

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

SAFECAST LIMITED LLC,
Patent Owner

Case No. IPR2023-00652
U.S. Patent No. 9,392,302

**REPLY IN SUPPORT OF
PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 9,392,302**

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LIST OF EXHIBITS

Exhibit	Description
Ex-1001	U.S. Patent No. 9,392,302
Ex-1002	Declaration of Dr. Henry Houh
Ex-1003	Curriculum Vitae of Dr. Henry Houh
Ex-1004	Prosecution History of U.S. Patent No. 9,392,302
Ex-1005	U.S. Patent Application Publication No. US 2002/0144262 (Plotnick)
Ex-1006	U.S. Patent App. No. 09/742,852 (“’852 Application”), published as U.S. Patent Application Publication No. US 2002/0083439
Ex-1007	U.S. Patent No. 8,413,189 (Parekh)
Ex-1008	[omitted]
Ex-1009	[omitted]
Ex-1010	[omitted]
Ex-1011	[omitted]
Ex-1012	[omitted]
Ex-1013	[omitted]

Exhibit	Description
Ex-1014	[omitted]
Ex-1015	[omitted]
Ex-1016	[omitted]
Ex-1017	[omitted]
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Ex-1019	[omitted]
Ex-1020	Claim Mapping Table
Ex-1021	[omitted]
Ex-1022	Plaintiff's Preliminary Infringement Contentions, (W.D. Tex. 6:22-cv-00678), as served on September 20, 2022
Ex-1023	Plaintiff SafeCast Limited's Response to Google LLC's Motion to Dismiss For Failure to State A Claim, No. 6:22-cv-00678-ADA (W.D. Tex., Oct. 13, 2022). ECF No. 26
Ex-1024	U.S. Patent Application Publication No. US 2009/0070414 (Singal)
Ex-1025	U.S. Patent Application Publication No. US 2009/0031390 (Rajakarunanayake)

Exhibit	Description
Ex-1026	U.S. Patent Application Publication No. US 2008/0181301 (Kim)
Ex-1027	U.S. Patent Application Publication No. US 2008/0281592 (McKoen)
Ex-1028	Appeals Court Upholds Indecency Safe Harbor Rules, Television Digest (July 12, 1995)
Ex-1029	Cable TV Rule Targets Adults-Only Flash; FCC Wants Tighter Control of Programming Signals, Chicago Tribune (Apr. 25, 1997)
Ex-1030	Brooks Boliek, FCC Narrows ‘Safe Harbor’; Court Says U.S. Can Restrict Adult Broadcast Fare to 10p.m.-6a.m., The Hollywood Reporter (July 5, 1995)
Ex-1031	Jonathan D. Salant, FCC Head Wants Bigger Fines for Profanity, Associated Press (Jan. 15, 2004)
Ex-1032	Bill Holland, Stations Get Lump of Coal From FCC, Billboard (Jan. 16, 1993)
Ex-1033	Obscene, Profane and Indecent Broadcasts : Notices of Apparent Liability – OBINN, Federal Communications Commission Enforcement Bureau, https://www.fcc.gov/enforcement/orders/1833 (last accessed on Feb. 27, 2023)
Ex-1034	Commission Proposes Statutory Maximum Forfeiture Of \$55,000 Against AMFM Radio Licenses For Apparent Violations Of Indecency Rules, Federal Communications Commission, News (October 2, 2003)

Exhibit	Description
Ex-1035	U.S. Patent Application Publication No. US 2002/0015093 (Dureau)
Ex-1036	U.S. Patent Application Publication No. US 2003/0208560 (Inoue)
Ex-1037	U.S. Patent Application Publication No. US 2008/0098423 (Malik)
Ex-1038	U.S. Patent Application Publication No. US 2009/0070414 (Singal)
Ex-1039	U.S. Patent No. 8,752,087 (Begeja)
Ex-1040	Reply Declaration of Dr. Henry Houh
Ex-1041	FCC 98-36, ET Docket No. 97-206 Technical Requirements to Enable Blocking of Video Programming based on Program Ratings
Ex-1042	FCC 04-175, MB Docket No. 04-261 Notice of Inquiry
Ex-1043	The V-Chip, Options to Restrict What Your Children Watch on TV, Federal Communications Commission, available at https://www.fcc.gov/consumers/guides/v-chip-putting-restrictions-what-your-children-watch
Ex-1044	Lawrie Mifflin, Question Lingers as F.C.C. Prepares V-Chip Standards, The New York Times, available at https://www.nytimes.com/1998/03/12/business/question-lingers-as-fcc-prepares-v-chip-standards.html

Exhibit	Description
Ex-1045	Paul Farhi, Parents Not Tuned to V-Chip, Washingtonpost.com, available at https://www.washingtonpost.com/wp-srv/national/daily/june99/vchip29.htm
Ex-1046	David V. Scott, The V-Chip Debate: Blocking Television Sex, Violence, and the First Amendment, Loyola of Los Angeles Entertainment Law Review, available at https://digitalcommons.lmu.edu/elr/vol16/iss3/5

I. Introduction

SafeCast's Patent Owner Response ("POR") does not rebut Petitioner's showing that Claims 1–4, 6–9, and 12–15 of U.S. Patent No. 9,392,302 should be canceled. Instead, the POR alleges deficiencies in Petitioner's Grounds by ignoring disclosures in the prior art, improperly considering each reference in isolation as opposed to combined as Petitioner proposed, and ignoring Petitioner's un rebutted expert testimony regarding motivation to combine. In short, there are no distinctions between Petitioner's Grounds and the challenged claims, and the claims should be canceled.

II. No Disputes Regarding Claim Construction Or Level Of Skill

Patent Owner does not dispute Petitioner's proposed constructions or level of skill in the art definition in this proceeding.¹ Paper 9 at 3–4 (no objections to Petitioner's proposed constructions).

III. Ground 1: Plotnick And Parekh Render The Challenged Claims Obvious

Patent Owner only contests elements 1[c.1], 1[c.2], and 1[e.1] as missing from Ground 1. In making its argument, Patent Owner raises only two substantive disputes. Paper 9 at 9–19. First, Patent Owner argues that Ground 1 does not

¹ Petitioner does not intend to, and does not, waive any argument that the structure for performing the claimed function of each term is not sufficiently disclosed in the '302 Patent.

render obvious the claimed “first field” of the header associated with each advertisement in 1[c.1] and thus also does not render obvious 1[e.1], which also recites reading the “first field.” Paper 9 at 8–14, 18–19. Second, the Patent Owner argues that Ground 1 does not render obvious the claimed “second field” of the header in 1[c.2]. *Id.* at 14–17. Both arguments fail for the reasons stated below.

A. Plotnick And Parekh Teaches The “First Field” Of Element 1[c.1]

The Patent Owner attacks Ground 1’s mapping to 1[c.1] based on three arguments: (1) Plotnick’s control data does not include “a local broadcasting time [sic]” and Parekh’s local broadcasting time regulation data is not in a “first field” of metadata (Paper 9 at 9–10, 11, 13); (2) Parekh checks for “airability” and rejects illegal and profane content before adding it to a media database for selection to be broadcast (Paper 9 at 12); and (3) Parekh does not teach time-shifted viewing/listening (Paper 9 at 13–14).

Each of Patent Owner’s three arguments fail to identify a meaningful distinction between Ground 1 and the challenged claims.

1. The Combination Of Plotnick And Parekh Renders Obvious A Header With A “First Field Related To A Local Broadcasting Time Regulation”

As explained in the Petition, Plotnick in combination with Parekh teaches a “first field related to a local broadcasting time regulation” (element 1[c.1]). Plotnick teaches that advertisements have “ad metadata” in “control data 1006,”

which has multiple fields regarding a variety of characteristics relating to the advertisement including, e.g., information relating to the “time of day” when the advertisement should be shown. Paper 1 at 42–43 (citing Ex-1005 ¶¶154, 155, 169, 194 and Ex-1006 ¶¶50–51). Plotnick’s ad metadata also includes information regarding the content of the advertisement, e.g., the product brand, which could indicate whether the content is child-friendly. *Id.* at 44–45 (citing Ex-1005 at Figs. 6C, 6B and Ex-1002 ¶¶98, 125–127). And as Petitioner’s expert explained in unrebutted testimony, a POSITA would have known that Plotnick’s ad metadata is stored in fields of a “header” associated with the advertisement because contemporaneous publications describe the then-routine and still-routine practice of storing information related to media in headers. *Id.* (citing Ex-1002 ¶¶97–98, 121–129).

The Petition further explained that a POSITA would have been motivated to look to similar references for additional implementation details regarding controlling when and how advertisements are shown, including time-based restrictions, by using advertisement metadata, headers, and rules. *Id.* (citing Ex-1002 ¶¶127–128). Parekh is one such reference. It teaches that before playing a media item, including advertisements, in a dynamic media system, the system should apply guidelines and rules, including rules based on FCC broadcasting time regulations, based on metadata associated with each advertisement. *Id.* (citing Ex-

1007 at 11:14–20, 11:26–36).

The Petition further explained that a POSITA would have been motivated to implement Plotnick’s system, which controls the “time of day” that an advertisement is played by using a metadata field in Plotnick’s advertisement header, by combining the Parekh teaching to apply rules based on local broadcasting time regulations. *Id.* at 45–47 (citing Ex-1002 ¶¶128–129). The system of Parekh shares multiple similarities with Plotnick, including that both describe controlling what media items are played based on “time of day” (*compare* Ex-1005 ¶¶169, 194 and Ex-1006 ¶¶50–51 *with* Ex-1007 at 11:26–36) and both describe doing so by using metadata associated with each advertisement (*compare* Ex-1005 ¶¶154, 155 *with* Ex-1007 at 10:32–57, 11:11–13, 9:66–10:4). Paper 1 at 45–47 (citing Ex-1002 ¶¶124–128); *id.* at 27–29. Thus, applying Parekh’s time of day rules, which include consideration of local broadcasting regulations, would have been a straightforward combination requiring only minor adjustment to the Plotnick system. Paper 1 at 47 (citing Ex-1002 ¶129). And the combination would have yielded the expected result that when Plotnick’s system considers the “time of day” to play an advertisement, such consideration would include applying the time restrictions of local broadcasting regulations. *Id.* (citing Ex-1002 ¶129).

The Petition further explained the motivation to seek implementation details regarding FCC broadcasting time regulations, as taught in Parekh, and apply them

to Plotnick. *Id.* at 29–31. Specifically, the rationale behind the FCC regulation restricting profane and obscene content at certain times of day—to prevent children from being exposed to harmful content—was a frequent topic of news articles and publications. *Id.* (citing Ex-1002 ¶¶100, 110 (citing Exs-1028–1034); Ex-1028 at 1 (quoting D.C. Circuit decision regarding government interest in “the well-being of minors”); Ex-1030 at 1 (“serves the goal of confining this material to hours minors are less likely to be exposed to it”)). As the Petition and Petitioner’s expert explain, a POSITA would have been motivated to ensure that advertisements were time-appropriate based on the timing restriction set forth in those laws because violation of the laws would incur legal and financial consequences and because the rationale behind the law—to protect children from being exposed to inappropriate content—was a public concern at the time of the invention. *Id.* (citing Ex-1002 ¶100); Ex-1002 ¶110 (citing, e.g., Ex-1028, Ex-1030); Ex-1040 ¶225.

The Petition thus showed that Plotnick in combination with Parekh renders obvious a “first field related to a local broadcasting time regulation” (1[c.1]).

a. *Patent Owner Attacks Plotnick By Misquoting The Language Of 1[c.1]*

Patent Owner argues that Plotnick does not teach a first field with “a local broadcasting time.” Paper 9 at 10. But the claims do not require the “first field” to have “a local broadcasting time.” Instead, the claims recite a “first field related to a local broadcasting time regulation.” Ex-1001 at Cl. 1 (element 1[c.1]) (emphasis

added). Accordingly, Patent Owner fails to distinguish the prior art based on the words of the claims. As explained in the Petition and above, Plotnick in view of Parekh teaches headers (from Plotnick) that would have included information *related to* local broadcast time *regulations* (from Parekh), which is what the challenged claims recite.

b. *Patent Owner Attacks Plotnick And Parekh Individually Rather Than In Combination*

Patent Owner admits that Plotnick teaches metadata in fields of a header associated with an advertisement, but attacks Plotnick for not including in those headers information related to “a local broadcasting time regulation.” Paper 9 at 9–10. Patent Owner next admits that Parekh teaches “a local broadcasting time regulation,” but attacks Parekh for not expressly stating that information related to this regulation is included in a metadata field or header. *Id.* at 11, 13. In essence, Patent Owner admits that the combined teachings of both references teach all aspects of the claims, but argues that the claims are not rendered obvious because no single reference expressly includes all of these claimed aspects together. This argument misses the mark because it is fundamentally an argument that neither reference *anticipates* the claims. But Petitioner’s Ground 1 argues that the *combined* teachings of Plotnick and Parekh *render obvious* the challenged claims.

Patent Owner’s argument fails because “obviousness, [] cannot be overcome ‘by attacking references individually where the rejection is based upon the

teachings of a combination of references.’” *Bradium Techs. LLC v. Iancu*, 923 F.3d 1032, 1050 (Fed. Cir. 2019) (quoting *In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986)). Instead, the relevant question is whether “a person of ordinary skill in the art would have been motivated to combine the prior art in a way such that the combination discloses the claim limitations.” *Fleming v. Cirrus Design Corp.*, 28 F.4th 1214, 1222 (Fed. Cir. 2022).

c. *Patent Owner Fails To Rebut The Petition’s Evidence Of Motivation To Apply Parekh’s Teaching Via The “First Field” In Plotnick*

Patent Owner, in attacking Plotnick and Parekh individually, fails to rebut the Petition’s evidence that a POSITA would have been motivated to combine the teachings of Plotnick and Parekh as recited in element 1[c.1]—specifically, via the “first field” of metadata in the advertisement header taught in Plotnick. Paper 9 at 9–11 (no discussion of motivation to combine Plotnick and Parekh teachings via the “first field”). The Petition cites multiple sources of evidence that a POSITA would have been motivated to implement local broadcasting authority time regulation rules as taught in Parekh in a first metadata field of an advertisement header as taught in Plotnick. *See supra* Section III.A.1.b; *see also* Paper 1 at 27–31, 34–35, 45–47. Patent Owner addressed none of this evidence or Petitioner’s expert testimony on this point. *E.g.*, Ex-1005 ¶¶125, 169, 194; Ex-1006 ¶¶50, 51; Ex-1002 ¶¶121–129.

Patent Owner did not depose Petitioner’s expert, nor did it provide its own expert testimony in response. Instead, Patent Owner’s Response consists entirely of attorney argument, which cannot take the place of actual evidence. *See Keynetik, Inc. v. Samsung Elecs. Co., Ltd.*, No. 2022-1127, 2023 WL 2003932, at *2 (Fed. Cir. Feb. 15, 2023) (Patent Owner’s “attorney argument is no substitute for evidence” and Petitioner’s un rebutted expert testimony on motivation to combine “constitutes substantial evidence to support the Board’s finding” of obviousness); *see also Nike Inc. v. Jezign Licensing, LLC*, IPR2017-00246, Paper 33 at 27 (PTAB May 29, 2018) (“We are not swayed by Patent Owner’s conclusory attorney arguments ... [r]ather ... we agree with Petitioner’s position as supported by the declaration testimony [.]”).

As the Petition explained, Plotnick receives and delivers broadcast programming and has the additional capability to store and play such programming later. Paper 1 at 37 (citing Ex-1005 ¶¶90–92, 150 (“An ad insertion module 812 handles the processes necessary to incorporate targeted ads into television programs, including programs received in real-time or being played from the set-top box’s hard disk.”)). Petitioner’s expert explained that a POSITA would have understood that broadcasted content played by the Plotnick system would be subject to FCC regulations, which prohibit certain types of content at certain times of day. Ex-1002 ¶126. Thus, as the Petition explained, Plotnick’s use of metadata

in a header (“control data 1006”) to control the “time of day” that advertisements were played in a system that is subject to FCC regulations would have suggested to a POSITA that “control data 1006” has a field relating to a local broadcasting time regulation. Paper 1 at 44–45 (citing Ex-1002 ¶¶125–127).

The Petition then explained that a POSITA would have been motivated to look to Parekh as a similar reference that teaches additional implementation details regarding how to control the time of day that advertisements are played to users by using advertisement metadata to implement rules. Paper 1 at 45–47 (citing Ex-1002 ¶¶127–129). Parekh teaches that FCC broadcasting time regulations should be considered when implementing rules about the time of day that content should be played. *Id.* (citing Ex-1007 at 11:14–20, 11:26–36).

The Petition explains that because the Plotnick system controls when, what, and how advertisements are played by using information in metadata fields of advertisement headers, a POSITA would have found it obvious to apply Parekh’s timing rules, which are based on local broadcasting regulations, in the same manner—via a field of an advertisement header. Paper 1 at 46–47 (citing Ex-1002 ¶¶128–129; Ex-1007, 10:47–51, 16:17–20, 20:9–21). Specifically, as Petitioner’s expert explained, a POSITA would have found that Parekh’s teaching could be easily incorporated using routine practices because Parekh also uses metadata to check its tracks against FCC time regulations. Ex-1002 ¶128; *see also id.* ¶¶101,

111. And a POSITA would have a reasonable expectation of success of applying Parekh's time regulation via the header fields of Plotnick because Plotnick uses such fields to control "time of day" and "other criteria" for selecting media. *Id.*

¶129. Indeed, because the techniques of using metadata, databases, and rules, were so well-known and programmable, Petitioner's expert explained that "a POSITA would have found it obvious to simply program the Plotnick system to include additional metadata or rules as needed to implement the teachings of Parekh to consider FCC time regulations." *Id.* The combination would simply lead to the expected result that the "time of day" control of the Plotnick system is programmed to have timing consistent with the FCC regulations as taught in Parekh. *Id.*

Patent Owner has cited no evidence to rebut the motivation to apply the teaching of Parekh via the first field of the header taught in Plotnick. Paper 9 at 9–11. Thus, as the Petition and un rebutted evidence show, a POSITA would have been motivated to implement a first field of the header, as taught in Plotnick, to include information "related to a local broadcasting time regulation," as taught in Parekh, just as recited in 1[c.1]. *See supra* Section III.A.1.b.

2. Patent Owner's Citation To The "Airability" Teaching Of Parekh Does Not Impact Ground 1, Which Relies On The "Rule Engine" Of Parekh

Patent Owner cites an "airability" filter process taught in Parekh as allegedly

undermining Parekh’s teaching of applying local broadcasting time regulations at the time an advertisement is played. Paper 9 at 12 (citing Ex-1007 at 11:2–13). But Patent Owner’s argument is a red herring—the “airability” teaching in Parekh is unrelated to Parekh’s teaching that a “rules engine” applies local broadcasting time regulations. *Contrast* Ex-1007 at 10:59–11:13 *with id.* at 11:14–31.

Specifically, Parekh’s “airability” filter reviews user-uploaded content to determine whether that content cannot be aired *at any time* and thus must be excluded from the media database entirely. Ex-1007 at 10:59–13, 11:11–13. The “airability” teaching in Parekh is implemented by the “moderation server” 316, which is shown as a distinct server from the “playlist generator and rules engine” 308 that manages the rules related to the local broadcasting time regulation. *See* Ex-1007 at Fig. 3A, 11:4–6, 11:15–31. The “airability” filter is performed to ensure that certain user-uploaded content can be aired. *Id.* at 10:59–13. If the content passes the filter (e.g., it is not illegal), then it will be added to the media database. *Id.* at 11:11–13. In contrast, Parekh’s “rule engine” applies to manage *when, not whether*, content is played from the media database. Ex-1007 at 11:29–31 (describing allowing indecent and/or profane content within the FCC Safe Harbor time period). This means that the content is in the database and has already passed the “airability” filter. *Id.* at 11:11–11:31 (describing first the airability filter and then the rules engine as a following step). In other words, Parekh’s

“airability” filter is an initial filter to ensure that the pool of media does not include illegal content that can never be aired, while Parekh’s “rules engine,” which is relied on in Ground 1, selects from the pool of advertisements by applying criteria, including time-based rules based on local broadcasting time regulations.

Thus, Patent Owner’s citation to the “airability” teaching in Parekh is not responsive to the Petition’s reliance on the local broadcasting time regulations applied by the “rules engine” of Parekh, leaving that reliance unrebutted.

3. A POSITA Would Have Been Motivated To Implement Parekh’s Time Regulation Rules In Plotnick’s Time-Shifted Viewing System

Patent Owner next argues that Parekh does not teach time-shifted viewing/listening. Again, Patent Owner attacks Parekh individually, rather than in the proposed combination. *Bradium*, 923 F.3d at 1050.

The petition explains that the “time-shifted viewing” aspect is taught by Plotnick. Specifically, Plotnick teaches a PVR system that is capable of recording programming and playing it back later. Ex-1005 ¶¶93, 97. Instead of addressing this time-shifted viewing/listening teaching of Plotnick, Patent Owner argues that Parekh does not teach time-shifted viewing. But the relevant question is whether a POSITA would have been motivated to combine Parekh’s local broadcasting time regulation rules in the PVR system of Plotnick, which is undisputedly capable of time-shifted viewing/listening.

As the Petition and Petitioner’s un rebutted evidence show, a POSITA would have been motivated to implement Parekh’s teaching of using rules based on local broadcasting time regulations in the system of Plotnick, which is capable of time-shifted viewing. Paper 1 at 27–31, 34–35, 46–47; Ex-1002 ¶¶100–102, 109–111. Specifically as to the time-shifted functionality of Plotnick, Petitioner’s expert testified that “[a] POSITA would have known the problems related to playing PVR-recorded programs at a later time, including the fact that advertisements may be inappropriate for the time of day at playback.” Ex-1002 ¶100.

Plotnick and Parekh both teach the importance of considering what time of day a viewer is being exposed to the media. Plotnick teaches applying rules based on “time of day,” and, because Plotnick’s system is a PVR-enabled set top box, Plotnick’s “time of day” rules apply definitionally to time-shifted viewing. *Id.* at 31–33, 42–45. Plotnick thus teaches a system that considers whether an advertisement is appropriate for the “time of day” during the time-shifted viewing. Ex-1040 ¶227 (citing Ex-1006 ¶51). Parekh likewise teaches that it is important to apply rules to control the time of day when the advertisements are to be played, including rules based on local broadcasting time regulations. Petition at 33–34, 45–47. And while Parekh discloses a live broadcast system, a POSITA would have been motivated to apply the FCC time regulation teachings of Parekh in the Plotnick system for the very reasons taught in both Plotnick and Parekh—to ensure

that advertisements are appropriate for the time of day that they are played to users. Petition at 46–47, 53–55. This is further supported by contemporaneous articles explaining that the motivating factor behind the FCC regulation is to prevent children from being exposed to profane and indecent content, which would apply equally to a PVR system like Plotnick. *See* Ex-1002 ¶¶62, 110 (citing Exs-1028–1034); Ex-1028 at 1 (quoting D.C. Circuit decision regarding government interest in “the well-being of minors”); Ex-1030 at 1 (“serves the goal of confining this material to hours minors are less likely to be exposed to it”).

Indeed, the discussion about how to prevent children from being exposed to profane and indecent TV and radio content and technology for implementing such restrictions started long before 2010. *See* Exs-1041–1046; Ex-1040 ¶227. By the 2000s, the V-chip was known by POSITAs, and even in mainstream media, as a technology that would enable parents to program restrictions in their TVs to block offensive content from being played to their children. *Id.* ¶226. Thus, the motivation to reduce the risk of minors being exposed to inappropriate content was well-known by POSITAs at the time of the invention. Ex-1040 ¶227. This motivation applied equally, if not even more so, when PVR technology made it possible to record content for time-shifted viewing and thus made it possible to record late night content and for playback during the day. Ex-1040 ¶227. Plotnick itself describes that “the relative appropriateness of the prepared ad schedule may

change as circumstances change” and that “[s]uch circumstances may include, but are not limited to, the *time of day*, program or type of program being watched, channel selection, *identity of the current viewer*, and timing/duration of the upcoming avail.” Ex-1006 ¶51 (incorporated by reference into Ex-1005 ¶¶2–14, 36, 194); Ex-1040 ¶227. Plotnick thus teaches and provides a motivation to ensure that time-shifted advertisements are appropriate for the time of day that they are played, including considerations based on the identity of the viewer. *Id.* And a POSITA would have looked to common standards, including local broadcasting regulations, to determine what timing and types of content were generally accepted or adopted by the general public as appropriate. Ex-1040 ¶228. For all of the reasons stated above, a POSITA would have been motivated to implement Parekh’s teaching to apply timing rules to advertising content that are based on FCC broadcasting regulations into the PVR system of Plotnick. *Id.* ¶229.

Thus, in the Ground 1 system, the Plotnick PVR applies Parekh’s local broadcasting time regulation-based time restriction rules to time-shifted viewing.

B. Plotnick And Parekh Teaches The “Second Field” Of Element 1[c.2]

The Patent Owner attacks Ground 1’s mapping to 1[c.2] (“a second field related to the number of times said advertisement has previously been shown during time-shifted viewing”) based on two arguments: (1) Plotnick allegedly does not disclose updating “the number of times” the advertisement was previously

shown; and (2) updating metadata after “ad delivery” in Plotnick allegedly means updating the metadata after the ad was delivered from the advertiser to the PVR rather than delivered to the user. Paper 9 at 15–17. Both arguments are wrong.

1. Plotnick Teaches Updating Ad Metadata And Sending An Insertion Report After Playback

As explained in the Petition, Plotnick teaches that after an advertisement is played to a user, “the system updates the ad metadata and transmits an insertion report to the head-end.” Petition at 47–48 (citing Ex-1005 ¶163); *see also id.* (citing Ex-1005 ¶156 (“update[] the ad metadata 1006 based on ad delivery and user interaction”)). Patent Owner argues that Plotnick does not explicitly state that such updated metadata includes “the number of times” the advertisement was shown. Paper 9 at 16. This argument is wrong, as Plotnick’s disclosures make clear that the updated metadata includes such count. *See, e.g.,* Ex-1005 ¶154 (“The set-top box can supplement this control data by adding presentation history and user interaction data.”).

Plotnick teaches that “the system updates the ad metadata and transmits an insertion report to the head-end” and that the “traffic and billing system [] tracks the insertion results and bills the advertiser based on the insertions.” Petition at 47–48 (citing Ex-1005 ¶¶163, 170). Petitioner’s un rebutted expert testimony explains that based on these disclosures, a POSITA would have understood the updated metrics in Plotnick’s metadata would include the number of times that the

advertisement was shown during playback. Petition at 48 (citing Ex-1002 ¶130). Specifically, as Petitioner’s expert explained, Plotnick teaches that the advertisement insertion results are tracked so the advertiser can be billed based on the number of times the advertisement was played, e.g., “based on the insertions.” Ex-1002 ¶130 (citing Ex-1005 ¶¶156, 163, 170). In other words, to be able to bill the advertiser “based on the insertions,” the Plotnick system must track the number of times that the advertisement was inserted/played. *Id.* And a POSITA would have been motivated to implement the metadata regarding the number of times that the advertisement was played in a second field of the header taught in Plotnick because Plotnick explains that the advertisement insertion reports are sent “upstream” and a POSITA would have known that a second field is necessary so as not to overwrite existing fields. Ex-1002 ¶130–131 (citing Ex-1005 ¶¶141, 168).

2. “Ad Delivery” In Plotnick Refers To Playback, Not Delivery To The PVR

Patent Owner’s next attempts to distinguish Plotnick’s disclosure that the system “updates the ad metadata 1006 based on ad delivery” by arguing, based on no evidence, that “ad delivery” in Plotnick relates to delivering ads to the PVR, rather than playing those ads to a user. Paper 9 at 16. Patent Owner’s interpretation is wrong.

Contrary to Patent Owner’s unsupported attorney argument, Plotnick’s disclosure that the system will “update[] the ad metadata 1006 based on ad delivery

and user interaction” makes clear that the updates are based on delivery to the user (and not to the PVR). Ex-1005 ¶156 (emphasis added). This is because, as Patent Owner admits, “user interaction” refers to the user taking certain actions to interact with the advertisement via a user interface (Paper 9 at 16 (citing Ex-1005 ¶140)), such as “channel changes, volume changes, and VCR-like controls of the PVR” (Ex-1005 ¶160).

Plotnick’s two other uses of the phrase “ad delivery” likewise refer to delivering ads to the user. Both mentions of “ad delivery” refer to “ad delivery instructions” that are saved on a VoD Server alongside the content. Ex-1005 at ¶170. The “ad delivery instructions” are used to schedule when the ads are played with respect to the content. *Id.* The “ad delivery instructions” thus refer to instructions for delivering/playing ads *to the user* rather than when the ads are sent to be stored in a PVR. Ex-1005 ¶170. Thus, Plotnick’s disclosure that “the processing component [] updates the ad metadata 1006 based on ad delivery and user interaction” teaches updating ad metadata based on delivery to the user and the user’s interaction upon delivery.

C. The POR Raises No Independent Arguments Regarding Claims 2–4, 6–9, 12–15

For challenged Claims 2–4, 6–9, and 12–15, the POR does not raise any independent arguments to rebut that Ground 1 invalidates the claims. Instead, the POR only cites to its arguments regarding 1[c.1], 1[c.2], and 1[e.1] as

corresponding to elements 12[c], 12[d], and 12[g]. For the same reasons that Ground 1 renders challenged Claim 1, including elements 1[c.1], 1[c.2], and 1[e.1], invalid, Ground 1 renders Claims 2–4, 6–9, and 12–15 invalid. *See* Sections III.A, III.B.

IV. Ground 2: Plotnick Matches Patent Owner’s Interpretation Of Every Limitation Of The Challenged Claims

As shown in Section XII.B of the Petition, Ground 2 maps to Patent Owner’s interpretation of the challenged claims in the civil action. Petition at 73–81. Patent Owner does not deny that Ground 2 corresponds to Patent Owner’s interpretation of the claims, nor does it deny that these are the claim construction positions advanced by Patent Owner in district court. Instead, Patent Owner argues that: (i) Patent Owner’s own claim constructions from the civil action are “not in compliance with the regulations of 37 C.F.R. §42.100(b)” and (2) the Board must apply the claim interpretations used in Ground 1 and find Plotnick deficient for the reasons the POR argued as to Ground 1.

First, 37 C.F.R. § 42.100(b) states that claims shall be construed using the same claim construction standard as that used in a civil action under 35 U.S.C. § 282(b). Petitioner’s Ground 2 applies Patent Owner’s constructions from the civil action. To the extent that Patent Owner asserts that these constructions reflect the proper scope of the challenged claims, then the claims are invalid for the reasons explained in Ground 2. Patent Owner has not presented any patentability argument

under its own view of the claims, or provided any further explanation for why its district court view of the claims is, or is not, correct. Petitioner, on the other hand, has explained how these claims should be understood in Ground 1, and has further explained why the claims are unpatentable under this understanding. Patent Owner does not dispute that Ground 2 meets every element of the challenged claims under Patent Owner's interpretation. *See* Paper 9 at 22 (admitting that "Petitioner construes the claims based on how Patent Owner appears to apply the claims"). Thus, if the Board interprets the challenged claims as Patent Owner did in the civil action, then there is no dispute that Ground 2 renders the challenged claims invalid.

Second, if the Board interprets the claims according to the interpretations applied by the Parties as to Ground 1, then for the reasons stated in Section III, Ground 1 renders the challenged claims invalid.

V. Conclusion

For the reasons given in the Petition and this Reply, Petitioner requests cancellation of Claims 1–4, 6–9, and 12–15 of the '302 Patent.

Respectfully Submitted,

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), Petitioner certifies that this Reply includes 4,740 words, as measured by Microsoft Word, exclusive of the table of contents, mandatory notices under § 42.8, certificates of service, word count, and exhibits.

CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e)(1))

The undersigned certifies pursuant to 37 C.F.R. § 42.6(e) and § 42.105 that on March 26, 2024, a true and correct copy of the **REPLY IN SUPPORT OF PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO. 9,392,302** was served on the Patent Owner via electronic mail.

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