

EXHIBIT 4

K&L GATES

March 7, 2023

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By Email and Personal Service

Dr. Lisa Su, Chief Executive Officer
Henry Wolin, General Counsel
Kevin O’Neil, Vice President, Intellectual Property & Licensing
Advanced Micro Devices, Inc.
2485 Augustine Dr.
Santa Clara, CA 95054

Dear Dr. Su and Messrs. Wolin and O’Neil:

We represent Realtek Semiconductor Corp. (“Realtek”). We write to demand that Advanced Micro Devices, Inc. and ATI Technologies ULC, (collectively, “AMD”) promptly cure the breach of AMD’s obligations under the Khronos Group Membership Agreement (“Membership Agreement”). AMD breached the Membership Agreement when it asserted claims against Realtek for infringement of U.S. Patent No. 11,184,628 (“’628 patent”) based on Realtek’s use of graphics processor technology for implementing the Adaptive Scalable Texture Compression (“ASTC”) standard. As you know, Arm Limited (“Arm”) supplied Realtek with the accused Graphics Processing Units (“GPUs”) that implement ASTC.¹

Realtek’s use of Arm’s GPUs is licensed pursuant to the Membership Agreement. In particular, the Membership Agreement provided Arm with a royalty-free license to practice any patent claims necessary to implement the ASTC standard. Because AMD’s theory of infringement rests upon Realtek’s use of Arm GPUs in implementing the ASTC standard, AMD breached its obligations under the Membership Agreement in asserting infringement of the ’628 patent, and Realtek has a complete defense to AMD’s infringement claim. Realtek therefore demands that AMD dismiss all of its patent infringement claims relating to the ’628 patent, including all such claims asserted in *Certain Graphics Systems, Components, Thereof, and Digital Televisions Containing the*

¹ The Khronos Group lists AMD and Arm as “Promoter Members.” See https://www.khronos.org/members/member_list (last visited March 6, 2023). As Promoter Members, AMD and Arm both were required to, and did, agree to abide by all terms of the Membership Agreement. See https://www.khronos.org/files/member_agreement.pdf (last visited March 6, 2023).

Same, ITC Investigation No. 337-TA-1318 (“1318 Investigation”) and in *Advanced Micro Devices, Inc. et al. v. TCL Industries Holdings Co., Ltd., et al.*, Case No. 22-cv-00134-JRG-RSP (E.D. Tex.) (“E.D. Tex. Action”), and that AMD reimburse Realtek for all fees and costs associated with defending against such patent infringement claims, including costs incurred in other proceedings related to the ’628 patent.

If AMD does not provide assurances, by Friday, March 10, 2023, that it will dismiss all claims against Realtek premised on infringement of the ’628 patent, Realtek will initiate an action against AMD in the Northern District of California,² which is the venue that Section 6.5 of the Membership Agreement selects. Realtek’s action will assert, among other claims, breach of the Membership Agreement. It is well established that Realtek, as the purchaser of technology licensed via the Membership Agreement, is a third-party beneficiary of that agreement. See Membership Agreement, Attachment A §1 (“Reciprocal License” defined as “the perpetual, royalty-free, fully paid, worldwide, nonexclusive, non-transferable license under any Necessary Patent Claims to make, have made, use, import, offer to sell and sell Compliant Portions, together with the right without royalty or fee to sublicense to third parties (a) the right to distribute Compliant Portions through the normal tiers of distribution to end users or to resellers, distributors, dealers and authorized manufacturers and others in the distribution channel”); see also *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872 (9th Cir. 2012); *Realtek Semiconductor Corp. v. LSI Corp.*, 946 F.Supp.2d 998 (N.D. Cal. 2013); *Implicit, LLC v. Imperva, Inc.*, Case No. 19-cv-00040-JRG-RSP (LEAD), 2020 WL 10356908 (E.D. Tex. Apr. 22, 2020).

I. The Khronos Group Membership Agreement, “Necessary Patent Claims,” and AMD’s Licenses to Arm

AMD and Arm are Promoter Members of the Khronos Group, and as indicated, each Member must sign and agree to the Membership Agreement. The Membership Agreement includes Attachment A, which governs the intellectual property rights of the Members. Attachment A defines “Necessary Patent Claims” as:

[C]laims of a patent or patent application, other than design patents and design registrations, issued or filed in any country, to which a Member or its Affiliates has the right to grant licenses in accordance with the terms and conditions of this Attachment A at any time during the term of the Agreement, and which are necessarily infringed by any Compliant Portion.

Membership Agreement, Attachment A §1. Section 2.2 of the Membership Agreement provides each Member, including Arm, a license to all Necessary Patent Claims, unless the Member takes explicit actions to exclude operation of the license:

Each Member agrees to grant a Reciprocal License under any of its Necessary Patent Claims not excluded in accordance with the following sections for any

² Realtek is sending this letter before filing a complaint because, as Judge Alsup has explained, “[c]ease-and-desist letters can efficiently lead to a resolution and save vast resources.” *Sonos v. Google LLC*, No. C 21-07559 WHA, at 5 (N.D. Cal. Mar. 16, 2022).

Ratified Specification on the date of Ratification in reciprocity to all other Members that also grant a Reciprocal License to Member. Such Reciprocal License is granted whether or not the licensor or licensee Member ever had any knowledge of the existence of such Necessary Patent Claims.

Id. § 2.2. The Membership Agreement makes clear that a Member must take explicit steps to opt out of the automatic, royalty-free license offered to other Members. Attachment A of the Membership Agreement specifically notes: “A Member is not required to disclose a Necessary Patent Claim if the Member commits to license such Necessary Patent Claim according to the terms and conditions of the Reciprocal License.” *Id.* at §3.2. However, if a Member “has actual knowledge of claims that may be Necessary Patent Claims owned or controlled by that Member with respect to that Member’s Contributions or any other aspect of a Draft Specification that will not be licensed under the Reciprocal License, the Khronos Representative of such Member **must** submit an IP Disclosure Certificate with the submission of a Contribution or as soon as is reasonably possible.” *Id.* § 3.3 (emphasis added). Accordingly, AMD granted Arm a Reciprocal License to all Necessary Patent Claims not excluded by an IP Disclosure Certificate. Based on our review of public Khronos Group documents, it is our understanding the ‘628 patent was never excluded from the scope of a Reciprocal License.

In addition, we understand that ASTC was jointly “developed by Arm and AMD.” <https://github.com/ARM-software/astc-encoder> (last visited March 6, 2023). Accordingly, Arm has rights to the technology necessary to implement ASTC independent of the Membership Agreement. As the co-developer of ASTC, Arm has rights to include ASTC in its products, regardless of any AMD patent, and Arm’s customers benefit from Arm’s rights.

II. AMD’s Patent Infringement Allegations and ASTC

In its Complaint requesting ITC Investigation No. 337-TA-1318, AMD asserted that Realtek infringes the ‘628 patent based exclusively on its use of Arm GPUs to implement the ASTC standard. See ITC Complaint ¶¶ 112, 113, and Ex. 43. Notably, AMD cites only the ASTC standards to establish infringement of non-generic limitations of the ‘628 patent. See Ex. 43 to ITC Complaint.

Pursuant to the Membership Agreement, all patents necessary to the ASTC standard are licensed, royalty-free, to Arm. In particular, OpenGL ES 3.2 expressly incorporates and requires ASTC, and the Khronos Group has ratified OpenGL ES 3.2,³ which is the trigger for a grant of license rights to all Members. See Membership Agreement § 1.2.

We understand that, in the 1318 Investigation and in the E.D. Tex. Action, AMD accuses Realtek of infringing the ‘628 patent by using Mali “Bifrost” GPUs, the Mali-G51 GPU, the Mali-57 GPU, and the Mali G310 GPU to implement the ASTC standard. We understand from Arm that such GPUs fully comply with OpenGL ES 3.2, and such compliance is the basis for AMD’s claims

³ OpenGL 3.2 uses Data Format 1.3.1 (the Khronos ASTC data format specification).

against Realtek. As such, Realtek's use of the accused GPUs to implement the ASTC standard is protected by the Reciprocal License that the Membership Agreement granted to Arm. See Membership Agreement, Attachment A §1 ("Reciprocal License"); *Microsoft Corp.*, 696 F.3d 872; *Realtek Semiconductor Corp.*, 946 F.Supp.2d 998; *Implicit, LLC*, 2020 WL 10356908.

III. Realtek's Demand

Realtek demands that AMD promptly dismiss all claims against Realtek for infringement of the '628 patent, including all such claims asserted in the 1318 Investigation and the E.D. Tex. Action. If AMD does not confirm, by Friday, March 10, 2023, that it will dismiss all such claims, then Realtek will initiate an action against AMD in the Northern District of California. Realtek will bring, among others, claims for breach of the Khronos Group Membership Agreement. Realtek is also investigating additional claims, and depending upon the result of its investigation, Realtek may assert, for example, antitrust and abuse of process claims.

Realtek further demands that AMD and all persons under its control preserve all evidence related to the facts discussed in this letter. This demand for preservation of evidence includes, but is not limited to, preserving paper and electronic documents, data-bases, document management systems, video and oral recordings, photographs, electronic images, internet images, instant messages, text messages, social media, voice mails, e-mails (including message contents, headers, html source, attachments and logs of e-mail system usage), electronic calendars and schedules, metadata, file fragments, browser logs, internet download logs, internet logs, browser logs, network access logs, cookies, browser caches, work logs, telephone logs, local and long distance telephone records, imaged files and drives, backup media, transcripts (of depositions or hearings), and pleadings. AMD must also preserve all instrumentalities and methods by which such evidence is created or maintained. The evidence is to be preserved in its native format, and the demand includes preservation of software, tools, applications, utilities and the like needed to access the evidence in its native format. Further, the request includes the suspension of routine document destruction and the preservation of all evidence created after the date of this letter.

We look forward to your prompt response and hope that AMD will take corrective action immediately.

Sincerely,



Jason N. Haycock
Jas Dhillon