

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

VIRENTEM VENTURES, LLC,
Patent Owner.

Case IPR2019-01247
Patent No. 7,043,433

PATENT OWNER'S NOTICE OF APPEAL

Office of the General Counsel
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450

Pursuant to 35 U.S.C. §§ 141-144 and 319, and 37 C.F.R. §§ 90.2 and 90.3, notice is hereby given that Patent Owner Virentem Ventures, LLC (“Virentem”) appeals to the United States Court of Appeals for the Federal Circuit from the Final Written Decision entered March 5, 2021 (Paper No. 34) by the U.S. Patent and Trademark Office, Patent Trial and Appeal Board (“Board”), and from all underlying findings, determinations, rulings, orders, and decisions regarding IPR2019-01247 and its Final Written Decision. A copy of the Final Written Decision is attached hereto as Exhibit A.

In accordance with 37 C.F.R. § 90.2(a)(3)(ii), Virentem further indicates that the issues on appeal may include, but are not limited to:

(1) the Board’s determination that Petitioner Google LLC met its burden of proving by a preponderance of the evidence that claims 1-4 and 7-9 of U.S. Patent No. 7,043,433 (“’433 Patent”) are unpatentable under 35 U.S.C. §§ 102 or 103, including whether Petitioner established a motivation to combine the asserted references;

(2) the Board’s claims constructions and other legal interpretations of claims

1-4 and 7-9 of the '433 Patent, including whether the Board properly applied the standards for claim construction set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005);

(3) the Board's findings that conflict with the evidence of record and are not supported by substantial evidence;

(4) the Board's impermissible shifting of the burden to Virentem to show patentability in violation of 35 U.S.C. § 316(e), 5 U.S.C. § 556(d), and 37 C.F.R. § 42.20(c);

(5) whether the determinations by the members of the Board in this proceeding, including the determination that claims 1-4 and 7-9 of the '433 Patent are unpatentable, are unconstitutional in view of, among other things, the principles in *Arthrex, Inc. v. Smith & Nephew, Inc.*, 941 F.3d 1320 (Fed. Cir. 2019); and

(6) all other issues decided adversely to Virentem.

Pursuant to 37 C.F.R. § 90.3, this Notice of Appeal is timely, having been filed within 63 days after the date of the Final Written Decision.

Pursuant to 35 U.S.C. § 142 and 37 C.F.R. § 90.2(a), true and correct copies of this Notice of Appeal are being filed simultaneously with the Patent Trial and Appeal Board and the Clerk's Office for the United States Court of Appeals for the

Federal Circuit, along with the required docketing fee, and served on the Director of the Patent and Trademark Office, as described in the accompanying Certificate of Filing and Service. Furthermore, a copy of this Notice of Appeal is being served on Petitioner Google LLC.

Dated: May 3, 2021

Respectfully submitted,

By /s/ Lauren N. Robinson

Lauren N. Robinson, Lead Counsel

Reg. No. 74,404

Denise M. De Mory, Back-Up Counsel

(pro hac vice)

Bunsow De Mory LLP

701 El Camino Real

Redwood City, CA 94063

T: 650-351-7248

F: 415-426-4744

lrobinson@bdiplaw.com

ddemory@bdiplaw.com

BDIP_IPR_Virentem_Service@bdiplaw.com

Counsel for Patent Owner

CERTIFICATE OF SERVICE

The undersigned hereby certifies that, in addition to being filed electronically through the Patent Trial and Appeal Board's End to End System (PTAB E2E), the foregoing PATENT OWNER'S NOTICE OF APPEAL was served by Express Mail, tracking number 9470 1116 9900 0285 7746 19, May 3, 2021, on the Director of the United States Patent and Trademark Office, at the following address:

Office of the General Counsel
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450

In addition, the undersigned certifies that a copy of the foregoing Notice of Appeal, along with the required docket fee, was filed on May 3, 2021, with the Clerk's Office for the United States Court of Appeals for the Federal Circuit through the Court's CM/ECF filing system.

The undersigned certifies pursuant to 37 C.F.R. § 42.6(e) that a true copy of the foregoing PATENT OWNER'S NOTICE OF APPEAL has been served in its entirety on May 3, 2021, by electronic mail on the Petitioner via its attorneys of record:

Naveen Modi
Joseph E. Palys
Daniel Zeilberger
Howard Herr
Paul Hastings LLP
875 15th St. N.W.,
Washington, D.C., 20005,
Tel.: 202.551.1700,
Fax: 202.551.1705,
PH-Google-Virentem-IPR@paulhastings.com.

/s/ Lauren N. Robinson

Lauren N. Robinson, Lead Counsel
Reg. No. 74,404

Bunsow De Mory LLP

701 El Camino Real

Redwood City, CA 94063

T: 650-351-7248

F: 415-426-4744

lrobinson@bdiplaw.com

BDIP_IPR_Virentem_Service@bdiplaw.com

Lead Counsel for Patent Owner

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

VIRENTEM VENTURES, LLC,
Patent Owner.

IPR2019-01247
Patent 7,043,433 B2

Before MEREDITH C. PETRAVICK, BRYAN F. MOORE, and
TERRENCE W. MCMILLIN, *Administrative Patent Judges*.

MOORE, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

A. *Background and Summary*

Google LLC (“Petitioner”) filed a Petition (“Pet.,” Paper 1) pursuant to 35 U.S.C. § 311 to institute an *inter partes* review of claims 1–4 and 7–9

of U.S. Patent No. 7,043,433 B2 (“the ’433 patent,” Ex. 1001) pursuant to 35 U.S.C. § 311 *et seq.* The Petition is supported by the Declaration of Dan Schonfeld, Ph.D. (Ex. 1002). Virentem Ventures, LLC (“Patent Owner”) filed a Preliminary Response (“Prelim. Resp.,” Paper 12). On March 9, 2020, we instituted trial. Paper 14 (“Inst. Dec.”). Patent Owner filed a Response. Paper 24 (“PO Resp.”). Petitioner filed a Reply. Paper 27 (“Reply”). Patent Owner filed a Sur-Reply. Paper 29 (“Sur-Reply”). An oral argument was held on December 4, 2020, and a transcript was entered into the record. Paper 33 (“Tr.”).

We have jurisdiction to conduct this *inter partes* review under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed herein, we determine that Petitioner has shown, by a preponderance of the evidence, that claims 1–4 and 7–9 of the ’433 patent are unpatentable.

B. Real Parties in Interest

Petitioner names Google LLC and YouTube LLC as the real parties-in-interest. Pet. 1.

C. Related Matters

The parties advise us that the ’433 patent is asserted against a real party in interest in *Virentem Ventures, LLC v. YouTube, LLC*, 1:18-cv-917 (D. Del.) (“the related litigation”). Pet. 1; Paper 4, 1.

D. The ’433 Patent

The ’433 patent relates to the “creation and presentation of media works to audiences.” Ex. 1001, 1:11–14. Specifically, to “creation and presentation of media works in accordance with audience affinity and/or aptitude and to determinations of audience affinity and/or aptitude.” *Id.* at 1:14–18.

E. Illustrative Claims

Challenged claims 1, 3, 7, 8, and 9 are independent claims. Challenged claim 2 depends directly from claim 1 and claim 4 depends directly from claim 3. Claim 1, reproduced below, is illustrative.

1. A method for inferring audience affinity or aptitude with regard to content or properties of portions of a media work which comprises:
 - presenting the media work to an audience;
 - obtaining user input regarding presentation rates for the portions of the media work;
 - correlating the content or properties of the portions with the presentation rates; and
 - associating audience affinity or aptitude with the presentation rates for the correlated content or properties.

Ex. 1001, 70:44–54.

F. Evidence

Petitioner relies on the following references. Pet. 8–75.

Name	Reference	Exhibit
Rochkind	US 5,848,130, filed Dec. 31, 1996, issued Dec. 8, 1998	1005
Walker	US 5,802,533, filed Aug. 7, 1996, issued Sept. 1, 1998	1006
Bhadkamkar	US 5,893,062, filed Dec. 5, 1996, issued Apr. 6, 1999	1007
Ottesen	US 5,778,135, filed Dec. 30, 1994, issued July 7, 1998	1008
Mauldin	US 5,664,227, filed Oct. 14, 1994 issued Sept. 2, 1997	1009
Iggulden	US 5,696,866, filed Sept. 12, 1994, issued Dec. 9, 1997	1013

G. Prior Art and Asserted Grounds

Petitioner contends that claims 1–4 and 7–9 would have been unpatentable on the following grounds:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
3, 4, 9	102(a)	Rochkind
9	103(a)	Mauldin, Bhadkamkar
1, 7	103(a)	Walker, Bhadkamkar
2	103(a)	Walker, Bhadkamkar, Iggulden
8	102(a)	Ottesen

II. ANALYSIS

A. Legal Standards

A claim is anticipated if a single prior art reference either expressly or inherently discloses every limitation of the claim. *Orion IP, LLC v. Hyundai Motor Am.*, 605 F.3d 967, 975 (Fed. Cir. 2010). Although the elements must be arranged or combined in the same way as in the claim, “the reference need not satisfy an ipsissimis verbis test,” i.e., identity of terminology is not required. *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009) (citing *In re Bond*, 910 F.2d 831, 832–33 (Fed. Cir. 1990)) (emphasis omitted).

A patent claim is unpatentable under 35 U.S.C. § 103 if the differences between the claimed subject matter 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 to which said subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3)

the level of ordinary skill in the art; and (4) objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

In that regard, an obviousness analysis “need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR*, 550 U.S. at 418.

B. Level of Ordinary Skill in the Art

Petitioner contends a person of ordinary skill in the art at the time of invention would have had

either (a) a Master’s or doctoral degree in computer science, electrical engineering, or a similar discipline; or (b) a Bachelor’s degree in computer science, electrical engineering, or a similar discipline and at least two years of work experience in content presentation systems, or a related area.

Pet. 4–5 (citing Ex. 1002 ¶¶ 19–20.). Patent Owner does not dispute this contention. *See generally* PO Resp. We adopt Petitioner’s articulation of the level of skill and determine that the level of ordinary skill in the art is also reflected by the prior art of record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978).

C. Claim Construction

Because the Petition was filed after November 13, 2018, we construe the challenged claims by applying “the standard used in federal courts, in other words, the claim construction standard that would be used to construe

the claim in a civil action under 35 U.S.C. [§] 282(b), which is articulated in *Phillips [v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (en banc)]*.”¹

Further, “[a]ny prior claim construction determination concerning a term of the claim in a civil action, or a proceeding before the International Trade Commission . . . that is timely made of record in [the *inter partes* review] proceeding will be considered.”² *Id.* at 51,340.

Under the standard set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–19 (Fed. Cir. 2005) (en banc), claim terms are given their ordinary and customary meaning, as would have been understood by a person of ordinary skill in the art at the time of the invention, in light of the language of the claims, the specification, and the prosecution history of record. *See Thorner v. Sony Comput. Entm’t Am. LLC*, 669 F.3d 1362, 1365–66 (Fed. Cir. 2012). There is a “heavy presumption,” however, that a claim term carries its ordinary and customary meaning. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) (citation omitted).

We are also guided by the principle that we only construe claim terms if, and to the extent that, it is necessary for the purpose of the proceeding. *See, e.g., Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011) (“[C]laim terms need only be construed ‘to the extent necessary to resolve the controversy.’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

¹ *See* Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340, 51,343 (amending 37 C.F.R. § 42.100(b) effective November 13, 2018) (now codified at 37 C.F.R. § 42.100(b) (2019)).

² The District Court presiding over the litigation between the parties involving the ’433 patent issued an order construing certain claim terms (Ex. 2011), which we have considered.

1. “*aptitude*”

Petitioner offers a construction for the term “aptitude,” which appears in the phrase “associating audience affinity or aptitude with the presentation rates for the correlated content or properties” in claim 1, “associating the audience affinity or aptitude associated with the detected content or properties with a presentation rate for the portion” in claim 3, and “correlating the presentation rates with the aptitude for the content or properties of the portions” in claim 7 of the ’433 patent. Pet. 6–7; Ex. 1001, 70:53–54, 70:62–64, 71:30–31. Petitioner proposes the term means “comprehension.” Pet. 7. Petitioner contends

[t]his construction is consistent with the specification of the ’433 patent, which states that “[t]he Audience (listener) input serves as a proxy for the Audience’s . . . aptitude for (this may also be referred to herein as ability to comprehend) the [media work] . . . and will be referred to herein as . . . Audience Aptitude” and that “an Audience member . . . might want to slow down some portion of the [media work] . . . if the Audience member . . . was having difficulty comprehending the portion” (*Id.*, 16:15-28 (emphasis added); *see also id.*, 5:29-32, 6:20-24, 7:23-27, 22:41-45, 23:65-67, 61:28-29, 67:58-60, 67:66 (“aptitude (comprehension rates)”), 68:31-32 (“aptitude (comprehension rate)”), 69:26-27 (“aptitude (comprehension rate)”); Ex. 1002, ¶ 47.).

Pet. 7 (emphasis omitted).

Patent Owner argues that “aptitude” means “level of comprehension, familiarity, or proficiency.” PO Resp. 15. Patent Owner cites to portions of the Specification that associate aptitude with familiarity and proficiency. *Id.* (citing Ex. 1001, 6:20–24, 7:23–27, 61:17–39, Fig. 21; Ex. 2016 ¶¶ 31–33).

Patent Owner does not argue that its broader construction distinguishes a claim limitation from the asserted prior art. *See* PO Resp.

15–16. Given the parties agreement at least to the term “comprehension,” we determine that “aptitude” means at least “comprehension.”

2. *“presentation rate” and “time-scale modification”*

We analyze the terms “presentation rate” and “time-scale modification” (also referred to as “TSM”) together. The term “presentation rate” is recited in challenged claims 1 and 7. Ex. 1001, 70:44–67, 71:25–72:15. “Time-scale modification” is not recited in any claim of the ’433 patent. *Id.* at 70:44–72:30. However, Patent Owner argues that the term “time-scale modification” is incorporated in all the claims by virtue of the definition of “presentation rate.” PO Resp. 17; Dec. to Inst., 7–8; Ex. 2011, 2; Ex. 2016 ¶¶ 28, 44. Patent Owner contends that “presentation rate” means “the speed at which media is played back in a time[-]scale modification system” and that “time-scale modification” means “speeding up and slowing down the perceived rate of speech while substantially preserving both intelligibility and the perceived pitch for audio and audio-visual media.” *Id.* 17–26. Petitioner argues that neither of Patent Owner’s proposed constructions should be adopted. Reply 4–7. Petitioner also contends, without explanation, that if “time-scale modification” is construed it should mean “playback rate modification.” Reply 4.

Patent Owner cites the Specification for support of this construction. PO Resp. 17. Specifically, Patent Owner argues:

The agreed-upon construction aligns with the ’433 specification, which recognizes that the ’433 Patent is directed to the field of Time-Scale Modification (“TSM”) and consistently uses the term “presentation rate” to describe the rate of media playback when TSM is employed, or in other words, the TSM rate (which is synonymous with presentation rate). *See, e.g.*, EX1001, 17:3-5, 18:35, 19:26-27, 19:37-38, 21:14, 22:23, 68:30-

31, FIG. 1-4, 6, 8-12, 22-30; EX2011, 11, 16; *see also* EX2016, ¶¶45, 59.

Id. As shown above, Patent Owner cites several places in the Specification for this proposition. In fact, the Specification recites “PR (TSM rate)” 70 times and “PR (TSM rate and playback rate)” 56 times. *See generally*, Ex. 1001.

Equating the terms using a parenthetical can be done only when it is consistent with the use of these terms throughout the Specification. *See Purdue Pharma L.P. v. Boehringer Ingelheim GMBH*, 237 F.3d 1359, 1364–65 (Fed. Cir. 2001) (determining that a parenthetical is not definitional because of other evidence in the specification and the record).

Although the Specification associates presentation rate with TSM rate, the Specification also explicitly defines “presentation rate” broadly as “information that can be used to obtain a rate at which a Media Work (‘MW’) is presented to an Audience. The information may be an identifier of a source of the rate which can be obtained using Media Work Communication Technology (‘MWCT’).” Ex. 1001, 11:26–31. Additionally, Patent Owner’s expert admits that there is an “important” difference between TSM rate and presentation rate. Ex. 2016 ¶ 59. He testifies “A presentation rate or playback rate can include playing at rate 1 or normal, while a TSM rate involves speeding up or slowing down the audio or audio-visual work using Time-Scale Modification.” *Id.* This cuts against Patent Owner’s argument and is consistent with the broad definition of presentation rate in the Specification.

Thus, as confirmed by Patent Owner’s declarant, the Specification has a broader definition of presentation rate than TSM rate. Ex. 1001, 11:26–31;

Ex. 2016 ¶ 59. For this reason, we do not equate the term “presentation rate” with the term “TSM rate.”

As stated above, Patent Owner requests that we explicitly construe the term “time-scale modification.” PO Resp. 17–26. This term does not appear in any of the challenged claims. In fact Patent Owner’s declarant testifies “the ’433 Patent is not about any specific techniques used to do Time-Scale Modification of media itself.” Ex. 2016 ¶ 16.

As an initial matter, that “we do not ordinarily construe words that are not in claims.” *Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1334 (Fed. Cir. 2009); *see also Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 339 (1961) (“[T]he claims made in the patent are the sole measure of the grant.”). Nevertheless, we can consider Patent Owner’s contentions and construe “time-scale modification” if necessary. *Advanced Fiber Techs. Trust v. J & L Fiber Servs., Inc.*, 674 F.3d 1365, 1373 (Fed.Cir. 2012) (finding that a court may construe a term found only in the construction, and not in the claims, if the correct construction of a claim term necessitates it). In performing this so-called “derivative construction,” the Court must apply “established claim construction principles,” just as if it was interpreting claim language in the first instance with the ultimate goal of elucidating the proper meaning of the actual claim terms. *See Advanced Fiber Techs.*, 674 F.3d at 1374.

With regard to “time-scale modification,” Patent Owner proposes a construction that it proposed in the District Court and that was rejected by the District Court. PO Resp. 17; Ex. 2011, 8.³ The District Court construed

³ Patent Owner notes that the District Court granted it leave to renew a motion for reconsideration of the court’s construction of “time-scale

“time-scale modification/time-scale modified” as meaning “speeding up or slowing down the playback rate.” Ex. 2011, 8. Patent Owner argues TSM should be construed to mean “speeding up or slowing down the playback rate of audio or audio-visual media, while maintaining pitch and intelligibility.” PO Resp. 17. Patent Owner argues the District Court’s construction “is an incomplete definition.” *Id.* at 18. Patent Owner does not explain sufficiently why we should adopt the District Court’s construction of “presentation rate” and at the same time incorporate into the challenged claims a definition of “time-scale modification” that the District Court rejected. By incorporating a definition of “time-scale modification” that was rejected by the District Court into the challenged claims by adopting the District Court’s construction of “presentation rate,” we would be construing the claims in a manner inconsistent with the District Court.⁴

Petitioner’s position on construction of “presentation rate” is inconsistent with the “agreed-upon”⁵ position it took before the District Court. In this proceeding, Petitioner argues, “[Patent Owner’s] construction improperly incorporates limitations by requiring playback to occur ‘in a timescale modification system.’ Nothing in the record supports reading ‘timescale modification system’ into the claims.” Reply 2. Despite the

modification” such that the construction is not yet final. PO Resp. 18 n.2 (citing Ex. 2033).

⁴ Patent Owner suggests that the District Court’s claim construction is not controlling. PO Sur-Reply 13 (“The Delaware district court has already agreed that its claim construction may need to be revisited to arrive at the correct construction following the IPR proceedings, recognizing that the Board may reach a different conclusion.”) (citing Ex. 2033, 1–2).

⁵ Petitioner assert there was a lack of dispute rather than an agreement on the meaning of “presentation rate” and “time-scale modification.” Reply 1.

inconsistencies in Petitioner’s position, we agree with Petitioner that “time-scale modification” should not be read into the challenged claims through construction of “presentation rate.”

We determine that “presentation rate” should be interpreted consistent with its definition in the Specification and according to its ordinary and customary meaning of “the speed of presentation.” We believe this meaning is consistent with the portion of the District Court’s construction of “presentation rate” as “the speed at which media is played back” and the Specification’s definition of “presentation rate” as “information that can be used to obtain a rate at which a Media Work (‘MW’) is presented to an Audience.” As cited previously, there is a “heavy presumption” that a claim term has its ordinary and customary meaning. *CCS Fitness*, 288 F.3d at 1366. We have not been presented with sufficient evidence to overcome that heavy presumption. Patent Owner relies only on the association of TSM rate and presentation rate in the Specification and on the agreement of the parties in District Court. PO Resp. 17. Based on our independent analysis of the ’433 patent and its file history, we do not discern sufficient support for incorporating “in a time-scale modification system” into the meaning of “presentation rate” as recited in the claims of the ’433 patent or otherwise limiting the construction of “presentation rate” from its ordinary and customary meaning.

Thus, we construe the term “presentation rate” differently than the District Court, because the records in the District Court case and in this proceeding relating to construction of “presentation rate” are different.⁶ In

⁶ In related IPRs such as IPR2019-01245, the Patent Owner failed to argue the relation between TSM rate and presentation rate in the way it does here and the Specification in IPR2019-01245 explicitly stated “Although the

the District Court proceeding, there was a construction of “presentation rate” that was agreed to by the parties. *See* Ex. 2004, 109:3–110:10. In this proceeding, there is a dispute between the parties as to the construction of “presentation rate.” *Compare* PO Resp. 17, *with* Reply 1–2. However, our conclusion that the challenged claims of the ’433 patent would have been unpatentable in view of the asserted art would not be different under either our construction or the District Court’s construction of “presentation rate,” as explained below.

Having determined that the proper construction of “presentation rate” in the challenged claims of the ’433 patent does not include “in a time-scale modification system,” we nonetheless construe “time-scale modification” in light of Petitioner’s agreement before the District Court to the construction of “presentation rate” as “the speed at which media is played back in a time-scale modification system.” We reject Patent Owner’s proposed construction of “time-scale modification system,” because, as explained below, we discern no basis for limiting the claims of the ’433 patent to

detailed description used the terms playback rate and TSM rate, and the terms playback and playback apparatus, ***these terms should be understood to include any type of presentation rate*** (i.e., a rate of presentation of information) and any type of presentation apparatus. As such, ***these terms are to be understood as being used in the broadest sense.***” IPR2019-01245, (Paper 41) Final Written Dec. 20 (quoting Ex. 1001, 42:60–66). As such, there are different arguments and different specifications regarding TSM rate in this IPR. For example, in related IPR IPR2019-01239 and IPR2019-01241, the term at issue was “default presentation rate,” and the “default rate” was defined in the Specification of the challenged patent as the normal rate of play. IPR2019-01239, (Paper 39) Final Written Dec. 19, IPR2019-01241, (Paper 38) Final Written Dec. 21–22, IPR2019-01243, (Paper 39) Final Written Dec. 18–19. Nevertheless, for the reasons described in this decision, we determine it is proper that we arrive at the same construction in this IPR as the related IPRs.

“speeding up and slowing down the perceived rate of speech while substantially preserving both intelligibility and the perceived pitch for audio and audio-visual media” through recitation of “presentation rate” as requested by Patent Owner. *See* PO Resp. 17–26.

Below we examine the intrinsic and extrinsic evidence with regard to “time-scale modification.”

Intrinsic Evidence - Specification

Patent Owner argues the ’433 Patent identifies the field as “creation and presentation of media works to audiences including, without limitation, audio and audio-visual works.” PO Resp. 18 (quoting Ex. 1001, 1:12–14) (emphasis omitted). Patent Owner further notes “[t]he specification generally uses the phrase ‘Time-Scale Modification’ (and variations thereof, such as ‘Time-Scale Modified’) as a capitalized term. *See, e.g.,* EX1001, 1:22, 14:42-43, 17:4-5, 17:47, 18:26-27, 18:37, 18:50, 27:62, 28:37, 28:42, 28:53, 39:61, 39:66, 41:14.” *Id.* at 18–19. Patent Owner does not argue the significance of it being a capitalized term but suggests that this infers a definition of the term. Thus, to the extent Patent Owner suggests capitalization infers a definitional statement, Patent Owner’s argument is unpersuasive because Patent Owner does not cite or explain any authority in support of its proposition that a patentee’s capitalization of a term in a specification indicates an intent to define it. *See e.g. Barkan Wireless Access Techs., L.P. v. Cellco P’ship*, 748 F. App’x 987, 991 (Fed. Cir. 2018) (“We also cannot conclude ‘Access Point’s’ capitalization necessarily designates a definition.”) (unpublished).

Specification Focus on Audio

Patent Owner argues that the first introduction of TSM in the Specification recites that “[p]resently known methods for Time-Scale

Modification (‘TSM’) enable digitally recorded audio to be modified so that a perceived articulation rate of spoken passages, i.e., a speaking rate, can be modified dynamically during playback.” PO Resp. 19 (quoting Ex. 1001, 1:22–25) (emphasis omitted). Patent Owner also points out “[t]he specification further explains that in a LD-TSM application, ‘a listener can control the speaking rate during playback of a previously recorded speaker.’” *Id.* (quoting Ex. 1001, 1:29–33) (emphasis omitted). In that application, according to Patent Owner, “‘the use of the TSM method...enables the sped-up or slowed-down speech or audio to be presented intelligibly at the increased or decreased playback rates,’ so that ‘a listener can readily comprehend’ the content.” *Id.* (quoting Ex. 1001, 1:36–42, citing 1:22–40:4) (emphasis omitted). Patent Owner argues that the term intelligibility is “typically associated with speech,” citing Petitioner’s expert, and thus, the ’433 Patent’s references to “‘intelligibility’ would have indicated to a POSITA that the Specification was referring to TSM of works including audio, that is, audio or audio-visual works.” *Id.* at 20 (citing Ex. 2015, 107:7–108:9; Ex. 2016 ¶¶ 50–53).

Patent Owner also argues the ’433 Specification’s specific embodiments relate to media that includes audio. *Id.* at 20–21 (citing Ex. 1001, 1:51–55, 1:62–63; Ex. 2016 ¶ 54). As explained *supra*, Patent Owner argues the Specification consistently recites that media works include audio. *Id.* at 21 (citing Ex. 2016 ¶¶ 34–7, 54, 55). Patent Owner also notes that specific embodiments explain how to sync a video stream to audio when the audio is time-scale modified. *Id.* at 21–22 (citing Ex. 1001, 17:65–18:67). Additionally, Patent Owner argues that “[t]hroughout the specification, components of the invention are repeatedly described as ‘TSM’ components,” tying TSM to those audio embodiments. *Id.* at 22.

Patent Owner also argues “[t]he ’433 Patent identifies the field as ‘creation and presentation of media works to audiences including, without limitation, *audio and audio-visual works.*’” *Id.* at 18 (quoting Ex. 1001, 1:12–14). The quoted language is permissive rather than limiting, however, stating that the field “includ[es], without limitation” audio and audio visual.

Patent Owner also argues an advantage of the invention depends on TSM being limited to increasing intelligibility because “the specification recognizes that listener interest in a given portion of a media work cannot be accurately determined if the listener cannot understand the audio or the audio is otherwise unintelligible.” *Id.* at 22–23 (citing Ex. 1001, 1:62–2:10; Ex. 2016 ¶ 58). Nevertheless, the Federal Circuit has explained that “[t]he fact that a patent asserts that an invention achieves several objectives does not require that each of the claims be construed as limited to structures that are capable of achieving all of the objectives.” *Liebel–Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 908 (Fed. Cir. 2004).

Although Patent Owner shows that embodiments and advantages of the invention are directed to audio, Patent Owner has not shown that the claims were intended to be so limited. In fact, Petitioner responds that the Specification discloses an example of presenting email (text-only) messages. Reply 3 (Ex. 1001, 54:51–55:3).⁷ Thus, the Specification does not consistently limit TSM to audio only.

The ’769 Patent

Patent Owner also relies on the ’769 patent which is incorporated by reference in the ’433 patent.⁸ PO Resp. 23. Patent Owner argues the ’769

⁷ This point is discussed further, below, with respect to the term “Media Work.”

⁸ U.S. Patent No. 5,175,769 (Ex. 2005, “Hejna”).

patent “makes clear that TSM requires preservation of pitch and intelligibility.” *Id.* Patent Owner relies on quotes from the ’769 Specification stating that that TSM refers to “reproduction of the signal at a wide variety of playback rates ***without an accompanying change in local periodicity***” and that “to preserve intelligibility, no phoneme should be removed completely.” *Id.* at 23–24 (quoting Ex. 2005, 1:5–10; 1:27–33, 1:44–62). Based on this quote, Patent Owner argues “the disclosed TSM method would be ***the method of performing TSM relevant to the ’433 Patent*** . . . [thus,] a POSITA considering the ’433 Patent would have understood that its inventor defined TSM, ***as used in the ’433 Patent***, as requiring preservation of pitch and intelligibility.” *Id.* at 24.

Incorporated patents are “effectively part of the host [patents] as if [they] were explicitly contained therein.” *Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1329 (Fed. Cir. 2001) (citations omitted); *see Ultradent Prods., Inc. v. Life-Like Cosmetics, Inc.*, 127 F.3d 1065, 1069 (Fed. Cir. 1997) (citing Manual of Patent Examining Procedure § 608.01(p) (6th ed.1996)) (explaining that, unless indicated otherwise, incorporation by reference of a patent renders “the entire contents” of that patent's disclosure a part of the host patent); *see also Harari v. Lee*, 656 F.3d 1331, 1335–36 (Fed.Cir.2011). As a result, the disclaimers and definitions of the incorporated patents are a part of the asserted patents.

Here, however, the ’769 patent does not have a clear disclaimer because the ’769 patent actually defines the term more broadly stating “time

scale modification ('TSM'), i.e., changing the rate of reproduction, of a signal." Reply 5 (quoting Ex. 2005, 1:6–13).⁹

Patent Owner's description of the history of TSM actually cuts against its argument that the '769 patent limits the invention to preserving pitch. For example, Patent Owner argues "the study of TSM dates back to at least the 1940's, and in more modern digital signal processing as described in the '769 Patent, TSM methods operate by inserting or deleting segments of a digitally sampled speech signal in a manner that preserves the local pitch and intelligibility." PO. Resp. 23. Patent Owner's argument does not suggest the TSM is defined as preserving pitch but, rather, suggests that more modern specific methods in the '769 patent do so.

Finally, the District Court in the related litigation disagreed that the '769 patent's references to pitch served to limit the construction of TSM to preserving intelligibility and pitch. Ex. 2011, 9. In its claim construction ruling, the District Court explains

[t]he court in California [in another litigation] agreed with the plaintiff in that case and did not read pitch into the meaning of the general term "time-scale modification" and construed the term to mean "speeding up or slowing down the playback rate." The plaintiff in the California case stated that it "proposed a clear definition [i.e., the definition Defendants here propose] drawn directly from the patent specification. . . . In fact the specification [of the '769 patent] very clearly uses the term 'time-scale modification' to refer only to the speeding up or slowing down playback of a signal." [6] The court in California concluded that

⁹ A patentee's use of "i.e.," in the intrinsic record, however, is often definitional. *Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1334 (Fed. Cir. 2009) ("[U]se of 'i.e.' signals an intent to define the word to which it refers."); *see also Abbott Labs. v. Novopharm Ltd.*, 323 F.3d 1324, 1330 (Fed. Cir. 2003) (holding that a patentee "explicitly defined" a term by using "i.e." followed by an explanatory phrase).

that construction was supported by the use of the term in the claims and the specification.[7]

I find that Court’s reasoning persuasive. In addition, I find that the construction of time-scale modification that does not require preservation of intelligibility and pitch is supported by the intrinsic evidence of the asserted patents here.

Id. (bracketed material in original). We agree with the District Court. The Specification does not support limiting the construction of TSM to preserving intelligibility and pitch.

Extrinsic Evidence

“[E]xtrinsic evidence may sometimes illuminate a well understood technical meaning.” *Immunex Corp. v. Sanofi-Aventis U.S. LLC*, 977 F.3d 1212, 1221 (Fed. Cir. 2020). Patent Owner also argues that publications cited on the face of the ’769 patent define TSM. PO Resp. 25. These publications also describe specific methods of TSM. A first publication states “[i]n time—scale modification, we wish to modify the perceived rate of speech while preserving the formant structure (for intelligibility) and the perceived pitch (for naturalness).” Ex. 2006, 1. That publication also recites, however, “[i]n this paper, we discuss an earlier algorithm for time-scale modification (TSM).” *Id.* A second publication recites “[c]hanging the speed of the speech signal without changing the voice quality is known as time-scale modification, or TSM.” Ex. 2007, 1. That publication also recites “In this paper, we apply the synchronized-overlap-add (SOLA) method of TSM.” *Id.* In other words, these publications indicate they are describing a particular method of TSM.

Patent Owner also points to several other publications that allegedly support a finding that “TSM would have been understood to involve the

speeding up or slowing down of digital multi-media content in a manner that preserves the pitch of the audio, such that it remains understandable and perceptible to the user.” PO. Resp. 25 (citing Ex. 2006, 1; Ex. 2007, 1; Ex. 2022; Ex. 2027, 12; Ex. 2028, 2; Ex. 2029, 2; Ex. 2030, 4; Ex. 2031, 8–9; Ex. 2016 ¶¶ 65–75). However, we find that they only show, as the first two, that there are specific methods of time-scale modification that preserve pitch and intelligibility. We do not find that these publications show a well understood definition of TSM that excludes methods that do not preserve the perceived pitch and intelligibility of audio. Additionally, even if these publications suggest TSM could in some circumstances be understood in such a way, “we give the intrinsic evidence ‘priority,’ . . . over extrinsic evidence with which it is ‘inconsistent.’” *Immunex Corp.*, 977 F.3d at 1221.

Conclusion

In sum, as to TSM, the claim language does not contain the term; the extrinsic evidence presents specific methods of TSM but not a well-understood definition; and, while the intrinsic evidence provides a view consistent with Patent Owner’s construction in some embodiments, it also provides a broad definition of TSM and does not provide an explicit disavowal of any scope of the claim. We do not discern that this evidence supports Patent Owner’s claim construction.

As explained above, we do not incorporate TSM into the definition of “presentation rate.” Additionally, for the reasons above, to the extent TSM remains relevant to this proceeding, we adopt the District Court’s construction of TSM to mean “speeding up or slowing down the playback rate.” PO Resp. 18; Ex. 2011, 8. Accordingly, we do not limit TSM to playback rate “of audio or audio-visual media, while maintaining pitch and intelligibility,” as urged by Patent Owner.

3. “*media work*”

Patent Owner argues “media work” should be construed as “audio or audio-visual media.” PO Resp. 26. Patent Owner relies on the following quote from the Specification:

Media Work: A Media Work (“MW”) may comprise, without limitation, one or more of text, pictures, audio, for example, a speech, an audio-visual work, for example, a movie or instructional video tape.

Ex. 1001, 8:20–24. Patent Owner argues that all the examples of media work include audio. PO Resp. 26–27. “It is . . . not enough that the only embodiments, or all of the embodiments, contain a particular limitation” to import a limitation from the specification into the claims. *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1366 (Fed. Cir. 2012). Additionally, the language quoted above that Patent Owner relies on allows for text to be one of the examples of a media work. Patent Owner argues that text is mentioned in association with an example that includes text and speech (*id.*), but we find that the quotation above is clear that Media Work includes “**one** or more” of text, pictures, and audio of which text alone could be the **one**. Patent Owner also argues its construction of TSM shows that a media work must have audio in order to have pitch and intelligibility to preserve. PO. Resp. 27–28. As explained above, we do not adopt that construction. Thus, we do not adopt Patent Owner’s construction that media work is limited to works that include an audio component.

4. “*media work content properties*”

Patent Owner argues “‘media work content properties’ must not be construed as coextensive with ‘content,’ and should instead be construed as ‘properties other than the content of a media work.’” Patent Owner relies on

the prosecution, in which keyword searches in a text to speech converter were distinguished because they detected the content not properties of the content. PO Resp. 29–32 (citing Ex. 1004, 59, 86, 122–23, 152, 163–64; Ex. 2016 ¶ 38). Patent Owner also relies on claim differentiation because claims 3 through 6 recite “detecting [the] content or properties” while claims 8 and 9 recite “detecting media work content properties.” *Id.* at 31.

Additionally, Patent Owner argues “[a]ll of these examples [of media work content properties in the specification] involve the results of analyzing the Media Work (such as how many letters are in a word, how many letters make up a syllable, grammatical analysis, a count of people or objects in a frame, aptitude or complexity analysis). They do not merely reflect the content of the Media Work.” *Id.* at 31–32.

Petitioner, on the other hand, argues the fact that properties are different than content is “self-evident” and does not need construction. Reply 7–8. We agree.

Rather than a dispute on construction, Patent Owner’s argument regarding obviousness relies on the assertion that examples Petitioner relies on in Rochkind are similar to examples distinguished in prosecution rather than explicitly relying on their suggested construction. Sur-Reply 3–6. Thus, we decline to explicitly construe “media work content properties.” Rather we discuss this limitation in the analysis below.

5. *Other Terms*

We conclude that no express claim construction of any other claim term is necessary to determine whether to institute review of the challenged claims. *See, e.g., Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)) (“[W]e need only

construe terms “that are in controversy, and only to the extent necessary to resolve the controversy.””).

D. Anticipation of Claims by Rochkind – Ground 1

Petitioner argues that claims 3, 4, and 9 are unpatentable under 35 U.S.C. § 102(a) as anticipated by *Rochkind*. Pet. 2. To support its contentions, Petitioner provides explanations as to how the prior art allegedly discloses each claim limitation. *Id.* at 8–24. Rochkind is summarized below.

1. Rochkind (Ex. 1005)

Rochkind (Ex. 1005) discloses “a system and method for playing back a recorded voice message, and, in particular, for playing back a spoken numeric portion of the message automatically at a rate that is slower than the rate for playing back the remaining portion of the recorded voice message.” Ex. 1005, 1:66–2:3.

2. Analysis of Claim 3

a) “A method of utilizing audience affinity or aptitude associated with content or properties to present a media work which comprises”

Patent Owner argues that the preamble is limiting. Patent Owner argues “[t]he preamble provides the antecedent basis for” “the audience affinity or aptitude,” “the content or properties,” and “the media work” terms in the body of claim 3. PO Resp. 16 (citing *In re Fought*, 941 F.3d 1175, 1178 (Fed. Cir. 2019)). For the purpose of this decision, we do not need to decide whether the preamble is limiting because Petitioner recognizes that the preamble may be limiting by presenting contentions “[t]o the extent the preamble of claim 3 is limiting.” Pet. 8.

Petitioner establishes sufficiently by a preponderance of the evidence that Rochkind discloses a “method of utilizing audience affinity or aptitude associated with content or properties to present a media work,” as recited in claim 3. Pet. 9 (citing Ex. 1002 ¶¶ 64–72; Ex. 1005, Abstract, 1:26–29, 1:31–37, 1:39–40, 1:44–48, 1:66–2:3, 2:15–18, 5:15–23, Figs. 2, 2B, 3, 5, 6).

Petitioner relies on Rochkind’s disclosure of an “enhanced intelligibility mode’ that, when enabled, causes ‘any spoken numbers detected in messages played back to the user thereafter [to] automatically be played back at a slower rate than the rest of the message.’” Pet. 9–10 (citing Ex. 1005, 5:15–18; 5:20–23; Ex. 1002 ¶ 68.) According to Petitioner, “[b]y disclosing a playback technique that results in numeric content (which *Rochkind* explains is harder to comprehend than non-numeric content [*see* Pet. 8 citing Ex. 1005, 1:31–37]) of a voice message being played back at a slower rate than non-numeric content, *Rochkind* discloses a method of utilizing audience aptitude associated with content or properties to play back (‘present’) the voice message (‘media work’).” *Id.*

b) “*detecting the content or properties in a portion of the media work*”

Petitioner establishes sufficiently by a preponderance of the evidence that Rochkind discloses “detecting the content or properties in a portion of the media work,” as recited in claim 3. Pet. 11–14 (citing Ex. 1002 ¶¶ 73–75; Ex. 1005, Abstract, 2:5–8, 2:15–18, 3:64–4:6, 4:19–39, 4:41–44, 5:4–8 , Figs. 3, 4).

c) “*associating the audience affinity or aptitude associated with the detected content or properties with a presentation rate for the portion*”

Petitioner establishes sufficiently by a preponderance of the evidence that Rochkind discloses “associating the audience affinity or aptitude associated with the detected content or properties with a presentation rate for the portion,” as recited in claim 3. Pet. 14–17 (citing Ex. 1002 ¶¶ 76–79; Ex. 1005, 4:32–39, 4:64–5:3, 5:15–18, 5:20–23, 6:17–25, Fig. 3, 6).

Patent Owner argues “[t]he antecedent basis for ‘the audience affinity or aptitude’ is in Element 3(a)’s recitation of ‘utilizing audience affinity or aptitude associated with content or properties to present a media work.’” PO Resp. 33. Patent Owner further argues the Petitioner relies only on aptitude rather than affinity. *Id.* Thus, according to Patent Owner, Petitioner is required to show an aptitude associated with content or properties. We agree.

Patent Owner argues that alleged “aptitude” regarding numeric content in Rochkind is not “associat[ed] . . . with a presentation rate for the portion” as recited in claim 3. *Id.* at 33–38. Patent Owner first argues that “Rochkind does not disclose assessing aptitude, and relies on generalizations that do not address aptitude for any given numeric content, such as whether the number is familiar, already known, or otherwise readily understandable at normal speed.” *Id.* at 33 (emphasis omitted). We disagree. The claim does not recite or require “assessing” aptitude but rather “utilizing” aptitude, which can include using a previously assessed aptitude as is done in Rochkind.

Patent Owner further argues that the “alleged ‘audience...aptitude’ is not ‘associat[ed]...with a presentation rate for the portion.’” Instead, the

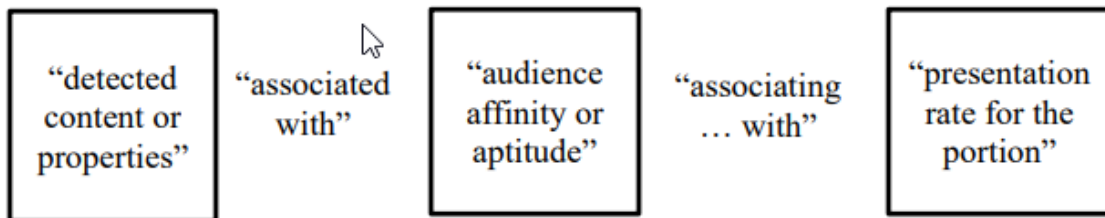
presentation rates are associated with ‘0’s and ‘1’s in Rochkind. And those ‘0’s and ‘1’s correspond only to what position in the media corresponds to numeric content.” *Id.* at 34 (emphasis omitted). We disagree. The presentation rate can be, in this case, slow or fast which Rochkind associates with “0” or “1” where the “0” is a non-numeric section of the text for which the audience has a high aptitude and where the “1” is a numeric section of the text for which the audience has a low aptitude. Pet., 13, 17–18. Patent Owner appears to argue that associating with a presentation rate requires some step of storing or creating some unexplained durable association between content, aptitude, and presentation rate.

Patent Owner argues that because presenting the portion at the rate is a separate step than associating there must be some association of an “aptitude” with a “rate” and failure to do so is a failure to give meaning to all terms in the claim. PO Resp. 36. We disagree. In order for the Rochkind system to work as described these things must occur: the system must be configured to play content associated with a 1 or a 0 (Ex. 1005, 5:15–18); content must be identified and associated with a 1 or 0 based on the property of the content being either numeric or non-numeric (*id.* at 4:32–38); and the system must play content associated with a 1 or 0 at a particular speed (*id.* at 5:15–18).

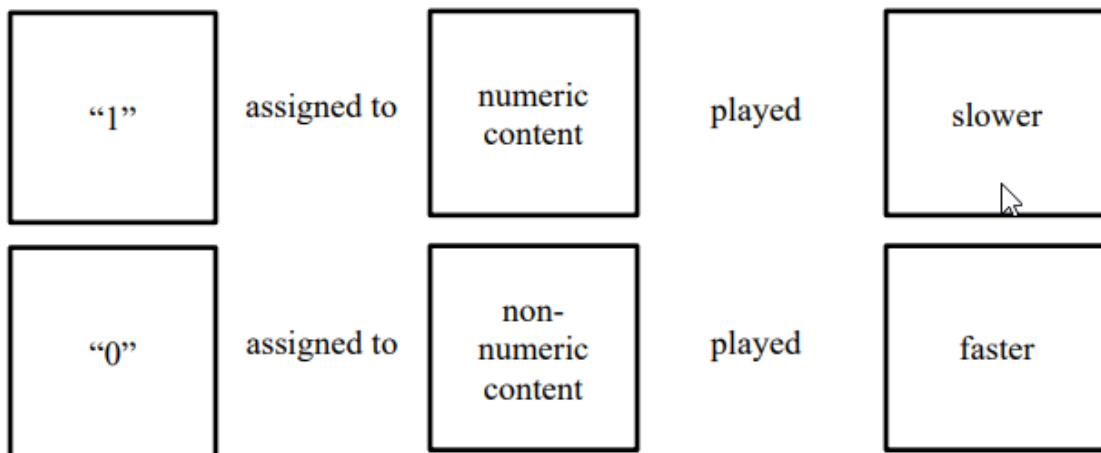
The first step – configuring the system to play content associated with 0 at a high rate – for example, is shown in Figure 4. The phrase “This is an example of a message that includes a spoken number” is associated with 0’s. Ex. 1005, Fig 4. Patent Owner cites to the Specification at column 7, lines 23–32, for an “example of associating audience affinity or aptitude with a presentation rate for the relevant content.” PO Resp. 37 (citing Ex. 1001, 7:23–32). An example at that citation relied on by Patent Owner associates

data such as “onomatopoeia” as a concept with data such as “well-known” as the aptitude for that concept. Ex. 1001, 7:25–28. We find that the fact that 0 is a number and “well-known” is a word does not change the fact that they both represent an aptitude. Both “well-known” and 0 are codes representing a level of aptitude. Thus, we are not persuaded by this argument.

Patent Owner also presents the following visual aids. Reproduced below is Patent Owner’s chart showing the claim language. PO Resp. 36.



Reproduced above is Patent Owner’s chart representing the claim language “detected content or properties” “associated with” “audience affinity or aptitude” “associating with,” and “presentation rate for the portion.” Below Patent Owner presents a chart purporting to represent Rochkind’s system of assigning “0” or “1” to content based on the property that the content is numeric or non-numeric and then playing the content either slower or faster. *Id.*



Reproduced above is a chart Patent Owner presents purporting to represent Rochkind's system of assigning "0" or "1" to content. We find this chart misleading at best. "[A]ssigned to" and "played" in the above chart require some association was also made.

Additionally, Patent Owner argues "*Rochkind's* '0's and '1's correspond only to whether any given position in the media includes numeric content; the '0's and '1's do not represent aptitude." PO Resp. 37. We find that the "0"s and "1"s represent segments of the media in which numeric content is either present or not present which, because the numeric character of a word is associated with a listener's ability to comprehend the media content (Ex. 1005, 1:31–37), *does* represent levels of aptitude. Pet. 9; Ex. 1005, 4:33–41. Those segments representing levels of aptitude are also associated with presentation rates. Pet. 9; Ex. 1005, 5:16–18 ("any spoken numbers detected in messages played back to the user thereafter [to] automatically be played back at a slower rate than the rest of the message."). Thus, we are not persuaded by Patent Owner's argument.

d) "presenting the portion at the presentation rate"

Petitioner establishes sufficiently by a preponderance of the evidence that Rochkind discloses "presenting the portion at the presentation rate," as recited in claim 3. Pet. 17–18 (citing Ex. 1002 ¶ 80; Ex. 1005, 5:15–18, 5:20–23, 6:17–25, Fig. 6).

3. Analysis of Claim 4

Claim 4 depends from claim 3. As explained above, Petitioner has shown that Rochkind discloses all of the limitations of claim 3. Petitioner also establishes sufficiently by a preponderance of the evidence that Rothkind discloses "associating includes accepting user input to determine the presentation rate," as recited in claim 4. Pet. 18–20 (citing Ex. 1002 ¶¶

81–83; Ex. 1005, 5:11–15, 5:17–23, 5:37–47, Fig. 5). Patent Owner does not raise any arguments specific to claim 4.

4. *Analysis of Claim 9*

a) *“A method of presenting a media work which comprises”*

Patent Owner does not argue that the preamble is limiting. For the purpose of this decision, we do not need to decide whether the preamble is limiting because Petitioner recognizes that the preamble may be limiting by presenting sufficient evidence showing the preamble is disclosed in Rochkind. Pet. 20.

b) *“detecting media work content properties in a portion of the media work”*

Petitioner establishes sufficiently by a preponderance of the evidence that Rochkind discloses “detecting media work content properties in a portion of the media work,” as recited in claim 9. Pet. 20–22 (citing Ex. 1002 ¶¶ 85–86; Ex. 1005, Fig. 4; discussion of claim 3, *supra*).

For example, Petitioner contends “*Rochkind* discloses ‘detecting media work content properties . . .’ because whether numeric information (or non-numeric information) is present or not in a voice message is a property of the content of the voice message, which is a ‘media work’ as discussed above for the preamble of claims 3 and 9.” Pet. 21. Additionally, as to claim 9, Petitioner contends “*Rochkind* discloses detecting media work content properties . . . because the property of being numeric (or non-numeric) content is detected.” Pet. 22.

By contrast, in association with claim 3’s recitation of “content or properties,” Petitioner contends that Rochkind “discloses detecting non-numeric content (which can be mapped to ‘the content or properties’) where

numeric content is not present.” Pet. 11. Petitioner contends “in addition to determining the relative position of spoken numbers within the voice message, *Rochkind*’s system and process also determines the complement of such positions (i.e., where numeric information is not present). (Ex. 1002, ¶75.) In Figure 4, *Rochkind* explicitly shows the detected non-numeric content with zeros and shows the detected numeric content with ones.” Pet. 13.

Patent Owner argues that the Petition cannot use the same numeric and non-numeric content as the claimed “content” for claim 3 and as the “content property” for claim 9. PO Resp. 39–40. We disagree. The spoken words which are numeric or non-numeric can be considered “content” as claimed. As to claim 3, Petitioner contends that *Rochkind* detects the “non-numeric content” and the “spoken numbers,” this is sufficient to refer to “content.” Pet. 13. As to claim 9, on the other hand, Petitioner points to “whether numeric information (or nonnumeric information) is present or not in a voice message is a property.” Pet. 21.

Patent Owner also suggests that the examples from the Specification, i.e. “syllables spoken, letters in a syllable, number of people or objects in a video frame, complexity of content, grammatical structure, rate of occurrence” etc. are not properties of content in the way that the presence of numeric or non-numeric information relates to content. PO Resp. 40. We disagree. For example, syllables in a spoken word is a property of the words containing those syllables just as the numeric character of a word is a property of a word.

c) “associating a presentation rate of the portion with the detected media work content properties”

Petitioner establishes sufficiently by a preponderance of the evidence that Rochkind discloses “associating a presentation rate of the portion with the detected media work content properties,” as recited in claim 9. Pet. 22 (citing Ex. 1002 ¶ 87; Ex. 1005, 4:32–39, 5:15–18, 5:20–23, 6:17–25, Fig. 3).

Patent Owner makes the same argument regarding the term “content properties” for this limitation as it did for the limitation above. Thus, for the same reasons as above, we are not persuaded by that argument. *See* PO Resp. 40.

d) “presenting the portion at the presentation rate”

Petitioner establishes sufficiently by a preponderance of the evidence that Rochkind discloses “presenting the portion at the presentation rate,” as recited in claim 9. Pet. 23 (citing Ex. 1002 ¶ 88; discussion of claim 3, *supra*).

e) “wherein the media work content properties comprise indicia of actions of objects”

Petitioner establishes sufficiently by a preponderance of the evidence that Rochkind discloses “wherein the media work content properties comprise indicia of actions of objects,” as recited in claim 9. Pet. 23–24 (citing Ex. 1002 ¶ 89; discussion of claim 3, *supra*).

For example, Petitioner contends:

Rochkind discloses detecting whether given content contains numeric as opposed to non-numeric information at various time instants (“media work content properties”). (*Supra* Section IX.A.3(b); *see also supra* Section IX.A.1(b) . . .) Because *Rochkind*’s content is speech content of a voice message, *Rochkind*’s detections of whether the content is numeric/non-

numeric at various time instants (“the media work content properties”) comprise indicia of whether the speaker (i.e., person speaking the voice message) spoke a number or something other than a number at those times. (Ex. 1002, ¶89.) A POSITA would have understood that in the context of the ’433 patent a person is an example of an object and that instances of a person speaking a number or something other than a number constitute actions of objects. (*Id.*) A POSITA would further have understood that because *Rochkind* discloses a voice message system and process without regard to any specific speaker, *Rochkind*’s process is applicable to multiple speakers. (*Id.*) As such, the detections of whether content is numeric/non-numeric at various time instants (“the media work content properties”) comprise indicia of actions of objects (plural). (*Id.*).

Pet. 23–24. In other words, Petitioner relies on the actions of a person speaking.

5. *Summary for Ground 1*

Having reviewed the record, we determine that the information presented establishes by a preponderance of the evidence that Petitioner would prevail in showing that claims 3, 4, and 9 are unpatentable under 35 U.S.C. § 102(a) as anticipated by *Rochkind*.

E. Obviousness of Claim 9 over Mauldin and Bhadkamkar – Ground 2

Petitioner argues that claim 9 is unpatentable under 35 U.S.C. § 103(a) as obvious over Mauldin and Bhadkamkar. Pet. 3. To support its contentions, Petitioner provides explanations as to how the prior art allegedly teaches each claim limitation. *Id.* at 24–37.

Because we find that claim 9 is unpatentable as anticipated by *Rochkind*, we do not reach the issue of whether it is also obvious over Mauldin and Bhadkamkar.

F. Obviousness of Claims 1 and 7 over Walker and Bhadkamkar – Ground 3

Petitioner argues that claims 1 and 7 are unpatentable under 35 U.S.C. § 103 as obvious over Walker and Bhadkamkar. Pet. 3. To support its contentions, Petitioner provides explanations as to how the prior art allegedly discloses each claim limitation. *Id.* at 37–59.

Walker and Bhadkamkar are summarized below.

1. Walker (Ex. 1006)

Walker (Ex. 1006) is directed to a “presentation of text for improved human reading” by using attributes of text, such as “paragraphs, sentences, words, and punctuation.” Ex. 1006, Abstract, 1:4–7, 9:56–58. Walker teaches presenting text one sentence at a time, broken up based on sentence structure, to “create a system of meaningful visual cues” and where the eyes need to move a shorter distance from phrase to phrase. *Id.* at 2:29–58.

Walker also varies the rate at which its sentences are presented, and can alter the amount of time for which text is displayed, and the time interval between sentences. *Id.* at 7:40–53. For example, Walker may increase the amount of time between sentences in order to indicate a new paragraph. *Id.* “The sentences advance at a rate using a rule previously selected by the reader,” where “[t]he formula is a function of the text type, number or words, educational level, and number of syllables present in the line.” (Ex. 1006, 3:42–45; 7:44–48, 10:25–29.

A reader may manually advance text, such as by mouse click, or the text advancement may be controlled by reader-specified parameters. *Id.* at 15:10–22. Advancement can take into account text properties, such as text type, number of words, number of syllables, and difficulty of words. *Id.* at 2:8–9, 3:43–46, 5:27–36.

2. *Bhadkamkar (Ex. 1007)*

Bhadkamkar (Ex. 1007) “relates to the display of audio and video data and, in particular, to variation of the apparent display rate at which the audio and video data is displayed.” Ex. 1007, Abstract, 1:6–8. Bhadkamkar further discloses that “it may be desirable to slow the apparent display rate so that the display can be more carefully scrutinized, or because the content of the display can be better digested at a slower rate.” *Id.* at 1:20–23. Bhadkamkar further describes varying the playback rate of audio data, e.g., based on an analysis of whether an audio segment contains a “particular speaking voice or voices.” *Id.* at 10:17–19.

3. *Motivation to Combine*

Petitioner contends that “[t]o the extent that *Walker*’s disclosure of correlating the content or properties of sentences with the presentation time intervals does not explicitly disclose correlating the content or properties of the portions with the presentation *rates* . . . it would have been obvious in view of *Walker* and *Bhadkamkar* to implement this feature.” Pet. 46. Petitioner also contends “*Walker* in combination with *Bhadkamkar* discloses or suggests” associating audience affinity or aptitude with the presentation rates for the correlated content or properties. *Id.* at 47.

Patent Owner argues that Petitioner has not shown sufficient motivation to combine *Walker* and *Bhadkamkar*. PO Resp. 56–63. As explained below, we disagree. Petitioner articulates sufficient reasons for combining the teachings of *Walker* and *Bhadkamkar*. Pet. at 41–44, 46–47, 48–51.

As an initial matter, Petitioner also contends “a POSITA would have known that a presentation rate is merely the reciprocal of a presentation time duration,” and that “it would have been a matter of simple arithmetic

convenience to decide whether to correlate with one mathematical quantity or with the reciprocal of that mathematical quantity.” Pet. 46–47. Patent Owner argues that in the context of the limitation of “correlating the content or properties of the portions with the presentation rates,” recited in claim 1, Petitioner does not explain *why* one of ordinary skill *would* associate display times with presentation rates as opposed to simply explaining that it *could* be done. PO Resp. 60. We disagree with Patent Owner’s argument because Walker explicitly relates rates to duration so no other motivation to do so need be shown. *See* Pet. at 46. As Petitioner contends, “*Walker* describes its technique in terms of both a rate and a duration because the relationship between the two is simple. (Pet. at 46; Ex. 1006, 7:40-42.)” Reply 22–23.

As to motivation to combine, Petitioner argues “*Bhadkamkar* is in a similar technical field as *Walker*, e.g., because both references relate to presenting video (*Walker*’s displayed text can be considered to be video) and address a similar problem (e.g., determining presentation rate for content).” Pet. 42 (citing Ex. 1002 ¶ 118.). Patent Owner argues there are differences between Walker’s text–based system and Bhadkamkar’s system for synchronizing audio and video at an altered playback speed. PO Resp. 56. Specifically, Patent Owner argues that, despite Petitioner’s contention that they are in the same technical field, Bhadkamkar is concerned with the “specific problem” of audio distortion when adjusting the playback rate and Walker’s text based system does not address that issue at all. *Id.* at 57.

Despite Patent Owner’s focus on the problem solved by Walker and Bhadkamkar, the motivation to combine inquiry focuses on whether one of ordinary skill would have been motivated to combine the teachings of both references as a whole, not whether the problems solved by the prior art are the same. *See Bosch Auto. Serv. Sols., LLC v. Matal*, 878 F.3d 1027, 1036

(Fed. Cir. 2017), as amended on reh’g in part (Mar. 15, 2018) (citing *EWP Corp. v. Reliance Universal Inc.*, 755 F.2d 898, 907 (Fed. Cir. 1985) (“A reference must be considered for everything it *teaches* by way of technology and is not limited to the particular *invention* it is describing and attempting to protect.”)). Here, although the inventions of Walker and Bhadkamkar are different and may address different problems, both inventions can manipulate the rate of presentation of material. *See* Pet. 42 (citing Ex. 1002 ¶ 118.)

Patent Owner argues that combining Bhadkamkar’s system to slow the presentation rate would not be compatible with Walker’s system that increases the presentation rate “a little faster than the reader’s comfortable rate to increase comprehension.” PO. Resp. 59 (citing Ex. 1006, 3:45–48) (emphasis omitted). Patent Owner further argues, “Petitioner does not explain why a [person of ordinary skill in the art] would have overlooked *Walker*’s teaching that the opposite approach (presenting material at a *faster* speed) should be used to increase comprehension.” *Id.*¹⁰ Patent Owner also argues Walker’s disclosure of increasing the speed applies to the “specific situation” relied on by Petitioner regarding comprehension. *Id.*

¹⁰ Patent Owner does not explicitly argue that this is a teaching away and we determine that this situation would not meet that standard. A teaching away requires a reference to actually criticize, discredit, or otherwise discourage the claimed solution. *See In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004) (“The prior art’s mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed.”). Merely teaching an alternative or equivalent method does not teach away from the use of a claimed method. *See In re Mouttet*, 686 F.3d 1322, 1334 (Fed. Cir. 2012) (citations omitted); *In re Dunn*, 349 F.2d 433, 438 (CCPA 1965).

Nevertheless, we determine that even if Petitioner relies on a specific teaching of Walker, the motivation to combine may be found in the broader teaching of the reference. *Bosch Auto. Serv. Sols., LLC*, 878 F.3d at 1036 (“That Dixit does not disclose a universal RTMS *activation* tool (which would make Dixit an anticipatory reference) or provide an express motivation to combine different means for *activating* RTMS sensors does not render its teachings irrelevant.”).

Consistent with that proposition, Petitioner contends

A POSITA would have had reason to consider the disclosure of *Bhadkamkar* and would have recognized that *Bhadkamkar*'s disclosure regarding using a slower display rate (and hence a longer display time) for enabling better digestion (e.g., understanding or comprehension) of content would have been relevant to implementing *Walker*'s process, given that *Walker* discloses considering “the time needed to read a sentence” (Ex. 1006, 15:30-31; *see also id.*, FIG. 10) and discloses a “presentation interval [that] may be reader controlled or automatically determined” (*id.*, 8:39-40). (Ex. 1002, ¶128.)

Pet. 49. In other words, Walker takes into account reader comprehension as it relates to displaying content. In fact, as Petitioner further contends, “*Walker* discloses or at least suggests inferring that a reader has relatively low aptitude (e.g., low fluency or low comprehension) regarding a sentence that requires a relative long time for the reader to read (e.g., as determined by measuring how long the reader caused the sentence to be displayed, which is disclosed in *Walker*, *see* Ex. 1006, 15:25-33). (Ex. 1002, ¶117.)” *Id.* at 41. Thus, we agree with Petitioner that Walker does not simply suggest increasing the duration but in the context of the entire discussion in Walker, Walker suggests adjusting the display time up and down based on comprehension. Pet. 38–41; Reply 20–21 (“The foregoing quote from

Walker merely relates to making the advancement rate close to the reader's comfortable rate, as opposed to much faster than that"). Thus, although Patent Owner presents a quote in which Walker increases the presentation rate, Walker considers the reader's comprehension in determining how long to display a sentence and teaches that display time can be user controlled.

Patent Owner also argues that Petitioner's explicit stated rationale for combining (i.e., "determine presentation rates") is deficient because Walker and Bhadkamkar are changing the rate of different things (i.e., text vs. audio) and, as discussed above, because Walker suggests speeding not slowing the rate specifically based on comprehension. PO Resp. 60. Based on this argument, Patent Owner suggests Petitioner has shown that the references *could* be combined but not why they *would* be combined. *Id.* We disagree.

The Specification is clear the invention is broad and relates to text and/or audio. Ex. 1001, 8:20–24. As to the differences between text and audio presentations, "[t]he test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference." *Facebook, Inc. v. Windy City Innovations, LLC*, 973 F.3d 1321, 1343 (Fed. Cir. 2020) (citations omitted).

As to Walker's suggestion to speed up the presentation, Walker also has extensive disclosure regarding how comprehension relates to display times. Pet. 39–40. Thus, given the finite choice of slowing the speed of presentation as suggested in Bhadkamkar or increasing the speed of presentation as suggested by the single quote in Walker, it would have been obvious from the extensive discussion of comprehension in Walker to combine the references. *See Procter & Gamble Co. v. Teva Pharm. USA, Inc.*, 566 F.3d 989, 996 (Fed. Cir. 2009) ("When a person

of ordinary skill is faced with ‘a finite number of identified, predictable solutions’ to a problem and pursues ‘the known options within his or her technical grasp,’ the resulting discovery ‘is likely the product not of innovation but of ordinary skill.’”). Thus, we are not persuaded by Patent Owner’s argument regarding Petitioner’s explicit stated rationale for combining.

Finally, Patent Owner argues Petitioner has not addressed the reasonable expectation of success for the combination because of the “fundamental differences” between the two references. PO. Resp. 66. Consistent with the discussion above, we disagree that the references have “fundamental differences” that would frustrate a reasonable expectation of success. We determine Petitioner’s statement, supported by its declarant, that the combination would have been a mere combination of known elements and technologies, according to known methods, to achieve predictable results provides a showing of a reasonable expectation of success regarding the combination. *See* Pet., 43, 51; Ex. 1002, ¶¶120, 130.

Thus, for the reasons above, on the current record, we are persuaded by Petitioner’s arguments regarding the motivation to combine Bhadkamkar with Walker.

4. *Analysis of Claim 1*

a) *“A method for inferring audience affinity or aptitude with regard to content or properties of portions of a media work which comprises”*

Patent Owner does not argue that the preamble is limiting. For the purpose of this decision, we do not need to decide whether the preamble is limiting because Petitioner recognizes that the preamble may be limiting by

presenting sufficient evidence the cited art teaches the preamble. Pet. 37–44.

b) “*presenting the media work to an audience*”

Petitioner establishes sufficiently by a preponderance of the evidence that Walker teaches “presenting the media work to an audience,” as recited in claim 1. Pet. 44 (citing Ex. 1002 ¶ 121; Ex. 1006, Abstract, 1:5–7, 2:29–39).

c) “*obtaining user input regarding presentation rates for the portions of the media work*”

Petitioner establishes sufficiently by a preponderance of the evidence that Walker teaches “obtaining user input regarding presentation rates for the portions of the media work,” as recited in claim 1. Pet. 44 (citing Ex. 1002 ¶ 122; Ex. 1006, 3:49–52, 15:23–25).

Petitioner argues the presentation of text sentences is a media work such that Walker teaches slowing down and speeding up of the playback rate. Pet. 37, 44. Specifically, Petitioner contends “*Walker* discloses, for example, that “[t]he reader is able to easily interact with the reading system, holding difficult sentences on the screen longer, and speeding up or slowing down the presentation.” Pet. 44 (citing Ex. 1006, 3:49–52.).

Petitioner relies on only *Walker* for the limitations in claims 1 and 7 of “obtaining user input regarding presentation rates for the portions of the media work.” *Id.* Patent Owner argues, under its construction of presentation rate as preserving pitch and media work as limited to audio works, that Walker cannot meet those limitations. Given our construction, we are not persuaded by these arguments that are not commensurate with the proper scope of the claims.

d) “correlating the content or properties of the portions with the presentation rates”

Petitioner establishes sufficiently by a preponderance of the evidence that the combination of Walker and Bhadkamkar teaches “correlating the content or properties of the portions with the presentation rates,” as recited in claim 1. Pet. 37–47 (citing Ex. 1002 ¶¶ 113–120, 123–125; Ex. 1006, Abstract, 1:5–7; 2:29–30, 3:12–13, 3:42–52, 7:40–48, 8:38–39, 8:61–63, 10:25–29, 12:29–39, 15:23–35, Figs. 2, 10; Ex. 1007, 1:7–9, 1:20–23, 10:66–11:01).

e) “associating audience affinity or aptitude with the presentation rates for the correlated content or properties.”

Petitioner establishes sufficiently by a preponderance of the evidence that the combination of Walker and Bhadkamkar teaches “associating audience affinity or aptitude with the presentation rates for the correlated content or properties,” as recited in claim 1. Pet. 47–51 (citing Ex. 1002 ¶¶ 126–130; Ex. 1006, Abstract, 1:5–7; 2:29–30, 3:12–13, 3:42–52, 7:40–48, 8:38–40, 8:61–63, 10:25–29, 12:29–39, 15:23–38, Figs. 2, 10; Ex. 1007, 1:7–9, 1:20–23, 10:66–11:01).

5. *Analysis of Claim 7*

a) “A method of testing aptitude of an audience for content or properties of portions of a media work which comprises”

Patent Owner does not argue that the preamble is limiting. For the purpose of this decision, we do not need to decide whether the preamble is limiting because Petitioner recognizes that the preamble may be limiting by presenting sufficient evidence the cited art teaches the preamble. Pet. 51–55.

b) “presenting the media to an audience”

Petitioner establishes sufficiently by a preponderance of the evidence that Walker teaches “presenting the media to an audience,” as recited in claim 7. Pet. 56; Ex. 1002 ¶ 138; discussion of claim 1.

c) “obtaining user input regarding presentation rates for the portions of the media work”

Petitioner establishes sufficiently by a preponderance of the evidence that Walker teaches “obtaining user input regarding presentation rates for the portions of the media work,” as recited in claim 7. Pet. 56 (citing Ex. 1002 ¶ 139; discussion of claim 1).

As explained above, we are not persuaded by Patent Owner’s argument that Walker does not teach speeding up or slowing down the playback rate of a media work. *See* discussion of claim 1; PO Resp. 56–63.

d) “correlating the presentation rates with the aptitude for the content or properties of the portions.”

Petitioner establishes sufficiently by a preponderance of the evidence that the combination of Walker and Bhadkamkar teaches “correlating the presentation rates with the aptitude for the content or properties of the portions,” as recited in claim 7. Pet. 51–58 (citing Ex. 1002 ¶¶ 131–137, 140–142; Ex. 1006, 1:5–7, 1:15–20, 3:42–52., 7:40–48, 8:61–63, 10:66–11:01, 15:23–35, Fig. 10; Ex. 1007, 1:20–23).

6. Summary for Ground 3

Having reviewed the record, we determine that the information presented establishes by a preponderance of the evidence that claim 1 and 7 are unpatentable under 35 U.S.C. § 103 as obvious over Walker and Bhadkamkar.

G. Obviousness of Claim 2 over Walker, Bhadkamkar, and Iggulden – Ground 4

Petitioner argues that claim 2 is unpatentable under 35 U.S.C. § 103 as obvious over Walker, Bhadkamkar, and Iggulden. Pet. 3. To support its contentions, Petitioner provides explanations as to how the prior art allegedly discloses each claim limitation. *Id.* at 59–64.

Iggulden is summarized below.

1. Iggulden (Ex. 1013)

Iggulden (Ex. 1013) “relates to the field of video recording and playback systems, and particularly to a method and apparatus for selectively omitting certain program content during playback of a recorded video signal.” Ex. 1013, 1:14–17. Iggulden discloses skipping over commercials. For example, Iggulden discloses that a user of its process and system “can press [a] SKIP button, which causes device 10/10' to immediately generate a blue video screen, mute the audio, and forward scan to the start of the next program segment, thereby skipping over the current or next commercial group” and that “[t]he skipping process will automatically stop at the end of the next commercial group.” Ex. 1013, 11:13–22, Abstract.

2. Motivation to Combine

Petitioner contends that “[t]o the extent *Walker* and *Bhadkamkar* do not explicitly disclose that the presentation rates include a rate which causes a portion to be skipped, it would have been obvious in view of *Iggulden* to configure the combined *Walker-Bhadkamkar* process (discussed above for claim 1) to implement this feature.” Pet. 60.

Petitioner relies on the Ottesen reference to show knowledge of one of ordinary skill in the art regarding a motivation to skip content in educational materials. Petitioner contends, however, “Petitioner is citing Ottesen (Ex.

1008) only to demonstrate knowledge of a POSITA, and does not rely on Ottesen as a reference in this ground.” Pet. 62, n. 5 (emphasis omitted).

Specifically, Petitioner contends:

Ottesen describes presenting program material such as “instructional videos, or other viewing material” to a viewer (person viewing the program material) (Ex. 1008, 3:59-61), similar to *Walker*’s “presentation of text for improved human reading” (Ex. 1006, Abstract). (*See also* Ex. 1006, 1:5-7; Ex. 1002, ¶148.)[5]

Ottesen discusses “editing in terms of discarding segments containing objectionable material,” where “objectionable material can include . . . subject matter too difficult and/or too easy for a student’s skill level (e.g., outside of the viewer’s skill level); subject matter outside of the student’s area of study; completed segments in a course of study; [and] skill levels outside of a user’s skill level.” (Ex. 1008, 4:1-7, 4:16-17.) *Ottesen*’s “discarding of one or more segments can be accomplished by editing them out, **skipping them during playback, deleting them**, . . . or by using some other technique to ensure that they are not presented to the viewer.” (*Id.*, 4:17-22 (emphasis added).) Thus, *Ottesen* demonstrates that skipping content during playback, like in *Iggulden*, was known in the educational context, like in *Walker*, and thus shows that there was motivation to combine the teachings of these references as described above. (Ex. 1002, ¶148.)

Pet. 62–63. Petitioner further contends that the combination would be “useful and desirable” because the concept was “known and useful,” the combined system would be more “user[]friendly,” and straightforward to implement and a mere combination of known elements and technologies, according to known methods, to achieve predictable results. Pet. 63.

Petitioner’s citation to *Ottesen* shows that skipping content was known as useful in an educational context such as *Walker*.

Patent Owner argues that Petitioner has not shown sufficient motivation to combine Walker, Bhadkamkar, and Iggulden. PO Resp. 65–69. We disagree. On the present record, Petitioner articulates sufficient reasons for combining the teachings of Walker, Bhadkamkar, and Iggulden. Pet. 59–64.

Patent Owner argues, regardless of Ottesen, a person of ordinary skill in the art “considering *Walker* would have recognized that skipping, omitting, or otherwise removing text would undermine this stated objective of *Walker*, because it would alter ‘the literal meaning of the text’ and reduce comprehension.” PO Resp. 66. Patent Owner relies on citations to Walker that emphasize “completeness” of a presentation. *Id.* (citing Ex. 1006, 2:59–64; 3:56–6). Patent Owner contrasts this objective (as well as Bhadkamkar’s objective explained below) with Iggulden’s objective and argues they are incompatible. *Id.* at 67. For example, Patent Owner argues “neither *Walker* or *Bhadkamkar* is applicable to the issues addressed by *Iggulden*, which involved shortcomings of existing VCR commercial-skipping systems, such as misclassification of non-commercial content as commercials, loss of non-commercial content due to technical disadvantages of those systems, and physical wear-and-tear on the videocassettes themselves. *See, e.g.*, EX1013, 1:56-65, 2:8-14, 2:29-36; *see also* EX2016, ¶156.” *Id.*

The motivation to combine references need not be explicit. *Motorola v. Interdigital Tech. Corp.*, 121 F.3d 1461, 1472 (Fed. Cir. 1997) (“[T]here is no requirement that the prior art contain an express suggestion to combine known elements to achieve the claimed invention.”). It is not correct, as Patent Owner suggests, “that a person of ordinary skill attempting to solve a problem will be led only to those elements of prior art designed to solve the same problem.” *KSR*, 550 U.S. at 1742. To the contrary, the Court in *KSR*

explained, “familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle. . . . A person of ordinary skill is also a person of ordinary creativity, not an automaton.” *Id.* An ordinarily skilled artisan may be motivated to pursue the desirable properties taught by one prior art reference even if that means foregoing the benefits taught by another prior art reference. *See In re Urbanski*, 809 F.3d 1237, 1244 (Fed. Cir. 2016); *see also Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1165 (Fed. Cir. 2006) (“[A] given course of action often has simultaneous advantages and disadvantages, and this does not necessarily obviate motivation to combine.”).

The suggestion in *Ottesen* to use skipping in educational materials such as *Walker* is reasonable even though *Walker* and *Iggulden* may have different purposes. Thus, we are not persuaded by Patent Owner’s argument.

Patent Owner also argues:

[N]either *Walker* or *Bhadkamkar* is applicable to the issues addressed by *Iggulden*, which involved shortcomings of existing VCR commercial-skipping systems, such as misclassification of non-commercial content as commercials, loss of non-commercial content due to technical disadvantages of those systems, and physical wear-and-tear on the videocassettes themselves. *See, e.g.*, EX1013, 1:56-65, 2:8-14, 2:29-36; *see also* EX2016, ¶156.

Further, a POSITA would have recognized that *Iggulden*’s VCR-based commercial skipping could negatively impact the synchronization issues sought to be solved by *Bhadkamkar*. Petitioner does not address these incompatibilities or explain why a POSITA would nonetheless have been motivated to make its alleged combination.

PO Resp. 67. In other words, Patent Owner argues that the technical differences between the implementation of a commercial skipping VCR system and a system for synchronizing audio and video would weigh against finding a motivation to combine. *Id.* We disagree. “The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference.”

Facebook, Inc., 973 F.3d at 1343 (citations omitted). Additionally, the claims do not recite limitations specific to VCRs or other media that would suggest concepts from various media could not be combined.

For example, Patent Owner argues “a POSITA would have recognized that these skips could result in misalignment or loss of synchronization—exacerbating the problems *Bhadkamkar* was trying to solve.” PO Resp. 67. However, *Bhadkamkar* is used by Petitioner for the limitations of “associating aptitude with [] presentation rates” and “inferring the reader’s aptitude” not for a specific showing of how to align or synchronize audio. Pet. 41. Thus, we are not persuaded by this argument.

Patent Owner also argues, despite the Petitioner’s reliance on Ottesen, “Petitioner does not address the inconsistencies between the references discussed above, and therefore does not provide the Board with sufficient evidence to demonstrate that a POSITA would have incorporated skipping or omitting content into *Walker*, despite *Walker*’s express teachings to the contrary.” PO Resp. 67–68. For the same reasons above, we are not persuaded by this argument.

Thus, for the reasons above, on the current record, we are persuaded by Petitioner’s arguments regarding the motivation to combine *Walker*, *Bhadkamkar* and *Iggulden*.

3. *Analysis of Claim 2*

a) “The method of claim 1 wherein the presentation rates include a rate which causes a portion to be skipped”

Petitioner contends Walker teaches “presenting the media work to an audience,” as recited in claim 2. Petitioner contends “*Walker* further discloses taking into account ‘phrase difficulty’ (Ex. 1006, 12:30) and ‘educational level’ of sentences (*Id.*, 7:45, 10:28, FIG. 2 []) when presenting text, and thus discloses or at least suggests skipping sentences that are too difficult for the reader or that are not matched to the reader in terms of educational level. (Ex. 1002, ¶ 144.)” Pet. 59.

Petitioner also relies on Iggulden to teach a rate in which content is skipped. Iggulden discloses skipping over commercials when playing back video content. Pet. 61 (citing Ex. 1013, 1:14–17).

Patent Owner argues, under its construction of presentation rate as preserving pitch and media work as limited to audio works, that Walker cannot meet those limitations and Iggulden does not make up for this deficiency. Given our construction, we are not persuaded by these arguments that are not commensurate with the proper scope of the claims.

4. *Summary for Ground 4*

Having reviewed the record, we determine that the information presented establishes by a preponderance of the evidence that claim 2 is unpatentable under 35 U.S.C. § 103 as obvious over Walker, Bhadkamkar, and Iggulden.

H. *Anticipation of Claim 8 by Ottesen – Ground 5*

Petitioner contends that claim 8 is unpatentable under 35 U.S.C. § 102(a) as anticipated by *Ottesen*. Pet. 3. To support its contentions,

Petitioner provides explanations as to how the prior art allegedly discloses each claim limitation. *Id.* at 64–74. Ottesen is summarized below.

1. *Ottesen (Ex. 1008)*

Ottesen discloses a method of presenting program material, such as “movies, video programs, video games, instructional videos, or other viewing material,” and of editing undesirable segments. Ex. 1008, Abstract, 3:17–19, 3:28–32, 3:59–61; 8:5–6, Fig. 5.

2. *Analysis of Claim 8*

a) *“A method of presenting a media work which comprises”*

Patent Owner does not argue that the preamble is limiting. For the purpose of this decision, we do not need to decide whether the preamble is limiting because Petitioner recognizes that the preamble may be limiting by presenting sufficient evidence that Ottesen discloses the preamble. Pet. 64–65.

b) *“detecting media work content properties in a portion of the media work”*

Petitioner establishes sufficiently by a preponderance of the evidence that Ottesen discloses “detecting media work content properties in a portion of the media work,” as recited in claim 8. Pet. 65–70 (citing Ex. 1002 ¶¶ 152–159; Ex. 1008, Abstract, 3:33–36, 3:42–51, 3:62–67, 4:16–22, 5:45–46, 5:23–28; 5:29–46, 5:61–65, 6:6–15, 7:20–22, 7:56–65, Figs. 3, 4, 5).

c) *“associating a presentation rate of the portion with the detected media work content properties;”*

Petitioner establishes sufficiently by a preponderance of the evidence that Ottesen discloses “associating a presentation rate of the portion with the detected media work content properties,” as recited in claim 8. Pet. 70–73 (citing Ex. 1002 ¶¶ 160–163; Ex. 1008, Abstract, 2:25–36, 4:16–19, 6:58–

7:4, 8:5–6, 8:8–9, Figs. 3, 5). For example, Petitioner relies on “*Ottesen*’s process us[ing] the detected ratings to make a binary decision of whether or not to play a given segment.” Pet. 72–73 (citing Ex. 1008, Abstract, 2:25–36, 8:8–9, Fig. 5). Thus, Petitioner reads “presentation rate” on a presentation with material skipped that is faster than a presentation without skipping.¹¹ As explained above, this is consistent with claim 2 and an associated portion of the Specification specifically recites wherein the presentation rates include “a rate which causes a portion to be skipped.” Ex. 1001, 33:30–35 (“In this embodiment of the present invention, a PR (TSM rate) of ‘infinity’ (or some other indicium that will be similarly translated) directs the presentation (playback) system to skip sections of an MW (an audio or audio-visual work) whose concept has a corresponding PR (TSM rate) of infinity”); 70:55–56.

Patent Owner argues, under its construction of presentation rate that requires preserving pitch, *Ottesen* cannot meet those limitations. PO Resp. 41–42. Given our construction, we are not persuaded by these arguments that are not commensurate with the proper scope of the claims.

Nevertheless, Patent Owner also makes arguments that are relevant under our construction of presentation rate as “the speed at which media is played back.” Patent Owner argues that material that is skipped in *Ottesen* is played at a normal rate thus, the rate remains the same whether or not material is skipped. PO Resp. 44–45. Patent Owner argues that this is consistent with the limitation in claim 2 of “wherein the presentation rates

¹¹ Petitioner also relies on Patent Owner’s statements in a chart in the District Court record. *See* Pet. 73. We do not rely on such statements. Thus, Patent Owner’s arguments that such reliance would be improper are moot. PO Resp. 43.

include a rate which causes a portion to be skipped.” *Id.* at 45. According to Patent Owner, the Specification treats skipping and increasing speed as distinct, i.e. “This embodiment operates under the assumption that material familiar to the candidate **would preferably be presented at an increased PR, or skipped.**” *Id.* at 45–46 (citing Ex. 1001, 61:29–32).

We disagree. This argument rests on excluding a preferred embodiment from the claims, which is disfavored. *On-Line Techs. v. Bodenseewerk Perkin–Elmer GmbH*, 386 F.3d 1133, 1138 (Fed. Cir. 2004) (a construction that “excludes a preferred embodiment . . . ‘is rarely, if ever, correct’”). Claim 2 explicitly recites that skipping is a “rate,” so any construction that would exclude skipping would necessarily be incorrect. Additionally, as explained above, the Specification also recites that skipping is a “presentation rate,” i.e. a rate “of infinity.” Ex. 1001, 33:30–35. For those reasons, we are not persuaded by Patent Owner’s argument.

d) “*presenting the portion at the presentation rate*”

Petitioner establishes sufficiently by a preponderance of the evidence that Ottesen discloses “presenting the portion at the presentation rate,” as recited in claim 8. Pet. 73 (citing Ex. 1002 ¶ 164; Ex. 1008, 2:25–36, 8:8–9, Fig. 5).

e) “*wherein the presentation rates provide a substantially uniform rate of content presentation*”

Petitioner establishes sufficiently by a preponderance of the evidence that Ottesen discloses “wherein the presentation rates provide a substantially uniform rate of content presentation,” as recited in claim 8. Pet. 74 (citing Ex. 1002 ¶ 165; Ex. 1008, 2:25–36, 8:8–9, Fig. 5).

3. *Summary for Ground 5*

Having reviewed the record, we determine that the information presented establishes by a preponderance of the evidence that claim 8 is unpatentable under 35 U.S.C. § 102(a) as anticipated by Ottesen.

III. CONCLUSION

For the foregoing reasons, we determine Petitioner has established by a preponderance of the evidence the unpatentability of claims 1–4, and 7–9 of the '433 patent.¹²

IV. ORDER

Accordingly, it is

ORDERED that claims 1–4, 7–9 of U.S. Patent No. 7,043,433 B2 are unpatentable; and

FURTHER ORDERED that parties to the proceeding seeking judicial review of this Final Written Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

In summary:

Claim(s)	35 U.S.C. §	Reference(s)/ Basis	Claim(s) Shown Unpatentable	Claim(s) Not Shown Unpatentable
3, 4, 9	103(a)	Rochkind	3, 4, 9	
9	103(a)	Mauldin, Bhadkamkar	Moot	Moot

¹² Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. § 42.8(a)(3), (b)(2).

Claim(s)	35 U.S.C. §	Reference(s)/ Basis	Claim(s) Shown Unpatentable	Claim(s) Not Shown Unpatentable
1, 7	103(a)	Walker, Bhadkamkar	1, 7	
2	103(a)	Walker, Bhadkamkar, Iggulden	2	
8	103(a)	Ottesen	8	
Overall Outcome			1-4, 7-9	

IPR2019-01247
Patent 7,043,433 B2

PETITIONER:

Naveen Modi
Joseph Palys
Daniel Zeilberger
Arvind Jairam
Jason Heidemann
PAUL HASTINGS LLP
naveenmodi@paulhastings.com
josephpalys@paulhastings.com
danielzeilberger@paulhastings.com
arvindjairam@paulhastings.com
jasonheidemann@paulhastings.com

PATENT OWNER:

Lauren Robinson
Christina Finn
BUNSOW DE MORY LLP
lrobinson@bdiplaw.com
crinn@bdiplaw.com