

**Tentative Order Regarding
Western Digital’s Post-Trial Motions**

Plaintiff SPEX Technologies, Inc. (“SPEX” or “Plaintiff”) filed this patent infringement suit against Defendants Western Digital Corporation, Western Digital Technologies, Inc., and HGST, Inc. (“WD” or “Defendants”) on September 28, 2016. Complaint, Docket No. 1. This matter proceeded to a jury trial on October 8, 2024. See Day One Minutes, Docket No. 523. The jury returned a verdict finding WD’s Ultrastar He 10 and My Book products (the “Accused Products”) infringed Claim 25 of U.S. Patent No. 6,088,802 (the “’802 Patent”). Verdict, Docket Nos. 590, 591 (sealed). The jury awarded SPEX \$315,715,900 in damages. *Id.*

The Court addresses WD’s Motion for Judgment as a Matter of Law under Fed. R. Civ. P. 50(b) (Docket No. 627) and WD’s Motion for Relief from Judgment and a New Trial under Fed. R. Civ. P. 59 (Docket No. 628) here. WD filed a consolidated memorandum in support of both motions. (Memo, Docket No. 637). SPEX filed an opposition (Opp’n, Docket No. 643) and WD filed a reply (Reply, Docket No. 644).

For the following reasons, WD’s Rule 50(b) Motion and Rule 59 Motion are **DENIED**.

I. BACKGROUND

A. Infringement

This case has been pending since 2016. In the earlier stages of the case, the Court construed several terms including the “means for providing” limitation and “defined interaction.” See generally, Markman Order, Docket No. 65. The Court found the “means for providing” limitation indefinite for failure to disclose sufficient corresponding structure. *Id.* at 43. The parties then filed summary judgment motions. See generally, Prior Summary Judgment Order, Docket No. 159. SPEX appealed the Court’s noninfringement findings as to certain claims of the ’802 Patent as well as the

indefiniteness finding. See Appellate Order, Docket No. 167. The Federal Circuit affirmed the noninfringement findings but reversed and remanded on the indefiniteness issue. *Id.* at 2.

On remand, SPEX asserted only Claims 6, 7, and 25 of the 802 Patent. The parties conducted additional discovery and WD moved for summary judgment of non-infringement of these claims. Summary Judgment Motion, Docket No. 247. Relevant to the “defined interaction” limitation, the Court found Rhyne’s opinion that “mass storage” is the “defined interaction incorrect. Summary Judgment Order, Docket No. 309 at 10. The Court found a triable issue of fact as to whether SATA/SAS/USB protocols (the “handshake”) could satisfy the limitation. *Id.* On that basis, the Court denied WD’s motion. WD later moved to exclude the “handshake” theory under Rule 37(c). Motion, Docket No. 324. The Court denied that motion based on disclosures in Rhyne’s original and supplemental expert reports. Order, Docket No. 491 at 6-8. Trial proceeded on only Claim 25 of the ’802 Patent thereafter.

B. Damages

At the post-remand summary judgment stage, the Court excluded SPEX’s damages expert. Order, Docket No. 307. WD then filed a motion in limine to preclude SPEX from presenting a reasonable royalty rate based on insufficient evidence and disclosure issues. Motion, Docket No. 325. The Court denied that motion. Order, Docket Nos. 411 (sealed), 412. SPEX presented a damages theory based on licensing efforts and supported by lay witness testimony at trial. During trial, the Court granted WD’s Rule 50(a) motion to eliminate SPEX’s comparable license theory but allowed SPEX to present a revised damages theory relying on evidence already presented at trial. See Day 6 Minutes, Docket No. 568. WD then moved again under Rule 50(a) to eliminate SPEX’s revised damages theory. The Court denied that motion and allowed SPEX to proceed.

II. LEGAL STANDARD

A. Rule 50(b)

Considering the grant or denial of a motion for judgment as a matter of law presents “a procedural issue not unique to patent law, which [the Federal Circuit] review[s] under the law of the regional circuit where the appeal from the district court

normally would lie.” *Riverwood Int’l Corp. v. R.A. Jones & Co.*, 324 F.3d 1346, 1352 (Fed. Cir. 2003); see also *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 435 F.3d 1356, 1364 (Fed. Cir. 2006). Rule 50 authorizes the defendant to move for judgment as a matter of law anytime after the plaintiff’s case-in-chief. Fed. R. Civ. P. 50(a). In determining whether to grant judgment as a matter of law, the court must determine whether the jury has a “legally sufficient evidentiary basis” to find for the plaintiff. *Id.* If the judge denies the motion, and the jury later returns a verdict against the defendant, the defendant may renew its motion for judgment as a matter of law after trial. Fed. R. Civ. P. 50(b); *EEOC v. Go Daddy Software, Inc.*, 581 F.3d 951, 961 (9th Cir. 2009). Like the pre-verdict motion, the post-verdict motion also challenges the sufficiency of the plaintiff’s evidence. *Hagen v. City of Eugene*, 736 F.3d 1251, 1256 (9th Cir. 2013). If the jury verdict is “supported by substantial evidence,” the court must uphold the jury verdict. *Pavao v. Pagay*, 307 F.3d 915, 918 (9th Cir. 2002). However, if the evidence “permits only one reasonable conclusion, and that conclusion is contrary to the jury,” the court may grant judgment as a matter of law to the defendant. *White v. Ford Motor Co.*, 312 F.3d 998, 1010 (9th Cir. 2002) (internal quotation marks omitted). When reviewing the evidence, the court must view the evidence “in the light most favorable to the nonmoving party” and draw “all reasonable inferences” in favor of the nonmoving party. *Torres v. City of Los Angeles*, 548 F.3d 1197, 1205-06 (9th Cir. 2008) (internal quotation marks omitted).

B. Rule 59

The power of the Court to grant a new trial under Fed. R. Civ. P. 59(a) is “confided almost entirely to the exercise of discretion on the part of the trial court.” *Murphy v. City of Long Beach*, 914 F.2d 183, 186 (9th Cir.1990). In deciding a motion for new trial, the Court “can weigh the evidence and assess the credibility of witnesses, and need not view the evidence from the perspective most favorable to the prevailing party.” *Landes Constr. Co., Inc. v. Royal Bank of Canada*, 833 F.2d 1365, 1371 (9th Cir.1987). The district court should “set aside the verdict of the jury, even though supported by substantial evidence, where, in the court’s conscientious opinion, the verdict is contrary to the clear weight of the evidence.” *Molski v. M.J. Cable, Inc.*, 481 F.3d 724, 729 (9th Cir. 2007) (“[T]he district court has the duty to weigh the evidence as the court saw it”) (internal alteration marks, quotation marks, and citations omitted). However, a court should grant a new trial only when it “is left with the definite and firm conviction that a mistake has been committed,” *Landes Constr.*, 833 F.2d at 1372, and it “may not grant a new trial simply because

it would have arrived at a different verdict.” *Silver Sage Partners, Ltd. v. City of Desert Hot Springs*, 251 F.3d 814, 819 (9th Cir. 2001).

IV. DISCUSSION

A. Infringement¹

1. “Target Means”

WD argues that SPEX’s technical expert, Dr. Rhyne, admitted at trial that the “target means” in the accused products does not “enabl[e] the defined interaction with a host computing device.” Memo at 6-7. WD therefore argues that the evidence cannot support the jury’s infringement finding and requests judgment as a matter of law of no infringement. See *id.* SPEX argues that substantial evidence supports the jury’s findings because Rhyne did not make the admission WD contends he did. Opp’n at 3.

The Target Means Limitation. Claim 24 of the ’802 Patent, from which Claim 25 depends, discloses, “target means for enabling a defined interaction with a host computing device.” ’802 Patent, Claim 24. The Court instructed the jury that the target means limitation has the function disclosed in the claim and has “corresponding structures of ‘1. a memory module adapted to enable nonvolatile storage of data; 2. a communication module adapted to enable communications between the host computing device and a modem or LAN transceiver; 3. a smart card reader; or 4. biometric device.’” Day 7 Trial Tr., Docket No. 643-13 at 58:18-59:8. The Court further clarified that “[e]nabling does not require active participation.” *Id.* Consistent with its claim construction ruling, the Court also instructed the jury that “defined interaction” means “an interaction that can provide one or more of a variety of functionalities.” *Id.*; see also Markman Order, Docket No. 65 at 10.

At summary judgment, SPEX identified the handshake as meeting the defined

¹ In its Motion (Docket No. 627), WD also argues that SPEX did not prove infringement of the limitation “means for providing to a host computing device, in response to a request from the host computing device for information regarding the type of the peripheral device, information regarding the function of the target” by substantial evidence. WD declined to address this limitation in its supporting memorandum. Accordingly, the Court declines to address it here.

interaction limitation. Summary Judgment Order, Docket Nos. 360, 309 (sealed) at 10 (discussing SAS and SATA protocols). Rhyne previously identified “mass storage” as meeting the “defined interaction” limitation. *Id.* The Court found that “mass storage,” a functionality, cannot be the defined interaction. *Id.*; see also Order Denying Previously-Deferred Portions of Apricorn’s Noninfringement Summary Judgment Motion, Docket No. 241-2 at 7. However, a protocol in which the disk identifies itself as a mass storage device (the handshake) could be the interaction. The Court found that “the testimony of Dr. Rhyne establishes a connection between the protocols and the target means.” *Id.* at 11. “Dr. Long characterizes the protocols as ‘defined interactions,’” other fact witness testimony, “provides additional detail regarding the functionality of the SAS, SATA, and USB connection protocols in the accused products.” “All of this evidence, taken together, at least raises a triable issue of fact as to whether the accused products include a ‘target means’ that enables a ‘defined interaction.’” *Id.*

Rhyne’s Trial Testimony. At trial, Rhyne testified that the spinning disk in the accused products meets the “target means” limitation and the “defined interaction” is the handshake. Day 4, Vol. I Trial Tr., Docket No. 637-6 at 131:23-25 and 134:9-15; see also Day 3, Vol. II Trial Tr., Docket No. 637-5 at 66:13-18 (explaining that the USB Protocol handshake is a standard involving a request to the device to identify itself and a response from the device that it is a storage device); see also *id.* at 69:22-70:13 (providing more detail about the request, “GET_DESCRIPTOR,” and response, code 08H, that make up the handshake).

On cross examination, Rhyne testified that the spinning disk itself does not enable the defined interaction. *Id.* at 137:11-5. He explained that the spinning disk, as part of the entire drive and including other components, such as control and handshake electronics, allows the handshake protocol to occur. *Id.* at 136:10-137:5 and 134:16-25 (“[I]t’s not the disk itself, it’s the capability built into the disk *drive* . . .”) (emphasis in original). He also explained that the code 08H is stored in SPI flash memory. Day 4, Vol. I Trial Tr., Docket No. 637-6 at 41:15-42:3. Thus, though Rhyne does not identify the SPI flash memory as the target means, he testified that it includes information about the target means. Day 4, Vol. II Trial Tr., Docket No. 637-7 at 62:22-63:10.

On direct and redirect, Rhyne clarified that the “enables” claim limitation is met because the spinning disk (target means) can only identify itself (defined

interaction) as a storage device because that is what it is. Day 4, Vol. II Trial Tr., Docket No. 637-7 at 46:5-14 (explaining that spinning disk returns code 08H as part of handshake protocol, which indicates it is a mass storage device); see also Day 3, Vol. II Trial Tr., Docket No. 637-5 at 65:10-19 (“[T]he answer here is it just says, I am such a device.”).

Rhyne’s testimony on direct and cross, as summarized above, interprets “enables” in two different ways. Consistent with WD’s line of questioning on cross examination, Rhyne offered testimony interpreting “enables” to refer to the hardware and software components that must interact for the handshake to occur. To that end, Rhyne agreed that the spinning disk alone does not enable the defined interaction. Rather, other components, including the control and handshake electronics, as well as SPI flash memory, work together to facilitate the interaction. Consistent with his direct testimony, Rhyne alternatively interpreted “enables” to mean the circumstances that must exist in order for the spinning disk to identify itself as a storage device through the handshake protocol. Rhyne explained that the defined interaction, in which the disk identifies itself as a storage device, can only occur because the disk is in fact a storage device.

Rhyne did not admit that the target means does not enable the defined interaction under any circumstances. Rather, as discussed above, Rhyne interprets the term “enables” in two different ways. He admitted that, using one sense of the word “enables,” the spinning disk itself does not enable the defined interaction. He resisted the way WD’s counsel phrased its questions when he ultimately admitted this. Day 4, Vol. I Trial Tr., Docket No. 637-6 at 137:11-5; compare with *ParkerVision, Inc. v. Qualcomm Inc.*, 627 F. App’x 921, 924 (Fed. Cir. 2015) (affirming JMOL of non-infringement given “unequivocal” testimony on cross establishing non-infringement). There is also no requirement in the claim language or the Court’s construction that the spinning disk, in isolation, must enable the defined interaction. Rhyne also affirmatively testified that using a different sense of the word, “enables,” the target means more directly enables the defined interaction. This inconsistency, alone, does not warrant a different outcome. *Presidio Components, Inc. v. Am. Tech. Ceramics Corp.*, 702 F.3d 1351, 1359 (Fed. Cir. 2012) (finding “the jury had the ultimate discretion to evaluate” inconsistent testimony given under direct and within the context of a hypothetical posed by opposing counsel on cross).

Rhyne’s testimony under either interpretation of “enables” supports the jury’s decision and is not conclusory like the testimony at issue in the authority WD cites. See *Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263, 1278 (Fed. Cir. 2004) (“Dynacore’s expert’s opinions are precisely conclusory assertions, reached using words in ways that contradict their plain meaning, that a critical claim limitation is found in the accused device.”); *J.G. Peta, Inc. v. Club Protector, Inc.*, 65 F. App’x 724, 728 (Fed. Cir. 2003) (affirming decision to disregard expert testimony that did not explain how the identified components performed the claim limitations).

Accordingly, WD’s argument that substantial evidence does not support the jury’s verdict on infringement is not persuasive. The evidence at trial permitted the jury to find that the spinning disk can only identify itself as storage because that is what it is, meeting the “target means” limitation. For the same reason, counsel for SPEX’s later statements that Rhyne testified that the rotating disk enables the handshake did not misrepresent the record. See Day 7 Trial Tr., Docket No. 637-10 at 86:25 (“[T]he rotating disk enables [the handshake] by being storage.”) and 87:5-6 (“[I]t is the rotating disk being storage that allows it to do so.”).

The remaining question here is whether Rhyne, and the Court, via Instruction No. 14, interpreted the term “enables” correctly.

The “Enables” Dispute. To resolve a dispute between the parties, the Court instructed the jury that “[e]nabling does not require active participation.” Day 7 Trial Tr., Docket No. 643-13 at 59:1. The parties raised a similar dispute in the Apricorn case:

In their supplemental briefs, the parties appear to agree that “enabling” covers circumstances where, for instance, a defined interaction is either directly or indirectly “enabled” by a “target means.” See, e.g., *Apricorn Resp. Supp. Br.* at 5–6. But the parties dispute whether “enabled” includes more passive circumstances where the “target means” simply makes the defined interaction possible, or more active circumstances where the “target means” must somehow participate in the performance of the defined interaction.

Order Denying Previously-Deferred Portions of Apricorn’s Noninfringement Summary Judgment Motion at 7, *SPEX Tech., Inc. v. Apricorn*, Case No. 16-cv-

07349 (C.D. Cal. Jan. 7, 2020), filed at Docket No. 241-2. In the Apricorn case, the Court determined that “enables” does not “require[] active work on the part of the target means,” and can be “met by virtue of the target means’ ability to provide certain functionalities and be part of the overall system of components in communication with the computing device.” *Id.* at 9.

The reasoning in the Apricorn case applies equally here. WD does not provide any basis to change this outcome. WD’s cited authority concerns claim construction rules for identifying corresponding structure for means plus function claim terms. The cases stand for the principles that corresponding structure must perform the recited function and that the corresponding structure has to include everything that performs the function. See *Asyst Techs., Inc. v. Empak, Inc.*, 268 F.3d 1364, 1370 (Fed. Cir. 2001); *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1119 (Fed. Cir. 2002). Here, the “target means” limitation is a means plus function limitation, enabling the defined interaction is the function, and the spinning disk is the target means. Under the first sense of the term “enables,” WD has a colorable argument that the spinning disk is not the correct structure because other software and hardware is needed to actually enable the defined interaction. The reasoning in the Apricorn decision undercuts this argument, though. Further, under the second sense of the term “enables,” the spinning disk itself performs the function. Accordingly, the Court finds that the jury’s determination is supported by the record.

The Disclosure Issue. The Court already evaluated this issue in its ruling on WD’s Motion in Limine No. 1. Order re Motions in Limine, Docket No. 491 (sealed) at 6-8. WD’s arguments amount to a request to reconsider this ruling in view of Rhyne’s trial admissions that “everything [he] said this morning about the defined interaction or everything [he] said last night about the defined interaction” did not appear in his original expert report but may have appeared in his supplemental expert report. Day 4, Vol. I Trial Tr., Docket No. 637-6 at 117:5-18. Rhyne later testified that “contrary to [counsel for WD’s] suggestions during [his] cross examination, [he] did, from [his] very first report and all through, refer to the interaction protocol.” Day 4, Vol. II Trial Tr., Docket No. 637-7 at 45:4-9. While acknowledging Rhyne’s confusion about what was in his original report, the Court does not find his admissions justify reconsideration of the initial order. The Court maintains its prior ruling.

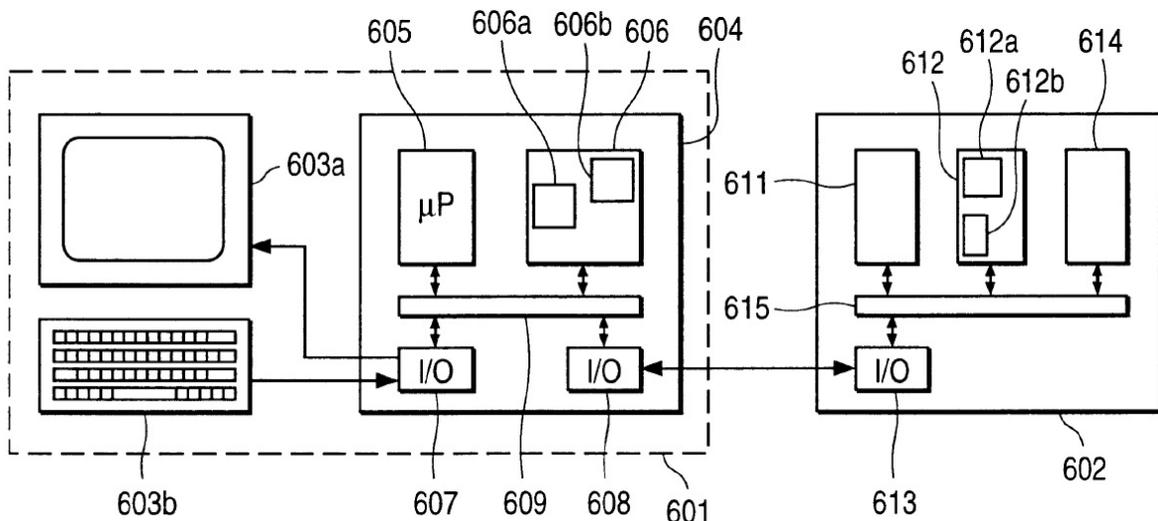
For the foregoing reasons, the Court **DENIES** WD’s Rule 50(b) motion as to

the “target means” limitation on liability.

2. “Means for Enabling . . .”

WD argues that Rhyne failed to show that the accused products meet the “means for enabling communication between the security means and the target means” limitation because he only compared the accused products to a generic, conventional computer bus instead of “conventional computer bus 615” shown in FIG. 6 of the ’802 Patent. Memo at 15. SPEX argues the evidence supports the jury’s finding because “conventional computer bus 615” is a generic conventional computer bus and does not require the features WD identifies. See Opp’n at 14.

The “Means for Enabling” Limitation. Claim 24 of the ’802 Patent, from which Claim 25 depends, discloses, “means for enabling communication between the security means and the target means.” ’802 Patent, Claim 24. The Court instructed the jury that this limitation has the function recited in the claim language and “a corresponding structure of ‘conventional computer bus 615.’” Day 7 Trial Tr., Docket No. 643-13 at 59:4-8. The ’802 Patent discloses that “[t]he security functionality 611, memory device 612, I/O device 613 and target functionality 614 can each be implemented by conventional devices and can communicate with each other via a conventional computer bus 615, as is well known and understood.” ’802 Patent at 6:40-45. FIG. 6 shows the “conventional computer bus 615” within a system:



Id., FIG. 6.

At summary judgment, the Court acknowledged the parties' dispute as to whether "conventional bus 615" necessarily requires 'a shared highway' and precludes intervening devices and data changes." Summary Judgment Order, Docket No. 309 at 12. The Court determined there was a triable issue of fact as to whether a person having ordinary skill in the art would find the identified buses in the accused products identical or equivalent to "conventional computer bus 615." Id.

Legal Standard. "Literal infringement of a [means plus function claim] limitation requires that the relevant structure in the accused device perform the identical function recited in the claim and be identical or equivalent to the corresponding structure in the specification." *Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1267 (Fed. Cir. 1999). "It remains true, of course, that corresponding structure need not include all things necessary to enable the claimed invention to work. It is equally true, however, that corresponding structure must include all structure that actually performs the recited function." *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1119 (Fed. Cir. 2002) (internal citation omitted). An applicant that chooses to use means plus function language limits the scope of the claim to the specific corresponding structure disclosed in the specification. See *Mettler-Toledo, Inc. v. B-Tek Scales, LLC*, 671 F.3d 1291, 1296 (Fed. Cir. 2012) (limiting patentee to specific type of A/D converter disclosed in the specification instead of generic A/D converters).

Rhyne's Testimony. Rhyne testified that the '802 Patent discloses that the "conventional computer bus 615" was "well known and understood. Day 3, Vol. II Trial Tr., Docket No. 643-6 at 77:9. He testified the "conventional computer bus" is not limited to component 615 in the '802 Patent and is instead "a very broad term that computer engineers understand." Id. at 77:10-14. He referenced technical dictionaries in support of his understanding. Id. at 77:20-22.

As to the MyBook accused product, Rhyne identified the H_APB bus and the S_APB bus as conventional computer buses meeting the structure limitation. Id. at 80:12-21; see also id. at 82:16-18 and 83:17-21 ("[I]t's the highway, if you will, that allows communication from the [AES block] to the [target storage]." As to the UltraStar accused product, Rhyne identified a DMA bus, which he also contends is a conventional computer bus. Id. at 84:20-23.

Rhyne’s wording is not quite accurate. The corresponding structure is in fact limited to “conventional computer bus 615.” See *Mettler-Toledo*, 671 F.3d at 1296. However, this is a distinction without a difference. There is no indication in the ’802 Patent that the applicant intended for “conventional computer bus 615” to point to a specific type of computer bus as opposed to a generic bus that would be well known in the art. The word “conventional” supports Rhyne’s interpretation. WD’s argument that “conventional computer bus 615” is limited only to buses lacking intervening components because FIG. 6 does not show intervening components is not persuasive. Rhyne testified that a person having skill in the art would understand that the identified buses are conventional buses, notwithstanding the intervening components. Day 4, Vol. I Trial Tr., Docket No. 637-6 at 78:7–13 (“It’s a communications pathway. That’s all there is to it.”). This situation is different from the situation at issue in the appeal because the patent does not identify a specific type of component, it identifies a conventional component. See *SPEX Techs., Inc. v. W. Digital Corp.*, 859 F. App’x 557, 561 (Fed. Cir. 2021).

Substantial evidence support’s the jury’s liability finding as to this limitation. The jury was entitled to credit Rhyne’s testimony that “conventional computer bus 615” in the ’802 Patent merely refers to a generic computer bus known in the industry. The jury did not have to credit WD’s argument that “conventional computer bus 615” necessarily lacks intervening structures. Rhyne identified components in each of the accused product groups that he opined would be a conventional computer bus. The Court need not consider the doctrine of equivalents argument, which pertains only to the Ultrastar products, because substantial evidence supports a determination of literal infringement.

For the foregoing reasons, the Court **DENIES** WD’s Rule 50(b) motion as to the “means for enabling” limitation on liability.

B. Damages

1. The Parties’ Positions

SPEX argues substantial evidence supports the jury’s damages determination. Opp’n at 17. SPEX argues that customers demanded hardware encryption as a condition to purchasing devices and that WD charged \$10-20 premiums for the encryption. *Id.* SPEX contends these premiums are pure profit because costs were

otherwise the same for devices that did not include encryption and because WD did not offer any evidence of non-infringing alternatives. Id.

WD argues that SPEX did not present substantial evidence of profit-splitting at trial. See generally Memo. Specifically, WD argues that SPEX (1) did not show that the \$10-20 premiums actually applied to the accused products, (2) did not show that WD considered the premiums in 2007, at the time of the hypothetical negotiation, (3) did not apportion out non-infringing features, and (3) draws incorrect legal conclusions regarding non-infringing alternatives. Reply at 10-34.

2. Legal Standard

“Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer” 35 U.S.C. § 284. The patentee has the burden to prove damages. Lucent Techs., Inc. v. Gateway, Inc., 580 F.3d 1301, 1324 (Fed. Cir. 2009) (citations omitted). There are several approaches for calculating a reasonable royalty including (1) “the analytical method” and (2) “the hypothetical negotiation.”² Id. Relevant here, the analytical method involves “subtract[ing] the infringer’s usual or acceptable net profit from its anticipated net profit realized from sales of infringing devices.” Id. (citing TWM Mfg. Co. v. Dura Corp., 789 F.2d 895, 899 (Fed. Cir. 1986)).

Because the analytical method is a less popular method than the hypothetical negotiation, there is less authority concerning what evidence suffices. Still, the cases the parties cite set out the following principles. First, though “evidence of actual profits is generally admissible,” the correct focus is “on the date when the infringement began.” TWM Mfg., 789 F.2d at 899; see also Aqua Shield v. Inter Pool Cover Team, 774 F.3d 766, 772 (Fed. Cir. 2014) (The correct inquiry is “what the parties would have anticipated, looking forward when negotiating,” not “a backward-looking inquiry into what turned out to have happened.”). Second, the analysis does not factor in the infringer’s efficiency or otherwise cap damages based on what “the infringer could profitably pay.” See Aqua Shield, 774 F.3d at 771. Finally, many

² Though Lucent describes the analytical method and the hypothetical negotiation as alternative methods of determining a reasonable royalty, other cases appear to consolidate the two methods. See generally, Aqua Shield.

different types of evidence can be relevant to the analytical method of determining a reasonable royalty, including “licenses, business prognostications, and information about cost savings or value enhancements compared to alternatives.” Id. at 772; see also Summit 6, LLC v. Samsung Elecs. Co., 802 F.3d 1283, 1296–98 (Fed. Cir. 2015) (affirming damages calculation based on expert report that considered annual reports, cost and revenue spreadsheets, business surveys, and a lack of non-infringing alternatives).

3. The Evidence

At trial, Western Digital personnel testified that WD introduced an encryption option to its products to be competitive in the market. Day 5, Vol. I Trial Tr., Docket No. 643-10 at 40:13-24 (testifying that WD introduced an encryption option for its RE products during the 2012 to 2013 time frame). Some customers even required the encryption option. Id. at 41:9-42:11; see also Chagnon Depo Designation, Docket No. 643-24 at 15:12-16:2 (testifying that HGST introduced hardware encryption in the Travelstar product during the 2007/2008 time frame due to customer demand) and 24:17-21 (testifying that HGST introduced hardware encryption in the Ultrastar line of products due to customer demand); see also Ottrey Depo Designation, Docket No. 643-26 at 86:16-87:09 (testifying that WD opted to maintain encryption features in the My Book products, first introduced in 2007, because customers expected it).

SPEX also introduced expert and lay witness testimony that hardware encryption has certain advantages compared to software encryption. Day 4, Vol. I Trial Tr., Docket No. 643-7 at 54:6-57:19 (describing speed, security, and “plug-and-play” advantages); see also Day 3, Vol. I Trial Tr., Docket No. 643-5 at 34:10-20 and 36:3-37:2.

SPEX also introduced evidence that WD considered a \$10-20 “adder” for hardware encryption features. Chagnon Depo Designation, Docket No. 643-24 at 16:21-17:18 (testifying that WD charged different prices for models including encryption during the 2007/2008 time frame and referencing the pricing figures in PX686); Day 5, Vol. I Trial Tr., Docket No. 643-10 at 43:20-44:5 (discussing \$20 adder for self-encrypting drive products) and 44:13-16 (testifying that the bill of materials for self-encrypting versus non-self-encrypting products were “similar”). Trial Exhibit PX686, titled “HGST Pricing Data,” (Docket No. 643-30) is a spreadsheet with several columns showing \$10-20 adders for certain encryption

features. The amounts in the spreadsheet do not reflect the actual price paid by customers. Schembri Depo Designations, Docket No. 550-9 at 108:23-109:23.

4. The Adder Evidence is Not Unrelated to the MyBook and Ultrastar Products

The only numerical evidence in the record supporting an adder of \$10-20 for the accused products is PX686 (Docket No. 643-30) as well as the testimony of Chagnon and Bulik. Chagnon's testimony is based on PX686. Bulik's testimony pertains to self-encrypting drive ("SED") products, though he acknowledged the bill of materials for non-self-encrypting products would be similar. WD argued that PX686 and Chagnon's testimony do not establish a premium amount for the MyBook products because the MyBook products are legacy WD products and not HGST products and because the MyBook products use USB interface. Reply at 13. Under the interface column, PX686 lists only SATA and SAS interfaces. WD does not cite the record in support of either assertion. *Id.* (citing Day 4, Vol. II Trial Tr., Docket No. 643-9 at 40:6-41:8 (questioning Dr. Rhyne regarding disclosure of handshake in expert report) and Chagnon Depo Designations, Docket No. 643-22 at 16:21-17:4 (testifying that WD charged different prices for models including encryption during the 2007/2008 time frame and referencing the pricing figures in PX686)). The Court cannot evaluate WD's argument that PX686 does not pertain to MyBook products without appropriate citations to the record. The spreadsheet otherwise provides an indication as to the profit WD would expect for adding hardware encryption functionality and supports the damages award.

Bulik's testimony concerning the \$20 adder for SED products could also help support the jury's determination. Though he recalled hearing about a \$20 adder in the industry, Bulik also testified that he was not aware that any WD customers expressed a willingness to pay for an encryption premium for RE products³ and that information from sales teams and original equipment manufacturers concerning premiums was not considered reliable. Day 5, Vol. I, Trial Tr., Docket No. 643-10 at 46:2-9. The jury was entitled to weigh this evidence. The Court cannot make a Rule 50(b) finding that the verdict was not supported solely because he offered inconsistent testimony.

³ The MyBook products are representative of MyBook, MyPassport, and RE Products. Joint Stipulation regarding Representative Products, Docket No. 480.

5. The Evidence Concerning the Hypothetical Negotiation is Sufficient

PX686 post-dates the date of infringement (2007) by about ten years. Schembri Depo Designations, Docket No. 643-23 at 98:09-10. Bulik's testimony also concerns the 2012 time period. Day 5, Vol. I Trial Tr., Docket No. 643-10 at 43:11-14. Chagnon's testimony concerns the relevant period but references only PX686 as to the actual amounts of the premiums. Thus, the evidence establishes that during the relevant time period WD would have anticipated premiums for encryption features. The later evidence provides indirect evidence as to the amount of those premiums. Taking the evidence together, substantial evidence supports the jury's rate determinations during the relevant time frame. Lucent Technologies, Inc. v. Gateway, Inc., 580 F.3d 1301, 1310 (Fed. Cir. 2009) (A jury's damages award "must be upheld unless the amount is grossly excessive or monstrous, clearly not supported by the evidence, or based only on speculation or guesswork.").

Further, the fact that PX686 and Bulik's testimony post-date the date of infringement, alone, does not mean the jury should have discounted this evidence in determining WD's anticipated profit. See DMF, Inc. v. AMP Plus, Inc., No. 2:18-CV-07090-CAS-GJSX, 2024 WL 3585191, at *30 (C.D. Cal. July 29, 2024) (collecting authorities explaining that courts may look at events and facts after infringement began as part of the hypothetical negotiation analysis). Still, the Court is mindful that actual profits cannot cap royalties. See Aqua Shield, 774 F.3d at 772. Here, the adders do not actually reflect customer pricing and there is no indication that the jury applied the adders as a royalty cap. Thus, they provide admissible, though imperfect, evidence as to the profit WD may have anticipated due to adding the infringing hardware encryption features in 2007.

Finally, the parties agree that the record shows that both SPEX (Spyrus at the time) and WD were open to licensing in 2007 but does not include much detail as to the types of licenses either party was negotiating or typically negotiated. WD argues that this lack of factual detail concerning the hypothetical negotiation renders the jury's damages determination unsupported. Memo at 25. The Court does not agree. Though the record does not include much admissible evidence as to either party's licensing practices, the testimony from Chagnon and Bulik, as well as the pricing spreadsheet, provide some indication as to what reasonable terms in a hypothetical negotiation would entail.

6. The Damages Determination Does Not Fail Due to Lack of Apportionment

WD faults SPEX for not apportioning out the benefits of Claim 25 as compared to other claims of the '802 Patent. Memo at 28 (citing Omega Pats., LLC v. CalAmp Corp., 13 F.4th 1361, 1379 (Fed. Cir. 2021)). SPEX argues that Claim 25 is broader than other claims that WD was found not to infringe. Opp'n at 26. The Court does not find any failure to apportion Claim 25 from other claims here, especially because SPEX no longer presents a license-based infringement theory.

WD also faults SPEX generally for not apportioning out non-infringing features. Memo at 28-29. This is not persuasive. Though the Court acknowledges that apportionment is required, the assumption underlying SPEX's damages theory is that any hardware encryption feature in the accused products infringes Claim 25. Thus a premium based on the value add of the hardware encryption feature only, and not the drive as a whole, would not require further apportionment.

WD also argues more specifically that SPEX failed to apportion out non-infringing features from the adders. Reply at 19-20. These include TCG (Trust Computing Group) and FIPS validation as well as self-encrypting technology. *Id.* Though WD argued generally that SPEX failed to apportion to obtain the incremental value of the infringing features in its memorandum, WD did not raise the specific arguments about the FIPS or self-encrypting drive distinctions until its reply brief. SPEX did not have an opportunity to respond to these arguments. "The district court need not consider arguments raised for the first time in a reply brief." Insight Psychology & Addiction, Inc. v. City of Costa Mesa, 724 F. Supp. 3d 1067, 1089 (C.D. Cal. 2024) (citing Zamani v. Carnes, 491 F.3d 990, 997 (9th Cir. 2007)). The Court declines to evaluate these arguments as improper.

7. The Non-infringing Alternatives Issue Does Not Present a Basis to Depart from the Damages Award

WD's memorandum focused on the entire market value rule, which SPEX does not rely upon. Memo at 33. The Court declines to evaluate this argument. In its Reply, WD argues that SPEX improperly flips the burden on non-infringing alternatives. Reply at 27. The Court does not agree. SPEX presented evidence that

software encryption has certain drawbacks as compared to hardware encryption. See § IV.B.2. The jury was entitled to consider this evidence and determine that software alternatives were not relevant alternatives under Georgia Pacific Factors 9 and 13. In other words, the jury was entitled to consider the evidence and conclude there was no next best technology to compare to the patented technology. Given the jury's finding of a lack of non-infringing alternatives, the damages award based on the adders is supported.

8. WD's Arguments Concerning Disparate Rates and Net Losses
Do Not Provide a Basis to Depart from the Damages Award

WD argues that the jury's determination is unsupported by the record because (1) the jury assessed different rates for the MyBook and Ultrastar products and (2) the rate assessed for the MyBook products would have resulted in a net loss to WD on each sale. Memo at 21-22. These arguments are not persuasive. The record supports the determinations. The \$6.08 rate assessed for the MyBook products falls below the \$10-20 range. It also corresponds to the net profits per unit for MyBook, of \$6.07. See Docket No. 643-41. The fact that the assessed rate exceeds the net profits does not provide a basis to depart from the damages award. See Aqua Shield, 774 F.3d at 771. The \$16.25 rate assessed for the Ultrastar products falls within the \$10-20 range.

In sum, substantial evidence supports the jury's damages award. WD's Rule 50(b) Motion is **DENIED** as to both liability and damages.

C. New Trial Specific Issues

1. Liability

WD first argues that a new trial is appropriate because SPEX did not timely disclose its theory that the handshake is the defined interaction. Memo at 37. For the reasons stated above, this does not provide a basis for a new trial. See § IV.A.1 (The Disclosure Issue), supra.

WD next argues that the Court's instruction that the target means can be any kind of storage or memory device "confused the jury into thinking that the distinction between spinning disks and flash memory was irrelevant." Memo at 37. The Court's

construction was not prejudicial. The issue is whether the target means enables the defined interaction, not whether it is a particular type of storage device. The jury was entitled to consider whether the spinning disk otherwise met the limitation. The jury had an opportunity to consider WD's evidence concerning flash memory. See § IV.A.1 (Rhyne's Trial Testimony), supra. This is not a basis to grant a new trial.

WD also argues that the Court's jury instruction concerning active versus passive enablement was prejudicial. Memo at 37. For the reasons stated above, this does not provide a basis for a new trial. See § IV.A.1 (The "Enables" Dispute), supra.

WD further argues that the Court's refusal to provide a jury instruction that the "defined interaction" cannot be data storage was prejudicial. Memo at 38. This decision was not prejudicial. SPEX did not present a theory at trial that the defined interaction is storage. SPEX identified the handshake as the defined interaction and argued that the spinning disk enables the handshake, the process during which it identifies itself as a storage device, because it is in fact a storage device. See § IV.A.1 (Rhyne's Trial Testimony), supra.

Finally, WD argues that SPEX's statements during closing arguments warrant a new trial. For the reasons discussed above, these statements do not provide a basis for a new trial. See § IV.A.1 (Rhyne's Trial Testimony), supra.

2. Damages

WD argues that the Court's instruction to disregard the Kingston license at the conclusion of trial was insufficient to eliminate prejudice. Memo at 39. SPEX points out that WD had the opportunity to propose an alternative instruction and declined. Opp'n at 37. WD argues that only an instruction to enter nominal damages would suffice. Reply at 28. The Court finds its instruction sufficiently informed the jury that they were not to consider the Kingston license and declines to grant a new trial on this basis. Moreover, an instruction to enter nominal damages would not have been appropriate given the evidence in the record. See § IV.B.3, supra.

WD also argues it was prejudicial for the Court to allow SPEX to move forward with its profit-based damages theory after the Court eliminated the Kingston license. Memo at 39. WD raises several challenges related to this new damages theory. Id. Allowing SPEX to move forward was within the Court's discretion. See

ePlus, Inc. v. Lawson Software, Inc., 700 F.3d 509, 523 (Fed. Cir. 2012) (“Trial management is particularly subject to the wide latitude of the district court.”) Here, WD had notice of the underlying evidence supporting SPEX’s theory and the shift in theory did not disrupt the proceedings because the evidence had already been introduced in connection with SPEX’s struck license based theory. See id. The Court declines to grant a new trial on this basis.

Finally, WD argues the Court’s jury instruction concerning the non-infringing alternatives was not accurate. The Court agrees that the instruction did not precisely track the language of Georgia Pacific Factors 9 and 13 because it said that alternatives must “provide[] a similar level of benefits.” Compare Day 7 Trial Tr., Docket No. 643-13 at 69:20-70:8. Georgia Pacific directs the fact finder to consider “[t]he utility and advantages of the patent property over the mold modes or devices, **if, any,** that had been used for working out similar result,” and “[t]he portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.” Georgia-Pacific Corp. v. U.S. Plywood Corp., 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970) (emphasis added). However, as SPEX points out, the jury had the factors in front of them. See Opp’n at 39-40. Moreover, the error here is harmless because the jury was still entitled to find that software encryption was simply too different from hardware encryption to be relevant under Factors 9 and 13. The jury was not obligated to conclude that software encryption was the next best alternative. The Court declines to grant a new trial on this basis.

For the foregoing reasons, WD’s Rule 59 Motion is **DENIED**.

V. CONCLUSION

For the foregoing reasons, WD’s Rule 50(b) Motion and Rule 59 Motion are **DENIED**.

IT IS SO ORDERED.