IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

GENUINE ENABLING TECHNOLOGY LLC, ***Plaintiff,*** ***v.*** **SONY CORPORATION et al.,** ***Defendants*.**	**Civil Action** **No. 17-cv-135**

MEMORANDUM OPINION

GOLDBERG, J.[1] **March 25, 2024**

In this patent infringement dispute, Plaintiff Genuine Enabling Technology LLC ("Genuine Enabling") asserts that video game hardware sold by Defendants Sony Corporation and Sony Interactive Entertainment LLC (collectively "Sony") infringes U.S. Patent No. 6,219,730 (the '730 patent). A more fulsome recitation of the facts is set forth in my November 28, 2022 Opinion, wherein I addressed the parties' motions under Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993).

Sony has now moved for summary judgment of noninfringement. Sony argues that Genuine Enabling lacks sufficient evidence to establish that a certain component of the accused controllers (a Bluetooth module) is structurally equivalent to a logic diagram disclosed in Genuine Enabling's '730 patent. For the reasons set out below, Sony's motion will be granted.

[1] Pursuant to 28 U.S.C. § 292(b), I have been designated to serve as a visiting judge for the District of Delaware to handle this matter and other District of Delaware cases.

I. FACTUAL AND PROCEDURAL BACKGROUND

The material facts, which are essentially undisputed, are presented below in the light most favorable to Genuine Enabling as the non-moving party.

A. The '730 Patent

The '730 patent claims an apparatus for sending multiple streams of information to a computer over a single communication link. The patent gives the example of a user-input device—such as a computer mouse—that can also receive speech input. ('730 patent, cols. 1-2.) By sending both voice and button presses over a single communication link instead of two, the invention "utilize[es] the computer resources efficiently." (Id.)

Genuine Enabling accuses Sony's products of infringing claims 10, 14, 16-18, and 21-23 of the '730 patent. Claim 10 is illustrative of these claims and reads, with independent claim 1 inserted:

> A user input apparatus operatively coupled to a computer via a communication means additionally receiving at least one input signal, comprising:
>
> user input means for producing a user input stream;
>
> input means for producing the [sic] at least one input signal;
>
> converting means for receiving the [sic] at least one input signal and producing therefrom an input stream; and
>
> encoding means for synchronizing the user input stream with the input stream and encoding the same into a combined data stream transferable by the communication means[;]
>
> wherein the input means is an input transducer.

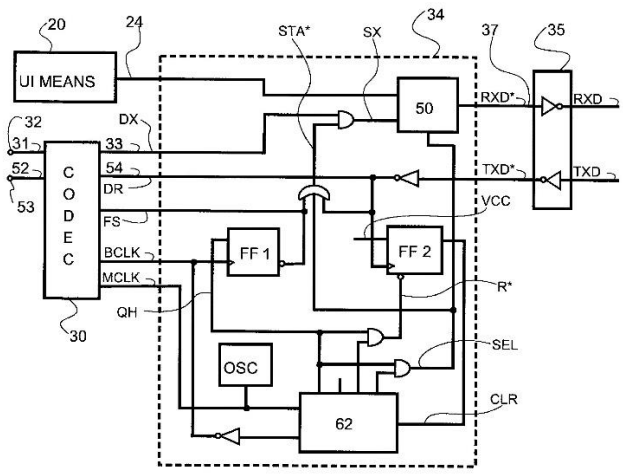
('730 patent, claim 10 (emphasis added).)

As noted above, the two streams of information are referred to as the "user input stream" and the "input stream." Using the example from the patent of a mouse with voice input, the "user input stream" could be button presses on the mouse and the "input stream" could be sound data from a microphone. (See '730 patent, Fig. 1B.) The "encoding means" synchronizes the two data

streams, combines them, and sends the combined data stream to the computer via the "communication means."

Each of the asserted claims requires the claimed invention to include an "encoding means," "means for synchronizing and encoding," or a "framer." Following a Markman hearing, I construed these terms synonymously as "means-plus-function terms" under 35 U.S.C. § 112(f) (codified as § 112, ¶ 6 at the time the '730 patent issued). A means-plus-function term consists of a "function" and a set of possible "structures" for performing that function, the latter of which are taken from the patent's specification. See § 112(f); Odetics, Inc. v. Storage Tech. Corp., 185 F.3d 1259, 1266-67 (Fed. Cir. 1999). I construed the term "framer" and its synonyms to have a function of "[s]ynchronizing the user input stream with the input stream and encoding the user input stream and the input stream into a combined data stream" and a structure of "[t]he logic design at block 34 in Figure 4A and equivalents thereof." (Claim Construction Opinion, ECF No. 112, at 27.)

Figure 4A depicts the following:



('730 patent, Fig. 4A.) "Block 34" of this figure, which corresponds to the "framer," is denoted by the dashed line. Other components of this figure that have been the subject of expert testimony are block 50, which is a "data selector"; block 62, a "clock generator"; and block 30 (not part of the framer), which is a "CODEC." An accompanying text in the patent's specification describes how

block 34 uses these components to synchronize the user input stream with the input stream to create a combined data stream. ('730 patent, col. 5.)

B. The Accused Product

The accused products are video game consoles and controllers. Genuine Enabling asserts that Sony uses the patented technology to send multiple streams of information—such as button presses, motion sensor data, and voice—to the game console over a single wireless communication link.

According to Genuine Enabling, Sony's accused products contain a "user input stream" that consists of button presses and various "input streams" that include data from motion sensors (accelerometers) and a microphone. Genuine Enabling asserts that a Bluetooth module in the accused video game controllers acts as a "framer": it synchronizes the button data stream (i.e., the "user input stream") with data from the motion sensors or microphone (i.e., the "input stream") and combines these into a single data stream that may be transmitted to the video game console over a wireless communication link. (See Genuine Enabling's Response Brief at 8-10.)

C. Dr. Fernald's Opinion and the Court's Subsequent Daubert Ruling

To support its theory that the accused Bluetooth module acts as a "framer," Genuine Enabling produced a report from its engineering expert Dr. Kenneth Fernald. Dr. Fernald asserts that certain steps in the Bluetooth protocol (called "whitening" and "CRC generation") require data that has been synchronized to a "bit-rate clock." Dr. Fernald further reasons that the data from button presses and the accelerometer must "be synchronized" to a common bit-rate clock for these steps to work correctly. Thus, Dr. Fernald concludes that the accused Bluetooth module, like block 34 of Figure 4A, synchronizes data streams to a common bit-rate clock. However, Dr. Fernald's report does not describe how the Bluetooth module causes the button presses and accelerometer

data to become synchronized to a common bit-rate clock. The report only explains that such synchronization must occur for the product to use Bluetooth as it does. (Fernald Report ¶¶ 128-31.)

On October 11, 2021, Sony moved to exclude Dr. Fernald's opinion pursuant to Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579 (1993), based on Dr. Fernald's alleged failure to analyze whether the accused Bluetooth module performed synchronization in substantially the same "way" as block 34 of Figure 4A, which is required under the "function-way-result test" for structural equivalency. See Traxcell Tech. LLC v. Sprint Comms. Co., 15 F.4th 1121, 1128 (Fed. Cir. 2021). I granted Sony's motion in part, agreeing with Sony that Dr. Fernald's analysis was incomplete and excluding Dr. Fernald's ultimate conclusion that the accused Bluetooth module was equivalent to block 34 of Figure 4A. However, I did not preclude Dr. Fernald from testifying that the accused Bluetooth module does in fact synchronize certain data streams to a common bit-rate clock. (Daubert Opinion, ECF No. 303, at 15.)

On December 12, 2022, Genuine Enabling moved to reargue Sony's Daubert motion. Genuine Enabling attached a declaration from Dr. Fernald stating that the "way" block 34 of Figure 4A synchronizes the two data streams is by synchronizing both to a common bit-rate clock, and the "way" the accused Bluetooth module synchronizes data streams is also by synchronizing them to a common bit-rate clock. In other words, the two structures operate in the same "way." Based on that clarification, Genuine Enabling asked that Dr. Fernald be permitted to testify to his ultimate conclusion that block 34 of Figure 4A and the accused Bluetooth module are equivalent. I denied Genuine Enabling's reargument motion, determining that Dr. Fernald had provided no information about how the accused Bluetooth module caused the two data streams to become synchronized to a common bit-rate clock, and it was therefore impossible to tell whether any conceivable variation from block 34 was "substantial." Notably, block 34 of Figure 4A included more details than simply

the presence of a bit-rate clock (e.g., a data selector, a clock generator, and a signal sent to a CO-DEC), and Dr. Fernald had performed no analysis of whether those details or the corresponding unknown details in the accused Bluetooth module should be viewed as substantial from the perspective of one of ordinary skill in the art. (Reargument Opinion, ECF No. 316, at 10-12.)

D. Sony's Summary Judgment Motion and Mr. Nguyen's Declaration

On September 11, 2023, Sony filed the instant motion for summary judgment. Sony asserts that Genuine Enabling cannot prove that the accused Bluetooth modules are equivalent to block 34 of Figure 4A and, for that reason, Genuine Enabling lacks evidence that any accused product contains the "framer" limitation or its synonyms.

In response, Genuine Enabling attached a declaration from the inventor of the '730 patent, Nghi Nho Nguyen. There, Mr. Nguyen provides additional grounds for inferring that the accused Bluetooth modules must synchronize data streams to a common bit-rate clock. For example, Mr. Nguyen observes that data is fed into the Bluetooth modules using an interface called "UART," which will not work unless the data is synchronized to a bit-rate clock. (Nguyen Dec. ¶ 23.)

Mr. Nguyen also opines that the accused Bluetooth module is equivalent to block 34 of Figure 4A. In Mr. Nguyen's view, this is true because both devices synchronize data streams to a common bit-rate clock, and therefore function in the same way. (Nguyen Dec. ¶ 22.) Mr. Nguyen further clarifies that there are other ways of synchronizing two data streams that are different from synchronizing to a common bit-rate clock, such as "by detecting edges in the other data stream and synchronizing the one data stream to those edges." (Nguyen Dec. ¶ 41.)

Sony objects to consideration of Mr. Nguyen's declaration on the ground that it contains undisclosed expert opinion testimony, as confirmed by Mr. Nguyen's statement in deposition that he had not tested the accused product and relied on his lawyers' investigation. (Reply at 2-3.)

II. LEGAL STANDARD

Summary judgment is proper "if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). A dispute is "genuine" if there is evidence from which a reasonable factfinder could return a verdict for the non-moving party, and a dispute is "material" if it might affect the outcome of the case under governing law. Kaucher v. County of Bucks, 455 F.3d 418, 423 (3d Cir. 2006) (citing Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986)). The court must view the evidence in the light most favorable to the non-moving party. Galena v. Leone, 638 F.3d 186, 196 (3d Cir. 2011). However, "unsupported assertions, conclusory allegations or mere suspicions" are insufficient to overcome a motion for summary judgment. Schaar v. Lehigh Valley Health Servs., Inc., 732 F. Supp. 2d 490, 493 (E.D. Pa. 2010) (citing Williams v. Borough of W. Chester, Pa., 891 F.2d 458, 461 (3d Cir. 1989)).

The movant "always bears the initial responsibility of informing the district court of the basis for its motion, and identifying those portions of [the record] which it believes demonstrate the absence of a genuine issue of material fact." Celotex Corp. v. Catrett, 477 U.S. 317, 323 (1986). Where the non-moving party bears the burden of proof on a particular issue at trial, the moving party's initial Celotex burden can be met by showing that the non-moving party has "fail[ed] to make a showing sufficient to establish the existence of an element essential to that party's case." Id. at 322.

After the moving party has met its initial burden, summary judgment is appropriate if the non-moving party fails to rebut the moving party's claim by "citing to particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations …, admissions, interrogatory answers, or other materials" that show a

genuine issue of material fact or by "showing that the materials cited do not establish the absence or presence of a genuine dispute." Fed. R. Civ. P. 56(c)(1)(A).

III. DISCUSSION

Sony's primary argument is that Genuine Enabling cannot prove that any accused product satisfies the "framer" limitation (and the synonymous limitations "encoding means" and "means for synchronizing and encoding"), found in every asserted claim.

As described above, these are means-plus-function terms with a function of "[s]ynchronizing the user input stream with the input stream and encoding the user input stream and the input stream into a combined data stream" and a structure of "[t]he logic design at block 34 in Figure 4A and equivalents thereof." (Claim Construction Opinion, ECF No. 112, at 27.) In analyzing infringement, a means-plus-function term encompasses any structure that performs the same function recited in the claim and that is the same as or equivalent to a structure disclosed in the specification. Odetics, 185 F.3d at 1267. "The word 'equivalent' in section 112 invokes the familiar concept of an insubstantial change which adds nothing of significance." Valmont Indus., Inc. v. Reinke Mfg. Co., 983 F.2d 1039, 1043 (Fed. Cir. 1993). "Structural equivalence under [§ 112(f)] is met only if the differences are insubstantial …; that is, if the assertedly equivalent structure performs the claimed function in substantially the same way to achieve substantially the same result as the corresponding structure described in the specification." Odetics, 185 F.3d at 1267. This is called the "function-way-result test" for structural equivalence. Traxcell, 15 F.4th at 1128.

In applying the function-way-result test, "[t]he appropriate degree of specificity is provided by the statute itself; the relevant structure is that which 'corresponds' to the claimed function. … Further deconstruction or parsing is incorrect." Odetics, 185 F.3d at 1268. Each "individual component[]" of a disclosed structure is not in itself a "claim limitation[]" required to be present

(literally or as an equivalent) in the accused device. Id. "Rather, the claim limitation is the overall structure corresponding to the claimed function." Id.

By limiting the scope of a means-plus-function term to disclosed structures and their equivalents, § 112(f) "prevents an overly broad claim construction by requiring reference to the specification, and at the same time precludes an overly narrow construction that would restrict coverage solely to those means expressly disclosed in the specification." Symbol Techs., Inc. v. Opticon, Inc., 935 F.2d 1569, 1575 (Fed. Cir. 1991). A patentee does not obtain ownership of "every conceivable way or means to perform the [claimed] function"—just those ways that are substantially the same as the way the patentee invented and disclosed. Mas-Hamilton Grp. v. LaGard, Inc., 156 F.3d 1206, 1214 (Fed. Cir. 1998). But by the same token, the patentee is not limited to structures that replicate every detail disclosed in the specification—so long as the details that vary are insubstantial. Odetics, 185 F.3d at 1267.

Sony argues that summary judgment is appropriate because Genuine Enabling cannot prove that the Bluetooth module is equivalent to block 34 of Figure 4A under the function-way-result test. There is no dispute that Genuine Enabling could prove that the accused Bluetooth module performs the same "function" as block 34 of Figure 4A: that is, synchronizing and combining the two data streams. It is also not disputed that Genuine Enabling could prove that the Bluetooth module achieves substantially the same "result" as block 34 of Figure 4A: a combined data stream. Rather, Sony's position focuses on Genuine Enabling's inability to prove that the accused Bluetooth module synchronizes the two data streams in substantially the same "way" as block 34 of Figure 4A. See Odetics, 185 F.3d at 1267. Sony presses that absent Dr. Fernald's now-excluded opinion that the two devices do operate in substantially the same way, Genuine Enabling cannot

meet its burden at trial to prove structural equivalence. See AquaTex Indus., Inc. v. Techniche Sols., 479 F.3d 1320, 1329 (Fed. Cir. 2007) (proof of equivalence requires expert testimony).

Genuine Enabling responds that it will prove that the accused Bluetooth module and block 34 of Figure 4A synchronize data streams in the same "way" because both synchronize data streams to a common bit-rate clock as opposed to by some other method, such as synchronizing the data streams directly to each other without a clock. Sony does not dispute the factual accuracy of this assertion, and, indeed, my prior Daubert ruling did not preclude Dr. Fernald from offering this testimony. Sony also does not take issue with the assertion in Dr. Fernald's declaration (repeated in Mr. Nguyen's declaration) that synchronizing to a bit-rate clock is not the only way to synchronize signals. Noting all of the above, Sony's contention is that proving the shared feature of a bit-rate clock is insufficient as a matter of law to show that the "way" in which these devices synchronize data streams is substantially the same. Specifically, Sony presses that each device consists of more than just a bit-rate clock, and proving only that the bit-rate clock is similar sheds no light on whether any other differences that might exist are "substantial."

While the legal principles underlying the present summary judgment motion substantially overlap with issues addressed in my prior Daubert ruling, the standard for evaluating summary judgment is different than the standard for evaluating evidentiary motions. Thus, my prior Daubert ruling is not necessarily dispositive of the outcome here. See Bradley v. Pittsburgh Bd. of Educ., 913 F.2d 1064, 1069-70 (3d Cir. 1990) (describing the difference between an evidentiary motion and a motion for summary judgment, the latter of which allows "the nonmovant [to] marshal his or her evidence to show that there is a genuine issue of material fact"). Nevertheless, I agree with Sony that the same principles that warranted the partial exclusion of Dr. Fernald's equivalency

analysis compel the conclusion that Genuine Enabling lacks sufficient evidence to prove that block 34 and the accused Bluetooth module synchronize signals in substantially the same "way."

Genuine Enabling proposes to prove equivalence by framing the "way" the claimed and accused structures operate at such a high level of generality that it is impossible to tell how they are similar or different. In denying Genuine Enabling's motion to reconsider my Daubert ruling, I used the analogy of a paperclip and a paperweight, which are similar in that they both apply pressure to paper but different in that one uses bent metal while the other uses gravity. (ECF No. 316 at 10.) To say that the "way" both devices work is by applying pressure to paper just begs the question of whether the omitted details (bent metal and gravity) are insubstantial. Here, analogously, Genuine Enabling argues that block 34 and the Bluetooth module are equivalent because both synchronize data streams using a bit-rate clock. But Genuine Enabling does not explain why a person of ordinary skill in the art would view other details about the two structures as less significant. In particular, Genuine Enabling has pointed to essentially no information regarding how the accused Bluetooth module operates other than that a bit-rate clock is involved somehow. Missing is any explanation of how the Bluetooth module differs from block 34 or why a person of ordinary skill in the art would view these unknown differences as "insubstantial." Valmont, 983 F.2d at 1043. A factfinder would be left with no basis to draw the inference that block 34 and the accused Bluetooth module synchronize data streams in substantially the same way.

The Federal Circuit's recent decision in VLSI Tech. LLC v. Intel Corp., 87 F.4th 1332 (Fed. Cir. 2023), supports this conclusion. While VLSI Tech. rested in part on policy concerns with the "doctrine of equivalents" (e.g., public notice) that do not apply to a literal infringement case such as this one, its discussion of the "way" prong of the function-way-result test is nevertheless instructive. See Kemco Sales, Inc. v. Control Papers Co., 208 F.3d 1352, 1364 (Fed. Cir. 2000)

("[T]he 'way' and 'result' prongs are the same under both the [§ 112(f)] and doctrine of equivalents tests … ."). In VLSI Tech., the accused product differed from the claim elements in how it performed a request to change clock frequency: in the claim, "the request function [was] performed by one component ... and the receipt and output functions [were] performed by a distinct component." In the accused product, the request and receipt "[were] performed not by distinct physical components but by different software 'modules'" within the same physical component. 87 F.4th at 1344. The plaintiff's expert characterized this difference as a "design choice" but did not otherwise explain why it should be viewed as "insubstantial." Id. In granting judgment as a matter of law to the defendant, the Federal Circuit concluded that such testimony was insufficient, as the label "design choice" "does not indicate whether, or begin to explain why, the options in the choice are substantially different or substantially the same: In both circumstances, the choice between the options is a design choice." Id.

Here, the evidence that the differences between the claimed and accused structures is insubstantial is even less specific. In VLSI Tech., the plaintiff's expert had at least narrowed the difference between the claim and the accused product to whether a request was transmitted between distinct physical components or software modules within the same physical component. Here, Genuine Enabling has provided essentially no information about how the accused Bluetooth module differs from block 34 of Figure 4A, much less why any differences should be viewed as insubstantial. For example, block 34 of Figure 4A feeds both data streams into a data selector that alternates between them to produce a combined data stream. (Fernald Report ¶ 125.) It is unknown whether the Bluetooth module does the same thing, or, if it does not, whether the choice to forego a data selector is substantial. A factfinder would be left entirely in the dark as to these issues.

Dr. Fernald's observation that there are other ways to synchronize data streams, without using a bit-rate clock, does not cure this problem. That block 34 and the accused Bluetooth module do not differ in every conceivable way sheds no light on whether the ways in which they do differ are insubstantial. Using again the analogy of a paperclip and a paperweight, a plaintiff might be able to prove that the two function in substantially the same "way" if it can convince a factfinder that the difference between bent metal and gravity is insubstantial in the context of the invention at hand. But absent such an explanation, the fact that there are other ways to hold paper together without pressure (e.g., a folder) does not bridge the necessary evidentiary gap. Just as it was insufficient in VLSI Tech. to show that both the claimed and accused devices transmitted a request to change clock frequency, the identification of one common feature, be it pressure or a bit-rate clock, is insufficient to explain why the "overall structure[s]" function in substantially the same way. Odetics, 185 F.3d at 1268.

Finally, Genuine Enabling notes that "[t]he 'way' … prong[] of a function-way-result test … [is a] factual inquir[y] that [is] not subject to construction by the Court." Marvell Semiconductor v. Commonwealth Sci. & Indus. Rsch. Organisation, No. 07-cv-204, 2010 WL 11531186, at *6 (E.D. Tex. Apr. 27, 2010). Although the "ways" the claimed and accused structures operate are indeed factual questions, it is still the plaintiff's burden at summary judgment to come forward with "concrete evidence" to "support[]" its factual contentions. Nitkin v. Main Line Health, 67 F.4th 565, 571 (3d Cir. 2023). Genuine Enabling has not pointed to "evidence on which the jury could reasonably find" that the differences between the way block 34 and the accused Bluetooth module synchronize signals are insubstantial. Anderson, 477 U.S. at 252.

For these reasons, I conclude that Genuine Enabling has failed to raise a dispute of fact as to whether the accused Bluetooth module satisfies the "framer" limitation and the synonymous

limitations "encoding means" and "means for synchronizing and encoding." As at least one of those limitations is present in every asserted claim, and Genuine Enabling has not advanced an argument under the doctrine of equivalents, Sony is entitled to summary judgment of noninfringement.[2]

IV. CONCLUSION

For the reasons set out above, Sony's motion for summary judgment will be granted.

An appropriate order follows.

[2] Sony offers four other grounds for summary judgment. Because I agree with Sony on its first ground, I do not reach Sony's alternative grounds.

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ORDER

AND NOW, this 25th day of March, 2024, upon consideration of Defendants' motion for summary judgment, and the responses and replies thereto, and following oral argument held on March 18, 2024, and for the reasons set forth in the accompanying memorandum opinion, it is hereby **ORDERED** that:

1. Defendants' motion for summary judgment (ECF No. 332) is **GRANTED**.
2. **JUDGMENT** is entered in favor of Defendants and against Plaintiff.
3. The Clerk of Court shall mark this case closed.

BY THE COURT:

/s/ Mitchell S. Goldberg
MITCHELL S. GOLDBERG, J.