# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

ARM LTD., a U.K. corporation,	
Plaintiff,	
V.	C.A. No
QUALCOMM INC., a Delaware corporation, QUALCOMM TECHNOLOGIES, INC., a Delaware corporation, and NUVIA, INC., a Delaware corporation,	JURY TRIAL DEMANDED

Defendants.

## **COMPLAINT**

Plaintiff Arm Ltd. ("Arm") complains and alleges as follows against Defendants

Qualcomm Inc., Qualcomm Technologies, Inc. (collectively "Qualcomm"), and NuVia, Inc.

("Nuvia"):

# **NATURE OF THE ACTION**

- 1. Arm is the world's leading provider of microprocessor intellectual property. For decades, Arm has developed innovative processor architecture and implementation designs that balance performance with energy efficiency. Billions of electronic devices use Arm processor technologies pursuant to Arm licenses—from smartphones used to interact seamlessly with friends and family around the world to an increasing number of the servers that run the essential day-to-day operations of Fortune 500 companies.
- 2. Qualcomm is a major semiconductor manufacturer. To accelerate its processor development efforts, Qualcomm spent over \$1 billion to acquire Nuvia, a start-up led by senior engineers previously from Apple and Google that licensed Arm technologies to develop high-performance processor cores for semiconductor chips. In the process,

Qualcomm caused Nuvia to breach its Arm licenses, leading Arm to terminate those licenses, in turn requiring Qualcomm and Nuvia to stop using and destroy any Arm-based technology developed under the licenses. Undeterred, Qualcomm and Nuvia have continued working on Nuvia's implementation of Arm architecture in violation of Arm's rights as the creator and licensor of its technology. Further, Qualcomm's conduct indicates that it has already and further intends to use Arm's trademarks to advertise and sell the resulting products in the United States, even though those products are unlicensed.

3. Arm now brings suit for specific performance of the Nuvia licenses' termination provisions to require Qualcomm and Nuvia to stop using and to destroy the relevant Nuvia technology and to stop their improper use of Arm's trademarks with their related products. Arm also seeks declaratory judgment, injunctive relief, and damages for the use of Arm's trademarks in connection with semiconductor chips incorporating the relevant Nuvia technology.

#### **PARTIES**

- 4. Plaintiff Arm is a corporation organized under the laws of the United Kingdom, has its principal place of business in Cambridge, United Kingdom, and is a resident or domiciliary of the United Kingdom.
- 5. Defendant Qualcomm Inc. is a Delaware corporation with its principal place of business at 5775 Morehouse Drive, San Diego, California 92121.
- 6. Defendant Qualcomm Technologies, Inc. is a subsidiary of Qualcomm Inc. and a Delaware corporation with its principal place of business at 5775 Morehouse Drive, San Diego, California 92121.

7. Defendant Nuvia is a subsidiary of Qualcomm and a Delaware corporation with its principal place of business at 2841 Mission College Blvd., Santa Clara, California 95054.

# **JURISDICTION AND VENUE**

- 8. The Court has subject matter jurisdiction under 28 U.S.C. § 1331 (federal question), 15 U.S.C. § 1121 (trademarks), and 28 U.S.C. § 1367(a) (supplemental jurisdiction). The Court also has subject matter jurisdiction under 28 U.S.C. § 1332 because there is complete diversity between the parties, and because the amount in controversy, based on the consideration that was anticipated under the Nuvia licenses, the volume of products expected under those licenses, and Defendants' potential loss from complying with the equitable relief requested here, exceeds \$75,000, exclusive of interest and costs.
- 9. The Court has personal jurisdiction over Qualcomm and Nuvia because they are incorporated in Delaware. Qualcomm and Nuvia have purposely availed themselves of the privileges and benefits of the laws of Delaware.
- 10. Venue is proper in this judicial district under 28 U.S.C. § 1391 because

  Qualcomm and Nuvia are incorporated in Delaware. Venue is also proper because

  Qualcomm Inc. and Qualcomm Technologies, Inc. have purposefully availed themselves of the courts in the State of Delaware and this Judicial District.

## **FACTUAL ALLEGATIONS**

#### Arm's business model

11. For decades, Arm has been a world leader in developing processor architectures, including instruction set architectures, and processor core designs

implementing those architectures, all of which are covered by an extensive intellectual property portfolio.

- 12. Processor cores are the parts of a computer's Central Processing Unit or "CPU" that read and execute program instructions to perform specific actions. Modern CPUs often integrate multiple processor cores on a single semiconductor chip or integrated circuit ("IC").
- 13. Arm owns intellectual property relating to its processor architectures and designs, including, among other things, trademarks.
- 14. Arm does not manufacture or sell chips. Instead, Arm licenses its technologies to hundreds of companies to use in developing their own chips or in their own electronic devices and works with these companies to ensure the success of Arm-based products.
- 15. Arm's customers manufacture (or have manufactured for them) chips based on Arm's technologies. The chips may then be used in the customer's own devices or sold to other device manufacturers. Arm earns revenue from licensing fees and royalties based on the number of Arm-based chips its customers sell.
- 16. Arm's business model relies on Arm's ability to monetize its research and intellectual property by receiving both licensing fees and royalties for products incorporating Arm's technology and intellectual property. Arm therefore grows its revenues by increasing both the number of customers and the number of Arm-based products sold.
- 17. There are two main types of Arm licenses for Arm's technologies:

  Technology License Agreements ("TLAs"), which allow the use of specific "off-the-shelf"

  Arm processor core designs with only minor modifications, and Architecture License

Agreements ("ALAs"), which allow for the design of custom processor cores that are based on particular architectures provided by Arm.

- 18. Arm grants few ALAs. Custom processor cores can take years to design, at great expense and requiring significant support from Arm, with no certainty of success. If successful, ALA licensees can sell custom processor cores for use in other companies' products.
- 19. Arm ALAs typically authorize licensees only to develop processor cores based on specific Arm technology provided by Arm under the licenses, rather than granting broader licenses to use Arm-based technology generally.

#### Nuvia obtains Arm licenses

- 20. Nuvia was founded as a start-up in 2019 by chip engineers who left Apple and Google. Nuvia planned to design energy-efficient CPUs for data center servers based on a custom processor implementing the Arm architecture, which would have expanded the market for Arm's technology. Nuvia's business model was thus reliant on customizing processor core designs based on Arm's technology. As one of the founders explained to the press when launching Nuvia, the start-up's premise (and one of its attractions to investors) was that Nuvia intended to build "a custom clean sheet designed from the ground up" using Arm's architecture.<sup>1</sup>
- 21. In September 2019, Arm granted Nuvia an ALA and TLA, providing rights to design custom processor cores based on an Arm architecture and to modify certain off-the-

<sup>&</sup>lt;sup>1</sup> Danny Crichton, *Three of Apple and Google's former star chip designers launch NUVIA with* \$53M in series A funding, TechCrunch (Nov. 15, 2019), <a href="https://techcrunch.com/2019/11/15/">https://techcrunch.com/2019/11/15/</a> three-of-apple-and-googles-former-star-chip-designers-launch-nuvia-with-53m-in-series-afunding/.

shelf designs. The licenses granted in the ALA and TLA are necessary to use Arm's extensive intellectual property portfolio covering the Arm architecture. The ALA and TLA included rights to use Arm trademarks in connection with products developed by Nuvia under the licenses. Arm also provided substantial, crucial, and individualized support from Arm employees to assist Nuvia in its development of Arm-based processors for data center servers.

- 22. The licenses provided Nuvia access to specific Arm architecture, designs, intellectual property, and support in exchange for payment of licensing fees and royalties on future server products that include processor cores based on Arm's architecture, designs, or related intellectual property. Nuvia's licensing fees and royalty rates reflected the anticipated scope and nature of Nuvia's use of the Arm architecture. The licenses safeguarded Arm's rights and expectations by prohibiting assignment without Arm's consent, regardless of whether a contemplated assignee had its own Arm licenses.
- 23. From September 2019 to early 2021, Nuvia used the technology it licensed from Arm to design and develop processor cores. Arm provided preferential support for Nuvia's development efforts, with Arm seeking to accelerate research and development in next-generation processors for data center servers to support that sector's transition to Arm technology.
- 24. In August 2020, Nuvia announced that its "first-generation CPU, code-named 'Phoenix'" would be "a custom core based on the ARM architecture." It also publicized benchmark tests showing that Phoenix could double the performance of rival products from

<sup>&</sup>lt;sup>2</sup> John Bruno & Sriram Dixit, *Performance Delivered a New Way*, Silicon Reimagined (Aug. 11, 2020), <a href="https://medium.com/silicon-reimagined/performance-delivered-a-new-way-8f0f5ed283d5">https://medium.com/silicon-reimagined/performance-delivered-a-new-way-8f0f5ed283d5</a>.

Apple, Intel, AMD, and Qualcomm. Based on these results, Nuvia claimed that the "Phoenix CPU core has the potential to reset the bar for the market."<sup>3</sup>

# Qualcomm relies on designs created by Arm

- 25. Qualcomm is one of the world's largest semiconductor companies, with a portfolio of intellectual property and products directed to wireless technologies, including cellular, Bluetooth, and Wi-Fi; CPUs and ICs; networking; mobile computers; cell phones; wearables; cameras; automobiles; and other electronic devices.
- 26. Even though Qualcomm has an Arm ALA, its prior attempts to design custom processors have failed. Qualcomm invested in the development of a custom Arm-based processor for data center servers until 2018, when it cancelled the project and laid off hundreds of employees.<sup>4</sup>
- 27. Qualcomm's commercial products thus have relied on processor designs prepared by Arm's engineers and licensed to Qualcomm under Arm TLAs. Discovery is likely to show that as of early 2021, Qualcomm had no custom processors in its development pipeline for the foreseeable future. To fill this gap, Qualcomm sought improperly to purchase and use Nuvia's custom designs without obtaining Arm's consent.

# Qualcomm acquires Nuvia

28. On January 13, 2021, Qualcomm announced that Qualcomm Technologies, Inc. was acquiring Nuvia for \$1.4 billion. Neither Qualcomm nor Nuvia provided prior

nuvia-a-cpu-magnitude-shift; Andy Patrizio, *Qualcomm makes it official; no more data center chip*, Network World (Dec. 12, 2018), <a href="https://www.networkworld.com/article/3327214/">https://www.networkworld.com/article/3327214/</a> qualcomm-makes-it-official-no-more-data-center-chip.html.

<sup>&</sup>lt;sup>3</sup> *Id*.

<sup>&</sup>lt;sup>4</sup> See, e.g., Andrei Frumusanu, Qualcomm to Acquire NUVIA: A CPU Magnitude Shift, AnandTech (Jan. 13, 2021), <a href="https://www.anandtech.com/show/16416/qualcomm-to-acquire-">https://www.anandtech.com/show/16416/qualcomm-to-acquire-</a>

notice of this transaction to Arm. Nor did they obtain Arm's consent to the transfer or assignment of the Nuvia licenses.

- 29. Qualcomm indicated in its announcement that "NUVIA CPUs"—that is, Nuvia's implementations of Arm technology developed under the Nuvia licenses with Arm—would be incorporated into a range of Qualcomm products. Qualcomm's press release declared its grand ambitions for Nuvia's implementation of Arm technology: "NUVIA CPUs are expected to be integrated across Qualcomm Technologies' broad portfolio of products, powering flagship smartphones, next-generation laptops, and digital cockpits, as well as Advanced Driver Assistance Systems, extended reality and infrastructure networking solutions." The press release also indicated that Qualcomm's first target would be "integrating NUVIA CPUs with Snapdragon," its flagship suite of system on a chip ("SoC") semiconductor products for mobile devices.
- 30. As Qualcomm's CEO, Cristiano Amon, noted in a Reuters interview shortly after the acquisition closed in the first half of 2021, "Qualcomm will start selling Nuviabased laptop chips next year." Amon confirmed the negative impact this might have on Arm, saying: "If Arm . . . eventually develops a CPU that's better than what we can build ourselves, then we always have the option to license from Arm."
- 31. Qualcomm also confirmed its prior deficiencies in core design, reportedly promoting the Nuvia acquisition as "filling a gap" because "for several years now" the

<sup>&</sup>lt;sup>5</sup> *Qualcomm to Acquire NUVIA*, Qualcomm Inc. (Jan. 13, 2021), https://www.qualcomm.com/news/releases/2021/01/13/qualcomm-acquire-nuvia.

<sup>&</sup>lt;sup>6</sup> Stephen Nellis, *Qualcomm's new CEO eyes dominance in the laptop markets*, Reuters (July 2, 2021), <a href="https://www.reuters.com/technology/qualcomms-new-ceo-eyes-dominance-laptop-markets-2021-07-01/">https://www.reuters.com/technology/qualcomms-new-ceo-eyes-dominance-laptop-markets-2021-07-01/</a>.

company "had been relying on external IP such as Arm's Cortex cores." Qualcomm further explained that "the immediate goals for the NUVIA team will be implementing custom CPU cores" designed for laptops.<sup>8</sup>

- 32. Analysts confirmed that the "Qualcomm acquisition [of] NUVIA is a huge move to scale up dramatically. It can reinvigorate current lines in smartphone, Windows PC and automotive SoCs, and make them more competitive with the competition. They have been lagging."9
- 33. Providing further confirmation of the acquisition's importance to Qualcomm in filling the "gap" in its "lagging" IP design, analysts noted that the Nuvia acquisition was "extremely speedy in terms of timeline," and Qualcomm "went as far as [to] put out a concrete roadmap for . . . using the newly acquired IP from Nuvia," announcing that Nuvia's processors would be finalized for use in high-end laptops "in the second half of 2022." 10

<sup>&</sup>lt;sup>7</sup> Andrei Frumusanu, *Qualcomm Completes Acquisition of NUVIA: Immediate focus on Laptops (Updated)*, AnandTech (Mar. 16, 2021), <a href="https://www.anandtech.com/show/16553/qualcomm-completes-acquisition-of-nuvia">https://www.anandtech.com/show/16553/qualcomm-completes-acquisition-of-nuvia</a>.

<sup>&</sup>lt;sup>8</sup> *Id*.

<sup>&</sup>lt;sup>9</sup> Trading Places Research, *Qualcomm's Acquisition of NUVIA is a Huge Move*, Seeking Alpha (Jan. 13, 2021), <a href="https://seekingalpha.com/article/4398808-qualcomms-acquisition-of-nuvia-is-huge-move">https://seekingalpha.com/article/4398808-qualcomms-acquisition-of-nuvia-is-huge-move</a>.

<sup>&</sup>lt;sup>10</sup> Andrei Frumusanu, *Qualcomm Completes Acquisition of NUVIA: Immediate focus on Laptops (Updated)*, AnandTech (Mar. 16, 2021), <a href="https://www.anandtech.com/show/16553/qualcomm-completes-acquisition-of-nuvia">https://www.anandtech.com/show/16553/qualcomm-completes-acquisition-of-nuvia</a> (quoting *Qualcomm Completes Acquisition of NUVIA*, Qualcomm Inc. (Mar. 15, 2021), <a href="https://www.qualcomm.com/news/releases/2021/03/16/qualcomm-completes-acquisition-nuvia">https://www.qualcomm.com/news/releases/2021/03/16/qualcomm-completes-acquisition-nuvia</a>).

- 34. Based on standard industry scheduling, that timeline indicated a design for data center processors would be completed "essentially as soon as possible following the acquisition" of Nuvia.<sup>11</sup>
- 35. This timing indicates that the Arm-based cores that Nuvia designed using Arm's technology and intellectual property were, as of the acquisition date, effectively ready for the final stages of design for Qualcomm chips, leading promptly to product integration and manufacturing. Qualcomm's November 2021 10-K filing disclosed that the \$1.4 billion acquisition encompassed Nuvia's team and "certain in-process technologies," reflecting the availability of existing cores such as the Phoenix CPU core developed under Nuvia's ALA.<sup>12</sup>
- 36. By entering into the acquisition of Nuvia and transferring the rights and technology developed under the Nuvia licenses without Arm's consent, Qualcomm thus greatly accelerated its ability to bring to market custom-designed processor cores—a head start that Qualcomm was willing to pay over \$1 billion to obtain.

#### Arm terminates the Nuvia licenses

37. Soon after the announcement of the merger, Arm informed Qualcomm in writing that Nuvia could not assign its licenses and that Qualcomm could not use Nuvia's in-process designs developed under the Nuvia ALA without Arm's consent. For more than a year, Arm negotiated with Qualcomm, through Qualcomm Inc. and Qualcomm

<sup>&</sup>lt;sup>11</sup> *Id*.

Technologies, Inc., in an effort to reach an agreement regarding Qualcomm's unauthorized acquisition of Nuvia's "in-process technologies" and license.

38. All the while, Qualcomm continued to broadcast its intentions to rush Nuvia products to market. In November 2021, Qualcomm's Chief Technology Officer told investors that Qualcomm was "pretty far along at this point" in developing its first chip with Nuvia's implementation of Arm technology and would "sample a product at, let's say nine months from now"—which would be August 2022. 13 Then in January 2022, Qualcomm issued a press release touting the "broad support from ecosystem partners for the PC industry's transition to Arm®-based computing," with Qualcomm's CEO confirming that "[t]he future of the PC industry is modern Arm-based architectures" and boasting that "the recent acquisition of NUVIA uniquely positions Qualcomm Technologies to drive this industry wide transition." Elsewhere, Qualcomm's CEO reiterated that Qualcomm is "definitely in a hurry" to launch Nuvia's Arm-based chips "as fast as we can." Based on these statements, discovery is likely to show that Qualcomm and Nuvia continued to use the relevant technology developed under Nuvia's Arm licenses.

<sup>13</sup> Qualcomm Investor Day 2

<sup>&</sup>lt;sup>13</sup> Qualcomm Investor Day 2021 Livestream: CEO Cristiano Amon looks ahead, YouTube (Nov. 16, 2021), <a href="https://www.youtube.com/watch?v=rUWPzROYn2E">https://www.youtube.com/watch?v=rUWPzROYn2E</a>; see also Mark Hachman, Qualcomm Prophesizes 2023 as the Rebirth of PC Snapdragon Chips, PCWorld (Nov. 16, 2021), <a href="https://www.pcworld.com/article/552285/qualcomm-prophesies-2023-as-the-rebirth-of-its-snapdragon-chips.html">https://www.pcworld.com/article/552285/qualcomm-prophesies-2023-as-the-rebirth-of-its-snapdragon-chips.html</a>.

<sup>&</sup>lt;sup>14</sup> Qualcomm and Leading Compute Partners Build Industry Momentum for Windows on Arm PCs Powered by Snapdragon Compute Platforms, Qualcomm Inc. (Jan. 3, 2022), <a href="https://www.qualcomm.com/news/releases/2022/01/04/qualcomm-and-leading-compute-partners-build-industry-momentum-windows-arm">https://www.qualcomm.com/news/releases/2022/01/04/qualcomm-and-leading-compute-partners-build-industry-momentum-windows-arm</a>.

<sup>&</sup>lt;sup>15</sup> Nilay Patel, *What Comes After the Smartphone, With Qualcomm CEO Cristiano Amon*, The Verge (Jan. 11, 2022), <a href="https://www.theverge.com/22876511/qualcomm-ceo-cristiano-amon-interview-decoder-podcast">https://www.theverge.com/22876511/qualcomm-ceo-cristiano-amon-interview-decoder-podcast</a>.

- 39. On February 1, 2022, Arm sent a letter to Nuvia and Qualcomm terminating the Nuvia licenses effective March 1, 2022. The letter terminated the licenses based on Nuvia's material breach of the assignment provisions of the Nuvia licenses by entering into the acquisition of Nuvia without Arm's consent. The letter also reminded Nuvia and Qualcomm of their obligations upon termination to stop using and destroy the Nuvia technology developed under the now-terminated licenses.
- 40. In February 2022, pending termination of the Nuvia licenses, Nuvia sought Arm's verification that a Nuvia processor design satisfied the Arm architecture's specifications. On February 23, 2022, Qualcomm confirmed that it was still developing the relevant Nuvia technology by stating in a court filing that certain Nuvia documents were based on "years of research and work" and would "reveal secret design components of Qualcomm chips that are still in development." *Qualcomm Technologies, Inc. v. Hoang*, No. 3:22-cv-00248-CAB-BLM (S.D. Cal. Feb. 23, 2022), ECF No. 1 at 5-6.
- 41. On March 1, 2022, the Nuvia licenses terminated, along with the corresponding rights to use or sell products based on or incorporating Nuvia technology developed under those licenses.
- 42. On April 1, 2022, Qualcomm's General Counsel sent Arm a letter enclosing a Nuvia representative's termination certification. The certification acknowledged—without objection—that the Nuvia licenses had been terminated. The certification recognized the obligations upon termination, and asserted that Nuvia was in compliance. Qualcomm and Nuvia thereby conceded that termination of the Nuvia licenses was appropriate, and that the termination provisions had been triggered, are binding, and are enforceable.

# Qualcomm keeps using Arm-based technology developed under the Nuvia licenses

- 43. Qualcomm is subject to Nuvia's termination requirements as the acquirer of Nuvia. Qualcomm has publicly described Nuvia as a Qualcomm "team" that has been "very tight[ly] integrat[ed]" with and is "not separate" from Qualcomm. <sup>16</sup> Qualcomm has also acted on behalf of Nuvia publicly and in correspondence with Arm since the acquisition. Qualcomm further told Arm that it planned to "redeploy NUVIA employees" and "transfer NUVIA's work" to Qualcomm and, consistent with that plan, Qualcomm has on-boarded Nuvia's leadership and employees as Qualcomm employees. <sup>17</sup>
- 44. On April 29, 2022, Arm wrote Qualcomm clarifying that neither Nuvia nor Qualcomm was authorized to continue working on technology that was developed under the Nuvia licenses.
- 45. Two weeks later, on May 13, 2022, Qualcomm sought Arm's verification that a new Qualcomm processor core complied with Arm architecture so that it could be verified and incorporated into a product. Qualcomm did not explain whether this processor core design was based on Nuvia's designs under the terminated licenses.
- 46. Based on the timing and circumstances surrounding Qualcomm's request, discovery is likely to show that Qualcomm's processor core design is based on or

<sup>&</sup>lt;sup>16</sup> Ian Cutress, *Interview with Alex Katouzian, Qualcomm SVP: Talking Snapdragon, Microsoft, Nuvia, and Discrete Graphics*, AnandTech (Jan. 31, 2022), <a href="https://www.anandtech.com/show/17233/interview-with-alex-katouzian-qualcomm-svp-talking-snapdragon-microsoft-nuvia-and-discrete-graphics">https://www.anandtech.com/show/17233/interview-with-alex-katouzian-qualcomm-svp-talking-snapdragon-microsoft-nuvia-and-discrete-graphics</a>; Ian Cutress, *AnandTech Interview with Miguel Nunes: VP for Windows and Chrome PCs, Qualcomm*, AnandTech (Feb. 14, 2022), <a href="https://www.anandtech.com/show/17253/anandtech-interview-with-miguel-nunes-senior-director-for-pcs-qualcomm">https://www.anandtech.com/show/17253/anandtech-interview-with-miguel-nunes-senior-director-for-pcs-qualcomm</a>.

<sup>&</sup>lt;sup>17</sup> See, e.g., Qualcomm Completes Acquisition of NUVIA, Qualcomm Inc. (Mar. 16, 2021), <a href="https://investor.qualcomm.com/news-events/press-releases/detail/1304/qualcomm-completes-acquisition-of-nuvia">https://investor.qualcomm.com/news-events/press-releases/detail/1304/qualcomm-completes-acquisition-of-nuvia</a>; Qualcomm to Acquire NUVIA, Qualcomm Inc. (Jan. 12, 2021), <a href="https://www.qualcomm.com/news/releases/2021/01/qualcomm-acquire-nuvia">https://www.qualcomm.com/news/releases/2021/01/qualcomm-acquire-nuvia</a>.

incorporates in whole or in part the processor core design developed under the prior Nuvia licenses.

- 47. Qualcomm's Arm licenses do not cover products based on or incorporating Arm-based technologies developed by third parties under different Arm licenses, such as the now-terminated Nuvia licenses.
- 48. Despite Arm's termination of the Nuvia licenses, Qualcomm has continued to tell the public that its Nuvia chips will soon be joining the industry-wide "ecosystem transition to Arm." Like Qualcomm's prior statements, this announcement was directed to readers throughout the United States, including to readers physically located in the State of Delaware and this Judicial District.
- 49. In June 2022, Qualcomm's CEO reiterated that it would soon begin "sampling" Nuvia chips to companies, allowing them to design electronic devices incorporating the chips in the "next year." Based on that timeline, he explained, "[i]n late next year, beginning 2024, you're going to see Windows PCs powered by Snapdragon with a Nuvia-designed CPU."

<sup>&</sup>lt;sup>18</sup> *Qualcomm CEO on What He Really Thinks of Apple*, The Daily Charge (June 9, 2022), https://podcasts.apple.com/us/podcast/qualcomm-ceo-on-what-he-really-thinks-of-apple/id1091374076?i=1000565773375.

<sup>&</sup>lt;sup>19</sup> *Id.*; see also Mark Tyson, Qualcomm CEO Admits Nuvia Chip OEM Sampling is Delayed (Update), Tom's Hardware (June 10, 2022), <a href="https://www.tomshardware.com/news/qualcomm-nuvia-chip-sampling-delays">https://www.tomshardware.com/news/qualcomm-nuvia-chip-sampling-delays</a> (Qualcomm spokesperson clarifying: "We are on track to sample the first products with our next generation CPUs this year.").

<sup>&</sup>lt;sup>20</sup> Qualcomm CEO on What He Really Thinks of Apple, The Daily Charge (June 9, 2022), <a href="https://podcasts.apple.com/us/podcast/qualcomm-ceo-on-what-he-really-thinks-of-apple/id1091374076?i=1000565773375">https://podcasts.apple.com/us/podcast/qualcomm-ceo-on-what-he-really-thinks-of-apple/id1091374076?i=1000565773375</a>.

- 50. In the microprocessor industry, "sampling" means providing pre-production processors to original equipment manufacturers ("OEMs"), original device manufacturers ("ODMs"), or independent software vendors ("ISVs") for use in the product design cycle before product launch.
- 51. Based on Qualcomm's statements that Nuvia processors took "years" to develop and "are still in development," and Qualcomm's consistent statements that it is developing Nuvia's Arm chips, discovery is likely to show that the chips that Qualcomm intends to sample in the coming months will contain Nuvia technology that Qualcomm cannot use and instead must destroy.
- 52. Further, based on Qualcomm's public announcements of its plans to use Nuvia technology, discovery is likely to show that Qualcomm has continued to retain and use Nuvia technology developed pursuant to the Nuvia licenses, thereby materially breaching the termination provisions of those licenses.
- 53. News reports indicate that Qualcomm is also developing Nuvia processors for data center servers, and "already has working silicon to at least demonstrate to potential customers," which discovery is likely to show is based on or incorporates Nuvia technology developed under the now-terminated Nuvia ALA.
- 54. The failure of Nuvia and Qualcomm to comply with the post-termination obligations under the Nuvia ALA is causing, and will continue to cause, irreparable harm to Arm. Qualcomm effectively seeks to circumvent Arm's licensing model, which allocates

<sup>&</sup>lt;sup>21</sup> Dan Robinson, *Qualcomm readying new Arm server chip based on Nuvia acquisition*, The Register (Aug. 19, 2022), <a href="https://www.theregister.com/2022/08/19/qualcomm\_arm\_server\_chip/">https://www.theregister.com/2022/08/19/qualcomm\_arm\_server\_chip/</a> (citing Ian King, *Qualcomm Is Plotting a Return to Server Market With New Chip*, Bloomberg (Aug. 18, 2022), <a href="https://www.bloomberg.com/news/articles/2022-08-18/qualcomm-is-plotting-areturn-to-server-market-with-new-chip">https://www.bloomberg.com/news/articles/2022-08-18/qualcomm-is-plotting-areturn-to-server-market-with-new-chip</a>).

use of the technology developed pursuant to a particular Arm license to a particular licensee.

- 55. These breaches thus interfere with Arm's ability and right to control the use of its technology, negatively affecting Arm's relationships with existing and prospective licensees.
- 56. The prospective monetary damages from Qualcomm's circumvention and interference with Arm's control over its technology are not readily ascertainable or calculable, given the resulting future impact on Arm's relationships with existing and prospective customers.
- 57. Qualcomm's improper acquisition of the relevant Nuvia technology in violation of Arm's standard provisions threatens to harm Arm's position in the ecosystem of Arm-based devices, harm Arm's reputation as an intellectual property owner and technology developer whose licenses must be respected, and embolden other companies to likewise harm Arm's reasonable business expectations in issuing its licenses.

# COUNT I: BREACH OF CONTRACT – SPECIFIC PERFORMANCE (ALL DEFENDANTS)

- 58. Arm hereby restates and re-alleges the allegations set forth above and incorporates them by reference.
- 59. The termination obligations of the ALA between Nuvia and Arm survive termination and remain valid and enforceable contract provisions, as Qualcomm's correspondence and Nuvia's termination certification confirm.
- 60. Arm complied with and fulfilled all relevant duties, conditions, covenants, and obligations under the Nuvia ALA, including ceasing use of Nuvia confidential information in its possession.

- 61. The Nuvia ALA terms were just and reasonable, involving adequate consideration and reasonable obligations for Nuvia in the event of Arm's termination based on Nuvia's material breach. Those obligations served to restore the license holder to its position *ex ante*, protect Arm's business model and reasonable business expectations in issuing its licenses, and prevent the unjust enrichment of Qualcomm, the party that induced Nuvia's breach.
- 62. Upon termination, the Nuvia ALA requires Nuvia to cease using and destroy any technology developed under the Nuvia ALA, as well as cease using Arm's trademarks in connection with any technology developed under the Nuvia ALA.
- 63. Qualcomm shares Nuvia's obligations under the Nuvia ALA in its capacity as Nuvia's acquirer, and thus Qualcomm is likewise subject to the requirements of the Nuvia licenses' termination provisions.
- 64. Based on Defendants' correspondence with Arm, public statements, and processor verification requests, discovery is likely to show that Defendants are still using and developing Nuvia technology developed under the now-terminated licenses, along with Arm trademarks, and intend to continue to do so.
- 65. Defendants therefore have breached and are breaching the Nuvia ALA's termination provisions.
- 66. As a direct and proximate result of Nuvia and Qualcomm's past and ongoing breaches, Arm has been irreparably injured and damaged in amounts not capable of determination, including, but not limited to, injury to Arm's global licensing program and misuse of Arm's technology.

- 67. Unless Defendants' breaches of the Nuvia ALA's termination provisions are enjoined and specific performance is granted, Arm will continue to suffer irreparable harm. As such, Arm has the right to enforcement of Nuvia and Qualcomm's compliance with the ALA's termination provisions, including via injunctive relief, specific performance, or any other measures necessary to avoid irreparable harm to Arm or to mitigate damages that have been caused by, and will continue to be caused by, Defendants' breach.
- 68. Arm is entitled to specific performance requiring Defendants to comply with the Nuvia ALA's termination provisions, including ceasing all use of and destroying any technology developed under the Nuvia ALA, and ceasing all use of Arm trademarks in connection with any technology developed under the Nuvia ALA—including the relevant Nuvia technology.
- 69. Arm is also entitled to monetary compensation incidental to specific performance of the Nuvia ALA's termination provisions to compensate Arm for the delay in Defendants' performance of their contractual obligations.

# COUNT II: DECLARATORY JUDGMENT AND TRADEMARK INFRINGEMENT UNDER 15 U.S.C. § 1114 (ALL DEFENDANTS)

- 70. Arm hereby restates and re-alleges the allegations set forth above and incorporates them by reference.
- 71. Arm owns U.S. Registration Nos. 5,692,669 and 5,692,670 for the ARM word mark in standard characters and the stylized ARM mark featuring the word "arm" in all lower case letters (collectively, the "ARM Marks"), true and correct copies of which are attached as **Exhibits A and B**. These marks are registered for "[e]lectronic data processing equipment," "integrated circuits," "semiconductors," "microprocessors," "RISC-based instruction set architectures, namely, software instructions designed to function with

particular microprocessors," "data processors," "printed circuit boards," "electronic circuit boards," and related "[r]esearch, development and design," among numerous other goods and services. The applications to register the marks were filed on July 31, 2017 and were issued on March 5, 2019. The application for Registration No. 5,692,669 has a claimed first use and first use-in-commerce date of November 30, 1990, while the application for Registration No. 5,692,670 has a claimed first use and first use-in-commerce date of August 1, 2017.

- 72. The ARM Marks have come to signify the highest standards of quality and excellence associated with licensed Arm products and services and have incalculable reputation and goodwill, which belong to Arm.
- 73. Arm has had valid and protectable rights in the ARM Marks since substantially before Qualcomm and Nuvia's first uses of those marks in connection with integrated circuit and microprocessor technologies.
- 74. Qualcomm and Nuvia, as current or former Arm licensees under agreements that permitted the use of the ARM Marks, have had actual knowledge of Arm's ownership and use of the ARM Marks for years.
- 75. Arm has not authorized Qualcomm or Nuvia to use the ARM Marks in connection with semiconductor chips incorporating the relevant Nuvia technology developed under the now-terminated licenses, instead terminating those licenses.
- 76. Qualcomm and Nuvia have engaged in substantial preparation and taken concrete steps with the intent to infringe Arm's trademarks in violation of Section 32 of the Lanham Act, 15 U.S.C. § 1114. Arm's customers—including Qualcomm and Nuvia, as discovery is likely to show—often use the ARM Marks in their die encapsulation (die

packages), end user product packaging, advertising and promotional materials, technical documentation, and websites directed to users throughout the United States, including users physically located in the State of Delaware and this Judicial District. Qualcomm promotes Snapdragon products as incorporating Arm technology, such as by saying on its website that "Snapdragon 855 is equipped with the cutting-edge Qualcomm® Kryo<sup>TM</sup> 485 CPU built on ARM Cortex Technology."<sup>22</sup> In January 2022, Qualcomm issued a press release touting the "broad support from ecosystem partners for the PC industry's transition to Arm®-based computing," with Qualcomm's CEO boasting that "the recent acquisition of NUVIA uniquely positions Qualcomm Technologies to drive this industry wide transition."<sup>23</sup> This press release remains online. Also, Qualcomm and Nuvia's plans to begin sampling chips with the relevant Nuvia technology as soon as August 2022 would require manufacturing a limited run of the chips in advance, and news reports indicate that Qualcomm already has some working chips to demonstrate to potential customers. Qualcomm and Nuvia have thus used the ARM Marks in connection with the advertising, distribution, offering for sale, or sale of the chips, and Arm believes discovery will show that their further use is imminent if it has not happened already.

77. Qualcomm and Nuvia's unauthorized use of the ARM Marks in connection with semiconductor chips incorporating the relevant Nuvia technology is likely to cause confusion, mistake, or deception on the part of consumers as to the affiliation, connection,

<sup>&</sup>lt;sup>22</sup> Samsung Galaxy Note10+, Qualcomm Inc., <a href="https://www.qualcomm.com/snapdragon/device-finder/smartphones/samsung-galaxy-note10-5g">https://www.qualcomm.com/snapdragon/device-finder/smartphones/samsung-galaxy-note10-5g</a>.

<sup>&</sup>lt;sup>23</sup> Qualcomm and Leading Compute Partners Build Industry Momentum for Windows on Arm PCs Powered by Snapdragon Compute Platforms, Qualcomm Inc. (Jan. 3, 2022), <a href="https://www.qualcomm.com/news/releases/2022/01/04/qualcomm-and-leading-compute-partners-build-industry-momentum-windows-arm">https://www.qualcomm.com/news/releases/2022/01/04/qualcomm-and-leading-compute-partners-build-industry-momentum-windows-arm</a>.

or association of Defendants with Arm, or as to the origin, sponsorship, or approval of Defendants' semiconductor chips using the relevant Nuvia technology, constituting trademark infringement in violation of 15 U.S.C. § 1114. Given Arm's close relationships with its customers and individualized support for their products, there is and is likely to be confusion in the marketplace because consumers encountering the ARM Marks in connection with semiconductor chips incorporating the relevant Nuvia technology do and will likely believe that the products are endorsed by, licensed by, or otherwise associated with Arm. Semiconductor chips incorporating the relevant Nuvia technology are also readily identifiable without the use of the ARM Marks, such as by not mentioning the processor architecture or by using the generic term "RISC" (for reduced instruction set computer).

- 78. An actual and justiciable controversy exists between Defendants and Arm regarding infringement of Arm's trademarks. Although Arm repeatedly notified Qualcomm and Nuvia that their development of the relevant Nuvia technology is unlicensed following termination of the Nuvia licenses, Qualcomm has continued to tell reporters that the technology is on track to be sampled to customers this year, and news reports indicate that Qualcomm already has some working chips to demonstrate to potential customers.
- 79. Arm is entitled to a declaratory judgment that Qualcomm and Nuvia's advertising, distribution, offering for sale, or sale of semiconductor chips with the relevant Nuvia technology and the ARM Marks do and will infringe Arm's trademarks, directly and indirectly.

- 80. Defendants' acts of infringement have injured Arm in an amount as yet unknown. Arm is entitled to recover from Defendants the damages sustained as a result of Defendants' wrongful acts in an amount subject to proof at trial.
- 81. Based on Qualcomm and Nuvia's continued development of the relevant Nuvia technology after repeated notifications that the technology is unlicensed following termination of the Nuvia licenses, discovery is likely to show that Qualcomm and Nuvia are acting willfully to usurp Arm's rights, warranting treble damages and attorneys' fees pursuant to 15 U.S.C. § 1117(a).
- 82. Arm will suffer and is suffering irreparable harm to its name, reputation, and goodwill from Defendants' trademark infringement. Arm has no adequate remedy at law and is entitled to a permanent injunction against Defendants' continuing infringement, including requiring Defendants, pursuant to 15 U.S.C. § 1118, to deliver up for destruction, or to show proof of said destruction or sufficient modification to eliminate the infringing matter, all semiconductor chips, die encapsulation (die packages), end user product packaging, advertising and promotional materials, technical documentation, websites, and other matter in Defendants' possession, custody, or control that bears or displays the ARM Marks in any manner in connection with the relevant Nuvia technology. Unless enjoined, Defendants will continue their infringing conduct.

# COUNT III: DECLARATORY JUDGMENT AND FALSE DESIGNATION OF ORIGIN UNDER 15 U.S.C. § 1125 (ALL DEFENDANTS)

- 83. Arm hereby restates and re-alleges the allegations set forth above and incorporates them by reference.
- 84. The acts of Qualcomm and Nuvia described above constitute false designation of origin in violation of Section 43(a) of the Lanham Act, 15 U.S.C. § 1125(a).

- 85. Arm has had valid and protectable rights in the ARM Marks since substantially before Qualcomm and Nuvia's first uses of those marks in connection with integrated circuit and microprocessor technologies.
- 86. Qualcomm and Nuvia, as current or former Arm licensees under agreements that permitted the use of the ARM Marks, have had actual knowledge of Arm's ownership and use of the ARM Marks for years.
- 87. Arm has not authorized Qualcomm or Nuvia to use the ARM Marks in connection with semiconductor chips incorporating the relevant Nuvia technology developed under the now-terminated licenses, instead terminating those licenses.
- 88. Qualcomm and Nuvia have engaged in substantial preparation and taken concrete steps with the intent to falsely designate the origin of their products in violation of Section 43(a) of the Lanham Act, 15 U.S.C. § 1125(a). Arm's customers—including Qualcomm and Nuvia, as discovery is likely to show—often use the ARM Marks in their die encapsulation (die packages), end user product packaging, advertising and promotional materials, technical documentation, and websites directed to users throughout the United States, including users physically located in the State of Delaware and this Judicial District. Qualcomm promotes Snapdragon products as incorporating Arm technology, such as by saying on its website that "Snapdragon 855 is equipped with the cutting-edge Qualcomm® Kryo<sup>TM</sup> 485 CPU built on ARM Cortex Technology." In January 2022, Qualcomm issued a press release touting the "broad support from ecosystem partners for the PC industry's transition to Arm®-based computing," with Qualcomm's CEO boasting that "the recent

<sup>&</sup>lt;sup>24</sup> Samsung Galaxy Note10+, Qualcomm Inc., <a href="https://www.qualcomm.com/snapdragon/device-finder/smartphones/samsung-galaxy-note10-5g">https://www.qualcomm.com/snapdragon/device-finder/smartphones/samsung-galaxy-note10-5g</a>.

acquisition of NUVIA uniquely positions Qualcomm Technologies to drive this industry wide transition."<sup>25</sup> This press release remains online. Also, Qualcomm and Nuvia's plans to begin sampling chips with the relevant Nuvia technology as soon as August 2022 would require manufacturing a limited run of the chips in advance, and news reports indicate that Qualcomm already has some working chips to demonstrate to potential customers. Qualcomm and Nuvia have thus used the ARM Marks in connection with the advertising, distribution, offering for sale, or sale of the chips, and Arm believes discovery will show that their further use is imminent if it has not happened already.

89. Qualcomm and Nuvia's unauthorized use of the ARM Marks in connection with semiconductor chips incorporating the relevant Nuvia technology is likely to cause confusion, mistake, or deception on the part of consumers as to the affiliation, connection, or association of Defendants with Arm, or as to the origin, sponsorship, or approval of Defendants' semiconductor chips using the relevant Nuvia technology, constituting false designation of origin in violation of 15 U.S.C. § 1125(a)(1)(A). Given Arm's close relationships with its customers and individualized support for their products, there is and is likely to be confusion in the marketplace because consumers encountering the ARM Marks in connection with semiconductor chips incorporating the relevant Nuvia technology do and will likely believe that the products are endorsed by, licensed by, or otherwise associated with Arm. Semiconductor chips incorporating the relevant Nuvia technology are also readily identifiable without the use of the ARM Marks, such as by not mentioning the

<sup>&</sup>lt;sup>25</sup> Qualcomm and Leading Compute Partners Build Industry Momentum for Windows on Arm PCs Powered by Snapdragon Compute Platforms, Qualcomm Inc. (Jan. 3, 2022), <a href="https://www.qualcomm.com/news/releases/2022/01/04/qualcomm-and-leading-compute-partners-build-industry-momentum-windows-arm.">https://www.qualcomm.com/news/releases/2022/01/04/qualcomm-and-leading-compute-partners-build-industry-momentum-windows-arm.</a>

processor architecture or by using the generic term "RISC" (for reduced instruction set computer).

- 90. An actual and justiciable controversy exists regarding Defendants' false designation of origin. Although Arm repeatedly notified Qualcomm and Nuvia that their development of the relevant Nuvia technology is unlicensed following termination of the Nuvia licenses, Qualcomm has continued to tell reporters that the technology is on track to be sampled to customers this year, and news reports indicate that Qualcomm already has some working chips to demonstrate to potential customers.
- 91. Arm is entitled to a declaratory judgment that Qualcomm and Nuvia's advertising, distribution, offering for sale, or sale of semiconductor chips with the relevant Nuvia technology and the ARM Marks do and will falsely designate the origin of their products, directly and indirectly.
- 92. Defendants' acts of false designation of origin have injured Arm in an amount as yet unknown. Arm is entitled to recover from Defendants the damages sustained as a result of Defendants' wrongful acts in an amount subject to proof at trial.
- 93. Based on Qualcomm and Nuvia's continued development of the relevant Nuvia technology after repeated notifications that the technology is unlicensed following termination of the Nuvia licenses, discovery is likely to show that Qualcomm and Nuvia are acting willfully to usurp Arm's rights, warranting treble damages and attorneys' fees pursuant to 15 U.S.C. § 1117(a).
- 94. Arm will suffer and is suffering irreparable harm to its name, reputation, and goodwill from Defendants' false designation of origin. Arm has no adequate remedy at law and is entitled to a permanent injunction against Defendants' continuing false designation of

origin, including requiring Defendants, pursuant to 15 U.S.C. § 1118, to deliver up for destruction, or to show proof of said destruction or sufficient modification to eliminate the falsely designated matter, all semiconductor chips, die encapsulation (die packages), end user product packaging, advertising and promotional materials, technical documentation, websites, and other matter in Defendants' possession, custody, or control that bears or displays the ARM Marks in any manner in connection with the relevant Nuvia technology. Unless enjoined, Defendants will continue their wrongful conduct.

## PRAYER FOR RELIEF

WHEREFORE, Plaintiff Arm Ltd. requests that the Court grant the following relief:

- a. A judgment in Arm's favor on all claims against Defendants;
- b. An order requiring specific performance by Defendants of the Nuvia licenses' termination provisions;
- c. An award of damages incidental to specific performance as a result of Defendants' breach of contract, in amounts to be proven at trial, including all pre-judgment and post-judgment interest at the maximum rate permitted by law;
- d. A judgment and a declaration that advertising, distributing, offering for sale, or selling semiconductor chips with the relevant Nuvia technology and the ARM Marks infringes Arm's trademarks, directly and indirectly;
- e. An order and judgment permanently enjoining Defendants and their officers, directors, agents, servants, employees, and all others acting in privity or in concert with them, and their parents, subsidiaries, divisions, successors, and assigns from (1) using in any manner in connection with the relevant Nuvia technology the ARM Marks, or any mark or logo that is confusingly similar to or a colorable imitation of the ARM Marks owned by

Arm; (2) doing any act or thing calculated or likely to cause confusion or mistake in the minds of the members of the public or prospective customers as to the affiliation, connection, or association of Defendants with Arm, or as to the origin, sponsorship, or approval of Defendants' semiconductor chips using the relevant Nuvia technology; or (3) assisting, aiding, or abetting any other person or business entity in performing any of the aforementioned activities;

- f. An order and judgment directing Defendants, pursuant to 15 U.S.C. § 1116(a), to file with this Court and serve upon Arm within thirty (30) days after entry of the injunction a report in writing under oath setting forth in detail the manner and form in which Defendants have complied with the injunction and ceased all offering of products with the relevant Nuvia technology under the ARM Marks, as set forth above;
- g. An order and judgment directing Defendants and their officers, directors, agents, servants, employees, and all others acting in privity or in concert with them, and their parents, subsidiaries, divisions, successors, and assigns to deliver up for destruction, or to show proof of said destruction or sufficient modification to eliminate the infringing matter, all semiconductor chips, die encapsulation (die packages), end user product packaging, advertising and promotional materials, technical documentation, websites, and other matter in Defendants' possession, custody, or control that bears or displays in any manner in connection with the relevant Nuvia technology the ARM Marks or any other mark that is confusingly similar to or a colorable imitation of the ARM Marks;
- h. A judgment in the aggregate amount of (1) Defendants' profits, (2) Arm's actual damages, (3) the costs of this action pursuant to 15 U.S.C. § 1117, and (4) restitution and/or disgorgement of all revenues, earnings, profits, compensation, and benefits that may

have been obtained by Defendants in connection with their semiconductor chips using the relevant Nuvia technology and the ARM Marks, including all pre-judgment and post-judgment interest at the maximum rate permitted by law;

- i. A judgment trebling any damages to the extent permitted by law, including under 15 U.S.C. § 1117;
  - j. Exemplary or punitive damages to the extent permitted by law;
- k. Costs, expenses, and reasonable attorney fees under all applicable rules, statutes, and rules in common law that would be appropriate, with pre-judgment and post-judgment interest thereon at the maximum rate permitted by law;
- 1. Equitable relief addressing any infringement occurring after entry of judgment; and
  - m. Such other relief as the Court deems just and proper.

## **JURY DEMAND**

Pursuant to D. Del. LR 38.1 and Fed. R. Civ. P. 38, Arm hereby demands a TRIAL BY JURY of all claims and issues presented in this Complaint that are so triable.

Dated: August 31, 2022

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