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UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF WASHINGTON  
AT SEATTLE

GENUINE ENABLING TECHNOLOGY  
LLC.,  
  
  Plaintiff,  
  
  v.  
  
NINTENDO CO., LTD. and NINTENDO OF  
AMERICA INC.,  
  
  Defendants.

Case No. C19-351RSM  
  
ORDER RE: CLAIM CONSTRUCTION  
AND GRANTING DEFENDANT’S  
MOTION FOR SUMMARY JUDGMENT

**I. INTRODUCTION**

This matter comes before the Court on the Defendants Nintendo Co., Ltd. and Nintendo of America, Inc. (“Nintendo”)’s Motion for Summary Judgment on the grounds of noninfringement and invalidity. Dkt. #90. Plaintiff Genuine Enabling Technology (“GET”) opposes Nintendo’s Motion. Dkt. #98. Parties submitted briefs regarding Claim Construction, Dkts. ## 85, 86, 92, 93, and oral argument was held on February 24, 2020 pursuant to *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995). Having reviewed the parties’ briefing, the appropriate portions of the records, and the relevant law, and having considered the

ORDER RE: CLAIM CONSTRUCTION AND GRANTING DEFENDANT’S MOTION FOR SUMMARY JUDGMENT - 1

1 arguments and evidence presented in the *Markman* Hearing, the Court GRANTS Nintendo's  
2 motion for summary judgment.<sup>1</sup>

## 3 II. BACKGROUND

### 4 A. The '730 Patent

5 GET brings this action against Nintendo claiming that five Nintendo products infringe  
6 U.S. Patent No. 6,219,730 (the '730 patent): (1) the Wii Remote and Wii Remote Plus; (2) the  
7 Nunchuk; (3) the WiiU Game Pad; (4) the Switch Joy-Con Controllers' and (5) the Nintendo  
8 Switch Pro Controller. The patent, owned by inventor Nghi Nho Nguyen, is entitled "Method  
9 and Apparatus for Producing a Combined Data Stream and Recovering Therefrom the Respective  
10 User Input Stream and at Least One Input Signal" and was issued by the United States Patent and  
11 Trademark Office on April 17, 2001. Dkt. #86-1. GET claims that Nintendo's controllers and  
12 console systems contain features and/or functionality that infringe claims 10, 14, 15, 16, 17, 18,  
13 21, 22, 23, and 25 of the '730 patent.  
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16 The patented technology involves how a user-input device (UID) may communicate  
17 remotely with a computer so that different input signals are received and transmitted via the same  
18 link. Typical UIDs, as identified in the patent, include a mouse, trackball, or keyboard. *Id.* at col.  
19 1, lines 16-18. Computers also use "various kinds of input/output ("I/O") cards or devices to  
20 handle I/O signals or information." *Id.* at col. 1, lines 16-17. Typical I/O cards include a "sound  
21 card handling I/O speech signals and the fax/modem device transferring information over the  
22 telephone line." *Id.* at 19-21. Because the devices and cards share common computer resources,  
23 the proliferation of cards and devices that offer new functions creates a problem of how to  
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27 <sup>1</sup> Parties have requested oral argument on the summary judgment motion, *see* Dkt. #90 at 1; Dkt. #98 at 1,  
28 but the court finds oral argument unnecessary to its disposition of the motion, *see* Local Rules LCR  
7(b)(4).

1 efficiently use limited computer resources shared between them. *Id.* at 22-23; 33-36 (“As  
 2 computer technology advances, more types of cards and devices are offered for richer sets of  
 3 functions; efficient use of computer resources becomes critical.”)

4 In light of this computer resource problem, Mr. Nguyen designed the claimed invention  
 5 to “offer[] a new kind of UID utilizing the computer resources efficiently and enabling a mode  
 6 of remote interaction between the computer and its user.” *Id.* at 42-44. GET explains that Mr.  
 7 Nguyen devised the ‘730 patent to solve a “collision problem” created by the transmission of  
 8 slow-varying and fast-varying user input signals to a computer. *See Markman Hrg. Tr.*, 02/24/20,  
 9 at 6:14-15. Normally, when these slow and fast signals are transmitted together, they collide  
 10 with one another and corrupt the data. The ‘730 patent purportedly solves this problem through  
 11 a user interface and novel framer that synchronizes the two data streams and encodes them into  
 12 a combined data stream for transmission to the computer. *Id.* at 7:14-15. The computer can then  
 13 receive the combined data stream uncorrupted, which creates the ability to receive the data from  
 14 multiple input sources, as depicted below:  
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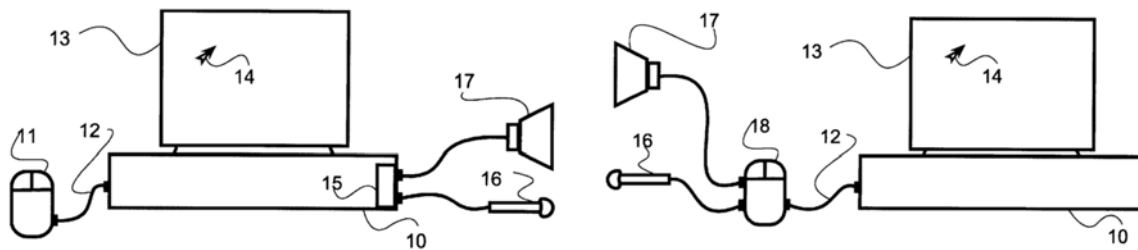


FIG. 1A - PRIOR ART

FIG. 1B

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 23 Dkt. #86-1 at 4. Figure 1B illustrates one embodiment of the invention, wherein a UID (11, Fig.  
 24 1A) and sound card (15, Fig. 1A) may be substituted with an “inventive apparatus” (18, Fig. 1B)  
 25 that “singly provides both functions.” *Id.* at col. 3, lines 30-41. In other words, the user may  
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1 simultaneously use apparatus 18 as a conventional UID while speaking into the microphone  
2 without requiring the use of a sound card and its computer resources.

### 3 **B. Rejection over Yollin**

4 During prosecution of the '730 patent, the U.S. Patent and Trademark Office ("PTO")  
5 Examiner initially rejected Mr. Nguyen's patent based on prior art, U.S. Patent No. 5,990,866  
6 ("Yollin") titled "Pointing Device With Integrated Physiological Response Detection Facilities,"  
7 issued November 23, 1999. Dkt. #86-2 at 54. In rejecting the '730 patent, the Examiner cited  
8 Yollin's teaching that "the controller generates a composite control signal" and discloses "a  
9 framer receiving the user-input stream and the input stream to produce a combined data stream."  
10 *Id.* In response, Mr. Nguyen distinguished his patent on the basis that Yollin did not address the  
11 collision problem created by combining slow-varying and fast-varying signals. Instead, he  
12 explained, while Yollin utilizes various configurations for receiving input from a motion  
13 translation unit, user selection unit and physiological response sensor, and for processing their  
14 information prior to communication to the host system, "Yollin only uses the configuration *to*  
15 *receive the slow varying signal coming from the physiological response sensor(s).* Yollin is not  
16 motivated and does not anticipate their use for receiving signals *containing audio or higher*  
17 *frequencies in place of the physiological response sensor(s).*" *Id.* at 70 (emphases added). Thus,  
18 the Yollin patent does not provide a solution to the inevitable collision problem that would occur  
19 if such slow-varying signals are combined with a high-frequency signal.  
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24 Mr. Nguyen asserted that his '730 patent, in contrast, addressed high-frequency signals  
25 that "come[] from a source different from those of motion and selection units, will run  
26 asynchronously relative to, and collide with, the other signals." *Id.* at 71. He further explained  
27 that "[the] invention describes . . . how to combine the data from a UID (mouse) and . . . a  
28

1 high-frequency signal, via a framer, which is unique and novel.” *Id.* Based on this patent  
2 prosecution history, the parties agree that the “fast-varying” input signals covered by the ‘730  
3 patent are signals that have “audio or higher frequencies.” *See* Dkt. 84-1 at 4. However, they  
4 dispute whether Mr. Nguyen further disavowed the scope of “input signal” during prosecution  
5 when he distinguished “fast-varying” frequencies addressed by his patent from the “slow-  
6 varying” frequencies at issue in Yollin.  
7

### 8 C. The Asserted Claims

9 The parties submitted a Joint Claim Construction and Prehearing Statement that identified  
10 the top ten disputed claim terms. Dkt. #84. Claims 1, 14, 16, and 21 are independent claims.  
11 Claims 10, 15, 17, 18, 22, 23, and 25 are dependent claims. Claim 10 depends on claim 1, claim  
12 15 depends on claim 14, claims 17-18 depend on claim 16, and claims 22-25 depend on claim  
13 21. The following are the relevant claims with disputed terms in bold:  
14

15 1: A user input apparatus operatively coupled to a computer via a communication  
16 means **additionally receiving at least one input signal**, comprising: user input  
17 means for producing a user input **stream; input means for producing the at least**  
18 **one input signal**; converting means for receiving the at least one **input signal** and  
19 producing therefrom an input **stream**; and **encoding means for synchronizing the**  
20 **user input stream with the input stream and encoding the same into a**  
21 **combined data stream** transferable by the communication means.

22 10: The apparatus of claim 1 **wherein the input means is an input transducer.**

23 14: A programming method, executed by a computer communicatively coupled via  
24 a communication link to a user input means having **means for synchronizing and**  
25 **encoding a user input stream and at least one additional input signal into a**  
26 **combined data stream**, comprising the steps of: initializing the communication  
27 link; servicing a single resource service interrupt for receiving the **combined data**  
28 **stream**; and recovering from the **combined data stream** respective information of  
the user input means and of the at least one additional **input signal**.

15: The programming method of claim 14 further comprises transmitting, via the  
**communication link**, output information, the output information being received  
and converted by a converter residing in the **user input means** into at least one  
**output signal**.

1 16: An apparatus linked to a computer by a communication link, functioning as a  
2 user input device and additionally receiving at least one **input signal**, comprising:  
3 a user input device producing a user input **stream**; an **input port** receiving at least  
4 one **input signal**; a converter receiving the at least one **input signal** for producing  
5 an input **stream**; and a **framer synchronizing the user input stream with the**  
6 **input stream and encoding the same into a combined data stream** transferable  
7 by the communication link.

8 17: The apparatus of claim 16 further comprises **means for receiving an output**  
9 **stream from the computer via the communication link** and **means for**  
10 **converting the output stream into at least one output signal**.

11 18: The apparatus of claim 16 wherein the converter further comprises an **output**  
12 **port** wherein the framer further receives an output **stream** from the computer via  
13 the communication link, the output **stream** being further received and converted by  
14 the converter into at least one output signal going to the **output port**.

15 21: A user input apparatus operatively coupled to a computer via a communication  
16 link **receiving user input signals and additionally at least one digital input**  
17 **signal**, comprising: a user input device for producing a user input **stream**; an **input**  
18 **port** for producing the at least one **digital input signal**; and a **framer for keeping**  
19 **the user input stream and the at least one digital input signal in synchrony and**  
20 **encoding the same into a combined data stream** transferable to the computer by  
21 the communication link.

22 22: The apparatus of claim 21 wherein the **framer** further receives output  
23 information from the computer to provide at least one **output signal**.

24 23: The apparatus of claim 22 further comprises an output transducer converting  
25 the at least one **output signal** into output energy.

26 25: The apparatus of claim 21 wherein the **input port** receives the at least one  
27 **digital input signal** from an external device.

28 Dkt. #84 at 2-6; *see also* Dkt. #84-1.

#### D. Procedural History

GET filed its Complaint in the U.S. District Court for the District of Delaware on February 8, 2017. Dkt. #1. On March 11, 2019, the case was transferred to this Court. Dkt. #47. Initial briefing on claim construction was filed by GET and Nintendo on January 21, 2020, Dkts. #85, #86, with responsive briefing on February 3, 2020, Dkts. #92, #93. Oral argument was held

1 on February 24, 2020. On January 23, 2020, Nintendo moved for summary judgment dismissal  
2 of GET's infringement claims. Dkt. #90.

### 3 III. LEGAL STANDARD

#### 4 A. Summary Judgment

5 Summary judgment is appropriate where "the movant shows that there is no genuine  
6 dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed.  
7 R. Civ. P. 56(a); *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247, (1986). Material facts are  
8 those which might affect the outcome of the suit under governing law. *Id.* at 248. In ruling on  
9 summary judgment, a court does not weigh evidence to determine the truth of the matter, but  
10 "only determine[s] whether there is a genuine issue for trial." *Crane v. Conoco, Inc.*, 41 F.3d  
11 547, 549 (9th Cir. 1994) (citing *Federal Deposit Ins. Corp. v. O'Melveny & Meyers*, 969 F.2d  
12 744, 747 (9th Cir. 1992)).

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15 On a motion for summary judgment, the court views the evidence and draws inferences  
16 in the light most favorable to the non-moving party. *Anderson*, 477 U.S. at 255; *Sullivan v. U.S.*  
17 *Dep't of the Navy*, 365 F.3d 827, 832 (9th Cir. 2004). The Court must draw all reasonable  
18 inferences in favor of the non-moving party. *See O'Melveny & Meyers*, 969 F.2d at 747, *rev'd*  
19 *on other grounds*, 512 U.S. 79 (1994). However, the non-moving party must make a "sufficient  
20 showing on an essential element of her case with respect to which she has the burden of proof"  
21 to survive summary judgment. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). Where the  
22 non-moving party fails to properly support an assertion of fact or fails to properly address the  
23 moving party's assertions of fact, the Court will accept the fact as undisputed. Fed. R. Civ. P.  
24 56(e). As such, the Court relies "on the nonmoving party to identify with reasonable particularity  
25 the evidence that precludes summary judgment." *Keenan v. Allan*, 91 F.3d 1275, 1278-79 (9th  
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1 Cir. 1996) (quotation marks and citations omitted). The Court need not “comb through the record  
2 to find some reason to deny a motion for summary judgment.” *Carmen v. San Francisco Unified*  
3 *Sch. Dist.*, 237 F.3d 1026, 1029 (9th Cir. 2001).

4 “A determination of patent infringement consists of two steps: (1) the court must first  
5 interpret the claim, and (2) it must then compare the properly construed claims to the allegedly  
6 infringing device.” *Playtex Prods, Inc. v. Procter & Gamble Co.*, 400 F.3d 901, 905–06 (Fed.  
7 Cir. 2005). “Direct infringement requires proof by preponderant evidence that the defendant  
8 performs (if a method claim) or uses (if a product claim) each element of a claim, either literally  
9 or under the doctrine of equivalents.” *Cheese Sys., Inc. v. Tetra Pak Cheese & Powder Sys., Inc.*,  
10 725 F.3d 1341, 1348 (Fed. Cir. 2013). Nintendo seeks summary judgment of noninfringement  
11 and invalidity. *See* Dkt. #90 at 1.

14 1. Noninfringement

15 To support a summary judgment of noninfringement, “it must be shown that, on the  
16 correct claim construction, no reasonable jury could have found infringement on the undisputed  
17 facts or when all reasonable factual inferences are drawn in favor of the patentee.” *Netword, LLC*  
18 *v. Centraal Corp.*, 242 F.3d 1347, 1353 (Fed. Cir. 2001). “Summary judgment of  
19 noninfringement under the doctrine of equivalents is appropriate if no reasonable jury could  
20 determine two elements to be equivalent.” *Goldenberg v. Cytogen, Inc.*, 373 F.3d 1158, 1164  
21 (Fed. Cir. 2004) (internal quotation marks omitted). Infringement, either literal or under the  
22 doctrine of equivalents, is a question of fact. *See Crown Packaging Tech., Inc. v. Rexam Beverage*  
23 *Can Co.*, 559 F.3d 1308, 1312 (Fed. Cir. 2009).

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1           2. Invalidity

2           Summary judgment of invalidity is appropriate if the patent claim fails to “particularly  
3 point[] out and distinctly claim[] the subject matter which the inventor or a joint inventor regards  
4 as the invention.” 35 U.S.C. § 112(b). A claim fails to satisfy this requirement and is invalid if  
5 its language, when read in light of the specification and the prosecution history, “fail[s] to inform,  
6 with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus,*  
7 *Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

9           Where summary judgment involves issues of patent validity, the party seeking to  
10 invalidate the patent must overcome a presumption that the patent is valid. *See* 35 U.S.C. § 282;  
11 *Microsoft Corp. v. i4i Ltd. P’ship*, 131 S. Ct. 2238, 2243 (2011); *U.S. Gypsum Co. v. Nat’l*  
12 *Gypsum Co.*, 74 F.3d 1209, 1212 (Fed. Cir. 1996). This presumption places the burden on the  
13 challenging party to prove the patent is invalid by clear and convincing evidence. *Microsoft*, 131  
14 S. Ct. at 2243; *U.S. Gypsum Co.*, 74 F.3d at 1212. However, “this presumption of validity does  
15 not alter the degree of clarity that § 112[] . . . demands from patent applicants; to the contrary, it  
16 incorporates that definiteness requirement by reference.” *Nautilus*, 134 S. Ct. at 2130 n.10  
17 (addressing predecessor of §112(b)).

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20           **B. Claim Construction Principles**

21           Patent claim construction is a question of law for the Court, even if the case is designated  
22 to go to a jury trial, but it may have underlying factual determinations that are reviewed for clear  
23 error. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837, 190 L. Ed. 2d 719 (2015);  
24 *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S.  
25 370, 116 S. Ct. 1384, 134 L. Ed. 2d 577 (1996). After the claims have been properly construed,  
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1 the fact-finder will compare the claims to the allegedly infringing product or process. The  
2 comparison is conducted on an element-by-element basis.

3 When interpreting claims, a court's primary focus is on the intrinsic evidence of record,  
4 which consists of the claims, the specification, and the prosecution history. *Phillips v. AWH*  
5 *Corp.*, 415 F.3d 1303, 1314-17 (Fed. Cir. 2005) (en banc). A court begins by examining the  
6 claim language, *id.* at 1312, which should be viewed through the lens of a person of "ordinary  
7 skill in the relevant art at the time of the invention." *SanDisk Corp. v. Memorex Prods., Inc.*,  
8 415 F.3d 1278, 1283 (Fed. Cir. 2005). Generally, a court should give the claim's words their  
9 "ordinary and customary meaning." *Phillips*, 415 F.3d at 1312-13 (quotation omitted). In  
10 construing a claim term's ordinary meaning, the context in which a term is used must be  
11 considered. *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003).

14 However, the claims "must be read in view of the specification, of which they are a part."  
15 *Phillips*, 415 F.3d at 1315 (quoting *Markman*, 52 F.3d at 979. Additionally, the doctrine of claim  
16 differentiation disfavors reading a limitation from a dependent claim into an independent claim.  
17 *See InterDigital Commc'ns, LLC v. Int'l Trade Comm'n*, 690 F.3d 1318, 1324 (Fed. Cir. 2012).  
18 The specification can offer "practically incontrovertible directions about a claim meaning."  
19 *Abbott Labs. v. Sandoz, Inc.*, 566 F.3d 1282, 1288 (Fed. Cir. 2009). "When consulting the  
20 specification to clarify the meaning of claim terms, courts must take care not to import limitations  
21 into the claims from the specification." *Id.* "[A]lthough the specification may well indicate that  
22 certain embodiments are preferred, particular embodiments appearing in the specification will  
23 not be read into claims when the claim language is broader than such embodiments." *Tate Access*  
24 *Floors, Inc. v. Maxcess Techns., Inc.*, 222 F.3d 958, 966 (Fed. Cir. 2000) (quotation omitted).  
25 "By the same token, the claims cannot enlarge what is patented beyond what the inventor has  
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1 described in the invention.” *Abbott Labs.*, 566 F.3d at 1288 (internal quotation omitted).  
2 “Likewise, inventors and applicants may intentionally disclaim, or disavow, subject matter that  
3 would otherwise fall within the scope of the claim.” *Id.* at 1288.

4 In addition to the specification, a court should consider the patent’s prosecution history,  
5 which consists of “the complete record of the proceedings before the PTO and includes the prior  
6 art cited during the examination of the patent.” *Phillips*, 415 F.3d at 1317. However, because  
7 the prosecution represents an “ongoing negotiation” rather than the “final product” of the  
8 negotiation, “it often lacks the clarity of the specification and thus is less useful for claim  
9 construction purposes.” *Id.* Consulting the prosecution history can, however, be helpful in  
10 determining whether the patentee disclaimed an interpretation during prosecution. *Research*  
11 *Plastics, Inc. v. Federal Packaging Corp.*, 421 F.3d 1290, 1296 (Fed. Cir. 2005). “Under the  
12 doctrine of prosecution disclaimer, a patentee may limit the meaning of a claim term by making  
13 a clear and unmistakable disavowal of scope during prosecution.” *Purdue Pharma L.P. v. Endo*  
14 *Pharm. Inc.*, 438 F.3d 1123, 1136 (Fed. Cir. 2006); *see also Chimie v. PPG Indus., Inc.*, 402 F.3d  
15 1371, 1384 (Fed. Cir. 2005) (“The purpose of consulting the prosecution history in construing a  
16 claim is to ‘exclude any interpretation that was disclaimed during prosecution.’”).  
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20 Although courts are permitted to consider extrinsic evidence, like expert testimony,  
21 dictionaries, and treatises, such evidence is generally of less significance than the intrinsic record.  
22 *Phillips*, 415 F.3d at 1317 (citing *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed.  
23 Cir. 2004)). Extrinsic evidence may not be used “to contradict claim meaning that is  
24 unambiguous in light of the intrinsic evidence.” *Id.* at 1324.  
25

26 Means-plus-function claiming occurs when a claim term is drafted in a manner that  
27 invokes 35 U.S.C. § 112(f) (previously § 112, ¶ 6). *Williamson v. Citrix Online, LLC*, 792 F.3d  
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1 1339, 1347-48 (Fed. Cir. 2015). Under this provision, an inventor may express a claim element  
2 “as a means or step for performing a specified function.” 35 U.S.C. § 112(f). Means-plus  
3 function claims allow the inventor to claim his invention in terms of the function performed, as  
4 long as he discloses in the specification the structure that performs the associated function. *See*  
5 *Med. Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1211 (Fed. Cir. 2003).  
6

7 The court must first determine whether each term is a means-plus-function limitation. To  
8 guide this inquiry, the Federal Circuit loosely follows a rebuttable presumption: if the claim term  
9 “uses the word ‘means,’” it is presumed to be a means-plus-function limitation, but if the claim  
10 term does not use “means,” it is presumed not to be. *Williamson*, 792 F.3d at 1348. The ultimate  
11 determination, however, depends upon whether claim would be understood by persons of  
12 ordinary skill in the art (“POSITA”) to give a sufficiently definite meaning for structure claimed.

13 *Id.* Construction of means-plus-function limitations involves two steps. “First, the court must  
14 determine the claimed function. Second, the court must identify the corresponding structure in  
15 the written description of the patent that performs that function.” *Applied Med. Res. Corp. v. U.S.*  
16 *Surgical Corp.*, 448 F.3d 1324, 1332 (Fed. Cir. 2006) (citation omitted).  
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#### 19 IV. DISCUSSION

20 At issue in Nintendo’s motion for summary judgment are claims 10, 14, 15, 16, 17, 18,  
21 21, 22, 23, and 25. *See* Dkt. #90. The Court will first resolve the parties’ claim construction  
22 disputes and then consider whether Nintendo infringes on the claims at issue.  
23

##### 24 A. ‘730 Patent Terms for Construction

25 The first disputed claim term is “input signal.” Parties agree that based on the patent’s  
26 prosecution history, the “fast-varying” input signals covered by the ‘730 patent are signals that  
27 have “audio or higher frequencies.” *See* Dkt. 84-1 at 4. However, they dispute whether Mr.  
28

1 Nguyen further disavowed the scope of “input signal” during prosecution.

Claims	GET’s Proposed Construction	Nintendo’s Proposed Construction
All Asserted Claims (10, 14, 15, 16, 17, 18, 21, 22, 23, 25)	A signal having an audio or higher frequency (Dkt. #84-1 at 5)	A signal containing audio or higher frequencies. Mr. Nguyen disclaimed signals that are 500 Hertz (Hz) or less. He also disclaimed signals that are generated from positional change information, user selection information, physiological response information, and other slow-varying information.  Alternatively, indefinite. (Dkt. #84-1 at 5)

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11 The Court agrees with parties that “audio or higher frequency” is the appropriate  
12 construction of “input signal.” In distinguishing the ‘730 patent from Yollin, the patentee relied  
13 on this term to differentiate the “slow-varying” positional change, user selection, and  
14 physiological response information covered by Yollin from the “fast-varying” signals that would  
15 pose a collision problem if combined with the slow-varying signals. *See* Dkt. #86-2 at 70-71.  
16 Furthermore, the Patent Trial and Appeal Board (“PTAB”) adopted this construction in an *inter*  
17 *partes* review proceeding. *See* Dkt. #86-4 at 12. While the PTAB’s construction is not binding,  
18 a district court may take it into consideration when its construction is “similar to that of a district  
19 court’s review.” *See In re Rambus Inc.*, 694 F.3d 42, 46 (Fed. Cir. 2012).  
20  
21

22 Although parties agree on the construction of “input signal” as “audio or higher  
23 frequencies,” they disagree on whether the analysis stops here. GET argues that a POSITA would  
24 construe “input signal” solely as “audio or higher frequencies,” thus referring to any frequency  
25 within the range of human hearing: 20 Hz to 20,000 Hz. Dkt. #86 at 25. Nintendo, in contrast,  
26 argues that Mr. Nguyen expressly disclaimed all “slow-varying” signals addressed by Yollin,  
27 including those generated from positional change information, user selection information, and  
28

1 other slow-varying information, and therefore disclaimed signals that are 500 Hz or less. Dkt.  
2 #85 at 9.

3 Nintendo argues that the patentee triggered prosecution disclaimer when he distinguished  
4 Yollin's "slow-varying" information changes and signals from the "fast-varying" ones that would  
5 create the collision problem addressed by the '730 patent. Nintendo highlights several statements  
6 from Mr. Nguyen's patent prosecution proceeding, including:  
7

8 Yollin's invention utilizes, in column 5 lines 27-34, a controller to receive  
9 *posit[i]onal change information, user selection information and physiological*  
10 *change information* to generate of a composite control signal but does not anticipate  
11 its use with audio signals. Using a controller to generate the composite control  
12 signal out of *the information changes, which are slow-varying*, is standard and not  
13 worth mentioned in Yollin's description. In contrast, my invention handles an audio  
signal which *change constantly and fast*; it cannot be transformed into control  
signals. My invention describes in details [sic] how to combine data, from the of  
mouse information and from the audio signal, via a framer.

14 Dkt. 85-4 at 36 (emphases added).

15 The Court agrees with Nintendo that the patentee's statements amount to disclaimer of  
16 the slow-varying signals addressed by Yollin. Although Mr. Nguyen used the term "audio or  
17 higher frequencies" to characterize the fast-varying signals that would cause a collision problem,  
18 he also attempted to rely on the frequency of Yollin's signals that were too slow to cause a  
19 collision problem in order to assert the novelty of the '730 patent. Indeed, much of the  
20 prosecution history contains entire subsections that Mr. Nguyen devoted to differentiating  
21 Yollin's signals from those addressed by his invention. *See, e.g.*, Dkt. #85-4 at 33-34. The Court  
22 finds the following sentences illustrative, wherein Mr. Nguyen stated:  
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25 Yollin's invention utilizes . . . a controller to receive *positional change information,*  
26 *user selection information and physiological change information* to generate . . . a  
27 composite control signal but does not anticipate its use with signals containing  
28 audio or higher frequencies. *Using a controller to generate the composite control*  
*signal out of the information changes, which are slow-varying, is standard and not*  
*worth mentioned [sic] in Yollin's description.* Difficulties will arise when one

1 signal runs asynchronously relative to another signal and fast. *Yollin's patent does*  
2 *not teach or suggest any method for the controller to receive and recover such*  
3 *signals*. In contrast, this invention describes, in its representative embodiments,  
4 how to combine the data from a UID (mouse) and from a high-frequency signal,  
5 via a framer, which is unique and novel.

6 Dkt. #86-2 at 70-71 (emphases added). Based on these statements in the prosecution history, the  
7 PTAB acknowledged the relational nature of the term “input signal” in terms of its exclusion of  
8 any slow-varying signals covered by Yollin. *See* Dkt. #86-6 at 13 (Concluding that while it “need  
9 not decide the specific range of frequencies that a skilled artisan would have understood to be  
10 covered by the term ‘input signal’ . . . [,] the term ‘input signal’ refers to a signal with *significantly*  
11 *higher frequency characteristics* than the slow varying signal characteristics of a ‘user input  
12 signal[.]’”) (emphasis added).

13 Accordingly, the Court finds these statements to be a clear expression by Mr. Nguyen  
14 that if a sensor produces signals at the frequency of those contemplated by Yollin, those  
15 frequencies do not pose a collision problem when combined with slow-varying button data and  
16 are therefore distinct from “fast-varying” signals addressed by the ‘730 patent. The Court finds  
17 that these statements, taken together, amount to a “clear and unmistakable disclaimer” of the ‘730  
18 patent’s scope. *See Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1325–26 (Fed. Cir. 2003)  
19 (“[F]or prosecution disclaimer to attach, our precedent requires that the alleged disavowing  
20 actions or statements made during prosecution be both clear and unmistakable”). Based on this  
21 express disclaimer of Yollin’s slow-varying signals, the Court finds that a POSITA would  
22 understand the upper bound of “slow-varying” signals covered by Yollin to set the lower bound  
23 of “fast-varying” signals covered by the ‘730 patent.

24 Consistent with this logic, Nintendo provides expert testimony from Dr. Chizeck on the  
25 range of frequencies covered by Yollin and thus disclaimed by Mr. Nguyen. *See* Dkt. #85-6 at  
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1 ¶¶ 25-27. The physiological response sensors referenced in Yollin are defined as “any of a  
2 number of alternative devices which measure any number of physiological responses,” but are  
3 expressly identified in the patent as “Galvanic Skin Response (GSR), heart rate, blood pressure,  
4 muscle tension, skin temperature, heart activity (e.g. rhythm), brain activity, and the like. . . .  
5 Another example of a suitable physiological response sensor 106 is the Electromyograph (EMG)  
6 sensor . . . .” Dkt. #85-7 at 13 (quoting Yollin at col. 3, line 62). Dr. Chizeck analyzed the  
7 maximum frequency produced by these various physiological phenomena as measured by  
8 technology available around 1998, and he determined that the signals ranged from 20 Hz  
9 (galvanic skin response as measured by a GSR sensor) to 500 Hz (muscle tension as measured  
10 by the EMG sensor). *Id.* at ¶ 26. Based on Dr. Chizek’s testimony, which identifies 500 Hz as  
11 the upper limit of slow-varying signals covered by Yollin, Nintendo proposes that the Court  
12 construe “input signal” as frequencies greater than 500 Hz.

15 GET responds that because Mr. Nguyen used the phrase “audio or higher frequencies” to  
16 distinguish Yollin’s slow-varying signals from the ‘730 patent’s fast-varying signals, which the  
17 PTO accepted when approving his patent, the Court should focus only on that phrase when  
18 determining the scope of “input signal.” The Court disagrees. It is well-recognized in patent law  
19 that “[a]n applicant’s invocation of multiple grounds for distinguishing a prior art reference does  
20 not immunize each of them from being used to construe the claim language. Rather, as [the  
21 Federal Circuit has] made clear, an applicant’s argument that a prior art reference is  
22 distinguishable on *a particular ground* can serve as a disclaimer of claim scope even if the  
23 applicant distinguishes the reference on *other grounds* as well.” *Andersen Corp. v. Fiber*  
24 *Composites, LLC*, 474 F.3d 1361, 1374 (Fed. Cir. 2007) (emphases added) (citing *Digital*  
25 *Biometrics, Inc. v. Identix, Inc.*, 149 F.3d 1335, 1347 (Fed. Cir. 1998)) (holding that a patentee’s  
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1 attempts to distinguish the prior art “on more narrow grounds . . . does not eliminate global  
2 comments made to distinguish the applicants’ ‘claimed invention’ from the prior art.”); *Gentry*  
3 *Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473, 1477 n.1 (Fed. Cir. 1998) (holding that when a  
4 patentee distinguishes the prior art on several grounds, “any of those grounds may indicate the  
5 proper construction of particular claim terms”). Accordingly, even though Mr. Nguyen  
6 distinguished Yollin on the basis that the ‘730 patent addressed “audio or higher frequencies,”  
7 this distinction does not negate his additional statements expressly disavowing as “slow-varying”  
8 the range of frequencies addressed by Yollin.

10           Regarding the “500 Hz or greater” range proposed by Nintendo, GET fails to rebut the  
11 declaration of Dr. Chizeck and his analysis of the maximum frequencies measured for the  
12 physiological responses described in Yollin. On the contrary, GET’s expert witness, Dr. Fernald,  
13 never analyzed Yollin’s physiological sensors on the basis that such analysis would be  
14 “irrelevant.” Dkt. #93 at 17; *see also* Dkt. #86-10 at 63:17-23. Instead, Dr. Fernald reasons that  
15 because Yollin describes a 30 Hz transmission rate in one of its embodiments, the input signals  
16 would be 15 Hz or less based on an anti-aliasing restriction.<sup>2</sup> Dkt. #84-8 at ¶ 3. The Court finds  
17 GET’s argument unavailing. While a patent’s specification may describe a preferred  
18 embodiment, the claims are not necessarily limited only to that embodiment. *Phillips*, 415 F.3d  
19 at 1323; *see also Prima Tek II, L.L.C. v. Polypap, S.A.R.L.*, 318 F.3d 1143, 1151 (Fed. Cir. 2003)  
20 (“The general rule, of course, is that claims of a patent are not limited to the preferred  
21 embodiment, unless by their own language.”).

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26 <sup>2</sup> Parties describe “aliasing” as an “undesirable distorting phenomena” that can be avoided by choosing a  
27 sampling frequency that is “greater than twice the highest frequency in the sensor signal measured.” Dkt.  
28 #85-7 at ¶ 20. Thus, under this “anti-aliasing” restriction, if Yollin’s sampling frequency is 30 Hz, then  
the information from its sensor signals must be less than one-half of 30 Hz, i.e. less than 15 Hz. Dkt.  
#84-8 at ¶ 3. Parties dispute whether Dr. Fernald’s analysis disregards Yollin’s embodiment that describes  
a 60 Hz transmission rate. *See* Dkt. #86-10 at 4:52-55.

1 Furthermore, GET fails to reconcile its proposed construction of “input signal” with  
2 Nintendo’s expert testimony that the “slow-varying” signals generated from the physiological  
3 sensors expressly listed in Yollin generate “slow-varying” frequencies within GET’s proposed  
4 range of 20 to 20,000 Hz. *See, e.g.*, Dkt. #85-7 at ¶ 26 (describing 20 Hz signal from GSR sensor,  
5 60 Hz from an electroencephalogram, and 250 Hz from an electrocardiogram). Instead, GET  
6 argues that even if Dr. Chizeck correctly identified the range of signals covered by Yollin, “that  
7 would not change the scope of the patentee’s disclaimer.” Dkt. #93 at 17. GET reasons that to  
8 the extent its construction of 20 to 20,000 Hz captures signals and information from Yollin, that  
9 overlap presents an invalidity issue—it does not affect the scope of disavowal, given that courts  
10 may not construe claims simply to preserve their validity. *Id.* at 18 (citing *Elektra Instr. S.A. v.*  
11 *O.U.R. Scient. Int’l, Inc.*, 214 F.3d 1302, 1309 (Fed. Cir. 2000); *Phillips*, 415 F.3d at 1327;  
12 *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 911 (Fed. Cir. 2004)).

15 These cases, however, address instances where a court’s construction deviated so far from  
16 the plain language of the claim term that it amounted to “judicial rewriting of claims to preserve  
17 validity.” *Liebel-Flarsheim Co.*, 358 F.3d at 911 (quoting *Rhine v. Casio, Inc.*, 183 F.3d 1342,  
18 1345 (Fed.Cir.1999)) (internal quotations omitted); *see also Elektra Instr. S.A.*, 214 F.3d at 1309  
19 (Finding claim “susceptible of only one reasonable construction”). Here, in contrast, the  
20 patentee’s express disavowal of Yollin’s slow-varying information makes clear that “input  
21 signal” does not include slow-varying signals covered by the Yollin patent. In this instance,  
22 adopting Nintendo’s proposed construction of “input signal”—a construction that is  
23 well-supported by the prosecution history—is readily distinguishable from the improper “judicial  
24 rewriting” at issue in *Liebel-Flarsheim* and its related cases.  
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1 Accordingly, the Court adopts Nintendo’s proposed construction and construes “input  
2 signal” to mean signals above 500 Hz and excluding signals generated from positional change  
3 information, user selection information, physiological response information, and other slow-  
4 varying information. Because the Court’s determination on this term is dispositive on the  
5 summary judgment noninfringement analysis, the Court need not address the remaining claim  
6 terms. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (A court is  
7 required to construe “only those terms . . . that are in controversy, and only to the extent necessary  
8 to resolve the controversy.”) (citing *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795,  
9 803 (Fed. Cir. 1999)).  
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## 11 **B. Infringement Analysis**

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13 The Court now turns to the “comparison of the properly construed claim to the accused  
14 product,” *see Abbott Labs.*, 566 F.3d at 1288, which is a question of fact, *see Crown Packaging*,  
15 559 F.3d at 1312. Because the Court held above that the patentee disclaimed signals below 500  
16 Hz and that are generated from positional change information, user selection information,  
17 physiological response information, and other slow-varying information, the Court considers  
18 Nintendo’s argument for noninfringement based on the Court’s construction of “input signal.”  
19

### 20 1. The Accused Products

21 GET accuses five Nintendo products of infringement on the ‘730 patent: (1) the Wii  
22 Remote and Wii Remote Plus; (2) the Nunchuk; (3) the Wii U GamePad; (4) the Switch Joy-Con  
23 Controllers; and (5) the Nintendo Switch Pro Controller (“the accused products”):  
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Dkt. #90-5 at 1-3; *see also* Dkt. #90 at 13 (providing above chart of infringing products).

Parties agree that each of the products produce “slow-varying” information generated from users pushing buttons located on the controller. It is likewise undisputed that each of the accused products contains one or more accelerometers that sense the movement of the players’ hands. Dkt. #98-15 at ¶¶ 6-7. Accelerometers measure acceleration, meaning the change in the speed or velocity of the device over time. *Id.* at ¶ 10. The accelerometer data is generated from a gamer moving the controller with her hands, thereby allowing the gamer “to use the controller as if it were a real component of the game . . . .” Dkt. #98 at 9. For example, the gamer may swing the controller as a racket in a tennis game or use it as a steering wheel in a driving game. Dkt. #98-7 at 4. The controllers then combine the slow-varying signals created from the user pushing buttons with the accelerometer data generated from the gamer moving the controller. Dkt. #90-5 at 8, 13. The combined data stream is then transmitted to the console. Parties dispute whether the signals from the accelerometer data constitute the “slow-varying” signals disclaimed by Mr. Nguyen during prosecution.

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1           2. Input Signals Above 500 Hz

2           The lynchpin of GET's infringement claim is that these accelerometer signals generated  
3 from a user's movement comprise the fast-varying "input signals" covered by the '730 patent.  
4 GET argues that because each of the accused products generate accelerometer signals at or above  
5 20 Hz, they combine signals of "audio or higher frequency" with the slow-varying data from the  
6 user's button-pressing. *See* Dkt. #98 at 13. Nintendo contends that the accelerometer signals  
7 comprise the same "slow-varying" information changes and signals that Mr. Nguyen expressly  
8 disavowed during prosecution. Nintendo supports this argument on three grounds: (1) the  
9 controllers cannot be moved faster than computer mice; (2) the accused controllers produced the  
10 disavowed "positional change information," and (3) the frequency of the signals produced by  
11 Nintendo's controllers are within the range of "slow-varying" signals disavowed during patent  
12 prosecution. Dkt. #90 at 16-20. The Court will address each argument in turn.  
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15           First, Nintendo argues that because computer mice and the accused controllers cannot  
16 be moved faster than a human hand, both generate the same "slow-varying" signals created by  
17 hand movement. Dkt. #90 at 16-17 ("[M]ouse position data comes from movement of a user's  
18 hand, and so does position data from the accused controllers. And both have the same limits:  
19 neither a mouse nor a controller can be moved faster than a human hand."). Because GET has  
20 conceded mouse signals from hand movement are "slow," Nintendo argues, it follows that the  
21 controller signals from hand movement are likewise "slow." *Id.* at 17. In response, GET provides  
22 expert testimony from Dr. Fernald that explains the divergent uses and purposes of computer  
23 mice compared to video game controllers. For example, while mice "require[] slower and  
24 more controlled motion since the user is also visually tracking the pointer and controlling the  
25 mouse . . . [g]ame controllers are often not used in this same way." Dkt. #98-15 at ¶ 12. Indeed,  
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1 given that Nintendo’s games require that the controller to be used as sports equipment, weapons,  
2 or musical instruments, the “game controllers are typically moved faster and more violently than  
3 a computer mouse.” *Id.*

4 The fact that computer mice and the accused game controllers and are both moved by  
5 hand is insufficient, on its own, to warrant summary judgment. While Nintendo contends that  
6 Mr. Nguyen disavowed “the slow varying hand movements generating an accelerometer output,”  
7 the Court disagrees. *See* Dkt. #107 at 6. The express disavowal in the prosecution history  
8 addressed the frequency of the signals and the information from which such signals are generated,  
9 such as positional change, user selection, and physiological response. *See* Section IV(A), *supra*.  
10 The Court found no “clear and unmistakable” disavowal of signals produced as a result of hand  
11 movement. *Purdue Pharma L.P.*, 438 F.3d at 1136. For that reason, considering GET’s evidence  
12 that the motion sensors in computer mice and game controllers are moved differently and with  
13 distinct purposes, a material dispute of fact precludes summary judgment on this basis.

14 Nintendo also argues that the accused controllers produce the “positional change  
15 information” disavowed during the patent prosecution process, because they “generate  
16 information from the motion of a user’s hand, i.e., information showing the change in the  
17 ‘position’ of a user’s hand . . . .” Dkt. #90 at 19. In response, GET provides Dr. Fernald’s expert  
18 testimony rejecting Nintendo’s characterization of the accelerometer data on the basis that  
19 accelerometers do not produce positional change information. On the contrary, Dr. Fernald  
20 contends, accelerometers measure acceleration as well as the force of gravity—even when the  
21 accelerometer is completely stationary. Dkt. #98-15 at ¶ 11. He contrasts this acceleration data  
22 with the “position data” generated by a computer mouse, which returns actual positional change  
23 or displacement data. *Id.* Again, the Court finds that Dr. Fernald’s testimony raises a material  
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1 dispute of fact as to whether the data measured by accelerometers in the accused products  
2 constitutes “positional change information” disavowed during patent prosecution.

3 Finally, Nintendo argues that summary judgment is warranted based on the frequency of  
4 the signals produced by Nintendo’s controllers that are within the range of “slow-varying” signals  
5 disavowed during patent prosecution. As evidentiary support, Nintendo provides testimony from  
6 Dr. Chizeck that the fastest a human hand can move is only 17 Hz—well below even the 20 Hz  
7 lower bound proposed by GET. Dkt. #90-9 at ¶ 22 (“[T]he maximum frequency for repeated  
8 voluntary movements of the fingers (separate or in combination with hand, wrist and arm motion)  
9 is less than 17 Hz.”). For the reasons set forth below, the Court finds no material dispute of fact  
10 precluding summary judgment on this basis.  
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13 GET counters Dr. Chizeck’s testimony with Dr. Fernald’s declaration, which states that  
14 Dr. Chizeck’s analysis does not provide information on the frequency content of signals  
15 generated by *the accelerometers*. Dkt. #98-15 at ¶ 13-16. Specifically, Dr. Fernald claims that  
16 the frequency at which a user can move the game controller “is only one factor that determines  
17 the frequency content” of the accelerometer’s signal. *Id.* at ¶ 15. He explains that a second factor  
18 is the pattern or shape of movement of the controller, such that “if the user moves the game  
19 controller in a non-sinusoidal manner at a rate of 10 Hz, the frequency content of the  
20 accelerometer signal would generally include frequencies at 10 Hz, 20 Hz, 30 Hz, and so forth.”  
21 *Id.* Dr. Fernald also conducted tests of the accelerometers on two of Nintendo’s accused  
22 products—the Wii Remote and the Joy-Con—to simulate the movements of a user. These tests  
23 included a “tapping test,” where he used one hand to tap the controller back and forth between  
24 thumb and forefinger of his other hand, and an “open air” test in which he moved the controller  
25 back and forth freely in the air. *Id.* at ¶¶ 19-20. For the Wii Remote, both tests generated  
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1 accelerometer signals “at least up to 80 Hz.” Dkt. #98 at 10 (citing Dkt. #98-15 at ¶¶ 23-24). For  
2 the Joy-Con controller, the “tapping test” generated accelerometer signals “up to at least 80 Hz”  
3 while the “open air” test generated frequency content “up to 56 Hz.” *Id.* (citing Dkt. #98-15 at  
4 ¶¶ 27-28).

5 Dr. Fernald’s analysis, which appears to presume that the range of frequencies for “input  
6 signal” is 20 Hz to 20,000 Hz, does not raise a material dispute of fact as to whether the frequency  
7 of the accelerometer signals exceeds 500 Hz—the construction of “input signal” proposed by  
8 Nintendo and adopted by this Court, *supra*. On the contrary, the frequency components he  
9 specifically identifies in his declaration are well below the 500 Hz threshold: 21.4 Hz and 28.6  
10 Hz from the “tapping” test for the Wii Remote, and 20 and 26.6 Hz from the “open air” test for  
11 the Wii Remote. *See* Dkt. #98-15 at ¶¶ 23-24. Regarding the Joy-Con, he provides more open-  
12 ended analyses: “frequency components at approximately 22 Hz, 28 Hz, 35 Hz, 42 Hz, etc.” from  
13 the “tapping” test and “frequency components (i.e. peaks) at approximately 21 Hz, 28 Hz, 35,  
14 Hz, 42 Hz, etc.” *Id.* at 98-15 at ¶¶ 27-28. The “etc.” in these data sets appear to reflect  
15 “harmonics”—frequencies generated from movement of the controllers that are higher than the  
16 actual movement or tapping rate. *Id.* at ¶ 15. These harmonics are multiples of the rate at which  
17 the user moves or taps the controller, meaning that if a user moves the controller in a  
18 non-sinusoidal manner at a rate of 10 Hz, the frequency content would include frequencies “at  
19 10 Hz, 20 Hz, 30 Hz, and so forth.” *Id.*

20 As an initial matter, Nintendo argues that GET failed to timely disclose its theory that the  
21 frequency of an “input signal” includes the harmonics in a signal’s frequency “content,” and thus  
22 its “harmonic theory” should be disregarded. Dkt. #107 at 9 (citing *Allvoice Developments US,*  
23 *LLC v. Microsoft Corp.*, 612 F. App’x 1009, 1013–15 (Fed. Cir. 2015). Western District of  
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1 Washington Local Patent Rule 124(c) requires that the party alleging patent infringement provide  
2 infringement contentions that “identify[] *specifically* where each element of each Asserted Claim  
3 is found within each Accused Device.” W.D. Wash. Local Patent R. 124(c) (emphasis added).  
4 Because the purpose of these contentions is to require “parties to crystallize their theories of the  
5 case early in the litigation,” *O2 Micro Int’l Ltd. v. Monolithic Power Sys., Inc.*, 467 F.3d 1355,  
6 1364 (Fed.Cir. 2006) (quotations omitted), it is “well within the discretion of a district court to  
7 require specificity in infringement contentions . . . .” *Allvoice Developments US, LLC*, 612 App’x  
8 at 1014; *see also* W.D. Wash Local Patent R. 101 (explaining that the local patent rules were  
9 “designed to streamline the pre-trial and claim construction process, and generally to reduce the  
10 cost of patent litigation”).  
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12  
13 The Court agrees with Nintendo that GET’s infringement contentions make no explicit  
14 reference to “harmonics.” *See* Dkt. #75-4; *see also* Dkt. #90-5 (excerpts). Indeed, it appears that  
15 the concept of “harmonics” was not addressed until Dr. Fernald’s declaration in opposition to  
16 Nintendo’s summary judgment motion. *See* Dkt. #98-15 at ¶ 15. However, it is unclear whether  
17 Dr. Fernald’s discussion of harmonics amounts to a theory of infringement that needed to be  
18 disclosed as early as the infringement contentions, or is simply an explanation of the frequency  
19 content of an accelerometer signal. To that end, the Court cannot conclude that GET’s failure to  
20 mention harmonics earlier in the case is equivalent to the omission in *Allvoice*. *Cf. Allvoice*  
21 *Developments US, LLC*, 612 App’x at 1013 (“Allvoice concedes that only the ‘Text Services  
22 Framework (TSF) property store’ in the accused products arguably satisfies this limitation. The  
23 district court, however, found that Allvoice failed to identify the TSF property store in either its  
24 original or its first amended infringement contentions.”). For that reason, the Court will consider  
25 GET’s discussion of harmonics in analyzing whether summary judgment is warranted.  
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1 Even considering Dr. Fernald’s discussion of harmonics, the Court finds that GET has  
2 failed to satisfy its burden as the non-movant to defeat summary judgment of noninfringement.  
3 The only measured frequencies from the accelerometers explicitly referenced in Dr. Fernald’s  
4 declaration are far below the 500 Hz lower-bound construed by the Court. *See, e.g.*, Dkt. #98-  
5 15 at ¶¶ 23-24; 27-28 (citing frequencies ranging from 21 Hz to 42 Hz). Dr. Fernald also refers  
6 to the “frequency range” or “bandwidth” of the accelerometers in each of the accused products,  
7 but these ranges merely refer to the sensitivity of the accelerometer, meaning its “ability to  
8 response [sic] to that frequency content”—not the frequency of the input signals themselves. *Id.*  
9 at ¶ 17 (“[T]he frequency range of the ADXL330 in the Wii controller can be as high as 1600 Hz  
10 for the X and Y axes, and 550 Hz for the Z axis. Ex. F2 at 1, 3. The frequency range for the  
11 LSM6DS3 accelerometer in the Joy-Con controller extends up to at least 400 Hz. . . . [S]uch  
12 limits *only indicate near what frequency the sensitivity of the accelerometer begins to decrease.*”)  
13 (emphasis added).

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16 Consequently, the only portions of Dr. Fernald’s declaration that could possibly refer to  
17 accelerometer frequency signals above 500 Hz are the ambiguous phrases “and so forth” and  
18 “etc.” following lists of identified frequencies. *See, e.g., id.* at ¶ 15 (“The actual frequency  
19 content of the accelerometer signal would contain harmonics at integer multiples of the rate at  
20 which the user moves or taps the controller, i.e., 2x the rate, 3x the rate, 4x the rate, *and so forth.*”)  
21 (emphasis added); *id.* at ¶ 23 (“The results also show other signal content at around 35 Hz, 42  
22 Hz, 49 Hz, 56 Hz, etc.”); *id.* at ¶ 24 (“The results also show other signal content at around 33 Hz,  
23 40 Hz, 47 Hz, etc.”); *id.* at ¶ 27 (“the signal from the accelerometer shows frequency components  
24 at approximately 22 Hz, 28Hz, 35Hz, 42Hz, etc., that is, in the audio spectrum.”); *id.* at ¶ 28 (“the  
25 violet frequency spectrum has frequency components (i.e. peaks) at approximately 21 Hz, 28 Hz,  
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1 35, Hz, 42 Hz, etc.”). Based on his explanation of frequency content, wherein harmonics are  
2 “integer multiples of the rate at which the user moves or taps the controller,” *id.* at ¶ 15, harmonics  
3 exceeding 500 Hz would need to be nearly 30x the rate at which the fastest person could move  
4 their hand. *See* Dkt. #90-9 at ¶ 22 (identifying 17 Hz as the fastest a person can move their hand).  
5 Dr. Fernald’s declaration, which only cites frequencies up to the 8th harmonic, offers no  
6 indication that his modifiers “etc.” and “and so forth” reasonably include frequencies up to the  
7 30th harmonic. Thus, while the Court must construe all evidence and inferences in the light most  
8 favorable to GET, GET must nevertheless make a “sufficient showing on an essential element of  
9 [its] case” to survive summary judgment. *Celotex Corp.*, 477 U.S. at 323. The Court cannot  
10 conclude that the ambiguous modifiers “and so forth” and “etc.” satisfy GET’s burden, as they  
11 fall well short of “identify[ing] with reasonable particularity the evidence that precludes  
12 summary judgment.” *Keenan*, 91 F.3d at 1278–79.

15 More fundamentally, GET’s opposition brief makes no attempt to argue that even if the  
16 Court adopted Nintendo’s construction of “input signal,” sufficient evidence exists to preclude  
17 summary judgment. Regarding other claim terms, GET makes clear that “[e]ven if the Court  
18 adopts Nintendo’s constructions of “framer” and the related means-plus-function terms, there is  
19 evidence to support a finding that components of the Bluetooth modules of the microcontrollers  
20 in the accused game controllers satisfy those limitations, barring summary judgment.” Dkt. #98  
21 at 21. GET further argues that to the extent the Court finds the cited evidence insufficient as to  
22 “framer” and the related means-plus-function terms, it asks that the Court deny summary  
23 judgment pursuant to Fed. R. Civ. P. 56(d) to allow further discovery on the Bluetooth modules  
24 in the accused products. *Id.* at 23-24. In contrast, GET raises no alternative arguments with  
25 respect to “input signal” and argues only that Nintendo’s proposed construction is incorrect. *See*  
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1 Dkt. #98 at 18-19. Similarly, GET makes no claim that further discovery would yield sufficient  
2 evidence to preclude summary judgment on this issue. On the contrary, Dr. Fernald's declaration  
3 indicates that further testing of the accelerometers in the remaining Nintendo products, such as  
4 the Nunchuk, Wii U GamePad, and the Switch Pro Controller, would merely yield the same  
5 results. *See* Dkt. #98-15 at ¶ 29 (stating he is "aware of no reason the results would be different"  
6 in the other accused products.) For these reasons, having reviewed the evidence in the light most  
7 favorable to GET and drawing all reasonable factual inferences in its favor, the Court concludes  
8 that no reasonable jury could find that the signals produced from an accelerometer in the accused  
9 products contain frequencies above 500 Hz. *Netword, LLC*, 242 F.3d at 1353.  
10

11  
12 Accordingly, under the Court's claim construction of "input signal," which is used in all  
13 claims asserted by the patentee, GET has failed to raise a genuine dispute of material fact that  
14 Nintendo's accused products infringe on the asserted '730 patent claims. The Court therefore  
15 GRANTS Nintendo's motion for summary judgment of noninfringement. Because the Court  
16 grants summary judgment in Nintendo's favor on the ground of noninfringement, it need not  
17 reach the parties' arguments regarding patent validity.  
18

## 19 V. CONCLUSION

20 For the foregoing reasons, the Court GRANTS Nintendo's motion for summary  
21 judgment, Dkt. #90. All versions of the Nintendo Wii Remote, all versions of the Nintendo Wii  
22 Remote Plus, all versions of the Nintendo Wii U Gamepad, all versions of the Nintendo Joy-Con  
23 Controller, all versions of the Nintendo Switch Pro Controller, all versions of the Nintendo Wii  
24 console system (when sold with at least one of the above described controllers), all versions of  
25 the Nintendo Wii U console system (when sold with at least one of the above-described  
26 controllers), and all versions of the Nintendo Switch console system (when sold with at least one  
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1 of the above-described controllers) do not infringe claims 10, 14, 15, 16, 17, 18, 21, 22, 23, and  
2 25 of U.S. Patent No. 6,219,730 because the accused products as described above lack the  
3 claimed “input signal.”

4 Accordingly, it is therefore ORDERED that Nintendo’s motion for summary judgment,  
5 Dkt. #90, is GRANTED.  
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8 DATED this 30<sup>th</sup> day of July, 2020.  
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12 RICARDO S. MARTINEZ  
13 CHIEF UNITED STATES DISTRICT JUDGE  
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