FED. PRAC. & PROC. JURIS. § 4475 (2d ed.). Instead, to determine whether adequate procedures are present, we examine “whether the procedures used in the first proceeding were fundamentally poor, cursory, or unfair.” *B & B Hardware*, 575 U.S. at 158. We must also consider “whether extrinsic policies indicate that the second forum should nevertheless examine the matter in question anew. These policies concern the relative competence and responsibility of the two forums . . . .” Restatement (Second) of Judgments § 6 Intro. Note. Taking these broad considerations into account, we conclude that the procedural mechanisms used in inter partes reexamination are sufficient to apply collateral estoppel arising from a first reexamination to a second reexamination.

First, as a matter of fairness, a party receives no different procedure in a second inter partes reexamination than in a first. “If the prior opportunity and incentive to litigate the claim or issue in question were substantially the same as would have existed had the matter been adjudicated in the second forum, the procedural prerequisites exist for normal application of the rules of *res judicata*.” *Id.* It makes little sense to preclude the application of collateral

estoppel based on a lack of procedure in the first proceeding to which the party objecting to collateral estoppel will not be entitled to in the second proceeding.

Vicor had the same opportunity to introduce its own evidence and contest SynQor's evidence in the '702 and '290 patent reexaminations as it did in the '190 patent reexamination. And Vicor had the opportunity to seek judicial review of the Board's unfavorable decisions in these reexaminations, which it took advantage of with regard to the frequency incompatibility question for the '290 reexamination—but declined for the same question in the '702 reexamination.

Next, the magnitude, context, and regulatory scheme of inter partes reexamination support the application of collateral estoppel between reexaminations. The statutory estoppel provisions show that Congress provided for broad statutory estoppel applying inter partes reexamination decisions in district court. *See* 35 U.S.C. § 315(c) (pre-AIA).<sup>3</sup> This statutory provision does not compel the application of collateral estoppel between inter partes reexaminations, but Congressional intent must of course inform the functioning of Article I tribunals. *See* Wright & Miller, *supra* n.**Error! Bookmark not defined.** (“Any particular [administrative] scheme may contemplate that administrative decisions are not meant to preclude independent judicial action, or to the contrary may contemplate that courts

---

<sup>3</sup> When Congress provides for statutory estoppel, the administrative proceeding “need do no more than satisfy the minimum procedural requirements of the Fourteenth Amendment’s Due Process Clause.” *See* *Kremer v. Chem. Constr. Corp.*, 456 U.S. 461, 481–83 (1982). In prior cases, this court has found that “excluding compulsory production of testimony in inter partes reexamination proceedings” does not cause a due process violation. *See, e.g., Abbott*, 710 F.3d at 1328.

extend special deference to an agency.”). Furthermore, the decisions of the Patent and Trademark Office, and the members of the Board, represent the “considered judgment of an expert agency.” *See Microsoft Corp. v. i4i Ltd.*, 564 U.S. 91, 112 (2011). Factual determinations made by the expert agency entrusted by Congress to make those determinations—and to make them finally—need not be endlessly reexamined. *Cf. Safir v. Gibson*, 432 F.2d 137, 143 (2d Cir. 1970) (Friendly, J.) (holding that a Federal Maritime Commission decision was entitled to preclusive effect, noting the FMC’s expertise and that the issues “were fully litigated before the agency designated to determine them”), *cert. denied*, 400 U.S. 942 (1970).

Vicor’s fundamental objection to the procedure used in inter partes reexamination appears to center on the lack of opportunity to cross-examine SynQor’s experts under oath.<sup>4</sup> But inter partes reexamination provides “full and fair opportunity to litigate,” even without cross-examination. While we recognize the importance of cross-examination in judicial proceedings, it is not the only means of evaluating the credibility of testimony. “Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 596 (1993).

In an inter partes reexamination, a party has the opportunity to respond directly to the other party’s evidence, challenge an expert’s credibility or the basis for the expert’s conclusions, and to submit the opinions of its own expert

---

<sup>4</sup> We note that expert testimony submitted in reexaminations must be submitted in the form of an affidavit or declaration as sworn testimony, rendering it also “under oath.” *See, e.g.*, 37 C.F.R. § 1.132; MPEP § 716.02(g); MPEP § 717.01(c).

supporting these arguments and offering evidence to the contrary. This testing of the opposition's evidence will not come in the form of confrontation during oral testimony, but it serves a similar purpose. And this form of challenging opposing testimony more suitably supplants cross-examination when the matter in question is the scientific opinion of technical experts, being evaluated by factfinders with technical expertise themselves. *Cf. Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1079 (Fed. Cir. 2015) (“[Board] members, because of [their] expertise, may more often find it easier to understand and soundly explain the teachings and suggestions of prior art without expert assistance.”). The need for cross-examination to address credibility is further obviated, at least partially, by the adoption of the requirements for candor and disclosure used to safeguard ex parte patent prosecution for inter partes reexamination. *See* 37 C.F.R. § 1.933.

Courts and commentators<sup>5</sup> have advocated for the necessity of live testimony and cross-examination within an administrative proceeding before collateral estoppel may apply. *See, e.g., Nasem v. Brown*, 595 F.2d 801, 807 (D.C. Cir. 1979) (holding that collateral estoppel did not apply from an agency proceeding because of a lack of live testimony and cross-examination); David A. Brown, Note, *Collateral Estoppel Effects of Administrative Agency Determinations: Where Should Federal Courts Draw the Line?*, 73 CORNELL L. REV. 817, 831–34 (1988) (discussing procedural requirements for collateral estoppel to apply). But this court, in applying collateral estoppel to inter partes reviews in *MaxLinear*, 880 F.3d at 1376, has already recognized that live testimony is not a prerequisite for collateral estoppel to arise from an administrative proceeding. Other

---

<sup>5</sup> 3 Wigmore, EVIDENCE § 1367, p. 27 (2d ed. 1923) (famously deeming cross-examination “the greatest legal engine ever invented for the discovery of truth”).



courts have also recognized the lack of bright-line procedural requirements. *See, e.g., Johnson v. Dep't of Agric.*, 833 F.3d 948, 956–57 (8th Cir. 2016) (explaining that “[t]here is no litmus test for deciding whether agency procedures are extensive enough to warrant granting them preclusive effect[,]” but denying collateral estoppel for lack of discovery, cross-examination, ability to object to evidence, *and* judicial review); *Chauffeur’s Training Sch., Inc. v. Spellings*, 478 F.3d 117, 132 (2d Cir. 2007) (rejecting argument that collateral estoppel should not apply because the school was “not permitted to cross-examine the Department’s statistical expert” where the school had the opportunity to submit competing evidence and argue how the statistical evidence was defective); *Herrera v. Churchill McGee, LLC*, 680 F.3d 539, 547–50 (6th Cir. 2012) (holding that the decisions of a state human rights commission were rendered in a judicial capacity and applying administrative preclusion where evidence was developed by an agency investigator and no hearing was held but claimant could respond to evidence submitted by the agency and seek judicial review).

In inter partes reexaminations—where the finders of fact are administrative judges with relevant expertise—cross-examination may provide rhetorical effectiveness but is not necessary for full and fair opportunity to contest evidence. Given the statutory estoppel scheme for inter partes reexaminations, the informal procedural safeguards, the nature of the tribunal, and the overall magnitude and complexity of the proceedings, we are unpersuaded that inter partes reexamination procedures are so “fundamentally poor, cursory, or unfair,” *B & B Hardware*, 575 U.S. at 158, that the resolution of a factual dispute in a first inter partes reexamination should not collaterally estop the contrary resolution of that dispute in a second reexamination.

The dissent contends that we rely on *Chauffer’s*—a case it describes as an outlier—“for the proposition that

cross-examination is not required for collateral estoppel.” See Dissenting Op. 6. We do not cite *Chauffer’s* for the categorical rule that cross-examination is not required. Rather, we cite *Chauffer’s*—among others—as an example to show the lack of bright-line rules when it comes to determining whether collateral estoppel applies to an administrative decision. Indeed, it is not the majority but the dissent that calls for such a categorical rule regarding what is or is not required for collateral estoppel to apply. This is inconsistent with our application of collateral estoppel to inter partes reviews, which like inter partes reexaminations do not require live testimony, and with the decisions of our sister circuits. See *Herrera*, 680 F.3d at 547 (“[A] full and fair opportunity to litigate does not require any ‘single model of procedural fairness, let alone a particular form of procedure.’” (quoting *Kremer*, 456 U.S. at 483)).

## 3

Given that common law collateral estoppel applies to inter partes reexaminations, we next evaluate whether the facts here support issue preclusion. They do.

“Issue preclusion is appropriate only if: (1) the issue is identical to one decided in the first action; (2) the issue was actually litigated in the first action; (3) resolution of the issue was essential to a final judgment in the first action; and (4) plaintiff had a full and fair opportunity to litigate the issue in the first action.” *In re Freeman*, 30 F.3d 1459, 1465 (Fed. Cir. 1994).

Here, the issues are identical between the ’190 patent reexamination and the ’290 and ’702 patent reexaminations. “Our precedent does not limit collateral estoppel to patent claims that are identical. Rather, it is the identity of the *issues* that were litigated that determines whether collateral estoppel should apply.” *Ohio Willow Wood Co. v. Alps S., LLC*, 735 F.3d 1333, 1342 (Fed. Cir. 2013); see also *B & B Hardware*, 575 U.S. at 157 (citing the Restatement (Second) of Judgments § 27 cmt. c, at 252–53, that an

“issue” must be understood broadly enough “to prevent repetitious litigation of what is *essentially* the same dispute” (emphasis added). In the ’190 patent reexamination here, as in the ’702 and the ’290 patent reexaminations, the relevant issue was whether “Cobos’ and Steigerwald’s circuits are mutually incompatible because of their switching frequency.” *Vicor*, 2016 WL 2344371, at \*6. *Compare id. with Vicor*, 2015 WL 1871498, at \*11 (addressing whether an artisan would have failed to combine Steigerwald and Cobos “due to the incompatible switching frequencies of the two circuits”) *and Vicor*, 2016 WL 2344380, at \*6 (deciding the issue of whether an artisan would have “overcome” “the frequency incompatibility of Cobos and Steigerwald” to combine the two references).

This issue was litigated and decided in both the ’290 and ’702 patent reexaminations. In the ’702 patent reexamination, the Board noted that SynQor argued “that the topologies of [Steigerwald and Cobos] are constrained to distinctly different and incompatible particular frequency ranges.” *Vicor*, 2015 WL 1871498, at \*11. The Board explained that Vicor disputed this, asserting “that SynQor’s arguments regarding switching frequencies are spurious” because Steigerwald “does not limit itself to any particular frequency.” *Id.* at \*12. The Board, acting as the trier of fact, decided this issue, holding that “there are incompatibilities in frequency between” Steigerwald and Cobos and that “[t]he Examiner and [Vicor] do not address how one of ordinary skill would have dealt with these incompatibilities sufficiently, instead principally arguing that they are nonexistent or spurious,” and that this incompatibility “lessen[s] the strength of the case for a conclusion of obviousness.” *Id.* Likewise, in the ’290 patent reexamination, “[t]he Board found that a person skilled in the art would not have been motivated to combine Steigerwald . . . and Cobos because of operating frequency incompatibilities between the references’ circuits.” *SynQor II*, 869 F.3d at 1320. This court rejected Vicor’s argument that the

Board's finding was not supported by substantial evidence and affirmed the Board's decision to decline to adopt the proposed rejections. *Id.*

The Board's findings that an artisan would not combine Steigerwald and Cobos because of their operating frequency incompatibilities were essential to the judgments holding the '290 and '702 patents not obvious. "In order to give preclusive effect to a particular finding in a prior case, that finding must have been necessary to the judgment rendered in the previous action." *Freeman*, 30 F.3d at 1466. This court's resolution of Vicor's appeal of the Board's decision in the '290 patent reexamination illustrates that the question of frequency incompatibility of Steigerwald and Cobos was essential to the judgment. The court noted that the Board rejected Vicor's argument that an artisan would be motivated to combine Steigerwald and Cobos because of the references' frequency incompatibilities. *See SynQor II*, 869 F.3d at 1320. Having found that substantial evidence supported the frequency incompatibilities, the court affirmed the Board's decision finding the '290 patent not obvious based on a combination including Cobos and Steigerwald. *Id.* And, for the reasons described in the prior section, Vicor had a full and fair opportunity to litigate the issue.

The dissent states that the Board reached the opposite frequency compatibility conclusion regarding the '190 patent because Vicor presented new evidence in a subsequent inter partes reexamination: the deposition of Dr. Steigerwald obtained during district court litigation. *See Dissenting Op.* 8. As an initial matter, Vicor argued and presented evidence to support that Steigerwald and Cobos did not operate on incompatible frequencies in each of the three inter partes reexaminations. Even more, Vicor presented Dr. Steigerwald's deposition to support compatibility in the 2016 inter partes reexamination of the '290 patent, but in that decision the Board did not credit that testimony over the testimony of SynQor's witness. *See*

*Vicor*, 2016 WL 2344380, at \*6–7. It is therefore not clear that the Board reached its contrary conclusion in 2016 and again in 2019 based on any new and previously unavailable evidence. Nonetheless, assuming that it did, collateral estoppel applies “even if new evidence exists.” *Black v. Off. of Pers. Mgmt.*, 641 F. App’x 1007, 1009 (Fed. Cir. 2016). A losing party does not get a second bite at the apple simply because they can find a new and arguably more persuasive witness to present their evidence; this is precisely the type of rematch that collateral estoppel is intended to foreclose to serve the interests of repose and finality. *See Astoria*, 501 U.S. at 107 (“[A] losing litigant deserves no rematch after a defeat fairly suffered, in adversarial proceedings, on an issue identical in substance to the one he subsequently seeks to raise.”); *Allen v. McCurry*, 449 U.S. 90, 94 (1980) (“[C]ollateral estoppel relieve[s] parties of the cost and vexation of multiple lawsuits, conserve[s] judicial resources, and, by preventing inconsistent decisions, encourage[s] reliance on adjudication.”).

Thus, because the Board was precluded from finding that an artisan would combine Steigerwald and Cobos, we vacate the Board’s decision on claims 1–19, 28, and 31, and remand for further proceedings consistent with this opinion.

## B

We turn our attention to the Board’s decision on claims 34–38. Because SynQor added these claims during reexamination, the claims would not go into effect unless and until the Director issued a reexamination certificate incorporating them after the Patent and Trademark Office found them patentable. *See* 35 U.S.C. §§ 314 (pre-AIA), 316(a) (pre-AIA). Since the ’190 patent expired before the appeals of the patentability of claims 34–38 terminated, the claims will never issue. *See* 37 C.F.R. § 1.530(j) (“[N]o amendment, other than the cancellation of claims, will be

incorporated into the patent by a [reexamination] certificate issued after the expiration of the patent.”).

SynQor argues that the inability of these claims to ever be included in an issued patent forecloses any relief from the Board’s decisions as to those claims, making any review of those decisions “moot through the happenstance of patent expiration.” Appellant’s Br. 60. SynQor asserts that the mootness of any review dictates that we should follow “established practice” and vacate the Board’s decision regarding those claims. *Id.* (quoting *United States v. Mun-singwear, Inc.*, 340 U.S. 36, 39–40 (1950)).

We agree with SynQor that we lack jurisdiction to consider the Board’s decisions on claims 34–38 because the expiration of the ’190 patent rendered the patentability of those claims moot. We are further persuaded that SynQor’s opportunity to seek review of the Board’s adverse decision on these claims was “frustrated by the vagaries of circumstance.” *U.S. Bancorp Mortg. Co. v. Bonner Mall P’ship.*, 513 U.S. 18, 25 (1994). In such circumstances, vacatur is available so that “those who have been prevented from obtaining the review to which they are entitled [are] not . . . treated as if there had been a review.” *Mun-singwear*, 340 U. S. at 39. This “prevent[s] an unreviewable decision ‘from spawning any legal consequences.’” *Camreta v. Greene*, 563 U.S. 692, 713 (2011) (quoting *Mun-singwear*, 340 U.S. at 40–41). Because SynQor has not had the opportunity to seek review of the Board’s decisions on claims 34–38, we vacate the Board’s decisions as to those claims.

### III

We have considered the parties’ remaining arguments and find them unpersuasive. Because collateral estoppel properly applies to the Board’s decision on claims 1–19, 28, and 31, we vacate its decision and remand for the Board to apply collateral estoppel. Because the Board’s decisions on

SYNQOR, INC. v. VICOR CORPORATION

23

claims 34–38 are moot, we vacate the Board’s dispositions of claims 34–38.

**VACATED AND REMANDED**

COSTS

Costs to SynQor.

**United States Court of Appeals  
for the Federal Circuit**

---

**SYNQOR, INC.,**  
*Appellant*

v.

**VICOR CORPORATION,**  
*Appellee*

---

2019-1704

---

Appeal from the United States Patent and Trademark  
Office, Patent Trial and Appeal Board in No. 95/001,702.

---

DYK, *Circuit Judge*, dissenting.

The majority holds that collateral estoppel (or issue preclusion) applies to inter partes reexamination proceedings at the United States Patent and Trademark Office (USPTO). The majority's holding is incorrect because these proceedings are examinational (or inquisitorial) rather than adjudicatory, do not include court-like adjudicatory procedures, and do not satisfy the requirements of *B & B Hardware, Inc. v. Hargis Industries, Inc.*, 575 U.S. 138 (2015), for application of collateral estoppel. The majority's decision conflicts with decisions of the Supreme Court and our sister circuits. I respectfully dissent.



## I

In *B & B Hardware*, the Supreme Court ruled that collateral estoppel applies to adjudicatory proceedings because, in an adjudicatory proceeding, “an administrative agency is acting in a judicial capacity and resolves disputed issues of fact properly before it which the parties have had an adequate opportunity to litigate.” 575 U.S. at 148 (quoting *Univ. of Tenn. v. Elliott*, 478 U.S. 788, 797–98 (1986)). There is no presumption of collateral estoppel when these requirements are not met. See *Astoria Fed. Sav. & Loan Ass’n v. Solimino*, 501 U.S. 104, 108–09 (1991). As the Supreme Court has explained, inter partes reexaminations are not adjudicatory. They “follow[] a more or less inquisitorial course led by the Patent Office” that is only a “slightly more adversarial process” than ex parte reexaminations, which “follow[] essentially the same inquisitorial process between patent owner and examiner as the initial Patent Office examination.” *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1353 (2018). And as we have concluded, at their core, inter partes reexaminations are not adjudicatory but “examinational.” *Abbott Labs. v. Cordis Corp.*, 710 F.3d 1318, 1326 (Fed. Cir. 2013) (stating that the purpose of replacing inter partes reexamination with inter partes review was to “convert[] inter partes reexamination from an examinational to an adjudicative proceeding” (citation omitted)). Collateral estoppel simply does not apply to inquisitorial proceedings such as inter partes reexaminations. The panel majority’s contrary holding here is not consistent with Supreme Court authority.

## II

A survey of inter partes reexamination procedures at a more granular level confirms this conclusion. In *B & B Hardware*, the Supreme Court looked to the Restatement (Second) of Judgments for guidance on whether administrative decisions could “meet the ordinary elements of issue

preclusion.” 575 U.S. at 153–54 (pointing to the Restatement (Second) of Judgments § 27). The Restatement limits collateral estoppel to those situations in which “[an] agency is in substance engaged in adjudication,” that is, “[w]here an administrative agency is engaged in deciding specific legal claims or issues through a procedure substantially similar to those employed by the courts.” Restatement (Second) of Judgments § 83 cmt. b. Thus, “[w]here an administrative forum has the essential procedural characteristics of a court, . . . its determinations should be accorded the same finality that is accorded the judgment of a court.” *Id.*

The procedures governing inter partes reexamination are not similar to court proceedings and do not meet the requirements of the Restatement for the application of collateral estoppel. In an inter partes reexamination, the examiner controls the course of the proceeding—not the third-party requester. The examiner decides which claims to reexamine and on which grounds, searches for additional prior art references, can formulate new rejections not advanced by the third-party requester, and initiates challenges to additional claims.<sup>1</sup>

---

<sup>1</sup> See 37 C.F.R. § 1.104(a)(1) (“On taking up an application for examination or a patent in a reexamination proceeding, the examiner shall make a thorough study thereof and shall make a thorough investigation of the available prior art relating to the subject matter of the claimed invention.”); MPEP § 2656 (8th ed. Rev. 7 2008) (“[T]he examiner must also consider patents and printed publications . . . discovered by the examiner in searching . . .”); *id.* § 2643 (“If the Office chooses to reexamine any claim for which reexamination has not been requested, it is permitted to do so, since the Office may always initiate

The examiner has no obligation to adopt and proceed on the arguments set out by the third-party requester. Instead, the examiner must only explain why he or she views the third-party requester's proposed arguments as not appropriate.<sup>2</sup> The process generally followed is the same as that followed for the examiner-led initial patent application examination. 37 C.F.R. § 1.937(b) ("The inter partes reexamination proceeding will be conducted in accordance with §§ 1.104 through 1.116, the sections governing the application examination process . . ."). The requester has no right to compulsory process or cross-examination, making inter partes reexaminations unlike the procedures employed by the courts and limiting the requester's ability to gather, present, and test important evidence. As the USPTO has pointed out, "[i]n reexaminations, the [Patent Trial and Appeal Board] is reviewing a record developed by the examiner, not conducting a trial and developing a factual record." Brief for Intervenor USPTO 18, *BioDelivery Scis. Int'l, Inc. v. Monosol Rx, LLC*, Nos. 17-1265, -1266, -1268 (filed June 9, 2017), 2017 WL 2666499, at \*18 [hereinafter "USPTO Brief"].<sup>3</sup>

---

a reexamination on its own initiative of the non-requested claim (35 U.S.C. 303(a)).

<sup>2</sup> See MPEP § 2660(III) ("Reasons why the rejection proposed by the third party requester is not appropriate (i.e., why the claim cannot be rejected under the ground proposed by the third party requester) must be clearly stated for each rejection proposed by the third party requester that the examiner refuses to adopt.").

<sup>3</sup> The majority points out that there are few inter partes reexamination proceedings that remain pending at the USPTO, Maj. Op. 7 n.2, but the majority decision will govern the future effect of all past inter partes

In discussing whether inter partes reexamination meets the requirements for collateral estoppel, commentators have also noted that “features traditionally found [in] judicial determinations, such as the ability to take discovery and present evidence,” “are difficult to find in reexamination proceedings before the USPTO.” 5 R. Carl Moy, *Moy’s Walker on Patents* § 16:127 (4th ed. Dec. 2020) (discussing Restatement (Second) of Judgments § 83).

### III

Of critical importance is the absence of the third-party requester’s ability to cross-examine witnesses. The Supreme Court has described the right of cross examination as “a right traditionally relied upon expansively to test credibility as well as to seek the truth.” *Pillsbury Co. v. Conboy*, 459 U.S. 248, 259 (1983). And it has adopted the view that cross-examination is “the ‘greatest legal engine ever invented for the discovery of the truth’” because it “aid[es] the jury in assessing [a witness’s] credibility.” *California v. Green*, 399 U.S. 149, 158 (1970); see also 1 Weinstein’s Evidence Manual § 14.01 (2020) (noting that cross-examination “has the potential of shedding light on all the elements of credibility—the witness’s perception, memory, accuracy in narration[,] and sincerity” and that “[i]t can expose inconsistencies, incompleteness, and inaccuracies in the testimony”).

Given the importance of cross-examination, our sister circuits have refused to find issue preclusion in

---

reexamination decisions by the Board. According to the USPTO, it has granted 1865 requests for inter partes reexamination proceedings. USPTO, *Inter Partes Reexamination Filing Data* (Sept. 30, 2017), [https://www.uspto.gov/sites/default/files/documents/inter\\_parte\\_historical\\_stats\\_roll\\_up.pdf](https://www.uspto.gov/sites/default/files/documents/inter_parte_historical_stats_roll_up.pdf).

administrative proceedings when the ability to cross-examine was unavailable. For example, in *Nasem v. Brown*, 595 F.2d 801 (D.C. Cir. 1979), the District of Columbia Circuit held that an administrative proceeding by the Office of Federal Equal Employment Opportunity did not meet the standard for collateral estoppel. *Id.* at 807. The court stressed that there was “no opportunity to cross-examine opposing witnesses,” concluding that cross-examination “cannot be underestimated” because it “creates incentives for witnesses to tell the truth and allows exposure of mistaken perception or memory.” *Id.* at 807 & n.13. Similarly, in *Johnson v. Vilsack*, 833 F.3d 948 (8th Cir. 2016), the Eighth Circuit, while eschewing bright-line rules, refused to find collateral estoppel from a Department of Agriculture internal anti-discrimination investigation, relying, together with other factors, on the unavailability of cross-examination. *See id.* at 957. The Eleventh Circuit also has concluded that the opportunity “to cross-examine opposing witnesses” in an agency proceeding is a critical fact to weigh when deciding whether parties “were afforded a full opportunity to litigate” for preclusive effect. *City of Pompano Beach v. FAA*, 774 F.2d 1529, 1539 n.10 (11th Cir. 1985) (citing *Nasem*, 595 F.2d at 807) (discussing the related doctrine of *res judicata*).

The majority cites a single outlier case, *Chauffer’s Training School, Inc. v. Spellings*, 478 F.3d 117 (2d Cir. 2007), for the proposition that cross-examination is not required for collateral estoppel. *See* Maj. Op. 17–18 (citing *id.* at 132).<sup>4</sup> *Chauffer’s* established no such categorical

---

<sup>4</sup> The majority also relies on *Herrera v. Churchill McGee, LLC*, 680 F.3d 539 (6th Cir. 2012), which holds that, in the context of a probable cause determination before a state human rights commission, a formal hearing

rule. The Second Circuit noted that “denial of cross-examination of expert testimony might in some circumstances justify denial of collateral estoppel effect to an award based on such expert testimony,” but it held that the denial of cross-examination in the circumstances of the case was not prejudicial. *Chauffer’s*, 478 F.3d at 132.

The case involved whether a school was collaterally estopped from contesting a damages calculation made by an administrative law judge (ALJ) at the Department of Education in an earlier proceeding. *Id.* at 123–24, 131–32. The school argued that collateral estoppel should not apply because it was not permitted to cross-examine the Department’s statistical expert who testified to the amount due. *See id.* at 132. The Second Circuit observed that the agency’s hearing focused on the methodology of calculating the assessment and that, during the hearing, the Department’s evidence “revealed and explained” “[t]he assumptions underlying the Department’s statistical analysis and the calculations upon which it depended” and the school did not offer competing statistical evidence. *Id.* In the Second Circuit’s view, “[t]he School’s argument [came] down to nothing more than a claim that arguments rebutting the

---

was not required for preclusive effect. *Id.* at 550–51. *Herrera* appears to be inconsistent with the Second Circuit’s decision in *Kosakow v. New Rochelle Radiology Associates*, 274 F.3d 706, 735–36 (2d Cir. 2001) (finding no collateral estoppel after a state human rights commission probable cause investigation because, among other reasons, the employee did not have access to discovery). Whether or not *Herrera* was correctly decided, it involved the determination of probable cause, which entails the application of a lower burden of proof. Reduced requirements for a full and fair opportunity to litigate may be appropriate in that context.

Department's analysis would have been more rhetorically effective in the form of cross-examination than in the form of written submissions of contrary evidence or argument.” *Id.*

Even if *Chauffer's* was correctly decided on its particular facts, the present case is unlike *Chauffer's*, the factual circumstances being quite different. The issue is not a statistical calculation of a monetary amount but a complex determination as to whether two references could be combined to challenge a patent as obvious.

SynQor, Inc.'s patent-at-issue, U.S. Patent No. 7,072,190 (“the '190 patent”), is directed toward a power architecture for telecommunications and computer systems that allows power converters to take up less space on circuit boards. Vicor Corp. proposed rejection of the '190 patent as obvious based on the combination of Steigerwald U.S. Patent No. 5,377,090 (“Steigerwald patent”)<sup>5</sup> and an article by Cobos. In an earlier proceeding involving a different patent, the Board concluded that the references could not be combined to render the patent obvious because the circuits in the Steigerwald patent and Cobos article operated at different and incompatible frequencies, explaining that “there are incompatibilities in frequency between the references” and it was unclear “how one of ordinary skill would have dealt with these incompatibilities sufficiently.” J.A. 36,189. These conclusions were based on a declaration from Dr. Schlecht, the inventor of the '190 patent, who was also used as an expert by the patentee, that

---

<sup>5</sup> We have previously held that the Steigerwald '090 patent incorporates certain aspects of the Steigerwald U.S. Patent No. 5,274,539, and the two should be read together as a combined reference. *Vicor Corp. v. SynQor, Inc.*, 603 F. App'x 969, 974–75 (Fed. Cir. 2015).

supposedly showed that the Steigerwald patent operated at frequencies in the range of 3.6 MHz and higher.

Here, however, the Board reached the opposite conclusion with the benefit of deposition testimony from Dr. Steigerwald, the inventor of the Steigerwald patent. Dr. Steigerwald was deposed by Vicor (the requester here) on October 28, 2013, in related district court litigation. During examination by counsel for Vicor, Dr. Steigerwald contradicted Dr. Schlecht and testified that the circuit of the Steigerwald patent operated at a frequency of either 0.5 or 1 MHz, within the frequency range of the other reference (Cobos). Dr. Steigerwald's deposition was not available to Vicor in the earlier proceeding, but Vicor submitted it to the Board in the later proceeding.

Given this new information, the Board concluded that the circuits were compatible and thus the references could be combined. The additional evidence gained from compulsory process changed the Board's outcome on this complex technical issue. The unavailability of compulsory process and the inability to cross-examine Dr. Schlecht in the earlier proceeding was clearly prejudicial because it deprived Vicor of the opportunity to develop critical facts for the earlier proceeding. Even under *Chauffer's*, which turned on the lack of prejudicial effect, collateral estoppel would not apply.

In response, the majority makes two arguments: (1) that it is not clear that the Board's change in interpretation resulted from the new district court deposition testimony from Dr. Steigerwald and (2) that, even if there was new testimony, collateral estoppel still applies. *See* Maj. Op. 20–21. The majority misses the point. The point is that compulsory process and cross-examination allow for the development of potentially significant evidence that would otherwise be unavailable. Dr. Steigerwald's district court deposition testimony is an example of such



potentially relevant evidence. The absence of compulsory process and cross-examination in inter partes reexaminations—and the resulting inability to discover relevant evidence—demonstrates the inappropriateness of applying collateral estoppel to decisions in inter partes reexaminations.

#### IV

Disregarding the importance of cross-examination, the majority claims that “inter partes reexamination provides ‘full and fair opportunity to litigate,’ even without cross-examination.” Maj. Op. 15. In the majority’s view, the “form of challenging opposing testimony” adopted by the USPTO “more suitably supplants cross-examination when the matter in question is the scientific opinion of technical experts, being evaluated by factfinders with technical expertise themselves.” *Id.* at 16. The majority also claims that “[i]n inter partes reexaminations—where the finders of fact are administrative judges with relevant expertise—cross-examination may provide rhetorical effectiveness but is not necessary for [a] fulsome and fair opportunity to contest evidence.” *Id.* at 17. No case support is cited, and insofar as I am aware, there are no such cases to cite.

Cross-examination is especially important for technical witnesses, as the Supreme Court and our sister circuits have agreed. For example, the Supreme Court has explained that cross-examination of an expert is important “in testing [the expert’s] honesty, proficiency, and methodology.” *Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 321 (2009). Cross-examination of an expert witness can illustrate the witness’s “lack of proper training or deficiency in judgment” and cross-examination may explore the expert’s

“methodology,” which “requires the exercise of judgment and presents a risk of error.” *Id.* at 320.<sup>6</sup>

The experience of cross-examination in inter partes review proceedings further shows the importance of cross-examination as to technical matters even where the adjudicators have their own technical expertise. In inter partes review proceedings, the Board regularly bases its conclusions on a witness’s cross-examination testimony.<sup>7</sup>

---

<sup>6</sup> See also *Howard v. Walker*, 406 F.3d 114, 127 (2d Cir. 2005) (“On cross-examination, an attorney is free to challenge an expert’s methodology, her conclusions, and the bases for her conclusions. To the extent that the reliability of certain facts accepted by an expert is questionable, the exercise and process of cross-examination allow a defendant to bring any such factual disputes to the attention of the jury.”); *Westberry v. Gislaved Gummi AB*, 178 F.3d 257, 261 (4th Cir. 1999) (explaining that “expert witnesses have the potential to ‘be both powerful and quite misleading’” and that while “the court need not determine that the expert testimony a litigant seeks to offer into evidence is irrefutable or certainly correct,” “[v]igorous cross-examination” is an important tool to test the expert’s testimony (citation omitted)); *Bunker Hill Co. v. EPA*, 572 F.2d 1286, 1305 (9th Cir. 1977) (emphasizing that when an issue “is of a highly complex and technical nature” “cross-examination will help crystalize the varying contentions of the experts and help guarantee that both parties’ experts are responsive to criticisms and counterarguments” and that “[c]ross-examination of the witnesses will also aid [the] court in reviewing” issues on a potential appeal).

<sup>7</sup> *E.g.*, *Cellco P’ship v. Bridge & Post, Inc.*, No. IPR2018-00054, 2019 WL 1749296, at \*11 (P.T.A.B. Apr. 15, 2019) (patent owner’s expert’s concession during cross-

The need for and importance of cross-examination in inter partes review proceedings can hardly be said to differ in inter partes reexaminations.

Significantly, the USPTO, which is intimately involved with and knowledgeable about inter partes reexaminations, has previously urged that there should be no preclusive effect stemming from issues previously litigated in an inter partes reexamination because there is no cross-examination and cross-examination is frequently outcome-determinative. USPTO Brief, 2017 WL 2666499, at \*18–19.

## V

The majority relies on various statutory estoppel provisions to support its view that “[t]he statutory scheme . . .

---

examination); *Hamamatsu Photonics K.K. v. SEMICAPS Pte Ltd.*, No. IPR2017-02110 , 2019 WL 1292463, at \*10 (P.T.A.B. Mar. 18, 2019) (petitioner’s expert’s testimony “was undercut by his testimony under cross-examination”); *Seabery N. Am. Inc. v. Lincoln Global, Inc.*, No. IPR 2016-00840, 2017 Pat. App. LEXIS 11685, at \*25–26 (P.T.A.B. Oct. 2, 2017) (crediting an expert witness’s testimony on cross-examination that further supported his conclusions); *Ericsson Inc. v. Intell. Ventures I LLC*, No. IPR2014-00527, 2015 Pat. App. LEXIS 6161, at \*25–30 (P.T.A.B. May 18, 2015) (patent owner’s expert made concession on cross-examination and failed to explain how a reference differed from a patent during cross-examination); *see also FLIR Sys., Inc. v. Leak Surveys, Inc.*, Nos. IPR2014-00411, -00434, -00608, -00609, 2014 Pat. App. LEXIS 6178, at \*36 (P.T.A.B. Sept. 5, 2014) (institution decision) (noting that arguments “are best addressed in a trial phase where both parties have an opportunity to cross-examine witnesses and where the Board can evaluate credibility of witnesses”).

is fully consonant with common law estoppel,” Maj. Op 9. Far from supporting the majority, these provisions contradict its reasoning. First, the majority relies on 35 U.S.C. §§ 315(c) and 317(b) (2006). Section 315(c) prohibits an unsuccessful third-party requester from challenging the validity of a patent claim in district court if the claim has been “finally determined to be valid and patentable on any ground which the third-party requester raised or could have raised during the inter partes reexamination proceedings.” *Id.* § 315(c). Section 317(b) prohibits the converse, estopping a party from requesting an inter partes reexamination of claims “actually challenged and for which the requesting party received an adverse final decision in [a] district court proceeding.” *In re Affinity Labs of Tex., LLC*, 856 F.3d 883, 893 (Fed. Cir. 2017) (interpreting § 317(b)). The statute also bars subsequent reexamination of the same claims on the same grounds in an inter partes reexamination proceeding. 35 U.S.C. § 317(b). As we held in *Affinity Labs*, these provisions are claim specific and in the nature of a claim preclusion bar rather than issue preclusion (collateral estoppel). *See* 856 F.3d at 892. These provisions (barring relitigation of the same claims) are entirely irrelevant to the present situation where the claims of a different patent are involved.

Second, the majority also relies on uncodified section 4607. That provision is similar to collateral estoppel. It states that

[a]ny party who requests an inter partes reexamination under section 311 of title 35, United States Code, is estopped from challenging at a later time, in any civil action, any fact determined during the process of such reexamination, except with respect to a fact determination later proved to be erroneous based on information unavailable at the time of the inter partes reexamination decision.

Optional Inter Partes Reexamination Procedure Act of 1999, Pub. L. No. 06-113, 113 Stat. 1501A-567, 1501A-567, sec. 4607. But section 4607 does not apply by its own terms to facts determined in the first proceeding that, in a later proceeding, are challenged on the basis of “information unavailable” in the first proceeding. That is the situation here. New information developed as a result of compulsory process and cross-examination would not bar reconsideration in a later civil action. And, as the majority admits, section 4607 facially only applies to later district court proceedings and not to inter partes reexamination proceedings. *See* Maj. Op. 9.

Congress’s decision to depart from the usual rules of collateral estoppel only in “civil action[s]” in district court and only when there is no previously unavailable evidence demonstrates a deliberate choice and strongly suggests that Congress did not wish to depart from the usual rule of collateral estoppel with respect to later USPTO proceedings or proceedings with new evidence.<sup>8</sup> *Jama v. Immigr. & Customs Enft*, 543 U.S. 335, 341 (“We do not lightly assume that Congress has omitted from its adopted text requirements that it nonetheless intends to apply . . . .”); *United States v. Texas*, 507 U.S. 529, 534 (1993) (“[S]tatutes which invade the common law . . . are to be read with a presumption of favoring the retention of long-established and familiar principles, except when a statutory purpose to the contrary is evident. . . . In order to abrogate a common-law principle, the statute must ‘speak directly’ to the question addressed by the common law.” (citations omitted)); *Monessen Sw. Ry. Co. v. Morgan*, 486 U.S. 330, 337 (1988) (holding that, in passing the Federal Employers’ Liability

---

<sup>8</sup> Congress may well have considered that a second reexamination proceeding provided far less opportunity to develop new evidence than a district court proceeding.

Act, “Congress expressly dispensed with [certain] common-law doctrines of that era” but being “unpersuaded that Congress intended to abrogate [other] doctrine[s] *sub silentio*”).

## VI

To be sure, we have applied collateral estoppel to inter partes review proceedings at the USPTO, but that is because those proceedings, which include compulsory process and cross-examination, are essentially adjudicatory. *See MaxLinear, Inc. v. CF CRESPE LLC*, 880 F.3d 1373, 1376–77 (Fed. Cir. 2018). Congress intentionally reformed inter partes reexamination and created inter partes review to “convert[] inter reexamination from an examinational to an adjudicative proceeding.” *Abbott*, 710 F.3d at 1326 (alteration in original) (quoting H.R. Rep. No. 112-98, pt. 1, at 46–47 (2011)). Indeed, the Supreme Court has recognized that Congress created inter partes review to be “a party-directed, adversarial process.” *SAS*, 138 S. Ct. at 1355.

## CONCLUSION

In sum, inter partes reexamination proceedings are examinational and not adjudicatory and do not satisfy the requirements for collateral estoppel. The majority’s decision is without support and contrary to governing Supreme Court authority.<sup>9</sup>

---

<sup>9</sup> I do not disagree with the majority’s decision regarding the mootness of claims 34 through 38, and the decision to vacate the Board’s decision as to those claims. *See* Maj. Op. Section II.B.