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**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

AKOUSTIS TECHNOLOGIES, INC. AND
AKOUSTIS, INC.,

Plaintiffs,

v.

QORVO, INC.,

Defendant.

Civil Action No. 2:23-cv-00180-JRG-RSP

JURY TRIAL DEMANDED

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**DEFENDANT'S SUPPLEMENTAL BRIEF IN OPPOSITION TO
PLAINTIFFS' MOTION FOR LEAVE TO FILE AN AMENDED
COMPLAINT TO ADD CORNELL UNIVERSITY AND CORNELL
RESEARCH FOUNDATION, INC. AS CO-PLAINTIFFS**

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In prior briefs, Qorvo addressed the prejudice that it has suffered from the untimely motion to join Cornell as a plaintiff. *See* Dkts. 94, 99. On June 17, 2024, Cornell filed a Patent Owner Preliminary Response (the “Preliminary Response”) in a co-pending *inter partes* review proceeding for the ’360 Patent that starkly highlights this prejudice. In the Preliminary Response, Cornell argues for the first time that the ’360 patent is entitled to an invention date **more than seven years before the filing date of the ’360 patent**. In support of that position, Cornell cited documents allegedly showing the conception and reduction to practice of the claimed invention. Those documents should have been produced in **July 2023** pursuant to the Patent Local Rule and governing Docket Control Order. In 2023, Qorvo also (i) affirmatively sought the conception and reduction to practice documents by subpoena to Cornell, and (ii) served an interrogatory asking Akoustis to identify the alleged invention date. But Akoustis and Cornell withheld the information for nearly a year.

In addition to advancing a new invention date, Cornell also advanced a new position concerning the scope of the asserted claims. In particular, Cornell argued claim 1 requires that the group II or III reactant used to pre-treat the surface of a substrate in step “b” of the claimed process be “kept on” while a group V or VI reactant is introduced in step “c” of the process. Akoustis did not advance this claim interpretation in its P.R. 3-1(c) infringement contentions, nor raise this position as part of the claim construction process under P.R. 4-1.

Because Akoustis affirmatively refused to join Cornell to this case prior to the deadline set in the DCO, Cornell’s positions on foundational issues such as priority date and claim scope were never disclosed as required by the Local Rules. Akoustis and Cornell compounded the absence of these disclosures by evading the discovery requests and subpoenas aimed at securing the information by other means. If Cornell is now added to this case and permitted to assert its

previously undisclosed positions, Qorvo will require an opportunity to revisit and supplement its invalidity contentions and claim construction positions. Additionally, as noted in prior briefs, Qorvo will require an opportunity to conduct discovery on Cornell as a party, including on the recently disclosed positions. As such, if the Court denies Qorvo's motion to dismiss (*see* Dkt. 17) and determines that it is appropriate to join Cornell as a plaintiff at this stage of the case, Qorvo respectfully requests that the discovery and trial schedules be extended to allow sufficient time to address the myriad issues arising from the late joinder, including the new contentions concerning claim scope and priority date.

I. RELEVANT BACKGROUND

A. Akoustis Makes Disclosures under P.R. 3-1 and 3-2

On July 6, 2023, Akoustis served its disclosures under P.R. 3-1 and 3-2. In those disclosures, Akoustis stated that the asserted claims were entitled to the March 2, 2005 filing date of the application that led to the '360 patent. *See* Ex. 1 at 3-4.¹ Akoustis did not identify any earlier date of invention for the claims of the '360 Patent or otherwise indicate that such a contention would be forthcoming.

Pursuant to P.R. 3-1(c), Akoustis provided a claim chart allegedly demonstrating how the asserted claims read on a single Qorvo product. Ex. 1 at 8-20. Akoustis' claim chart did not apply the "kept on" construction for step c) advanced by Cornell in its Preliminary Response. *Compare* Ex. 1 at 14-17 with Ex. 5 at 34, 37-40; *see also* Part II.G, below.

Pursuant to P.R. 3-2(b), Akoustis stated that it did not have possession of any documents beyond the application for the '360 patent reflecting the conception, reduction to practice, design, or development of the alleged invention. Ex. 1 at 6. Akoustis stated, however, that it had

¹ All exhibits citations refer to the Declaration of Jonathan DeFosse unless otherwise indicated.

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“reached out” to Cornell to obtain such documents and would “amend this production as more information becomes available.” *Id.* Under the license agreement between Cornell and Akoustis,

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[REDACTED] Despite this, Akoustis never amended or supplemented its disclosures under P.R. 3-1 or 3-2 based on information from Cornell.

B. Qorvo Serves Invalidity Contentions

On September 14, 2023, Qorvo served its invalidity contentions according to P.R. 3-4. Qorvo performed its prior art search and charted references based on the March 2005 priority date and scope for step c) of claim 1 that Akoustis advanced in its P.R. 3-1 and 3-2 disclosures. *See, e.g.*, Ex. 2 at 7-10 (listing prior art references).

C. Qorvo Serves Interrogatories on Akoustis

On September 18, 2023, Qorvo served its initial set of interrogatories on Akoustis. Qorvo asked Akoustis, *inter alia*, to identify “the date on which You contend the claimed invention was conceived and the date on which you contend the claimed invention was first reduced to practice.” Ex. 3 at 19-20. On December 6, 2023, Akoustis responded by cross-referencing its P.R. 3-1 disclosures, which identified the priority date as March 2005. Akoustis stated that it did not have possession of any further information. *Id.* at 20-21.

D. Qorvo Subpoenas Information from Cornell

On December 7, 2023, Qorvo served a subpoena on Cornell. *See* Ex. 4 at 1. The subpoena requested production of all documents related to the conception and reduction to practice of the alleged invention. *See id.* at 10. After requesting multiple extensions, Cornell agreed that it would begin producing documents in response to the subpoena in March 2024. *See* Dkt. 94 at 5.

E. IQE PLC and Qorvo File *Inter Partes* Review Petitions

On March 1, 2024, one of the companies that sells epitaxial wafers to Qorvo—IQE PLC—filed a Petition for *inter partes* review challenging claims 1-24 of the '360 patent. On April 17, 2024, Qorvo filed a petition for *inter partes* review that was substantially identical to the IQE petition and a request to join the IQE proceeding in the role of an “understudy” if *inter partes* review is instituted. *See* Dkts. 107-3 (Qorvo IPR Pet.); 107-4 (Motion for Joinder).

F. Cornell Produces Invention Disclosure Documents

On May 30, 2024, Cornell produced its first set of documents in response to Qorvo’s December 2023 subpoena. *See* Dkt. 99 at 3. Invention disclosure documents were among the 400 pages of materials Cornell produced. Cornell’s production of these documents came ten months after Akoustis purportedly asked Cornell for documents in connection with the P.R. 3-2 disclosures, six months after Qorvo subpoenaed any documents relating to the conception and reduction to practice of the '360 patent, and two months after Cornell represented that it would begin producing documents.

G. Cornell Advances Previously Undisclosed Positions

On June 17, 2024, Cornell filed the Preliminary Response in the IQE IPR. *See* Ex. 5. In that brief, Cornell advanced at least two new positions that Akoustis did not disclose under the Local Patent Rules or in response to Qorvo’s discovery requests. First, Cornell argued that the claimed invention was allegedly conceived on December 31, 1997—seven years before its March 2, 2005 filing date. Ex. 5 at 13-18. In support of this position, Cornell relied on the invention disclosure statement (produced May 2024) and a lab notebook (produced June 11,

2024).² Second, Cornell advanced new arguments concerning the scope of step c) in claim 1. In particular, claim 1 of the '360 patent requires the steps of “b) pre-treating a surface of the substrate with at least one group III reactant or at least one group II reactant at an elevated growth temperature prior to introducing a group V reactant or a group VI reactant” and “c) introducing a group V reactant or a group VI reactant to grow a nucleation layer on the surface of the substrate.” Dkt. 107 ('360 patent), 5:9-11. In the Preliminary Response, Cornell contends that these claim elements should be interpreted to require that “at least one group II/III material is **kept on after (b) pretreatment** when the group V/VI material is introduced.” Ex. 5 at 34.

II. CORNELL'S UNDISCLOSED POSITIONS DEMONSTRATE PREJUDICE

In moving to join Cornell as a co-plaintiff without modifying the discovery and trial schedule, Akoustis seeks to obtain an improper tactical advantage that prejudices Qorvo. As a result of Akoustis' refusal to join Cornell according to the schedule in the DCO (as Qorvo requested in June 2023), Cornell did not provide the disclosures and discovery that are required from a party. Cornell's identification of a new priority date and new claim scope in its IPR filing amply demonstrates the prejudice. If these contentions had been properly advanced in July 2023 (e.g., if Cornell had been properly named in the original Complaint or joined as Qorvo requested), Qorvo would have been able to consider them when preparing its own contentions, claim construction positions, and IPR Petition. That is the process the Local Rules envisage. As a result of Akoustis' delay in joining Cornell:

- Qorvo could not consider the alleged 1997 invention date in conducting its prior art search and preparing its invalidity contentions under P.R. 3-3. As a result, more than 75% of the prior art references identified in Qorvo's invalidity contentions are dated after the newly alleged invention date. Ex. 2 at 8-10.

² Cornell relied on a notebook produced by co-inventor Joseph Smart on June 11, 2024. Qorvo subpoenaed conception and reduction to practice documents from Dr. Smart in December 2023. Dr. Smart produced documents in January 2024, but withheld the lab notebook until June 2024.

- Qorvo was unable to consider the (alleged) December 31, 1997 date of invention when preparing its IPR petition.
- Qorvo could not consider Cornell's contention as to the scope of step c) of claim 1 (i.e., the "kept on" construction) in searching for prior art or mapping prior art references to the asserted claims in the invalidity contentions and IPR.
- Qorvo could not consider Cornell's contention as to the scope of step c) of claim 1 in proposing claim terms for construction pursuant to P.R. 4-1 *et seq.*

The absence of Cornell's disclosures on these foundational issues shows the prejudice Qorvo will suffer if Cornell is added as a party to this case, especially without a corresponding adjustment to the schedule. Qorvo must be afforded the opportunity (and time) to address Cornell's new positions in supplemental invalidity contentions, which will require a supplemental prior art search to account for the newly alleged date of invention and newly alleged scope of step c), the review of new prior art references, and the preparation of new charts. Further, the parties will need to revisit and, potentially, supplement the claim construction exchanges to account for the newly alleged scope of step c) by Cornell.

Further, Cornell's previously undisclosed positions also have a ripple effect on other discovery issues. For example, the newly alleged invention date gives rise to substantial new issues, including (but not limited to) whether Cornell exercised diligence in filing the application for the '360 patent, whether Qorvo's predecessors had ownership rights to the '360 patent based on their employment of one of the inventors in the early 2000s, and whether there was inequitable conduct before the patent office. These issues are in addition to all of the other issues that Qorvo has a right to pursue in discovery from Cornell if it is a party.

Qorvo respectfully requests that the Court deny the untimely motion for leave and instead grant the motion to dismiss (Dkt. 17) without prejudice to Cornell and Akoustis refiling this case with the proper parties. Should the Court grant the motion for leave to join Cornell, Qorvo respectfully requests a six-month extension of the remaining deadlines.

Dated: July 5, 2024

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the above and foregoing document has been served on all counsel of record via electronic mail and the Court's CM/ECF system on July 5, 2024.

/s/ Jennifer Klein Ayers

Jennifer Klein Ayers

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