

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

UNITED VIDEO PROPERTIES, INC.,)
and INDEX SYSTEMS, INC.,)

Plaintiffs,)

v.)

HAIER GROUP CORP. and HAIER)
AMERICA TRADING, LLC,)

Defendants.)

Civil Action No. 11-1140 (KAJ)

UNSEALED ON
JUNE 11, 2014

MEMORANDUM OPINION

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May 16, 2014
Wilmington, Delaware


JORDAN, Circuit Judge sitting by designation

I. INTRODUCTION

Plaintiffs United Video Properties, Inc. ("UVP") and Index Systems, Inc. ("ISI") (collectively, the "Plaintiffs") filed this suit against Haier Group Corp. ("Haier Group") and Haier America Trading, LLC ("Haier America") (collectively, "Haier") for infringement of United States Patent Nos. 6,701,523 ("the '523 patent") and 7,047,547 ("the '547 patent") (collectively, "the patents-in-suit").¹ (D.I. 1.) Jurisdiction is proper under 28 U.S.C. §§ 1331 and 1338. The patents-in-suit relate to parental-control technology for restricting access to television programming content.

Haier has asserted counterclaims seeking declaratory judgment of non-infringement and invalidity of the patents-in-suit. (D.I. 20; D.I. 99.) Before me now are the following matters for resolution: (1) the parties' claim construction positions for the patents-in-suit (D.I. 137); (2) Haier's summary judgment motions for invalidity of all asserted claims of the patents-in-suit (D.I. 141; D.I. 142); and (3) Haier's motion for partial summary judgment limiting the damages that are potentially recoverable (D.I. 143).

II. BACKGROUND

A. Technology Overview

Parental controls for restricting access to certain television programming content were well known in the art before the inventions claimed by the patents-in-suit. Those

¹ Haier America is a subsidiary of Haier Group. (Docket Item ["D.I."] 1, **ij** 7.) ISI is the owner of the '523 patent; UVP is likewise the owner of the '547 patent.

features were generally referred to as "V-Chip technology." *See* Technology Requirements to Enable Blocking of Video Programming Based on Program Ratings, 63 Fed. Reg. 20,131, 20,131 (Apr. 23, 1998) ("[T]he Commission is amending the rules to require ... technological features to allow parents to block the display of violent, sexual, or other programming they believe is harmful to their children. These features are commonly referred to as 'v-chip' technology."). Finding that "[t]here is a compelling governmental interest in empowering parents to limit the negative influences of video programming that is harmful to children," Congress sought to "provid[e] parents with timely information about the nature of upcoming video programming and with the technological tools" to block undesirable programming by passing the Telecommunications Act of 1996 (the "Telecommunications Act"). 47 U.S.C. § 303 note (Parental Choice in Television Programming). Among other measures, the Telecommunications Act provided for the establishment of a television rating code; required 13-inch-screen or larger televisions shipped in interstate commerce or manufactured in the United States to include V-chip technology; and authorized the Federal Communications Commission ("FCC") to oversee the industry's adoption of standards for V-chip technology. *Id.* §§ 303, 330. In order to fulfill its mandate under the Telecommunications Act, the FCC in 1998 adopted a rule providing for industry-standard methods for transmitting and using program rating information. 63 Fed. Reg. at 20,131-34. The rule required, in part, that certain televisions "shall block programming based on the age based ratings, the content based ratings, or a combination of the two." *Id.* at 20,134 (codified at 47 C.F.R. § 15.120(e)(4)).

I will describe the particular subject matter of each of the patents-in-suit in more detail herein.

B. Procedural History

The Plaintiffs filed this suit against Haier on November 16, 2011, alleging infringement of the patents-in-suit. (D.I. 1.) Rovi Guides, Inc. ("Rovi Guides") and Rovi Corp. were also originally listed as plaintiffs in this action. (*Id.*) Plaintiff UVP is a wholly-owned subsidiary of Rovi Guides, which is itself a wholly-owned subsidiary of Rovi Corp. (*Id.* ¶¶3-4.) It is unclear whether or how Plaintiff ISI is related to UVP, Rovi Guides, or Rovi Corp. On February 21, 2012, the case was stayed pursuant to 28 U.S.C. § 1659 pending a United States International Trade Commission ("ITC") Investigation. (D.I. 15.) It was reopened on July 18, 2012 (D.I. 17), and assigned to me on March 4, 2013 (D.I. 40).

On April 17, 2013, Haier Group filed a motion to dismiss for lack of personal jurisdiction (D.I. 48), which I denied on August 23, 2013 (D.I. 94). In the accompanying memorandum opinion, I urged the parties to clarify how Rovi Guides and Rovi Corp. could have standing to sue in this case. (D.I. 93 at 2 n.2.) The parties subsequently reached a stipulation and proposed order to dismiss Rovi Guides and Rovi Corp. from this action, which order was entered on September 5, 2013. (D.I. 97.) Discovery closed on December 30, 2013. (D.I. 101.)

As mentioned before, the parties have submitted for construction several claim terms from the patents-in-suit. (D.I. 137.) Haier has also filed motions for summary judgment of invalidity of the asserted claims of the '523 patent (D.I. 142) and of the '547

patent (D.I. **141**), and partial summary judgment limiting damages (D.I. 143). Following the completion of briefing, I held a *Markman* hearing and oral argument regarding those matters. (D.I. 182.)

III. LEGAL STANDARDS

A. Claim Construction

"Claim construction is a legal statement of the scope of the patent right" *Lighting Ballast Control LLC v. Philips Elecs. N Am. Corp.*, 744 F.3d 1272, 1284 (Fed. Cir. 2014) (en bane). "[T]he words of a claim 'are generally given their ordinary and customary meaning.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en bane) (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). That ordinary meaning "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention," when read "in the context of the entire patent." *Id.* at 1313.

To ascertain the meaning of a term, the court should review the same resources as would have been consulted by a person of ordinary skill in the art at the time of the invention. *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1477 (Fed. Cir. 1998). Those resources include "the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004).

Of those resources, the patent specification is "the single best guide to the meaning of a disputed term." *Phillips*, 415 F.3d at 1315 (quoting *Vitronics*, 90 F.3d at 1582) (internal quotation marks omitted). The claims themselves, which appear at the end of the specification, "provide substantial guidance as to the meaning of particular claim terms." *Id.* at 1314. Specifically, "the context in which a term is used in [an] asserted claim can be highly instructive," and reference to the "[o]ther claims of the patent in question" can also be useful "[b]ecause claim terms are normally used consistently throughout the patent." *Id.* "[T]he descriptive part of the specification [also] aids in ascertaining the scope and meaning of the claims inasmuch as the words of the claims must be based on the description." *Id.* at 1315 (quoting *Standard Oil Co. v. Am. Cyanamid Co.*, 774 F.2d 448, 452 (Fed. Cir. 1985)) (internal quotation marks omitted).

The patent specification does not stand alone, however. A court "should also consider the patent's prosecution history, if it is in evidence." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995) (en bane), *aff'd*, 517 U.S. 370 (1996). "Like the specification, the prosecution history provides evidence of how the [United States Patent and Trademark Office ('PTO')] and the inventor understood the patent." *Phillips*, 415 F.3d at 1317. A court may also rely on extrinsic evidence, which is "all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Markman*, 52 F.3d at 980. In particular, "dictionaries, and especially technical dictionaries, ... have been properly recognized as among the many tools that can assist the court in determining the meaning of particular terminology." *Phillips*, 415 F.3d at 1318.

During claim construction, "[t]he sequence of steps used by the judge in consulting various sources is not important; what matters is for the court to attach the appropriate weight to be assigned to those sources in light of the statutes and policies that inform patent law." *Id.* at 1324. For example, extrinsic evidence is "less significant than the intrinsic record in determining the 'legally operative meaning of disputed claim language,'" *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004) (quoting *Vanderlande Indus. Nederland BV v. ITC*, 366 F.3d 1311, 1318 (Fed. Cir. 2004)), and extrinsic evidence "is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence," *Phillips*, 415 F.3d at 1319. Thus, "[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Renishaw PLC v. Marposs Societa 'per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998). For that reason, interpreting a claim term to exclude an inventor's product or a preferred embodiment is rarely the correct construction. *Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1581 (Fed. Cir. 1996).

For a claim term written in means-plus-function format, once the function has been identified, the corresponding structure for that function must be sought in the written description. *Med. Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1210 (Fed. Cir. 2003); *see also* 35 U.S.C. § 112, ¹6 (providing that a means-plus-function claim "shall be construed to cover the corresponding structure ... described in

the specification").² "All one needs to do in order to obtain the benefit of [35 U.S.C. § 112, **if** 6] is to recite some structure corresponding to the means in the specification, as the statute states, so that one can readily ascertain what the claim means and comply with the particularity requirement" *Atmel Corp. v. Info. Storage Devices, Inc.*, 198F.3d 1374, 1378 (Fed. Cir. 1999). A corresponding structure must be "link[ed] or associate[d]" with the function recited in the claim. *B. Braun Med., Inc. v. Abbott Labs.*, 124F.3d 1419, 1424 (Fed. Cir. 1997).

B. Summary Judgment

Pursuant to Rule 56(a) of the Federal Rules of Civil Procedure, a "court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). Both the movant and the non-movant must support their factual positions either by "citing to particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations (including those made for purposes of the motion only), admissions, interrogatory answers, or other materials" or by "showing that the materials cited [by another party] do not establish the absence or presence of a genuine dispute, or that an adverse party cannot produce admissible evidence to support the fact." Fed. R. Civ. P. 56(c)(1). In determining

² Paragraph 6 of 35 U.S.C § 112 was replaced with newly designated § 112(±) by the Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112-29, 125 Stat. 284 (2011). AJA § 4(c) makes this change applicable to patent applications filed on or after September 16, 2012. Because the applications resulting in the patents-in-suit were filed before that date, I will refer to the pre-AIA version of § 112.

whether there is a genuine dispute of material fact, all justifiable inferences from the evidence must be drawn in favor of the non-moving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986). A court should not make credibility determinations or weigh the evidence presented by the parties. *Id.* Furthermore, when determining whether summary judgment is appropriate, a court "must view the evidence presented through the prism of the substantive evidentiary burden." *Id.* at 254.

To defeat a motion for summary judgment after a moving party has carried its burden under Rule 56(c), the non-moving party must "do more than simply show that there is some metaphysical doubt as to the material facts." *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586 (1986). Rather, the non-moving party "must set forth specific facts showing that there is a genuine issue for trial." *Id.* at 586 n.11 (quoting former Fed. R. Civ. P. 56(e), amended Dec. I, 2010); *see* Fed. R. Civ. P. 56 advisory committee's note (explaining that "[t]he standard for granting summary judgment remains unchanged" after the amendments to Rule 56 effective December I, 2010). "Where the record taken as a whole could not lead a rational trier of fact to find for the non-moving party, there is no genuine issue for trial." *Matsushita*, 475 U.S. at 587 (internal quotation marks omitted).

C. Invalidity

Pursuant to 35 U.S.C. § 282, "[a] patent shall be presumed valid," and "[e]ach claim of a patent ... shall be presumed valid independently of the validity of other claims." 35 U.S.C. § 282(a). The party asserting invalidity bears the burden of proving

that contention by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd.*, 131 S. Ct. 2238, 2242 (2011).

1. *Anticipation*

Under 35 U.S.C. § 102, a claimed invention is "anticipated," and therefore invalid, if it "was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant" or "was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States." 35 U.S.C. § 102(a)-(b).³ In addition, a claimed invention is invalid as anticipated if "the invention was described in ... a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent." *Id.* § 102(e)(2).

Anticipation is a question of fact but can be amenable to summary judgment. *See Upsher-Smith Labs., Inc. v. Pamlab, LLC*, 412 F.3d 1319, 1322 (Fed. Cir. 2005) (affirming grant of summary judgment in part on anticipation). "A patent is invalid for anticipation if a single prior art reference discloses each and every limitation of the claimed invention," and "a prior art reference may anticipate without disclosing a feature of the claimed invention if that missing characteristic is necessarily present, or inherent, in the single anticipating reference." *Schering Corp. v. Geneva Pharm.*, 339 F.3d 1373,

³ The AIA also amended certain aspects of 35 U.S.C. §§ 102 and 103, effective March 16, 2013. *See* AIA § 3(b)-(c), 125 Stat. at 285-88; *id.* § 3(n)(1), 125 Stat. at 293. Because this case was filed before that date, I will refer to the pre-AIA versions of §§ 102 and 103.

1377 (Fed. Cir. 2003). However, a prior art reference does not anticipate through mere disclosure of all limitations of a claim; it must also disclose the limitations as arranged in the claim and enable the claimed invention which it is asserted to anticipate. *Abbott Labs. v. Sandoz, Inc.*, 544 F.3d 1341, 1345 (Fed. Cir. 2008); *see also Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008) ("[U]nless a reference discloses within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim, it cannot be said to prove prior invention of the thing claimed and, thus, cannot anticipate under 35 U.S.C. § 102.").

2. *Obviousness*

A claimed invention is unpatentable if "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C. § 103(a).⁴ Whether the claimed subject matter would have been obvious at the time of invention to one of ordinary skill in the pertinent art is a question of law based on several underlying facts, namely: (1) the scope and content of the prior art; (2) the differences between the claimed invention and the prior art; (3) the level of ordinary skill in the art; and (4) any relevant secondary considerations, such as commercial success, long felt but unsolved needs, and failure of others. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (citing *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17-18 (1966)). When "the content of the prior art,

⁴ *See supra* note 3.

the scope of the patent claim, and the level of ordinary skill in the art are not in material dispute, and the obviousness of the claim is apparent in light of these factors, summary judgment is appropriate" on the issue of obviousness. *Id.* at 427.

That question of obviousness is not subject to any "rigid rule" that requires an express "discussion of obvious techniques or combinations" in the prior art. *Id.* at 419. Rather, other factors, such as "market demand," "any need or problem known in the field of endeavor at the time of invention and addressed by the patent," "the inferences and creative steps that a person of ordinary skill in the art would employ," and "common sense" may be evidence of "design trends ... that would occur in the ordinary course without real innovation." *Id.* at 418-20. Moreover, "neither the particular motivation nor the avowed purpose of the patentee controls. What matters is the objective reach of the claim. If the claim extends to what is obvious, it is invalid under § 103." *Id.* at 419. Simply put, "a patent's subject matter can be proved obvious by noting that there existed at the time of invention a known problem for which there was an obvious solution encompassed by the patent's claims." *Id.* at 420. As the United States Court of Appeals for the Federal Circuit has summarized:

Before the Supreme Court's decision in *KSR*, [the law] required that a patent challenger show that a person of ordinary skill in the art would have had motivation to combine the prior art references and would have had a reasonable expectation of success in doing so. ... *KSR*, however, instructs courts to take a more "expansive and flexible approach" in determining whether a patented invention was obvious at the time it was made. In particular, the Court emphasized the role of "common sense"

Wyers v. Master Lock Co., 616 F.3d 1231, 1238 (Fed. Cir. 2010) (citations omitted).

However, "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." *KSR*, 550 U.S. at 418. "When determining whether a patent claiming a combination of known elements would have been obvious, we 'must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.'" *TriMed, Inc. v. StJyker Corp.*, 608 F.3d 1333, 1341 (Fed. Cir. 2010) (quoting *KSR*, 550 U.S. at 417). That factual inquiry, and "the legal determination of obviousness[,] may include recourse to logic, judgment, and common sense" and be "appropriate for resolution on summary judgment." *Wyers*, 616 F.3d at 1239-40.

IV. THE '523 PATENT

The '523 patent was issued on March 2, 2004, and is titled "V-Chip Plus+In-Guide User Interface Apparatus and Method for Programmable Blocking of Television and Other Viewable Programming, Such as for Parental Control of a Television Receiver." It is aimed at solving what it says is the problem of overly broad and subjective television ratings. According to the patent, blocking all programs of a certain rating would often block some content that was desirable and allow some content that was not desirable. ('523 patent at 1:43-2:4.) For example, blocking all programs with a rating above PG may permit the viewing of certain "talk" shows that have relatively little or no violence, offensive language, or nudity but that may contain physical confrontations or graphic discussions of sex and violence. (*Id.* at 1:49-61.) The claimed invention⁵ of

⁵ In speaking of the "claimed invention," I am in no way implying a conclusion as to the validity of the patent.

the '523 patent offers an interface that allows for more finely tuned blocking preferences by allowing a user to block programs based on both "overall program ratings" and "specific program content indications." (*Id.* at Abstract.) The patent has thirteen claims, of which claims I and 11 are independent.

A brief overview of other proceedings related to the '523 patent may be helpful, though the results of those proceedings, as they currently stand, are not binding here. *See In re Swanson*, 540 F.3d 1368, 1377 (Fed. Cir. 2008) ("PTO examination procedures have distinctly different standards, parties, purposes, and outcomes compared to civil litigation. ... [T]he two forums take different approaches in determining validity and on the same evidence could quite correctly come to different conclusions." (citation omitted) (internal quotation marks omitted)); *Tex. Instruments Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1569 (Fed. Cir. 1996) ("[O]nce we accept, as we have done at least since 1986, that ITC decisions are not binding on district courts in subsequent cases brought before them, it necessarily follows that accused infringers can raise whatever defenses they believe are justified, regardless whether they previously raised them and lost in the ITC."). An *ex parte* reexamination of the '523 patent was initiated on March 3, 2011. (D.I. 149, ex. 18 at I.) On May 9, 2012, the assigned PTO examiner issued an Advisory Action that rejected claims 1-13. (*Id.*, ex. 18.) After considering arguments in response, the examiner confirmed the rejection on June 29, 2012. (*Id.*, ex. 20.) The Patent Trial and Appeal Board⁶ ("the Board") affirmed the rejection of claims 1-5 and 7-

⁶ Under the AIA, the Board of Patent Appeals and Interferences was renamed the Patent Trial and Appeal Board, effective September 16, 2012. 35 U.S.C. § 6.

13 – which encompasses all of the '523 patent claims being asserted in the present case – on August 6, 2013. (*Id.*, ex. 22 at 9.) The patent owner appealed the Board's rejection to the Federal Circuit on September 30, 2013, where it is currently pending.⁷ (D.I. 145 at 6; D.I. 182 at 14:5-15:23, 108:12-20.)

The Plaintiffs also asserted the '523 patent in Investigation No. 337-TA-820 in the ITC against Vizio, Inc. In the ITC proceeding, Chief Administrative Law Judge ("ALJ") Bullock found that the term "specific content ratings," which appears in both independent claims of the '523 patent, had no antecedent basis and that no intrinsic or extrinsic evidence supported the construction that the Plaintiffs had proposed. (D.I. 149, ex. 23 at 25.) Therefore, the ALJ held that the term was indefinite and granted a motion for summary determination of invalidity with respect to the claims of the '523 patent asserted in that proceeding.⁸ (*Id.*, ex. 23 at 25-26; *id.*, ex. 24 at 2-3.) On January 9, 2013, the ITC determined it would not review the ALJ's decision. (*Id.*, ex. 25 at 2.) The Plaintiffs did not appeal the result of the ITC proceeding.⁹ (D.I. 145 at 6.)

⁷ A recent check of the Federal Circuit docket shows that briefing in the appeal has been completed but oral argument has not yet been scheduled. The parties agree that the decision in that matter is not likely to issue before the scheduled trial in this case. (*Id.* at 92:12-14, 112:14-17.) In addition, claims of the '547 patent at issue in this case are not on appeal, so it has seemed appropriate to move forward in this case rather than await the outcome of the appeal.

⁸ Haier states that claims 1-5 and 7-13 of the '523 patent were at issue before the ITC (D.I. 145 at 6), but the record shows that only claims 1-5, 7, 8, and 10-12 were asserted in the ITC proceeding (D.I. 149, ex. 23 at 1).

⁹ Because the asserted claims of the '523 patent have been twice rejected in separate proceedings, there may have been some hesitancy to press them again here. But,

A. Claim Construction for the '523 Patent

The parties dispute six terms in the asserted claims of the '523 patent: "overall program ratings"; "specific program content indications"; "specific content ratings"; "tiles"; "either the rows of tiles or the columns of tiles correspond to overall program ratings and either the rows of tiles or the columns of tiles correspond to specific program content indications"; and "means for blocking or allowing viewing of television programs based on the overall program ratings and specific content ratings of the rows and columns corresponding to the highlighted tiles when a selection command is entered into the input." (D.I. 137, ex. A.)

As an initial matter, the Plaintiffs argue that the terms "overall program ratings" and "specific program content indications" need not be construed because they "do not appear to be pertinent to either party's infringement or validity positions." (D.I. 138 at 2 n.l.) Haier counters that "[u]nderstanding how th[o]se two terms are used in the claims and how they differ from other related terms ... is essential." (D.I. 161 at !.) The parties' dispute regarding the necessity of construing those terms appears to center around whether the term "specific content ratings" is indefinite or, instead, used interchangeably with "specific program content indications." (*See* D.I. 138 at 3-6; D.I. 147 at 4-6.) I am able, however, to construe "specific content ratings" without considering either "overall program ratings" or "specific program content indications," except to note that dependent claim 2 recites "TV-Y, TV-Y7, TV-G, TV-PG, TV-14, TV-

given the higher burden of proof to invalidate a patent in litigation, the Plaintiffs have chosen to proceed on that patent in this case.

MA, G, PG, PG-13, R, NC-17, and X" as examples of "overall program ratings" ('523 patent at 17:34-37), and dependent claims 3 and 4 recite "L, language, Y, violence, MY, mild violence, FY, fantasy violence, BN, brief nudity, N, nudity, S, sexual content, AS, adult situations, D, and suggestive dialog" as examples of "specific program content indications" (*id.* at 17:38-47). I need not otherwise consider "overall program ratings" or "specific program content indications" at this time. I therefore begin by construing the term "specific content ratings."

1. *"specific content ratings"*

The term "specific content ratings" appears in independent claims 1 and 11, in claim language that references "blocking or allowing viewing of television programs" on the basis of "overall program ratings and *specific content ratings.*" ('523 patent at 17:29-31, 18:35-37 (emphasis added).) As Haier points out and the Plaintiffs acknowledge, the term "specific content ratings" lacks an antecedent basis in the claims of the '523 patent. (D.I. 147 at 5; D.I. 156 at 1.) The closest term to "specific content ratings" appears in claim language reciting "overall program ratings" and "*specific program content indications*" that relate to a claimed two-dimensional matrix. ('523 patent at 17:23-26, 18:30-32 (emphasis added).) Haier argues that the term "specific content ratings" is not amenable to construction because it is indefinite and lacks a written description. (D.I. 137, ex. A.) The Plaintiffs propose that the term is "used interchangeably with 'specific program content indications.'" (*Id.*) Here, the specification leads me to conclude that "specific content ratings" is not indefinite and is synonymous with "specific program content indications."

Under 35 U.S.C. § 112, *if* 2, a patent's specification must "conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. § 112, *if* 2. "Because claims delineate the patentee's right to exclude, the patent statute requires that the scope of the claims be sufficiently definite to inform the public of the bounds of the protected invention Otherwise, competitors cannot avoid infringement, defeating the public notice function of patent claims." *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1249 (Fed. Cir. 2008). "A determination of claim indefiniteness is a legal conclusion that is drawn from the court's performance of its duty as the construer of patent claims." *Personalized Media Commc'ns, LLC v. ITC*, 161 F.3d 696, 705 (Fed. Cir. 1998).

The Federal Circuit has found claims indefinite in numerous circumstances, including "if a term does not have proper antecedent basis where such basis is not otherwise present by implication or the meaning is not reasonably ascertainable." *Halliburton*, 514 F.3d at 1249 (citing *Energizer Holdings, Inc. v. ITC*, 435 F.3d 1366, 1370-71 (Fed. Cir. 2006)). "[C]laims are not indefinite merely because they present a difficult task of claim construction." *Id.* Rather, "[o]nly claims not amenable to construction or insolubly ambiguous are indefinite."¹⁰ *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005) (internal quotation marks omitted).

¹⁰ I am bound by the "insolubly ambiguous" standard, even though its viability is currently in question before the Supreme Court. See *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 896 (2014) (granting *certiorari* on, *inter alia*, the question of whether room for some ambiguity under the "insolubly ambiguous" standard conflicts with the statutory requirement of particular and distinct patent claiming).

To prove indefiniteness, "[a]n accused infringer must ... demonstrate by clear and convincing evidence that one of ordinary skill in the relevant art could not discern the boundaries of the claim based on the claim language, the specification, the prosecution history, and the knowledge in the relevant art." *Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1366 (Fed. Cir. 2011) (alterations in original) (internal quotation marks omitted). Accordingly, the lack of an antecedent basis, alone, does not require a holding of indefiniteness, and I am free to determine whether "specific content ratings" has an antecedent basis by implication or a reasonably ascertainable meaning. *See Energizer Holdings*, 435 F.3d at 1370 ("Whether this claim, despite lack of explicit antecedent basis for 'said zinc anode' nonetheless has a reasonably ascertainable meaning must be decided in context.").

Haier argues that the lack of antecedent basis "is reason alone" to decide that the "specific content ratings" term is indefinite. (D.I. 147 at 5.) Haier also argues that the use of "content" and "ratings" together in the same term creates uncertainty "concerning what, exactly, the inventors intended to claim as the invention." (*Id.*) According to Haier, the specification of the '523 patent uses the words "ratings" and "content" to refer to mutually exclusive concepts: "ratings" being "levels" of program content, and "content" being "indications" of the type of programming. (*Id.*) Haier thus argues that combining the two in a single term would "suggest[] that there are other kinds of content-based systems that include information about the *level* of adult content, like 'ratings' do." (*Id.*) Haier says that the result is "insoluble ambiguity as to whether the patentee intended to claim one thing, i.e., 'specific program content indications,' or something

different, i.e., 'specific content ratings,' or both." (D.I. 161 at 3.) The Plaintiffs argue that, in light of the intrinsic evidence, "specific content ratings" is synonymous with the term "specific program content indications," as distinguished from "overall program ratings." (D.I. 138 at 4.) Although the Plaintiffs recognize the presumption that different terms have different meanings, they submit that the presumption "can be, and in this case has been, rebutted." (D.I. 156 at 1.)

It is true that "when an applicant uses different terms in a claim it is permissible to infer that he intended his choice of different terms to reflect a differentiation in the meaning of those terms." *Innova/Pure Water*, 381 F.3d at 1119. "That inference, however, is not conclusive; it is not unknown for different words to be used to express similar concepts, even though it may be poor drafting practice." *Bancorp Servs., LLC v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1373 (Fed. Cir. 2004).

The specification includes a section titled "Ratings or Content Code Blocking" that draws a distinction between "Ratings Codes" and "Content Codes." It teaches that examples of "Ratings Codes" include "TV Ratings Codes ('TV-Y,' 'TV-Y7,' etc.)" and "[Motion Picture Association of America ('MPAA')] Ratings Codes" (G, PG, PG-13, R, NC-17), while "Content Codes" may be "TV Content Codes, ('S' for Sex, 'V' for Violence, 'L' for Language, etc.)." (523 patent at 9:40, 10:18-33.) That section is the only part of the specification that draws a distinction between different types of codes, so the distinction between "Ratings Codes" and "Content Codes" illustrates the distinction between "overall" and "specific" information, respectively. As recited in the independent claims, the "overall program ratings" and "specific program content indications" are

arranged in relation to "rows of tiles or ... columns of tiles." (*Id.* at 17:22-26, 18:29-32.)

The "blocking or allowing viewing of television programs" is also "based on the overall program ratings and specific content ratings *of the rows and columns* corresponding to the highlighted tiles." (*Id.* at 17:29-32, 18:35-38 (emphasis added).)

In context, there is no mystery as to the meaning of "specific program ratings." It carries the same meaning as "specific program content indications." The operative distinction is between the "overall" and "specific" nature of the ratings or indications, not whether – as Haier emphasizes – the words "ratings" and "content" are used in a mutually exclusive manner in the patent.¹¹ The term "specific program content indications" is thus the implicit antecedent to "specific content ratings."

While the drafting certainly leaves much to be desired, the intent to have the term "specific content ratings" mean the same thing as "specific program content indications" is the most sensible interpretation in context. Therefore, the term "specific content ratings" provides sufficient clarity regarding the scope of the claims that a person skilled in the art at the time of the invention would understand it to be synonymous with "specific program content indications."¹²

¹¹ As mentioned previously, the FCC itself has referred to content-based designations as "ratings," requiring certain televisions to "block programming based on the age based ratings, the content based ratings, or a combination of the two." 63 Fed. Reg. at 20,134.

¹² Again, I do not construe the term "specific program content indications" (or the term "overall program ratings").

2. "tiles "

The Plaintiffs submit that the term "tiles" does not require construction or, alternatively, means "space filling elements associated with regions of the screen." (D.I. 138 at 6.) Haier proposes the construction "rectilinear space filling elements of a row or column." (D.I. 147 at 11.) Given the appearance of the term "tiles" in the disputed limitation "either the rows of tiles or the columns of tiles," discussed below, I will construe "tiles" to mean "space filling elements associated with regions of the screen that allow input by a user."

By proposing the language "rectilinear," Haier has clarified that it is not taking the position that "tiles" must be rectangular (D.I. 182 at 54:12-14) but that the tiles must be "generally straight-sided" (D.I. 147 at 11 & n.4), *i.e.*, "defined by lines, not ... by curves" (D.I. 182 at 54:15-16).¹³ Haier and its expert, John H. Roop, focus on the bordered tiles shown in Figure 24A of the '523 patent. (*See* D.I. 139, ex. E, ¶ 70.) However, that is but one embodiment, and, as the Plaintiffs argue, "the '523 patent does not limit tiles to having visible and rectangular borders." (D.I. 138 at 6.) Even if Figure 24A shows rectilinear tiles, the Federal Circuit has admonished "against confining the claims to [an] embodiment[]." ¹⁴ *Phillips*, 415 F.3d at 1323. Figure 20 shows a "BY \$

¹³ Haier's expert, Roop, conceded that "tiles" do not have to be rectangular. (D.I. 139, ex. B at 74:20-23.)

¹⁴ I will refer to the figures using the numbering of the drawings themselves. The parties do not dispute that the figure numbering and the figure references in the written description of the '523 patent are off by one due to the insertion of Figure 1 by an amendment during prosecution. For example, a discussion of "FIG. 6" in the written

ALLOWANCE' tile" that is not bound by any borders, linear or otherwise, and that turns red when highlighted. ('523 patent at 16:2-4.)

To the extent Haier relies on the definition of "tile" in the IBM Dictionary of Computing - "[o]ne of several nonoverlapping, rectangular divisions of a display screen" (D.I. 149, ex. 32) – that definition is inconsistent with its proposed construction. It speaks of rectangular divisions, but Haier admits that its proposed construction contemplates "rectangles *or other regular polygons*."¹⁵ (D.I. 147 at 11 (emphasis added).) The intrinsic evidence is the best guide. Nothing in the intrinsic evidence limits "tiles" to having straight sides, and the shape of the claimed "tiles" is immaterial to the claimed invention. One can imagine tiles that are ever-so-slightly rounded at the edges or that are ovals or that have a number of other designs.

Meanwhile, Haier argues that the Plaintiffs' proposed construction potentially "covers anything displayed on a screen, from a single pixel to an empty blue screen." (D.I. 161 at 4.) While nothing in the '523 patent limits a tile's *size per se*, Haier raises a legitimate criticism, as the specification does not describe a "tile" to simply be any area on a screen. The Plaintiffs suggested at the *Markman* hearing that, in the context of the claims, "tiles" must represent intersections of rows and columns in a two-dimensional matrix. (D.I. 182 at 56:6-13.) However, Haier pointed out that such a construction

description corresponds to the figure labeled "FIG. 7," and a discussion of "FIG. 23A" in the written description corresponds to the figure labeled "FIG. 24A." (D.I. 138 at 7 n.6.)

¹⁵ In addition, it is unclear that the definition from the IBM Dictionary applies to the field of television or user interface technology.

would "assume[] that the columns and rows [of the matrix] must intersect" -a dispute that arises in the context of the "either the rows of tiles or the columns of tiles ..." term, discussed *infra*. (*Id.* at 57:14-16.) Haier is correct that "tiles" do not necessarily have to represent intersections of columns and rows. It is true that in the context of the claimed invention's *grid* interface, the specification describes "tiles" as corresponding to "a particular combination of a TV Ratings Code and a TV Content Code." ('523 patent at 10:33-35; *see also id.* at 10:63 (discussing the "grid of tiles").) However, the specification also provides that a "tile" may correspond to a "User" tile (*id.* at 7:56-67), a "Confirm" tile (*id.* at 8:9), a "password" tile (*id.* at 13:33), a "channel" or "theme" tile (*id.* at 13:35-44), a "By \$ Allowance" tile (*id.* at 16:2), or particular "rating code" or "content code" tile (*id.* at 9:58, 9:66-67, 10:4-5). Thus, the term "tiles," by itself, does not necessarily refer to "tiles" that appear at the intersection of columns and rows. Any such requirement would have to be provided by other claim language.

However, "tiles" are limited in another meaningful sense by the '523 patent. All the "tiles" described in the specification allow some form of user input, whether through selection or otherwise. In the context of a "tile" in a grid, a user "uses the up/down and left/right arrow keys on the viewer's remote control device to highlight a grid tile," and "[w]hen the appropriate grid tile is highlighted, the [user] presses the ... action button ... to select that particular ... grid tile to be blocked." (*Id.* at 10:34-39.) Figure 24A shows tiles that "have been highlighted, selected and turned red (or some other color) to indicate they have been selected." (*Id.* at 10:43-48.) Alternatively, a user may select and highlight tiles to indicate "the tiles that the [user] wants to allow rather than selecting the

tiles that the [user] want[s] to block." (*Id.* at 10:64-67.) Even when a "tile" does not appear in a grid, the specification describes a user's ability to make an input via the tile, such as inputting a user name (*id.* at 7:56-67), inputting a password (*id.* at 13:30-36, 14:28-31, 15:32-33), selecting channels or themes to block or enable (*id.* at 13:36-44), or inputting settings (*id.* at 16:1-4). The characteristic that the wide-ranging types of "tiles" described in the '523 patent all have in common is the ability to accept some type of user input. That is the feature that distinguishes "tiles" from any random space filling element on a display screen.

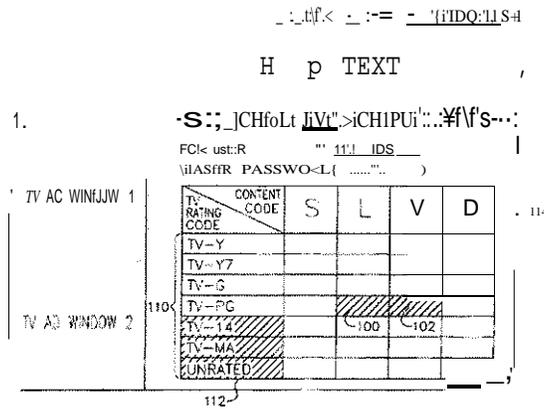
Therefore, "tiles" are "space filling elements associated with regions of the screen that allow input by a user."

3. *"either the rows of tiles or the columns of tiles correspond to overall program ratings and either the rows of tiles or the columns of tiles correspond to specific program content indications "*

The Plaintiffs submit that no construction is necessary for the "either the rows ... or the columns ..." term or, alternatively, that the term means "the rows of tiles and the columns of tiles correspond to overall program ratings and specific program content indications, respectively, or vice versa." (D.I. 138 at 7-8.) Haier proposes the construction "the overall program ratings tiles are arranged in one or more rows or columns and the specific program content indications tiles are arranged in one or more rows or columns." (D.I. 147 at 12.) I believe that construction of this term will be helpful, and I adopt Haier's construction.

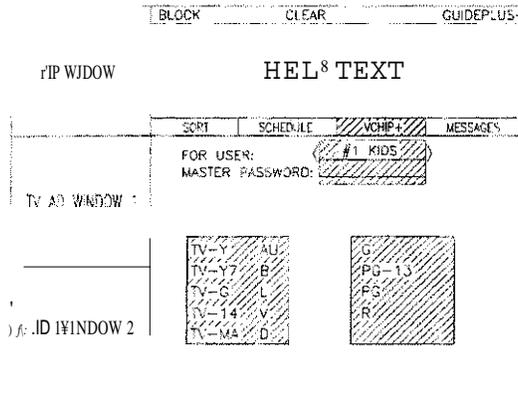
There is no dispute that the term covers the embodiment shown in Figure 24A of the '523 patent (D.I. 138 at 8-9; D.I. 147 at 13):

FIG. 24A



The dispute boils down to whether independent claims 1 and 11 of the '523 patent also cover the embodiment shown in Figure 7. Haier submits that the "either the rows of tiles or the columns of tiles" term encompasses Figure 7, whereas the Plaintiffs submit that it does not. (D.I. 138 at 9; D.I. 147 at 12-13.) Figure 7 is reproduced here:

FIG. 7



As Haier's expert confirmed under oath, to block programs based on overall program ratings and specific content ratings "you'd have to highlight two tiles in Figure 7," rather than the single tile called for in Figure 24A. (D.I. 139, ex. B at 55:25-57:1.) The Plaintiffs are correct that each tile in Figure 7 relates to a particular "overall program rating" or "specific program content indication," whereas the intersecting tiles shown in Figure 24A correspond to particular combinations of "overall program ratings" and

"specific program content indications." (D.I. 138 at 9.) But that distinction is immaterial, as nothing in the patent specification requires a user to be able to block or allow the viewing of programs with the selection of just a single tile. And, indeed, such a requirement would read out the embodiment shown in Figure 7.

As Haier points out, the portion of the specification about "Ratings or Content Code Blocking" discusses the embodiment shown in Figure 7 before discussing Figure 24A as "[a]n alternative embodiment." (D.I. 147 at 12-13 (citing '523 patent at 10:17).) "[R]ead in the context of the specification, the claims of the patent need not encompass all disclosed embodiments." *TIP Sys., LLC v. Phillips & Brooks/Gladwin, Inc.*, 529 F.3d 1364, 1373 (Fed. Cir. 2008). However, "there is a strong presumption against a claim construction that excludes a disclosed embodiment," *In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1324 (Fed. Cir. 2011), as "it is unlikely that an inventor would define the invention in a way that excluded the preferred embodiment." *Hoechst Celanese*, 78 F.3d at 1581.

Taking independent claim 1 as an example, the claim language does not exclude the embodiment shown in Figure 7, which is expressly relied on in the written description. Under the Plaintiffs' proposed construction, the rows and columns would have to correspond to "overall program ratings" and "specific program content indications" "respectively, or vice versa." (D.I. 137, ex. A.) In other words, the Plaintiffs' construction would read out embodiments in which the "overall program ratings" and "specific program content indications" both correspond to rows or both correspond to columns. The plain language of the claim term, however, does not require

one set of such ratings or indications to correspond to rows while the other corresponds to columns; instead, the "overall program ratings" may correspond to "rows of tiles or ... columns of tiles," just as the "specific program content indications" may correspond to "rows of tiles or ... columns of tiles."¹⁶ ('523 patent at 17:22-26.) Figure 7 shows two separate arrangements of tiles, while Figure 24A shows a single, larger arrangement of tiles. Both figures, however, show rows of tiles and/or columns of tiles. In Figure 7, the "overall program ratings" and "specific program content indications" are placed on rows and arranged in columns of tiles. In Figure 24A, TV Ratings Codes –examples of "overall program ratings" –correspond to either a column or row of tiles, while TV Content Codes –examples of "specific program content indications" –also correspond to either a column or row of tiles. Therefore, Figure 7 discloses "rows of tiles or columns of tiles" related to "overall program ratings" and "specific program content indications."¹⁷

¹⁶ Claim 7 of the '523 patent, on the other hand, is directed more particularly at the embodiment shown in Figure 24A, wherein the overall program ratings and specific program content indications are situated along different axes of the two-dimensional matrix, and tiles located at intersections correspond to both an overall program rating and a specific program content indication: "the overall program ratings are listed along a column of the matrix, each program rating having rows corresponding to one or more specific program content indications." ('523 patent at 18:10-14.)

¹⁷ The Plaintiffs also seem to view Figure 7 as disclosing separate "lists," rather than any "two dimensional matrix." (D.I. 138 at 8-9; D.I. 156 at 9.) As there seems to be an underlying dispute over the meaning of "two dimensional matrix," I will construe that term. The independent claims of the '523 patent recite "a two dimensional matrix composed of rows and columns of tiles." ('523 patent at 17:21-22, 18:28-29.) The general definition of a "matrix," in the relevant context, is "something resembling a mathematical matrix esp. in rectangular arrangement of elements into rows and columns." Merriam-Webster's Collegiate Dictionary at 716. The '523 patent discloses Figure 7 as a preferred embodiment, and Figure 7 shows two separate rectangular arrangements of tiles, each with multiples rows and one column. Thus, although a "two

In addition, the Plaintiffs argue that the rows or columns of tiles in Figure 7 "do[] not ... '*correspond to*' anything, let alone '*correspond to overall program ratings*' and '*correspond to specific program content indications*' as required by the claims. (D.I. 138 at 8.) The word "correspond" ordinarily means "to compare closely" or "match." Merriam-Webster's Collegiate Dictionary 260 (10th ed. 2002). The Plaintiffs seem to take the position that, to "correspond" with an "overall program rating" or "specific program content indication," a tile cannot relate to only one such rating or indication. (D.I. 138 at 8-9.) Instead, they argue that rows of tiles that relate to overall program ratings and columns of tiles that refer to specific program content indications – or vice versa – must intersect such that each "particular single tile ... correspond[s] to a particular combination" of overall program rating and specific program content indication. (*Id.* at 9 (internal quotation marks omitted).) The Plaintiffs do not cite to any evidence for their restrictive interpretation of the word "correspond," indeed, the specification does not use the word "correspond" so narrowly.

The Plaintiffs also point to the prosecution history for evidence that the claims of the '523 patent do not cover Figure 7. (*Id.*) During prosecution, the examiner cited to a

dimensional matrix" may include multiple rows and multiple columns, the patent uses the term to also encompass rectangular arrangements having only a single row or column, *e.g.*, a 4 (rows) x 1 (column) matrix or a 1x4 matrix. As discussed above, the Plaintiffs try to run away from the disclosure in Figure 7, despite indications that it is a preferred embodiment. That effort fails. Therefore, as used in the '523 patent, "two dimensional matrix" means "rectangular arrangement of tiles composed of at least one row and one column."

prior art reference for a rejection of then-pending dependent claim 5.¹⁸ (D.I. 139, ex. E at 4-5.) The Plaintiffs argue that, even though that reference disclosed a figure similar in appearance to Figure 7, "the examiner did not even attempt to rely on [it] as disclosing [independent] claim I and 11's two-dimensional matrix with rows and columns corresponding to overall program ratings and specific program content indications." (D.I. 138 at 9.) But the examiner's silence implies nothing at all.

The other claims of the '523 patent are identical to claim I in all aspects material to the "either the rows of tiles or the columns of tiles ..." term, so the claimed invention encompasses the embodiment shown in Figure 7. Regardless of whether the Plaintiffs think that Haier's proposed construction is "a robotic parsing of the claim term" (D.I. 156 at 9), it is the correct construction. Therefore, "either the rows of tiles or the columns of tiles correspond to overall program ratings and either the rows of tiles or the columns of tiles correspond to specific program content indications" means "the overall program ratings tiles are arranged in one or more rows or columns and the specific program content indications tiles are arranged in one or more rows or columns."

4. *"means for blocking or allowing viewing of television programs based on the overall program ratings and specific content ratings of the rows and columns corresponding to the highlighted tiles when a selection command is entered into the input"*

With respect to the "means for blocking or allowing viewing ..." term, the parties agree that it states a means-plus-function element subject to 35 U.S.C. § 112, ¶ 6. (D.I.

¹⁸ That prior art reference was U.S. Patent No. 5,969,748 to Casement, *et al.*, which is also one of the asserted prior art references in this action. (D.I. 139, ex. E at 4-5.)

138 at 10; D.I. 147 at 6.) Haier argues, however, that the term is indefinite for two reasons: "[f]irst, there is no disclosure of any structure that performs the claimed function," and, second, the written description lacks any "specific algorithm." (D.I. 147 at 6.) With respect to the second argument, the disclosure of an algorithm is required for a means-plus-function claim element that only discloses "a general purpose computer or microprocessor" as the relevant structure. *Net MoneyIN*, 545 F.3d at 1367. The rationale for that requirement is that "general purpose computers can be programmed to perform very different tasks in very different ways, [so] simply disclosing a computer as the structure designated to perform a particular function does not limit the scope of the claim." *Id.* (internal quotation marks omitted). Here, as the claimed invention does not disclose just a general computer or microprocessor, the requirement for disclosing an algorithm is inapplicable.

Haier argues that the term is indefinite for failing to disclose any structure that performs the claimed function. (D.I. 137, ex. A.) The parties agree that, if the term is not indefinite, the pertinent function is: "blocking or allowing viewing of television programs based on the overall program ratings and specific content ratings of the rows and columns corresponding to the highlighted tiles when a selection command is entered into the input." (*Id.*) However, the parties propose different constructions for the corresponding structure. Haier proposes that the structure must be the "parental control circuitry in VCR 50 in Fig. 1, including at least the command controller, command signal receiver, G-code decoder, teletext decoder and storage, and input select switch." (*Id.*) The Plaintiffs propose: "(1) a user interface; (2) a memory; (3) a microprocessor; and (4) a

blocking circuit, as generally described in the Summary of the Invention in col. 3; 'Rating of Content Code Blocking' portion of the specification (9:40-11:22); and/or illustrated in Fig. 24A or equivalents thereof." (D.I. 138 at 11.)

According to the Plaintiffs, Haier's ability to propose a construction "alone should put an end to Haier's indefiniteness attack, as it is an implicit admission that the element is amenable to construction." (D.I. 156 at 3 (internal quotation marks omitted).) That Haier has provided an alternative construction does not mean that its indefiniteness attack loses, as the possibility that its argument might fail should not bar it from submitting an alternative construction. Instead, I look to the Federal Circuit's statement that "[w]e have not insisted that claims be plain on their face in order to avoid condemnation for indefiniteness; rather, what we have asked is that the claims be amenable to construction, however difficult that task may be." *Exxon Research & Eng 'g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001). As described below, the "means for blocking or allowing viewing ..." term is amenable to construction.

The Plaintiffs argue that several of Haier's proposed structural elements are examples of elements that they propose but that the rest of Haier's proposed structural elements are unnecessary. (*Id.* at 11-12.) The "Summary of the Invention" states:

The present invention is directed to an apparatus and method that provides for a user interface for programmable blocking, such as for parental control, of viewable programs, such as programs that can be viewed on a television receiver. A memory provides storage of information relating to viewable programming and user defined blocking instructions. A microprocessor generates a blocking command as a function of the information stored in memory. A blocking circuit, such as a blocking circuit which passes a baseband television video signal to a television display, provides blocking of the video signal in response to the blocking command.

('523 patent at 3:20-30.) Figure 1 shows the "circuitry for providing parental control" as such circuitry is "generally embedded within a VCR." (*Id.* at 5:30-33.) That "circuitry ... permit[s] the user to select either by inclusion or exclusion the particular source and/or programs, channels, dates and times available for television viewing." (*Id.* at 5:37-40.) In other words, Figure 1 is one embodiment showing the circuitry that gives the user of a parental control system the means to block or allow the viewing of programming. The question then becomes what elements in Figure 1 are the necessary structural elements.

Haier complains that the relevant description of Figure 1 only consists of two sentences:

As shown in FIG. 1, the circuitry is generally embedded within a VCR ... connected between a television signal input ... and a television monitor or display The parental control circuitry may be controlled by an input or remote controller ... sending a command signal ... to the circuitry to permit the user to select either by inclusion or exclusion the particular source and/or programs, channels, dates and times available for television viewing.

(*Id.* at 5:33-40.) According to Haier, that is a bare-bones description that fails to "describe what any of the elements are, how they function, the arrows between them, how they work together to perform parental control functions, or how they might perform the claimed function." (D.I. 147 at 7.) Additional detail, however, is not required, because the specification incorporates by reference prior art teaching the apparatus and circuitry for parental control systems.

Haier's expert, Roop, agreed that the "command controller" of Figure 1 is a microprocessor (D.I. 139, ex. B at 70:25-71:5; D.I. 165, ex. J, iJ 82); the "storage" of Figure 1 is a memory (*id.*, ex. B at 72:12-15); and the "input select switch" of Figure 1 is

a circuit that selects (or does not select) the television video signal (*id.*, ex. B at 72:25-73:9), *i.e.*, the "blocking circuit" recited in the "Summary of the Invention" (*id.*, ex. A, 'lf 82).¹⁹ Thus, there is no material dispute that at least those three elements are necessary structural elements. (*See id.*, ex. A, 'lf 82; D.I. 161 at 11-14.) Rather than calling the structural components a command controller, storage, and input select switch (the narrower terminology used to show an embodiment), though, I will use the more encompassing terminology from the "Summary of the Invention": microprocessor, memory, and blocking circuit.²⁰ The means-plus-function limitation additionally requires a user interface, as described in the "Summary of the Invention," because part of the agreed-upon function is to block or allow viewing "based on overall program ratings and specific content ratings ... corresponding to the highlighted tiles." (D.I. 137, ex. A.) In other words, there must be a user interface so that a user can highlight the desired tiles.

According to the Plaintiffs, "[t]he remaining elements of Haier's proposed structure – the command signal receiver, G-code decoder, and teletext decoder – are not necessary for blocking, do not perform the recited blocking function, and are thus improper to include as the corresponding structure." (D.I. 138 at 11-12.) I agree with

¹⁹ The Plaintiffs' expert also called the "command controller" a "remote control" in his deposition (D.I. 165, ex. I at 96:20-97:6). The written description, however, expressly states that another element in Figure 1, element 56, is a "remote controller." ('523 patent at 5:36-37.)

²⁰ The Plaintiffs' citations to the "Ratings or Content Code Blocking" portion of the specification and to Figure 24A are not helpful because those parts of the specification do not describe the *structural* elements of the means for blocking or allowing viewing.

respect to the G-code decoder and teletext decoder but conclude that a command signal receiver is required.

The Plaintiffs' expert, Dr. Michael I. Shamos, opines that a G-code decoder is necessary to decode "codes used to designate programs for recording on a VCR," not to block programming. (D.I. 139, ex. A, ¶80.) Haier offers Roop's opinion that the G-code decoder "*maybe* involved in blocking" because it "receives a 'G-CODE' signal from the COMMAND CONTROLLER and it returns a CDTL signal to the COMMAND CONTROLLER." (D.I. 149 at 10, ¶59 (emphasis added).) Essentially, Roop opines that because "there is no way for one of ordinary skill in the art to determine whether the G-CODE Decoder is part of the structure for performing the claimed blocking function," it *could* be a necessary structural element. (*Id.*) That is mere speculation, and Haier does not provide evidence to rebut Shamos' assertion that a "G-code does not contain ratings or content information, hence is not relevant to blocking." (D.I. 139, ex. A, ¶80.) In light of the evidence, the G-code decoder is not a necessary structural element for the means to block or allow viewing.

As to the teletext decoder, Shamos opines that the "teletext decoder is not necessary for content blocking [because it] decodes textual information transmitted ... between successive television images." (*Id.*) Haier asserts that "[i]t was well-known at the time of the '523 patent's application that digital programming schedule and rating information may be delivered using the vertical blanking interval" that the teletext decoder reads. (D.I. 161 at 13.) Although the specification of the '523 patent states that use of "the vertical blanking interval ... of a standard television signal to include a code

which indicates one or more rating factors" was known in the prior art ('523 patent at 1:29-31), the ability for the system to decode schedule and rating information is not part of the agreed-upon function for the "means for blocking or allowing viewing ..." term. Haier contends that the teletext decoder "provides structure for *the function of receiving program schedule and rating information* from the broadcast television signal." (D.I. 161 at 13 (emphasis added).) In contrast, the agreed-upon function at issue provides, in relevant part, "blocking or allowing viewing of television programs *based on the overall program ratings and specific content ratings of the rows and columns corresponding to the highlighted tiles.*" (D.I. 137, ex. A (emphasis added).) The claimed function thus relates to *blocking or allowing* programs based on schedule and rating information, irrespective of how that information is obtained. The teletext decoder is not a necessary structural element for the "means for blocking or allowing viewing ..." term.

Finally, the Plaintiffs' expert, Shamos, opines that a "command signal receiver is also not a necessary structural element [because it] receives input signals from the remote controller." (D.I. 139, ex. A, ¶ 81.) As Haier points out, however, Shamos also testified at his deposition that the command signal receiver *is* necessary to perform the "means for blocking or allowing viewing ..." limitation. (D.I. 165, ex. I at 96:12-19.) Specifically, he said that the command signal receiver is necessary because "if you don't have something on the TV that will receive from the remote, you can't set the blocking." (*Id.*, ex. I at 97:7-13.) Shamos's testimony is consistent to the extent he opines that a command signal receiver is a structure that receives command signals from a remote controller. Based on the intrinsic evidence, such a structure is necessary to perform the

"means for blocking or allowing viewing ..." limitation. The agreed-upon function, consistent with the claim language ('523 patent at 17:29-33, 18:35-39), provides for "blocking or allowing viewing ... *when a selection command is entered into the input*" (D.I. 137, ex. A (emphasis added)). In other words, the blocking or allowing occurs in response to a command signal from an "input," such as a remote controller. ('523 patent at 5:35-38.) By necessity, then, there must be a component within the scope of the "means for blocking or allowing" that can receive the command signal; that seems plainly to be the command signal receiver.²¹

Accordingly, the structure for the "means for blocking or allowing viewing ..." term is "a user interface; a memory; a microprocessor; a blocking circuit; and a command signal receiver, or equivalents thereof."

B. Summary Judgment Invalidity of the '523 Patent

Haier moves for summary judgment of invalidity of claims 1-4, 7, 8, and 10-12 of the '523 patent.²² (*See* D.I. 145 at 8-20.) Asserted claims 1 and 11 are independent

²¹ The structure that provides means for sending the command signal is covered by the separate limitation in claim 1 that recites "an input for accepting cursor movement and selection commands." ('523 patent at 17:18-20.)

²² Haier titled the "obviousness" section of its opening brief "Asserted Claims 1-5 and 7-13 of the '523 Patent Are Obvious Over Casement in View of EIA-744." (D.I. 145 at 8.) That appears to be a scrivener's error, as its arguments do not address claims 5, 9, or 13 of the '523 patent. In addition, the Plaintiffs respond to Haier's invalidity arguments regarding claims 7 and 8 of the '523 patent (*see, e.g.*, D.I. 160 at 9), even though the Plaintiffs' expert, Shamos, stated that "[c]laims 7 and 8 of the '523 Patent are not being asserted" for infringement. (D.I. 159, ex. 6, ¶3 n.1). Haier America pleaded invalidity of the '523 patent as a counterclaim (D.I. 20 at 8-9), while Haier Group raised invalidity of the '523 patent only as an affirmative defense (D.I. 99 at 4). Therefore, I have jurisdiction to address the invalidity of claims 7 and 8 with respect to at least Haier

claims. Haier raises three theories of invalidity with respect to the '523 patent: (1) indefiniteness under 35 U.S.C. § 112, 2, based on ambiguity of the claim term "specific content ratings"; (2) indefiniteness under 35 U.S.C. § 112, 6, based on insufficient disclosure for the structure of the limitation "means for blocking or allowing viewing of television programs based on the overall program ratings and specific content ratings of the rows and columns corresponding to the highlighted tiles when a selection command is entered into the input"; and (3) obviousness under 35 U.S.C. § 103(a) in light of U.S. Patent No. 5,969,748 to Casement *et al.* ("Casement") and Electronic Industries Association Standard No. 744 for Transport of Content Advisory Information Using Extended Data Service ("EIA-744"). I address each argument in turn.

I. *Indefiniteness*

Haier's two alternative indefiniteness theories for invalidity of the '523 patent – indefiniteness for ambiguity surrounding the term "specific content ratings" and indefiniteness for insufficient disclosure of the structure for the means-plus-function "blocking or allowing viewing" limitation – are unavailing. As discussed in detail in the context of claim construction, neither the "specific content ratings" term nor the "means for blocking or allowing viewing ..." term is indefinite. And the ITC's finding of invalidity on the basis that the "specific content ratings" term is indefinite holds no binding power in this litigation. *See Tex. Instruments*, 90 F.3d at 1569 ("The district court can attribute whatever persuasive value to the prior ITC decision that it considers

America. One thing is definitely obvious: the claims of the '523 patent that are at issue for infringement and/or invalidity should have been clearly delineated before now.

justified."). Therefore, for the reasons discussed in connection with claim construction, the '523 patent is not invalid under Haier's indefiniteness theories.

2. *Obviousness*

The '523 patent was filed on September 16, 1999, and claims a priority date of September 16, 1998. Haier asserts two prior art references for its obviousness argument:

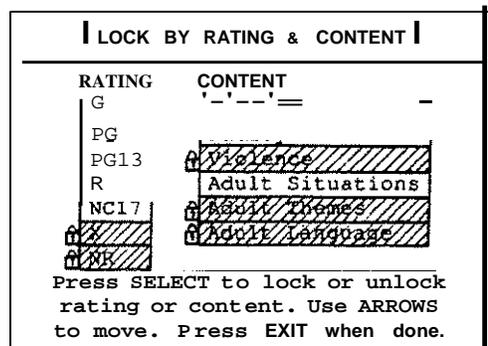
Casement and EIA-744. Haier also contends that

a person of ordinary skill in the relevant art would be an electrical engineer with at least a Bachelor's degree, with 1-4 years of experience in the field of television visual display design, programming and implementation. Such a person would necessarily be knowledgeable regarding the pertinent standards and recommendations promulgated by trade organizations and government regulations, particularly those of the EIA and FCC.

(D.I. 145 at 4 (citing D.I. 149, 46).) The Plaintiffs do not dispute the level of ordinary skill in the art.

a. *The Casement Reference*

The Casement patent was filed on May 29, 1996, and is entitled "Television Schedule System with Access Control." (D.I. 149, ex. 3 at HAT-DE2484.) There is no dispute that it is prior art. (*See* D.I. 145 at 2; D.I. 160 at 4, 7.) Casement relates to blocking television programs. Of importance to the instant case, it includes a "Lock by Rating & Content" parental control interface in Figure 2D, which shows two "lists" of tiles that are next to each other – one for "rating" and one for "content":



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FIG. 20.

(D.I. 149, ex. 3 at 4:45-46, Fig. 2D.) Casement's written description discloses, in part:

The user may lock by content and/or or rating by highlighting the relevant content and/or rating on the pop-up and inputting the SELECT key. Programs may be locked using more than one category of rating and/or content.

If TV viewing is attempted during a locked period, the system will mute the audio, and display a blue screen over video. A pop-up will appear asking for the parental password. When the correct password is entered, the solid blue screen will disappear, and audio will be re-enabled. If a lock is placed on a time period during which there are programs scheduled for recording, a pop-up will appear warning the user of the conflict. If the user ignores the pop-up, it will time out ... , the channel will be locked, and the recording will occur without the requirement of a password as it was set before the lock was enabled. However, all future recordings scheduled during the locked period will require a password.

(*Id.*, ex. 3 at 4:46-50, 5:5-17.)

b. *The EIA-744 Reference*

After Congress passed the Telecommunications Act in 1996, the MPAA, the National Association of Broadcasters (the "NAB"), and the National Cable Television Association (the "NCTA") collectively proposed a rating system for television programs called the TV Parental Guidelines, which consisted of the codes TV-Y, TV-Y7, TV-G, TV-PG, TV-14, and TV-M. (*Id.*, ex. 10 at 10.) After the ratings system was revised to

include codes for violence, sexual situations, coarse language, and suggestive dialog, the FCC approved the video programming industry's voluntary adoption of the TV Parental Guidelines. (*Id.*, ex. 10 at 10-11.) The FCC subsequently issued FCC Report and Order 98-35 requiring all televisions larger than 13 inches to have parental control technology and mandating such blocking technology to be able to respond to the TV Parental Guidelines and MPAA Ratings. (*Id.*, ex. 10 at 10-13.) However, in FCC Report and Order 98-36, the FCC declined to require television manufacturers to support other ratings systems. (*Id.*, ex. 10 at 14-16.) EIA-744 was the technical standard for blocking television programming and, as the FCC had not approved alternative ratings systems, it was "the only available standard" for allowing users to block television programming. (*Id.*, ex. 10 at 9.) There is no dispute that EIA-744 is prior art. (*See* D.I. 145 at 3; D.I. 160 at 4, 7.)

EIA-744 discloses the following program designations, called "bits": FV for fantasy violence, V for violence, S for sexual situations, L for adult language, and D for sexually suggestive dialog. (D.I. 149, ex. 4 at 2.) It also describes the TV-Y, TV-Y7, TV-G, TV-PG, TV-14, and TV-MA "guidelines categor[ies]." (*Id.*, ex. 4 at 2-3.) Impmiantly, EIA-744 discloses a table, wherein the bits are along the horizontal axis, and the guidelines categories are in a column:

n?	a1	nQ	Ralina	FV	V	S	L	D
0	0	0	None*					
0	0	1	"TV-Y"					
0	1	0	"TV-Y7"	X				
0	1	1	"TV-G"					
1	0	0	"TV-PG"		X	X	X	X
1	0	1	"TV-14"		X	X	X	X
1	1	0	"TV-MA"		X	X	X	X
1	1	1	None*					

* No blocking is intended per the program rating criteria.

(*Id.*, ex. 4 at 2.)

c. *Analysis*

Haier's theory of obviousness on summary judgment is essentially the one adopted by the PTO on reexamination – that the asserted claims of the '523 patent are invalid in light of *Casement* over EIA-744. The parties agree, though, that the PTO's non-final decision of invalidity is not binding on me.²³ (D.I. 145 at 2; D.I. 160 at 6-7.)

Haier argues that "*Casement* discloses every element and limitation of claims 1 and 11 except, arguably, the 'the rows of tiles or the columns of tiles correspond to overall program ratings and either the rows of tiles or the columns of tiles correspond to specific program content indications' limitation." (D.I. 145 at 9.) Its expert, Roop, testified in that regard and added that "[i]t would have been obvious to one of ordinary skill that the two-dimensional matrix display in Figure 2D could be designed such that either the rows of tiles or the columns of tiles correspond to overall program ratings and either the rows of tiles or the columns of tiles correspond to specific program content

²³ Unlike in reexamination, when there is no presumption of validity and the preponderance of the evidence standard applies, the defendant in a patent infringement suit must overcome a presumption of validity by clear and convincing evidence. *In re Swanson*, 540 F.3d at 1377.

indications." (D.I. 149, **iii** 122-23, 125.) He further stated that EIA-744 discloses the limitation requiring "a display that depicts a two dimensional matrix composed of rows and columns of tiles wherein either the rows of tiles or the columns of tiles correspond to overall program ratings and either the rows of tiles or the columns of tiles correspond to specific program content indications" (*id.*, **ii** 124). For several reasons, Roop says that "[i]t would have been obvious to one of ordinary skill to implement Casement's Figure 2D in the format illustrated on page 2 of EIA-744." (*Id.*, **iii** 121, 124.)

Haier further cites Roop's testimony that, as recited by the additional limitation in dependent claim 2, Casement discloses blocking or allowing the viewing of programs on the basis of one or more of the "overall program ratings" G, PG, PG-13, R, NC-17, and X, and EIA-744 discloses the "overall program ratings" TV-Y, TV-Y7, TV-G, TV-PG, TV-14, and TV-MA. (*Id.*, **iii** 126-27.) He opined that "[i]t would have been obvious to one of ordinary skill to include the additional overall program ratings disclosed in EIA-744 in the Casement System because the guidelines and codes in EIA-744 were approved for use in the broadcasting industry." (*Id.*, **ii** 127.) With respect to the additional limitations of claims 3 and 4, which require one or more listed "specific program content indications," Roop opined that Casement discloses "one or more of L, language ('Profanity' in Figure 2D), V, violence ('Violence'), MV, mild violence (V2 and 'Violence'), FV, fantasy violence ('Violence'), BN, brief nudity ('Nudity'), N, nudity ('Nudity'), S, sexual content ('Adult Theme'), AS, adult situations, D ('Adult Situations'), and suggestive dialog ('Adult Language')." (*Id.*, **ii** 126.) In addition, Roop submits that the table in EIA-744 discloses the additional limitation of dependent claim 7,

"wherein the overall program ratings are listed along a column of the matrix, each program rating having rows corresponding to one or more specific program content indications." (*Id.*, ¶ 121.) And he stated his opinion that, in Figure 2D of Casement, "a tile corresponding to one of the overall program ratings is activated or deactivated to block or enable a particular program rating," as required by dependent claim 8. (*Id.*, ¶ 128 (citing D.I. 149, ex. 3 at 4:43-60).)

Regarding independent method claim 11, Haier argues that, "[f]or the same reasons discussed ... with respect to claim 1, Casement discloses each of the required steps" of that claim. (D.I. 145 at 15 (citing D.I. 149, ¶¶ 122-25).) And Roop opined that, as required by the additional limitation of dependent method claim 12, Casement teaches activating or deactivating a tile corresponding to one of the "overall program ratings" to block or enable a particular program rating. (D.I. 149, ¶ 128.)

The Plaintiffs argue that there are genuine disputes of material fact regarding: (1) whether the prior art discloses "a display that depicts a two dimensional matrix" or "displaying a two dimensional matrix"; (2) whether the prior art discloses the "means for blocking or allowing" element recited by independent system claim 1; and (3) whether a person of ordinary skill in the art would have had reason to combine the prior art references and, if so, what such a resulting combination would be. (D.I. 160 at 7.) The Plaintiffs do not otherwise dispute Haier's argument that Casement and EIA-744, in combination, disclose all of the elements of the asserted claims of the '523 patent. (*See* D.I. 145 at 9-15; D.I. 151, ex. C1; D.I. 160 at 5-10.) In addition, the Plaintiffs do not

dispute that a person of ordinary skill in the art would have referred to EIA-744 (D.I. 160 at 5-10). I turn, then, to addressing the alleged disputes of fact that the Plaintiffs raise.

(1) *Disclosure of "a display that depicts a two dimensional matrix" and "displaying a two dimensional matrix"*

I have construed the term "two dimensional matrix" to mean "rectangular arrangement of tiles composed of at least one row and one column." The Plaintiffs' expert, Shamos, opined that Figure 2D of Casement "shows two separate and independent one-dimensional displays, labeled 'RATING' and 'CONTENT'" -not the "two dimensional" matrix claimed by the '523 patent. (D.I. 162, ex. 2 87.) Haier's expert, Roop, stated that, while Casement's written description does not use the word "row" (*id.*, ex. 3 at 106:13-25), Figure 2D shows both columns and rows (*id.*, ex. 3 at 102:1-7). Figure 2D of Casement meets my construction of "two dimensional matrix"²⁴ because, although Shamos calls them one-dimensional, the arrangement of tiles in Figure 2D includes at least one row and at least one column.²⁵ Therefore, under my construction, Casement discloses a "two dimensional matrix." The Plaintiffs do not dispute that Casement teaches "displaying" the two dimensional matrix, as that term is recited in the '523 patent. (D.I. 160 at 7-8.)

²⁴ See *supra* note 17.

²⁵ As discussed above in the context of claim construction, the claimed invention encompasses Figure 7 of the '523 patent. Figure 2D of Casement bears a strong resemblance to Figure 7.

With respect to EIA-744, there is no dispute that that reference discloses a "two dimensional matrix."²⁶ However, the Plaintiffs argue that "[t]he table in EIA-744 is simply that, a table; it is not a user interface or display." (D.I. 160 at 5.) Shamos opined that "EIA-744 does not disclose any sort of *display*" because the "table ... is not disclosed as, or intended to be, displayed to anyone, even television engineers, let alone television viewers." (D.I. 162, ex. 2, **iJ** 88 (emphasis added).) Roop acknowledged that the figure in EIA-744 "is not intended to be a plan for a user interface display." (*Id.*, ex. 3 at 114:5-6.) Therefore, there is no genuine dispute that EIA-744 discloses a two-dimensional matrix but not an interactive display.²⁷ To summarize, both Casement and EIA-744 describe a "two dimensional matrix," but only Casement discloses "displaying" such a matrix or such a matrix being a "display." The two references, together, disclose the limitation "a display that depicts a two dimensional matrix" (claim 1) and "displaying a two dimensional matrix" (claim 11).

(2) *Structural Elements for "Meansfor Blocking or Allowing"*

With respect to the "means for blocking or allowing" recited in independent claim 1, the Plaintiffs argue that "Haier does not identify any structural components in the prior

²⁶ The Plaintiffs' expert, Shamos, referred to the relevant figure as a "table" and a "matrix" and did not rebut Roop's opinion insofar as EIA-744 discloses a *two-dimensional matrix*. (D.I. 162, ex. 2, **ii** 84, 88, 92-94.)

²⁷ During reexamination, the PTO examiner also noted "that the authors of the EIA-744 document decided to present information regarding valid combinations of ratings and content codes in the form of a *two-dimensional matrix*, instead of a different way," such as "convey[ing] [it] textually" or "in the form of a list." (D.I. 149, ex. 10 at 6-7 (emphasis added).)

art that meet the required structure" under either of the parties' proposed constructions. (D.I. 160 at 8.) Haier replies that "[i]f true, th[at] is because the '523 patent specification does not identify any structure that performs the claimed function." (D.I. 170 at 5.) I have rejected that argument and construed the "means for blocking or allowing" term. Haier's only other argument on summary judgment is that the structural elements of the "means for blocking or allowing" are met by Casement's disclosure of a V-chip."²⁸ (*Id.*; D.I. 182 at 95:18-96:14.)

Haier's opening brief on summary judgment of invalidity of the '523 patent cites a portion of Casement that teaches:

A step ... further checks whether the program has a V-chip classification if the program does not contain restricted content. If so, a step ... (details shown in FIG. 7) determines whether the user is trying to gain access to a program with restricted V-chip classifications.

(D.I. 149, ex. 3 at 7:15-20.) While that description mentions the V-chip, it does not discuss any of its structural components that might map onto the required elements of the "means for blocking or allowing" term. Haier also cites to the following disclosure in Casement in its chart comparing the elements of the asserted '523 patent claims to the teachings of Casement:

[T]he content description on pop-up ... may include information corresponding to data supplied by the V-chip. The V-chip data may be enclosed within parenthesis and will indicate the V-chip attribute classification of the program. For example, the content category "Violence" may have corresponding V-chip attribute mildly violent (V2), moderately violent (V3), and the like. When the user locks shows according to rating, all higher ratings are automatically locked. Since the

²⁸ Haier does not attempt to argue on summary judgment that EIA-744 discloses the structural elements of the "means for blocking or allowing." (*See* D.I. 145 at 12.)

show contents are not listed in order of severity, locking one content does not automatically lock any others.

(D.I. 151, ex. C1 at 6-7 (quoting D.I. 149, ex. 3 at 4:50-58).) Again, although that passage mentions the V-chip, it does not appear to describe a structural element.

Haier essentially relies on Casement's disclosure that "it's the V-chip that's doing the work" and its understanding that Casement "incorporates by reference that [one would] use ... V-chip technology." (D.I. 182 at 96:11-14.) With its reply brief on summary judgment, Haier did submit a declaration from its expert, Roop, who states:

The FCC requires all television sets with picture screens 13 inches or larger sold in the United States beginning January 2000 to be equipped with a V-chip. The V-chip reads rating and content indicator information encoded with the rated program and blocks programs from the set based upon the rating and content indicators selected by the parent. *A V-chip system integrated into a television would invariably include components required to carry out the blocking function, e.g., a user interface, a memory, a microprocessor, a blocking circuit, a command controller, and a command signal receiver.*

(D.I. 172, ¶ 3 (emphasis added) (citation omitted).) The Plaintiffs' expert, Shamos, however, disagrees with the assertion that Casement discloses the structural elements of the "means for blocking or allowing" limitation. (D.I. 162, ex. 2, ¶¶ 95, 102.)

At this point, the parties leave me mostly in the dark regarding whether the V-chip satisfies the structural elements of the "means for blocking or allowing," as I have construed that term.²⁹ Whether or not Casement discloses the requisite user interface;

²⁹ Notably, Roop's declaration regarding the structural components of the V-chip system was made after the Plaintiffs had filed their responsive summary judgment brief. (See generally D.I. 172.) Shamos's opinion as to why Casement does not meet the "means for blocking or allowing" limitation cites to an exhibit that he calls "an integral

memory; microprocessor; blocking circuit; and command signal receiver, or equivalents thereof remains a genuine dispute of material fact that will depend on the credibility of the parties' experts. Claims 2-4, 7, 8, and 10 are all dependent from claim 1 and, thus, also require the structural elements of "the means for blocking or allowing" under my construction. Therefore, on summary judgment, Haier has not met its burden of clear and convincing evidence that system claims 1-4, 7, 8, and 10 are invalid for being obvious.

(3) *Reason to Combine and Resulting Combination*

Although there is insufficient evidence on summary judgment that all of the elements of the asserted *system* claims are present in Casement and EIA-744, there is no dispute that all of the elements of the asserted *method* claims are found in Casement and EIA-744. The parties also do not dispute that Casement and EIA-744 "are directed to the same field," *i.e.*, implementing parental controls on television, or that persons of ordinary skill at the time of the invention would have been aware of the guidelines and codes in EIA-744. (D.I. 160 at 7-9; D.I. 162, ex. 2, if 91; D.I. 172, ex. 41 at 120:23-121:6, 124:8-125:14; D.I. 170 at 4.) The only remaining argument regarding the method claims that the Plaintiffs raise on summary judgment is whether a person of ordinary skill in the art would have had reason to combine the references and what the resulting combination would be. (D.I. 160 at 9.)

Haier argues that a person of ordinary skill in the art would have implemented Casement's interface display in the format disclosed by EIA-744 "because it would

part of [his] report" but was not attached to the summary judgment briefing. (D.I. 162, ex. 2, if 95-96, 102.)

provide an improved and more flexible interface." (D.I. 170 at 4.) Specifically, Haier's expert, Roop, opined in a declaration submitted with Haier's opening brief that (1) "each of the matrixes disclosed in th[o]se references serves the same purpose"; (2) the combination "would have yielded predictable results," whether "by combining the prior art elements according to known methods with Casement" or "by a simple substitution of the prior art matrix for Casement's matrix"; and (3) there were a "finite number of identified predictable solutions" and a "reasonable expectation of success." (D.I. 149, 121; see also D.I. 172, ex. 41 at 118:14-120:9, 120:23-121:6, 126:6-21.) In addition, he opines that a person of ordinary skill in the art would have been motivated to combine Casement and EIA-744 because the combination "shows how you can have an improved interface and ... the value of that improvement would be obvious once you combine them." (D.I. 172, ex. 41 at 118:23-119:10.) The Plaintiffs counter that "Haier does not point to any undisputed teaching, suggestion or other reason to combine, but rather relies on its expert's bald statement that such a combination would have allegedly been obvious." (D.I. 160 at 9.) Their expert, Shamos, opines that "[t]here is no reason one would discard the interface of Casement for what is not even an interface in EIA-744" because the matrix in EIA-744 does not have the same purpose or function as the interface display that Casement discloses. (D.I. 162, ex. 2, 89, 91-94.) According to the Plaintiffs, the parties' expert testimony is sufficient to give rise to "a classic 'battle of the experts' that is not amenable to resolution at summary judgment." (D.I. 160 at 9 (citations omitted).)

"The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR*, 550 U.S. at 416.

"Predictable results" include combining known elements that each perform a function it performed in the prior art to serve the invention's purpose. *Id.* at 417. On the other hand, "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." *Id.* at 418. "[A]n analysis of obviousness ... may include recourse to logic, judgment, and common sense available to the person of ordinary skill that do not necessarily require explication in any reference or expert opinion." *Perfect Web Tech., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1329 (Fed. Cir. 2009). Accordingly, "in appropriate cases, the ultimate inference as to the existence of a motivation to combine references may boil down to a question of 'common sense,' appropriate for resolution on summary judgment." *Wyers*, 616 F.3d at 1240. "[N]o expert opinion [i]s required to support [an] obviousness determination[] [when] the technology [i]s 'easily understandable.'" *Id.* (quoting *Perfect Web*, 587 F.3d at 1330).

The Plaintiffs' complaint that Haier has failed to point to any teaching, suggestion, or other reason to combine is unavailing. *See Ball Aerosol & Specialty Container, Inc. v. Ltd. Brands, Inc.*, 555 F.3d 984, 993 (Fed. Cir. 2009) (holding that, although a court's analysis of motivation to combine "should be made explicit," there need "not [be] teachings in the prior art of a motivation to combine." (internal quotation marks omitted) (citing *KSR*, 550 U.S. at 418)). There are only a handful of ways to present two different types of variables in a single interface display like Casement's, one of which is the two-

dimensional matrix shown in EIA-744. The Plaintiffs do not explain how any specialized knowledge "[i]s necessary to appreciate the value of' using a two-dimensional matrix as the interface display disclosed in Casement. *Perfect Web*, 587 F.3d at 1332. Keeping in mind that "[a] person of ordinary skill is also a person of ordinary creativity, not an automaton," *KSR*, 550 U.S. at 421, one readily apparent reason to combine Casement and EIA-744 would be the reason behind displaying any two-dimensional matrix to a user: the ease of viewing and using information organized in a matrix. An interface displayed as a two-dimensional matrix, which allows the simultaneous selection of an option corresponding to two variables, is more flexible and convenient than the same interface requiring a user to choose from two categories of variables separately.³⁰ Accordingly, the motivation for combining the prior art references asserted by Haier requires no more than common sense to apprehend, and the result would be the asserted method claims of the '523 patent.³¹ The nature of the problem to be solved – displaying an interface in a more flexible and accessible graphic representation – itself also serves as a motivation to combine the references. *See Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1276 (Fed. Cir.

³⁰ As Haier submits, it would also be obvious, as a matter of common sense, to leave out the rows and columns of EIA-744's table related to the bits g0-g2 indicating various combinations. (D.I. 145 at 11; *see* D.I. 149, ex. 3 at 2.) The layman user of a parental control system would have no use for seeing the bits corresponding to the selected options displayed.

³¹ The Plaintiffs cite Roop's statement that he did not see any single tile in Casement that could be highlighted so as to create a blocking based on both overall program rating and specific content rating. (D.I. 160 at 8 (citing D.I. 162, ex. 3 at 110:10-14).) However, that statement is focused only on Casement and not on the combination of Casement with EIA-744.

2004) ("[T]his court has consistently stated that a court or examiner may find a motivation to combine prior art references in the nature of the problem to be solved.").

In addition, despite the different standards for establishing invalidity before the PTO and before a district court, I may take judicial notice of the reexamination record. *See Standard Havens Prods., Inc. v. Gencor Indus. Inc.*, 897 F.2d 511, 514 n.3 (Fed. Cir. 1990) (noting that a court may take judicial notice of adjudicative facts from reexamination proceedings). In the reexamination of the '523 patent, the PTO examiner noted that

the rationale for providing information regarding valid combinations of ratings and content codes in a two-dimensional matrix format on the user interface of a computer would be the same as that which motivated the authors of the EIA-744 reference to use that format in composing the document: because *it quickly and easily conveys the information to the reader*. Indeed, the chosen layout of the document can itself be thought of as constituting a user interface of sorts, requiring the authors to decide the best way to format the information for display to the reader in order to best convey that information.

(D.I. 149, ex. 10 at 7.) The PTO examiner also pointed out that "there are only a finite number of arrangements in which to display the TV Parental Guidelines combinations of age-based ratings and content codes in a user interface. The ... EIA-744 reference clearly is one such arrangement, and would have been recognized as such by an ordinary artisan at the time of the invention." (D.I. 149, ex. 10 at 8.) Given the finite possibilities, a person of ordinary skill would have had "a reasonable expectation of success" by adopting the EIA-744 table as an interface display. (*Id.*, ex. 10 at 8.)

Thus, while the reexamination proceedings, alone, do not dictate the obviousness result here and indeed, the asserted system claims of the '523 patent survive to see

another day – the PTO examiner's determinations are persuasive. In conjunction with common sense and predictable results, they further support the determination that the asserted method claims are obvious. Accordingly, asserted method claims 11 and 12 of the '523 patent are invalid for being obvious in light of Casement in combination with EIA-744.

V. THE '547 PATENT

The '547 patent, titled "Electronic Television Program Guide Schedule System and Method," issued on May 16, 2006. It is directed toward "an improved electronic program guide that provides the user with a more powerful and convenient operating environment, while, at the same time, increasing the efficiency of navigation by the user through the guide." ('547 patent at 1:10-13.) The claimed invention of the '547 patent generally relates to a system and method for restricting the display of "program schedule information." (*Id.* at Abstract.) In addition, it allows a user to view "restricted program schedule information" when he or she has entered a "code." (E.g., *id.* at 32:64-67, 34:11-15, 35:35-38, 36:28-32 (independent claims).)

The Plaintiffs have asserted infringement of claims 1-2, 4, 6, 8, 10-14, 16-18, 20, 22, 24, 26-30, 32-34, 36, 38, 40, 42-46, 48-50, 52, 54, 56, 58-62, and 64 of the '547 patent. (See D.I. 144 at 5.) Of those, asserted claims 1, 17, 33, and 49 are independent claims.

A. Claim Construction for the '547 Patent

The parties dispute eight terms of the '547 patent: "program schedule information," "[valid) lockout code," "restricting the ability to view," and five different means-plus-function terms.

I. "*program schedule information*"

The Plaintiffs propose that "program schedule information" means "information relating to a program listing." (D.I. 137, ex. A.) Haier proposes that "program schedule information" is limited to "program title, and the channel and time of its broadcast." (*Id.*) I will adopt, with some modification, Haier's proposed construction.

According to the Plaintiffs, "program schedule information" is not limited to information about the program title, channel, and time of broadcast because the written description teaches that other items, including "content identifiers, program descriptions, or cast members," may also constitute "program schedule information." (D.I. 138 at 15.) However, the Plaintiffs support that argument with citations to the intrinsic evidence that conflate "program schedule information" with "schedule information *database record*," "*additional programming information*," and "program *listings information*." (D.I. 138 at 15 (citing '547 patent at 17:46-51, 20:46-48, 30:40-51).) Those terms are not, as the Plaintiffs imply, synonymous.

As a general matter, "the schedule information appearing in the overlay portion ... describes the programs currently playing on any particular channel." ('547 patent at 13:59-61.) "[A]s the user flips through the channels, the program schedule information for any selected channel automatically appears in the graphic overlay ... while the actual

program ... appearing on the selected channel at the particular time occupies the remainder of the screen." (*Id.* at 12:49-54.) In other words, "program schedule information" may be viewed for one channel at a time, displayed in a graphic overlay. Alternatively, "program schedule information" for multiple programs may be viewed at the same time, "displayed in a grid listing." (*Id.* at 15:67-16:1.)

As Haier contends, regardless of the format in which the "program schedule information" appears, the relevant figures of the '547 patent consistently show "program schedule information" to include only certain information. (See D.I. 147 at 14-15.) Figure 5 illustrates an embodiment in which a user can view the program schedule information for the channel that he or she is currently watching, and that information includes the title, channel, service provider, and start and end times for the television program. ('547 patent at 12:49-54, Fig. 5.) Figure 11 shows an embodiment in which a user can browse "program schedule information" for various channels, regardless of which channel he or she is currently watching. (*Id.* at 13:1-9, Fig. 11.) Again, that graphic overlay shows information about the title, channel, service provider, and start and end times of the program. (*Id.* at Fig. 11.) The same is true for Figures 12 and 12A. (*Id.* at 13:58-61, 14:13-17, Figs. 12, 12A.) Figures 18 and 25 show different grid listings of "program schedule information," both of which display channel numbers and times along different axes. (*Id.* at 16:3-5, Figs. 18, 25.) In addition, Figures 19 and 20 also show "program schedule information" that is limited to program title, channel, service provider, and time. (*Id.* at 23:9-11, Figs. 19, 20.) Indeed, the written description discloses that "[t]he schedule information presented includes the name of the program

and program start/stop time." (*Id.* at 13:67-14:2.) It also describes "program schedule information" as including "the displayed time of airing ... of the particular show ... , as well as the channel number and service indicator." (*Id.* at 14:13-17.) While those embodiments – numerous and consistent as they are – do not necessarily limit "program schedule information," the specification's treatment of other types of program-related information does.³²

The specification does not refer to other types of information as part of "program schedule information." Instead, it discusses that information in the following context: "Any time t[he] ['i,' or 'information'] icon appears, the user can view *additional programming information*, generally comprising a textual description of program content and/or other information related to the program, such as the names of cast members and the like, by depressing the 'i' key ... on the remote controller" ('547 patent at 17:46-51 (emphasis added); *see also id.* at 10:32-33 ("The information, or 'i,' key ... allows the user to view supplemental program and other information...").) Figure 21 shows the display of such "additional information." (*Id.* at 17:51-53; Fig. 21.) That information encompasses program-related information beyond the scope of "program schedule information" and includes not just program descriptions or cast members but also "information about ... Pay-Per-View event[s] or service[s]." (*Id.* at 17:64-66.)

³² Some embodiments show both start and end times (*see* '547 patent at Figs. 5, 11, 12, 12A), while others show only start times (*see id.* at Figs. 19-20). Therefore, "program schedule information" may include the time of a program, regardless of the format.

The '547 patent's specification also draws a distinction between "program schedule information" and the "schedule information database record." "The *database record* stored for each listing contains a content-specific identifier... ." (*Id.* at 16:55-56 (emphasis added); *see also id.* at 20:46-48 ("The schedule information database record for each program contains a field that corresponds to the program content identifiers in the Parental Guidance category.")) The schedule information database record may also contain fields for data corresponding "to rating, program content identifier or channel." (*Id.* at 23:49-54). The written description further teaches that "program listings information is loaded into *data* a [sic] processor[, and t]he *data* includes program titles, program schedule times, duration, category, as well as additional descriptive information." (*Id.* at 30:44-47 (emphasis added).) Thus, similar to "additional programming information," "database record" and "program listings information" relate to additional data beyond "program schedule information."³³

The "program schedule information" may be categorized and displayed according to "program content" (*id.* at 16:55-61) or "channel" (*id.* at 17:13-14), and the display of "program schedule information" may be restricted based on factors such as channel, rating information, or title (*see, e.g., id.* at 33:6-23 (claims 3-5)). However, the information itself is limited to program title, channel, service provider, and time. Therefore, I will adopt a modified version of Haier's proposed construction. The term

³³ I make no comment regarding the relationship among "additional programming information," "database record," and "program listings information" except that they may each encompass information or data outside the scope of "program schedule information."

"program schedule information" means "program title, channel, service provider, and time of broadcast."

2. *"[valid] lockout code"*

The Plaintiffs propose that "[valid] lockout code" means "a code the correctness of which can be confirmed." (D.I. 137, ex. A.) Haier argues that the term means "specific multi-digit user input controlling the ability to set parental control options." (Id.) I will construe "[valid] lockout code" to mean "a code the correctness of which can be confirmed."

Haier claims that "'lockout code' does not have a common meaning to" a person of ordinary skill in the art and, thus, its meaning is limited to that given in the specification. (D.I. 147 at 16.) The Plaintiffs posit that it does have meaning to a person of ordinary skill in the art and that "Haier's construction incorrectly limits the term to 'multi-digit' inputs." (D.I. 138 at 14 (citing D.I. 138, ex. A, iJ 119).) Although the '547 patent discloses an embodiment in which the lockout code is "enter[ed] ... using ... numeric digit keys" ('547 patent at 21:63-64), the Plaintiffs argue that "there is no reason why the 'lockout code' could not be, for example, a password comprising letters." (D.I. 156 at 13.)

The embodiment that Haier relies on, shown in Figure 39 of the '547 patent, does not limit the lockout code even though the lockout code is described in the specification using the modifier "multi-digit." ('547 patent at 21:63.) The use of that modifier implies that the term "lockout code," standing alone, is not limited to being multi-digit. In addition, the specification notes that an object of the invention is to provide "password

control" (id. at 4:35-38), and Figure 4 shows an embodiment of a remote controller that has symbols like "*" and "#" in addition to numeric digit keys. (*Id.* at 10:44-45, Fig. 4.) Even if a remote controller lacks non-numeric keys, nothing in the specification bars the claimed invention from providing alternative means for a user to input a lockout code, such as by using a remote controller's arrow keys to select letters or other symbols from a displayed keyboard.

The key feature of the lockout code is that it can be checked against a previously set lockout code. The written description states that "[t]he user will be prompted to enter the previously set lockout code before the system takes any further action." (*Id.* at 24:3-4.) Put another way, the claimed invention requires an "entered code" to "match[]" a "lockout code previously entered and stored" to determine whether to carry out an action. (*Id.* at 24:6-12.) Haier's proposed language requiring a lockout code to "control[] the ability to set parental control options" does not succinctly capture the importance of being able to check the code against a previously set code. It may also lead to unnecessary confusion as to what qualifies as "parental control options."

Therefore, I construe "[valid] lockout code" according to the Plaintiffs' proposed construction. It means "a code the correctness of which can be confirmed."

3. *"restricting the ability to view"*

The Plaintiffs submit that the plain and ordinary meaning of "restricting the ability to view" is "limiting the display of," while Haier proposes the construction "preventing the viewing of." (D.I. 137, ex. A.) I will adopt the Plaintiffs' proposed construction.

The Plaintiffs' expert, Shamos, opined that Haier's proposed construction would "require[] completely preventing the viewing of program schedule information," whereas the plain and ordinary meaning of the term is broad enough to include measures that fall short of "preventing." (D.I. 139, ex. A, 1103.) Haier's expert, Roop, relies on a portion of the '547 patent's written description that teaches, in part:

The schedule information database record for each program contains a field that corresponds to the program content identifiers in the Parental Guidance category. During operation, the microcontroller checks this field in response to a user command ... to display its corresponding schedule information before carrying out the ... displaying function. If the parental guide identifier in the program schedule information database record matches any of the activated parental guidance identifiers shown in FIG. 30, the user will be prompted to enter the four digit key lock access code before the system takes any further action. If the entered code matches the key lock access code previously entered and stored by the user as described above, the system will carry out the user request ... to display its corresponding schedule information. If the code is not recognized by the system, no further action will be taken and the user's request will be denied.

('547 patent at 20:46-63; D.I. 149, 195) That description, however, refers specifically to checking for a field corresponding to "the program content identifiers *in the Parental Guidance category*" and the display of that "*corresponding* schedule information" after a matching key lock access code has been entered; it does not teach blocking *all* "program schedule information." ('547 patent at 20:46-48, 20:60-61 (emphasis added).) Haier points to nothing else in the intrinsic evidence that allegedly limits "restricting the ability to view" to entirely "preventing" the ability to view. (D.I. 147 at 15; D.I. 148, 195.) Contrary to Haier's position, the Summary of the Invention discloses that the displayed information can be "*aportion* of the program schedule information." ('547 patent at

4:65-5:1 (emphasis added).) As the Plaintiffs point out, adopting Haier's narrow construction would require all of the program schedule information shown in Figure 18 of the '547 patent to be blocked, "even though ... th[at information may be] associated with other, unblocked program information." (D.I. 138 at 16.)

Haier points to extrinsic evidence in the form of Congressman Edward J. Markey's speech introducing the Television Violence Reduction Through Parental Empowerment Act of 1993 (the "Parental Empowerment Act"), which allegedly evidences that "a goal of requiring TV manufacturers and broadcasters to support parental controls was to implement the same protection for broadcast and cable programs that the 'plain brown wrapper' provides for print material intended exclusively for adults." (D.I. 147 at 16.) According to Roop, a person of ordinary skill in the art at the time of the invention would have "paid attention" to that legislation. (D.I. 150, ex. 35 at 154:24-155:13.) However, it is far from apparent that the goal of the Parental Empowerment legislation was to provide "brown wrapper" restriction of program schedule information and not just programming itself. Moreover, Haier has not shown that the claimed invention of the '547 patent was directed to such a legislative goal. Instead, the ordinary definition of "restrict" lends support to the Plaintiffs' proposed construction. To "restrict" is "to confine within bounds," "restrain," or "limit." Merriam-Webster's Collegiate Dictionary at 996. It is not so narrow as to require absolute "prevention."

Therefore, Haier's proposed construction is too narrow. "[R]estricting the ability to view" means "limiting the display of."

4. *"means for providing a user with the ability to set parental control options"*
5. *"means for providing the user with the ability to activate parental control options"*

The parties agree that "means for providing a user with the ability to set parental control options" and "means for providing the user with the ability to activate parental control options" are drafted in means-plus-function format and that 35 U.S.C. § 112, 6 is applicable. The parties address the constructions for those terms together (D.I. 147 at 17; D.I. 156 at 14), and so will I. While the parties agree that the functions of the terms are "providing a user with the ability to set parental control options" and "providing the user with the ability to activate the parental control options," respectively, they dispute the corresponding structure. (D.I. 137, ex. A; D.I. 147 at 17.) For both terms, the Plaintiffs propose the corresponding structure to be "an input device, such as a remote controller or keypad, or any equivalents thereof." (D.I. 137, ex. A.) Haier contends that "there is no disclosure adequate to explain how to perform any of the[] claimed functions," so the terms are indefinite and lack a written description. (D.I. 137, ex. A; D.I. 147 at 17-18.) I will adopt the Plaintiffs' proposed construction.

The Plaintiffs claim that "Haier's position is based on failing to make a distinction between providing the user with the ability to set, activate, and deactivate parental control options (which is what the claims call for), and software that may be involved in enforcing the options (which is not what the claims call for)." (D.I. 138 at 17.) I agree with the Plaintiffs that "[t]he claims do not require setting or activating parental control options; they only require providing the user with the *ability* to do so." (D.I. 156 at 14

(emphasis added).) The illustrative remote controllers corresponding to the relevant functions are shown in Figures 3 and 4 ('547 patent at 9:56-10:36), and the specification teaches that the functions of the remote controller "can ... be integrated into a keypad on the user's cable box or other hardware" (id. at 11:34-36).

Haier's primary argument for the lack of a corresponding structure is the observation that Figure 36D of the '547 patent includes a block labeled "KEY ACCESS (UNDER DEFINITION)." (D.I. 147 at 19.) That position is unavailing. The '547 patent discloses the same structure for both setting and activating the parental controls -the input device sets the parental control ('547 patent at 20: 11-16, 21 :7-12, 22:38-52, 22:59-23:1, 23:1-4), and the parental controls can be activated by pressing a key on the input device (*id.* at 22:38-52, 22:59-23: 1-4). Although "KEY ACCESS" is labeled as "under definition" in Figure 36D, its related functionality is described elsewhere, namely columns 19-21 of the '547 patent.³⁴

Therefore, I do not find any indefiniteness or lack of written description. As the Plaintiffs propose, the structure providing a user with the ability to set parental control options and to activate the parental control options is "an input device, such as a remote controller or keypad, or any equivalents thereof."

³⁴ There is no indication as to what "under definition" means.

6. *"means for providing the user with the ability to deactivate the parental control options"*
7. *"means for providing the user with the ability to indicate channels to which access is to be restricted "*
8. *"means for providing the user with the ability to indicate ratings of television programs to which access is to be restricted"*

Again, I will address several terms together, as the parties do. (D.I. 147 at 19-20; D.I. 156 at 17-19.) The parties agree that "means for providing the user with the ability to deactivate the parental control options," and "means for providing the user with the ability to indicate channels to which access is to be restricted," and "means for providing the user with the ability to indicate ratings of television programs to which access is to be restricted" are all means-plus-function claim elements and that 35 U.S.C. § 112, ¶ 6 is applicable to each of them. (D.I. 147 at 17.) Haier argues that all of those terms are indefinite and lack a written description. (D.I. 137, ex. A.) It does not submit proposed constructions for any of them. (D.I. 137, ex. A; D.I. 147 at 19.) The Plaintiffs propose that the terms' functions are "providing the user with the ability to": (a) "deactivate the parental control options"; (b) "indicate channels to which access is to be restricted"; and (c) "indicate ratings of television programs to which access is to be restricted." (D.I. 137, ex. A.) They further propose that the corresponding structures are, respectively: (a) "a user interface that displays parental control options and an input device, such as a remote controller or keypad, or any equivalents thereof "; (b) "a user interface that displays parental control options and an input device, such as a remote controller or keypad, or any equivalents thereof "; and (c) "a user interface that provides one or more options to restrict access to television programs based on ratings and an input device, such as a

remote controller or keypad, or any equivalents thereof." (*Id.*) I will adopt the Plaintiffs' proposed constructions for each of those means-plus-functions terms, with modification.

Again, the disputed terms provide the user with the "ability" to do various things, whether it is to "deactivate the parental control options," "indicate channels to which access is to be restricted," or "indicate ratings of television programs to which access is to be restricted."

With respect to the ability to deactivate parental control options, the written description provides a simple algorithm linked to structural elements: "Once a key lock access is set, it can be deactivated by selecting the category letter and depressing the ENTER key." ('547 patent at 20: 18-20; *see also id.* at 22:27-30 ("Clearing a previously set lockout code is accomplished by moving the selection cursor to the 'Clear' entry ... in the Lockout Code category ... and depressing the enter key ... on the remote controller ... ").) Doing so "causes the microcontroller to clear the lockout code stored in memory[], as well as all locks previously set by the user." (*Id.* at 22:30-32.)

As for the means for providing "the ability to indicate channels to which access is to be restricted" and "the ability to indicate ratings of television programs to which access is to be restricted," the written description also teaches a simple algorithm:

Several methods can be used to block programs at their time of airing. For example, in the case of the Movie Rating, Parental Guidance and Channel categories, the schedule information database record for each program is provided with a field that corresponds to the rating, program content identifier or channel appearing, respectively, in the Movie Rating ... , Parental Guidance ... and Channel ... category of the Lockout screen ... shown in FIG. 39.

During operation, the microcontroller checks the appropriate field in the database record in response to a user command to tune to or order a program before carrying out the tuning or ordering function. Additionally, the lockout code also may be used to restrict access to program schedule information. In this instance, the microcontroller also would check the appropriate field in the schedule information database record before displaying schedule information for a program.

(*Id.* at 23:47-63.) The ability to restrict viewing by channel is provided for by the disclosure that "the user navigates to the Channel Block category ... by manipulating the cursor using the direction arrow keys on the remote controller and depressing the ENTER key." (*Id.* at 21:22-26; *see also id.* at 21:26-51, 22:21-26, 22:53-58.) Similarly, the ability to restrict viewing by ratings is disclosed as follows: "Once the user selects a particular item, such as 'L,' by moving to the active window ... using the right direction arrow key, depressing the ENTER key will indicate to the microcontroller ... that a key lock access has been selected for [that item]." (*Id.* at 20:11-16; *see also id.* at 21:7-12, 22:38-52.)

The category letter or channel is displayed on a user interface – whether a "submenu" such as that shown in Figure 30 (*id.* at 19:55-56, Fig. 30) or a "Lockout screen" like that shown in Figure 39 (*id.* at 21:62-64, Fig. 39) – and the "ENTER key" is found on a "user control apparatus, such as a "remote controller" (*id.* at Abstract, 4:59, 9:56-10:8, 10:34-36, 10:39-44) or "keypad" (*id.* at 11:34-36).³⁵ Therefore, the user

³⁵ Because the specification of the '547 patent refers to the element that a viewer uses to input commands as a "user control apparatus" ('547 patent at Abstract, 4:59), rather than the "input device" used in the Plaintiffs' proposed constructions (D.I. 137, ex. A), I will also refer to that element as a "user control apparatus."

interface and user control apparatus are the corresponding structures for each of the three disputed means-plus-function claims.

Accordingly, I reject Haier's arguments and adopt the Plaintiffs' proposed constructions, with some modification:

- "[M]eans for providing the user with the ability to deactivate the parental control options": the function is "providing the user with the ability to deactivate the parental control options," and the structure is "a user interface that displays parental control options and a user control apparatus, such as a remote controller or keypad, or any equivalents thereof."
- "[M]eans for providing the user with the ability to indicate channels to which access is to be restricted": the function is "providing the user with the ability to indicate channels to which access is to be restricted," and the structure is "a user interface that displays parental control options and a user control apparatus, such as a remote controller or keypad, or any equivalents thereof."
- "[M]eans for providing the user with the ability to indicate ratings of television programs to which access is to be restricted": the function is "providing the user with the ability to indicate ratings of television programs to which access is to be restricted," and the structure is "a user interface that provides one or more options to restrict access to television programs based on ratings and a user control apparatus, such as a remote controller or keypad, or any equivalents thereof."

B. Summary Judgment Invalidity of the '547 Patent

At the summary judgment stage, Haier argues that all of the asserted claims of the '547 patent are invalid for being both anticipated and obvious.

1. Anticipation

Haier argues that "[t]he asserted claims of the '547 patent are invalid as anticipated by" U.S. Patent No. 6,418,556 to Bennington *et al.* ("Bennington") under 35 U.S.C. § 102(e). (D.I. **144** at 8.) As noted above, 35 U.S.C. § 102(e)(2) (in its presently applicable pre-AIA form) provides that a patent claim is invalid if "(t]he invention was

described in ... a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent." 35 U.S.C. § 102(e)(2). The '547 patent claims a priority date of May 20, 1994, as a continuation of a patent application filed on that date. Bennington was filed earlier, on September 9, 1993, and issued on July 9, 2002.³⁶ (D.I. 149, ex. 7.) There is no dispute Bennington was filed in the United States before the filing date of the '547 patent.

Haier asserts that "Bennington and the '547 patent share almost identical specifications" such that the Bennington disclosure anticipates all of the asserted claims of the '547 patent. (D.I. 144 at 9.) It relies on various portions of Bennington's written description, including the following paragraph:

The schedule information database record for each program contains a field that corresponds to the program content identifiers in the Parental Guidance category. During operation, the microcontroller checks this field in response to a user command to tune to or order a program, or to display its corresponding schedule information before carrying out the tuning, ordering or displaying function. If the parental guide identifier in the program schedule information database record matches any one of the activated parental guidance identifiers shown in FIG. 30, the user will be prompted to enter the four digit key lock access code before the system takes any further action. If the entered code matches the key lock access code previously entered and stored by the user as described above, the system will carry out the user request to tune to the program, to order it, or to display its corresponding schedule information. If the code is not recognized by the system, no further action will be taken and the user's request will be denied.

(D.I. 159, ex. 3 at 18:43-60.) The Plaintiffs do not set forth any specific facts to contest Haier's assertion that all of the limitations of the asserted *method* claims (claims 1, 2, 4,

³⁶ Bennington and the '547 patent were both assigned to Plaintiff UVP. (See D.I. 158 at 7.)

6, 8, 10-14, and 16) are disclosed in Bennington. (D.I. 182 at 125:3-20.) Rather, they make two arguments on summary judgment. First, they argue that Bennington is not § 102(e) prior art because the co-inventors of the '547 patent were the source of the allegedly anticipatory disclosure. (D.I. 158 at 6-7.) Second, they argue that Haier has not even attempted to show that Bennington discloses the structural limitations of the asserted *apparatus* claims of the '547 patent (claims 17-18, 20, 22, 24, 26-30, 32-34, 36, 38, 40, 42-46, 48-50, 52, 54, 56, 58-62, and 64). (*Id.* at 12.) Because I agree that, at least for purposes of summary judgment, the Plaintiffs' first argument raises an issue of fact, I will deny summary judgment of anticipation on that ground and not reach whether Haier has carried its burden of showing that Bennington anticipates the asserted apparatus claims of the '547 patent.³⁷

The Plaintiffs submit that a jury could reasonably find, based on the evidence, that the Bennington disclosure was not "by another" as required under § 102(e). (D.I. 158 at 6-8.) In the context of § 102(e), "[a]nother" means other than applicants, in other words, a different inventive entity. The inventive entity is different if not all inventors are the same." MPEP § 2136.04 (citing *In re Land*, 368 F.2d 866 (C.C.P.A. 1966)). The inventors listed on Bennington are Gerard E. Bennington, George Backer, Shawn Green, Bill Cooper, Dave Spell, Rosetta Rogers, and Bruce Davis. (D.I. 158 at 3.) Davis is also listed as an inventor on the '547 patent, alongside three co-inventors: Jerry Alten,

³⁷ That is not to imply anything about the Plaintiffs' second argument. If Bennington is indeed § 102(e) prior art, the Plaintiffs are free at trial to argue that it does not disclose the structural limitations of the asserted apparatus claims of the '547 patent.

Michael Morris, and Roger Youman. (*Id.*) Thus, despite sharing Davis as a common inventor, Bennington and the '547 patent were granted to different inventive entities.

The fact that Bennington and the '547 patent list different inventive entities, however, does not necessarily mean that § 102(e)'s "by another" requirement is satisfied. *See Applied Materials, Inc. v. Gemini Research Corp.*, 835 F.2d 279, 281 (Fed. Cir. 1987) ("[E]ven though an application and a patent have been conceived by different inventive entities, if they share one or more persons as joint inventors, the ... § 102(e) exclusion for a patent granted to 'another' is not necessarily satisfied."); *In re Land*, 368 F.2d at 881 (holding that when the inventors listed on a reference patent partially overlap with those listed on a later patent, the "by another" requirement of § 102(e) *may* be met). The Federal Circuit has held that "[w]hat is significant is not merely the differences in the listed inventors, but whether the portions of the reference relied on as prior art, and the subject matter of the claims in question, represent the work of a common inventive entity." *Riverwood Int'l Corp. v. R.A. Jones & Co.*, 324 F.3d 1346, 1356 (Fed. Cir. 2003). In other words, when there is a dispute as to whether a reference is § 102(e) prior art, a court must first determine what part of a patent is being asserted as prior art before deciding whether that disclosure represents the work of the same inventive entity responsible for the patent claims being asserted in litigation.³⁸ *See id.* ("We hold that by not deciding who invented the portion of the subject matter disclosed in the [reference]

³⁸ Under 35 U.S.C. § 102(e), "the disclosure in [a patent] reference is available as prior art whether or not the disclosed subject matter is claimed." *In re Land*, 368 F.2d at 876 (citing *Alexander Milburn Co. v. Davis-Bournonville Co.*, 270 U.S. 390 (1926)).

patent that served as the basis for [the alleged infringer's] obviousness contentions, the district court erred."); *see also Ethicon Endo-Surgery, Inc. v. Hologic, Inc.*, 689 F. Supp. 2d 929, 942 (S.D. Ohio 2010) ("[A] factual inquiry needs to be done to determine what claims or elements of the [reference] patents were invented by John Hibner and/or Mark Burdorff and which claims or elements of [two asserted] patents were also invented by them."). The alleged anticipatory disclosure here is limited to Bennington's written description and is not found in any of Bennington's claimed subject matter. (D.I. 144 at 9-10; D.I. 158 at 3, 7; D.I. 171 at 3; D.I. 182 at 126:17-21.)

The Plaintiffs argue that the relevant portion of Bennington's written description was, in fact, not made "by another" because it represents the work of the '547 patent's four co-inventors. (D.I. 158 at 6-8.) The only evidence that the Plaintiffs rely on is a sworn declaration executed by Davis, the inventor listed on both Bennington and the '547 patent.³⁹ In the declaration, Davis states:

3. I have reviewed [Bennington] and was involved in [its] initial drafting as one of the named inventors. The subject matter discussed at Col. 18:43-60 of [Bennington] was derived from the work of myself and my '547 patent co-inventors: Jerry Alten, Michael Morris, and Roger Youman. That subject matter was not invented by any of my [Bennington] co-inventors and was transmitted to my [Bennington] co-inventors by their working for the same company as myself and my '547 patent co-inventors and by my status as inventor on both patents.

4. The involvement of myself and my co-inventors in subject matter discussed in the [Bennington] specification is substantiated by U.S. Patent No. 5,781,246, which is a continuation-in-part of and shares an overlapping

³⁹ The Davis declaration was executed on December 9, 2013, a few weeks before the close of discovery and the deadline for filing summary judgment motions. (*See* D.I. 101; D.I. 159, ex. 5; D.I. 182 at 127:16-24.)

disclosure with [Bennington] and names myself, Jerry Alten, Michael Morris, and Roger Youman as joint inventors.

(D.I. 159, ex. 5, iii! 3-4.) The Plaintiffs assert that this declaration is sufficient to foreclose summary judgment of § 102(e) invalidity because it establishes a "disputed factual inquiry into who invented" the overlapping subject matter. (D.I. 158 at 7.)

Haier takes the position that the Davis declaration, without more, is "insufficient to meet Plaintiffs' burden of showing common inventorship." (D.I. 171 at 3.) It cites to the rule that "[a]n inventor's testimony respecting the facts surrounding a claim of derivation or priority of invention cannot, standing alone, rise to the level of clear and convincing proof." (*Id.* at 2 (quoting *Ethicon, Inc. v. US Surgical Corp.*, 135 F.3d 1456, 1461 (Fed. Cir. 1998)).) The Plaintiffs respond that the requirement for corroborating evidence is a limited one that is inapplicable to the question at hand (D.I. 182 at 121:10-128:8) and that, in any case, "Davis' testimony is independently corroborated by the Bennington patent itself." (D.I. 158 at 7). They argue that the burden of showing invalidity by clear and convincing evidence remains on Haier and that the Davis declaration is sufficient to raise a genuine dispute of material fact regarding whether Bennington qualifies as prior art. (D.I. 158 at 7; D.I. 182 at 124:10-16, 125:21-24.)

As the Plaintiffs correctly point out, Haier relies not on Bennington's claimed subject matter but on Bennington's written description, and, ordinarily, there is no presumption that the inventors listed on Bennington necessarily invented the subject matter of that disclosure. *Aktiebolaget Karlstads Mekaniska Werkstad v. ITC*, 705 F.2d

1565, 1574 (Fed. Cir. 1983) ("There is no presumption, or any reason to assume, that everything disclosed in a patent specification has been invented by the patentee."). (D.I. 158 at 6.) But that argument misses the point. The rationale underlying § 102(e) is that a full description of the invention in a different inventive entity's earlier-filed patent application, by itself, evidences that the applicant was not, in fact, the first to invent that subject matter. *See In re Land*, 368 F.2d at 877 (stating that the rule of § 102(e) originates from the idea that a patent "containing a full description of [an invention] earlier than any date of invention claimed by [the inventor] [i]s evidence that [the inventor] was not the first inventor"). Accordingly, "a U.S. patent ... by a different inventive entity, whether or not the application shares some inventors in common with the patent, is prima facie evidence that the invention was made 'by another' as set forth in pre-AIA 35 U.S.C. [§] 102(e)." MPEP § 2136.04. Although the burden of *persuasion* for proving invalidity remains on the accused infringer, "[a]fter an accused infringer has put forth a prima facie case of invalidity, the burden of *production* shifts to the patent owner to produce sufficient rebuttal evidence." *Taurus IP, LLC v. DaimlerChrysler Corp.*, 726 F.3d 1306, 1322 (Fed. Cir. 2013). Therefore, there being no dispute that Bennington and the '547 patent list different inventive entities, the burden on summary judgment has shifted to the Plaintiffs to produce evidence sufficient to rebut the prima facie evidence that the claimed invention of the '547 patent had already been invented by someone else.

Again, the Plaintiffs rely on the Davis declaration and submit that the requirement for corroborating evidence is inapplicable because it applies narrowly to disputes of fact

"surrounding a claim of derivation o[r] priority of the invention," not to "the issue of attribution which is whose invention is it." (D.I. 182 at 121:14-17, 122:12-14.) In other words, the Plaintiffs take the position that the requirement to submit corroborating evidence applies when there is a claim to an *earlier date* of conception but not when the issue is limited to the *identity* of the inventive entity. (See D.I. 158 at 7 ("[T]he disputed factual inquiry into who invented th[e] subject matter is not amenable to summary judgment."); D.I. 182 at 124:15-16 (arguing that the determination of whether Bennington is § 102(e) prior art requires "the determination of who invented it").)

A reference patent qualifies as § 102(e) prior art if its disclosure was (1) made by another, and (2) made in an application filed before the invention date. See 35 U.S.C. § 102(e)(2). When a party submits an inventor's testimony to prove an earlier date of invention for purposes of pre-dating a § 102(e) reference, the Federal Circuit has required corroborating evidence. *Taurus IP*, 726 F.3d at 1323-24. In *Taurus IP*, however, the patent holder did not dispute that the reference patent's disclosure was made "by another," only that the asserted patent was entitled to an earlier date of invention. In contrast, the Plaintiffs here are trying to disqualify Bennington as § 102(e) prior art only on the basis that it was not "by another." The Plaintiffs do not also argue that the subject matter claimed in the '547 patent was, in fact, conceived prior to the filing of Bennington.⁴⁰ Therefore, as the Plaintiffs point out, their argument does not implicate a date of conception.

⁴⁰ If a publication became publicly accessible more than one year prior to the filing date of a patent application, then the document would constitute prior art under 35 U.S.C.

An argument certainly can be made that the identity of the inventive entity in a circumstance like this, i.e., who conceived the claimed invention, is a question implicating derivation and therefore requiring corroboration of testimony about inventorship. At least one district court has applied the requirement to an inventorship dispute. *See AMP, Inc. v. Fujitsu Microelectronics, Inc.*, 853 F. Supp. 808, 821 (M.D. Pa. 1994) ("[W]e believe the principle of [requiring corroborating evidence to claim an earlier date of conception] to be equally applicable to a claim by alleged joint inventors that the subject matter of certain claims was the product of just one inventor."). As a policy matter, that is understandable, as "[c]redibility concerns undergird the corroboration requirement, the purpose of which is to prevent fraud" *Medichem S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1170 (Fed. Cir. 2006). Although the Davis declaration is not being submitted to support a defendant's burden of proving invalidity by clear and convincing evidence, similar policy concern apply.⁴¹

Additionally, as I have noted, the Plaintiffs' burden on summary judgment is to produce evidence sufficient to rebut the prima facie evidence that the inventors of the '547 patent were not the first to invent the claimed subject matter. Looking at the

§ 102(b), regardless of who conceived the invention. 35 U.S.C. § 102(b) (pre-AIA). Here, however, Bennington's filing date (September 9, 1993) is less than one year before the claimed priority date of the '547 patent (May 20, 1994).

⁴¹ The Federal Circuit has stated that it "know[s] of no corroboration requirement for inventor testimony asserted to defend against a finding of invalidity by pointing to deficiencies in the prior art." *See i4i Ltd. v. Microsoft Corp.*, 598 F.3d 831, 847 (Fed. Cir. 2010), *aff'd*, 131 S. Ct. 2238. That observation is not applicable here, as the Plaintiffs are not alleging any deficiency in Bennington itself.

rational underlying the corroboration requirement –the suspicion regarding an inventor's self-serving testimony when his claim to a patent is at stake –it is not straightforward to conclude that the Davis declaration is not subject to the corroboration requirement.

However, the Federal Circuit has not yet applied the corroboration requirement under circumstances like these, and I will refrain from doing so at this time because the parties are free to proceed to trial on the system claims of the '547 patent regardless.⁴² Rebutting that the Bennington disclosure was "by another" may prove to be a challenge for the Plaintiffs at trial, in no small part because anything other than an exact overlap in inventive entities would meet the "by another" requirement. Nevertheless, the Plaintiffs may present their evidence to a jury. I will deny summary judgment of anticipation of the '547 patent, without prejudice to Haier raising the issue again in a post-trial motion, if appropriate.

2. *Obviousness*

Haier also argues that the asserted claims of the '547 patent are invalid, pursuant to 35 U.S.C. § 103, as being obvious under the "Parental Empowerment Act of 1993 in view of Bennington, U.S. Patent No. 6,072,520 to Yuen ("Yuen"), and/or U.S. Patent No. 5,253, 066 to Vogel ("Vogel")."⁴³ (DJ. 144 at 1.) Haier asserts the same level of

⁴² Accordingly, I need not determine at this time whether Bennington itself is corroborating evidence of the Davis declaration.

⁴³ Having determined that the question of Bennington's status as prior art to the '547 is not appropriate for summary judgment, I will only address Haier's obviousness arguments as to the additional asserted references. (See DJ. 144 at 14 ("[E]ven assuming that [Bennington's disclosures] were a fact in dispute, the combination of the Parental Empowerment Act of 1993, Yuen and Vogel discloses any elements or limitations

ordinary skill in the art as it does with the '523 patent (D.I. 144 at 6), and the Plaintiffs do not dispute that contention (D.I. 158 at 1-2).

a. *The Parental Empowerment Act Reference*

In 1993, then-Representative Markey of Massachusetts introduced the Parental Empowerment Act with a speech to the U.S. House of Representatives, in which he said that the legislation would "give parents the power to block from their homes, and from their children's viewing, television programs which contain harmful depictions of violence." (D.I. 149, ex. 5 at 19520.) The bill's co-sponsors were concerned about the "excessive level of murder and mayhem" to which children, often left unsupervised in front of the television, were increasingly exposed. (*Id.*) The proposed legislation included two requirements: (!) "TV sets must be capable of blocking programs based on a violence rating or advisory," and (2) "TV sets must be capable of blocking the display of programs or time slots as well as channels so that parents can block any individual program even if it does not carry and advisory." (*Id.*, ex. 5 at 19521.)⁴⁴ In sum, the legislation addressed V-chip technology.

Representative Markey's introductory remarks cited comments from supporters of the legislation, including television industry leaders, editorial boards, and public health

arguably not disclosed by Bennington.".) Thus, if any obviousness combination depends on Bennington's disclosures, summary judgment is not appropriate at this stage.

⁴⁴ Representative Markey's remarks are reflected in H.R. 2888, which states: "(1) apparatus designed to receive television signals be equipped with circuitry designed to enable viewers to block the display of channels, programs, and time slots; and (2) such apparatus enable viewers to block display of all programs with a common rating." (D.I. 149, ex. 6 at 4.)

professionals, all of whom addressed the need to "enable parents to prevent their children from viewing violent programming." (*Id.*) An editorial in the *Wall Street Journal*, dated August 3, 1993, from Newton N. Minow, the former Chairman of the FCC, was attached to Representative Markey's remarks. Relevant to Haier's obviousness argument, Minow compared the ease with which children can be shielded from printed publications with the difficulty of protecting children from certain television programs. "[P]roviding such protection has proved especially difficult in broadcasting, which, unlike the magazine rack or the video store, cannot be partitioned or its contents hidden in a plain brown wrapper." (*Id.*, ex. 5 at 19522.) Minow went on to state that V-chip technology would make "it possible for parents to lock out programs unsuitable for children, provided only that such programs are transmitted with a code that labels them as such." (*Id.*)

b. *The Yuen Reference*

Yuen was filed on June 25, 1999, and is entitled "System for Improved Parental Control of Television Use." (*Id.*, ex. 8 at HAT-DE00002763.) Yuen relates to "[a]n apparatus and method for parental control of television programs." (*Id.*)

c. *The Vogel Reference*

Vogel was filed on May 30, 1990, and is entitled "TV Recording and Viewing Control System." (*Id.*, ex. 9 at HAT-DE00001482.) Vogel relates to a television program guide "indicating which program is currently being viewed or recorded." (*Id.*)

d. *Analysis*

Haier argues that the asserted claims of the '547 patent are rendered obvious by a combination of the Parental Empowennent Act with either Yuen or Vogel. (D.I. 144 at

14.) The Plaintiffs argue that there is a genuine dispute of material fact as to whether the Parental Empowerment Act is "analogous" art that "would have commended itself to an inventor's attention." (D.I. 158 at 2 (internal quotation marks omitted).) They also assert three disputes of material fact related to the "scope and content of the asserted prior art": (1) "whether the asserted prior art discloses 'restricting the ability to view program schedule information,'" which is recited by all asserted claims of the '547 patent; (2) whether a person of ordinary skill in the art would have had reason to combine the prior art references and, if so, what the result would be; and (3) whether the prior art discloses the elements of the asserted apparatus claims.⁴⁵ (*Id.*) The Plaintiffs' argument concerning disclosure of the "restricting the ability to view program schedule information" element most clearly raises a dispute of fact that forecloses summary judgment. Accordingly, I will address that argument but not the other two.

Even assuming *arguendo* that the Parental Empowerment Act is analogous art and that a person of ordinary skill in the art would have had reason to combine the asserted references, Haier has failed to show that it is entitled to a ruling as a matter of law that the prior art references disclose "restricting the ability to view program schedule

⁴⁵ In its briefing for summary judgment, Haier does not argue, except perhaps by referring to its invalidity claim charts, how the structural limitations of the asserted apparatus claims have been disclosed. (D.I. 171 at 9.) It primarily relies on its position that the apparatus claims are "nearly identical" to the asserted method claims. (*Id.*) By itself, Haier's general reliance on the similarities between the apparatus and method claims would not demonstrate whether the prior art discloses the corresponding structure for the means-plus-function limitations of the apparatus claims.

information," as that term has been construed.⁴⁶ First, Haier argues that the Parental Empowerment Act discloses "restricting the ability to view program schedule information." (D.I. 144 at 17.) For support, Haier points to Representative Markey's speech invoking a "plain brown wrapper." (*Id.* at 18.) Haier's overarching argument is that, as Roop opines, "[a] person of ordinary skill in the art, indeed any person, would recognize that using an electronic program guide to restrict access to program schedule information (e.g., program titles) is analogous to covering adult content magazines in a plain brown wrapper." (D.I. 149, **ii** 143; *see also* D.I. 159, ex. 7 at 159:11.) Based on that comparison, Roop opines that the Parental Empowerment Act discloses that "[a] user can choose to block the program schedule information by setting parental control options." (D.I. 149, **ii** 143.) The Plaintiffs' expert, Shamos, disagrees, responding that both Representative Markey's remarks and the Act use language to specify the "blocking" of programs, time slots, and channels, not of "blocking *or restricting*" program schedule information. (D.I. 159, ex. 6, **iii** 126, 128 (emphasis added).) The Plaintiffs also point out that Roop conceded at his deposition that there is "nothing about specifically ... blocking program schedule information" in the Parental Empowerment Act. (*Id.*, ex. 7 at 159:17-18.)

⁴⁶ I have construed "restricting the ability to view" to mean "limiting the display of." The term "program schedule information" means "program title, channel, service provider, and time of broadcast." Therefore, under my construction, the prior art references must disclose "limiting the display of program title, channel, service provider, and time of broadcast."

Haier's argument rests on whether Representative Markey's reference to using a "plain brown wrapper" for a magazine is analogous to "restricting the ability to view program schedule information." Under my claim construction, "restricting" does not require entirely blocking the ability to view, and "program schedule information" includes program titles. In light of the expert testimony, there remains a genuine dispute of material fact regarding whether the Parental Empowerment Act discloses "restricting the ability to view program schedule information."

As to Yuen, Roop testified that it "teaches a television program guide that allows a user to control access to television programs by time, rating, content, and/or channel." (D.I. 149, ¶ 150.) According to Roop, Yuen discloses that "[a] user can choose to block the program schedule information by setting parental control options." (*Id.*, ¶ 151.) The portions of Yuen relied upon by Roop, however, allow for a "display ... to display *blocked programs*." (*Id.*, ex. 8 at 13:8 (emphasis added).) Shamos points out that, far from restricting the display of any information, Yuen provides for it to be "shown on a separate screen." (D.I. 159, ex. 6, ¶ 132.) At his deposition, Roop clarified that, given the relevant figures in Yuen, it was "ambiguous" whether Yuen discloses this element "because it says that the selections that are enabled or blocked for viewing will be displayed But I don't see anything in the flow chart about how you can just do anything." (*Id.*, ex. 7 at 171:17-24.) Roop, also testified that "I guess I would have to say that it would be obvious that you could only display unblocked programs according to Yuen." (*Id.*, ex. 7 at 172: 11-13.) Thus, whether Yuen discloses "limiting the display

of program title, channel, service provider, and time of broadcast" presents a genuine issue of material fact.

Finally, in his expert report, Roop did not separately consider Vogel, and the Plaintiffs point out that he conceded in his deposition that Vogel does not disclose blocking program schedule information and, in fact, that was "not what [he] was using the Vogel reference for." (*Id.* at 173:8-9.) In its reply brief, Haier does not further rely on the Vogel reference, focusing instead on The Parental Empowerment Act, Bennington, and Yuen. (D.I. 171 at 6-7.) It merely pays Vogel lip-service. (*Id.* at 18.)

The Plaintiffs argue that the issue of obviousness here is "a classic 'battle of the experts'" in that their expert disagrees with Haier's expert regarding whether any of the asserted prior art references disclose the limitation "restricting the ability to view program schedule information." (D.I. 158 at 10.) I agree with the Plaintiffs that, at the very least, they have raised a genuine dispute of material fact as to whether the prior art references disclose "limiting the display of program title, channel, service provider, and time of broadcast." I will therefore deny Haier's motion for summary judgment of obviousness of the '547 patent.

VI. DAMAGES POTENTIALLY RECOVERABLE

Finally, Haier seeks partial summary judgment to limit the damages potentially recoverable by the Plaintiffs for infringement. (D.I. 143.) Haier argues that any damages for infringement are limited by the provisions of 35 U.S.C. §§ 286 and 287(a). (D.I. 146 at 5.) It relies on § 286, which bars the recovery of damages for infringing activity that occurred more than six years before the filing of infringement claims or counterclaims.

35 U.S.C. § 286. It also relies on § 287(a), which sets forth certain marking and notice requirements for the recovery of damages. *Id.* § 287(a).

A. Undisputed Facts

Haier America began selling televisions in the United States in mid-2004. (D.I. 146 at 3.) The Plaintiffs filed this suit on November 16, 2011. (D.I. 1.)

The complaint alleged willful and deliberate infringement of the patents-in-suit no later than September 2009, when Rovi Corp. first approached Haier about a potential license. (*Id.* 23, 32.) Specifically, there is no dispute that, on September 9, 2009, Rovi Corp. wrote to Haier Group, alleging infringement of its patent portfolio, including the patents-in-suit; nor is there any dispute that that communication did not identify any specific product model numbers of allegedly infringing products. (D.I. 163 at 4; D.I. 166, ex. 2 at 109571, 109573.) Subsequent communications took place between Rovi Corp. and Haier in the form of an April 2010 meeting in Hong Kong and a slide deck that was sent to Haier in July 2010. (D.I. 148, ex. A at 3.) The slides from July 2010 included a reference to a model HL26KI product.⁴⁷ (*Id.*, ex. D.)

⁴⁷ The Plaintiffs, in their response to Interrogatory No. 4, frame the facts as follows:

Haier was informed of its infringement of the '523 and '547 patent[s] when it received the September 9, 2009 letter from Clay E. Gaetje from Rovi to Mr. Zhang Ruimin that contained an explicit identification of the parental controls interface functionality that infringes the '523 patent and the electronic program guide interface functionality that infringes the '547 patent. That letter was also sent to Ms. Qi Jia of Haier on September 18, 2009. ...

Haier was further notified of infringement allegations at an April 2010 meeting in Hong Kong between Rovi and Haier. Haier was again

The Plaintiffs complain that Haier did not raise the provisions in 35 U.S.C. §§ 286 and 287(a) until a discovery dispute arose related to Haier's sales information for televisions dating back to 2004. (D.I. 120; D.I. 121.) Following a teleconference, that dispute was resolved by stipulation. (D.I. 125.) The Plaintiffs have since served an expert report that calculates damages based on sales beginning in 2004, when the earlier of the two patents-in-suit -the '523 patent – was issued. (*See* D.I. 146 at !.) Haier then filed this motion for partial summary judgment related to the amount of damages potentially recoverable. (D.I. 143.)

B. 35 U.S.C. § 286

Pursuant to 35 U.S.C. § 286, "[e]xcept as otherwise provided by law, no recovery shall be had for any infringement committed more than six years prior to the filing of the complaint or counterclaim for infringement in the action." 35 U.S.C. § 286. Haier argues that, applying § 286, the Plaintiffs should not be permitted to recover damages for any infringement that occurred before November 16, 2005. (D.I. 146 at 6.) The Plaintiffs' only rebuttal is that, under Rule 8(c) of the Federal Rules of Civil Procedure

given notice of infringement of the '523 and '547 patent[s] when it received the July 2010 slide deck from Clay Gaetje from Rovi that again contained an explicit identification of the parental controls interface functionality that infringes the '523 patent and the electronic program guide functionality that infringes the '547 patent. Furthermore, Haier was clearly aware of its infringement of the '523 patent, when it formulated a different interface shortly thereafter and filed a patent application on that new design on December 3, 2010.

(D.I. 148, ex. A at 3-4 (citations omitted).)

and 35 U.S.C. § 282(b), Haier waived its right to invoke 35 U.S.C. § 286 by not raising it earlier. (D.I. 163 at 7-9.)

Rule 8(c) provides, in relevant part, that "[i]n responding to a pleading, a party must affirmatively state any avoidance or affirmative defense." Fed. R. Civ. P. 8(c)(1); *see also Long v. Wilson*, 393 F.3d 390, 398 (3d Cir. 2004) ("[A]lthough an affirmative defense need not be raised in the answer, it must be raised 'as early as practicable' thereafter."). The rule provides a list of avoidances or affirmative defenses, including any relevant statutes of limitations, subject to its requirement. *See* Fed. R. Civ. P. 8(c)(1). Meanwhile, the defenses in patent actions are set forth under 35 U.S.C. § 282(b), titled "Presumption of validity; defenses":

The following shall be defenses in any action involving the validity or infringement of a patent and shall be pleaded:

- (1) Noninfringement, absence of liability for infringement or unenforceability.
- (2) Invalidity of the patent or any claim in suit on any ground specified in part II as a condition for patentability.
- (3) Invalidity of the patent or any claim in suit for failure to comply with –
 - (A) any requirement of section 112, except that the failure to disclose the best mode shall not be a basis on which any claim of a patent may be canceled or held invalid or otherwise unenforceable; or
 - (B) any requirement of section 251.
- (4) Any other fact or act made a defense by this title.

35 U.S.C. § 282(b).

The Plaintiffs argue that, pursuant to the requirements under Rule 8(c) and § 282(b), Haier has waived its argument to limit damages based on § 286. (D.I. 163 at 7.) Specifically, the Plaintiffs submit that the six-year limitation on damages under § 286 is, essentially, a statute of limitations subject to Rule 8(c) and, even if it is not "formally" a statute of limitations, Haier is relying on it "as an 'avoidance' of liability." (*Id.*) The Plaintiffs also point to § 282(b)(1)'s requirement to plead the "absence of liability for infringement" to argue that § 286 is such a defense that Haier has failed to plead.⁴⁸ (D.I. 163 at 6 (internal quotation marks omitted).) Those arguments are unavailing. The time-based limitation of 35 U.S.C. § 286 is not an "avoidance or affirmative defense" under Rule 8 or an "absence of liability for infringement" under 35 U.S.C. § 282(b).

"Ordinarily in civil litigation, a statutory time limitation is forfeited if not raised in a defendant's answer... ." *Day v. McDonough*, 547 U.S. 198, 202 (2006) (affirming dismissal of a habeas petition under a one-year statute of limitations). However, § 286 "is not a statute of limitations barring suit in the usual meaning of the term." *Standard Oil Co. v. Nippon Shokubai Kagaku Kogyo Co.*, 754 F.2d 345, 347 (Fed. Cir. 1985). Unlike the typical statute of limitations that "defeats the right to bring suit, it cannot be said that [§ 286] 'begins to run' on some date or other." *Id.* at 348. Rather, as the Federal Circuit explained, § 286 "counts *backward* to determine the date before which infringing *acts* cannot give rise to a right to recover damages." *Id.* Haier is not asserting that § 286 completely bars the Plaintiffs from recovering damages for infringement, only

⁴⁸ The Plaintiffs do not – and indeed cannot – argue that, under 35 U.S.C. § 282(b)(4), title 35 of the United States Code makes § 286 a defense.

that it bars the Plaintiffs from recovering damages for any infringing activity that took place more than six years before this suit was filed. Therefore, Haier's reliance on § 286 was not subject to Rule 8(c)'s requirement to raise a statute-of-limitations defense as early as practicable.

Section 286 is also not an "avoidance" within the meaning of Rule 8(c). The Plaintiffs interpret the word "avoidance" as "[t]he act of evading or escaping." (D.I. 163 at 7 (quoting *Black 'sLaw Dictionary* (9th ed. 2009)).) But their position is unpersuasive because, in the context of Rule 8(c), "avoidance" has a more specific meaning. "An avoidance in pleadings is an allegation or statement of new matter, in opposition to a former pleading, which, admitting the facts alleged in such former pleading, shows cause why they should not have their ordinary legal effect."⁴⁹ *Simon v. United States*, 891 F.2d 1154, 1157 (5th Cir. 1990) (internal quotation marks omitted); *see also* 5 C. Wright & A. Miller, *Federal Practice and Procedure* § 1271 at 585 (3d ed. 1998) ("Generally speaking, [Rule 8(c)(1)'s] reference to 'an avoidance or affirmative defense' encompasses two types of defensive allegations: those that admit the allegations of the complaint but suggest some other reason why there is no right of recovery, and those that concern allegations outside of the plaintiff s prima facie case that the defendant therefore cannot raise by a simple denial in the answer."). The Plaintiffs cite no precedent to support their

⁴⁹ The Plaintiffs' interpretation of the word "avoidance" in Rule 8(c) cannot be correct. Applying the Plaintiffs' logic, Rule 8(c) would be circular – it would require a party to raise, as early as practicable, any argument that might be seen as evasive or untimely if not raised as early as practicable.

position that Haier's arguments based on § 286 should be classified as an "avoidance," as that term is used in Rule 8(c).

In addition, § 286 does not fall under 35 U.S.C. § 282(b)'s requirement to plead the "absence of infringement." 35 U.S.C. § 282(b)(1). "By section 286, Congress imposed an *arbitrary* limitation on the period for which damages may be awarded on any claim for patent infringement." *A.C. Aukerman Co. v. R.L. Chaides Constr. Co.*, 960 F.2d 1020, 1030 (Fed. Cir. 1992) (en bane). While § 286 bars recovery for infringing acts that took place more than six years before an infringement claim was filed; it does not affect whether a defendant, in fact, infringed a patent. In sum, Haier's invocation of § 286 in this case is not subject to Rule 8(c)'s requirement for stating, as early as practicable, an avoidance or affirmative defense or § 282(b)(1)'s requirement for pleading "the absence of liability for infringement."⁵⁰

The Plaintiffs make the overarching argument that "Haier should not ... be rewarded for ... conduct" (D.I. 163 at 6) that was "part of [a] concerted effort to suppress evidence of the long extent" of infringing activity (*id.* at 9).⁵¹ That argument is also unavailing. While "[t]he purpose of requiring the defendant to plead available affirmative defense in [its] answer is to avoid surprise and undue prejudice by providing

⁵⁰ In addition, the Federal Circuit has held "that § 286 operates independently of the equitable defenses of laches and estoppel." *A. Stucki Co. v. Buckeye Steel Castings Co.*, 963 F.2d 360, 363 (Fed. Cir. 1992).

⁵¹ Specifically, the Plaintiffs argue that "Haier refused to take a license," "g[ot] out of the ITC by abandoning the infringing features going forward," "downplay[ed] damages," "threw up discovery road blocks," and "tactically ... eschew[ed] § 286 and § 287." (D.I. 163 at 6.)

the plaintiff with notice and the opportunity to demonstrate why the affirmative defense should not succeed," *Robinson v. Johnson*, 313 F.3d 128, 134-35 (3d Cir. 2002), there is no surprise or undue prejudice here. The damages limitation imposed by § 286 is statutorily mandated, as the statute provides that "no recovery shall be had for any infringement committed more than six years prior to the filing" of the infringement claim. 35 U.S.C. § 286. Moreover, it was ultimately the Plaintiffs' own choice, after they learned of Haier's allegedly infringing activity, to file this infringement action when they did.

Therefore, Haier has not waived reliance on § 286. Under the statute and given the filing date of the complaint for infringement in this action, the Plaintiffs are barred from recovering damages for infringing activity that occurred before November 16, 2005.

C. 35 U.S.C. § 287(a)

Haier also invokes 35 U.S.C. § 287(a) as a limitation on the extent to which the Plaintiffs may recover damages for infringement in this case. (D.I. 146 at 7-14.) That statute provides, in relevant part:

In the event of failure so to mark, no damages shall be recovered by the patentee in any action for infringement, except on proof that the infringer was notified of the infringement and continued to infringe thereafter, in which event damages may be recovered only for infringement occurring after such notice. Filing of an action for infringement shall constitute such notice.

35 U.S.C. § 287(a). In short, "[s]ection 287(a) provides that absent marking, a patentee may not recover damages without proof that 'the infringer was notified of the infringement.'" *Amsted Indus. v. Buckeye Steel Castings Co.*, 24 F.3d 178, 186 (Fed. Cir.

1994) (quoting 35 U.S.C. § 287(a)); *see also Crown Packaging Tech., Inc. v. Rexam Beverage Can Co.*, 559 F.3d 1308, 1316 (Fed. Cir. 2009) ("[A] party that does not mark a patented article is not entitled to damages for infringement prior to actual notice."). The Federal Circuit has held that § 287 serves three purposes: "1) helping to avoid innocent infringement; 2) encouraging patentees to give notice to the public that the article is patented; and 3) aiding the public to identify whether an article is patented." *Nike Inc. v. Wal-Mart Stores Inc.*, 138 F.3d 1437, 1443 (Fed. Cir. 1998) (citations omitted).

1. *Waiver*

As an initial matter, the Plaintiffs argue that Haier waived its reliance on the marking and notice requirements of § 287 for failing to timely raise § 287 as an avoidance or affirmative defense under Rule 8(c) of the Federal Rules of Civil Procedure and the requirements of 35 U.S.C. § 282(b). (D.I. 163 at 9.) Again, those arguments are unpersuasive. The Plaintiffs' attempt to characterize Haier's position as an "avoidance" subject to Rule 8(c) fails for the same reasons previously discussed.

The argument that Haier's reliance on § 287(a) is part of a "concerted effort to suppress evidence" (D.I. 163 at 10) also fails to invoke legitimate concerns regarding surprise or undue prejudice. *See Robinson*, 313 F.3d at 134-35 (discussing purpose for affirmative defenses pleading requirement). Like § 286, the limitation on damages under § 287(a) is statutorily mandated. Section 287(a) states that, when there has been a failure to mark, "*no damages shall be recovered by the patentee ... , except on proof that the infringer was notified of the infringement and continued to infringe thereafter, in which event damages may be recovered only for infringement occurring after such notice.*" 35

U.S.C. § 287(a) (emphasis added). In addition, "the burden of pleading and proving at trial ... compli[ance] with the statutory requirements" of § 287(a) rests on the patentee. *Maxwell v. J. Baker, Inc.*, 86 F.3d 1098, 1111 (Fed. Cir. 1996). Thus, the Plaintiffs cannot meaningfully complain that Haier failed to raise § 287(a) earlier.

Moreover, like § 286, § 287(a) does not constitute a statute-of-limitations provision or serve as a basis for a non-infringement position. The Federal Circuit has expressly held that § 287(a) provides a statutory "limitation on damages," not a "defense." *Motorola, Inc. v. United States*, 729 F.2d 765, 769 (Fed. Cir. 1984). In *Motorola, Inc. v. United States*, the Federal Circuit examined whether § 287 is a defense in the context of determining whether 28 U.S.C. § 1498 – which provides a cause of action for a patent owner seeking to recover just compensation for the United States government's unauthorized taking and use of an invention⁵² – incorporates 35 U.S.C. § 287. *Id.* A Reviser's Note to § 1498 stated: "In the absence of statutory restriction, any defense available to a private party is equally available to the United States." *Id.* (citation omitted) (internal quotation marks omitted). The Federal Circuit decided that the

⁵² 28 U.S.C. § 1498 states, in relevant part:

Whenever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same, the owner's remedy shall be by action against the United States in the United States Court of Federal Claims for the recovery of his reasonable and entire compensation for such use and manufacture.

28 U.S.C. § 1498(a). Except for the forum in which such an action is to be brought (which was previously the United States Claims Court), the relevant language of § 1498 has not changed since the Federal Circuit's decision in *Motorola* in 1984.

predecessor of § 287 was "*not* a statutory *defense* to an action for infringement" but, rather, "a limitation on damages." *Id.* It also stated that "the subsequent addition of the title 'limitation on damages' to § 287 indicated that "the marking and notice statute was never thought of as a defense." *Id.* at 770. Furthermore, the court reasoned that "the marking and notice statute cannot be interpreted as a patent defense since it was already recognized as a requirement separate and apart from the patent defenses at the time the [predecessor] statute [of § 1498] was enacted." *Id.* The court pointed out that a separate statute, "35 U.S.C. § 282, is entitled 'defenses.'" *Id.* Although the Federal Circuit was addressing the relationship between § 1498 and § 287(a), its conclusion that § 287 is not a defense was a necessary step in reaching its holding that § 1498 does not incorporate § 287(a). *Id.* The result here, in short, is that Haier has not waived its reliance on the marking and notice requirements of § 287 because they are statutory limitations on damages, not avoidances or defenses that must be timely raised or else waived.

2. *Analysis*

Moving to the merits, Haier argues that the Plaintiffs "have offered no evidence that they marked software or anything else with the numbers of their asserted patents." (D.I. 146 at 9.) The Plaintiffs respond that Haier should not be granted partial summary judgment limiting damages because they are non-practicing, non-producing entities, and § 287(a) does not apply where there are no articles to mark. (D.I. 163 at 12 ("Haier has not here shown undisputed facts of any 'patented articles' that would invoke the requirement of the marking statute.").) The Plaintiffs, however, fail to meet their burden on summary judgment to produce sufficient evidence to establish that a trial on whether

they are subject to or have met § 287(a)'s marking requirement is warranted. *See Von Holdt v. A-1 Tool Corp.*, 714 F. Supp. 2d 863, 868 (N.D. Ill. 2010) (noting that "to survive the defendants' motion for summary judgment on the issue of notice under § 287, the plaintiffs must make an evidentiary showing that could lead a reasonable juror to find that the plaintiffs were, in fact, in compliance with the marking statute."). The Plaintiffs also argue that there remain genuine issues of fact as to whether correspondence between the parties constituted sufficient actual notice under § 287(a). (D.I. 163 at 13 ("Haier has not established insufficiency of the September 2009, actual notice").) But, under Federal Circuit case law, the September 2009 letter was not legally sufficient notice.

"Compliance with section 287(a) is a question of fact." *Maxwell*, 86 F.3d at 1111. As mentioned before, the patentee bears the burden at trial of showing compliance with the marking and notice requirements of § 287(a). *Id.* Damages are not limited by § 287(a), however, unless there are tangible articles that can be marked. *See Am. Med. Sys. v. Med. Eng 'g Corp.*, 6 F.3d 1523, 1538-39 (Fed. Cir. 1993) (holding that the obligation to mark does not attach unless "there is a tangible item to mark by which notice of the asserted method claims can be given"); *Inline Connection Corp. v. AOL Time Warner Inc.*, 465 F. Supp. 2d 312, 317 n.12 (D. Del. 2006) ("In the case of a 'non-producing patentee,' § 287(a) does not preclude recovery of damages for the period of time when *no product covered by the patent is produced or sold.*"). The Federal Circuit has held that "[w]here the patent contains both apparatus and method claims, ... to the extent that there is a tangible item to mark by which notice of the asserted method claims can be given, a party is obliged to do so." *Am. Med. Sys.*, 6 F. 3d at 1538.

Here, there is no dispute that the Plaintiffs, Rovi Corp., and/or Rovi Guides sold software that is employed in practicing the '547 patent.⁵³ (D.I. 148, ex. A at 2; D.I. 163 at 13.) Haier also points to evidence that the Plaintiffs' licensees produce tangible articles.⁵⁴ (D.I. 146 at 10.) Software may be subject to the marking requirement of § 287(a). *Cf McKesson Automation, Inc. v. Swisslog Italia S.P.A.*, 712 F. Supp. 2d 283, 297 (D. Del. 2010) ("[T]he marking displayed by the Connect-Rx software does not sufficiently apprise the public that [an associated system] is covered by the patents-in-suit."); *Soverain Software LLC v. Amazon.com, Inc.*, 383 F. Supp. 2d 904, 908 (E.D. Tex. 2005) (discussing the burden of showing that software complied with the marking statute). In addition, a third party licensee's authorized use of the patented invention also triggers the duty to mark. *See Maxwell*, 86 F.3d at 1111 ("The marking provisions also

⁵³ The Plaintiffs' objections and responses to Haier's second set of interrogatories stated, in part, that "Rovi has sold software that is employed in practicing the '547 patent." (D.I. 148, ex. A at 2.) As used therein, "Rovi" referred generally to Rovi Corp., Rovi Guides, and the Plaintiffs (*id.*, ex. A at 1), so it is unclear which entity or entities actually sold that software.

⁵⁴ Haier asserts that the Plaintiffs have licensed their "interactive program guide portfolio" to third parties, including Funai Electric Co. ("Funai"). (D.I. 146 at 10 (citing D.I. 148, ex. E, ¶¶ 35-37, 62-66); *id.*, ex. F.) In conjunction with its reply brief, Haier submitted additional evidence that the Plaintiffs have licensed certain claims of the '523 patent to entities such as Samsung (D.I. 169, exs. D, E; *id.*, ex. F, ¶¶ 26-27; *id.*, ex. G, at 84:16-88:11) and Funai (*id.*, ex. F, ¶ 35) to produce tangible products, and that the Plaintiffs have licensed certain claims of the '547 patent to entities such as Insight (*id.*, ex. H) and Funai (*id.*, ex. F, ¶ 35) to produce tangible products.

Haier further alleges that the Plaintiffs represented before the ITC that certain products sold by their licensees practiced the patents-in-suit. (D.I. 168 at 1, 7.) Although Haier makes a judicial estoppel argument (D.I. 168 at 8), I am not prepared, at this stage, to decide whether the Plaintiffs are judicially estopped from arguing that they have not licensed the asserted claims to any third parties.

apply to 'persons making or selling any patented article for or under [the patentees].'" (alteration in original)).

The Plaintiffs do not dispute that the relevant software or licensed products might give rise to a duty to mark. Rather, they argue that Haier has not shown on summary judgment that the software was a tangible product that could have been marked or that "Haier has ... shown for *any time any* practice of the '523 patent." (D.I. 163 at 13.) The Plaintiffs, in effect, try to shift the burden of proof to Haier to show that the Plaintiffs were subject to and failed to meet the marking requirement. However, a patentee is in the best position to prove that there are no such articles to mark. *See Sovereign Software LLC*, 383 F. Supp.2d at 908 (granting summary judgment limiting damages where patentee "failed to bring forth any evidence that [its licensees] complied with the statute by marking any products ... or by not selling any products at all"). And, as a general matter, whether a patentee has complied with the marking statute is "a matter peculiarly within [its] own knowledge." *Dunlap v. Schofield*, 152 U.S. 244, 248 (1894). "[T]he defendants have no burden to establish non-compliance with the marking statute because compliance with § 287(a) is an essential element of the plaintiffs' case on which the plaintiffs bear the burden of proof at trial." *VonHoldt*, 714 F. Supp.2d at 868 (citing *Celotex CO1p. v. Catrett*, 477 U.S. 317, 323-24 (1986)). Faced with evidence that they sell software that practices the '547 patent and that their licensees sell tangible products that practice the patents-in-suit, the Plaintiffs ignore their own, although minimal, burden of production to bar summary judgment. The Plaintiffs have produced no evidence and fail to even allege the existence of evidence tending to show that they do not "mak[e],

offer[] for sale, or sell[] ... any patented article" that would subject them to the requirements of 35 U.S.C § 287(a). The Plaintiffs have also failed to submit any evidence regarding their compliance.

Thus, the Plaintiffs have not provided any evidence from which a reasonable juror could find that there are no products to which § 287(a) applies or that they have sufficiently complied with § 287(a)'s marking requirement. All the Plaintiffs assert is that Haier has not "pointed to any tangible product." (D.I. 163 at 13). Although the facts must be viewed in the light most favorable to the nonmoving party at this stage, that party must first put forth some facts to view. The Plaintiffs have failed to do so.

That does not end the inquiry, however, because the Plaintiffs also assert that Haier has not shown that the September 9, 2009, letter is insufficient to serve as actual notice under § 287(a).⁵⁵ (D.I. 163 at 13.) Under § 287(a), if a patentee that is subject to the marking requirement fails to comply with it, the patentee can still recover damages for sales made after the date that it gave the defendant actual notice of infringement. 35 U.S.C. § 287(a). Haier argues that the Plaintiffs failed to give "either defendant actual notice that a specific product allegedly infringed either of the asserted patents before this action and the related ITC action were filed" (D.I. 146 at 1) because it was Rovi Corp. – not either of the patentees, UVP or ISI – that wrote to Haier Group Corp. in 2009 and offered to license its portfolio of interactive programming guide patents (*id.* at 12).

⁵⁵ Although there were additional communications, including a July 2010 slide deck, the Plaintiffs only rebut Haier's motion with reference to the September 9, 2009 letter. (D.I. 163 at 13-14.) The Plaintiffs fail to argue that anything else before the filing date constitutes actual notice. (*Id.*)

"Informing the alleged infringer 'of the identity of the patent and the activity that is believed to be an infringement, accompanied by a proposal to abate the infringement, whether by license or otherwise' complies with the actual notice requirement of the marking statute." *Garf v. Logitech, Inc.*, 254 F.3d 1334, 1345 (Fed. Cir. 2001) (quoting *SRI Int'l, Inc. v. Advanced Tech. Labs., Inc.*, 127 F.3d 1462, 1470 (Fed. Cir. 1997)).

"The correct approach to determining notice ... must focus on the action of the patentee, not the knowledge or understanding of the infringer." *Amsted Indus.*, 24 F.3d at 187. As there is no dispute that the sender of the November 9, 2009 communication was Rovi Corp., the relevant question becomes whether notice sent by Rovi Corp., rather than the patentee itself, is legally sufficient notice.⁵⁶

Haier relies (D.I. 146 at 12) on *Lans v. Digital Equipment Corp.*, 252 F.3d 1320 (Fed. Cir. 2001), which held that actual notice must identify the patent owner and not merely an associated entity. *Id.* at 1327. There, Lans, the sole inventor of the patent-in-suit, assigned the patent to Uniboard, and then, on behalf of Uniboard, executed a license to IBM. *Id.* at 1324-25. Years later, Lans sent letters to various computer companies, "accusing them of infringing the [patent-in-suit] and offering them licenses." *Id.* at 1325. Importantly, the letters identified Lans but not Uniboard. *Id.* Lans then sued the defendant computer companies in his personal capacity and, eventually, Uniboard filed a separate suit. The defendant computer companies argued before the district court that § 287(a) precluded any damages because, *inter alia*, Uniboard failed to provide notice.

⁵⁶ As mentioned before, Rovi Corp. was initially named as a plaintiff in this case. (D.I. 1.)

Id. at 1326. The Federal Circuit upheld the district court's dismissal of Uniboard's complaint, holding that the "actual notice requirement of § 287(a) demands notice of the patentee's identity as well as notice of infringement" and "notice from someone closely associated with the patentee does not satisfy § 287(a)." *Id.* at 1327. Looking to the policy considerations underlying the notice requirement, the court stated that "knowledge of the patentee's identity facilitates avoidance of infringement with design changes, negotiations for licenses, and even early resolution of rights." *Id.* In affirming that actual notice must be an "affirmative act on the part of the patentee," *id.* (quoting *Amsted Indus.*, 24 F.3d at 187)(internal quotation marks omitted), the court noted that the rule "avoids troublesome determinations about the sufficiency of relationships between the notifier and the patentee," *id.* at 1328. Relying on *Lans*, Haier argues that the September 9, 2009, letter does not constitute actual notice because it came from Rovi Corp. and Gemstar-TV Guides, not UVP and ISI. (D.I. 146 at 13.)

The Plaintiffs respond by arguing that Haier's reliance on *Lans* is misplaced, given the Federal Circuit's holding in *U.S. Philips Corp. v. Iwasaki Electric Co.*, 505 F. 3d 1371, 1375 (Fed. Cir. 2007), which distinguished *Lans*. U.S. Philips was the assignee of the patent-in-suit. *Id.* at 1373. The alleged notice letter in question was from "an employee of Philips International B.V., Corporate Intellectual Property, ... on Philips International B.V. letterhead." *Id.* The letter notified defendant Iwasaki of four potentially infringing patents, including the patent-in-suit. A copy of the patent-in-suit was enclosed with the letter. *Id.* However, "[t]he letter did not identify U.S. Philips as the patent owner" or "disclose the corporate relationship between U.S. Philips and Philips

International B.V." *Id.* The letter only identified the sender as the "Patent Portfolio Manager, speaking on behalf of Corporate Intellectual Property, Philips International B.V." *Id.* (internal quotation marks omitted). Witnesses for U.S. Philips testified before the district court that "the corporate intellectual property department of Philips International B.V. is responsible for prosecution, licensing, and enforcement of ... patents assigned to U.S. Philips Corporation." *Id.* The district court concluded that, under *Lans*, the letter was not sufficient notice. *Id.* at 1374. The Federal Circuit reversed.⁵⁷

The Federal Circuit distinguished *Lans* on two grounds. First, "the front page of the [patent-in-suit], which was enclosed with the ... letter," identified U.S. Philips as the assignee. The court held that "when the information printed on the patent is correct, it is enough to put an accused infringer on notice of the patentee's identity." *Id.* at 1375. Second, it was "undisputed that Philips International B.V. had the ultimate responsibility for licensing and enforcement of the ... patent." *Id.* The court concluded that the policy reasons outlined in *Lans* were satisfied because the party that sent the letter was the party to contact to negotiate a resolution. *Id.* (quoting *Lans*, 252 F. 3d at 1327). The Plaintiffs here assert that it is "plainly the case" that the sender of the letter -presumably Rovi Corp. on behalf of Gemstar-TV Guide - "was the party ... with whom to negotiate a

⁵⁷ In *U.S. Philips*, it was undisputed that the alleged notice letter was an "affirmative communication of a specific charge of infringement by a specific accused product or device." *U.S. Philips*, at 1375. (quoting *Amsted Indus.*, 24 F.3d at 187) (internal quotation marks omitted). The question was whether the letter sufficiently identified the patentee, not whether it provided specific notice of infringement. *Id.*

valid license" (D.I. 163 at 14 (quoting *U.S. Philips*, 505 F.3d at 1375) (internal quotation marks omitted)), or, at least, "the contrary is not an undisputed fact" (*id.*).

To determine whether this case is closer to *Lans* or *U.S. Philips*, the specifics of the alleged notice are critical. The September 9, 2009, letter was written on letterhead labeled "Gemstar – TV Guide Now Part of Rovi." (D.I. 148, ex. 133 at RVHR00077194). It states that "Gemstar – TV Guide International, Inc. (now a part of Rovi Corporation) ... is a recognized leader in the" field. (*Id.*) The letter further states that "Gemstar – TV Guide is willing to offer a non-exclusive license under our ... patent portfolios to Haier." (*Id.*) No patents were attached to the September 9, 2009, letter. Attached to the letter was, however, a "slide deck" that "briefly outlines our portfolio and licensing program, and includes representative patents illustrating the relevance [sic] our portfolio to Haier's televisions." (*Id.*, ex. 133 at RVHR00077195). The patents-in-suit are both referenced in the slide deck. (*Id.*, ex. 133 at RVHR00077206 (the '547 patent), RVHR00077208 (the '523 patent).) Five additional patents are also outlined in the slide deck. (*Id.*, ex. 133 at RVHR00077202-07.) A term sheet was included with the letter, which indicated that the applicable parties were Haier and Gemstar. (*Id.*, ex. 133 at RVHR00077196). In the term sheet, the pertinent patents were referred to as "Gemstar's patents and patent applications," and the term sheet further states that "the [I]licensee will pay Gemstar" a one-time fee. (*Id.*, ex. 133 at RVHR00077196-97.)

Haier argues in its reply brief that, unlike in *U.S. Philips*, neither patent-in-suit here was enclosed with the September 9, 2009, letter. (D.I. 168 at 9.) In *U.S. Philips*, the patentee's identity was included in the information sent to the alleged infringer.

Although its identity was not in the letter itself, it was disclosed in the accompanying patent cover sheet. In contrast, nowhere in any of the information transmitted on September 9, 2009, are ISI's and UVP's identities disclosed. Haier asserts that "[a]t most the plaintiffs can show that Gemstar-TV Guide notified Haier of the existence of the now-asserted patents and of the language and pictures in the slides." (D.I. 146 at 13.) Although one could argue that, armed with the patent numbers from the slide deck, a simple internet search would yield the patentee's identity, the Federal Circuit has been absolutely clear that the notice inquiry "must focus on the action of the patentee," not the infringer. *Amsted Indus.*, 24 F.3d at 187. The September 2009 letter and slide deck contained no information as to the patentee's identity and, as such, cannot constitute actual notice under § 287. *See Lans*, 252 F.3d at 1327 (noting that "the actual notice requirement of § 287(a) demands notice of the patentee's identity").

In addition, the record in *U.S. Philips* included witnesses who testified that the company that sent the letter was the company responsible for oversight of the patent portfolio. *U.S. Philips*, 505 F.3d at 1373. The Plaintiffs state, without citing to any evidence of record, that Rovi Corp.'s responsibility over the patents-in-suit is a disputed fact. (D.I. 163 at 14.) Even assuming Rovi Corp.'s responsibility remains unclear, Rovi Corp. failed to give notice of the patentees' identity in its correspondence with Haier. *U.S. Philips*, 505 F.3d at 1375 (holding that actual notice "demands notice of the patentee's identity ... by an affirmative act on the part of the patentee" (internal quotation marks omitted)).

Haier also argues that the September 9, 2009, communication did not identify the specific names or models of the allegedly infringing Haier products, as required under § 287(a). (D.I 146 at 13.) However, even assuming that the September 9, 2009 letter adequately specified the allegedly infringed products, it did not identify the patentee, and actual notice requires "notice of the patentee's identity *as well as* notice of infringement." *Lans*, 252 F.3d at 1327 (emphasis added). Thus, regardless of whether the letter adequately identified Haier's allegedly infringing products, the notice was legally insufficient because it did not identify either patentee of the patents-in-suit.

Therefore, Haier did not receive actual notice of infringement of the '523 and '547 patents before the filing of the complaint, and I will grant the partial motion for summary judgment limiting damages. Under § 287(a), the Plaintiffs can only recover damages for infringement from the filing date of this action.

VII. CONCLUSION

The disputed claim terms of the '523 patent and the '547 patent are construed as described herein. Under those constructions, Haier's motion for summary judgment of invalidity of the '523 patent will be granted in part and denied in part, and Haier's motion for summary judgment of invalidity of the '547 patent will be denied. In addition, Haier's motion for partial summary judgment limiting damages will be granted. An appropriate order will issue.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

UNITED VIDEO PROPERTIES, INC.,)
and INDEX SYSTEMS, INC.,)

Plaintiffs,)

v.)

HAIER GROUP CORP. and HAIER)
AMERICA TRADING, LLC,)

Defendants.)

Civil Action No. 11-1140 (KAJ)

ORDER

For the reasons set forth in the Memorandum Opinion issued in this matter today,

IT IS HEREBY ORDERED that

1. The term "specific content ratings" as used in United States Patent No. 6,701,523 ("the '523 patent") is construed to be synonymous with "specific program content indications."

2. The term "tiles" as used in the '523 patent is construed to mean "space filling elements associated with regions of the screen that allow input by a user."

3. The term "either the rows of tiles or the columns of tiles correspond to overall program ratings and either the rows of tiles or the columns of tiles correspond to specific program content indications" as used in the '523 patent means "the overall program ratings tiles are arranged in one or more rows or columns and the specific program content indications tiles are arranged in one or more rows or columns."

4. The term "two dimensional matrix" as used in the '523 patent means "rectangular arrangement of tiles composed of at least one row and one column."

5. The term "means for blocking or allowing viewing of television programs based on the overall program ratings and specific content ratings of the rows and columns corresponding to the highlighted tiles when a selection command is entered into the input" as used in the '523 patent is a means-plus-function limitation. The function is "blocking or allowing viewing of television programs based on the overall program ratings and specific content ratings of the rows and columns corresponding to the highlighted tiles when a selection command is entered into the input." The COJTesponding structure is "a user interface; a memory; a microprocessor; a blocking circuit; and a command signal receiver, or equivalents thereof."

6. The term "program schedule information" as used in United States Patent No. 7,047,547 ("the '547 patent") means "program title, channel, service provider, and time of broadcast."

7. The term "[valid] lockout code" as used in the '547 patent means "a code the correctness of which can be confirmed."

8. The term "restricting the ability to view" as used in the '547 patent means "limiting the display of."

9. The term "means for providing a user with the ability to set parental control options" as used in the '547 patent is a means-plus-function limitation. The function is "providing a user with the ability to set parental control options." The corresponding

structure is "an input device, such as a remote controller or keypad, or any equivalents thereof."

10. The term "means for providing a user with the ability to activate parental control options" as used in the '547 patent is a means-plus-function limitation. The function is "providing the user with the ability to activate the parental control options." The corresponding structure is "an input device, such as a remote controller or keypad, or any equivalents thereof."

11. The term "means for providing the user with the ability to deactivate the parental control options" as used in the '547 patent is a means-plus-function limitation. The function is "providing the user with the ability to deactivate the parental control options." The corresponding structure is "a user interface that displays parental control options and a user control apparatus, such as a remote controller or keypad, or any equivalents thereof."

12. The term "means for providing the user with the ability to indicate channels to which access is to be restricted" as used in the '547 patent is a means-plus-function limitation. The function is "providing the user with the ability to indicate channels to which access is to be restricted." The corresponding structure is "a user interface that displays parental control options and a user control apparatus, such as a remote controller or keypad, or any equivalents thereof."

13. The term "means for providing the user with the ability to indicate ratings of television programs to which access is to be restricted" as used in the '547 patent is a means-plus-function limitation. The function is "providing the user with the ability to

indicate ratings of television programs to which access is to be restricted." The corresponding structure is "a user interface that provides one or more options to restrict access to television programs based on ratings and a user control apparatus, such as a remote controller or keypad, or any equivalents thereof."


Circuit Judge Sitting by Designation

May 16, 2014
Wilmington, Delaware

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

UNITED VIDEO PROPERTIES, INC.,)
and INDEX SYSTEMS, INC.,)
)
Plaintiffs,)
) Civil Action No. 11-1140 (KAJ)
v.)
)
HAIER GROUP CORP. and HAIER)
AMERICA TRADING, LLC,)
)
Defendants.)

ORDER

For the reasons set forth in the Memorandum Opinion issued in this matter today,

IT IS HEREBY ORDERED that

1. The motion for summary judgment of invalidity of United States Patent No. 6,701,523 filed by Haier Group Corp. and Haier America Trading, LLC (collectively, "Haier") (Docket Item ["D.I."] 142) is granted in part and denied in part. The motion is granted with respect to claims 11 and 12, and is denied in all other respects.

2. Haier's motion for summary judgment of invalidity of United States Patent No. 7,047,547 (D.I. 141) is denied.

3. Haier's motion for partial summary judgment limiting damages (D.I. 143) is granted.


Circuit Judge Sitting by Designation

May 16, 2014
Wilmington, Delaware