

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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APPLE INC.  
Petitioner,

v.

MAXELL, LTD.,  
Patent Owner

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**Case: IPR2020-00200**

**U.S. Patent No. 10,084,991**

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**PATENT OWNER PRELIMINARY RESPONSE TO PETITION FOR  
*INTER PARTES REVIEW* OF U.S. PATENT NO. 10,084,991**

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Patent Trial and Appeal Board  
U.S. Patent and Trademark Office  
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## PATENT OWNER'S EXHIBIT LIST

Description	Exhibit #
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March 16, 2020 Scheduling Order	2002
May 31, 2019 Scheduling Order	2003
Docket From District Court Action	2004
January 8, 2020 Minute Order	2005
March 18, 2020 <i>Markman</i> Order	2006
August 28, 2019 Minute Order	2007
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## **I. INTRODUCTION**

Patent Owner Maxell, Ltd. (“Patent Owner”) respectfully requests that the Board deny institution because Petitioner Apple Inc. (hereinafter, “Petitioner”) has failed to demonstrate a reasonable likelihood of success on the grounds submitted in its Petition for challenging the patentability of claims 1-5 and 8-12 (“challenged claims”) of U.S. Patent No. 10,084,991 (“the ’991 patent”).

**First**, the Board should exercise its discretion pursuant to 35 U.S.C. § 314(a) and deny this petition. Application of the factors set forth in *Apple v. Fintiv* weighs heavily in favor of denial of institution. IPR2020-00019, Paper 11, at 5-6 (PTAB March 20, 2020). One of the purposes of IPRs is to be an “effective and efficient alternative” to litigation. *Gen. Plastic Indus. Co., Ltd. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19 at 16-17 (PTAB Sept. 6, 2017) (precedential). Here, instituting an IPR would not be an effective or efficient alternative to litigation, particularly given the advanced stage of the co-pending District Court case, *Maxell, Ltd. v. Apple Inc.*, No. 5:19-cv-00036-RWS (E.D. Tex.) (“District Court Action”), the finite resources of the Board, and Apple’s delay in filing its Petition.

**Second**, the Petition fails to show that a POSITA would be motivated to combine *Asmussen* with *Bear*. For example, Petitioner fails to consider the

different design requirements of each reference and instead only provides a general motivation to combine. Moreover, Petitioner fails to specify which elements of each of the cited references it contends would have been obvious to combine with each other to obtain the claimed invention, let alone how or why such a combination would be made in view of the different design requirements of each system.

*Third*, even if *Asmussen* and *Bear* could be combined, the Petition fails to show that those references in combination with various other references such as *Marley*, *DeFazio*, and *Lindstrom* render Claims 1-5 and 8-12 unpatentable.

**II. THE BOARD SHOULD EXERCISE ITS DISCRETION AND DENY INSTITUTION FOR ALL GROUNDS PURSUANT TO 35 U.S.C. § 314**

Apple's Petition for IPR should be denied because the invalidity arguments Apple raises here will be resolved in the co-pending District Court Action long before this proceeding will conclude. While Apple acknowledged the District Court Action in its Petition, it failed to inform the Board that the District Court Action will be complete long before any final decision would issue in this proceeding. Nor did Apple inform the Board that Maxell identified claims at issue in the '991 Patent *fourteen months* prior to Apple filing its Petition, and that the trial date of October 2020 for the District Court action was scheduled back in May

2019.<sup>1</sup> *See* Patent Trial and Appeal Board Consolidated Trial Practice Guide (Nov. 2019) at 58 (noting that proceedings related to the same patent at a district court may favor denial of a petition and inviting parties to “address in their submissions whether any other such reasons exist in their case . . . and whether and how such factors should be considered”). Not only is a jury trial scheduled in the District Court Action a mere three months after the Board’s anticipated Institution Decision, the jury trial adjudicating the validity of the ’991 Patent will conclude *nine months before* any Final Written Decision issues in this proceeding.

The District Court Action will also resolve the same, or substantially the same, invalidity arguments that Apple raises in the instant Petition. The primary prior art reference relied on in this proceeding is the same as the primary prior art reference at issue in the District Court Action. Additionally, the challenged claims are substantially the same in substance and scope as those asserted in the District Court Action. The claim construction disputes between the parties are also the same across the two proceedings. The claim constructions Apple applies in this proceeding are *identical* to those it proposes in the District Court Action. Thus, any

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<sup>1</sup> *See* Notice Letter from Maxell to Apple dated October 9, 2018 (Ex. 2001) at 2 (specifically identifying claims 1-16 of the ’991 Patent as being infringed by Apple).

questions of whether the grounds of invalidity raised in Apple’s Petition invalidate the asserted claims of the ’991 Patent will be decided in the District Court Action at least nine months prior to when the Board would render a final decision in this proceeding.

There is no requirement that the Board institute IPR. *Harmonic Inc. v. Avid Tech.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016). Instead, the decision to institute is delegated to the Board and is purely discretionary. As 35 U.S.C § 314(b) explains, “[t]he Director shall determine whether to institute an inter partes review.” *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016); 37 C.F.R. § 42.108(a). The Director’s discretion is informed by many things, including the consideration of “the integrity of the patent system, [and] the efficient administration of the Office.” 35 U.S.C. § 316(b).

Simply put, instituting an IPR in this circumstance would needlessly duplicate the District Court Action, and unnecessarily waste the Board’s

resources.<sup>2</sup> *See NHK Spring Co., Ltd. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential) (denying institution under similar facts).

“[T]he Board’s cases addressing earlier trial dates as a basis for denial under *NHK* have sought to balance considerations such as system efficiency, fairness, and patent quality.” *Apple Inc.*, IPR2020-00019, Paper 11, at 5. When applying *NHK*, the Board has balanced the following factors:

- (1) whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
- (2) proximity of the court’s trial date to the Board’s projected statutory deadline for the final written decision;
- (3) investment in the parallel proceeding by the court and the parties;
- (4) overlap between issues raised in the petition and in the parallel proceeding;

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<sup>2</sup> Apple has filed nine other Petitions challenging the patentability of the other patents-in-suit in the District Court Action. The Board should exercise its discretion to deny institution in those proceedings for similar reasons pursuant to 35 U.S.C. § 314. *See* IPR2020-00199, -00201, -00202, -00203, -00204, -00407, -00408, -00409, and -00597.

- (5) whether the petitioner and the defendant in the parallel proceeding are the same party; and
- (6) other circumstances that impact the Board's exercise of discretion, including the merits.

*Id.* at 5-6. After applying these factors to the current petition and circumstances, *all* strongly weigh in favor of denying institution of this Petition pursuant to 35 U.S.C. §314.

**A. Factor 1: The District Court Action is Unlikely To Be Stayed**

Apple only recently moved for a stay of the District Court Action on March 24, 2020—over a year into the District Court Action and one week before the close of discovery. That motion is unlikely to succeed. As set forth below, the district court and the parties have already invested *significant* time and resources in the District Court Action. There is no indication that the district court will grant a motion to stay at this late stage in the District Court Action.

Where, as here, a defendant delayed filing IPRs until later in the litigation, the Eastern District of Texas has often ruled such facts weigh against staying the case. *See, e.g., Realtime Data LLC v. Actian Coporation*, No. 6:15-CV-463-RWS-JDL, 2016 WL 3277259, at \*3 (E.D. Tex. June 14, 2016) (“The Court may deny a request for a stay where the movant has unjustifiably delayed seeking

reexamination.”); *Peloton Interactive, Inc. v. Flywheel Sports, Inc.*, No. 2:18-CV-00390-RWS-RSP, 2019 WL 3826051, at \*5 (E.D. Tex. Aug. 14, 2019) (noting that a “significant portion of discovery had already been conducted” as a reason to deny the stay); *TracBeam, L.L.C. v. T-Mobile US, Inc.*, No. 6:14-CV-678, 2016 WL 9225574, at \*2 (E.D. Tex. Mar. 29, 2016) (noting that one of the reasons the motion to stay was denied was because fact discovery had already closed); *see also Motion Games, LLC v. Nintendo Co.*, 2014 WL 11678661, at \*3 (E.D. Tex. Sept. 23, 2014) (denying stay, *even though IPR had been instituted*, where case was twenty months old, court had held a Markman hearing, and trial was scheduled for one year later), adopted, 2014 WL 11709443 (E.D. Tex. Oct. 30, 2014).

The Eastern District of Texas recognizes that a patent owner has “a recognized interest in the timely enforcement of its patent rights,” and that staying litigation is unfairly prejudicial to the extent it delays a patent owner’s opportunity to enforce its patent rights against competitors. *Motion Games*, 2014 WL 11678661, at \*3-4. Given that the District Court Action trial is set to occur *nine months* before any Final Written Decision here, a stay would undoubtedly prejudice Maxell’s interest in timely enforcement. *Id.*; *Ambato Media, LLC v. Clarion Co.*, No. 2:09-CV-242-JRG, 2012 WL 194172, at \*1 (E.D. Tex. Jan. 23,



2012) (noting that patentee “would be unduly prejudiced if the Court were to grant the stay because a stay would effectively prevent [patentee] from enforcing its patent rights for several more years.”).

This *Fintiv* factor weighs in favor of denial.

**B. Factor 2: Trial In The District Court Action Will Occur *Nine* Months Before The Board’s Final Written Decision**

The District Court Action will be complete nine months before a Final Written Decision is issued in this proceeding. Fact discovery closed in the District Court Action on March 31, 2020, and expert discovery closes June 16, 2020, all before an institution decision is expected on Apple’s petition. Ex. 2002. The District Court Action is set for trial beginning October 26, 2020. *Id.* Apple has known about the trial date in the District Court Action since May 31, 2019, over six months prior to filing the instant petition. Ex. 2003. In contrast, if this proceeding is instituted, an oral hearing would not be expected until about April 2021, and a Final Written Decision would not be expected until July 2021, a full nine months after the trial in the District Court Action. *See* 35 U.S.C. §316(a)(11) (“requiring that the final determination in an inter partes review be issued not later than 1 year after the date on which the Director notices the institution of a review”).

As the Board has recognized, this fact pattern weighs in favor of denying the Petition. For example, in *NHK* the Board denied institution when the Petitioner had asserted the same prior art and arguments in a co-pending district court proceeding set to go to trial six months before the IPR hearing. *See NHK Spring*, IPR2018-00752, Paper 8 at 20. Specifically, the Board found that institution in that situation “would not be consistent with ‘an objective of the AIA . . . to provide an effective and efficient alternative to district court litigation.’” *Id.* (quoting *Gen. Plastic*, IPR2016-01357, Paper 19 at 16-17).

Similarly, the Board in *Mylan Pharmaceuticals* denied institution based on the advanced stage of the co-pending district court proceeding and the extensive overlap of the asserted prior art, expert testimony and claim construction. IPR2018-01143, Paper 13 at 13 (PTAB Dec. 3, 2018). The Board further held that the “inefficiency is amplified when the district court trial is set to occur . . . more than eight months before [the Board’s] Final Written Decision,” if the Board had instituted trial. *Id.* at 14; *see also Hormel Foods Corp. v. HIP, Inc.*, IPR2019-00469, Paper 9 at 50 (PTAB July 15, 2019) (recognizing “in cases such as *NHK Spring* that the fact that [a] court will resolve the same issues raised by [a] Petition, at an earlier date than the Board, gives rise to inefficiencies and duplication of

effort between the tribunals.”); *E-One, Inc. v. Oshkosh Corp.*, IPR2019-00161, Paper 16 at 9 (PTAB May 16, 2019) (denying institution pursuant to §314(a) due to parallel district court trial scheduled eleven months away).

In *Sand Revolution II, LLC v. Continental Intermodal Group – Trucking LLC*, the Board relied on *NHK* to deny institution of a petition in view of the advanced stage of related District Court proceedings where the invalidity arguments were “very similar to, but perhaps not exactly the same” as those presented in the District Court. IPR2019-01393, Paper 12 at 17 (PTAB Feb. 5, 2020).

Most recently, in *Google LLC v. Uniloc 2017 LLC*, the Board denied institution where the underlying trial would begin less than five months from the Institution decision. IPR2020-00115, Paper 8, at 3, 10 (PTAB March 27, 2020).

Here, the advanced stage of the District Court Action relative to a hearing or Final Written Decision in this matter is the same as in *NHK*, *Mylan*, *Hormel Foods*, *E-One*, *Sand Revolution*, and *Google*. Quite simply, the arguments at issue in this proceeding will be resolved in the District Court Action well before the Board would reach a Final Written Decision on the same issues. Accordingly, it would be inefficient and contrary to the Board’s express goals and finite resources to

institute IPR here due to the advanced stage of the District Court Action. *NHK Spring Co.*, IPR2018-00752, Paper 8 at 20-21.

This *Fintiv* factor weighs in favor of denial.

**C. Factor 3: Significant Investment of Time and Resources By The Court and the Parties Has Already Occurred**

There has been significant time and resources invested by both the Court and the parties in the District Court Action, pending now for over one year. *See generally* Ex. 2004 (Docket from District Court Action).

**1. The District Court Has Spent Significant Time and Resources on the District Court Action**

The District Court has invested significant time and resources into the District Court Action. For example, the Court conducted a four-hour *Markman* hearing and issued a 57-page *Markman* order with a detailed discussion of a number of disputed claim terms and phrases for the ten patents at issue in the District Court Action. Ex. 2005; Ex. 2006. The district court also has invested many hours in holding arguments and has issued numerous rulings on Apple's motion to dismiss, motion to transfer, and the parties' other various motions. Ex. 2005; Ex. 2007; Ex. 2008.

**2. The Parties Have Spent Significant Time and Resources on the District Court Action**

The parties have also invested significant time and resources into the District Court Action. For example, fact discovery closed on March 31, 2020, save for some remaining depositions postponed due to COVID-19 issues. Ex. 2002. During fact discovery, the parties collectively produced nearly 2 million pages of documents, conducted 30 depositions (through April 15), filed 19 motions, and served 50 interrogatories and 120 requests for admission. Ex. 2004. The parties also served over 30 third-party subpoenas. Expert discovery is underway and closes June 16, 2020. Expert discovery also highlights the significant time and resources the parties have already invested in the District Court Action. For example, Maxell's experts have already spent nearly 600 hours reviewing source code produced by Apple. Maxell's expert report regarding infringement and Apple's expert reports regarding invalidity of the '991 Patent will be served on May 7, 2020 after substantial expense and effort by counsel and experts on both sides.

Apple clearly has prioritized the District Court Action over the timely filing of its Petition. As Apple admits, "Apple prepared and served invalidity contentions in the [District Court Action] on August 14, 2019, **which involved a significant**

**time investment** beyond the prior art searching already undertaken. **Immediately upon completing the invalidity contentions**, Apple began preparing the IPRs for the ten asserted patents. . . .” *Apple v. Maxell*, IPR2020-00204, Paper 1 at 46 (PTAB December 20, 2019) (emphasis added).

This *Fintiv* factor weighs in favor of denial.

**D. Factor 4: There is Significant Overlap Between Issues Raised In The Petition And In The District Court Action**

The scope of Apple’s challenge to the ’991 Patent’s validity in this proceeding is substantially the same as in the District Court Action. For example, there is overlap in the claims challenged in both proceedings. Here, Apple asserts that Claims 1-5 and 8-12 of the ’991 Patent are unpatentable. Petition at 1. These claims cover all the asserted claims against Apple in the District Court action. *See* Ex. 2009 at 2. Pursuant to the District Court Action scheduling order, on March 17, 2020, Maxell made a Final Election of Asserted Claims and on April 7, 2020, Apple made a Final Election of Prior Art. Ex. 2010; Ex. 2011.

The prior art that Apple relies on in its Petition is the same, or substantially the same, as the prior art at issue in the District Court Action. For example, in the Petition, Apple proposes six grounds, all utilizing *Asmussen* as the primary reference. Petition at 8. In the District Court Action, Apple also uses *Asmussen* as a

primary reference. Ex. 2012 at 73. Apple also has charted some of the same secondary references it uses here, *Bear* and *Marley*, in the District Court Action. *Id.* Indeed, a sample comparison of the evidence cited in the Petition allegedly supporting unpatentability of Claim 1 illustrates that the very same issues will be decided by a jury at the trial in the District Court Action a mere three months after the Board's Institution Decision:

<b>Element</b>	<b>Alleged Support from <i>Asmussen</i> Relied on in Petition</b>	<b>Alleged Support from <i>Asmussen</i> Relied on in District Court Action Contentions</b>
<b>1[Pre]</b>	<i>Asmussen</i> : 3:20-30; 3:44-51; 4:5-9; 15:60-16:38;	<i>Asmussen</i> : Abstract; 3:20-30; 4:5-9; 4:26-30; 16:34-37
<b>1(a)</b>	<i>Asmussen</i> : 15:15-20; 26:6-8; 50:18-49; Fig. 4; Fig. 30	<i>Asmussen</i> : Abstract; 4:5-9; 4:20-25; 6:48-7:22; 14:14-23; 15:15-23; 15:27-33; 16:34-38; 23:64-24:3; 25:43-46; 26:1-11; 26:21-29; 26:60-63; 30:20-27; 31:39-46; 33:26-33; 36:13-15; 43:18-40; 44:1-19; 49:41-56; 50:44-57; 51:37-64; 52:20-25; Fig. 4; Fig. 10
<b>1(b)</b>	<i>Asmussen</i> : Abstract; 4:5-7; 16:36-38; 50:18-43; Fig. 30	<i>Asmussen</i> : 49:43-56; 50:18-31; 55:56-56:16; Fig. 30
<b>1(c)</b>	<i>Asmussen</i> : 11:30-39; 43:50-53; 50:44-51	<i>Asmussen</i> : Abstract; 3:20-30; 4:5-30; 30:1-9; 43:50-53; 49:57-50:3; 50:44-54; Fig. 3
<b>1(d)</b>	<i>Asmussen</i> : 15:15-16; 15:30-33; Fig. 4	<i>Asmussen</i> : 3:31-41; 12:34-39; 15:24-33; 26:1-11; 26:21-29; 26:60-63; 36:13-15
<b>1(e)</b>	<i>Asmussen</i> : 46:27-62; Fig. 28	<i>Asmussen</i> : Abstract; 4:10-18; 4:26-30; 21:34-42; 43:18-40; 44:1-27; 44:38-56; 46:27-62; 47:26-38;

	<i>Bear</i> : 4:24-28; 9:34-35; 11:37-45; 11:61-66; 7:50- 56	50:18-43; 59:43-56; Fig. 28; Fig. 30 <i>Bear</i> : 11:33-45; 6:44-46; 11:61-12:7; Fig. 10
<b>1(f)</b>	<i>Asmussen</i> : 15:27-33; 50:44-54; 52:20-25	<i>Asmussen</i> : Abstract; 4:26-30; 49:42- 56; 50:18-43; 59:43-56; Fig. 30
<b>1(g)</b>	<i>Asmussen</i> : 15:15-20; 49:49-50:3; Fig. 30	<i>Asmussen</i> : Abstract; 4:10-20; 26:1-6; 31:33-48; 44:20-24; Fig. 11

*Compare* Petition at 17-45 and Ex. 1003 *with* Ex. 2013 at 1-54. Other claims show similar substantial overlap. *Compare* Petition at 45-74 *with* Ex. 2013 at 55-77.

Even Apple’s Final Election of Prior Art shows that Apple continues to rely primarily on *Asmussen* to set forth its invalidity case at trial in the District Court litigation in October 2020, nine months before a final written decision is expected in this IPR. *See* Ex. 2011 at 4. Indeed, with respect to Claim 4, both in the Petition and in the District Court Action, Apple **solely** relies on *Asmussen*.<sup>3</sup> With respect to *Allen*, no meaningful distinction can be made relative to Apple’s secondary references used in the petition, *Bear*, *Lindstrom*, *Marley*, and *DeFazio*. For example, in Grounds 2, 5, and 6 Apple relies on *Marley* for claim 2 to disclose “the processor restarts the displaying of the first digital information.” Petition at 50-53. This is the exact same way Apple is relying on *Allen* in the District Court Action as

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<sup>3</sup> Claim 4 depends from claims 1-3, thus requiring a validity analysis on each of the claims.



shown by Apple’s invalidity contention therein:

<b>Claim 2</b>	<b><i>Asmussen With Marley in the Petition</i></b>	<b><i>Asmussen With Allen in District Court Action Contentions</i></b>
“the processor restarts the displaying of the first digital information,”	“A POSITA would have been motivated and found it obvious to modify <i>Asmussen</i> to include <i>Marley’s</i> teaching of the PAVP (i.e., the processor) to restart the playing of a buffered (i.e., stored) video program after the videophone call is finished. ( <i>Dec.</i> 161-162). Such a modification to <i>Asmussen</i> uses <i>Marley’s known technique</i> of a processor receiving input from a user to end the video call and then responsively restarting the paused programming, with <i>Asmussen’s</i> teaching of the processor receiving input from a user to end the video call.”	“Additionally or alternatively, it would have been obvious to a PHOSITA to configure <i>Asmussen’s</i> processor to restart the first digital information after the videophone call is finished, as taught by Allen . . . . Combining prior art elements according to <b>known methods</b> would have yielded the predictable result of restarting a paused program upon termination of a videophone call with a reasonable expectation of success.”

*Compare* Petition at 52-53 *with* Ex. 2013 at 62, Similarly, Apple contends in the District Court Action that *Asmussen* in view of *Bear* and *Allen* renders Claims 2-5 and 9-12 obvious, which is substantially the same as grounds presented in the Petition.

In any event, Apple’s Final Election states “Apple reserves the right to amend its election of prior art as appropriate. . . .” Ex. 2011 at 1. Apple’s invalidity

contentions in the District Court Action purport to “incorporate[] by reference all prior art cited during prosecution of the Asserted Patents, and all *inter partes* review (IPR) petitions filed against the Asserted Patents and the prior art cited in these IPR petitions” Ex. 2012 at 2. In other words, Apple has expressly and specifically sought to incorporate all of the Petition’s contentions into the District Court Action.

Thus, substantially the same issues will be decided by a jury, using the same prior art and the same citations of the prior art, all nine months prior to the issuance of a Final Written Decision. At bottom, the issues presented in the Petition that differ from what will be argued in the District Court Action do not meaningfully distinguish the arguments in this proceeding from those in the District Court Action. *Edwards Lifesciences Corp. v. Evalve*, IPR2019-01546, Paper 7, 12-13 (PTAB Feb. 26, 2020) (denying institution despite lack of a 1:1 overlap of claims and prior art, finding such distinction not meaningful); *Sand Revolution II*, IPR2019-01393, Paper 12, at 17 (denying institution where the invalidity arguments were “very similar to, but perhaps not exactly the same” as those presented in the District Court).

This *Fintiv* factor weighs in favor of denial.

**E. Factor 5: Apple is Both Petitioner And Defendant**

It is undisputed that Apple is the Petitioner in these proceedings and the defendant in the District Court Action. *Compare* Petition at 1 with Ex. 2004.

This *Fintiv* factor weighs in favor of denial.

**F. Factor 6: Other Circumstances, Such As Apple's Purposeful Delay In Filing The Petition, Weigh In Favor of Denial**

Apple has known about Maxell's asserted claims, as well the District Court Action trial date, for nearly a year. Ex. 2003. Indeed, it has known about Maxell's asserted claims for at least *fourteen months*, because as early as October 9, 2018, Maxell specifically notified Apple that it was infringing claims 1-5 and 8-12 of the '991 Patent. Ex. 2001.

Apple fails to explain why it waited so long to file its Petition after learning of Maxell's asserted claims against it in the District Court Action and learning of the prior art it planned to use in its Petition. Apple also ignores Board precedent that recognizes precisely the situation here, where the advanced stage of parallel district court proceedings presenting substantially similar issues would undermine the express goals of the IPR scheme as well as the Board's finite resources. *NHK Spring*, IPR2016-01357, Paper 19 at 16-17; *Mylan Pharms.*, IPR2018-01143, Paper 13 at 13-14. Indeed, inefficiency is "amplified" here where the district court

trial is set to occur nine months before a Final Written Decision. *Mylan Pharms.*, IPR2018-01143, Paper 13 at 14.

Not only has Apple known about Maxell's asserted claims for fourteen months and the District Court Action trial date for nearly a year, Apple learned of the prior art it planned to utilize in the present Petition at least four months prior to filing its Petition. Ex. 2012. Apple's '991 Patent invalidity contentions disclose that as early as August 14, 2019, Apple was aware of many of the references upon which it currently bases its Petition: *Asmussen, Bear, and Marley*. Ex. 2012 at 70. These contentions also disclose that at least as early as August 14, 2019, Apple had completed over seventy-five pages of charts attempting to map these references to the challenged claims of the '991 Patent, including the very grounds it set forth in the Petition months later. *Id.* Based on these facts, it is clear Apple analyzed *Asmussen, Bear, and Marley* in view of the challenged claims well before August 2019, as well as many months before it filed this Petition in December 2019. Yet, Apple admits that it did not begin preparing its Petition until *after* completing its invalidity contentions. *See Apple Inc.*, IPR2020-00204, Paper 1 at 46 (“[i]mmediately upon completing the invalidity contentions [on August 14, 2019], Apple *began* preparing the IPRs for the ten asserted patents”) (emphasis added).

Apple argues that §315(b) “originally contained only a 6-month filing window, which was amended to 1-year prior to passage of the America Invents Act to ‘afford defendants a reasonable opportunity to identify and understand the patent claims that are relevant to the litigation’ before having to file an IPR petition.” Petition at 6-7. But Apple has had since at least October 2018 to understand the patent claims of the ’991 Patent. Ex. 2001. Additionally, having analyzed and charted all of the references that support the grounds asserted in its Petition by at least August 2019, Apple could have been ready to file an IPR at that time, but it chose to delay filing until four months later. This delay undermines any argument that Apple was not afforded “a reasonable opportunity to identify and understand the patent claims that are relevant to the litigation before having to file an IPR petition.” Petition at 6-7.

One of the purposes of IPRs is to be an “effective and efficient alternative” to litigation. *Gen. Plastic*, IPR2016-01357, Paper 19 at 16-17. Here, instituting an IPR would not be an effective or efficient alternative to litigation, particularly given the advanced stage of the District Court Action, the finite resources of the Board, and Apple’s delay in filing its Petition. Accordingly, the Board should exercise its discretion to deny institution pursuant to 35 U.S.C. §314.

Board precedent demands denial of institution due to Apple's delay in filing its Petition and the advanced stage of the District Court Action. *NHK Spring*, IPR2018-00752, Paper 8 at 20; *Sand Revolution II*, IPR2019-01393, Paper 12 at 18.

Additionally, as set forth in detail below in Section III, the Petition also fails on the merits.

This *Fintiv* factor weighs in favor of denial.

\* \* \*

All the foregoing factors weigh in favor of denying institution of the Petition. Accordingly, the Board should exercise its discretion to deny institution pursuant to 35 U.S.C. §314.

### **III. THE PETITION DOES NOT SHOW A REASONABLE LIKELIHOOD OF PREVAILING WITH RESPECT TO ANY CHALLENGED CLAIM**

If the Board does not exercise its discretion under 35 U.S.C. § 314, institution should nonetheless be denied because the petition fails to show a reasonable likelihood of prevailing with respect to any challenged claim.

#### **A. Background**

##### **1. Overview of the '991 Patent Invention**

The '991 Patent is directed to an apparatus that allows a user to seamlessly

and automatically switch between watching content and participating in a video call in a single device. *See, e.g.*, Ex. 1001 at 2:32-48. At the time of the '991 Patent, conventional systems included separate equipment for watching programming content and making video calls. *Id.* at 2:6-31. For example, if a user was watching television when a video call came in, the user would need to manually stop the programming in order to begin the video call. *Id.* When the call ended, the user would then need to manually resume watching the content. *Id.*

The inventors of the '991 Patent overcame this problem by providing an integrated system that allows the user to switch between watching content and participating in a video call, without having to perform manual operations. *Id.* at 2:32-55. For example, the inventors developed an apparatus for automatically pausing programming content to allow the user to answer a video call and, after ending the call, to automatically resume the content. *Id.* at 6:25-29.

## **2. Person of Ordinary Skill in the Art**

For the '991 Patent, a person of ordinary skill in the art has a working knowledge of image processing and/or networking, gained through a Bachelor of Science in Electrical Engineering, computer engineering, computer science or equivalent, and at least two years of experience in the field of image processing

and/or networking.

**B. Claim Construction**

Under 37 C.F.R. § 42.104(b)(4) it is Petitioner's burden to propose a construction and then explain how the construed claim is unpatentable under Petitioner's construction. *Id.* As Patent Owner explains herein, the Petition fails to meet this burden. Given the multiple reasons why the Petition should not be instituted, including 35 U.S.C. § 314, to minimize the disputes that the Board needs to address at this preliminary stage, and for the purposes of this Preliminary Response **only**, Patent Owner simply applies Petitioner's own constructions to show how the Petitioner has not met its burden under 37 CFR § 42.104(b)(4).

Patent Owner, however, reserves all rights to dispute Petitioner's proposed construction with the support of expert testimony to the extent the Board decides to institute review of this Petition. Any statements made herein with respect to the lack of a claim element in a prior art reference are under Petitioner's proposed constructions and should not be construed as an admission on behalf of Patent Owner that such construction is proper under the *Phillips* standard.

**C. All Grounds Are Unlikely To Succeed Because Petitioner Fails To Articulate A Rationale For Combining *Asmussen* and *Bear***

All grounds of the Petition rely on the combination of *Asmussen* and *Bear*.



But the Petition fails to show that a POSITA would combine *Asmussen* with *Bear*. For example, Petitioner provides merely a general motivation to combine that fails to consider the different design requirements of each reference. Petitioner also fails to specify which elements of each of the cited references it contends would have been obvious to combine with each other to obtain the claimed invention, let alone how or why such a combination would or could be made. *See ActiveVideo Networks, Inc. v. Verizon Comm's, Inc.*, 694 F.3d 1312, 1327 (Fed. Cir. 2012). And, instead of providing any rational underpinning to support its asserted obviousness grounds, Petitioner offers only conclusory assertions. Indeed, what is required here—and notably absent—is an “additional showing” of what a POSITA would have “selected and combined.” *Unigene Labs., Inc. v. Apotex, Inc.*, 655 F.3d 1352, 1360 (Fed. Cir. 2011). Petitioner fails to meet this standard.

**1. Petitioner Fails to Identify What Is Missing From the Primary Reference**

Petitioner's obviousness analysis lacks sufficient articulated reasons with rational underpinnings because Petitioner fails to identify what element is missing from the primary reference in its obviousness combination. *LG Elecs., Inc. v. Cellular Commc'ns Equipment LLC*, IPR2016-00197, Paper No. 7 at 10 (PTAB Apr. 29, 2016). For example, Petitioner relies on the disclosure of both *Asmussen*

and *Bear* for Claims 1(e) and 8(c), but has not clearly articulated what is missing from *Asmussen*. Petition at 34-38, 46. Instead, Petitioner cites to *Asmussen* and explains that it discloses the claimed processor that renders the camera operative. *Id.* Indeed, Petitioner states earlier in the Petition that “*Asmussen* teaches all of claims 1(e) and 1(f) and merely provides *Bear* as an alternative teaching.” *Id.* at 14.

Without explaining what is missing from *Asmussen* for this element, it is unclear why a person of ordinary skill would turn to the teachings of *Bear* for an element that, according to Petitioner, is also taught by the primary reference. *LG Elecs.*, IPR2016-00197, Paper No. 7, at 8. Thus, here, both Patent Owner and the Board have to speculate as to what Petitioner’s basis is for relying on the secondary reference.

Accordingly, because Petitioner fails to identify what is missing from *Asmussen* and fails to explain why a POSITA would turn to the teachings of *Bear* for multiple claim limitations, the Petition fails to show “sufficiently why a POSITA—without improper hindsight—would have combined . . . [the two references] to account for all the features of the challenged claims . . . .” *Id.* at 9.

Therefore, Petitioner has not established a reasonable likelihood that it would prevail in showing that any of the challenged claims would have been

obvious over *Asmussen* and *Bear*.

## **2. Petitioner Fails to Explain What It Is Combining From Each Reference**

Petitioner also fails to clearly articulate what it is combining from *Asmussen* and *Bear* to arrive at the claimed invention. Petitioner never explains what allegedly obvious combination Petitioner is advancing as the basis for its asserted ground, for example in claim elements 1(e) and 8(c). This failure to explain the relevance of the two references to its asserted grounds violates the Board's rules. 37 C.F.R. § 42.22(a)(2); *Whole Space Indus. Ltd. v. Zipshade Industrial (B.V.I.) Corp.*, IPR2015-00488, Paper 14, at 9-12 (P.T.A.B. July 24, 2015) (denying institution for failure to satisfy section 42.22(a)(2) where, e.g., the petition set forth confusing obviousness combinations for the Board to interpret).

In addition, Petitioner has not proffered a ground of obviousness in view of *Asmussen* alone and thus Petitioner should not be permitted to argue that *Asmussen* alone renders obvious Claims 1 and 8. Patent Owner is "entitled to notice of and a fair opportunity to meet the grounds of rejection" in this proceeding. *Dell Inc. v. Acceleron, LLC*, 818 F.3d 1293, 1301 (Fed. Cir. 2016) (citation omitted).

## **3. Petitioner Fails to Explain How It Is Combining Each Reference**

The Petition also fails to provide any explanation as to why a POSITA

would be motivated to rely on *Bear* to include automatically launching an A/V capture application to begin capture of a video stream in *Asmussen*. See *Ferring B.V. v. Watson Laboratories, Inc.-Florida*, 764 F.3d 1401, 1407 (Fed. Cir. 2014).

As discussed below, the design requirements for *Asmussen* and *Bear* are substantially different. In addition, a POSITA would not be motivated to combine the teachings of *Asmussen* and *Bear* because they are directed to solving different problems and use different structures to solve these problems. Petitioner has not considered the two references as a whole and has not accounted for these differences. Instead, Petitioner selected portions of each reference and used hindsight to assemble a new system without accounting for the different objectives and goals of the systems in *Asmussen* and *Bear*.

“To establish that a particular combination of references would have been obvious, Petitioner must explain both *how* and *why* one of ordinary skill in the art would have combined the references to produce the claimed invention.” *Guangdong Alison Hi-Tech Co., Ltd. v. Aspen Aerogels, Inc.*, IPR2017-00152, Paper 8 at 16 (P.T.A.B. Mar. 23, 2017) (citing *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1066 (Fed. Cir. 2016) (emphasis in original). Here no such “how” and “why” have been provided by Petitioner.

A POSITA would not be motivated to modify *Asmussen*, a set top box system, to include an A/V capture application designed for use in a personal computer as described in *Bear*. While *Bear* states that its “invention is operational with numerous other general purpose or special computing system environments,” *Bear* also merely states that it “**may be** suitable for use with . . . set top boxes” without providing any further detail. *See* Ex. 1005, 3:66-4:9.

Petitioner also does not explain how a POSITA would implement the personal computer-based application of *Bear* in a set top box system like *Asmussen*. Petitioner describes some benefits in generalities (“improve the functionality” and “simplified”), and claims that “the modification requires only simple programming techniques,” citing to its expert’s declaration. *See* Petition at 39. But describing potential improvements that are accomplished by the claims of the ’991 Patent is the definition of hindsight. Neither Petitioner nor its expert attempts to quantify such “simple programming techniques.” Incorporating an entirely different function into a processor is hardly the result of “simple programming techniques.” Accordingly, the Board should give this reasoning no weight.

Finally, *Bear* was not solving the same problem as *Asmussen*. As discussed

above, *Asmussen*'s focus is providing user control (i.e., waiting for user input after the digital information is paused), and *Bear* is completely silent on rendering the camera operative in the full context of Claims 1 and 8 (i.e., rendering the camera operative when a processor receives an inbound videophone call notice while displaying the first digital information on the display and pauses the first digital information). Petitioner improperly focuses on *Bear*'s teachings in isolation.

For all of the foregoing reasons, the Petition fails to demonstrate a POSITA would combine *Asmussen* and *Bear*. As a result of this failure, all of the grounds fail and Institution should be denied.

However, even were *Asmussen* to be combined with *Bear*, all grounds fail for the reasons more fully expressed below.

**D. Ground 1: Petitioner Fails To Establish That Claims 1 and 8 Are Obvious Over *Asmussen* In View of *Bear***

The Petition fails to show a reasonable likelihood that *Asmussen* in combination with *Bear* and “the knowledge of one of ordinary skill in the art” renders obvious Claims 1 and 8 of the '991 Patent.

**1. Petitioner Fails to establish that *Asmussen* in combination with *Bear* discloses element 1(a)**

The combination of *Asmussen* and *Bear* does not disclose “a network interface configured to receive first digital information which is received from a

contents server which is coupled to the communication apparatus via the network interface and second digital information from the another communication apparatus” as set forth in Claim 1(a).

Petitioner does not provide any citation to *Bear* for support; thus, the only question is whether *Asmussen*’s “tuner 603 in combination with a receiver 750” discloses the network interface limitation. It does not.

At the beginning of the discussion of Claim 1(a) in Ground 1, Petitioner states that “*Asmussen* teaches the claimed ‘network interface.’ To the extent Maxell contends *Asmussen* does not teach the claimed ‘network interface,’ see Ground 4 and *Lindstrom*’s teaching of a receiver including an out-of-band tuner for receiving both video-on-demand and videophone signals.” Petition at 21.

First, *Lindstrom* is not part of Ground 1 and, thus, Patent Owner will properly address *Lindstrom* as part of Petitioner’s three-reference combination in Ground 4. Indeed, the fact that Petitioner is previewing this argument at the beginning of this claim element signals that *Asmussen*’s collective tuner 603 and receiver 750 do not satisfy the claimed network interface receiving first and second digital information.

Second, Petitioner spends much time discussing and thoroughly establishing

that there are two separate embodiments at play, but neither of which disclose the “network interface” as claimed. *See* Petition at 21-24.

In the embodiment shown in Figure 11, *Asmussen* provides significant discussion of the tuner 603, which is primarily used to change cable signals intended for reception on the subscriber’s TV, e.g., the user instructing the tuner to tune to the proper frequency of the channel or desired program. *See* Ex. 1004, 26:1-29; Fig. 11. And, while there are upgrades to the set top terminal where a tuner can receive cable television input signals (CATV), there is no explicit disclosure that the combination of the tuner 603 and receiver 750 satisfy the claimed network interface receiving first and second digital information. *See* Petition at 21-23. In fact, *Asmussen* mentions receiver 750, the receiver with respect to video conferencing, only once in the entirety of the patent and this is not in the context of use with a tuner as other receivers. *Compare* Ex. 1003, 50:44-49 *with id.* at 26:1-63, 28:7-16.

In an attempt to paper over the lack of disclosure and motivation to combine the two disparate embodiments, Petitioner relies on its expert to essentially rewrite *Asmussen’s* disclosure. *See* Petition at 21-24 (citing to Ex. 1003, ¶¶109-119). According to Petitioner, the combination of the embodiments—combining tuner



603 and receiver 750 together—was predictable and straightforward, yet Petitioner’s expert spends approximately **10 pages** providing his understanding of *Asmussen*. This is hindsight and should not be accorded any weight.

Moreover, Petitioner does not provide any discussion how this purported modification of *Asmussen* to combine two embodiments would impact *Bear*, the purported secondary reference for Ground 1.

In sum, as *Asmussen* does not disclose the claimed “network interface” of Claim 1(a), the combination of *Asmussen* and *Bear* does not disclose Claim 1(a), either.

**2. Petitioner Fails to establish that *Asmussen* in combination with *Bear* discloses element 1(e)**

*Asmussen* is directed to a set top box capable of sending and receiving videophone calls. *Asmussen* also discloses pausing the video program being displayed in response to an incoming videophone call. *See* Ex. 1004 at Abstract, 4:10-18, 43:18-40. However, *Asmussen* does not disclose the “rendering the camera operative” limitation set forth in Claim 1(e).

Petitioner provides two pieces of alleged support from *Asmussen* for its argument, but both do not disclose the limitation:

To support video calling, the instructions also enable the microprocessor 602 to process video signals from a camera, to process audio signals from a microphone and to control a camera and microphone.

Ex. 1004, 15:27-30.

To support video calling, a video call options menu 1022 is preferably provided. In the video call options menu 1022, the user can set up such things as turning caller ID on/off, turning automatic program pausing on/off, the default state of the video camera 2000 (on or off), time periods when calls shall not interrupt programming and shall be automatically messaged instead (e.g., during favorite programs), how video call images are displayed (e.g., picture-in-picture, on a blue screen or on a paused image of the current program).

*Id.* at 21:34-42.

The foregoing excerpts merely stand for the unremarkable proposition that a processor within the *Asmussen* system generally interacts with the camera. But neither disclose the “rendering the camera operative” limitation, which results from the operation of the processor in response to an inbound videophone call as claimed in Claim element 1(e):

“wherein **when the processor receives an inbound videophone call notice** while displaying the first digital information on the display, the

processor pauses the displaying of the first digital information **and renders the camera operative”**

Ex. 1001, 32:52-56 (emphasis added). Thus, it is not simply that a camera is rendered operative; rather, the camera is rendered operative by the processor upon receipt of an inbound videophone call notice, while displaying the first digital information, and then pausing that first digital information.

Petitioner’s expert looks at these same two pieces of evidence and concludes, without any evidence, that the “rendering the camera operative” limitation is met. Ex. 1003, ¶¶128-130. This is a disguised inherency argument within an obviousness analysis that is improper and not supported.

Moreover, Petitioner’s expert’s “understand[ing]” and “logical” conclusions about *Asmussen* are nothing of the sort—it is a wholesale injection of subject matter that is simply not present in the disclosure. For example, Petitioner’s expert equates the camera’s “on” (of the on/off) state to disclosing the “rendering the camera operative” limitation, a position that Petitioner adopts wholesale. Petition at 37 (citing Ex. 1003, ¶¶128-129). However, the camera in Claim 1(e) of the ’991 Patent is rendered operative *when* a videophone call is received, i.e., a causation result that occurs without user involvement.

Indeed, Petitioner’s expert admits that *Asmussen* discloses detecting an

inbound videophone call, pausing the video program, and “then waits for user input, and once the user input is received, determines if the user input is a ‘triggering event.’” Ex. 1003, ¶155. In other words, the processor does not cause the camera to be rendered operative after receiving a videophone call as Claim 1(e) requires. At most, the processor pauses the program and waits for further instruction *from the user*. The claim requires that the camera is rendered operative upon receipt of the video call, not when the call is answered.

*Asmussen* further discloses that “[t]o support video calling with outgoing video, the remote control unit **900** preferably includes a camera activation button (not shown) and buttons or other controls for pointing the camera **2000**. The cursor movement buttons **370**, a joystick, a trackball or something similar can be used for camera pointing in a camera control mode.” Ex. 1004, 31:43-48. Although this passage discusses outgoing video calls, the passage further underscores the user’s ability to control and render the camera operative—not the processor on receipt of a video call as required by Claim 1(e)—consistent with the remainder of the *Asmussen* disclosure.

Petitioner also claims that the first piece of evidence relating to *Asmussen*’s microprocessor’s execution of program instructions in memory and “control” of

the camera demonstrates that the “rendering the camera operative” limitation is met. Petition at 36; Ex. 1003, ¶130. This is incorrect. The relevant paragraph is produced in full:

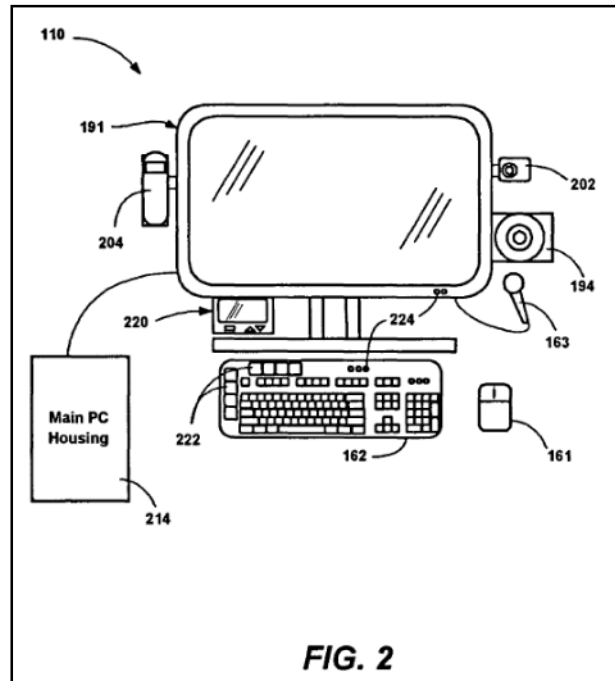
The microprocessor **602** is capable of executing program instructions stored in memory. These instructions allow a user to access various menus by making selections on the remote control **900**. To support video calling, the instructions also enable the microprocessor **602** to process video signals from a camera, to process audio signals from a microphone and to control a camera and microphone. The microprocessor **602** may be a single microprocessor, as shown, or may be several microprocessors, such as a general microprocessor, a camera microprocessor and a microphone processor.

Ex. 1004, 15:24-33. Notably, the instructions “allow a user to access various menus by making selections on the remote control 900” and an example of a menu is the “video call operations menu 1022” that Petitioner relies on with respect to the default state (on/off) of the video camera. *See id.* at 21:34-42. Thus, even if the user chooses the default camera setting to “on” via a remote control prior to receiving an inbound video call (as Petitioner’s expert concedes, Ex. 1003, ¶131), there is nothing in *Asmussen* that discloses that that the camera is rendered operative by the processor *when* the inbound video call is received. At most, as

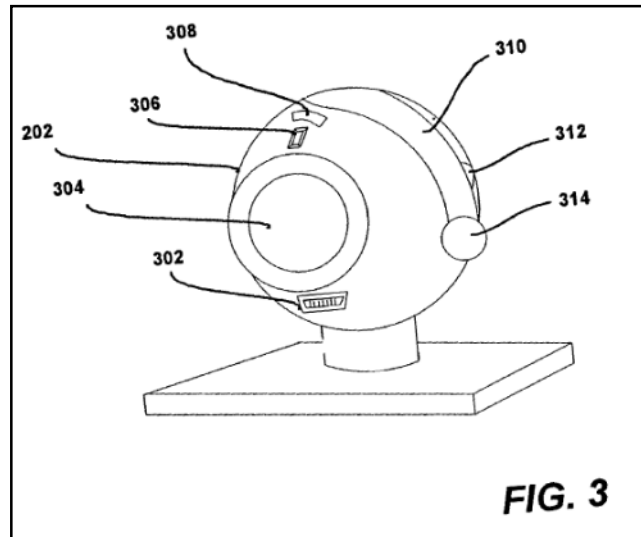
admitted by Petitioner's expert, the program is paused and waits for further user input.

Petitioner appears to acknowledge this deficiency of *Asmussen* by the attempted combination with *Bear*. Petition at 39. However, Petitioner's overstates the disclosure of *Bear*.

First, *Bear* discloses "[a] system and method for improved video capture on personal computer." Ex. 1005, Abstract. In fact, the Summary of the Invention states that "the present invention provides a system and method for capturing and otherwise working with video on a personal computer." *Id.*, 2:14-16. Figure 2, reproduced below, is a "general representation of a computer system arranged with integrated communications-related devices including a camera and video controls, in accordance with an aspect of the present invention" (*id.* at 3:20-23):



*Bear* primarily describes a system where the user must manually open the lens cover 310 or press a button (e.g., video capture button 308) to provide an instruction to initiate the A/V capture application program to capture a video or still image, requiring this step to actuate the lens cover 310 to “safeguard against inadvertent video recording or damage to the lens 314” as shown in Figure 3, reproduced below:



*See id.* at 3:24-26, 7:35-9:18; 10:38-40.

*Bear* mentions that “the computer system may launch the [A/V] application in response to receiving an incoming phone call that supports video.” *Id.* at 11:41-43. However, contrary to Petitioner’s claim, *Bear* does not teach the “claimed processor” of Claim 1(e). Petition at 37.

Nowhere does *Bear* explain or disclose that the camera is rendered when the processor in *Bear* receives an inbound videophone call notice while displaying the first digital information as required in Claim 1(e). Nor does *Bear* explicitly disclose that the processor pauses the displaying of the first digital information *and* renders the camera operative as required in Claim 1(e).



Petitioner focuses solely on the one sentence disclosure about the camera being rendered operative in response to an incoming video call while completely ignoring the remainder of the Claim 1(e). That is improper.

Accordingly, Petitioner has not identified the claimed processor in Claim 1(e) being disclosed in either *Asmussen* or *Bear*.

**3. Petitioner Fails to establish that *Asmussen* in combination with *Bear* discloses element 8(b)**

For the same reasons that Petitioner has failed to show the disclosure of Claim 1(e) in *Asmussen* and *Bear*, Petitioner has equally failed to show the disclosure in claim 8(c). Petitioner has not forwarded any additional argument for Claim 8(c); rather, it refers back its discussion for Claim 1(d)-(e). *See* Petition at 46.

Although the “rendering the camera operative” element is set forth on a single line (Ex. 1001, 33:40), the element is a sub-step of the larger method step of Claim 8(b), which states “upon receiving an inbound videophone call notice while playing the first digital information, pausing the displaying of the first digital.” *Id.*

In other words, just as the processor renders the camera operative when it receives an inbound videophone call notice while displaying the first digital information on the display, the processor pauses the displaying of the first digital

information, the rendering of the camera operative step in Claim 8(c) also occurs when an inbound videophone call notice, while playing the first digital information, is received and the displaying of the first digital information is paused.

**E. Ground 2: Petitioner Fails To Establish That Claims 1-5 and 8-12 Are Obvious Over *Asmussen* In View Of *Bear* In Further View Of *Marley***

**1. *Marley* Was Already Considered During Prosecution**

Ground 2 attempts to add *Marley* to the *Asmussen* and *Bear* combination. Petitioner concedes, however, that *Marley* was already considered by the USPTO during examination of the application that led to the '991 Patent. Petition at 13. Petitioner attempts to provide a distinction regarding the examiner's consideration of *Marley* during the '991 Patent ("cited but not substantively considered"), but then concedes that the examiner fully considered *Marley* during the examination of the parent application to the '991 Patent. *See id.*

35 U.S.C. § 325(d) provides the Board discretion to deny institution when "the same or substantially the same prior art or arguments" were previously presented to the Office. *See Agrinomix, LLC v. Mitchell Ellis Prods., Inc.*, IPR2017-00525, Paper 6 at 12-13 (PTAB Jun. 14, 2017).

The non-exclusive *Becton Dickinson* factors are reproduced below with Patent Owner's responses:

*(a) the similarities and material differences between the asserted art and the prior art involved during examination;*

Petitioner states in a conclusory manner the nature of the disclosures of *Asmussen* and *Bear* compared with the dozens of prior art references cited during examination of the '991 Patent or its parent, whose prosecution is also relevant. However, neither *Asmussen* nor *Bear* (nor them in combination pursuant to Ground 2) teach each limitation of any of the challenged claims in the Petition, the same result as during prosecution of the '991 Patent. This factor weighs in favor of the Board exercising its discretion or is, at best, neutral.

*(b) the cumulative nature of the asserted art and the prior art evaluated during examination;*

Similarly, Petitioner does not provide any comparison or reasoning to disprove the fact that *Asmussen* and *Bear* are cumulative to the dozens of prior art references considered during examination of the '991 Patent or its parent. This factor weighs in favor of the Board exercising its discretion.

*(c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection;*

*Marley* was fully considered and evaluated during both the examination of the '991 Patent or its parent. This factor weighs in favor of the Board exercising its discretion.

*(d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art;*

*Marley* was fully considered and evaluated during both the examination of the '991 Patent or its parent. Although the combination of *Asmussen* and *Bear* and *Marley* was not explicitly presented during examination, neither *Asmussen* nor *Bear* (nor them in combination pursuant to Ground 2) teach each limitation of any of the challenged claims in the *Petition* and *Marley* does not address those deficiencies. This factor weighs in favor of the Board exercising its discretion or is, at best, neutral.

*(e) whether Petitioner has pointed out sufficiently how the Examiner erred in its evaluation of the asserted prior art; and*

Petitioner claims that this factor is inapplicable because the Examiner did not rely on *Marley* as a basis for a rejection, but that is wrong—the Examiner fully considered *Marley* during the prosecution of both the '991 Patent and its parent and decided that both were patentable over *Marley*. This factor weighs in favor of the Board exercising its discretion.

*(f) the extent to which additional evidence and facts presented in the Petition warrant reconsideration of the prior art or arguments.*

As neither *Asmussen* nor *Bear* (nor them in combination pursuant to Ground 2) teach each limitation of any of the challenged claims in the Petition, there is nothing to reconsider prior art or arguments, particularly in combination with *Marley*, which does not remedy *Asmussen* or *Bear*'s deficiencies. This factor weighs in favor of the Board exercising its discretion.

Petitioner has not provided sufficient reasons to the Board on why it should now institute a ground relying on *Marley* as a secondary reference even though this same prior art was already considered by the Office during prosecution. Thus, institution of Ground 2 should be denied at least for this reason.

**2. Petitioner Fails to establish that *Asmussen* In Combination With *Bear* In Further View Of *Marley* Discloses Claims 1(preamble)-(b) And 1(d)-(g) And Claim 8**

For each of Claims 1(preamble)-(b) and 1(d)-(g) and Claim 8, Petitioner merely refers back to its mapping for Ground 1. As such, Patent Owner incorporates its arguments in Section III(C).

**3. Petitioner Fails To Establish That *Asmussen* In Combination With *Bear* In Further View Of *Marley* Discloses Claim 2**

For Claim 2, Petitioner refers back to its mapping for Grounds 1 and 2. As

such, Patent Owner incorporates its arguments in Section III(C), as well as incorporates its arguments regarding why the combination of *Asmussen* and *Bear* and *Marley* do not render obvious Claim 1.

Moreover, *Marley* is generally directed to a set top box device that integrates videophone call functions. *See* Ex. 1006, [0015]-[0016]. However, as conceded by Petitioner, *Marley* only discloses pausing video content after the call is accepted, not upon receiving an inbound call:

Acceptance of the call causes PAVP **308** to mute and/or pause any programming presently being viewed on monitor **320 (503)**, and store the paused programming in DVR memory **316** for viewing after the termination of the video call **(505)**.

*Id.* at [0022]; Petition at 51. Thus, although *Marley* may generally disclose a resumption of viewing of programming presenting being viewed on a monitor after the video call is terminated, *Marley* does not disclose that the processor paused the programming and rendered the camera operative when receiving an inbound videophone call as required by Claim 1(e). Petitioner is again viewing a limitation—in this case, an entire dependent claim (Claim 2)—in isolation and ignoring the greater context in which the claimed processor operates. This is improper.

Thus, just as the combination of *Asmussen* and *Bear* did not disclose each of the limitations of claim 1, *Asmussen* in view of *Bear* in further view of *Marley* does not disclose each limitation for Claim 2.

**4. Petitioner Fails To Establish That *Asmussen* In Combination With *Bear* In Further View Of *Marley* Discloses Claim 3**

For Claim 3, Petitioner refers back to its mapping for Ground 2, Claim 2 and provides further citations to *Asmussen*. As such, Patent Owner incorporates its arguments in Section III(C), as well as incorporates its arguments regarding why the combination of *Asmussen* and *Bear* and *Marley* do not render obvious Claims 1 and 2.

**5. Petitioner Fails To Establish That *Asmussen* In Combination With *Bear* In Further View Of *Marley* Discloses Claim 4**

For Claim 4, Petitioner refers back to its mapping for Ground 2, Claim 3 and provides further citations to *Asmussen*. As such, Patent Owner incorporates its arguments in Section III(C), as well as incorporates its arguments regarding why the combination of *Asmussen* and *Bear* and *Marley* do not render obvious Claims 1, 2, and 3.

**6. Petitioner Fails To Establish That *Asmussen* In Combination With *Bear* In Further View Of *Marley* Discloses Claim 5**

For Claim 5, Petitioner refers back to its mapping for Ground 2, Claim 4 and provides further citations to *Marley*. As such, Patent Owner incorporates its arguments in Section III(C), as well as incorporates its arguments regarding why the combination of *Asmussen* and *Bear* and *Marley* do not render obvious Claims 1, 2, and 3.

Moreover, Petitioner does not identify what element in *Marley* is the claimed processor of Claim 5, which is the same claimed processor in Claims 1-4. Rather, Petitioner primarily discusses the primary audio/video processor (PAVP) alone executes certain tasks upon receiving an input for making an outbound call, but then pivots to stating that “it would have been obvious for the PAVP to directly render operative the camera and microphone or for the PAVP to comprise multiple sub-processors, including the VTP.” Petition at 57-59. It is unclear which of the two processors—PAVP and/or VTP—allegedly perform the processor functionality both in Claim 5 as well as Claims 1-4.

The confusion is particularly noticeable because, for inbound calls, *Marley* states that the PAVP pauses programming and the VTP “activates camera 104 and



microphone 106, and in conjunction with PVAP 308, transmits the video image and audio from camera 304 and microphone 306 for reception by set-top box 100 (507).” Ex. 1006 at [0022]. Petitioner does not explain this inconsistency, only that the PAVP and VTP work “in conjunction.” *See* Petition 57-58. But, even then, the two processors in *Marley* do not meet the limitations of the processor for Claims 1-4 that Claim 5 depends from.

Thus, *Marley* does not disclose, for example, that the same processor of Claim 5 paused the programming and rendered the camera operative when receiving an inbound videophone call as required by Claim 1(e)—*Marley* at best only teaches pausing of programming upon ***acceptance*** of the inbound call. *See id.* at [0022]. Petitioner is again viewing a limitation—in this case, an entire dependent claim (Claim 5)—in isolation and ignoring the greater context in which the claimed processor operates. This is improper.

Finally, Petitioner states, at the beginning of the Claim 5 analysis, that “To the extent Maxell contends *Asmussen* in combination with *Marley* does not teach all the limitations of Claim 5,” Apple maps *DeFazio* in Ground 3—while ignoring the necessity of having *Bear* in the combination (as it was necessary for Claims 3 and 4 which Claim 5 depends from as well as *Bear* is included in the stated

grounds for Ground 2 generally)—for teaching the “processor . . . displays information indicating the outbound videophone call on the display calling message.” Petitioner did not provide any further analysis of *DeFazio* in **Ground 2** and such comingling of references and grounds is improper. Thus, Patent Owner will address Petitioner’s four-reference combination involving *DeFazio* (and *Asmussen*, *Bear*, and *Marley*) properly in **Ground 3**.

**7. Petitioner Has Failed To Establish That *Asmussen* In Combination With *Bear* In Further View Of *Marley* Discloses Claim 9**

For Claim 9, Petitioner merely refers back to its mapping for Ground 1 and 2. As such, Patent Owner incorporates its arguments in Section III(C), as well as incorporates its arguments regarding why the combination of *Asmussen* and *Bear* and *Marley* do not render obvious Claims 2 or 8.

**8. Petitioner Fails To Establish That *Asmussen* In Combination With *Bear* In Further View Of *Marley* Discloses Claim 10**

For Claim 10, Petitioner merely refers back to its mapping for Ground 1 and 2. As such, Patent Owner incorporates its arguments in Section III(C), as well as incorporates its arguments regarding why the combination of *Asmussen* and *Bear* and *Marley* do not render obvious Claim 3, 8, or 9.

**9. Petitioner Fails To Establish That *Asmussen* In Combination With *Bear* In Further View Of *Marley* Discloses Claim 11.**

For Claim 11, Petitioner merely refers back to its mapping for Ground 1 and 2. As such, Patent Owner incorporates its arguments in Section III(C), as well as incorporates its arguments regarding why the combination of *Asmussen* and *Bear* and *Marley* do not render obvious Claim 4, 8, 9, or 10.

**10. Petitioner Fails To Establish That *Asmussen* In Combination With *Bear* In Further View Of *Marley* Discloses Claim 12**

For Claim 12, Petitioner refers back to its mapping for Ground 1 and 2, and provides further citations to *Marley*. As such, Patent Owner incorporates its arguments in Section III(C), as well as incorporates its arguments regarding why the combination of *Asmussen* and *Bear* and *Marley* do not render obvious Claim 5, 8, 9, 10, or 11.

Petitioner notes that “Claim 12 is similar to Claim 5, except that Claim 12 recites “renders the camera and microphone operative and displays information indicating the outbound videophone call on the display *at the same time*.” Petition at 63 (emphasis in original). Of course, there are additional differences between Claim 5 (an apparatus claim) and Claim 12 (a method claim), including the absence of the “display calling message” limitation in Claim 5.

That said, Petitioner provides a handful of citations to [0018] and [0019] regarding the general activation of the camera, microphone, and display information. Petition at 64. However, none of Petitioner's citations explicitly disclose that the camera and microphone are rendered operative and displaying information indicating the outbound call at the same time.

Petitioner's reliance on its expert is equally unavailing as the obviousness arguments attempt to rewrite *Marley's* disclosure and are littered with hindsight-based conclusions. *See id.* 64-65 (citing to Ex. 1003, ¶¶180-181).

The combination of *Asmussen* in view of *Bear* in further view of *Marley* does not disclose each limitation for Claim 12.

**11. Petitioner Fails To Articulate Any Rational Underpinning For Petitioner's Obviousness Combination Of *Asmussen*, *Bear*, And *Marley***

For Claims 1-5 and 8-12, Patent Owner incorporates its arguments in Section III(C), as well as incorporates its arguments regarding why the combination of *Asmussen* and *Bear* and *Marley* do not render obvious Claims 1-5 and 8-12.

Petitioner makes the same mistakes with respect to the attempted combination of *Marley* with *Asmussen* and *Bear*. As an example, for element 1(c)

Petitioner relies on the disclosure of both *Asmussen* (by Petitioner cross-referencing to “Ground 1, Claim 1(c)”) and *Marley* for Claim 1(c). Petition at 49. By relying on both *Asmussen* and *Marley*, Petitioner has not clearly articulated what is missing from *Asmussen* or, more generally the combination of *Asmussen* and *Bear* since that combination (with *Marley*) is Ground 2. Petitioner does not say this limitation is missing from *Asmussen* (just the opposite, see Petition at 31-33), but provides arguments contingent on *Maxell’s* interpretation of the claim language.

Moreover, for Claim 2, Petitioner states that Claim 2 is dependent on Claim 1, which is allegedly rendered obvious by the combination of (1) *Asmussen* and *Bear*, or (2) *Asmussen*, *Bear*, and *Marley*. See Petition at 50.

But Petitioner then argues that the combination for Claim 2 is *Asmussen* and *Marley*. *Id.* at 52-53. Petitioner does not explain what is missing from *Asmussen* or why *Bear*—necessary for Ground 2 (as well as Ground 1)—disappeared from the analysis for Claim 2.

Similarly, Claim 5 depends on Claim 4 and, as Petitioner claims, Claim 4 (and Claim 3) are allegedly taught by the combination of *Asmussen*, *Bear*, and *Marley*. Petition at 53-56. Petitioner then states that “[a]s mapped for this Ground

2, *Asmussen* in combination with *Marley* teachers [sic] or renders obvious the limitations of Claim 5.” Petition at 56. Petitioner again does not explain what happened to *Bear*—necessary for Ground 2 (as well as Ground 1)—or what is missing from *Asmussen* for Claim 5.

Without explaining what is missing from *Asmussen* (and also why *Bear* is omitted despite it being part of Ground 2) for these elements/claims, it is unclear why a person of ordinary skill would turn to the teachings of *Marley* for an element that, according to Petitioner, is also taught by the primary reference (*Asmussen*) or the combination of *Asmussen* and *Bear*. See *LG Elecs.*, IPR2016-00197, Paper No. 7, at 8. Both Patent Owner and the Board have to speculate as to what Petitioner’s basis is for relying on the secondary reference.

Accordingly, because Petitioner fails to identify what is missing from *Asmussen* or the combination of *Asmussen* and *Bear* (as is required for Ground 2) such that a POSITA would turn to the teachings of *Marley* for multiple claim limitations, the Petition fails to show “sufficiently why a POSITA—without improper hindsight—would have combined . . . [the two references] to account for all the features of the challenged claims . . . .” *Id.* at 9. Therefore, Petitioner has not

established a reasonable likelihood that it would prevail in showing that any of the challenged claims would have been obvious over *Asmussen* and *Bear* and *Marley*.

**a. Petitioner Fails To Explain What It Is Combining From Each Reference**

Petitioner confusingly relies on both *Asmussen* and *Marley* for Claim 1(c), again while completely ignoring that *Bear* is part of Ground 2, and thus fails to clearly articulate what it is combining from each reference to arrive at the claimed invention. Petitioner never explains what allegedly obvious combination Petitioner is advancing as the basis for its asserted ground. This is improper.

**b. Petitioner Fails To Explain How It Is Combining Each Reference**

The Petition fails to provide any explanation as to why a person of ordinary skill in the art would have been motivated to include: (1) a communication apparatus including a display and all components in a single housing (Claim 1(c)); (2) restarting the first digital information after the videophone call is finished (Claim 2); (3) rendering the camera and microphone operative when the processor receives an input for an outbound call and displaying information indicating the outbound call on the display calling message (Claim 5); and (4) the step upon receiving an input for an outbound call, rendering the camera and microphone operative and displaying information indicating the outbound call on the display at

the same time (Claim 12) in the combination of *Asmussen* and *Bear* (per Ground 2) by relying on the teachings of *Marley* given the particular design requirements of each system, as further discussed below.

As discussed below, the design requirements for the combination of *Asmussen* and *Bear* (per Ground 2) are substantially different than the system in *Marley*. In addition, a POSITA would not be motivated to combine the teachings of the combination of *Asmussen* and *Bear* with *Marley* because they are directed to solving different problems and use different structures to solve these problems. Petitioner has not considered the three references as a whole and has not accounted for these differences. Instead, Petitioner selected portions of each reference and used hindsight to assemble a new system without accounting for the different objectives and goals of the systems in the combination of *Asmussen* and *Bear* to be used with *Marley*.

“To establish that a particular combination of references would have been obvious, Petitioner must explain both *how* and *why* one of ordinary skill in the art would have combined the references to produce the claimed invention.” *Guangdong Alison Hi-Tech Co., Ltd. v. Aspen Aerogels, Inc.*, IPR2017-00152, Paper 8 at 16 (P.T.A.B. Mar. 23, 2017) (citing *Trivascular, Inc. v. Samuels*, 812



F.3d 1056, 1066 (Fed. Cir. 2016) (emphasis in original). Here no such “how” and “why” have been provided by Petitioner.

A POSITA would not be motivated to modify *Asmussen*, a set top box system, to include an A/V capture application designed for use in a personal computer as described in *Bear*. See Section III(C). The systems of *Asmussen* and *Bear* are different and were solving different problems, and Petitioner provide only hindsight-based reasoning for combining the two references.

Compounding that mistake, Petitioner never explains how a POSITA would implement another set-top box system as discussed in *Marley* to the now hybrid set-top box/personal computer combination of *Asmussen* and *Bear*. For each of the discussed combinations in Claims 1(c), 2, 5, and 12, Petitioner improperly focused on and explained *only* how a POSITA would modify *Asmussen alone* to be combined with *Marley* (e.g. the modification of “*Asmussen’s* microprocessor”) and *not* how a POSITA would have modified the *combination of Asmussen and Bear* (e.g., the modification of *Asmussen/Bear* processor) as required for Ground 2. See Petition at 49-56, 60-61, 65-66.

Moreover, Petitioner provides hindsight-based, conclusory reasoning to (improperly) combine *Asmussen* with *Marley* (while ignoring *Bear*) for Claims 1(c), 2, 5, and 12. The Board should give this reasoning no weight.

For all these reasons, Petitioner has failed to show obviousness of Claims 1-5 and 8-12 and institution of Ground 2 should be denied.

**F. Ground 3: Petitioner Fails To Establish That Claims 5 and 12 Are Obvious Over *Asmussen* In View Of *Bear* And In Further View Of *Marley* and *DeFazio***

For Claim 5, Petitioner refers back to its mapping for Ground 2. As such, Patent Owner incorporates its arguments in Section III(C), as well as incorporates its arguments regarding why the combination of *Asmussen* and *Bear* and *Marley* do not render obvious Claims 1-5 and 8-12.

For Claim 12, Petitioner refers back to its mapping for Ground 2 and Ground 3, Claim 5. As such, Patent Owner incorporates its arguments in Section III(C), its arguments regarding why the combination of *Asmussen* and *Bear* and *Marley* do not render obvious Claims 1-5 and 8-12, and its arguments why the combination of *Asmussen* and *Bear* and *Marley* and *DeFazio* do not render obvious Claim 5.

**1. Petitioner Fails To Articulate Any Rational Underpinning for Petitioner's Obviousness Combination of *Asmussen*, *Bear*, *Marley*, and *DeFazio***

For Claims 5 and 12, Patent Owner incorporates its arguments in Section

III(C), as well as incorporates its arguments regarding why the combination of *Asmussen* and *Bear* and *Marley* do not render obvious Claims 1-5 and 8-12.

**a. Petitioner Fails To Identify What Is Missing From the Primary Reference**

For Claims 5 and 12, Petitioner discusses only *Marley* and *DeFazio*. See Petition 66-69. By relying on both *Marley* and *DeFazio*, Petitioner has not clearly articulated what is missing from *Marley* or, more generally the combination of *Asmussen*, *Bear*, and *Marley* since that combination (with *DeFazio*) is Ground 3. For Claim 5, Petitioner couches the use of *DeFazio* as contingent on Maxell's understanding of the combination of *Asmussen* and *Marley*, but Petitioner once again ignores *Bear* in Ground 3. See Petition at 66. For Claim 12, Petitioner uses *Marley* and *DeFazio* together for the "at the same time" limitation. See *id.* at 68-69. But Petitioner used *Marley* to supplement the combination of *Asmussen* and *Bear* just a few pages earlier for Claim 12 in Ground 2. See *id.* at 63-66.

Without explaining what is missing from for the *Asmussen/Bear/Marley* combination for these elements/claims, it is unclear why a person of ordinary skill would turn to the teachings of *DeFazio* for an element that, according to Petitioner, is also taught by *Marley*. *LG Elecs.*, IPR2016-00197, Paper No. 7, at 8. Both Patent

Owner and the Board have to speculate as to what Petitioner's basis is for relying on the secondary reference.

Accordingly, because Petitioner fails to identify what is missing from *Asmussen* or the combination of *Asmussen*, *Bear*, and *Marley* (as is required for Ground 3) to motivate a POSITA to turn to *DeFazio* for multiple claim limitations, the Petition fails to show “sufficiently why a POSITA—without improper hindsight—would have combined . . . [the two references] to account for all the features of the challenged claims . . . .” *Id.* at 9. Therefore, Petitioner has not established a reasonable likelihood that it would prevail in showing that any of the challenged claims would have been obvious over *Asmussen*, *Bear*, *Marley*, and *DeFazio*.

**b. Petitioner Fails To Explain What It Is Combining From Each Reference**

Petitioner confusingly relies on both *Asmussen* and *DeFazio* for Claim 5, while again completely ignoring *Bear* and *Marley*, thus failing to clearly articulate what it is combining from each reference to arrive at the claimed invention. Similarly, Petitioner combines *Marley* and *DeFazio* for Claim 12 without any explanation how the *Marley-DeFazio* combination fits into the broader *Asmussen*, *Bear*, *Marley*, and *DeFazio* combination. As such, Petitioner never explains what

allegedly obvious combination Petitioner is advancing as the basis for its asserted ground. This is confusing and improper. Petitioner does not explain whether it contends that each reference contains all the limitations of a given element or relies on a combination of the cited references for disclosure of all limitations of the element. This failure to explain the relevance of the two references to its asserted grounds violates the Board's rules. 37 C.F.R. §42.22(a)(2); *Whole Space*, IPR2015-00488, Paper 14, at 9-12 (denying institution for failure to satisfy section 42.22(a)(2) for advancing confusing obviousness combinations for the Board to interpret).

**c. Petitioner Fails To Explain How It Is Combining Each Reference**

The Petition fails to provide any explanation as to why a person of ordinary skill in the art would have been motivated to include, on an outgoing call, displaying the name of a called party, in the combination of *Asmussen* and *Bear* and *Marley* (per Ground 3) by relying on the teachings of *DeFazio* given the particular design requirements of each system, as further discussed below.

As discussed below, the design requirements for the combination of *Asmussen*, *Bear*, and *Marley* (per Ground 3) are substantially different than the system in *DeFazio*. In addition, a POSITA would not be motivated to combine the

teachings of *Asmussen*, *Bear*, and *Marley* with *DeFazio* because they are directed to solving different problems and use different structures to solve these problems. Petitioner has not considered the four references as a whole and has not accounted for these differences. Instead, Petitioner selected portions of each reference and used hindsight to assemble a new system without accounting for the different objectives and goals of the systems in the combination of *Asmussen*, *Bear*, and *Marley* to be used with *DeFazio*.

As previously discussed in Sections III(C)(2) and III(D)(2)-(3), a POSITA would not be motivated to modify *Asmussen*, a set top box system, to include both an A/V capture application designed for use in a personal computer as described in *Bear* and another set top box system in *Marley*.

Compounding that mistake, Petitioner never explains how a POSITA would implement a names database for call identification services as discussed in *DeFazio* to the now hybrid set-top box/personal computer combination of *Asmussen*, *Bear*, and *Marley*. For the discussed combination in Claim 5, Petitioner improperly focused on and explained **only** how a POSITA would modify *Asmussen alone* to be combined with *DeFazio* (e.g. the modification of *Assumen's* “display message”) and **not** how a POSITA would have modified the **combination**

*of Asmussen, Bear, and Marley* (e.g., the modification of *Asmussen/Bear/Marley* display message) as required for Ground 3. *See* Petition at 67-68. Similarly, Petitioner combines *Marley* and *DeFazio* regarding the “at the same time” limitation for Claim 12, but Petitioner provided an explanation only for those two references and not with respect to all four references.

Moreover, Petitioner provides hindsight-based, conclusory reasoning to (improperly) combine *Asmussen* with *DeFazio* (while ignoring *Bear* and *Marley*) for Claim 5, and combining *Marley* with *DeFazio* (with ignoring *Asmussen* and *Bear*) for Claim 12. The Board should give this reasoning no weight.

For all these reasons, Petitioner has failed to show obviousness of Claims 5 and 12 and institution of Ground 3 should be denied.

**G. Ground 4: Petitioner Fails To Establish That Claims 1 And 8 Are Obvious Over *Asmussen* In View Of *Bear* And In Further View of *Lindstrom***

For Claims 1 and 8, Petitioner refers back to its mapping for Grounds 1 and 2 for all limitations other than Claim 1(a). Petitioner then provides additional disclosure from *Lindstrom* that allegedly fills in the lack of disclosure of Claim 1(a) in *Asmussen* (and the *Asmussen/Bear* combination as previously discussed in Ground 1).

As such, Patent Owner incorporates its arguments in Section III(C), as well as its arguments regarding why the combination of *Asmussen* and *Bear* and *Marley* do not render obvious Claims 1-5 and 8-12.

**a. Petitioner Fails To Identify What Was Missing From The Primary Reference**

For example, as noted above, Petitioner relies on the disclosure of both *Asmussen* and *Lindstrom* for Claims 1(a). Petition at 69-73. By relying on both *Asmussen* and *Lindstrom*, Petitioner has not clearly articulated what is missing from *Asmussen* or more generally the combination of *Asmussen* and *Bear* since that combination (with *Lindstrom*) is Ground 4. Petitioner never explains that *Asmussen* is missing this element, instead citing to *Asmussen*'s collective tuner 603 and receiver 750, and hedging that, if the tuner/receiver does not disclose the claimed "network interface," then *Lindstrom* teaches the limitation. *See id.*; *see also id.* at 21-29. Without clearly explaining what is missing from *Asmussen* for this element, it is unclear why a person of ordinary skill would turn to the teachings of *Lindstrom* for an element that, according to Petitioner, is also taught by the primary reference. *See LG Elecs.*, IPR2016-00197, Paper No. 7, at 8. Both Patent Owner and the Board have to speculate as to what Petitioner's basis is for relying on the secondary reference.



Accordingly, because Petitioner fails to identify what is missing from *Asmussen* or the combination of *Asmussen* and *Bear* (as is required for Ground 4) such that a POSITA would turn to the teachings of *Lindstrom* for Claim 1(a), the Petition fails to show “sufficiently why a POSITA—without improper hindsight—would have combined . . . [the two references] to account for all the features of the challenged claims . . . .” *Id.* at 9. Therefore, Petitioner has not established a reasonable likelihood that it would prevail in showing that any of the challenged claims would have been obvious over *Asmussen*, *Bear*, and *Lindstrom*.

**b. Petitioner Fails To Explain What It Is Combining From Each Reference**

Petitioner confusingly relies on both *Asmussen* and *Lindstrom* for Claim 1(a), again while completely ignoring that *Bear* is part of Ground 4, and thus fails to clearly articulate what it is combining from *Lindstrom* to the *Asmussen/Bear* combination to arrive at the claimed invention.

Petitioner never explains what allegedly obvious combination Petitioner is advancing as the basis for its asserted ground. This is confusing and improper.

Petitioner does not explain whether it contends that each reference contains all the limitations of a given element or relies on a combination of the cited references for disclosure of all limitations of the element.

**c. Petitioner Fails To Explain How It Is Combining Each Reference**

The Petition fails to provide any explanation as to why a POSITA would have been motivated to include a single out-of-band tuner for receiving video-on-demand and videophone information in the combination of *Asmussen* and *Bear* (per Ground 4) by relying on the teachings of *Lindstrom* given the particular design requirements of each system, as further discussed below.

As discussed below, the design requirements for the combination of *Asmussen* and *Bear* (per Ground 4) are substantially different than the system in *Lindstrom*. In addition, a POSITA would not be motivated to combine the teachings of the combination of *Asmussen* and *Bear* with *Lindstrom* because they are directed to solving different problems and use different structures to solve these problems. Petitioner has not considered the three references as a whole and has not accounted for these differences. Instead, Petitioner selected portions of *Asmussen* and *Lindstrom* (completely ignoring *Bear*) and used hindsight to assemble a new system without accounting for the different objectives and goals of the systems in the combination of *Asmussen* and *Bear* to be used with *Lindstrom*.

As previously discussed in Sections III(C)(2) and III(D)(2)-(3), a POSITA would not be motivated to modify *Asmussen*, a set top box system, to include both

an A/V capture application designed for use in a personal computer as described in *Bear* and another set top box system in *Lindstrom*. The systems of *Asmussen*, *Bear*, and *Lindstrom* are different and were solving different problems, and Petitioner provides only hindsight-based reasoning for combining the three references.

Compounding that mistake, Petitioner never explains how a POSITA would implement a single out-of-band tuner for receiving video-on-demand and videophone information as discussed in *Lindstrom* to the now hybrid set-top box/personal computer combination of *Asmussen* and *Bear*. For the discussed combination in Claim 1(a), Petitioner improperly focused on and explained **only** how a POSITA would modify *Asmussen alone* to be combined with *Lindstrom* (e.g. the modification of *Assumen's* receiver 750) and **not** how a POSITA would have modified the **combination of *Asmussen and Bear*** as required for Ground 4. *See* Petition at 72-73.

Moreover, Petitioner provides hindsight-based, conclusory reasoning to (improperly) combine *Asmussen* with *Lindstrom* (while ignoring *Bear*) for Claim 1(a). The Board should give this reasoning no weight.

For all these reasons, Petitioner has failed to show obviousness of Claims 1 and 8 and institution of Ground 4 should be denied.

**H. Ground 5: Petitioner Fails To Establish That Claims 1-5 And 8-12 Are Obvious Over *Asmussen* In View Of *Bear* And *Lindstrom* In Further View Of *Marley***

For Claims 1-5 and 8-12, Petitioner refers back to its mapping for Ground 2 for all limitations other than Claim 1(a). Petitioner does not, however, incorporate by reference its discussion of *Lindstrom* for Claim 1(a) as set forth in Ground 4. Accordingly, this is another independent reason to deny this Ground—the combination, per Petitioner’s incorporation, does not disclose Claim 1(a).

Moreover, Patent Owner incorporates its arguments in Section III(C), its arguments regarding why the combination of *Asmussen* and *Bear* and *Marley* do not render obvious Claims 1-5 and 8-12, and its arguments regarding why the combination of *Asmussen* and *Bear* and *Lindstrom* do not render obvious Claims 1 and 8.

**I. Ground 6: Petitioner Fails To Establish That Claims 5 and 12 Are Obvious Over *Asmussen* In View Of *Bear*, *Lindstrom*, and *Marley* And In Further View Of *DeFazio***

For Claims 5 and 12, Petitioner refers back to its mapping for Ground 3 for all limitations other than Claim 1(a). Petitioner does not, however, incorporate by reference its discussion of *Lindstrom* for Claim 1(a) as set forth in Ground 4. Accordingly, this is another independent reason to deny this Ground—the combination, per Petitioner’s incorporation, does not disclose Claim 1(a).

Moreover, Patent Owner incorporates its arguments in Section III(C), its arguments regarding why the combination of *Asmussen* and *Bear* and *Marley* do not render obvious Claims 1-5 and 8-12, its arguments regarding why the combination of *Asmussen*, *Bear*, *Marley*, and *DeFazio* do not render the challenged claims unpatentable, its arguments regarding why the combination of *Asmussen* and *Bear* and *Lindstrom* do not render obvious Claims 1 and 8, and its arguments regarding why the combination of *Asmussen*, *Bear*, *Lindstrom*, and *Marley* do not render obvious Claims 1-5 and 8-12.

#### IV. CONCLUSION

The Board should not institute *inter partes* review on any of the grounds set forth in the Petition. As Patent Owner has shown, Petitioner has not established a reasonable likelihood that the cited references render any of the challenged claims of the '991 Patent unpatentable.

Dated: April 16, 2020

Respectfully submitted,

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**CERTIFICATION PURSUANT TO 37 C.F.R. § 42.24(d)**

Pursuant 37 C.F.R. 42.24(d), the undersigned certifies that this Preliminary Response and complies with the type-volume limitation of 37 C.F.R. §42.24(a). The word count application of the word processing program used to prepare this Preliminary Response indicates that the Preliminary Response contains 13,902 words, excluding the parts of the brief exempted by 37 C.F.R. § 42.24(a).

Respectfully submitted,

Date: April 16, 2020

By:

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**CERTIFICATE OF SERVICE**

I hereby certify that on this 16th day of April, 2020, a copy of the attached **PATENT OWNER'S PRELIMINARY RESPONSE** was served by electronic mail to the attorneys of record, at the following addresses:

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