IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

VB ASSETS, LLC,)
Plaintiff,))
v.) C.A. No. 19-1410 (MN)
AMAZON.COM SERVICES LLC,	
Defendant.)

MEMORANDUM OPINION

Neal C. Belgam, Jason Z. Miller, SMITH, KATZENSTEIN & JENKINS LLP, Wilmington, DE; James C. Yoon, Ryan R. Smith, WILSON SONSINI GOODRICH & ROSATI P.C., Palo Alto, CA; Matthew A. Macdonald, Jamie Otto, Alexander J. Turner, WILSON SONSINI GOODRICH & ROSATI P.C., Los Angeles, CA; Bradley T. Tennis, WILSON SONSINI GOODRICH & ROSATI P.C., Washington, DC; Mikaela E. Evans-Aziz, WILSON SONSINI GOODRICH & ROSATI P.C., San Francisco, CA – Attorneys for Plaintiff.

Steven J. Balick, Andrew C. Mayo, ASHBY & GEDDES, P.A., Wilmington, DE; J. David Hadden, Ravi R. Ranganath, Vigen Salmastlian, Saina S. Shamilov, FENWICK & WEST LLP, Mountain View, CA – Attorneys for Defendant.

September 30, 2024 Wilmington, Delaware

S. DISTRICT JUDGE:

The Court presided over a five-day jury trial from November 2, 2023 to November 8, 2023. (*See* D.I. 303-307 ("Tr.")). At the end, the jury found that Defendant Amazon.com Services LLC ("Defendant" or "Amazon") willfully infringed claims of four patents owned by Plaintiff VB Assets, LLC ("Plaintiff" or "VB Assets"), and that Defendant had failed to prove that those claims are invalid. Presently before the Court are the parties' post-trial motions. (D.I. 298; D.I. 300).¹ For the reasons that follow, the Court will GRANT-IN-PART and DENY-IN-PART Defendant's motion for judgment as a matter of law; and will GRANT-IN-PART and DENY-IN-PART Plaintiff's motion for an ongoing royalty, pre-judgment interest, post-judgment interest and enhanced damages.

I. <u>BACKGROUND</u>

Plaintiff owns several patents related to its smart speaker technology. Defendant is the owner of Alexa, a voice-based artificial intelligence assistant that interacts with users through Alexa-enabled devices. At trial, Plaintiff alleged that Alexa infringed claim 13 of U.S. Patent No. 8,073,681 ("the '681 patent"), claim 25 of U.S. Patent No. 9,626,703 ("the '703 patent"), claim 40 of U.S. Patent No. 7,818,176 ("the '176 patent") and claim 23 of U.S. Patent 9,269,097 ("the '097 patent") (collectively, "the asserted claims" of "the asserted patents").² Defendant denied infringement and challenged the validity of the asserted claims. Specifically, Defendant argued

¹ Each party filed a single post-trial motion but moved for relief on multiple grounds.

Plaintiff had also alleged infringement of U.S. Patent No. 9,015,049 and U.S. Patent No. 8,886,536. The claims of the former patent were invalidated by the Patent Trial and Appeal Board. See Amazon.com, Inc, et. al. v. VB Assets, LLC, IPR2020-01346, 2022 WL 320531, at *16 (PTAB Feb. 1, 2022). The latter patent was dropped before trial as a result of negotiations between the parties. (See D.I. 255 at 1).

the asserted claims of the '703, '176 and '097 patents are patent ineligible,³ and that all asserted claims are invalid for lack of adequate written description and obviousness over the prior art. After a five-day trial, the jury found all the asserted claims willfully infringed, not invalid and not patent ineligible. (*See* D.I. 291). The jury then awarded Plaintiff running royalty damages of \$46.7 million. (*Id.* at 7).

Both parties filed post-trial motions that are now before the Court. Defendant renewed its motion for judgment as a matter of law on infringement of all the asserted claims, invalidity for lack of adequate written description for claim 23 of the '097 patent, ineligibility for all asserted claims and willfulness. (D.I. 299). Plaintiff asks the Court to award pre-judgment and post-judgement interest on the jury's damages award, an ongoing royalty and enhanced damages. (D.I. 301). The Court addresses the motions below.

II. DEFENDANT'S MOTION FOR JUDGMENT AS A MATTER OF LAW

A. Legal Standard

Before a case is submitted to a jury, the Court may grant judgment as a matter of law if it "finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for the [moving] party on that issue." FED. R. CIV. P. 50(a)(1). Judgment as a matter of law is granted "sparingly" and is only warranted "if, viewing the evidence in the light most favorable to the nonmovant and giving it the advantage of every fair and reasonable inference, there is insufficient evidence from which a jury reasonably could find liability." *Lightning Lube v. Witco Corp.*, 4 F.3d 1153, 1166 (3d Cir. 1993). If the court denies the motion, following the entry of judgment, a party may file a renewed motion for judgment as a matter of law. FED. R. CIV. P. 50(b).

³ The jury was instructed to consider whether the elements in each of these claims, considered individually and as an ordered combination, involved only activities which a person of ordinary skill in the art would have considered to be well-understood, routine, and conventional. (D.I. 288 at 19).

A court may grant a renewed motion for judgment as a matter of law if the movant shows "that the jury's findings, presumed or express, are not supported by substantial evidence or, if they were, that the legal conclusion(s) implied [by] the jury's verdict cannot in law be supported by those findings." Pannu v. Iolab Corp., 155 F.3d 1344, 1348 (Fed. Cir. 1998) (internal quotation marks omitted). "Substantial' evidence is such relevant evidence from the record taken as a whole as might be accepted by a reasonable mind as adequate to support the finding under review." Perkin-Elmer Corp. v. Computervision Corp., 732 F.2d 888, 893 (Fed. Cir. 1984). The Court may not "weigh the evidence, evaluate the credibility of the witnesses, or substitute its own version of the facts for the jury's findings." Dow Chem. Co. v. Nova Chems. Corp. (Can.), C.A. No. 05-737-JJF, 2010 U.S. Dist. LEXIS 77389, at *4 (D. Del. July 30, 2010). Furthermore, the Court must give the verdict winner "the benefit of all logical inferences that could be drawn from the evidence presented, resolve all conflicts in the evidence in [their] favor and, in general, view the record in the light most favorable to [them]." Williamson v. CONRAIL, 926 F.2d 1344, 1348 (3d Cir. 1991). Moreover, in the Third Circuit, when the movant bears the burden of proof on an issue, judgment as a matter of law is appropriate only if "there is insufficient evidence for permitting any different finding." Fireman's Fund Ins. Co. v. Videfreeze Corp., 540 F.2d 1171, 1177 (3d Cir. 1976).

B. <u>Infringement</u>

The jury found that Defendant infringed claim 13 of the '681 patent, claim 25 of the '703 patent, claim 40 of the '176 patent and claim 23 of the '097 patent. (D.I. 291 at 2). Defendant moves for judgment as a matter of law on infringement of all the asserted claims. (D.I. 298). For the reasons discussed below, the Court denies Defendant's motion for the '681 patent, the '176 patent, and the '097 patent, but grants Defendant's motion for the '703 patent.

1. <u>Claim 13 of the '681 patent</u>

The '681 patent is titled "System and Method for a Cooperative Conversational Voice User

Interface." Claim 13 of the '681 patent claims:

13. A non-transitory computer readable medium containing computer-executable instructions for providing a cooperative conversational voice user interface, the computer-executable instructions operable when executed to:

receive an utterance at a voice input device, during a current conversation with a user, wherein the utterance includes one or more words that have different meanings in different contexts;

accumulate short-term shared knowledge about the current conversation, wherein the short-term shared knowledge includes knowledge about the utterance received at the voice during the current conversation;

accumulate long-term shared knowledge about the user, wherein the long-term shared knowledge includes knowledge about one or more past conversations with the user;

identify a context associated with the utterance, wherein a conversational speech engine identifies the context associated with the utterance from the short-term shared knowledge and the long-term shared knowledge;

establish an intended meaning for the utterance within the identified context, wherein the conversational speech engine establishes the intended meaning within the identified context to disambiguate an intent that the user had in speaking the one or more words that have the different meanings in the different contexts; and

generate a response to the utterance, wherein the conversational speech engine grammatically or syntactically adapts the response based on the intended meaning established within the identified context.

(JTX-1,'681 patent at 21:6-35).

Defendant argues that no reasonable jury could have found claim 13 to be infringed by

Alexa for three reasons: (1) there was no evidence proving "computer executable instructions" in

Alexa, such as "Alexa source code, technical documents, or testimony from Amazon witnesses"

(D.I. 299 at 10); (2) no evidence "[identified] at least one received utterance and [explained] how

Alexa performs each of the claimed steps for *that same utterance*" (*id.* at 13);⁴ and (3) Plaintiff did not establish that Alexa accumulated either "short-term" or "long-term" knowledge. (D.I. 319 at 8). The Court disagrees.

The jury heard Plaintiff's infringement expert, Dr. Polish, analyze each element of claim 13 and then explain how "technical documents" and "[his] own use of the system" demonstrated that those elements were present in Alexa. (Tr. 339:1-2; *see also* Tr. 296:9-20; 298:9-22; 337:9-351:23) (explaining how various aspects of Alexa meet each element of claim 13). Dr. Polish also used a demonstrative video to bring to life his testimony explaining how, in his opinion, Alexa practices each step of claim 13.⁵ (Tr. 340:6-17; *see also* Tr. 340:17-346:3, 346:25-348:21) (discussing how Alexa cooperatively converses with a user setting an alarm; and how Alexa is able to decipher that various numbers correspond to desired alarm times)). The jury was further presented with evidence Alexa could disambiguate user intent through utilizing long-term or short-term information in response to the utterance "Hunger Games." (Tr. 349:5-10; *see also* Tr. 328:20-332:1) (testifying step-by-step, how Alexa disambiguated the utterance "Hunger Games.").

Dr. Polish conceded that he did not show Alexa performing each step of claim 13 in response to "one specific utterance." (Tr. 395:2). Rather, Dr. Polish presented the jury with

⁴ Specifically, Defendant asserts that Dr. Polish did not "map a single utterance to the claim elements" and instead used multiple, disparate utterances to demonstrate each of the steps in isolation. (D.I. 299 at 14).

⁵ When deciding a motion for judgment as a matter of law, the Court must assess the evidence presented at trial. Demonstrative exhibits, such as Dr. Polish's videos, are not by themselves evidence, and, therefore, cannot be a standalone basis to support judgment as a matter of law. In contrast, expert testimony that is aided by use of a demonstrative exhibit can be properly considered when assessing judgment as a matter of law. *See, e.g., SSL Servs., LLC v. Citrix Sys.*, 769 F.3d 1073, 1088 (Fed. Cir. 2014) (finding that an expert's use of "demonstrative slides" to prove infringement constituted substantial evidence to support the jury's verdict).

testimony (using demonstratives) of Alexa performing each claim element in response to different utterances. Although Dr. Polish's testimony may have been more persuasive had he shown Alexa complete all the claim elements in response to one specific utterance, it was not unreasonable for the jury to infer that if Alexa was able to perform each step prompted by different utterances, then Alexa likewise was able to perform each step prompted by the same utterance. And the Court cannot "substitute its own conclusions for that of the jury where the record evidence supports multiple inferences." *Bd. of Regents v. Bos. Sci. Corp.*, C.A. No. 18-392, 2024 WL 2848471, 2024 U.S. Dist. LEXIS 99773, at *5-*6 (D. Del. June 5, 2024).

Moreover, despite not viewing Alexa's source code, the jury was presented with substantial evidence that Alexa was programmed with "computer-executable instructions," as required by claim 13. First, Dr. Polish opined that the entirety of claim 13's preamble, including computer-executable instructions, was present in the Alexa device. (Tr. 337:24-338:6). Second, the jury could reasonably infer computer-executable instructions enabled Alexa to perform each element of claim 13. The jury was entitled to rely on circumstantial evidence, such as Alexa's actual ability and operation, to conclude Alexa contained computer-executable instructions. *See Lucent Techs., Inc. v. Gateway, Inc.,* 543 F.3d 710, 723 (Fed. Cir. 2008) ("A patentee may rely on either direct or circumstantial evidence to prove infringement."). Substantial evidence demonstrated Alexa was able to perform each and every element of claim 13; and technological devices are unable to perform intended functions without source code or computer executable instructions. Therefore, the jury was entitled to "evaluate the weight to be attributed to this circumstantial evidence and to decide whether to draw the inferences [Plaintiff] sought." *Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 935 F. Supp. 2d 747, 759 (D. Del. 2013).

Thus, the Court concludes the jury reasonably found infringement of claim 13.

2. <u>Claim 40 of the '176 patent</u>

The '176 patent is titled "System and Method for Selecting and Presenting Advertisements

Based on Natural Language Processing of Voice-Based Input." Claim 40 of the '176 patent claims:

40. A system for selecting and presenting advertisements in response to processing natural language utterances, comprising:

an input device that receives a natural language utterance containing at least one request at an input device;

a speech recognition engine coupled to the input device, wherein the speech recognition engine recognizes one or more words or phrases in the natural language utterance;

a conversational language processor coupled to the speech recognition engine, wherein the conversational language processor is configured to:

interpret the recognized words or phrases, wherein interpreting the recognized words or phrases includes establishing a context for the natural language utterance, select an advertisement in the context established for the natural language utterance; and present the selected advertisement via an output device; and

an adaptive misrecognition engine configured to determine that the conversational language incorrectly interpreted the words or phrases in response to detecting a predetermined event, wherein the conversational language processor reinterprets the words or phrases in response to the predetermined event.

(JTX-3, '176 patent at 16:48-17:6).

Amazon argues that the jury could not have reasonably found infringement of claim 40 because Plaintiff did not "identify any 'adaptive misrecognition engine' in Alexa and a 'predetermined event' in response to which the engine determines that words or phrases were incorrectly interpreted."⁶ (D.I. 299 at 15). Again, the Court disagrees.

⁶ Defendant's complaints about Plaintiff's evidence appear to be rooted in form, and not substance. Plaintiff had to prove that Alexa has an "adaptive misrecognition engine" – not that Alexa contains a component labeled "adaptive misrecognition engine."

As a preliminary note, the Court was not asked to (and did not) construe the term "predetermined event" in claim 40. That term, thus, was given its plain and ordinary meaning. At trial, Amazon's expert, Dr. Johnson, explained that a "predetermined event" is "something else the user says afterwards [that] might indicate the system misunderstood." (Tr. 743:7-9). Based on Dr. Johnson's testimony, the jury could have decided that "a predetermined event" is anything a user says which may indicate to the device that it was not providing information the user sought.

Plaintiff presented ample evidence at trial establishing that Alexa contains "an adaptive misrecognition engine configured to determine that the conversational language [processor] incorrectly interpreted the words or phrases in response to detecting a predetermined event" (JTX-3,'176 patent at 17:1-4). First, Dr. Polish opined that Alexa Shopping contains the last element of claim 40. (Tr. 357:10-18). He supported his opinion with references to technical documents like the "NLU deep dive document," which he explained demonstrated Alexa's ability to re-rank a user's intent "in response to getting some information that indicated that [it] had gotten it wrong." (Tr. 358:9-12; PTX-226 at 22; see also Tr. 409:20-410:12 (discussing the re-ranking processing in Alexa's NLU); Tr. 319:13-23; PTX-78 (discussing that Amazon's technical documents show that Alexa has a "blueshift intent format" which is a "collection of intents and scores for them.")). Furthermore, Dr. Polish utilized a demonstrative video, along with his testimony, to explain that when Alexa was presented with the term "Hunger Games," Alexa reranked and re-scored the user's intent to conclude whether the term referenced a movie, album, song or book with that title. (Tr. 331-332; PTX-226 at 18-22). Additionally, Mr. Peck, Plaintiff's source code expert, testified Alexa is coded to take the list of user interpretations and then reorder and re-rank them. (See Tr. 449:3-9). Defendant's expert, Dr. Strom, likewise explained Alexa's re-ranking method:

... the different intents that are coming from the different neural networks, they're compiled into what we call an NBest list, so that's a list of all the intent, and each one of the intents has a confidence score designed with it, depending on how sure we are about that meaning ... then we have other machine learning methods that can boost or lower the score of some intents, depending on other factors like other features in the system. This is called re-ranking ...

(Tr. 565:7-16).

Ultimately, Plaintiff presented substantial evidence that Alexa Shopping is configured to re-rank and re-score a user's intent after the receiving verbal feedback or incorporating other context cues which indicate that its initial intent ranking was incorrect. Such evidence supports the jury's conclusion that Defendant infringes claim 40. (*See also* Tr: 351:25-358:15) (explaining how each and every element of claim 40 is present in Alexa.).

3. <u>Claim 23 of the '097 patent</u>

The '097 patent is titled "System and Method for Delivering Targeted Advertisements and/or Providing Natural Language Processing Based on Advertisements." Claim 23 of the '097 patent claims:

23. A system providing natural language processing based on advertisements, the system comprising:

one or more physical processors programmed with computer program instructions which, when executed, cause the one or more physical processors to:

provide an advertisement associated with a product or service for presentation to a user;

receive a natural language utterance of the user; and

interpret the natural language utterance based on the advertisement and, responsive to the existence of a pronoun in the natural language utterance, determine whether the pronoun refers to one or more of the product or service or a provider of the product or service.

(JTX-5,'097 patent at 14:66-15:12).

Amazon argues that no reasonable jury could find infringement of claim 23 because "Dr. Polish offered only a conclusion that Alexa met this limitation" and did not present "source code" or "testimony from an Amazon engineer" to support his "speculative" opinion. (D.I. 299 at 16-17). Yet again, the Court disagrees.

Dr. Polish utilized an example to show that Alexa is responsive to and can recognize a pronoun in an utterance and then recognize whether that pronoun refers to a previously presented advertisement. (See Tr. 361:14-362:13) (discussing his own use of the system and an advertisement for an iPhone case). When Alexa was prompted with an utterance – Dr. Polish used utterances containing the pronouns "peach" and "stone" – Alexa was able to tie that utterance back to the color of an item in a potential purchase discussed previously, rather than concluding the utterance referred to a fruit or a rock. (See Tr. 413:18-21) (Dr. Polish stating, "[i]t just seems clear that the existence of the pronoun tells Alexa that we're talking about the purchase that we were making previously."). Although Dr. Polish did not discuss technical documents or Alexa's source code, the jury was entitled to agree with Dr. Polish that "the behavior of the system speaks for itself." (Tr. 414:8). Juries are permitted to rely on circumstantial evidence, like the behavior of Alexa, to conclude there is infringement. See Martek Biosciences Corp. v. Nutrinova, Inc., 579 F.3d 1363, 1372 (Fed. Cir. 2009) ("A patentee may prove infringement by any method of analysis that is probative of the fact of infringement, and circumstantial evidence may be sufficient.") (internal citations and quotation marks omitted); see also Alco Std. Corp. v. TVA, 808 F.2d 1490, 1503 (Fed. Cir. 1986) ("Although the evidence of infringement is circumstantial, that does not make it any less credible or persuasive."). Further, the jury could have simply found Dr. Polish credible and relied on his purportedly "conclusory" opinion. (See, e.g., Tr. 358:16-362:17) (Dr. Polish opining that Alexa infringes each and every element of claim 23). It is not the

role of the Court, on a motion for judgment as a matter of law, to weigh the credibility of the witnesses. Accordingly, the Court denies Amazon's motion.

4. <u>Claim 25 of the '703 patent</u>

The '703 patent is titled "Voice Commerce." Claim 25 of the '703 patent ("claim 25") claims:

25. A system for providing voice commerce, the system comprising:

one or more physical processors programmed with computer program instructions which, when executed, cause the one or more physical processors to:

receive a user input comprising a natural language utterance;

provide, without further user input after the receipt of the user input, the natural language utterance as an input to a speech recognition engine;

obtain, without further user input after the receipt of the user input, one or more words or phrases recognized from the natural language utterance as an output of the speech recognition engine;

determine, without further user input after the receipt of the user input, a context based at least on the one or more words or phrases;

identify, without further user input after the receipt of the user input, the product or service to be purchased on behalf of the user based at least on the determined context;

obtain payment information with which to pay for the product or service;

obtain, without further user input after the receipt of the user input, shipping information with which to deliver the product or service, wherein the shipping information specifies a name or address of a recipient to which the product or service is to be delivered after the product or service is purchased; and

provide, without further user input after the receipt of the user input, a request for user confirmation to use the payment information and the shipping information for a purchase transaction for the product or service.

(JTX-2, '703 patent at 26:8-43).

Amazon argues that no reasonable jury could find infringement of claim 25 because Plaintiff did not: (1) present "source code or back-end Alexa operations" that evidence "computer instructions;" (2) prove Alexa "obtain[s], without further user input after the receipt of the user input, shipping information with which to deliver the product or service;" and (3) prove Alexa "provide[s], without further user input after the receipt of the user input, a request for user confirmation to use the payment information and the shipping information for a purchase transaction." (D.I. 299 at 17-18). The Court finds merit in Amazon's third argument.

To prove infringement, Plaintiff must establish, by a preponderance of the evidence, that each and every claim element is present in the accused device. *See Catalina Mktg. Int'l v. Coolsavings.com, Inc.*, 289 F.3d 801, 812 (Fed. Cir. 2002) ("Literal infringement requires the patentee to prove that the accused device contains each limitation of the asserted claim."). The jury was instructed "[i]f the accused product or process does not contain one or more elements or steps recited in a claim, there is no infringement." (Tr. 892:12-14). Relevant here, the last element of claim 25 requires "*a request for user confirmation to use* the payment information and the shipping information for a purchase transaction for the product or service." (JTX-2,'703 patent at 26:41-43) (emphasis added). Accordingly, to find Defendant infringed claim 25, there must have been substantial evidence that Alexa made "a request for user confirmation to use the payment and the shipping information." (*Id.*).

Simply put, however, the jury was not presented with substantial evidence to reasonably conclude Alexa provided "a request for user confirmation to use the payment and the shipping information." Plaintiff presented evidence, through the testimony of Dr. Polish, that Alexa responds "buy it now" when completing a transaction. In its brief, Plaintiff argues the prompt "buy it now" constitutes "a request for user confirmation to use the payment and shipping

information" because Alexa previously stores a user's payment and shipping information. (D.I. 311 at 15). Problematically, however, Plaintiff did not introduce evidence at trial suggesting that "buy it now" is shorthand for, or equivalent to, "user confirmation to use the payment and shipping information." In everyday interactions, when a person directs another to "buy it now" they are not necessarily confirming use of a payment method or shipping information. Rather, and literally, "buy it now" only expresses the end goal of purchase, it does not confirm the means for execution.

Moreover, testimony from Dr. Polish did not establish that Alexa performs each element of claim 25. At trial, Dr. Polish was asked whether the last element of claim 25 was "illustrated in [his] video demonstration." (Tr. 368:17-18). Dr. Polish replied that it was because Alexa "provided information about what was going on." (*Id.* at 19-20). Notably, Dr. Polish did *not* state that Alexa asked for confirmation to use his payment or shipping information, only that it "provided information about what was going on." This statement does not amount to evidence that Alexa performs the last element of claim 25.⁷ *See, for example, United States v. Bailey*, 598 Fed. Appx. 117, 122 at n.10 (3d Cir. 2015) ("While [plaintiff's] counsel's statements or questions are not evidence, answers are . . ."). Moreover, a reasonable juror viewing the demonstrative would not have concluded Alexa asked for user confirmation. In actuality, the demonstrative, as described in Dr. Polish's testimony, showed Alexa describing a product's color, price, and shipment time, and then stating, "you can say 'buy it now."" (*See* Tr. 421:23-422:14) (discussing what occurred in the demonstrative video). After Dr. Polish said, "buy it now," the device informed Dr. Polish where it was shipping the product and its total cost. Alexa neither

⁷ In the same exchange of questioning, Dr. Polish also contradictorily affirmed the purchase was charged to his credit card without further input, even though the claim requires that Alexa make a request for confirmation to use a payment method. (Tr. 369:8-10).

asked for user confirmation to use a shipping address, nor did it mention a payment method at all. Dr. Polish affirmed this interpretation by stating Alexa executed the transaction without further input. (Tr. 368:22-24; Tr. 422:7-15). Dr. Johnson, Amazon's expert, highlighted this discrepancy to the jury and stated Alexa did not make "a request for confirmation of payment or shipping information" and instead made a "statement that [the product was] ordered." (Tr. 709:15-17; *see also* Tr. 709:23-24) ("Alexa doesn't ask for that particular confirmation when you buy something."). Further, on cross examination, Dr. Polish acknowledged that he did not prove that Alexa provides a request for user confirmation to use the payment information and shipping information. (Tr. 419:20-24) (Q: ". . . Nowhere did you show Alexa saying Dr. Polish, please confirm this payment information and the shipping information, right? A: "I think that's right, I think the receipt was sent - - was sent via e-mail.").

In light of the above, the Court finds the jury's verdict as to this claim is not supported by substantial evidence. Indeed, even when "viewing the evidence in the light most favorable to the nonmovant and giving it the advantage of every fair and reasonable inference, there is insufficient evidence from which a jury reasonably could find' for the nonmovant." *Transweb, LLC v. 3M Innovative Props. Co.*, 812 F.3d 1295, 1301 (Fed. Cir. 2016) (quoting *Lightning Lube, Inc.* 4 F.3d 1153 at 1166). Therefore, the Court grants Amazon's motion for judgment as a matter of law with regard to infringement of claim 25 of the '703 patent.

C. <u>WILLFUL INFRINGEMENT</u>

The jury found that VB Assets proved, by a preponderance of the evidence, that Amazon willfully infringed the asserted claims of the '681 patent, the '176 patent and the '097 patent. (D.I. 291 at 3). Willful infringement is a question of fact and the jury's determination as to willfulness is reviewable under the substantial evidence standard. *See Braun Inc. v. Dynamics Corp. of Am.*, 975 F.2d 815, 822 (Fed. Cir. 1992).

The jury also concluded that the '703 patent was willfully infringed; but, for the reasons explained above, the Defendant's motion with regards to this patent is mooted by the Court's decision that the jury could not have reasonably concluded that claim 25 of the '703 patent was infringed.

1. Legal Standard

Willful infringement is found where the defendant both knew of the asserted patent and knew its conduct amounted to infringement of the asserted patent. "Knowledge of the asserted patent and evidence of infringement is necessary, but not sufficient, for a finding of willfulness. Rather, willfulness requires deliberate or intentional infringement." *Bayer HealthCare LLC v. Baxalta Inc.*, 989 F.3d 964, 988 (Fed. Cir. 2021). "A finding of 'subjective willfulness,' proof that the accused infringer acted in the face of a risk of infringement that was 'either known or so obvious that it should have been known to the accused infringer' can satisfy this standard." *Sunoco Partners Mktg. & Terminals L.P. v. Powder Springs Logistics, LLC*, 624 F. Supp. 3d 473, 480-481 (D. Del. 2022) (quoting *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 579 U.S. 93, 101 (2016)).

2. <u>Analysis</u>

Amazon argues there cannot be willful infringement because it "requires an actual charge of infringement" and there is "no evidence that plaintiff gave Amazon notice of alleged infringement before filing suit." (D.I. 299 at 26). Amazon's argument, however, is legally inaccurate. Although it is true that Plaintiff must show that Amazon had notice of the patent and that Amazon knew its conduct amounted to infringement, Plaintiff need not show that notice came in the form of an explicit accusation of infringement from Plaintiff to Amazon. *See, e.g., Smith Eng'g Co., Inc. v. Eisenmann Corp.*, 28 Fed. Appx. 958, 965-966, (Fed. Cir. 2002) (finding willful infringement because the defendant "knew about the patent four years prior to the filing of the suit," even though Defendant was not directly "notified [by Plaintiff] of the patent prior to the

filing of the complaint."). As discussed below, there was substantial evidence to establish notice of the patents and notice that practicing those patents' claims would constitute infringement.

a. <u>Knowledge of the Patents</u>

The jury was presented with evidence that Amazon learned of the '176 and '681 patents during a "very deep dive" meeting at VoiceBox's⁸ office in October 2011.⁹ (Tr. 156:4-158:7; Tr. 160:20-161:3; Tr.161:9-19). The jury also viewed the presentation VoiceBox gave to Amazon at the meeting, which contained a slide titled "Voice Box Patents" and displayed the cover page of the '176 patent. (*See* PTX-65 at 10; *see also* Tr. 160:17-19). Separately, Mr. Hayden, the Vice-President of Intellectual Property at Amazon, confirmed that Amazon knew of the '681 patent in 2015. (*See* Tr. 466:16-20; *see also* PTX-158 at 21).

Evidence also established Amazon became aware of the '097 patent in the spring of 2017. Mr. Kennewick, one of the inventors of the '097 patent, testified that VoiceBox engaged in potential acquisition discussions with Amazon, in which the parties discussed VoiceBox's intellectual property and patents. Related to those discussions, VoiceBox provided Amazon with a comprehensive list of its intellectual property, which included the '097 patent. (*See* Tr. 176:8-177:5; *see also* PTX-629). This is sufficient evidence that Amazon had knowledge of the asserted patents.

⁸ VoiceBox was the successor entity to VB Assets (*see* Tr. 143-144) and retained all the asserted patents from VoiceBox (*see* Tr. 186).

⁹ Mr. Kennewick testified that VoiceBox and Amazon discussed VoiceBox's patents, as well as the additional pending patents. (Tr. 161:2-3). In October 2011, the '681 patent had not issued and was a pending patent. Therefore, drawing all reasonable inferences in favor of VB Assets, it is reasonable for the jury to conclude the application that issued as the '681 patent two months later was discussed at the October 2011 meeting.

b. Intent to Infringe or Knowledge of Infringement

The jury was also presented with substantial evidence from which it was reasonable to infer Amazon acted with "deliberate or reckless disregard for VB Assets's patent rights." (Tr. 896: 5-6 (reading the jury instructions for willful infringement)). For example, the jury heard that following the October 2011 meeting, Amazon told VoiceBox it was "very impressed with what they heard and that they really liked the idea of moving forward with a smart speaker." (Tr. 158:22-24). Additionally, after the meeting, "[a] lot of [Amazon's] technical team actually stayed well beyond the allotted time interacting with [VoiceBox's] Chief Scientist, and many of [VoiceBox's] engineers." (Tr. 158:24-159:2). Plaintiff also introduced evidence that in 2011, "[Amazon] was discussing internally how contextual speech, the idea of context and cooperative conversations could play inside Amazon's future." (Tr. 159:5-8; see also PTX-271 at 1-2) (displaying an e-mail from Mr. Komorous, the Director of Intellectual Property at Amazon, stating Amazon was "still discussing internally how contextual speech/cybermind 2012 could play a part in our future."). Then, in 2016 and in early 2017, Amazon began hiring VoiceBox employees, and hosted a recruiting event solely for VoiceBox employees. (Tr. 172:8-18). This prompted the parties, for a second time, to engage in potential merger or acquisition discussions "for about six months." (Tr. 184:25; see also Tr. 173:12-178:8).

In sum, the evidence demonstrates that Amazon was interested in developing a smart speaker, it knew VoiceBox possessed several related patents, it thoroughly investigated VoiceBox's technological capabilities, it began hiring and recruiting employees from VoiceBox, and it seriously considered acquiring or partnering with VoiceBox. At a minimum, it was reasonable for the jury to conclude that Amazon knew or should have known that its own smart speaker may infringe VoiceBox's patents. A more sinister interpretation of the evidence would be that "[Defendant] believed it needed to acquire or license [the patented products] to avoid infringement" and "copied [Plaintiff's] technology" instead of buying it. *Georgetown Rail Equip*. *Co. v. Holland L.P.*, 867 F.3d 1229, 1245 (Fed. Cir. 2017) (affirming the jury's finding of willful infringement). Regardless, either interpretation is reasonable and "the jury was free to decide whose evidence it found more compelling on the question of willfulness." *Id.* Therefore, the Court denies Defendant's motion.

D. <u>ELIGIBILITY</u>

1. <u>Legal Standard</u>

Section 101 of the Patent Act provides that "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof" may be awarded a patent. 35 U.S.C. § 101. The Supreme Court has interpreted Section 101 to contain the "implicit exception" that "[1]aws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014) (quoting *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)). In other words, not all inventions are "eligible" for patent protection.

To determine whether the patent is eligible, courts apply a two-step framework known as the *Alice* test. *See Alice*, 573 U.S. 208. At *Alice* step one, the Court reviews "whether a claim is directed to a patent-ineligible concept, such as an abstract idea." *EcoFactor, Inc. v. Google LLC*, 104 F.4th 243, 249 (Fed. Cir. 2024). A claim will "pass" step one, and will be deemed patent eligible, if the claims "focus on a specific means or method that improves the relevant technology" or embodies an advance over the prior art. *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016). If the claim passes step one, the Court need not assess eligibility under step two.

At *Alice* step two, the Court focuses on whether the elements of the claim, "both individually and as an ordered combination," "transform the nature of the claim into a patent-

eligible application of the abstract idea." *Two-Way Media Ltd v. Comcast Cable Communs., LLC*, 874 F.3d 1329, 1338 (Fed. Cir. 2017). To "pass" step two, the Court, or jury, must find the claim describes an "inventive concept," and does not merely recite instructions to "implement or apply the abstract idea on [a new platform]." *BASCOM Global Internet Servs. v. AT&T Mobility*, 827 F.3d 1341, 1349 (Fed. Cir. 2016).

2. <u>Analysis</u>

Amazon challenges the jury's finding that Amazon did not prove "by clear and convincing evidence that, from the perspective of one of ordinary skill in the art, when taken individually or as an ordered combination" claim 40 of the '176 patent or claim 23 of the '097 patent "only involved activities that were well-understood, routine, and conventional at the time of the invention."¹⁰ (D.I. 291 at 6). Amazon argues the jury's verdict was unreasonable because the asserted claims are "abstract" and "recite no inventive concept at *Alice* step 2." (D.I. 299 at 22-23). Additionally, notwithstanding the fact that the jury was not charged with determining eligibility of the '681 patent, Amazon argues claim 13 of the '681 patent is ineligible under Section 101. The Court disagrees.

a. <u>Alice Step One</u>

Prior to trial, the Court found that claim 1 of the '097 patent is directed to an abstract idea – "namely, providing promotional content in response to natural language utterances and

¹⁰ Amazon also argues that claim 25 of the '703 patent is patent ineligible. (D.I. 299 at 16-17). Amazon raised this only as an affirmative defense to infringement. As discussed above, the Court is granting Amazon's motion for judgment as a matter of law of noninfringement for the '703 patent. Therefore, any affirmative defenses concerning the '703 are mooted and will not be addressed by the Court. *Solomon Techs., Inc. v. Int'l Trade Comm'n*, 524 F.3d 1310, 1319 (Fed. Cir. 2008) ("Where invalidity is raised as an affirmative defense, however, it is not necessary for the reviewing court to address the validity issue.").

processing natural language responses to promotional content based on pronouns, respectively." (D.I. 57 at 15). Plaintiff does not challenge that this determination likewise applies to asserted claim 23. (*See* D.I. 311 at 17) (VB Assets stating that "[f]or the asserted claim[] of the . . .'097 Patent[], VB Assets does not reargue Alice Step 1, given the Court's prior ruling that similar claims were directed to [] abstract ideas"). Prior to trial, the Court also determined that claim 27 of the '176 patent is not directed to an abstract idea but rather to an improvement in the functioning of this technology, *i.e.*, it solved the previous inability of machines to engage in continuous dialogue with users by "mapping phonemes to syllables and providing preliminary interpretations based on that mapping to a conversational language processor for interpretation." (D.I. 57 at 14). At trial, however, claim 40 – not claim 27 – was asserted, and the parties dispute whether claim 40 of the '176 patent passes *Alice* step one.

As an initial matter, claim 40 does not claim the improvement in technology the Court focused on when addressing claim 27. Plaintiff elides over this fact and simply states:

Claim 40 overlaps with Claim 27 but is even more focused. In addition to the speech recognition engine and conversational language processor in both claims, Claim 40 also includes an "adaptive misrecognition engine." This additional limitation shows Claim 40, even more than Claim 27, is directed to a "patentable, technological improvement over the existing voice user interfaces," *id.* at 14, as it uses a process "specifically designed to achieve an improved technological result in conventional industry practice" under *McRO v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1316 (Fed. Cir. 2016).

(D.I. 311 at 14).

Plaintiff, however, offers no explanation as to how the "adaptive misrecognition engine" is an improvement in the functioning of this technology, and the Court cannot make that determination from its review of the claims or specification. At the same time, the Court is not entirely sure what abstract idea is being put forth by Defendant. (D.I. 299 at 17) ("Other than the

idea of customizing advertisements based on an utterance, the claim adds only the further abstraction of an 'adaptive misrecognition engine' detecting a 'predetermined event' and 'reinterpreting' an utterance in response."). In any event, given the jury's finding that claim 40 passes muster at step two of the *Alice* framework, the Court will leave clarification of this issue for another day. *Cf. CosmoKey Sols. GmbH & Co. KG v. Duo Sec. LLC*, 15 F.4th 1091, 1097 (Fed. Cir. 2021) ("We need not answer this question [*Alice* step one], however, because even if we accept the district court's narrow characterization of the [asserted] patent claims, the claims satisfy *Alice* step two."); *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1303 (Fed. Cir. 2016) (explaining that "even if [the claim] were directed to an abstract idea under step one, the claim is eligible under step two.").

b. <u>Alice Step 2</u>

The jury was presented with sufficient evidence to conclude that the processes described in the claims were not "in context obvious, already in use, or purely conventional." *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 81 (2012). Plaintiff's experts testified that the steps described in the claims were not "well-understood, routine, conventional activi[ties], previously engaged in by" voice computing programmers at the time. *Id.* at 82.

i. <u>Claim 40 of the '176 patent</u>

Defendant argues claim 40 is ineligible because Plaintiff did not explain how the claimed "adaptive misrecognition engine" works or "provide any detail about its operation." (D.I. 299 at 25). In other words, Defendant argues eligibility hinges on whether VB Assets established the claimed invention actually operates in a novel, non-conventional way. (*See* D.I. 319 at 13) ("Announcing goals that a patentee contends will flow from the claimed abstract idea . . . does not

constitute an inventive concept for purposes of *Alice* step 2.") (internal quotation marks omitted).¹¹ The relevant inquiry, however, for judgment as a matter of law, is whether the jury unreasonably found "Amazon [did not] prove by clear and convincing evidence" that the patent was ineligible. (D.I. 291 at 6 (verdict sheet); *see also* D.I. 288 at 17 (final jury instructions)). The alleged infringer, not the patentee, "must prove that the patent does not satisfy [the] prerequisites [for patent protection] before the patent loses its presumption of validity." *Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1319 (Fed. Cir. 2019). Accordingly, the Court must examine whether the jury's finding that Amazon did not meet its burden was supported by substantial evidence. *See Boehringer Ingelheim Vetmedica, Inc. v. Schering-Plough Corp.*, 320 F.3d 1339, 1353 (Fed. Cir. 2003) (stating that for any ground of invalidity, a defendant's burden on a JMOL motion is "doubly high: it must show that no reasonable jury could have failed to conclude that [Defendant's] case had been established by clear and convincing evidence.") (internal citation omitted).

At trial, Plaintiff's expert testified claim 40 was not well understood, routine, or conventional because the '176 patent's specification describes the invention's ability to "shortcut the complexity of some of the interactions" by "looking for misunderstanding, misrecognition, and then makes available a whole range of other systems to help [a user] figure out what the person meant to say." (Tr. 855:9-17). The jury further heard that the adaptive misrecognition engine was inventive because it capitalized on marrying interactivity with advertising "instead of it being a

¹¹ To clarify, the Court does not disagree with Amazon's general understanding of eligibility: the relevant inquiry at *Alice* step two is "whether the claims are directed to 'a specific means or method' for improving technology or whether they are simply directed to an abstract-end result." *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1326 (Fed. Cir. 2017) (quoting *McRO*, 837 F.3d at 1314). To be eligible, the claims must "focus on a specific means or method that improves the relevant technology" and cannot be "directed to a result or effect that itself is the abstract idea." *McRO*, 837 F.3d at 1314 (emphasis added). The Court disagrees, however, that it was Plaintiff's burden to prove the claims were eligible.

one-way flow from the source." (Tr. 277:7-13). Additionally, and contrary to Amazon's assertions, the jury was presented with evidence that the adaptive misrecognition engine in claim 40 was successfully invented, and the '176 patent's detailed description described how the adaptive misrecognition engine worked. (Tr. 228:12-22; 230:17-231:24). In contrast, Defendant's expert testified that none of claim 40's steps "were innovative" and the "order in which you connect [the steps] together is kind of the obvious way and in fact the only way." (Tr. 757:24-758:3). The same expert testified that "everything in [the '176 patent] was well-known and conventional." (Tr. 758:21-22).

Overall, Defendant offered minimal evidence of ineligibility at trial. (*See* D.I. 311 at 20) ("Amazon asked Dr. Johnson only two questions on [eligibility], and in response, he did not identify a single piece of prior art proving the elements were well-understood, routine, and conventional."). Comparatively, Plaintiff produced substantial, competing evidence of eligibility. Therefore, the jury was not unreasonable to conclude Amazon did not overcome its burden to prove ineligibility.

ii. <u>Claim 23 of the '097 patent</u>

Defendant argues claim 23 is ineligible because "neither the claim nor the specification explains how to use a pronoun to identify an item." (D.I. 299 at 24). Plaintiff counters that Defendant did not prove ineligibility by clear and convincing evidence because Defendant "did not offer much on '097 Patent eligibility other than [an expert's opinion] that in his view 'everything in [the] patent was well-known and conventional." (D.I. 311 at 21) (citing Tr. 758:12-23). The Court agrees with Plaintiff and concludes a "reasonable jury could have failed to conclude that [Defendant's] case had been established by clear and convincing evidence." *Boehringer Ingelheim Vetmedica, Inc.*, 320 F.3d at 1353.

Amazon's expert, Dr. Johnson, testified there was "nothing unconventional about what is disclosed" in the steps of claim 23. (Tr. 758:14-17). Aside from this conclusory testimony, Amazon has not demonstrated that it presented other evidence establishing ineligibility; and a single expert's conclusory statement does not constitute clear and convincing evidence of ineligibility. Furthermore, the jury was presented with competing evidence from Plaintiff that claim 23 was eligible-despite eligibility not being Plaintiff's burden to bear. For example, Mr. Freeman, one of the inventors of the '097 patent, testified that claim 23 was not conventional because it "remov[ed] the friction from the human to machine interaction . . . of being able to substitute a pronoun for a very long product name" which added "a lot of value in the human/machine interface" at the time. (Tr. 278:10-18). The other inventor, Mr. Kennewick, likewise emphasized that "use of a pronoun" to trigger a response in the interface was unique at the time. (See Tr. 153). Dr. Polish also testified that claim 23 "offers ideas that go beyond what was conventional" by "using a pronoun" and "enab[ling] the computer to understand the context and proceed from there." (Tr. 853:10-11, 15-18). Defendant had the burden to provide clear and convincing evidence of ineligibility, and it was not unreasonable for the jury to conclude that Defendant failed to do so.

c. <u>Claim 13 of the '681 patent is not ineligible</u>

Although the Court previously determined that Amazon had not proven that claim 13 of the '681 patent was ineligible, Amazon argues that the "jury still had ample evidence, including expert testimony, from which it could find the claim recited only well-understood, routine, and conventional technology." (D.I. 299 at 25). The Court disagrees. Amazon's own briefing fails to point to clear and convincing evidence of invalidity it presented at trial, and, contradictorily, acknowledges that its invalidity expert, Dr. Johnson, "did not state an opinion on the ultimate issue." (*Id.*). Therefore, the court affirms its prior ruling. (*See* D.I. 324 at 4:25-5:15).¹²

E. <u>INVALIDITY</u>

The jury found that Amazon did not prove, by clear and convincing evidence, that claim 23 of the '097 patent was invalid for lack of adequate written description. (D.I. 291 at 4). Amazon, nevertheless, moves this court to enter judgment as a matter of law in its favor.

1. Legal Standard

The Patent Act requires that every patent possess an adequate written description:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

35 U.S.C. § 112(a).

To satisfy this requirement, "the description must clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed." *In re Gosteli*, 872 F.2d 1008, 1012 (Fed. Cir. 1989). "In other words, the applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention, and demonstrate that by disclosure in the specification of the patent." *Carnegie Mellon Univ. v. Hoffmann-LaRoche Inc.*, 541 F.3d 1115, 1122 (Fed. Cir. 2008) (internal quotation marks and citation omitted).

The question whether a claim satisfies the written description requirement "is a question of fact, and, because a patent is presumed valid, the evidentiary burden to show facts supporting a

¹² The Court granted judgment as a matter of law with respect to the Section 101 issue and removed the question from the verdict sheet because Defendant's "counsel acknowledged that its expert hadn't put on or offered any opinions on this" at trial. (D.I. 324 at 5:7-8).

conclusion of invalidity is clear and convincing evidence." *ICN Photonics, Ltd. v. Cynosure, Inc.*, 73 Fed. Appx. 425, 428 (Fed. Cir. 2003) (internal citations omitted).

2. <u>Analysis</u>

Claim 23 describes a system able to interpret a natural language utterance from a user and then respond to "the existence of a pronoun in the natural language utterance" and "determine whether the pronoun refers to one or more of the product or service or a provider of the product or service." (JTX-5,'097 patent at 15:7-12). Amazon argues "no skilled artisan could understand the inventor to have possessed the invention – here, a computer system that can parse pronouns from speech – based on a specification devoid of *any mention*, much less explanation of such a system." (D.I. 299 at 21). Although Amazon acknowledges "it bears the burden of proof in invalidity," it argues that the '681 Patent is facially invalid and thus "proves its own invalidity." (D.I. 299 at 20) (quoting *Univ. of Rochester v. G.D. Searle & Co.*, 358 F.3d 916, 930 (Fed. Cir. 2004)). VB Assets counters that claim 13 is not facially invalid because the specification describes "how the claimed invention may resolve ambiguous utterances" and it "provides an example of resolving a pronoun in the phrase 'Yeah, I'll buy that' to a specific product." (D.I. 311 at 16-17) (quoting JTX-5,'097 patent at 11:20-31). The Court ultimately agrees with Plaintiff.

Mr. Freeman testified that he did not invent a way for a computer to understand the meaning of a pronoun, and instead tasked engineers to devise a way to be "able to substitute for the actual nouns in this situation." (Tr. 286:3-10). Amazon capitalizes on Mr. Freeman's admission that he did not invent a way for a computer "to *understand the meaning* of a pronoun." (Tr. 286:11-13) (emphasis added). Nevertheless, claim 23 does not require the computer "understand the meaning of a pronoun." Claim 23 requires the computer "determine whether the pronoun refers to one or more of the product or service or a provider of a product or service," where the service or provider had already been presented in the advertisement. The former is akin

to requiring that a person describe and detail a foreign dish on a restaurant menu, and the latter is akin to requiring that person to simply point to an item on the menu – the latter being a much simpler task. Furthermore, Dr. Johnson, a person with skill in the art, described claim 23 as being "pretty simple" because "you interpret that utterance based on the advertising you just gave them, and you figure out whether there was a pronoun in there and then you determine whether the pronoun refers to one or more product or service that may have been in the advertisement." (Tr. 699:3-11). An example of this "simple" concept which is "monitored in a decisional operation" is illustrated in the '097 patent's detailed description:

... a selected advertisement may enable the user to purchase a ringtone for a mobile phone that corresponds to the song. In this example, the interaction may include a request to purchase the ringtone (e.g., "Yeah, I'll buy that"), and action taken in operation 335 ["Action Based on Interaction"] may include completing a transaction for the ringtone and/or downloading the ringtone to the mobile phone. Furthermore, additional advertisements may be selected in an operation 340 ["Select Ad Based on Interaction"] based on the interaction, using similar techniques as described in connection with operation 320 ["Select Ad Based on Request"] (e.g., advertisements for additional ringtones, similar musicians, etc. mya be selected). Processing may subsequently return to operation 325 ["Present Output (Including Advertisement)"] to present output resulting from the interaction.

(JTX-5,'097 patent at 11:25-37).

With deference to the aforementioned evidence, the Court finds that the jury was entitled to find that Defendant failed to meet its burden of proving that claim 23 of the '097 patent is invalid for lack of adequate written description.

III. PLAINTIFF'S POST-TRIAL MOTIONS

The jury awarded Plaintiff \$46,700,000 in reasonable royalty damages, and the Court entered judgment following jury verdict for that amount. (D.I. 291 at 7; D.I. 293 at 2). The jury adopted the award calculated by Plaintiff's damages expert, Mr. Reed, who testified that

reasonable royalty damages for infringement of all the asserted patents should total \$46,724,400. (Tr. 511:23). Plaintiff now moves the Court to enhance the jury's damages award by one-half to \$70,050,000; impose an ongoing royalty at the rates the jury found at trial; and award pre-judgment and post-judgment interest on the total damages award. (D.I. 301 at 5-6).

As a preliminary matter, the Court must reduce the damages to exclude the amount attributed for infringement of the '703 patent because the Court has determined there was insufficient evidence to support the jury's infringement verdict. Mr. Reed calculated reasonable royalty damages of \$6,692,400 for the '703 patent. (Tr. 511:16-21).¹³ Accordingly, the jury's award is properly reduced to \$40,007,600.

A. <u>ENHANCED DAMAGES</u>

In its post-trial motion, VB Assets requests that the Court enhance damages by 50%, *i.e.*, increase the damages from \$40,007,600 to \$60,011,400. (D.I. 301 at 9). VB Assets argues enhanced damages are warranted because the infringement was willful, the case was not close, "Amazon's defenses at trial were based on false premises," Amazon has vast resources and Amazon "massively over-litigated this case prior to trial." (*Id.*). In opposition, Amazon asks the Court to deny the request because neither its litigation conduct nor any other relevant factors justify enhancement. (*See* D.I. 312 at 8-19). VB Assets, as the party seeking enhanced damages, has the burden of proving by a preponderance of the evidence that an increased award is warranted. *See Halo Elecs.*, *Inc.*, 579 U.S. at 107.

¹³ Mr. Reed calculated the damages attributed to infringement of the '703 patent by multiplying 22 cents (\$0.22) by 30,420,000. This calculation should result in a total of \$6,692,400 in damages (which was also the number written on Mr. Reed's demonstrative slide). The trial transcript, however, reflects that Mr. Reed stated the total was "6,699,204." (Tr. 511: 17-21). Although neither party raised this discrepancy in the errata, it is clear that it is an error. Therefore, the Court uses the correct number \$6,692,400.

1. Legal Standard

Section 284 of the Patent Act ("the Act") provides that in a case of patent infringement a Court may "increase the damages up to three times the amount found or assessed." 35 U.S.C. § 284. Although the Act does not detail appropriate circumstances for these so-called "enhanced damages," courts have interpreted the Act to require a finding of willful infringement prior to enhancing damages. *See WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1341 (Fed. Cir. 2016) ("Knowledge of the patent alleged to be willfully infringed continues to be a prerequisite to enhanced damages."). "Consistent with nearly two centuries of enhanced damages under patent law, however, such punishment should generally be reserved for *egregious* cases typified by willful misconduct."¹⁴ *Halo*, 579 U.S. at 106 (emphasis added). "The sort of conduct warranting enhanced damages has been variously described in [Supreme Court] cases as willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant, or – indeed – characteristic of a pirate." *Id.* at 103-104.

As an initial matter, Amazon's conduct does not strike the Court as "willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant," or "egregious." *Id.* Indeed, there was minimal direct evidence demonstrating Amazon had a nefarious motive of any sort. Nevertheless, Plaintiff argues the factors articulated in *Read Corp. v. Portec, Inc.*, 970 F.2d 816 (Fed. Cir. 1992), ("the *Read* factors") favor an award of enhanced damages. Although "not mandatory," the *Read* factors "assist the trial court in evaluating the degree of the infringer's culpability and in determining whether to exercise its discretion to award enhanced damages at all, and if so, by how much the damages should be increased." *WCM Indus., Inc. v. IPS Corp.*,

¹⁴ Notably, a jury verdict of willful infringement does not require a court to impose enhanced damages. The Supreme Court has held that enhanced damages are reserved for "egregious cases *typified* by willful misconduct," not that enhanced damages must always follow a finding of willful misconduct. 579 U.S. at 106 (emphasis added).

721 Fed. Appx. 959, 972 (Fed. Cir. 2018).¹⁵ The *Read* factors, and the Court's corresponding analysis, are set out below.

2. <u>Analysis</u>

a. Factor 1: "whether the infringer deliberately copied the ideas or design of another."

Amazon argues there is a lack of evidence proving it deliberately copied Plaintiff's technology. (D.I. 312 at 9). The Court agrees. Indeed, prior to trial, the parties agreed that Plaintiff would not use the words "copy," "steal," "theft," or "trespass," or any variations thereof, to describe Amazon's conduct. (D.I. 259 at 2). Plaintiff also stipulated that "it will not present any argument, evidence or testimony that Amazon copied any VB Assets or VoiceBox product." (*Id.*). The Court will take Plaintiff at its word and finds that this factor weighs against enhancing damages.

b. Factor 2: "whether the infringer, when he knew of the other's patent protection, investigated the scope of the patent and formed a good-faith belief that it was invalid or that it was not infringed."

As discussed above (*see supra* Section II(C)(2)(a)), Amazon became aware of the '176 and '681 patents in 2011 and the '097 patent in 2017. Amazon, however, argues that because VB Assets never directly accused it of infringement, it was excused from conducting any precautionary infringement due diligence. Amazon's assertion is unterhered from the law. It is "well settled that where a potential infringer has actual notice of another's patent rights he has an affirmative duty of due care." *Rolls-Royce Ltd. v. GTE Valeron Corp.*, 800 F.2d 1101, 1110 (Fed. Cir. 1986). Assuming the affirmative duty "will normally entail the obtaining of competent

¹⁵ According to the Federal Circuit, "the district court is not required to discuss the *Read* factors" but it is obligated to explain how and why it came to a decision of enhancement. *Presidio Components, Inc. v. Am. Tech. Ceramics Corp.*, 875 F.3d 1369, 1382 (Fed. Cir. 2017).

legal advice of counsel before infringing or continuing to infringe," or relying on other facts that would indicate to the party that the patent was invalid or not infringed. *Id.* Amazon failed to present any mitigating evidence showing it exercised due care when it became aware of VB Assets' respective patent rights. Accordingly, this factor weighs in favor of enhancing damages.

c. <u>Factor 3: "the infringer's behavior as a party to the litigation."</u>

VB Assets argues the third factor weighs in favor of enhancing damages because Amazon "hid the ball by over-litigating its defenses" and "presented only a small and inconsistent case at trial." (D.I. 301 at 15, 18). Amazon counters that VB Assets, not it, "dictated the scope of the case at each stage" and that its defenses were made in good-faith and did not lack merit. (D.I. 312 at 11). In essence, both parties blame the other for alleged "misconduct" such as failing to bring certain experts to trial, presenting the other with voluminous responses, and over-asserting claims or defenses and then changing strategy. Typically, however, "'litigation misconduct' refers to bringing vexatious or unjustified suits, discovery abuses, failure to obey orders of the court, or acts that unnecessarily prolong litigation." i4i Ltd. P'ship v. Microsoft Corp., 598 F.3d 831, 859 (Fed. Cir. 2010). The "behavior" each party complains of may be inconvenient, but it is not out of the ordinary during a contentious litigation. There is no evidence that Amazon only employed its defenses or its "two-path" trial theme "for the primary purpose of unnecessarily increasing the burden of this litigation on [Plaintiff]." Joyal Prods. v. Johnson Elec. North Am., Inc., C.A. No. 04-5172 (JAP), 2009 WL 512156, 2009 U.S. Dist. LEXIS 15531, at *19 (D.N.J. Feb. 27, 2009) (determining there was litigation misconduct where the Defendant repeatedly made frivolous motions that "utterly lacked merit," and where the Court was required to intervene during discovery). The Court also does not find Amazon engaged in other types of vexatious conduct such as "consistently relitigat[ing] settled issues, ignor[ing] prior warnings about perceived misconduct, and adopt[ing] astonishing litigation positions that were ... highly questionable at best." *Trustees of Columbia University City of New York v. Gen Digital Inc.*, C.A. No. 3:13cv808, 2023 U.S. Dist. LEXIS 231611, 2023 WL 8699435, at *13 (E.D. Va. Sept. 30, 2023) (describing conduct that warrants enhanced damages under *Read* Factor three). Thus, this factor does not support enhancement.

d. Factor 4: "Defendant's size and financial condition."

Plaintiff argues "Amazon's indisputable size and financial strength further supports enhancement." (D.I. 301 at 20). For example, Plaintiff states that Amazon would not be materially impaired by an award of enhanced damages because the requested enhancement "represents only .0126% of Amazon's revenue" for the twelve-month period ending September 2023. (Id. at 21). Although some courts have determined financial success bodes in favor of enhancement, "[t]his factor is often given weight *against* enhancement in situations where, for instance, the other *Read* factors strongly support enhancement but the infringer is in such perilous financial condition that an award of enhanced damages might put it out of business." Idenix Pharms. LLC v. Gilead Scis., Inc., 271 F. Supp. 3d 694, 701 (D. Del. 2017); see also Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc., 762 F. Supp. 2d 710, 722 (D. Del. 2011) ("The defendant's financial condition typically is used as a reason *not* to grant enhanced damages to the fullest extent."). The Court therefore will consider this factor as having a neutral effect, but not as a reason to support enhancement. See Power Integrations, Inc. v. Fairchild Semiconductor Int'l, C.A. No. 08-309-LPS, 2019 U.S. Dist. LEXIS 121675, at *22 (D. Del. July 22, 2019) (determining where there is a "large, financially successful company" the fourth Read factor "does not disfavor enhanced damages" and "is neutral.").

e. <u>Factor 5: "Closeness of the case."</u>

Plaintiff asserts the fifth factor supports enhancement because "the jury found for VB Assets on every issue, for each of the four patents," "awarded VB Assets the full amount of

damages it sought at trial" and "the jury needed less than two hours to render its verdict on infringement." (D.I. 301 at 21-22). The case, however, was not as "close" as Plaintiff contends. Indeed, the issues were not so clear cut that the Court was able to rule in Plaintiff's favor on summary judgment. And, in fact, the Court has decided that the jury did not have substantial evidence to reasonably conclude claim 25 of the '703 patent was infringed. Additionally, the case law "indicates that the length of deliberations can not be taken into account either way in assessing the closeness of the case." *IMX, Inc. v. Lendingtree, LLC*, 469 F. Supp. 2d 203, 221 (D. Del. 2007); *see also Roche Diagnostics Corp. v. Meso Scale Diagnostics, LLC*, 503 F. Supp. 3d 156, 180 (D. Del. 2020) ("[Plaintiff's] contention that the speed of the jury deliberation (just two hours) means this was not a close case and, hence, supports willfulness is unpersuasive."). As a result, the Court finds that this factor does not weigh in favor of enhancing damages.

f. Factors 6 & 7: "Duration of the defendant's misconduct" and "Remedial action by the defendant."

Amazon has sold the accused products since 2014. Following trial, and seemingly unphased by the jury's infringement verdict, Amazon has continued selling and marketing the accused products. Amazon justifies its decision by arguing it maintains a good-faith belief "the patents are both invalid and not infringed." (D.I. 312 at 17). "That excuse, at least as to post-verdict conduct, holds little weight here." *Jiaxing Super Lightning Elec. Appliance Co. v. CH Lighting Tech. Co.*, C.A. No. 6:20-cv-00018-ADA, 2022 WL 3371630, 2022 U.S. Dist. LEXIS 146033, at *28 (W.D. Tex. Aug. 16, 2022) (holding that the seventh *Read* favor weighs in favor of enhancing damages where the defendant "has taken no remedial action but excuses itself on the ground it has asserted good-faith defenses and will continue to do so in post-verdict motions and on appeal."). The Court finds that Amazon's decade-long conduct, disregard for the jury's verdict and failure to take any remedial actions all counsel in favor of enhancing damages.

g. Factor 8: "Defendant's motivation for harm."

"For the eighth factor, the Court considers whether there is evidence of any direct motivation on the part of the infringer to harm the patent holder, as opposed to advancing its own interests." Canon, Inc. v. Color Imaging, Inc., 292 F. Supp. 3d 1357, 1368 (N.D. Ga. 2018). Plaintiff argues Amazon was motivated to harm its business as evidenced by Amazon's meetings with VoiceBox's top customers, and its hiring and recruiting of VoiceBox employees. (Tr. 820:17-821:2; Tr. 172:8-18; see also D.I. 301 at 23 (stating that Amazon intended to "subsume VoiceBox's business by building out the exact products VoiceBox was working on in addition to the smart speaker they started with.")). The Court perceives the evidence to establish that Amazon was clearly interested in Plaintiff's expertise and experience with smart speaker technologies; but not that Amazon was motivated to harm Plaintiff. Significantly, "there is nothing to suggest that [Defendant] acted out of spite or ill-will toward [Plaintiff] or for any reason other than a desire to capture a piece of the market." Georgetown Rail Equip. Co. v. Holland L.P., C.A. No. 6:13-CV-366, 2016 WL 3346084, 2016 U.S. Dist. LEXIS 78365, at *64 (E.D. Tex. June 16, 2016) (finding that although circumstantial evidence indicated that Defendant may have chosen to copy rather than license Plaintiff's product, Defendant's motivation was its own financial gain, not to harm Plaintiff specifically), aff'd, 867 F.3d 1229 (Fed. Cir. 2017); see also Green Mt. Glass LLC v. Saint-Gobain Containers, Inc., 300 F. Supp. 3d 610, 630 (D. Del. 2018) (finding that "motivation for harm" is not proven when the infringer "acted pursuant to a financial motive" in a "gardenvariety infringement case."). The evidence indicates that Amazon's infringement was motivated by its goal to improve its own products and stay ahead in the technology space. (See Tr. 160:9-17) (Mr. Kennewick speculating that Amazon's desire was to put voice into the Kindle Fire or the Amazon phone). Therefore, the Court cannot conclude Amazon was motivated to harm Plaintiff and this factor does not support enhancement.

h. Factor 9: "whether defendant attempted to conceal its misconduct."

No evidence indicates Defendant attempted to hide its products or sales. *See Nox Med. Ehf v. Natus Neurology, Inc.*, C.A. No. 1:15-cv-00709-RGA, 2018 U.S. Dist. 206844, at *10 (D. Del. Dec. 7, 2018). Indeed, "[t]here is no dispute between the parties that the accused products were openly sold." *Vectura Ltd. v. GlaxoSmithKline LLC*, C.A. No. 16-638-RGA, 2019 WL 4346502, 2019 U.S. Dist. LEXIS 155768, at *12 (D. Del. Sept. 12, 2019). Therefore, this factor does not support enhancing damages.

3. <u>Conclusion</u>

Having carefully weighed and analyzed each of the *Read* factors, the Court concludes an award of enhanced damages is not warranted. Although several factors may support enhancement, on balance, the factors do not support the enhancement requested. More significantly, having overseen this case for its entirety, the Court does not view the particular circumstances of this case as involving the type of egregious misconduct recognized by the Supreme Court in *Halo. See* 579 U.S. 93 (2016). Thus, in exercising its due discretion, the Court declines to enhance damages.

B. <u>ONGOING ROYALTY</u>

Plaintiff requests an ongoing royalty "at the rates underpinning the jury's verdict." (D.I. 301 at 7). Specifically, Plaintiff seeks \$0.40 per net new Alexa user as an ongoing royalty on the '681 patent, and \$0.22 per net new Alexa Shopping user as an ongoing royalty on the '176 patent and '097 patent.¹⁶ (*Id.*). Plaintiff argues an ongoing royalty is warranted because "Amazon has done nothing to change its infringing practices going forward, and the verdict does not compensate VB Assets for Amazon's infringement in the future." (*Id.* at 6). Defendant argues

¹⁶ Plaintiff also seeks \$0.22 per net new Alexa Shopping purchaser as an ongoing royalty on the '703 patent; however, because the Court has determined the jury improperly concluded claim 25 of the '703 patent was infringed, the Court will not address this request.

the Court should deny an ongoing royalty because VB Assets has not met its burden of proving entitlement to the royalty or the specific rate, the jury's awarded rate was over-inflated, and the requested royalty base "double-counts users and includes predominately non-infringing activity."¹⁷ (D.I. 312 at 22).

1. <u>Legal Standard</u>

"When a patentee requests running royalty damages, and the jury awards damages through trial, district courts have authority to craft a compulsory ongoing royalty for future sales of products the jury found to infringe." Godo Kaisha IP Bridge 1 v. TCL Commun. Tech. Holdings Ltd., Civ. No. 15-634-JFB, 2019 U.S. Dist. LEXIS 70752, at *11 (D. Del. Apr. 26, 2019). "Although an ongoing royalty is not automatic, 'the Federal Circuit has indicated that a prevailing patentee should receive compensation for any continuing infringement." Purewick Corp. v. Sage Prods., LLC, 666 F. Supp. 3d 419, 448 (D. Del. 2023) (quoting Apple, Inc. v. Samsung Elecs. Co., Case No.: 12-CV-00630-LHK, 2014 WL 6687122, at *7 (N.D. Cal. Nov. 25, 2014)). To determine an appropriate ongoing royalty, the Court must consider "what a hypothetical negotiation would look like after the prior infringement verdict." XY, LLC v. Trans Ova Genetics, L.C., 890 F.3d 1282, 1297 (Fed. Cir. 2018); see also id. at 1297 ("[T]here is a fundamental difference between a reasonable royalty for pre-verdict infringement and damages for post-verdict infringement") (internal quotation marks and citation omitted). Of course, the hypothetical negotiation may be impacted by a change in the marketplace, a change in demand for the patented product, and, importantly, the fact that the Court has determined the patent to be valid and infringed. See ActiveVideo Networks, Inc. v. Verizon Communs., Inc., 694 F.3d 1312, 1342 (Fed. Cir. 2012)

¹⁷ Specifically, Amazon argues Mr. Reed's damages calculation does not reflect "new" customers, and instead only demonstrates the change in monthly active users – some of which may have been customers previously but became temporarily inactive. (D.I. 312 at 22).

(stating that a verdict of infringement and validity creates a "substantial shift in the bargaining position of the parties."). The burden of proving damages for the ongoing royalty remains with the patentee. *See Creative Internet Adver. Corp. v. Yahoo! Inc.*, 674 F. Supp. 2d 847, 854 (E.D. Tex. 2009) ("When injunctive relief is denied . . . and the Court instead considers whether an infringer should pay an ongoing royalty, the Court finds that the burden of proving damages remains with the patentee.").

2. <u>Analysis</u>

The Court finds that Plaintiff is entitled to an ongoing royalty. The jury found that Amazon willfully infringed the asserted patents through the end of 2023 and, since then, Amazon has continued to infringe three of the patents. The Court, however, cannot on the record before it determine what that ongoing royalty rate should be.

Plaintiff contends it does not need to "demonstrate a change in the parties' post-verdict bargaining position" because it "has not asked for an upward departure from the jury award." (D.I. 318 at 7). In other words, Plaintiff argues that if the Court agrees to issue an ongoing royalty, Plaintiff is entitled to the rate awarded by the jury. Although it is true that the jury's awarded rate should serve as a starting point for an ongoing royalty, the Court must conclude that "other considerations do not compel a departure from the jury's assessment of the proper royalty rate." *Erfindergemeinschaft UroPep GbR v. Eli Lilly & Co.*, Case No. 2:15-CV-1202-WCV, 2017 WL 3034655, at *7 (E.D. Tex. July 18, 2017). Indeed, the Federal Circuit has "instructed" district courts to consider post-verdict factors – such as "changes related to the market for the patented products" – which may indicate that the rate should differ from the jury's rate. *Trans Ova Genetics, L.C.*, 890 F.3d at 1297. Therefore, because "a patentee bears the burden of proving its damages by a preponderance of the evidence," the patentee must present relevant post-verdict factors which would frame the new, hypothetical negotiation. *EMC Corp. v. Zerto, Inc.*, C.A. No.

12-956 (GMS), 2017 U.S. Dist. LEXIS 126908, at *3 (D. Del. Aug. 10, 2017). Here, Plaintiff has failed to present the Court with information on how circumstances have changed. As a result, the Court is ill-equipped to assess whether the jury's awarded royalty rate would be an appropriate rate for the ongoing royalty and orders further briefing on this issue. The Court will give Plaintiff until October 10, 2024, to submit papers of no more than five pages, setting forth its proposed ongoing royalty rate and the reasoning therefor in accordance with this opinion. Defendant must submit its answer, which shall not exceed five pages, by October 24, 2024. No other papers will be accepted. After receipt of the aforementioned briefing and proper review, the Court will issue an appropriate Order.

C. <u>PRE-JUDGMENT INTEREST</u>

Upon a finding of infringement, Plaintiff is entitled to prejudgment interest under 35 U.S.C. § 284. *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1574 (Fed. Cir. 1996). Prejudgment interest should only be limited or denied "where the patent owner has been responsible for undue delay in prosecuting the lawsuit." *GM Corp. v. Devex Corp.*, 461 U.S. 648, 657 (1983). Nevertheless, "the withholding of prejudgment interest based on delay is the exception, not the rule." *Lummus Indus. v. D.M. & E. Corp.*, 862 F.2d 267, 275 (Fed. Cir. 1988).

Defendant argues Plaintiff is not entitled to pre-judgment interest because "it delayed asserting its patents, causing damages to escalate." (D.I. 312 at 24). Defendant points to meetings it had with Plaintiff in 2017, where it asserts Plaintiff could have informed it of infringement. (*Id.*). Notably, however, "to show that a delay was undue, a defendant must, at least generally, show that it was prejudiced." *Kaufman v. Microsoft Corp.*, 34 F.4th 1360, 1375 (Fed. Cir. 2022). Prejudice is not shown where a defendant "merely argues that its damages are higher due to the delay in filing the suit." *MHL Custom, Inc. v. Waydoo USA, Inc.*, C.A. No. 21-0091-RGA, 2023 U.S. Dist. LEXIS 158243, at *19 (D. Del. Sept. 7, 2023). Amazon argues that "VB Assets deprived Amazon

of any meaningful opportunity to reengineer Alexa;" but, significantly, Amazon does not argue that it *would have* done so. (D.I. 312 at 25). In fact, Amazon, in the same brief, also asserts it "had no reason to stop selling or redesign the accused products when VB Assets finally did file suit." (D.I. 312 at 17). Therefore, the Court does not find that VB Assets' delay was prejudicial to Amazon and shall award Plaintiff pre-judgment interest.

To calculate the pre-judgment interest rate, district courts are afforded "wide latitude" and may use a variety of "statutory rates set by states, U.S. Treasury bill rate, and the prime rate." *Schwnedimann v. Arkwright Advanced Coating, Inc.*, 959 F.3d 1065, 1076 (Fed. Cir. 2020). Notably, in the District of Delaware, selecting "[t]he prime rate is by far the most common practice." *ArcherDX, LLC v. Qiagen Sciences, LLC*, C.A. No. 18-1019 (MN), 2022 U.S. Dist. LEXIS 178509, at *54 (D. Del. Sept. 30, 2022). Delaware courts "have recognized that the prime rate best compensate[s] a patentee for lost revenues during the period of infringement because the prime rate represents the cost of borrowing money, which is a better measure of the harm suffered as a result of the loss of the use of money over time." *IMX, Inc. v. Lendingtree, LLC*, 469 F. Supp. 2d 203, 227 (D. Del. 2007) (internal quotations omitted). Neither party contests use of the prime rate applied to the adjusted award of \$40,007,600.

D. <u>POST-JUDGMENT INTEREST</u>

"Post-judgment interest is mandatory for damages awarded in a civil case." *Archer DX*, *LLC*, 2022 U.S. Dist. LEXIS 178509 at *55; *see also* 28 U.S.C. § 1961(a) ("Interest shall be allowed on any money judgment in a civil case recovered in a district court."). Post-judgment interest is awarded at the rate "equal to the weekly average 1-year constant maturity Treasury yield ... for the calendar week preceding the date of the judgment." *Id*. The calendar week preceding the date of the judgment." *Id*. The calendar week preceding the date of the judgment." *Id*. The calendar week preceding the date of the judgment." *Id*. The calendar week preceding the date of judgment, November 8, 2023, was October 30 through November 3, 2023. The weekly

average 1-year constant maturity Treasury yield for that week was 5.38%. (D.I. 301 at 8). Therefore, the Court awards Plaintiff pre-judgment interest at the 5.38% rate for the entire judgment amount, including the award of pre-judgment interest.

IV. CONCLUSION

For the aforementioned reasons, Defendant's renewed motion for judgment as a matter of law is GRANTED-IN-PART with respect to infringement of claim 25 of the '703 patent and DENIED-IN-PART in all other respects, and Plaintiff's post-trial motion is GRANTED-IN-PART as to pre-judgment interest and post-judgment interest and DENIED-IN-PART as to enhanced damages. The Court will GRANT Plaintiff's motion for an ongoing royalty but orders further briefing, as detailed in Section III(B)(2) of this Opinion, to determine the appropriate award. An Order will follow.

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

VB ASSETS, LLC,)
Plaintiff,))
v.)) C.A. No. 19-1410 (MN)
AMAZON.COM SERVICES LLC,)
Defendant.)

<u>ORDER</u>

At Wilmington, this 30th day of September 2024 for the reasons set forth in the Memorandum Opinion issued on this date, IT IS HEREBY ORDERED that:

1. Defendant's motion for judgment as a matter of law on infringement of U.S. Patent Nos. 8,073,681 ("the '681 patent"), 7,818,176 ("the '176 patent"), and 9,269,097 ("the '097 patent") is DENIED.

Defendant's motion for judgment as a matter of law on infringement of U.S. Patent
 No. 9,626,703 ("the '703 patent") is GRANTED.

3. Defendant's motion for judgment as a matter of law on invalidity of the '097 patent is DENIED.

4. Defendant's motion for judgment as a matter of law on ineligibility of the '176 patent, the'097 patent and the '681 patent is DENIED.

 Defendant's motion for ineligibility and invalidity of the '703 patent is DENIED AS MOOT.

6. Defendant's motion for judgment as a matter of law on willful infringement is DENIED.

7. Plaintiff's motion for enhanced damages is DENIED.

8. Plaintiff's motion for pre-judgment and post-judgment interest on the damages award is GRANTED.

IT IS FURTHER ORDERED that the parties shall submit further briefing on the issue of an ongoing royalty in accordance with the Court's ruling by October 10, 2024 and October 24, 2024, respectively.

The Honorable Maryellen Noreika United States District Judge