

815 F.3d 1356
United States Court of Appeals,
Federal Circuit.

HARMONIC INC., Appellant
v.
AVID TECHNOLOGY, INC., Appellee.

No. 2015–1072.

|
March 1, 2016.

Synopsis

Background: Competitor in field of video streaming filed inter partes review (IPR) petition challenging the **patentability** of system of decompressing consecutive streams of compressed video data to provide continuous, uninterrupted decompressed video data output stream, seeking determination that it was unpatentable. The **Patent** Trial and Appeal Board, 2013 WL 8595955, construed the **patent**, and subsequently, 2014 WL 3422011, determined the **patent** was unpatentable in part. Competitor appealed.

Holdings: The Court of Appeals, **Stoll**, Circuit Judge, held that:

[1] substantial evidence supported Board's determination that **patent** claim for controller command for system was not unpatentable as obvious, and

[2] the Court of Appeals lacked jurisdiction to review Board's decision not to institute review of **patent** claims on certain prior art grounds that Board classified as redundant.

Affirmed in part, and appeal dismissed in part.

West Headnotes (9)

[1] **Patents** 🔑 Questions of law or fact

Obviousness of a **patent** claim is a mixed question of law and fact. 35 U.S.C.A. § 103.

6 Cases that cite this headnote

[2] **Patents** 🔑 Scope of Review

The **Patent** Trial and Appeal Board's ultimate determination on obviousness of a **patent** claim is a legal conclusion, which the Court of Appeals reviews de novo. 35 U.S.C.A. § 103.

8 Cases that cite this headnote

[3] **Patents** 🔑 Scope of Review

The Court of Appeals reviews the **Patent** Trial and Appeal Board's underlying factual findings, in determining whether a **patent** claim is obvious, including what a reference teaches and differences between the prior art and the claims, for substantial evidence. 35 U.S.C.A. § 103.

[6 Cases that cite this headnote](#)

[4] **Patents** 🔑 Particular products or processes

Substantial evidence supported determination by **Patent** Trial and Appeal Board that **patent** claim for controller command for system of decompressing consecutive streams of compressed video data to provide continuous, uninterrupted decompressed video data output stream, which commanded the input switch to begin providing data to second decompression array at predefined period of time after a first decompression array began receiving data, was not unpatentable as obvious based on prior art; although prior **patent** had demultiplexer and encoders to control bit rate of bit-streams, and disclosed a predetermined system timing, there was no showing that those generic functions specifically commanded the input switch to provide video data to the second decompression array at a specific time after the first array began. 35 U.S.C.A. § 103.

[Cases that cite this headnote](#)

[5] **Patents** 🔑 Inter partes review

Congress established inter partes review (IPR) proceedings as a means for challenging **patentability** before the United States **Patent** and Trademark Office (PTO). 35 U.S.C.A. §§ 141(c), 314(d).

[1 Cases that cite this headnote](#)

[6] **Patents** 🔑 Inter partes review

Inter partes review (IPR) proceedings challenging **patentability** involve two distinct phases: (1) the institution phase, beginning with the filing of an IPR petition and culminating in the decision of whether to institute an IPR proceeding (the institution decision); and, if instituted, (2) the merits phase, beginning after the **Patent** Trial and Appeal Board's institution decision and culminating in the Board's determination of **patentability** in light of the instituted grounds (the final written decision). 35 U.S.C.A. §§ 141(c), 314(d).

[2 Cases that cite this headnote](#)

[7] **Patents** 🔑 Inter partes review

The Court of Appeals lacked jurisdiction to review decision of the **Patent** Trial and Appeal Board, on inter partes review (IPR) of **patent** for data decompression system, not to institute review of **patent** claims on certain prior art grounds that Board classified as redundant; the Board instituted on some grounds, and permissibly declined to institute on other grounds, and only reached the merits of and issued a final written decision on the grounds that it instituted. 35 U.S.C.A. §§ 141(c), 314(d); 37 C.F.R. § 42.108.

[2 Cases that cite this headnote](#)

[8] **Patents** 🔑 In general;utility

US **Patent** 5,159,447, US **Patent** 5,508,940. Cited as Prior Art.

[5 Cases that cite this headnote](#)

[9] **Patents** 🔑 In general;utility

US **Patent** 5,495,291. Valid in Part.

[Cases that cite this headnote](#)

Attorneys and Law Firms

***1357** [Boris Feldman](#), Wilson, Sonsini, Goodrich & Rosati, PC, Palo Alto, CA, argued for appellant. Also represented by [James C. Yoon](#); [Michael T. Rosato](#), Seattle, WA; [Robin L. Brewer](#), San Francisco, CA; ***1358** [Gideon A. Schor](#), New York, NY; [Richard Torczon](#), Washington, DC.

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[Scott Weidenfeller](#), Office of the Solicitor, United States **Patent** and Trademark Office, Alexandria, VA, argued for intervenor Michelle K. Lee. Also represented by [Nathan K. Kelley](#), [Stacy Beth Margolies](#).

Before [CHEN](#), [MAYER](#), and [STOLL](#), Circuit Judges.

Opinion

[STOLL](#), Circuit Judge.

Harmonic Inc. filed an inter partes review (“IPR”) petition with the **Patent** Trial and Appeal Board (“Board”) to review the **patentability** of Avid Technology, Inc.’s (“Avid”) U.S. **Patent** No. 5,495,291 (“the #291 patent”). The Board instituted an IPR proceeding on a subset of the grounds in the petition and ultimately determined that the instituted ground did not render claims 11–16 of the #291 **patent** unpatentable. Harmonic appeals the Board’s final written decision, challenging both the Board’s **patentability** determination and its refusal to revisit grounds of unpatentability that it declined to institute as redundant to the instituted ground. For the reasons below, we affirm the Board’s confirmation of claims 11–16 over the instituted ground and conclude that we do not have jurisdiction to review the Board’s institution decision.

BACKGROUND

I.

Avid is the assignee of the #291 **patent**, issued February 27, 1996, and directed to a “system for decompressing consecutive streams of compressed video data to provide a continuous, uninterrupted decompressed video data output stream.” #291 **patent** abstract. Many computers store video in a compressed form. One well-known compression format is MPEG. Instead of storing every video frame in full, MPEG stores only changes in one frame to the next. Before these compressed video files can be played, they must first be decompressed to restore the video’s full content. Systems and methods to compress and decompress videos were well known in art at the time of the #291 **patent** application’s filing.

The #291 **patent** discloses that these prior art systems and methods often generated several blank frames between first and second videos when playing multiple compressed videos back to back due to system latency. The **patent** explains that this latency resulted from having to wait for a decompression buffer to fill with enough frames of the second video file before decompression could begin. The #291 **patent** purports to teach a decompression system and method that allows play of compressed video streams one after the other without creating blank frames or a video-less gap when switching

between the different streams. This result is achieved by using multiple decompression buffers. Figure 3 of the #291 patent illustrates the preferred architecture.

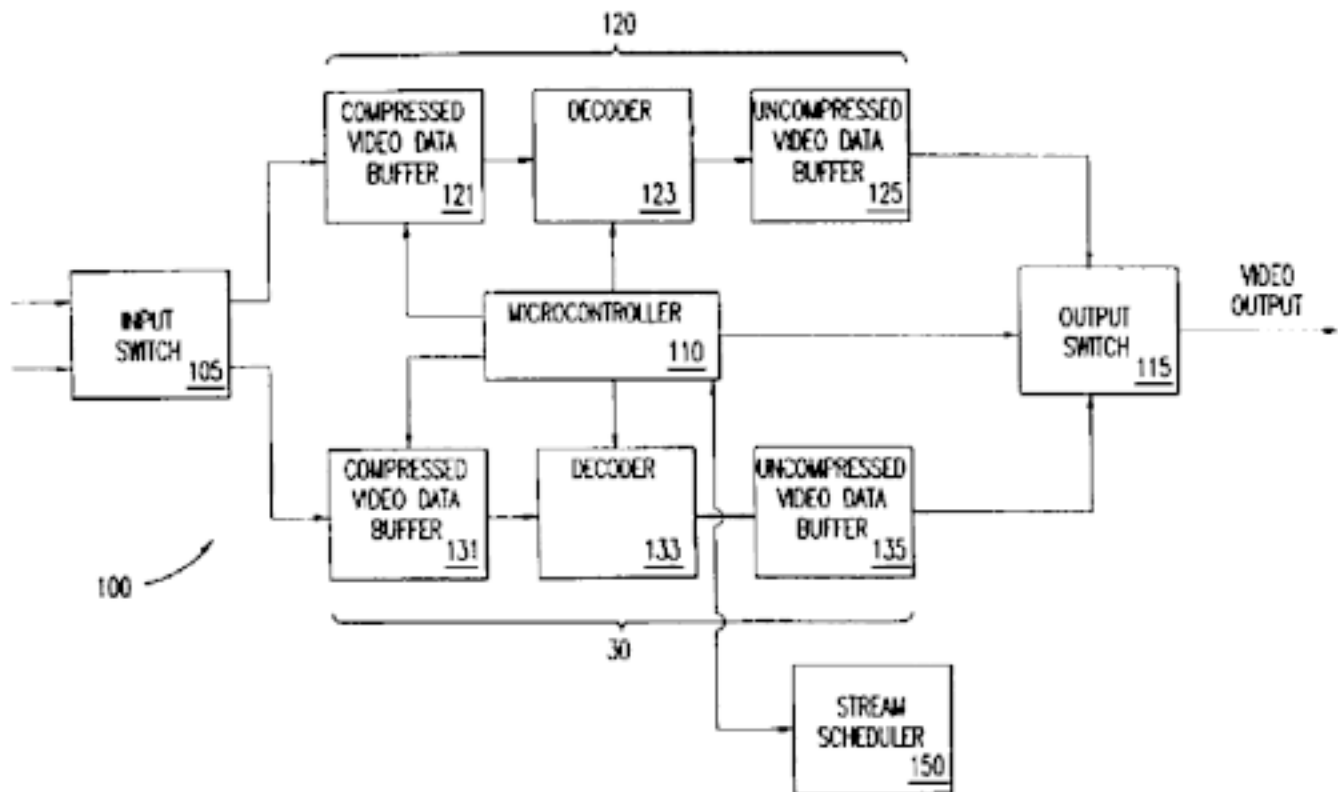


FIG.3

*1359 In this embodiment, input switch 105 accepts multiple compressed video streams. Under command of microcontroller 110, video data flows through input switch 105 to either decompression circuit 120 or 130,¹ which decompress the input video streams and place them within a buffer 125 or 135 from which output switch 115 reads to play video to a user. Microcontroller 110 instructs input switch 105 to alternate directing input video streams to decompression circuits 120 and 130. First, microcontroller 110 instructs input switch 105 to send video streams to decompression circuit 120. At a time before the circuit 120 is predicted to finish decompressing, microcontroller 110 directs input switch 105 to send a second input video stream to decompression circuit 130 so that decompression may begin there. Because decompression of the second video stream begins before decompression of the first stream completes, there is decompressed video data in buffer 135 from the second video stream awaiting output immediately upon output completion of the first decompressed video stream. As a result, a user experiences no blank frames due to system latency.

The claims at issue in this appeal are dependent claims 11–16. Claim 9, from which claims 11–16 depend, and claim 11 recite:

9. A video decompression system comprising:

a first switch coupled to at least two video data input lines, the first switch controlling the direction and rate of video data flow from the video data input lines;

at least two video data decompression arrays coupled to the first switch, the video data decompression arrays storing compressed video data, decompressing the stored compressed video data, and storing the decompressed video data;

a second switch coupled to the video data decompression arrays and to an *1360 output bus, the second switch directing output from the at least two video data decompression arrays to the output bus; and

a controller coupled to the first switch, the video data decompression arrays, and to the second switch for controlling the flow of video data through the system.

11. The system of claim 9 wherein the controller commands the first switch to provide video data to the first video data decompression array at a first rate and to provide video data to the remaining video data decompression arrays at a second rate a *predefined period of time* after the first video data array begins receiving the video data at the first rate.

#291 patent col. 7 ll. 4–32 (emphasis added). Pertinent to this appeal, claim 11 requires switching to provide video data to a second decompression array at a “predefined period of time” after the first video compression array receives data. *Id.* col. 7 ll. 27–32.

II.

Harmonic petitioned for IPR of the #291 patent, alleging that, in view of seven different prior art grounds, all twenty of the patent's claims were unpatentable as anticipated under 35 U.S.C. § 102 or as obvious under 35 U.S.C. § 103.² The Board instituted IPR on claims 1–16 based on the obviousness ground of U.S. Patent No. 5,159,447 (“Haskell”) combined with U.S. Patent No. 5,508,940 (“Rossmere”). The Board did not institute based on four other grounds in Harmonic's petition directed at claims 1–16, calling them “redundant” of the instituted ground. In addition, the Board did not institute IPR on claims 17–20, disposing of the remaining two grounds.

The Haskell patent discloses a system for avoiding overflow and underflow of buffers during video encoding and decoding. As illustrated in Figures 2 and 3 below, Haskell's device includes encoder system 100 and decoder system 200, which are connected by a channel that runs from the encoder's multiplexer to the decoder's demultiplexer.

FIG. 2

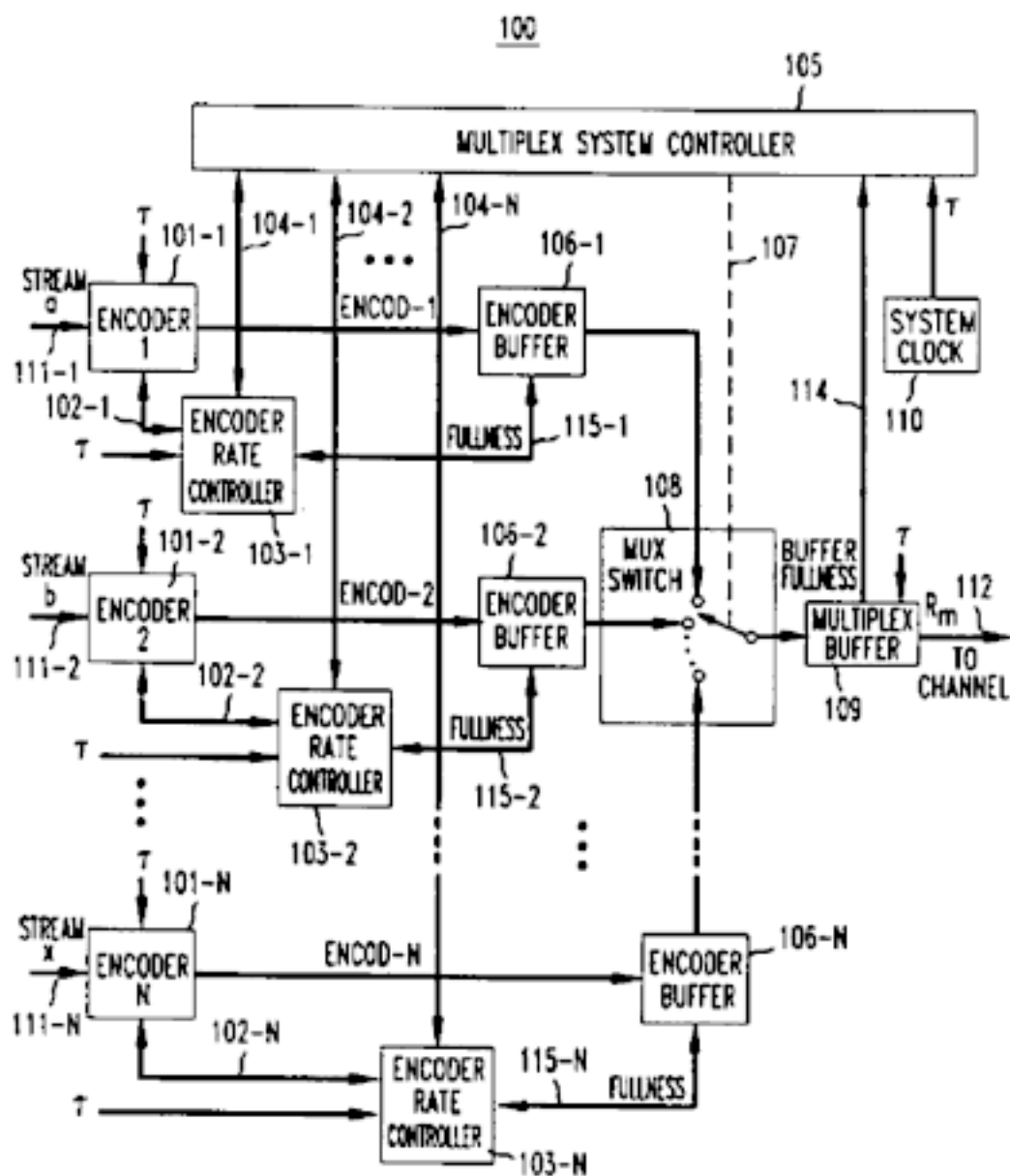
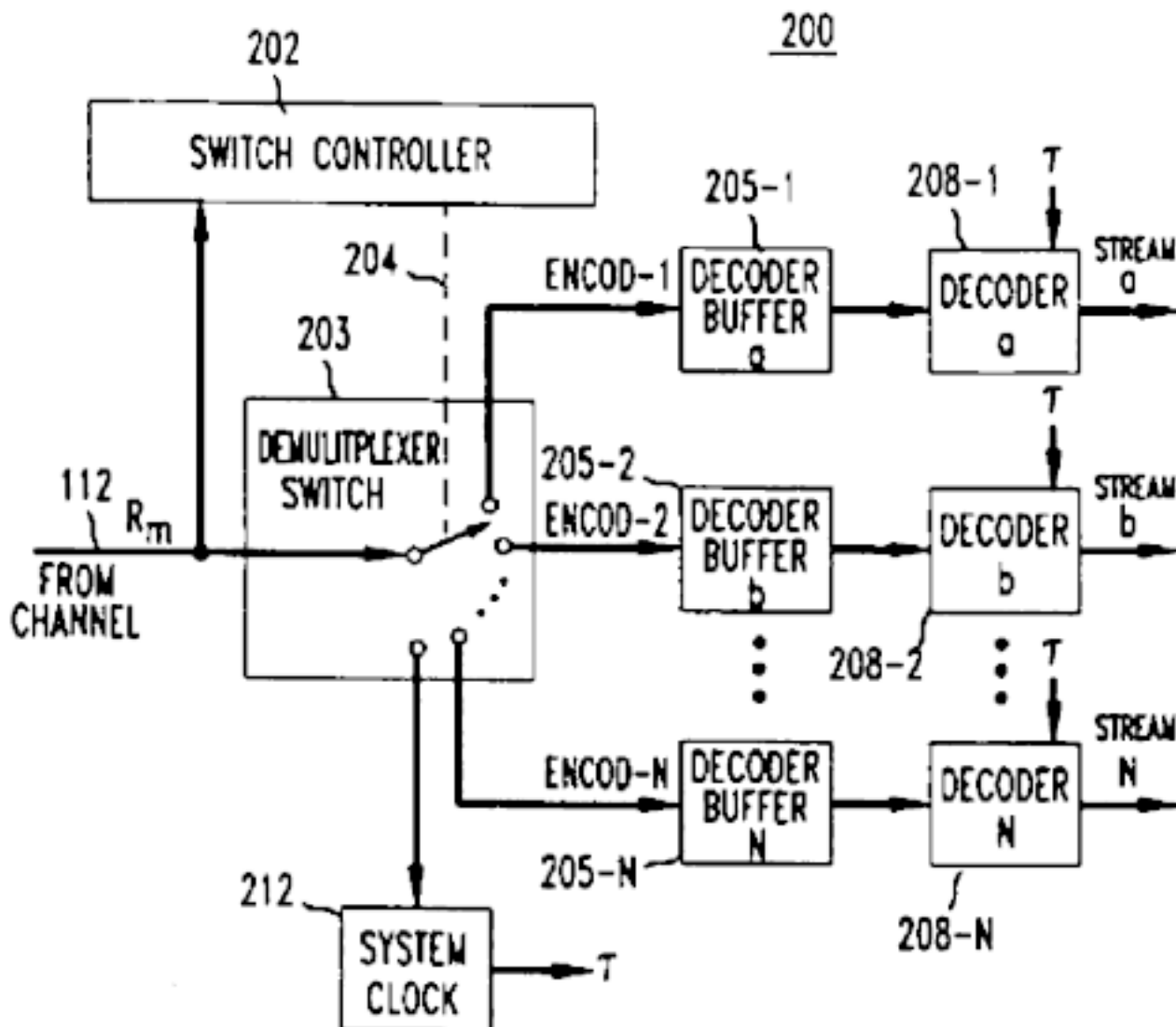


FIG. 3



*1362 Encoder system 100 includes multiple encoder buffers 106, and decoder system 200 includes multiple decoder buffers 205. Haskell's encoder controls two aspects of the system to avoid buffer overflow and underflow: (1) the number of bits employed to encode each video frame; and (2) the bitrate of the channel connecting the encoder and decoder.

The Board's final written decision concluded that claims 1–10 of the # 291 patent were unpatentable in view of Haskell combined with Rossmere. At the same time, the Board found claim 11—along with claims 12–16, which depend from claim 11—patentable over the instituted prior art ground. Particularly, the Board found that Haskell combined with Rossmere did not satisfy the “predefined period of time” limitation in claim 11, which it construed to mean “a prior defined period of time.” *Harmonic, Inc. v. Avid Tech., Inc.*, IPR2013–00252, 2014 WL 3422011, at *5, *13–14 (P.T.A.B. July 10, 2014) (*Final Written Decision*).

Harmonic timely appealed to this court, and we have jurisdiction under 28 U.S.C. § 1295(a)(4)(A) and 35 U.S.C. § 141(c) to review the Board's final written decision.

DISCUSSION

On appeal, Harmonic argues that the Board erred in concluding that claim 11 (and claims 12–16, which depend from it) is **patentable** in light of the instituted prior art ground. Harmonic also argues that the Board should have considered all prior art grounds in its petition, especially after finding claim 11 **patentable** in view of the instituted ground. We address each argument in turn.

I.

We first consider Harmonic's argument that the Board erred in determining that claims 11–16 are **patentable** in light of Haskell combined with Rossmere.

***1363** [1] [2] [3] A **patent** claim is unpatentable as obvious “if the differences between the subject matter sought to be **patented** and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.” 35 U.S.C. § 103. Obviousness under § 103 is a mixed question of law and fact. The Board's ultimate determination on obviousness is a legal conclusion, which we review de novo. *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1280 (Fed.Cir.2015) (citing *In re Baxter Int'l, Inc.*, 678 F.3d 1357, 1361 (Fed.Cir.2012)), cert. granted sub nom., *Cuozzo Speed Techs., LLC v. Lee*, — U.S. —, 136 S.Ct. 890, 193 L.Ed.2d 783 (2016). We review the Board's underlying factual findings, including what a reference teaches and differences between the prior art and the claims, for substantial evidence. *Id.* (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17–18, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966)).

In an IPR, the petitioner has the burden from the onset to show with particularity why the **patent** it challenges is unpatentable. See 35 U.S.C. § 312(a)(3) (requiring IPR petitions to identify “with particularity ... the evidence that supports the grounds for the challenge to each claim”). Thus, it was Harmonic's burden to explain to the Board how Haskell combined with Rossmere rendered the challenged claims unpatentable. With respect to claim 11 of the **#291 patent**, Harmonic did not do so.

[4] Claim 11 requires that the system's controller command the input switch to begin providing data to a second decompression array at a “predefined period of time” after a first decompression array begins receiving data. Harmonic argues that Haskell teaches this claim limitation, but puts forth very little evidence to support this contention. With no express teaching of this limitation in Haskell, Harmonic relies on several unsupported and inferential theories based on what Haskell does teach.

First, Harmonic relies on the presence of a demultiplexer in Haskell together with the ability of its encoders to control the bit rate of bit-streams destined to its decoders. But Harmonic's discussion of these features of Haskell is conclusory. Harmonic does not relate what appears to be generic multiplexing and bit rate adjustment to what is recited in claim 11. Specifically, Harmonic does not explain how Haskell's control of bit rate teaches the specific claim limitation of commanding the input switch to provide video data to a second decompression array a prior defined period of time after a first decompression array begins receiving data. Harmonic's expert testimony in support of this theory is equally unavailing, adding nothing beyond the conclusory statements in Harmonic's petition.

Harmonic also emphasizes Haskell's disclosure of a “predetermined system timing” in an attempt to satisfy the “predefined period of time” limitation.³ But this disclosure relates to how Haskell passes video frames to a multiplexer bit-stream in groups, with time variables also periodically inserted into the bit-stream. Simply ***1364** stating that Haskell discloses “predetermined system timing” does not satisfy Harmonic's burden. Harmonic fails to explain how Haskell's predetermined system timing discloses or suggests the specific timing required by claim 11. Indeed, Harmonic's expert

offered no testimony on Haskell's "predetermined system timing." And Harmonic mentioned the feature to the Board only once in a single sentence without any elaboration. Harmonic Reply Br., *Harmonic, Inc. v. Avid Tech., Inc.*, No. IPR2013–00252, at *13 (P.T.A.B. Sept. 25, 2013) ("Haskell explicitly discloses the use of predetermined system timing with regard to providing video data to decode buffers (205–1, 205–2, 205–N)." (citing Haskell col. 13 ll. 7–54)). On appeal, Harmonic still has not sufficiently explained how Haskell's predetermined system timing corresponds to the "predefined period of time" limitation in claim 11.

On this record, we conclude that there is substantial evidence to support the Board's finding that Haskell neither teaches nor suggests the "predefined period of time" limitation in claim 11. Therefore, we affirm the Board's confirmation of claim 11, and dependent claims 12–16, as **patentable** over Haskell and Rossmere.

II.

We now turn to Harmonic's second argument, which asserts that the Board, after concluding that the instituted ground did not render claims 11–16 unpatentable, erred by failing to consider the other prior art grounds in Harmonic's IPR petition that were not instituted.

In addition to the obviousness ground based on Haskell and Rossmere, Harmonic's IPR petition included four other distinct grounds for unpatentability of claims 1–16 of the #291 **patent**. The Board denied institution on these remaining four grounds as "redundant":

Those grounds of unpatentability are redundant to the grounds of unpatentability on which we initiate an *inter partes* review. Accordingly, we do not authorize an *inter partes* review on the remaining grounds of unpatentability asserted by Harmonic against claims 1–16 of the #291 **patent**.

Harmonic, Inc. v. Avid Tech., Inc., No. IPR2013–00252, 2013 WL 8595955, at *19 (P.T.A.B. Sept. 25, 2013) (citing 37 C.F.R. § 42.108(a)). Harmonic argues that in light of the Board's conclusion in its final written decision that Haskell and Rossmere do not render claim 11 unpatentable, the Board was compelled to revisit the grounds it previously deemed redundant.

Before we address the merits of Harmonic's argument, we first must determine whether we have jurisdiction to review this question. See *Arlington Indus., Inc. v. Bridgeport Fittings, Inc.*, 759 F.3d 1333, 1336 (Fed.Cir.2014) ("It is axiomatic that the initial inquiry in any appeal is whether the court to which appeal is taken has jurisdiction to hear the appeal." (quoting *Woodard v. Sage Prods., Inc.*, 818 F.2d 841, 844 (Fed.Cir.1987) (en banc))).

A.

[5] [6] Congress established IPR proceedings as a means for challenging **patentability** before the United States **Patent** and Trademark Office ("PTO"). IPR proceedings involve two distinct phases: (1) the institution phase, beginning with the filing of an IPR petition and culminating in the decision of whether to institute an IPR proceeding ("institution decision"); and, if instituted, (2) the merits phase, beginning *1365 after the Board's institution decision and culminating in the Board's determination of **patentability** in light of the instituted ground(s) ("final written decision"). See *Achates Reference Publ'g, Inc. v. Apple Inc.*, 803 F.3d 652, 654–55 (Fed.Cir.2015); *St. Jude Med., Cardiology Div., Inc. v. Volcano Corp.*, 749 F.3d 1373, 1375–76 (Fed.Cir.2014).

We have jurisdiction to hear appeals from parties "dissatisfied with the final written decision" from the merits phase. 35 U.S.C. § 141(c). We do not, however, have jurisdiction to review an institution decision. Under the title "No appeal,"

35 U.S.C. § 314(d) prescribes that a “determination by the Director whether to institute an *inter partes* review under this section shall be final and nonappealable.”

Our cases have strictly applied the § 314(d) restriction. First, in *St. Jude*, we addressed whether we could review the Board's decision to not institute an IPR proceeding. 749 F.3d at 1374. The Board had denied the underlying IPR petition on the ground that the petition was time-barred under 35 U.S.C. § 315(b). *Id.* at 1375. Recognizing that § 141(c) only authorizes our review of final written decisions and that § 314(d) constitutes a “broadly worded bar on appeal,” we held that we lack jurisdiction to review a decision to not institute an IPR proceeding. *Id.* at 1376; *see also In re Dominion Dealer Sols., LLC*, 749 F.3d 1379, 1381 (Fed.Cir.2014) (denying mandamus petition seeking review of Board decision not to institute IPR).

In *Cuozzo*, we considered whether we could review the PTO's decision to institute an IPR proceeding. 793 F.3d at 1274. The patent owner in *Cuozzo*, appealing after a final written decision had issued, argued that the PTO improperly instituted an IPR on certain claims because it relied on prior art that was not identified in the petition. *Id.* The patent owner argued that we had jurisdiction to review the institution decision because § 314(d), it asserted, does not completely preclude review of the institution decision, but instead merely postpones review of the PTO's authority until after issuance of the final written decision. We disagreed, holding that § 314(d) precludes our review of institution decisions, even when the challenge comes after a final written decision issues. *Id.*

In *Versata Development Group Inc. v. SAP America Inc.*, 793 F.3d 1306 (Fed.Cir.2015), we addressed § 314(d)'s counterpart in the post-grant review scheme, § 324(e). Like § 314(d), § 324(e) states that the determination of whether to institute a post-grant review is final and non-appealable, and also applies in the context of covered business method (“CBM”) review. Leahy–Smith America Invents Act, Pub. L. No. 112–29, 125 Stat. 284, 329–31 (2011) (“AIA § 18”). The patentee in *Versata* argued that the Board's unpatentability decision should not stand because the patent was not a CBM patent as defined in AIA § 18(d)(1). The PTO responded that the Board's determination as to whether a patent qualifies as a CBM patent is an institution decision that we are barred from reviewing under § 324(e). We disagreed with the PTO. We held that § 324(e) did not preclude our review of the Board's decision that the challenged patent was a “covered business method patent” because that question involved the Board's “ultimate authority” to deem a patent unpatentable under the CBM review proceedings. *Versata*, 793 F.3d at 1319. We clarified that § 324(e) does not preclude review of questions that go to whether the Board has violated a limit on *1366 its under § 18 to deem a patent unpatentable. *Id.* at 1320.

In *Achates*, we examined whether we could review the PTO's institution decision premised on IPR petitions that the patent owner argued contravened the timing requirements for filing a petition under 35 U.S.C. § 315(b). 803 F.3d at 653. We held that § 314(d) prohibited our review because the § 315(b) time bar “does not impact the Board's authority” to deem a patent claim unpatentable, but, rather, “only bars particular petitioners from challenging the claim.” *Id.* at 657. Because the time bar is simply a procedural rule governing the proceedings, and does not itself give the Board the power to deem a patent unpatentable, it is not a “defining characteristic” of the Board's authority to deem a patent unpatentable that we are able to review. *Id.* at 657–68.

Most recently, in *Synopsys Inc. v. Mentor Graphics Corp.*, 814 F.3d 1309, 2016 WL 520236 (Fed.Cir.2016), we considered a challenge under 35 U.S.C. § 318(a) to a final written decision that did not address every claim raised in an IPR petition following the Board's decision to institute review for some, but not all, of the claims challenged in the petition. While we declined to review the merits of the Board's partial institution decision, we did review the question of whether the Board is nevertheless required to address all claims raised in an IPR petition in its final written decision under § 318(a), which directs the Board to issue a final written decision with respect to “any patent claim challenged by the petitioner.” *Synopsys*, 814 F.3d at 1314, 2016 WL 520236, at *3–4. We concluded that it is not, finding no statutory requirement that the Board address every claim raised in an IPR petition. *Id.* at 1316–17, 2016 WL 520236 at *6.

B.

[7] With this background in mind, we address whether we have jurisdiction here. Harmonic argues that the Board's decision to not institute on certain prior art grounds it classified as “redundant” is not an institution decision. In support of its position, Harmonic points out that this case introduces facts not present in the cases discussed above. Here, acting on a single IPR petition, the Board instituted an IPR proceeding on one ground, but denied institution on others. According to Harmonic, the non-binary nature of the Board's decision—i.e., instituting on some grounds, but not others—takes it out of the realm of an institution decision and into that of a case management decision, which Harmonic asserts we have jurisdiction to review for an abuse of discretion.

We disagree. Our prior decisions hold that § 314(d) prohibits review of the decision to institute an IPR, *Cuozzo*, 793 F.3d at 1276, as well as the decision to deny institution of an IPR, *St. Jude*, 749 F.3d at 1375–76. A decision to institute on only a *subset* of the grounds identified in the petition is simply a combination of the two. Although Harmonic labors to categorize the Board's institution decision in this case as a different type of “case management decision,” it is no different than the circumstances squarely addressed in our prior decisions. The Board's decision to institute on one prior art ground or another does not raise fundamental questions about the scope of its statutory authority to deem **patents** unpatentable; it is simply the Board's exercise of its institution authority in a given case. Section 314(d) prohibits our review of such a decision.

Contrary to Harmonic's suggestion, the Board's reference to the non-instituted grounds as “redundant” also does not alter ***1367** this conclusion. In its use of the term redundant, the Board suggested nothing more than that the claims addressed by the non-instituted grounds were already addressed by the instituted ground. Indeed, the Board's institution decision in this case first concluded that the Haskell and Rossmere combination provided Harmonic with a reasonable likelihood of success in showing that claims 1–16 of the **#291 patent** are unpatentable. Only after reaching this conclusion did the institution decision label the other grounds targeting claims 1–16 “redundant.” As the PTO correctly indicates in its intervenor's brief, the Board did not determine that the prior art relied on in the non-instituted grounds was duplicative of that relied on in the instituted grounds. See PTO Br. 28. Rather, the most the Board implied was that the non-instituted grounds were redundant simply in the sense that they were directed to the same claims as the instituted grounds. For us to hold that by providing the public with a basis for its institution decision—redundancy—rather than remaining silent, the Board somehow triggered our appellate jurisdiction would violate both § 314(d) and our governing case law.

Nor does the fact that the Board ultimately found claim 11 **patentable** over the instituted ground alter our conclusion that we may not review the Board's institution decision, including its decision to not institute for redundancy reasons. As we explained before, IPR proceedings occur in two distinct phases: (1) an institution phase; and (2) a merits phase. See *Achates*, 803 F.3d at 654; *St. Jude*, 749 F.3d at 1375–76. During the institution phase, the Board establishes parameters that confine the proceeding during the merits phase. See *AIA Regulation Comments*, 77 Fed. Reg. 48,680 at 48,689 (“Any claim or issue not included in the authorization for review is not part of the review.”). The PTAB's institution decision included within the merits phase Haskell combined with Rossmere, but nothing more. The IPR proceeding was thus limited and did not include the non-instituted grounds.

Finally, our conclusion here is consistent with *Synopsys* because, in that case, the petitioner challenged the Board's final written decision, not its decision to institute. *Synopsys*, 814 F.3d at 1313–15, 2016 WL 520236, at *3–4. As here, we recognized in *Synopsys* that “[t]he decision of the Board to institute inter partes review cannot be appealed.” *Id.* at 1314, 2016 WL 520236 at *3. We determined, however, that we could review the question of whether the Board was required to address all claims raised in an IPR petition in its final written decision under § 318(a), which directs the Board to issue a final written decision with respect to “any **patent** claim challenged by the petitioner.” *Id.* at 1314–15, 2016 WL 520236 at *4–6.

Under the IPR framework, Congress did not require that once the PTO institutes a proceeding, all grounds in the underlying petition must be considered. First of all, the PTO is permitted, but never compelled, to institute an IPR proceeding. See 35 U.S.C. § 314(a) (stating that “[t]he Director *may not* authorize an inter partes review to be instituted *unless* the Director determines ... there is a reasonable likelihood that the petitioner would prevail ...” (emphases added)). Moreover, statute directs that the PTO “shall prescribe regulations” for both “setting forth the standards for the showing of sufficient grounds to institute a review under section 314(a)” and “establishing and governing inter partes review under this *1368 chapter....” 35 U.S.C. § 316(a)(2), (4). The AIA also requires the PTO to “consider the effect of any such regulation on the economy, the integrity of the patent system, the efficient administration of the Office, and the ability of the Office to timely complete proceedings....” 35 U.S.C. § 316(b).

The PTO adopted such regulations in 37 C.F.R. § 42.108. Subsection (a) states that “[w]hen instituting inter partes review, the Board may authorize the review to proceed on ... *all or some* of the grounds of unpatentability asserted for each claim.” (emphasis added). Subsection (b) further provides that “[a]t any time prior to institution of inter partes review, the Board may deny *some or all* grounds for unpatentability for some or all of the challenged claims.” 37 C.F.R. § 42.108(b) (emphasis added). Under the PTO's regulations, grounds not instituted never become part of the merits phase of the IPR proceeding. See *Changes to Implement Inter Partes Review Proceedings, Post-Grant Review Proceedings, and Transitional Program for Covered Business Method Patents*, 77 Fed. Reg. 48,680, 48,689 (Aug. 14, 2012) (*AIA Regulation Comments*) (“Any claim or issue not included in the authorization for review is not part of the review.”).

In light of 35 U.S.C. § 316, we have already satisfied ourselves that the PTO possessed authority to promulgate 37 C.F.R. § 42.108. Applying *Chevron* deference, we also consider whether the agency, in exercising its rulemaking authority to enact § 42.108, reasonably interpreted § 316 and the statutory provision for instituting IPR proceedings, § 314. *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 844, 104 S.Ct. 2778, 81 L.Ed.2d 694 (1984). We conclude that it did. As noted, § 316 directs the PTO to promulgate regulations that, in part, consider “the efficient administration of the Office, and the ability of the Office to timely complete proceedings.” 35 U.S.C. § 316(b). The PTO's rationale for promulgating § 42.108 aligns with Congress's guidance in § 316. In *Synopsis*, we held that the related and analogous § 42.108 provision permitting the Board to institute on a subset of claims challenged in a petition is “plainly an exercise” of the PTO's rulemaking authority and “is a reasonable interpretation of the statutory provision governing the institution of inter partes review.” 814 F.3d at 1316, 2016 WL 520236, at *5 (Fed.Cir. Feb. 10, 2016). The PTO explained that the regulation's “convergence of issues for review streamlines the proceeding and aids in the efficient operation of the Office and the ability of the Office to complete the proceeding within the one-year timeframe.” *AIA Regulation Comments*, 77 Fed. Reg. 48,680 at 48,703. Our previous holding and the PTO's rationale applies equally to the subset-of-grounds provision and reasonably effectuates the statute's efficiency imperative. And, as we also noted, § 314 does not compel PTO to institute an IPR proceeding in any instance. Thus, we find the § 42.108 subset-of-grounds regulation to be reasonable and conclude that it is valid. And under that section, it is clear that the Board may choose to institute some grounds and not institute others as part of its comprehensive institution decision.

CONCLUSION

For the foregoing reasons, we affirm the Board's determination that claims 11–16 of the #291 patent are patentable in light of the instituted prior art ground and do not review the Board's institution decision because we lack jurisdiction.

AFFIRMED

*1369 COSTS

No costs.

All Citations

815 F.3d 1356, 118 U.S.P.Q.2d 1198

Footnotes

- 1 Decompression circuit 130 is erroneously labeled “30” in Figure 3.
- 2 The versions of [35 U.S.C. §§ 102](#) and [103](#) that apply here are those in force preceding the changes made by the America Invents Act (“AIA”), given the effective filing dates of the claims of the #291 [patent](#). See Leahy–Smith America Invents Act, [Pub. L. No. 112–29](#), [125 Stat. 284](#), 293 (2011).
- 3 The parties devote much of their appeal briefs to addressing whether the Board erred by stating that Harmonic waived its argument based on Haskell’s “predetermined system timing” feature because it cited it for the first time in its Reply brief. Because the Board did actually address the “predetermined system timing” feature in its final written decision, however, we do not reach this waiver argument. See *Final Written Decision*, [2014 WL 3422011](#), at *13.