

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

SIGHTSOUND TECHNOLOGIES, LLC,
Appellant

v.

APPLE INC.,
Appellee

2015-1159, 2015-1160

Appeals from the United States Patent and Trade-
mark Office, Patent Trial and Appeal Board in No.
CBM2013-00020.

Decided: December 15, 2015

MATTHEW WOLF, Arnold & Porter LLP, Washington,
DC, argued for appellant. Also represented by JENNIFER
SKLENAR, Los Angeles, CA.

DOUGLAS HALLWARD-DRIEMEIER, Ropes & Gray LLP,
Washington, DC, argued for appellee. Also represented
by JON STEVEN BAUGHMAN, SHARON LEE, MEGAN
FREELAND RAYMOND, PAUL MICHAEL SCHOENHARD,
DARRELL STARK; CHING-LEE FUKUDA, New York, NY;

JAMES RICHARD BATCHELDER, LAUREN NICOLE ROBINSON,
East Palo Alto, CA.

BENJAMIN T. HICKMAN, United States Patent and
Trademark Office, Office of the Solicitor, Alexandria, VA,
argued for intervenor Michelle K. Lee. Also represented
by NATHAN K. KELLEY, SCOTT C. WEIDENFELLER.

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

DYK, *Circuit Judge*.

SightSound Technologies, LLC (“SightSound”) is the owner of U.S. Patent No. 5,191,573 (the “573 patent”) and 5,966,440 (the “440 patent”). Apple Inc. (“Apple”) petitioned the United States Patent and Trademark Office (“PTO”) for covered business method (“CBM”) review of claims 1, 2, 4, and 5 of the ’573 patent and claims 1, 64, and 95 of the ’440 patent. The PTO granted Apple’s petition and instituted CBM review. The Patent Trial and Appeal Board (“the Board”) issued a final decision finding all the challenged claims would have been obvious. SightSound appealed.

We hold that we lack jurisdiction to review the PTO’s decision to consider issues not explicitly raised in the petitions. We do, however, have jurisdiction to review whether the patents qualify as CBM patents. We affirm the Board’s determination that the ’573 and ’440 patents qualify as CBM patents. Finally, we affirm the Board’s final decision with respect to claim construction and obviousness.

BACKGROUND

The ’573 and ’440 patents owned by SightSound disclose methods for the electronic sale and distribution of digital audio and video signals. Each of the relevant

claims requires (1) forming a connection, through telecommunications lines, between a first party's first memory and a second party's second memory; (2) selling the desired digital video or digital audio signals to the second party for a fee through telecommunications lines; (3) transmitting the desired signal from the first memory to the second memory via telecommunications lines; and (4) storing the transmitted signal in the second memory. *E.g.*, '440 patent col. 8 ll. 44–64; '573 patent col. 6 ll. 4–24. Dependent claim 2 of the '573 patent adds the step of searching for and selecting a signal from the first memory after the signal has been transferred. '573 patent col. 6 ll. 25–29. Claims 4 and 5 of the '573 patent are the same as claims 1 and 2 respectively, but substitute digital video for audio signals. *Id.* col. 6 ll. 36–59. Claims 64 and 95 of the '440 patent recite additional limitations, including storing digital signals “in the second party hard disk.” U.S. Patent No. 5,966,440 C1 (re-examination certificate) (“440 C1 patent”) col. 8 ll. 14–44, col. 13 ll. 14–51.

On May 6, 2013, Apple filed petitions with the Board seeking CBM review of the '573 and '440 patents under AIA § 18. *See Leahy-Smith America Invents Act (“AIA”), Pub. L. 112-29, 125 Stat. 284, 329–31 (2011).*¹ Apple argued that claims 1, 2, 4, and 5 of the '573 patent and claims 1, 64, and 95 of the '440 patent were invalid as anticipated under 35 U.S.C. § 102. The Board instituted CBM review. In instituting review, the Board applied the definition of CBM in the statute and regulations. *See AIA § 18(d); 37 C.F.R. § 42.301.* The Board first determined

¹ In general, the AIA is codified in various parts of Title 35 of the U.S. Code. Section 18 of the AIA, however, is not codified; it is found in pages 329–31 of 125 Stat. References to § 18 in this opinion are to the statutes at large.

that the '573 and '440 patents are CBM patents because they recite the electronic movement of money between financially distinct entities, an activity that is “financial in nature,” and do not include novel and non-obvious technological features that would otherwise excluded them from CBM treatment. J.A. 556–59, 987–94. The Board then determined that there was a reasonable likelihood that the asserted claims were anticipated or rendered obvious by a series of disclosures relating to a computer system developed by CompuSonics in the 1980s. Although Apple’s petitions included the grounds on which the PTO instituted review with respect to anticipation and alleged facts to support obviousness, the petitions did not specifically allege obviousness over CompuSonics. The Board nonetheless held that it was appropriate to initiate review on obviousness grounds: “[I]n addition to Petitioner’s asserted ground of anticipation . . . we exercise our discretion to institute a covered business method review . . . on the ground of unpatentability over the CompuSonics publications under 35 U.S.C. § 103(a).” J.A. 571.

During the CBM proceedings SightSound argued that it had been deprived of a fair opportunity to respond to the obviousness grounds on which the CBM review had been instituted. The Board granted SightSound additional time for argument and authorized it to file sur-replies and new declaration testimony on the issue of obviousness, “to ensure that Patent Owner has a full and fair opportunity to be heard on the issue of obviousness.” J.A. 709, 1003.

In its final decision on the merits, the Board rejected SightSound’s contention that the term “second memory” is limited to non-removable media, relying on the claim language, specification, and prosecution history to conclude that under the broadest reasonable interpretation standard the term encompasses any second storage space

in a computer medium that is capable of retaining data or instructions and is not limited to hard disks. The Board reaffirmed the initiation decision that the Board did not exceed its jurisdiction when it initiated CBM review, explaining that, while Apple's petitions did not assert obviousness explicitly, they nevertheless "supported [such] a ground" based on their detailed explanation of the various CompuSonics references. J.A. 25–27, 92–94. The Board held claims 1, 2, 4, and 5 of the '573 patent and claim 1 of the '440 patent invalid as obvious. It found that "Apple explains in detail in its Petition[s] how the CompuSonics publications teach every limitation" of the claims, J.A. 31, 98, and that the reason to combine was manifested by the references themselves. The Board also held claims 64 and 95 of the '440 patent invalid as obvious, finding that the CompuSonics publications would have suggested to an ordinary artisan the desirability of using a hard disk in connection with the other claimed aspects of the invention. SightSound appealed. The PTO intervened. We have jurisdiction to review the Board's final decision under 28 U.S.C. § 1295(a)(4)(A) and 35 U.S.C. § 329.

DISCUSSION

I

We first address the question of jurisdiction. CBM patents are governed by the special provisions of AIA § 18. For purposes of conducting proceedings and appellate review, section 18 is considered part of the broader chapter 32 provisions of title 35 of the U.S. Code, governing post-grant review ("PGR").² Decisions relating to the

² "The transitional proceeding implemented pursuant to this subsection shall be regarded as, and shall employ the standards and procedures of, a post-grant

institution of CBM review are not reviewable. “The determination by the Director whether to institute a post-grant review under this section shall be final and nonappealable.” 35 U.S.C. § 324(e). As noted, this provision is applicable to both PGR and CBM proceedings; the Board acts for the Director in deciding whether to institute a review. *See* AIA § 18(a)(1); 37 C.F.R. § 42.4. After CBM review is instituted, CBM review proceeds before the Board, and concludes with the Board’s “final written decision” pursuant to 35 U.S.C. § 328(a). Section 329 provides for appeal of that decision to this court. Thus the decision whether to initiate is not appealable, but the final decision is subject to review. *See In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1273 (Fed. Cir. 2015).

A

SightSound contends that we should set aside the final decision because the proceedings were improperly initiated since Apple did not explicitly raise the issue of obviousness in its petitions.³ The Board rejected this argument, explaining that Apple’s petitions supported review for obviousness because they explained in detail how the CompuSonics disclosures “teach every limitation of the claims . . . and describe similar features and relate

review under chapter 32 of title 35.” AIA § 18(a)(1). *See also Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1315 (Fed. Cir. 2015) (“*Versata II*”).

³ SightSound relies on 35 U.S.C. § 322(a)(3), which requires that a petition must recite “in writing and with particularity, each claim challenged, the grounds on which the challenge to each claim is based, and the evidence that supports the grounds for the challenge to each claim,” and 37 C.F.R. § 42.204(b), which requires a petition to include the “specific statutory grounds . . . on which the challenge to [each] claim is based.”

to each other.” J.A. 26. Because the CompuSonics references described various advantages of a system that would enable electronic music processing, “the references themselves demonstrate that a person of ordinary skill in the art would have been led to create a system for users to purchase and download music.” *Id.* at 40. The PTO and Apple argue that the statute and our prior decision in *In re Cuozzo Speed Technologies*, 793 F.3d at 1268, bars this Court from reviewing whether the Board properly initiated review when obviousness was not explicitly raised in the petitions. We agree.

In *Cuozzo* we considered § 314(d), applicable to inter partes review proceedings, which mirrors the bar on appeal in § 324(e). It provides that “[t]he determination by the Director whether to institute an inter partes review under this section shall be final and nonappealable.” 35 U.S.C. § 314(d). There, *Cuozzo* argued that the PTO improperly instituted inter partes review with respect to certain claims because it relied on prior art references not identified by the petitioner in its petitions contrary to the requirements of 35 U.S.C. § 312(a)(3). *Cuozzo*, 793 F.3d at 1272. We rejected *Cuozzo*’s challenge as barred by the statute. *Id.* at 1274. We held that § 314(d) “bar[s] review of all institution decisions, even after the Board issues a final decision.” *Id.* at 1273. We explained that generally institution decisions are not reviewable, and in particular a challenge based on a defect in the initiation that could have been cured by a proper pleading is not reviewable. *Id.* at 1274. Only limitations on the Board’s authority to issue a final decision are subject to review.

In *Achates Reference Publishing, Inc. v. Apple Inc.*, 803 F.3d 652 (Fed. Cir. 2015), we again considered alleged defects in the initiation of inter partes review. There, *Achates* argued that the Board improperly instituted inter partes review because the underlying petitions were time-barred under 35 U.S.C. § 315(b). Once again, we

rejected the argument as barred by the statute. *Achates*, 803 F.3d at 658. We explained that just as the pleading in *Cuozzo* could have been made “sufficient by the inclusion of the missing prior art reference . . . the [alleged] timeliness issue here could have been avoided if Apple’s petition had been filed a year earlier or if a petition identical to Apple’s were filed by another party.” *Id.* at 657. *Achates*’ argument thus challenged nothing more than the Board’s determination to institute inter partes review.

The same is true here. SightSound argues that the Board erred in considering obviousness because Apple failed to include such argument in its petitions. As in *Cuozzo*, the statute does not limit the Board’s authority at the final decision stage to grounds alleged in the CBM petitions. The reasoning of *Cuozzo* and *Achates* applies not only to § 314(d), involved in *Cuozzo* and *Achates*, but also to § 324(e), the identical provision applicable to CBM review. SightSound argues that the “under this section” language in § 324(e) only bars review of challenges to institution decisions based on the grounds specified in § 324(a) and (b). We reject this argument. Section 324(e) bars review of any institution decision. *Cuozzo* and *Achates* control, and the challenge is therefore barred by § 324.⁴ We also see no basis for mandamus relief on the Board’s initiation decision, because “the situation here is far from satisfying the clear-and-indisputable requirement for mandamus.” *Cuozzo*, 793 F.3d at 1275.

⁴ We see no merit in SightSound’s contention that the Board’s approach deprived it of due process, particularly in light of the Board’s care in giving SightSound multiple opportunities to comment on the obviousness issue beyond what was required.

B

SightSound also contends that the '573 and '440 patents are not CBM patents, and therefore the Board lacked authorization to review them. The PTO and Apple again argue that we are barred from reviewing this question. Here we disagree.

We previously addressed our jurisdiction to review the Board's determination of whether patents are CBM patents in *Versata II*. There we held that the question of whether a patent falls within the scope of the Board's authority under AIA § 18 as a CBM patent is a limitation on the Board's authority to issue a final decision and may be reviewed on appeal from a final written decision of the Board. *Id.* at 1319. While *Versata II* is limited to our review of Board determinations of whether a patent falls within its § 18 authority as a CBM patent, that is precisely the issue here. Accordingly, *Versata II* controls, and SightSound's contention that the Board lacked jurisdiction to review the '573 and '440 patents because they are not CBM patents is not barred by § 324(e).

II

CBM review is available only for patents that fall under the definition of a "covered business method patent." The statute defines that term:

For the purposes of this section, the term "covered business method patent" means a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions.

AIA § 18(d). There are three sources of PTO rulemaking relevant to CBM review. First, 35 U.S.C. § 326, which is

applicable to CBM review through the PGR provisions, grants the PTO authority to “prescribe regulations . . . setting forth the standards for the showing of sufficient grounds to institute a review.” 35 U.S.C. § 326(a)(2). Second, AIA § 18 grants the PTO general authority to “issue regulations establishing and implementing a transitional post-grant review proceeding for the review of the validity of covered business method patents.” AIA § 18(a)(1). Third, AIA § 18 grants the PTO specific authority with respect to the “technological inventions” element of the covered business method patent definition:

To assist in implementing the transitional proceeding authorized by this subsection, the Director shall issue regulations for determining whether a patent is for a technological invention.

AIA § 18(d)(2).

A

We need not decide whether *Chevron* deference applies because the only legal questions regarding application of AIA § 18 to the patents-at-issue were decided by *Versata II*. SightSound primarily contends that its patents are not CBM patents because to “relate to a financial product or service the invention as a whole must be directed to the management of money, banking, or investment or credit.” Appellant’s Br. 30. *Versata II* foreclosed this interpretation: “as a matter of statutory construction, the definition of ‘covered business method patent’ is not limited to products and services of only the financial industry, or to patents owned by or directly affecting activities of financial institutions.” 793 F. 3d at 1325. We explained that the interpretation proposed by SightSound would “require reading limitations into the statute that are not there.” *Id.* Here, the Board concluded that a “financial activity” not directed to money management or banking can constitute a “financial product or

service” within the meaning of the statute. J.A. 988; *accord* J.A. 556. *Versata II* directly supports this conclusion.

SightSound also contends that its patents are not CBM patents because they claim technological inventions, since they “recite a computer to transmit, and a second memory to store, digital signals in a way that prior art hardware units did not.” Appellant’s Br. 35 n.9. *Versata II* again foreclosed this interpretation: “the presence of a general purpose computer to facilitate operations through uninventive steps” in a patent does not render it a technological invention within the meaning of the statute. *Id.* at 1327. Claiming a computer without “specific, unconventional software, computer equipment, tools or processing capabilities” is insufficient. *Id.* Here, the Board concluded that a combination of known technologies does not amount to a “technological invention” within the meaning of the statute. J.A. 559–60, 993–94. *Versata II* also directly supports this conclusion.

B

We next address the Board’s determinations that the particular patents at issue are CBM patents. In this respect, we review the Board’s reasoning under the arbitrary and capricious standard and its factual determinations under the substantial evidence standard. “A reviewing court reviews an agency’s reasoning to determine whether it is ‘arbitrary’ or ‘capricious,’ or, if bound up with a record-based factual conclusion, to determine whether it is supported by ‘substantial evidence.’” *Dickinson v. Zurko*, 527 U.S. 150, 164 (1999). *See also In re Gartside*, 203 F.3d 1305, 1313–14 (Fed. Cir. 2000); Harry T. Edwards & Linda A. Elliot, Federal Standards of Review: Review of District Court Decisions and Agency Actions 167–169 (2007). In concluding that the ’573 and ’440 patents claim a method used in a financial product or

service, the Board explained that claim 1 of both the '573 and '440 patents is “directed to activities that are financial in nature, namely the electronic sale of digital audio.” J.A. 554, 988. The Board looked to the specifications, which repeatedly refer to electronic “sale,” “purchase,” and “money,” *e.g.*, '573 patent col. 1 ll. 9–14; col. 2 ll. 26–30; col. 2 ll. 51–58, and claims 3 and 4 of the '573 and '440 patents respectively, which recite “providing a credit card number of the second party . . . so the second party is charged money.” J.A. 555, 988. The Board concluded that “the electronic sale of something, including charging a fee to a party’s account, is a financial activity, and allowing such a sale amounts to providing a financial service.” J.A. 988; *accord* J.A. 556. The Board’s reasoning is not arbitrary or capricious and its findings are supported by substantial evidence.

The Board next explained that the '573 and '440 patents do not claim a “technological invention.” J.A. 560, 994. It found that, while the claims of both the '573 and '440 patents utilize technical components such as a “first memory,” “second memory,” “telecommunications line,” “transmitter,” and “receiver,” those components were all “generic hardware devices known in the prior art.” J.A. 559, 992. The Board also found that the combination of steps recited in the '573 and '440 patents did not amount to a technological feature that is novel and non-obvious over the prior art, because the steps would have been obvious in light of the CompuSonics references. The Board explained that “while we agree with Patent Owner that the steps in claim 1 must be implemented using the recited hardware . . . that does not mean necessarily that the patent is for a technological invention because the components themselves were known in the art.” J.A. 560, 993. Finding that the claims merely recited “known technologies to perform a method” and the “combination” of those technologies would have been obvious, the Board

concluded that the '573 and '440 patents did not claim a “technological invention.” J.A. 559–60, 993–94. The Board’s reasoning is not arbitrary or capricious and substantial evidence supports its findings here.

III

The next question is whether the Board here properly construed the relevant claims. The Board applied the broadest reasonable interpretation standard, the standard adopted by the PTO for AIA post-grant proceedings and approved by this court. *See Cuozzo*, 793 F.3d at 1278. We also apply the Supreme Court’s decision in *Teva Pharmaceuticals U.S.A., Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015). We review intrinsic evidence and the ultimate construction of the claim de novo. *See id.* We review underlying factual determinations concerning extrinsic evidence for substantial evidence. *Id.*

Claims 1 and 4 of the '573 patent and claims 1, 64, and 95 of the '440 patent include the term “second memory,” as in “[a] method for transmitting a desired digital audio signal stored on a first memory of a first party to a second memory of a second party.” '573 patent col. 6 ll. 4–24 (emphasis added). *See also id.* col. 6 ll. 37–56; '440 C1 patent col. 1 ll. 33–64, col. 8 ll. 14–44, col. 13 ll. 14–51. The two patents have a common specification and trace their origin to the same parent application. Where multiple patents “derive from the same parent application and share many common terms, we must interpret the claims consistently across all asserted patents.” *NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1293 (Fed. Cir. 2005). Here the claim term “second memory” should be interpreted the same in the '573 and '440 patents. The Board construed “second memory” in both patents as meaning “a second storage space in a computer system or medium that is capable of retaining data or instructions.” J.A. 15, 82. The specification notes

some disadvantages of the “three basic mediums (hardware units) of music” then available: “records, tapes, and compact discs.” *E.g.*, ’573 patent col. 1 ll. 17–20; ’440 patent col. 1 ll. 24–26. Addressing the language in the specification, the Board appeared to conclude that “second memory” would not exclude those three media based on the specification, because the Board required a “clear disclaimer” in the specification to overcome the ordinary meaning and to exclude records, tapes, and CDs. J.A. 13, 82.

The Board’s analysis in this respect was incorrect. Claims “must be read in view of the specification, of which they are a part.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2004) (en banc). We have explained that the specification is “the single best guide to the meaning of a disputed term and that the specification acts as a dictionary when it expressly defines terms used in the claims *or when it defines terms by implication.*” *Id.* at 1321 (citation and internal quotation marks omitted) (emphasis added). Thus “a claim term may be clearly redefined without an explicit statement of redefinition.” *Id.* (quoting *Bell Atl. Network Servs.*, 262 F.3d 1258, 1268 (Fed. Cir. 2011)). We followed this approach in *In re Abbott Diabetes Care Inc.*, 696 F.3d 1142 (Fed. Cir. 2012), where we held that the claim term “electrochemical sensor” excluded cables and wires based on critical language in the claims and specification, despite their having been no explicit disclaimer of cables or wires. *See id.* at 1149–50. *See also Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1329 (Fed. Cir. 2009). The disadvantages identified by the specification of records, tapes, and CDs amount to implied disclaimer of those three media. *See, e.g.*, ’573 patent col. 1 ll. 17–20; ’440 patent col. 1 ll. 24–26. Thus we disagree with the Board’s interpretation insofar as it included records, tapes, and CDs in its construction of “second memory.”

Nonetheless, the Board did not err in rejecting SightSound's contention that floppy disks—a medium referenced in the CompuSonics prior art—should also be excluded. SightSound contends that the correct construction should exclude “*all removable memory* sharing the attributes of the prior art tapes and CDs distinguished in the specification and throughout prosecution,” i.e., that it should exclude floppy disks. Appellant's Br. 55 (emphasis added). SightSound argues that the specification and prosecution histories make clear that a removable “second memory” would not fulfill the purpose of the invention to overcome the disadvantages of records, tapes, and CDs, and therefore the patents expressly disclaimed all removable memory from the scope of “second memory,” limiting it to a non-removable hard disk.

The Board rejected this argument. The Board found, and we agree, that the specification's description of the disadvantages of records, tapes, and CDs does not “indicate that the identified disadvantages extend to all removable media or that the disadvantages occur specifically because the devices are removable. . . . To the contrary, some of the identified disadvantages, like limited capacity and playback capability, have nothing to do with whether the device can be removed.” J.A. 12, 81. The specification suggests that the patent's objective was not to overcome the alleged disadvantages associated with the removable nature of the three hardware units, as SightSound suggests, but rather to overcome the disadvantages associated with distributing the three types of units: “hardware units need to be physically [transferred] from the manufacturing facility to the wholesale warehouse to [the] retail warehouse to the retail outlet, resulting in [lengthy], lag time between music creation and music marketing.” '573 patent col. 1 ll. 39–43; '440 patent col. 1 ll. 45–49. These disadvantages would not apply to storing digitally purchased music on a floppy disk, for

example. *See* '573 patent col. 1 ll. 39–49; '440 patent col. 1 ll. 45–54. Accordingly, SightSound's reading of "secondary memory" to exclude all removable media is not supported by the specification.

The Board also reviewed the prosecution history and found certain statements contradicting SightSound's proposed limitation, including one made by the named inventor, Arthur R. Hair, that "[a]ny suitable recording apparatus controlled and in possession of the second party can be used to record the incoming digital signals." J.A. 14. What is more, the original claims expressly recited a "hard disk," but that language was removed in favor of the broader term "second memory." J.A. 15. The Board concluded that this "deliberate choice" to use the broader term "second memory" instead of the narrower "hard disk" strongly supports that the two are not coextensive. *Id.*; *see Arlington Indus., Inc. v. Bridgeport Fittings, Inc.*, 632 F.3d 1246, 1255 (Fed. Cir. 2011).

The doctrine of claim differentiation additionally supports the Board's construction that "second memory" is not limited to a non-removable hard disk. Claim 1 of the '440 patent recites a method for transferring desired digital video or audio signals by "forming a connection through telecommunications lines between a first memory of a first party and a second memory of a second party control unit of a second party." '440 C1 patent col. 1 ll. 34–37. Claim 64 of the '440 patent contains nearly identical language, but adds the following limitation: "forming a connection through telecommunications lines between a first memory of a first party and a second memory of a second party control unit of a second party, the second memory including a second party hard disk." '440 C1 patent col. 8 ll. 16–18 (emphasis added). This distinction further underscores that "second memory" must be different from a non-removable "hard drive," because otherwise the additional language of claim 64

would be redundant. J.A. 79; see *Arlington Indus., Inc.*, 632 F.3d at 1254–55. The intrinsic and extrinsic evidence both support construing “second memory” as not limited to a non-removable hard disk. We see no error in the Board’s ultimate conclusion that the term “second memory” includes floppy disks.

IV

The final question is whether the Board properly determined that the claims would have been obvious. We review the Board’s factual findings for substantial evidence and its legal conclusions de novo. *Cuozzo*, 793 F.3d at 1280 (citing *In re Baxter Int’l, Inc.*, 678 F.3d 1357, 1361 (Fed. Cir. 2012)). The ultimate determination of obviousness under § 103 is a question of law based on underlying factual findings. *Id.* (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966)). What a reference teaches and the differences between the claimed invention and prior art are questions of fact which we review for substantial evidence. *Id.*

The Board found that “Apple explains in detail in its Petition[s] how the CompuSonic publications teach every limitation” of the primary claims. J.A. 31, 54, 98. SightSound conceded that the CompuSonic publications “describe prior art elements working according to their established functions in a predictable manner,” but argued that a skilled artisan would have had no reason to combine those elements. J.A. 38, 105. The Board rejected this argument, finding that the references “expressly contemplate that it would be commercially desirable to have a system that allowed users to buy” and store music and video electronically. J.A. 39, 55, 106. Finding that the reason to combine was manifested by the references themselves, see *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1125 (Fed. Cir. 2000), the Board thus concluded that a person of ordinary skill

in the art would have had reason to combine the teachings of the CompuSonic references.

As for claims 1, 2, 4, and 5 of the '573 patent and claim 1 of the '440 patent, SightSound argues that the Board erred in rejecting objective indicia of non-obviousness. On appeal, SightSound contends only that the Board lacked substantial evidence to conclude that there was no nexus between the success of the iTunes Music Store ("iTMS") and the claimed invention. To establish a proper nexus between a claimed invention and the commercial success of a product, a patent owner must offer "proof that the sales were a direct result of the unique characteristics of the claimed invention—as opposed to other economic and commercial factors unrelated to the quality of the patented subject matter." *In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996). If a product both "embodies the claimed features" and is "coextensive" with the claims at issue, "a nexus is presumed." *Brown & Williamson*, 229 F.3d at 1130. In other words, a nexus exists if the commercial success of a product is limited to the features of the claimed invention. But "if the commercial success is due to an unclaimed feature of the device" or "if the feature that creates the commercial success was known in the prior art, the success is not pertinent." *Ormco Corp.*, 463 F.3d 1299, 1312 (Fed. Cir. 2006). Here the Board found that "iTMS embodies numerous inventions other than the general purchasing and downloading of music relied upon by SightSound." J.A. 46, 113. The Board further found that SightSound failed to offer proof that the commercial success of iTMS is the direct result of a unique characteristic of the claimed invention, noting that there was "persuasive evidence that the commercial success of the iTMS is due to features other than those of the claimed methods." *Id.* at 47, 114.

Specifically, the Board relied on the testimony of Lawrence Kenswil, former employee of the Universal

Music Group and board member of the Recording Industry Association of America with over 25 years of experience in the music industry, who explained how content selection and the user interface were predominantly responsible for iTunes' commercial success. SightSound objects to Mr. Kenswil's reliance on certain other features, such as Genius and five-star and song-by-song popularity ratings, which were not available until 2008—long after the commercial success of iTunes had been established. Even putting these features to one side, the Board's findings are supported by substantial evidence because the two primary features posited as responsible for the commercial success of iTunes—content selection and user interface—were present from the beginning. The Board found that iTunes was successful largely because of its ability to acquire licensed content from the major record labels. SightSound admits that its inability to do the same was in part responsible for its failed business model. We see no error in the Board's conclusion that claims 1, 2, 4, and 5 of the '573 patent and claim 1 of the '440 patent would have been obvious.

SightSound also argues that the Board erred in finding that claims 64 and 95 of the '440 patent would have been obvious. Claims 64 and 95 of the '440 patent recite similar limitations to claim 1, but expressly require that the digital video or audio signals be stored in a “second party hard disk.” SightSound contends that it would not have been obvious to employ a hard disk to store purchased and received digital signals. SightSound acknowledges that CompuSonics “professional” devices taught using a hard disk for a similar purpose, but argues that because CompuSonics’ “consumer” devices used only floppy disks, a skilled artisan would not have sought a hard disk for the patented purposes. Appellant's Br. 66–67.

We have explained that that the “mere disclosure of more than one alternative” does not amount to teaching away from one of the alternatives where the reference does not “criticize, discredit, or otherwise discourage the solution claimed.” *In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004). The Board here found that the publications “do not criticize the use of a hard disk for storing or receiving signals,” nor do they indicate that such a use “would have been undesirable.” J.A. 125. To the contrary, the Board found that at least one publication disclosed a “benefit to using a hard disk rather than other types of storage,” namely, greater storage capacity. *Id.* Additionally, the Board found that it would have been obvious to utilize a hard disk to store purchased and received digital signals because doing so would only require a hard disk to function for its known purpose of storing digital data: “we do not see sufficient reason why using a hard disk rather than a floppy disk would have achieved an unexpected result or would have been uniquely challenging or otherwise beyond the level of an ordinarily skilled artisan.” J.A. 124. The Board’s findings are supported by substantial evidence. The same secondary considerations of non-obviousness apply to claims 64 and 95 of the ’440 patent as discussed above, and the Board did not err in concluding that claims 64 and 95 of the ’440 patent would have been obvious.

For the foregoing reasons, we affirm the Board’s decision.

AFFIRMED

COSTS

Costs to appellee.