IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

| QORVO, INC., |) |
|----------------------------------|------------------------------|
| Plaintiff, |) |
| |) Case No. 1:21-cv-01417-JPM |
| V. |)) |
| AKOUSTIS TECHNOLOGIES, INC., and |)) |
| AKOUSTIS, INC., |) |
| Defendants. |) |

ORDER GRANTING IN PART AND DENYING IN PART PLAINTIFF'S MOTION FOR PERMANENT INJUNCTIVE RELIEF

Before the Court are Plaintiff Qorvo, Inc's ("Qorvo's" or "Plaintiff's") Motion for Permanent Injunctive Relief and Opening Brief in Support, Defendants Akoustis Technologies, Inc., and Akoustis, Inc.'s (collectively, "Akoustis" or "Defendants") Response in Opposition, and Plaintiff's Reply. (ECF Nos. 608–09, 626, 636.) For the reasons discussed below, Plaintiff's Motion is **GRANTED IN PART AND DENIED IN PART**.

I. BACKGROUND

On May 17, 2024, a jury in the District of Delaware found Defendants liable for trade secret misappropriation under the federal Defend Trade Secrets Act ("DTSA") and North Carolina Trade Secrets Protection Act ("NCTSPA"). (ECF No. 601.) The jury found that the misappropriation was willful and malicious and awarded \$31,315,214 in unjust enrichment damages and \$7,000,000 in punitive damages. (Id.) The jury also found Defendants liable for infringing two claims of United States Patent No. 7,522,018 ("the '018 Patent") and two claims of United States Patent No. 9,735,755 ("the '755 Patent") (collectively, "Patents at Issue"). (Id.) The jury found that Akoustis

did not violate the North Carolina Unfair and Deceptive Trade Practices Act ("UDTPA"). (Id.) Plaintiff filed the instant Motion on June 17, 2024, Defendants responded on July 25, 2024, and Plaintiff replied on August 8, 2024. (ECF Nos. 608–09, 626, 636.) The Court held a hearing on August 29, 2024.

II. TRIAL RECORD

The jury determined that Akoustis was liable for the misappropriation of trade secrets, and that Akoustis' products infringed Qorvo's patents. (ECF No. 601.) The record showed that Akoustis and Qorvo compete in the market for bulk acoustic wave ("BAW") filters. (Trial Tr. 449:24-450:4 (Cross-examination of Dr. Robert Aigner) ("[W]e compete for the same slots [as Broadcomm, Akoustis, and other manufacturers], sometimes we win, sometimes we lose. We perform in the very same markets with the very same performance.").) The record shows that Qorvo spends "a four[-] to five-year time frame" and "in excess of \$1 billion" to develop each new BAW filter product. (Trial Tr. 375:6–15.) "Trade secrets play a big role [in BAW development] because not everything [Qorvo] do[es] can be reverse engineered or can be patented." (Id. at 375:22–23.)

After misappropriating trade secrets and confidential information from Qorvo, former Qorvo employee and Chief Product Officer at Akoustis Rohan Houlden and others circulated Qorvo materials to others at Akoustis. (See, e.g., id. at 671:6–8; 845:16–846:12; 1098:3–1100:17; 1240:20–1245:15.) Those documents were referenced in the development of Akoustis processes and incorporated into Akoustis materials. (See, e.g., id.) While Qorvo's expert had limited access to the devices of Akoustis employees, over 9,000 Qorvo documents and 500,000 Qorvo emails were found on the devices and systems of Akoustis custodians. (Id. at 849:21–24, 852:4–7; 850:5–7.) 8,600 of these documents were found in the custody of Houlden and Rama Vetury, another

Akoustis custodian, and at least 700 Qorvo documents were found on the devices of thirty-eight other Akoustis employees. (Id. at 848:12–849:20, 1361:23–1362:15.) Akoustis treated the Qorvo trade secrets misappropriated by Mr. Houlden indistinguishably from non-trade secrets and public access material, and Mr. Houlden was not initially disciplined by Akoustis for circulating Qorvo materials. (Id. at 1016:10–15 ("Rohan was having—Mr. Houlden was having multiple discussions with multiple people within Qorvo. And so anything that he would send me, I don't know exactly where he got it, you know, if it was through, obviously, you know, right channels or incorrect channels. So I just didn't raise, you know, any visibility to me on that being a concern.").) Akoustis also incorporated Qorvo trade secrets into their own material, including relabeling Qorvo information as "industry standard." (See Tr. Exs. 213, 220.)

Akoustis employees used personal emails to share Qorvo material that had been designated as confidential. (See, e.g., Trial Tr. 1092:10–1093:7.) While Mr. Houlden was eventually terminated from Akoustis, it had "absolutely nothing" to do with his circulation of Qorvo confidential-marked materials. (Id. at 1018:24–1019:1.) Indeed, at the time of trial, Akoustis' then-CEO, Jeff Shealy, testified that no employee had been disciplined for misappropriating or circulating Qorvo's information. (Id. at 1157:3–15.) Shealy also testified that while guidelines prohibited misappropriation of trade secrets and other confidential information, Akoustis had no way to police or enforce these guidelines, and did not do so. (Id. at 1188:14–1189:6.)

III. LEGAL STANDARD

"According to well-established principles of equity, a plaintiff seeking a permanent injunction must . . . demonstrate: (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is

warranted; and (4) that the public interest would not be disserved by a permanent injunction." <u>S&P</u> <u>Glob. Inc. v. S&P Data LLC</u>, 619 F.Supp.3d 445, 472 (D. Del. 2022) (quoting <u>eBay Inc. v. MercExchange, L.L.C.</u>, 547 U.S. 388, 391 (2006)).

"[R]egardless of any irreparable harm [p]laintiffs have previously incurred, a permanent injunction will not issue unless there is reason to believe that future injury would constitute irreparable harm." Bone v. Univ. of N.C. Health Care Sys., 378 F.Supp.3d 660, 688 (M.D.N.C. 2023) (collecting cases). "At the same time, 'past wrongs are evidence bearing on whether there is a real and immediate threat of repeated injury,' . . . and thus current compliance with the law does not necessarily preclude the entry of a permanent injunction." Id. (citing O'Shea v. Littleton, 414 U.S. 488, 496 (1974); United States v. W.T. Grant Co., 345 U.S. 629, 633 (1953)).

IV. ANALYSIS

a. Trade Secrets

"The purpose of an injunction in a trade secret case is to protect the secrecy of the misappropriated information, eliminate the unfair advantage obtained by the wrongdoer and reinforce the public policy of commercial morality." Gen. Elec. Co. v. Sung, 843 F.Supp. 776, 778 (D. Mass. 1994) (citing Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 481 (1974)). Given the remarkable scale of trade secret misappropriation in this case, and because Akoustis' willful and malicious misappropriation of Qorvo's trade secrets was unmitigated and led to the incorporation of Qorvo trade secrets into Akoustis documents, processes, and systems, irreparable injury uncompensable by monetary damages is imminent without injunctive relief. The balance of equities weighs in favor of relief which is narrowly tailored to the extent that it includes purging Qorvo information from Akoustis' systems and prohibition of future use of Qorvo's trade secrets.

<u>See Barr-Mullin, Inc. v. Browning</u>, 424 S.E.2d 226, 230 (N.C. Ct. App. 1993); <u>WeRide Corp. v.</u> Kun Huang, 379 F.Supp.3d 834, 853–54 (N.D. Cal. 2019).

i. Irreparable Injury

Plaintiff argues that it will face irreparable injury without an injunction. (ECF No. 609.) Plaintiff argues that irreparable injury should be presumed for misappropriation under North Carolina law, that "continuing use of a trade secret is a 'recurrent violation' that gives rise to irreparable harm," and that a variety of other factors suggest irreparable harm is imminent without a permanent injunction. (Id. at PageID 28862–66.)

Defendants argue that the record is "devoid of any trial evidence to establish any direct or irreparable injury" because "Akoustis no longer has access to, possession of, or use of the information contained in Qorvo Trade Secret Groups 2-7" given their voluntary sequestration and deletion efforts. (ECF No. 626 at PageID 30664–66.) Defendants argue that the Akoustis board of directors authorized a "Document Replacement Project" which will "sequester and permanently remove from its computers and information systems any documents identified by Qorvo to contain trade secrets and/or confidential information purportedly belonging to Qorvo." (Id. at PageID 30664.)

Defendants' remediation effort used a keyword search as a proxy for Qorvo trade secret or confidential information. (See ECF No. 630 ¶ 9.) The keywords do not appear to be linked topically or substantively to the trade secrets alleged, but rather use Qorvo product names and the email addresses of key circulators as proxies for the alleged trade secrets. (Id.) Given the incorporation of Qorvo's trade secrets into unrelated documents, the unmitigated spread of Qorvo's trade secret information across Akoustis, and that Qorvo identifiers were removed from Qorvo-related documents, it is clear that use of Qorvo-related keywords as a proxy for trade secret

information would be insufficient to cleanse Akoustis' system of Qorvo's trade secrets. Indeed, even after remediation efforts, it is likely that Qorvo's trade secrets will remain in Akoustis documents, and will remain incorporated into Akoustis products, given the breadth of misappropriation. See supra Section II. Accordingly, the threat of future harm has not "dissipated" through remediation efforts. Cf. Adler v. Duval Cnty. Sch. Bd., 112 F.3d 1475, 1477 (11th Cir. 1997) ("When the threat of future harm dissipates, the plaintiff's claims for equitable relief become moot because the plaintiff no longer needs protection from future injury.")

Under North Carolina law, those liable for "actual . . . misappropriation of a trade secret ... shall be permanently enjoined upon judgment finding misappropriation. ... N.C. Gen. Stat. § 66-154(a). Federal courts interpreting North Carolina law note that this statutory language "creat[es] a presumption of irreparable injury and irreparable harm absent an injunction." Legacy Data Access, LLC v. MediQuant, Inc., No. 3:15-cv-00584-FDW-DSC, 2017 WL 6001637, at *21 (citing BridgeTree, Inc. v. Red F Marketing LLC, No. 3:10-cv-00228-FDW-DSC, 2013 WL 443698, at *22 (W.D.N.C. Feb. 5, 2013)). While Defendants argue that Legacy Data Access establishes that this presumption should be rebutted in this case, that case involved a jury's verdict finding only a single agent of the defendant "possessed or used plaintiff's trade secrets" and therefore "[i]t follows that upon the termination of [the agent] as an employee, Defendant loses control" over the trade secrets. Id. at *22; see also ActiveVideo Networks v. Verizon Commc'ns, Inc., 694 F.3d 1312, 1338 n.6 (Fed. Cir. 2012) ("Every injunctive case must be considered according to its unique facts"). Here, even if all forty of the custodians of Qorvo information at Akoustis were terminated, the evidence suggests that Qorvo's trade secrets were incorporated into Akoustis processes, documents, and products, and likely spread beyond the initial pool. Accordingly, Akoustis has not rebutted the presumption of irreparable harm.

ii. Adequacy of Monetary Remedies

Defendant argues that the \$31,315,215 in compensatory damages and \$7 million in exemplary damages awarded by the jury is "more than adequate to compensate [Qorvo] for the alleged misappropriation of trade secrets." (ECF No. 626 at PageID 30669.) This argument is unavailing—the theory of damages pursued by Qorvo is based on Akoustis' unjust enrichment through their misappropriation of trade secrets. Compensation disgorging Akoustis' ill-gotten past gains does not adequately compensate Qorvo for the future use or proliferation of their trade secrets. This is especially true because trade secrets cannot be "unshared" once revealed: were Akoustis to inadvertently or purposely share Qorvo's trade secrets, Qorvo would suffer irreparable harm not only from Akoustis' use of that secret, but also its spread to other competitors in the field.

Cf. CPG Prod. Corp. v. Mego Corp., No. C-1-79-582, 1981 WL 59413, at *9 (S.D. Ohio Jan. 12, 1981) ("The Court finds that exportation of the technology for making [the plaintiff's] stretchable toy figure is likely to place such information in the public domain, and that such an occurrence would cause plaintiff irreparable harm.")

iii. Balance of Hardships and Public Interest

The balance of hardships favors granting a permanent injunction. Akoustis asserts that they have voluntarily begun the remediation process, and that they will not use the misappropriated trade secrets. (ECF No. 626 at PageID 30663–66.) Defendant do not argue that they will face hardship if a permanent injunction is entered, rather asserting that "Qorvo . . . has no evidence of any other direct harm which could support [Qorvo's] claim of hardship." (Id. at PageID 30670.) Any interest Defendants have in retaining the trade secrets would not establish hardship, as there is "no cognizable hardship" in prohibiting a defendant from engaging in continued wrongdoing.

See BTL Indus., Inc. v. Advanced Regenerative Med., LLC, No. CV 23-359-WCB, 2024 WL 455218 (D. Del. Feb. 6, 2024).

The public interest favors granting a permanent injunction. Defendants do not argue otherwise, describing the proposition that "there is a public interest in 'upholding the inviolability of trade secrets'" as "unremarkable[.]" (ECF No. 626 at PageID 30670; see also Bimbo Bakeries, USA, Inc. v. Botticella, 613 F.3d 102, 119 (3d Cir. 2010) ("As noted by the District Court, there is a generalized public interest in 'upholding the involability of trade secrets and enforceability of confidentiality agreements"). Instead, Akoustis argues that "no public interest supports granting ... injunctive relief absent showings of irreparable harm and that money damages cannot provide an adequate remedy" and that "no public interest supports enjoining Akoustis from accessing and/or using trade secrets that it no longer has." (ECF No. 626 at PageID 30670.) As discussed above, Qorvo established at trial that its trade secrets have spread through Akoustis' systems without mitigation, Akoustis' remediation efforts are insufficient to prevent irreparable harm, and money damages cannot provide an adequate remedy for future misappropriation of trade secrets by and through Akoustis. Accordingly, Akoustis' arguments are unavailing and the public interest favors injunctive relief.

b. *Patents*

Plaintiff has demonstrated that it is entitled to injunctive relief as to its patents. To award permanent injunctive relief for patent infringement, a plaintiff must demonstrate the same four factors in equity: (1) irreparable injury; (2) inadequate remedies at law; (3) the balance of hardships

¹ Defendants argue that this quotation is an "untethered caselaw 'sound bite.'" (ECF No. 626 at PageID 30670.) The Court disagrees—the Third Circuit in <u>Bimbo Bakeries</u> not only agreed that a public interest in protecting trade secrets exists, but that it outweighed competing public interests in "employers being free to hire whom they please and in employees being free to work for whom they please" and favored injunctive relief. 313 F.3d 102 at 119.

weighs in its favor; and (4) the public interest would not be disserved by a permanent injunction. eBay, 547 U.S. at 391. Each factor is addressed in turn.

i. Irreparable Injury

Plaintiff has demonstrated irreparable injury, as "the direct competition between Qorvo and Akoustis gives rise to irreparable harm." (ECF No. 609 at PageID 28869.) "Where two companies are in competition against one another, the patentee suffers the harm—often irreparable—of being forced to compete against products that incorporate and infringe its own patented inventions." Douglas Dynamics, LLC v. Buyers Prods. Co., 717 F.3d 1336, 1345 (Fed. Cir. 2013).

Qorvo and Akoustis are in competition with one another in a market with a small number of competitors. (See ECF No. 609 at PageID 28870; Trial Tr. 449:24–450:4.) Qorvo spent significant time and capital to develop its technology via the Patents at Issue, while Akoustis infringed on those patents. (Trial Tr. at 375:6–15; ECF No. 601.) Further, Akoustis used Qorvo's patents to develop its own technology and compete for the same customers. (See, e.g. Exh. 127.) Because Akoustis' sales "will come at the expense of Qorvo," (ECF No. 609 at PageID 28870), Qorvo has demonstrated irreparable injury "in light of evidence of the parties' direct competition and loss in access to potential customers resulting from Akoustis' introduction of infringing technology." Robert Bosch LLC v. Pylon Mfg. Corp., 659 F.3d 1142, 1151 (Fed. Cir. 2011) (cleaned up).

Further, Qorvo has demonstrated a "causal nexus" between its harm and Akoustis' infringement, which is "part of the irreparable harm calculus." <u>Apple Inc. v. Samsung Elecs. Co.</u>, 735 F.3d 1352, 1361 (Fed. Cir. 2013) (quoting <u>Apple Inc. v. Samsung Elecs. Co.</u>, 695 F.3d 1370, 1375 (Fed. Cir. 2012)). A causal nexus is found "[w]hen a patentee alleges it suffered irreparable harm stemming from lost sales solely due to a competitor's infringement, [and there is] a finding

that the competitor's infringing features drive consumer demand for its products." Apple Inc. v. Samsung Elecs. Co., 809 F.3d 633, 641 (Fed. Cir. 2015). Here, the Patents at Issue "are directed to improving the most basic performance aspects of BAW filters" and "Akoustic promotes these very performance improvements . . . in its data sheets for the infringing BAW filters." (ECF No. 609 at PageID 28871 (citing Trial Tr. at 1378:17–1379:6; 1387:22–1373:19; 1609:15–1611:8; 1612:20–1613:8; Exhs. 240–257).) Because these performance aspects of the filters are "an important consideration . . . for customers" and drive demand, Qorvo has satisfied the causal nexus requirement. See Apple, 809 F.3d at 641.

Akoustis argues that there is no irreparable harm because it "ceased manufacturing and offering for sale the accused products found to infringe the [Patents at Issue]" and has "evidence of [its] redesign of its products to not infringe the [Patents at Issue.]" (ECF No. 626 at PageID 30671.) "However, a redesign is not a valid reason for denying an injunction to prevent future infringement, 'unless the evidence is very persuasive that further infringement will not take place." GeigTech E. Bay LLC v. Lutron Elecs. Co., No. 18 CIV. 5290 (CM), 2024 WL 3595413, at *26 (S.D.N.Y. July 30, 2024) (quoting W.L. Gore & Assocs., Inc. v. Garlock, Inc., 842 F.2d 1275, 1281–82 (Fed. Cir. 1988), abrogated on other grounds by eBay, 547 U.S. at 126).

Akoustis does not provide any information as to the specifics of its redesign. (See ECF No. 626 at PageID 30671–72.) Instead, Akoustis supports its argument with a citation to XpertUniverse, Inc. v. Cisco Sys., Inc. No. CV 09-157-RGA, 2013 WL 6118447, at *12 (D. Del. Nov. 20, 2013), aff'd, 597 F. App'x 630 (Fed. Cir. 2015). However, XpertUniverse is easily distinguished, as the court there found that the plaintiff "[made] no allegations of prospective lost customers or harms that are truly irreparable unless the court issues a permanent injunction." Id. Here, however, Qorvo has made allegations of prospective lost customers, and has shown that

Akoustis is projected to grow dramatically in the future. (See Exh. 127; Trial Tr. at 1712:20–1713:11.)

Because Akoustis has not provided "very persuasive" evidence as to its redesign, its argument as to irreparable harm fails. See GeigTech E. Bay, 2024 WL 3595413, at *26.

ii. Adequacy of Monetary Remedies

Plaintiff has demonstrated that monetary remedies are inadequate, satisfying the second eBay factor. See 547 U.S. at 391.

Looking forward, it is clear that "[m]onetary damages [will] be an inadequate remedy for harm caused by patent infringement [because] the harm, including harm from lost sales, is difficult to quantify." Wonderland Switzerland AG v. Evenflo Co., Inc., No. 1:20-CV-00727-JPM, 2023 WL 4098571, at *5 (D. Del. June 7, 2023) (citing Apple, 809 F.3d at 644–45). In a small market where "relationships with customers often last for years," (ECF No. 609 at PageID 28870–71), "[i]t is difficult to determine how many sales [Qorvo] will lose as a result of competition from [Akoustis'] Accused Products versus how many sales will be gained or lost as a result of other factors such as [Qorvo's] pricing model, differences in advertising, general market fluctuations, or a host of other factors." Wonderland, 2023 WL 4098571, at *6. Because of this difficulty in quantifying a monetary remedy, Qorvo has demonstrated that the second eBay factor favors issuing the permanent injunction. See Apple, 809 F.3d at 645.

Akoustis argues that an injunction would be a duplicative remedy, as the jury has already awarded damages. (See ECF No. 626 at PageID 30672–73.) This argument is unavailing. The jury awarded unjust enrichment damages, which compensated for infringement prior to the judgment, not for future infringement. (See supra Section III.a.ii; see also ECF No. 601.)

iii. Balance of Hardships

Plaintiff has demonstrated that the balance of hardships weighs in its favor. "This factor 'assesses the relative effect of granting or denying an injunction on the parties." Apple, 809 F.3d at 645 (quoting i4i Ltd. P'ship v. Microsoft Corp., 598 F.3d 831, 862 (Fed. Cir. 2010), aff'd, 564 U.S. 91 (2011)). In its analysis, the Court considers several factors, including "the parties' sizes, products, and revenue sources." i4i, 598 F.3d at 862.

Here, the hardship to Qorvo is great. As in <u>i4i</u>, Qorvo's BAW filters are "central to [its] business." <u>See id.</u> at 683; Trial Tr. 449:24–450:4. Further, "requiring [Qorvo] to compete against its own patented invention, with the resultant harms described above, places a substantial hardship on [Oorvo]." See Robert Bosch, 659 F.3d at 1156.

In contrast, the hardship to Akoustis is lower. Akoustis states it has redesigned its products. See CH2O, Inc. v. Meras Eng'g, Inc., No. LACV1308418JAKGJSX, 2017 WL 1700844, at *3 (C.D. Cal. May 2, 2017) (finding no significant hardship for a defendant where it "no longer use[d] the patented method"). Indeed, there is no cognizable hardship in prohibiting Akoustis from engaging in continued wrongdoing. (See supra Section IV.a.iii.) Further, "[t]he fact that the enjoined portion of [Akoustis'] business was built on infringing products also weighs against the hardship [it] will suffer by being enjoined." Wonderland, 2023 WL 4098571, at *8. Finally, even though Akoustis is a smaller company, it "cannot escape an injunction simply because it is smaller than the patentee." Robert Bosch, 659 F.3d at 1156.

Thus, Plaintiff has demonstrated that the third <u>eBay</u> factor weighs in favor of granting a permanent injunction. <u>See</u> 547 U.S. at 391.

iv. Public Interest

Plaintiff has demonstrated that the public interest factor supports injunctive relief. "[T]he touchstone of the public interest factor is whether an injunction, both in scope and effect, strikes a

workable balance between protecting the patentee's rights and protecting the public from the injunction's adverse effects." i4i, 598 F.3d at 863.

Here, the injunction strikes this "workable balance." <u>Id.</u> On the side of protecting the patentee's rights, "the public interest nearly always weighs in favor of protecting property rights in the absence of countervailing factors, especially when the patentee practices his inventions." <u>Apple</u>, 809 F.3d at 647. Here, Qorvo practices its patents. (<u>See ECF No. 609 at PageID 28870.</u>) On the other side, the injunctive relief requested is tailored enough to protect the public from any adverse effects. While the public benefits from competition, there is no benefit "when that competition comes at the expense of a patentee's investment-backed property right." <u>Apple</u>, 809 F.3d at 647. Further, the Court has narrowed the injunctive relief requested such that the "quarterly compliance process" requested is not included. <u>See infra Section IV.c.</u>

Thus, Plaintiff has demonstrated that the fourth <u>eBay</u> factor weighs in favor of granting a permanent injunction. See 547 U.S. at 391.

c. Tailoring of Remedies

While Qorvo is entitled to injunctive relief, its proposed remedy is overbroad in several respects. First, Section II(3)(c) of the proposed permanent injunction requires the removal of "all other information that is derived from Qorvo's Trade Secret Information and/or other documents that contain confidential Qorvo information." (ECF No. 608-1 at PageID 28846.) This clause is overbroad, especially in comparison to the prior clauses, which require deletion of all "Qorvo Trade Secret Information" and documents which are "indicated as Qorvo-confidential by the information itself or otherwise known to be Qorvo-confidential by Akoustis[.]" (Id. at PageID 28846.) Indeed, not everything in a Qorvo confidential document is protected or trade secret. Subclause (c) does not differentiate between the non-protected information in Qorvo-confidential

materials incorporated into Akoustis' system and the wrongfully obtained, protected information. (Id. at PageID 28845–46.) The deletion of all "Qorvo Trade Secret Information," in conjunction with the use of Qorvo's trade secret information in Part I is sufficient to prevent irreparable harm through continued misappropriation of Qorvo's trade secrets. Subclause (c) also presents enforceability problems. Given the breadth of trade secrets and confidential information alleged and the vague use of "derived from," nearly any information on Akoustis' system could fall under this subclause, including documents which incorporate templates from properly-obtained but confidential-marked Qorvo materials. Accordingly, clause II(3)(c) will not be included in the Permanent Injunction.

Similarly, Qorvo's proposed Audit Rights seeking to audit "personal email accounts of Akoustis employees who have used his/her email accounts for business" is overbroad. (Id. at PageID 38846.) As written, it would subject any employee who sent a single work-related email or used their Gmail calendar to record meetings to invasive audits of all their email accounts. Some ability to audit some personal email accounts, however, is necessary, given the use of personal email accounts by Akoustis employees to avoid detection of their trade secret misappropriation. Accordingly, Section III(1)(b) of the permanent injunction is modified to read: "The mailboxes contained in Akoustis' corporate email servers for all Akoustis employees and, upon documented and disclosed probable cause to believe that employees' personal email accounts were used to transmit, download, or upload Qorvo trade secrets, those email accounts." Similarly, because "Paper files belonging to all Akoustis employees" could be read to include personal paper files, Section III(1)(d) is modified to read "paper files belonging to Akoustis employees and kept on Akoustis property, or related to the employees' work at Akoustis."

Section III(3) is further modified to read: "The findings of such audits will be available only to Qorvo's outside attorneys, the independent third-party auditor, the Court, and Akoustis and its attorneys. Notwithstanding the foregoing, Qorvo's outside attorneys may be permitted to provide a summary of the finding of such audits to Qorvo's in-house attorneys. Any summary must comply with the terms of the Protective Order entered in this case."

The five-year audit period described in Section III is overly burdensome. The suggested provision provides for a five-year period during which Qorvo has the right to subject Akoustis to an extensive auditing process "a maximum of twice per calendar year" on five business days' notice. (Id. at PageID 28846–47.) Accordingly, the audit period is modified to occur for a maximum of four years, at most once per calendar year. If no violations are found in the first two years of the four year period, the audit period will presumptively expire after those first two years.

In its proposed patent injunction, Qorvo proposes a quarterly compliance process, requiring Akoustis to provide documentary evidence that any redesigned product is non-infringing, including cross-sectional electron microscopy analyses demonstrating the non-infringement of the product. Qorvo cites no precedent for this remedy and made strategic decisions to not pursue many of the redesigned products during this case. (See ECF No. 609.) Qorvo may pursue sanctions should purportedly redesigned products infringe and may pursue new actions against other infringing products. However, Qorvo's proposed compliance process would place the burden of proof on Akoustis to establish their products were non-infringing. The balance of equities weighs against this burden-shifting, as does the public's interest in promoting innovation and a competitive marketplace between non-infringing products. Accordingly, the quarterly compliance process is not narrowly tailored, and those provisions will not be included in the final permanent injunction.

V. CONCLUSION

For the reasons discussed above, Plaintiff's Motion for Permanent Injunctive Relief is **GRANTED IN PART AND DENIED IN PART**.

The following permanent injunctive relief is **ORDERED**:

- 1. Permanent Injunction on Use of Qorvo Trade Secret Information
 - a. Akoustis, its officers, agents, servants, employees, distributors and resellers of any type, and all those persons in active concert or participation with any of them who receive actual notice of this order by personal service or otherwise, are permanently enjoined from performing any of the following actions:
 - i. Possessing, accessing, reviewing, using, or disclosing Qorvo Trade
 Secret Information, in whole or in part, anywhere in the world;
 - ii. Offering to sell, selling, or otherwise distributing anywhere in the world any product made using Qorvo Trade Secret Information;
 - iii. Advertising, promoting, offering to sell, or otherwise providing services anywhere in the world that use Qorvo Trade Secret Information.

2. Removal and Quarantine of Confidential Qorvo Information

a. Akoustis, its officers, agents, servants, employees, distributors and resellers of any type, and attorneeys, and all those persons in active concert or participation with any of them who receive actual notice of the order by personal service or otherwise, shall undertake the following steps to remove from their possession and quarantine any confidential Qorvo information (as set forth in Part 2.a.iii), as follows:

- Akoustis will, at its own expense, engage an e-discovery vendor that is approved in advance in writing by Qorvo, to assist with the identification, collection, and removal of any Qorvo confidential information;
- ii. Akoustis will inspect the following data sources in its possession:
 - Any database, document management system, or other shared storage in use at Akoustis;
 - 2. The mailboxes contained in Akoustis' corporate email servers for all Akoustis employees, and, upon documented and disclosed probable cause to believe that employees' personal email accounts were used to transmit, download, or upload Qorvo trade secrets, those email accounts;
 - Akoustis computers, laptops, hard drives, and other storage media (including USB drives and network-based storage drives) belonging to all Akoustis employees; and
 - 4. Paper files belonging to Akoustis employees and kept on Akoustis property or related to the employees' work at Akoustis.
- iii. Akoustis will remove from its possession and quarantine the following:
 - 1. Qorvo Trade Secret Information
 - 2. All other documents that contain confidential Qorvo information (either indicated as Qorvo-confidential by the information itself or otherwise known to be Qorvo-confidential by Akoustis) obtained or received without Qorvo's authorization or in

violation of any obligation to maintain the confidentiality of that information.

3. Qorvo Audit Rights

- a. In order to monitor compliance with Parts 1 and 2 of this Permanent Injunction Order, Qorvo shall, for a period of four years from the issuance of this Order, have the right to conduct audits of Akoustis, its officers, agents, servants, employees, distributors and resellers of any type, and attorneys, and all those persons in active concert or participation with any of them who receive actual notice of the order by personal service or otherwise, as follows:
 - Qorvo may audit, through audits conducted by an independent third party chosen by Qorvo, and in compliance the Protective Order in this case, the following data sources in Akoustis' possession;
 - Any database, document management system, or other shared storage in use at Akoustis;
 - 2. The mailboxes contained in Akoustis' corporate email servers for all Akoustis employees, and, upon documented and disclosed probable cause to believe that employees' personal email accounts were used to transmit, download, or upload Qorvo trade secrets, those email accounts;
 - Akoustis computers, laptops, hard drives, and other storage media (including USB drives and network-based storage drives) belonging to all Akoustis employees; and

- Paper files belonging to Akoustis employees and kept on Akoustis property, or related to the employees' work at Akoustis.
- ii. Upon request, the auditor shall be given access to any other data sources reasonably necessary to determine whether Akoustis is in compliance with Parts 1 and 2 of this Permanent Injunction, including data sources sufficient to show how Akoustis is performing trimming and reliability testing with respect to BAW filters.
- iii. The findings of such audits will be available only to Qorvo's outside attorneys, the independent third-party auditor, the Court, and Akoustis and its attorneys. Notwithstanding the foregoing, Qorvo's outside attorneys may be permitted to provide a summary of the finding of such audits to Qorvo's in-house attorneys. Any summary must comply with the terms of the Protective Order entered in this case.
- iv. If the auditor finds that Akoustis may not be in compliance with the terms of this Order, the auditor shall provide written notice and a copy of his findings to Akoustis and one of Qorvo's in-house attorneys to permit Qorvo to understand the reason(s) and extent of Akoustis' noncompliance.
- v. The audits may be conducted a maximum of one per calendar year, during the course of normal business hours, and upon electronic or written notice of at least five business days to Akoustis. The parties will use good faith efforts to conduct the audit in a manner least disruptive

to Akoustis' normal business activities. The cost of any audit shall be born equally by Akoustis (50%) and Qorvo (50%). In the event an audit shows a violation of this Permanent Injunction Order, the cost of the audit shall be borne exclusively by Akoustis.

- b. If no violations are found after 2 years, Qorvo's audit rights will presumptively expire after 2 years.
- 4. Permanent Injunction on Infringement of the '018 and '755 Patents
 - a. Akoustis and any of its officers, agents, servants, directors, employees, attorneys, subsidiaries, successors in interest, and all those persons in active concert or participation with such persons who receive actual notice of this Order by personal service or otherwise, are permanently enjoned and restrained from making, using, selling, or offering for sale within the United States, or importing into the United States:
 - i. The '018 Patent Enjoined Products or any products not more than colorably different from the '018 Patent Enjoined Products from the Effective Date (which is fourteen (14) days from the date of this signed Permanent Injunction) through the expiration of the '018 Patent;
 - ii. The '755 Patent Enjoined Products or any products not more than colorably different from the '755 Patent Enjoined Products from the Effective Date through the expiration of the '755 Patent.
- 5. For the purposes of this injunction, the term "'018 Patent Enjoined Products" means the following Akoustis BAW filter products the jury found to infringe the '018 patent: A10149, A10154, A10155, A10156, A10158, A10160, A10165, A10166, A10235,

- A10238, A10249, A10252, A10256, A10266, A10335, AKF-1256, AKF-1256, AKF-1336, AKF-1938.
- For the purposes of this injunction, the term "'755 Patent Enjoined Products" means
 the following Akoustis BAW filter products the jury found to infringe the '755 Patent:
 A10149, A10154, A10155, A10156, A10160, A10165, A10166, A10235, A10238,
 A10249, A10256, A10266, A10335, AKF-1252, AKF-1256, AKF-1336, AKF-1938.
- 7. For the purpose of this injunction, the term "Qorvo Trade Secret Information" means any confidential information copied or derived from, in whole or in part, the following trade secrets that the jury found Akoustis to have misappropriated (identified here by trade secret number and citation to trial exhibit):

a. Group 2: Qorvo BAW filter and resonator designs

- i. Trade Secret 2.1
 - 1. Trial Ex. 8 (PTX-0078) at page 4
 - 2. Trial Ex. 46 (PTX-0007) at page 2
- ii. Trade Secret 2.2
 - 1. Trial Ex. 9 (PTX-0149) at page 3
 - 2. Trial Ex. 44 (PTX-0005) at page 3
 - 3. Trial Ex. 45 (PTX-0006) at page 2
- iii. Trade Secret 2.3
 - 1. Trial Ex. 9 (PTX-0149) at pages 14–16
 - 2. Trial Ex. 44 (PTX-0005) at pages 14–16
 - 3. Trial Ex. 45 (PTX-0006) at pages 3–5
- iv. Trade Secret 2.4

- 1. Trial Ex. 9 (PTX-0149) at page 17
- 2. Trial Ex. 44 (PTX-0005) at page 17
- 3. Trial Ex. 45 (PTX-0006) at page 6

v. Trade Secret 2.5

- 1. Trial Ex. 9 (PTX-0149) at page 19
- 2. Trial Ex. 44 (PTX-0005) at page 19

vi. Trade Secret 2.6

- 1. Trial Ex. 9 (PTX-0149) at page 24
- 2. Trial Ex. 44 (PTX-0005) at page 24

vii. Trade Secret 2.7

- 1. Trial Ex. 9 (PTX-0149) at page 11
- 2. Trial Ex. 44 (PTX-0005) at page 11
- 3. Trial Ex. 45 (PTX-0006) at pages 12

viii. Trade Secret 2.8

- 1. Trial Ex. 10 (PTX-0720) at page 4
- ix. Trade Secret 2.9
 - 1. Trial Ex. 10 (PTX-0720) at page 8

x. Trade Secret 2.10

- 1. Trial Ex. 10 (PTX-0720) at page 10
- xi. Trade Secret 2.11
 - 1. Trial Ex. 10 (PTX-0720) at page 15

xii. Trade Secret 2.12

1. Trial Ex. 10 (PTX-0720) at page 23

- xiii. Trade Secret 2.13
 - 1. Trial Ex. 10 (PTX-0720) at page 24
- xiv. Trade Secret 2.14
 - 1. Trial Ex. 10 (PTX-0720) at page 29
- xv. Trade Secret 2.15
 - 1. Trial Ex. 10 (PTX-0720) at page 36
- xvi. Trade Secret 2.16
 - 1. Trial Ex. 10 (PTX-0720) at page 37
- b. Group 3: Qorvo's trimming method and procedures
 - i. Trade Secret 3.1
 - 1. Trial Ex. 11 (PTX-1141) at page 16
 - 2. Trial Ex. 12 (PTX-0453) at page 2
 - 3. Trial Ex. 209 (PTX-0421) at page 2
 - 4. Trial Ex. 213 (PTX-0438) at page 11
 - 5. Trial Ex. 217 (PTX-0662) at pages 10
 - 6. Trial Ex. 220 (PTX-0721) at page 11
 - ii. Trade Secret 3.2
 - 1. Trial Ex. 11 (PTX-1141) at page 17
 - 2. Trial Ex. 12 (PTX-0453) at page 3
 - 3. Trial Ex. 209 (PTX-0421) at page 3
 - 4. Trial Ex. 213 (PTX-0438) at pages 4 and 12
 - 5. Trial Ex. 217 (PTX-0662) at pages 8 and 11
 - 6. Trial Ex. 220 (PTX-0721) at pages 9 and 12

iii. Trade Secret 3.3

- 1. Trial Ex. 11 (PTX-1141) at page 18
- 2. Trial Ex. 12 (PTX-0453) at page 4
- 3. Trial Ex. 209 (PTX-0421) at page 4
- c. Group 4: Qorvo's evaluation board design rules and schematics
 - i. Trade Secret 4.1
 - 1. Trial Ex. 13 (PTX-1142) at page 1
- d. Group 5: Qorvo's product development process and testing procedures
 - i. Trade Secret 5.4
 - 1. Trial Ex. 33 (PTX-0111) at overview, specification, and production test tabs
 - 2. Trial Ex. 34 (PTX-0114) at overview and specification tabs
 - 3. Trial Ex. 76 (PTX-0112) at overview and specification tabs
 - 4. Trial Ex. 79 (PTX-0116) at overview and specification tabs
 - 5. Trial Ex. 80 (PTX-0117) at overview and specification tabs
 - 6. Trial Ex. 83 (PTX-0120) at overview and specification tabs
 - ii. Trade Secret 5.5
 - 1. Trial Ex. 7 (PTX-1089) at pages 1–2
 - 2. Trial Ex. 33 (PTX-0111) at overview, specification, and production test tabs
 - 3. Trial Ex. 34 (PTX-0114) at overview and specification tabs
 - 4. Trial Ex. 35 (PTX-0088) at specification tab (with guard band file), test specification, and conditions tab

- 5. Trial Ex. 61 (PTX-0089) at page 2
- 6. Trial Ex. 76 (PTX-0112) at overview and specification tabs
- 7. Trial Ex. 79 (PTX-0116) at overview and specification tabs
- 8. Trial Ex. 80 (PTX-0117) at overview and specification tabs
- 9. Trial Ex. 83 (PTX-0120) at overview and specification tabs
- e. Group 6: Qorvo's systems at processes, and procedures for testing reliability and mean-time-to-failure of parts
 - i. Trade Secret 6.1
 - 1. Trial Ex. 14 (PTX-0099) at pages 6 and 24
 - 2. Trial Ex. 68 (PTX-0101) at pages 6 and 24
 - 3. Trial Ex. 70 (PTX-0103) at pages 6 and 24
 - 4. Trial Ex. 73 (PTX-0107) at pages 6 and 24
 - 5. Trial Ex. 110 (PTX-0105) at pages 6 and 24
 - ii. Trade Secret 6.3
 - 1. Trial Ex. 14 (PTX-0099) at pages 15–17
 - 2. Trial Ex. 68 (PTX-0101) at pages 15–17
 - 3. Trial Ex. 70 (PTX-0103) at pages 15–17
 - 4. Trial Ex. 73 (PTX-0107) at pages 15–17
 - 5. Trial Ex. 110 (PTX-0105) at pages 15–17
 - iii. Trade Secret 6.4
 - 1. Trial Ex. 14 (PTX-0099) at pages 15–17
 - 2. Trial Ex. 68 (PTX-0101) at pages 15–17
 - 3. Trial Ex. 70 (PTX-0103) at pages 15–17

- 4. Trial Ex. 73 (PTX-0107) at pages 15–17
- 5. Trial Ex. 110 (PTX-0105) at pages 15–17

iv. Trade Secret 6.5

- 1. Trial Ex. 14 (PTX-0099) at pages 15–17
- 2. Trial Ex. 68 (PTX-0101) at pages 15–17
- 3. Trial Ex. 70 (PTX-0103) at pages 15–17
- 4. Trial Ex. 73 (PTX-0107) at pages 15–17
- 5. Trial Ex. 110 (PTX-0105) at pages 15–17

v. Trade Secret 6.6

- 1. Trial Ex. 14 (PTX-0099) at page 23
- 2. Trial Ex. 68 (PTX-0101) at page 23
- 3. Trial Ex. 70 (PTX-0103) at page 23
- 4. Trial Ex. 73 (PTX-0107) at page 23
- 5. Trial Ex. 110 (PTX-0105) at page 23
- f. Group 7: Qorvo's manufacturing and assembly procedures
 - i. Trade Secret 7.2
 - 1. Trial Ex. 37 (PTX-0751) at pages 7 and 9

IT IS SO ORDERED, this 11th day of October, 2024.

/s/ Jon P. McCalla
JON P. McCALLA
UNITED STATES DISTRICT JUDGE