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15 **UNITED STATES DISTRICT COURT**
16 **FOR THE NORTHERN DISTRICT OF CALIFORNIA**
17

18 SK HYNIX INC. and SK HYNIX AMERICA
19 INC.,

20 Plaintiffs,

21 v.

22 LONGHORN IP LLC, TRENCHANT BLADE
23 TECHNOLOGIES LLC, and HAMILCAR
24 BARCA IP LLC,

25 Defendants.

Case No. 22-3915

**COMPLAINT FOR DECLARATORY
JUDGMENT**

DEMAND FOR JURY TRIAL

1 Plaintiffs SK hynix Inc. and SK hynix America Inc. (collectively, “Plaintiffs” or “SK hynix”) file
2 this Complaint for Declaratory Judgment against Defendants Longhorn IP LLC (“Longhorn IP”),
3 Trenchant Blade Technologies LLC (“Trenchant Blade”), and Hamilcar Barca IP LLC (“Hamilcar”)
4 (collectively, “Defendants”). By and through this Complaint, SK hynix seeks a declaration that SK
5 hynix does not directly or indirectly infringe United States Patent Nos. 7,056,821 (the “’821 patent”),
6 7,494,846 (the “’846 patent”), 9,379,079 (the “’079 patent”), 8,848,462 (the “’462 patent”), 8,086,938
7 (the “’938 patent”), 9,147,664 (the “’664 patent), and 8,669,619 (the “’619 patent”) (collectively, the
8 “Patents-in-Suit”), either literally or under the doctrine of equivalents.

9 **NATURE OF THE ACTION**

10 1. This is an action for a declaratory judgment of non-infringement of the Patents-in-Suit
11 pursuant to the Declaratory Judgment Act, 28 U.S.C. §§ 2201–2202, and the patent laws of the United
12 States, Title 35 of the United States Code.

13 2. SK hynix requests this relief based on Defendants’ infringement assertions and licensing
14 demands to SK hynix, in which Defendants have accused SK hynix and its subsidiaries and affiliates of
15 infringing the Patents-in-Suit and made unreasonable demands that SK hynix take a license to patent
16 portfolios that include the Patents-in-Suit.

17 3. An actual and justiciable controversy therefore exists between SK hynix and Defendants
18 concerning the Patents-in-Suit under 28 U.S.C. §§ 2201–2202 and as to whether SK hynix’s products
19 infringe the Patents-in-Suit.

20 **THE PARTIES**

21 4. SK hynix Inc. is a corporation organized and existing under the laws of the Republic of
22 Korea, with its principal place of business at 2091, Gyeongchung-daero, Bubal-eub Icheon-si,
23 Gyeonggi-do, South Korea.

24 5. SK hynix America Inc. is a corporation organized and existing under the laws of the State
25 of California, with its principal place of business at 3101 North First Street, San José, California 95134.
26 SK hynix America Inc. is a subsidiary of SK hynix Inc.

27 6. On information and belief, Longhorn IP is a limited liability company existing under the
28 laws of the state of Texas having its principal place of business at 5204 Bluewater Drive, Frisco, Texas

1 75036. On information and belief, Longhorn IP is a privately owned IP management and patent portfolio
2 licensing company, which engages in efforts to license the patent portfolios of Trenchant Blade and
3 Hamilcar, among others. On information and belief, Tanit Ventures, Inc. (“Tanit”), a corporation
4 existing under the laws of the state of Texas, is the sole member of Longhorn IP. On information and
5 belief, Mr. Khaled Fekih-Romdhane is the sole Director and President of Tanit.

6 7. On information and belief, Trenchant Blade is a limited liability company existing under
7 the laws of the state of Texas having its principal place of business at 1700 Pacific Ave, Suite 4650,
8 Dallas, Texas 75201. On information and belief, Trenchant Blade, an affiliate of Longhorn IP, is a non-
9 practicing entity, which aims to license its patent portfolio to others. On information and belief, Mr.
10 Khaled Fekih-Romdhane is the sole Member and Director of Trenchant Blade.

11 8. On information and belief, Hamilcar is a limited liability company existing under the
12 laws of the state of Texas having its principal place of business at 5204 Bluewater Drive, Frisco, Texas
13 75036. On information and belief, Hamilcar, an affiliate of Longhorn IP, is a non-practicing entity,
14 which aims to license its patent portfolio to others. On information and belief, Mr. Khaled Fekih-
15 Romdhane and Tanit are the only managers of Hamilcar. On information and belief, Mr. Khaled Fekih-
16 Romdhane is the sole Director and President of Tanit.

17 **JURISDICTION AND VENUE**

18 9. This action arises under the Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, and
19 under the patent laws of the United States, Title 35 of the United States Code.

20 10. This Court has subject matter jurisdiction over this action under 28 U.S.C. §§ 1331,
21 1338(a), 2201(a), 2202, and the patent laws of the United States, 35 U.S.C. § 1 *et seq.*

22 11. An immediate, real, and justiciable controversy exists between SK hynix and Defendants
23 as to whether SK hynix has infringed the Patents-in-Suit. As described in detail below, this controversy
24 arises out of Defendants’ infringement assertions and licensing demands to SK hynix, in which
25 Defendants broadly and repeatedly alleged that SK hynix and its subsidiaries and affiliates infringe the
26 Patents-in-Suit and that SK hynix requires a license to the Trenchant Blade and Hamilcar patent
27 portfolios. SK hynix accordingly requests a judicial determination of its rights regarding the Patents-in-
28

1 Suit. Because this action presents an actual controversy with respect to the Patents-in-Suit, the Court
2 may grant the declaratory relief sought pursuant to 28 U.S.C. § 2201 *et seq.*

3 12. This Court has personal jurisdiction over Defendants by virtue of their sufficient
4 minimum contacts with this forum. On information and belief, Defendants, directly or through their
5 agents and alter egos, have regularly conducted business activities in California, and this action arises
6 out of and relates to activities that Defendants have purportedly directed at California and this District.

7 13. Among other things, Defendants purposefully directed allegations of patent infringement
8 to SK hynix and its subsidiaries and affiliates, which includes SK hynix America Inc., a resident of this
9 District. SK hynix America Inc. provides technical support, marketing, and sales activities in the United
10 States, including for customers headquartered in this District, with respect to the allegedly infringing SK
11 hynix products. Longhorn IP and its associated entities, Trenchant Blade and Hamilcar, sent five letters
12 to SK hynix Inc. explicitly asserting that SK hynix and its “subsidiaries” and/or “affiliates” infringe
13 various U.S. Patents allegedly owned by Trenchant Blade or Hamilcar. The substance of these letters
14 directly implicate the activities of SK hynix America Inc. in this District with respect to the allegedly
15 infringing SK hynix products. On information and belief, Longhorn IP, Trenchant Blade, and Hamilcar
16 made these infringement allegations and license demands with the goal of coming to a business
17 arrangement with SK hynix Inc. and its subsidiaries and affiliates, including SK hynix America Inc.

18 14. The present declaratory judgment action arises out of and relates to these notice letters,
19 and the subsequent negotiations described herein, because Defendants engaged in these activities to
20 assert the alleged patent rights that are the subject of this Complaint.

21 15. On information and belief, Longhorn IP and its commonly controlled, associated entities
22 have directed concerted activities toward this District in furtherance of a patent acquisition, licensing,
23 and assertion scheme run and managed by a single individual: Mr. Khaled Fekih-Romdhane.

24 16. On information and belief, Mr. Khaled Fekih-Romdhane is the Founder, CEO, and
25 President of Longhorn IP. On information and belief, Mr. Khaled Fekih-Romdhane controls Longhorn
26 IP through Tanit; Mr. Fekih-Romdhane is Tanit’s sole Director and President, and Tanit is the sole
27 member of Longhorn IP. On information and belief, Mr. Fekih-Romdhane also controls Trenchant Blade
28

1 as its sole Member and Director and controls Hamilcar through himself and Tanit, who are the only
2 managers of Hamilcar.

3 17. On information and belief, Longhorn IP and its associated entities engage in licensing,
4 patent acquisition, and litigation activities in this District, which activities Longhorn IP announces and
5 advertises on Longhorn IP's website, www.longhornip.com/news.

6 18. On information and belief, Mr. Fekih-Romdhane is the common representative of
7 Longhorn IP's associated entities, and he acts and negotiates on their collective behalf. For example, Mr.
8 Fekih-Romdhane uses Longhorn IP letterhead and his Longhorn IP email address when communicating
9 on behalf of Longhorn IP's alter ego entities, including Trenchant Blade and Hamilcar. Mr. Fekih-
10 Romdhane is also the sole manager of Trenchant Blade and Hamilcar. On information and belief,
11 Trenchant Blade has no employees of its own. On information and belief, Trenchant Blade executed a
12 licensing service agreement with Longhorn IP to act as its agent to monetize its patents. On information
13 and belief, Hamilcar is an affiliate of Longhorn IP, and Longhorn IP exercises licensing campaigns of
14 Hamilcar on behalf of itself.

15 19. On information and belief, Longhorn IP's associated entities, including Trenchant Blade,
16 Hamilcar, Katana Silicon Technologies LLC ("Katana"), Lone Star Silicon Innovations LLC ("Lone
17 Star"), and others, are alter egos of Longhorn IP. On information and belief, Longhorn IP dominates and
18 controls the actions of its associated entities and, specifically, directs and controls their patent
19 enforcement activities. Longhorn IP's associated entities do not appear to have separate websites, and
20 are identified on Longhorn IP's website, www.longhornip.com, merely as "Portfolio" entities holding IP
21 assets for the benefit of Longhorn IP.

22 20. On information and belief, Mr. Fekih-Romdhane and Longhorn IP create entities for the
23 purpose of assigning intellectual property rights, widely licensing such rights, and bringing infringement
24 suits by and through its associated entities. On information and belief, Longhorn IP has created its
25 associated entities to allow its alter egos to assert infringement claims nationally or globally while
26 attempting to limit or insulate itself and its associated entities from being subject to personal jurisdiction
27 outside of Texas.

28

1 21. Longhorn IP and its associated entities have previously accused companies residing in
2 this District of patent infringement. For example, Katana brought an action for patent infringement
3 against Taiwan Semiconductor Manufacturing Company, Ltd. and two of its California subsidiaries
4 residing in this District, TSMC North America, Inc. and TSMC Technology, Inc. (collectively,
5 “TSMC”), in the U.S. District Court for the Western District of Texas. *See* No. 6:19-cv-00695. On
6 information and belief, Longhorn IP and Trenchant Blade obtained the ’821 and ’846 patents in a
7 settlement of that lawsuit. As part of the settlement, Longhorn announced an IP collaboration and
8 service agreement with TSMC that, on information and belief, establishes an ongoing relationship
9 between TSMC and Longhorn IP / Trenchant Blade in this District. The collaboration agreement
10 between TSMC and Longhorn IP / Trenchant Blade allows TSMC and its California subsidiaries to
11 license the ’821 and ’846 patents (among others), is governed by California law, and requires that
12 disputes arising from it are heard in federal and state courts in Santa Clara County. *See Samsung*
13 *Electronics Co., Ltd. et al v. Trenchant Blade Technologies LLC et al.*, No. 3:20-cv-08205, Dkt. No. 55.

14 22. Further, Longhorn IP, by and through its subsidiary Lone Star, filed lawsuits in this
15 District in 2017 against STMicroelectronics, Inc., No. 3:17-cv-07206, and in 2018 against Micron
16 Technology, Inc., Case No. 3:18-cv-01680. In addition, Lone Star consented to transfer of cases to this
17 District from the U.S. District Court for the Eastern District of Texas on several occasions. *See Lone*
18 *Star Silicon Innovations LLC v. Renesas Electronics Corp. et al.*, No. 3:17-cv-03971 (N.D. Cal.), Dkt.
19 No. 43; *Lone Star Silicon Innovations LLC v. Semiconductor Mfg. Int’l Corp. et al.*, No. 3:17-cv-03980
20 (N.D. Cal.), Dkt. No. 33; *Lone Star Silicon Innovations LLC v. United Microelectronics Corp. et al.*, No.
21 3:17-cv-04033 (N.D. Cal.), Dkt. No. 28; *Lone Star Silicon Innovations LLC v. Toshiba Corp. et al.*, No.
22 3:17-cv-04034 (N.D. Cal.), Dkt. No. 153; *Lone Star Silicon Innovations LLC v. Nanya Tech. Corp. et*
23 *al.*, No. 3:17-cv-04032 (N.D. Cal.), Dkt. No. 28. On information and belief, Longhorn IP representatives
24 traveled to California for these matters in furtherance of their patent licensing business.

25 23. On information and belief, Defendants and their agents and alter egos have charged
26 infringement and threatened litigation against numerous companies residing and conducting business in
27 this District. For example, in at least one patent assertion letter directed to SK hynix giving rise to this
28 matter, discussed *infra*, Defendants Longhorn IP and Trenchant Blade stated their intent to negotiate and

1 enter into license agreements for some of the Patents-in-Suit with companies either resident in this
2 District or with operations and/or subsidiaries located in this District, including “Samsung, Intel,
3 Micron, Global Foundries, UMC, and SMIC.”

4 24. On information and belief, Defendants sent such a patent assertion letter to at least
5 Samsung Electronics Co., Ltd. (“Samsung”) and Intel Corporation (“Intel”) alleging that Samsung and
6 Intel each infringe patents in the Trenchant Blade patent portfolio, including at least the ’846 and ’821
7 patents that are the subject of this Complaint. As a result, Samsung filed a declaratory judgment action
8 in this District. *See Samsung Electronics Co. Ltd. et al v. Trenchant Blade Technologies LLC et al.*, No.
9 3:20-cv-08205 (N.D. Cal. Nov. 20, 2020), Dkt. No. 1. In that complaint, Samsung alleged that, prior to
10 filing the complaint, Samsung and Mr. Fekih-Romdhane engaged in licensing negotiations that included
11 Samsung representatives participating from this District. Likewise, Intel also filed a declaratory
12 judgment action in this District. *See Intel Corp. v. Trenchant Blade Technologies LLC et al.*, No. 3:21-
13 cv-3398 (N.D. Cal. May 6, 2021), Dkt. No. 1. In that complaint, Intel alleged that, prior to filing the
14 complaint, Intel and Mr. Fekih-Romdhane engaged in licensing negotiations that included Intel
15 representatives participating from this District. In the Samsung declaratory judgment action, the Court
16 denied a motion to dismiss for lack of personal jurisdiction filed by Longhorn IP and Trenchant Blade,
17 and held that “[t]he Court clearly has personal jurisdiction over the defendants.” No. 3:20-cv-08205,
18 Dkt. No. 55.

19 25. Venue is proper in this District under 28 U.S.C. §§ 1391(b)–(c) at least because a
20 substantial part of the events giving rise to the claims presented in this Complaint occurred in this
21 District and Defendants are subject to personal jurisdiction in this District.

22 **INTRADISTRICT ASSIGNMENT**

23 26. Pursuant to Civil L.R. 3-2(c) and 3-5(b), this is an Intellectual Property Action subject to
24 assignment on a district-wide basis.

25 **FACTUAL ALLEGATIONS**

26 **PATENTS-IN-SUIT**

27 27. The ’821 patent is entitled “Method for Manufacturing Dual Damascene Structure with a
28 Trench Formed First.” The ’821 patent states on its cover that it was issued on June 6, 2006, and names

1 as its inventors Chin-Tien Yang of Hsinchu, Taiwan; Juan-Jann Jou of Tainan Hsien, Taiwan; Yu-Hua
2 Lee of Hsinchu, Taiwan; and Chia-Hung Lai of Hsinchu, Taiwan. The '821 patent also states that the
3 initial assignee of the '821 patent was Taiwan Semiconductor Manufacturing Co., Ltd. of Hsinchu,
4 Taiwan. Trenchant Blade purports to own by assignment the '821 patent. A copy of the '821 patent is
5 attached hereto as Exhibit A.

6 28. The '846 patent is entitled "Design Techniques for Stacking Identical Memory Dies."
7 The '846 patent states on its cover that it was issued on February 24, 2009, and names as its inventors
8 Chao-Shun Hsu of San-Shin, Taiwan; Louis Liu of Hsinchu, Taiwan; Clinton Chao of Hsinchu, Taiwan;
9 and Mark Shane Peng of Hsinchu, Taiwan. The '846 patent also states that the initial assignee of the
10 '846 patent was Taiwan Semiconductor Manufacturing Co., Ltd. of Hsinchu, Taiwan. Trenchant Blade
11 purports to own by assignment the '846 patent. A copy of the '846 patent is attached hereto as Exhibit
12 B.

13 29. The '079 patent is entitled "Flip Chip Scheme and Method of Forming Flip Chip
14 Scheme." The '079 patent states on its cover that it was issued on June 28, 2016, and names as its
15 inventors Jia-Wei Fang of Hsinchu, Taiwan; and Shen-Yu Huang of Taipei, Taiwan. The '079 patent
16 also states that the initial assignee of the '079 patent was Mediatek Inc. of Hsinchu, Taiwan. The
17 USPTO Assignment Database records for the '079 Patent show that Mediatek Inc. assigned the '079
18 patent to Fortieth Floor LLC on May 14, 2021. The USPTO Assignment Database does not contain any
19 record of Fortieth Floor LLC assigning the '079 patent to any other entity. Hamilcar claims to be the
20 current owner by assignment of the '079 patent. A copy of the '079 patent is attached hereto as Exhibit
21 C.

22 30. The '462 patent is entitled "Low Power Memory Controllers." The '462 patent states on
23 its cover that it was issued on September 30, 2014, and names as its inventors Yan-Bin Luo of Taipei,
24 Taiwan; Chih-Chien Hung of Hualien, Taiwan; Qui-ting Chen of Sanchong, Taiwan; and Shang-Ping
25 Chen of Tai-Chung, Taiwan. The '462 patent also states that the initial assignee of the '462 patent was
26 Mediatek Inc. of Hsinchu, Taiwan. The USPTO Assignment Database records for the '462 Patent show
27 that Mediatek Inc. assigned the '462 patent to Fortieth Floor LLC on May 14, 2021. The USPTO
28 Assignment Database does not contain any record of Fortieth Floor LLC assigning the '462 patent to

1 any other entity. Hamilcar claims to be the current owner by assignment of the '462 patent. A copy of
2 the '462 patent is attached hereto as Exhibit D.

3 31. The '938 patent is entitled "Method for Processing Noise Interference." The '938 patent
4 states on its cover that it was issued on December 27, 2011, and names as its inventors Pao-Ching Tseng
5 of Hsin Chu, Taiwan; Shu-Fang Tsai of Hsin Chu, Taiwan; and Chuan Liu of Jen Te Hsiang, Taiwan.
6 The '938 patent also states that the initial assignee of the '938 patent was Mediatek Inc. of Hsinchu,
7 Taiwan. The USPTO Assignment Database records for the '938 Patent show that Mediatek Inc. assigned
8 the '938 patent to Fortieth Floor LLC on May 14, 2021. The USPTO Assignment Database does not
9 contain any record of Fortieth Floor LLC assigning the '938 patent to any other entity. Hamilcar claims
10 to be the current owner by assignment of the '938 patent. A copy of the '938 patent is attached hereto as
11 Exhibit E.

12 32. The '664 patent is entitled "Semiconductor Package." The '664 patent states on its cover
13 that it was issued on September 29, 2015, and names as its inventor Nan-Jang Chen of Hsinchu, Taiwan.
14 The '664 patent also states that the initial assignee of the '664 patent was Mediatek Inc. of Hsinchu,
15 Taiwan. The USPTO Assignment Database records for the '664 Patent show that Mediatek Inc. assigned
16 the '664 patent to Fortieth Floor LLC on May 14, 2021. The USPTO Assignment Database does not
17 contain any record of Fortieth Floor LLC assigning the '664 patent to any other entity. Hamilcar claims
18 to be the current owner by assignment of the '664 patent. A copy of the '664 patent is attached hereto as
19 Exhibit F.

20 33. The '619 patent is entitled "Semiconductor Structure with Multi-Layer Contact Etch Stop
21 Layer Structure." The '619 patent states on its cover that it was issued on March 11, 2014, and names as
22 its inventors Tien-Chang Chang of Hsinchu, Taiwan; Jing-Hao Chen of Singapore, Singapore; and
23 Ming-Tzong Yang of Hsinchu County, Taiwan. The '619 patent also states that the initial assignee of the
24 '619 patent was Mediatek Inc. of Hsinchu, Taiwan. The USPTO Assignment Database records for the
25 '619 Patent show that Mediatek Inc. assigned the '619 patent to Fortieth Floor LLC on May 14, 2021.
26 The USPTO Assignment Database does not contain any record of Fortieth Floor LLC assigning the '619
27 patent to any other entity. Hamilcar claims to be the current owner by assignment of the '619 patent. A
28 copy of the '619 patent is attached hereto as Exhibit G.

DISPUTE BETWEEN SK HYNIX AND DEFENDANTS

A. The Trenchant Blade Patent Portfolio

34. On information and belief, Mr. Fekih-Romdhane caused Trenchant Blade to be created in January 2020, and caused TSMC to assign the '821 and '846 patents (among others) to Trenchant Blade on March 24 2020, in connection with the settlement of Katana's patent infringement lawsuit against TSMC, W.D. Tex. Case No. 6:19-cv-00695. On information and belief, Mr. Fekih-Romdhane exercised control over the settlement between Katana and TSMC, allocating obligations and benefits among Longhorn IP, Katana, and Trenchant Blade.

35. On May 8, 2020, Mr. Fekih-Romdhane, as President and CEO of Longhorn IP, sent a letter by email to Jinho Lee, Director of SK hynix, alleging that "SK hynix and its affiliates" infringe "one or more" patents owned by Trenchant Blade, including at least the '846 patent. The letter states that Trenchant Blade executed a licensing service agreement with Longhorn IP. The letter further alleges that "SK hynix sells and offers to sell in the United States, and imports into the United States, integrated circuit devices that infringe one or more of the [Trenchant Blade] patents," and that Longhorn IP "believe[s] that SK hynix induces other companies, such as distributors, resellers and end-users, to perform one or more of these infringing acts in the United States." The letter offers to discuss terms for SK hynix to license the referenced patents. A true and correct copy of the May 8, 2020 letter is attached as Exhibit H.

36. On February 12, 2021, Mr. Scott Breedlove, as counsel for Longhorn IP and Trenchant Blade and at the direction of Mr. Fekih-Romdhane, sent a letter to Jinho Lee, Director of SK hynix, alleging that "SK hynix and its subsidiaries/affiliates" infringe "one or more" patents owned by Trenchant Blade, including at least the '821 and '846 patents. The letter states that it "will serve to follow up on and supplement Mr. Fekih-Romdhane's letter to you of May 8, 2020." The letter further alleges that "SK hynix at a minimum makes, sells, and imports integrated circuit devices that infringe one or more of Trenchant Blade's patents," and that "SK hynix induces others, such as distributors, resellers, and end users, to perform one or more of these infringing acts." The letter offers to discuss terms for SK hynix to license the referenced patents. A true and correct copy of the February 12, 2021 letter is attached as Exhibit I.

1 37. On April 27, 2021, representatives of Longhorn IP and Trenchant Blade, including Mr.
2 Fekih-Romdhane and Mr. Breedlove, presented claim charts regarding SK hynix’s alleged infringement
3 of the ’821 and ’846 patents.

4 38. On June 23, 2021, SK hynix presented responses to the infringement allegations
5 concerning the ’821 and ’846 patents, raising multiple grounds for non-infringement and identifying
6 prior art that would likely invalidate the asserted claims in the ’821 and ’846 patents. SK hynix delivered
7 this presentation to representatives of Longhorn IP and Trenchant Blade, including Mr. Breedlove.

8 39. On March 8, 2022, representatives of Longhorn IP and Trenchant Blade, including Mr.
9 Fekih-Romdhane and Mr. Breedlove, presented a response to SK hynix’s non-infringement and
10 invalidity positions with respect to the ’821 and ’846 patents.

11 40. On May 18, 2022, SK hynix presented sur-rebuttal to the infringement allegations
12 concerning the ’821 and ’846 patents, which refuted the arguments made by representatives of Longhorn
13 IP and Trenchant Blade during the March 2022 meeting. SK hynix delivered this presentation to
14 representatives of Longhorn IP and Trenchant Blade, including Mr. Fekih-Romdhane and Mr.
15 Breedlove.

16 41. Throughout the aforementioned discussions, SK hynix consistently denied any
17 infringement of the ’821 and ’846 patents. SK hynix has reasonably concluded that further discussions
18 concerning the merits of the infringement allegations would be unproductive. Accordingly, discussions
19 have concluded without a resolution of the infringement allegations presented by Longhorn IP and
20 Trenchant Blade.

21 **B. The Hamilcar Patent Portfolio**

22 42. On information and belief, Mr. Fekih-Romdhane caused Hamilcar to be created in
23 November 2021, and caused Hamilcar to acquire the ’079, ’462, ’938, ’664 and ’619 patents (among
24 others) to Hamilcar by assignment.

25 43. On March 4, 2022, Mr. Scott Breedlove, as counsel for Longhorn IP and Hamilcar, sent a
26 letter to Jinho Lee, Director of SK hynix, alleging that “SK hynix and its subsidiaries/affiliates” infringe
27 “one or more” patents owned by Hamilcar, including at least the ’079 patent and ’462 patent. The letter
28 further alleges that “SK hynix is making, selling, offering to sell in the United States, importing or

1 causing to be imported into the United States, devices that infringe one or more of Hamilcar’s patents,”
2 and that “SK hynix is inducing other companies, such as distributors, resellers and end-users, to perform
3 one or more of these acts in the United States.” The letter offers to discuss terms for SK hynix to license
4 the referenced patents and states that “Hamilcar has retained [Longhorn IP] to assist” it with its patent
5 portfolio licensing program. A true and correct copy of the March 4, 2022 letter is attached as Exhibit J.

6 44. On March 11, 2022, Mr. Scott Breedlove, as counsel for Longhorn IP and Hamilcar, sent
7 a second letter to Jinho Lee, Director of SK hynix, referencing the earlier March 4, 2022 letter and
8 alleging that SK hynix also infringes at least the ’938 patent. The letter offers to discuss terms for SK
9 hynix to license the referenced patents. A true and correct copy of the March 11, 2022 letter is attached
10 as Exhibit K.

11 45. On March 30, 2022, representatives of Longhorn IP and Hamilcar, including Mr. Fekih-
12 Romdhane and Mr. Breedlove, presented claim charts regarding SK hynix’s alleged infringement of the
13 ’079, ’462, and ’938 patents.

14 46. On June 21, 2022, Mr. Scott Breedlove, as counsel for Longhorn IP and Hamilcar, sent a
15 third letter to Jinho Lee, Director of SK hynix, referencing the earlier March 4, 2022 and March 11,
16 2022 letters and alleging that SK hynix also infringes at least the ’664 and ’619 patents. The letter offers
17 to discuss terms for SK hynix to license the referenced patents. A true and correct copy of the June 21,
18 2022 letter is attached as Exhibit L.

19 47. On June 21, 2022, shortly after Mr. Breedlove transmitted the letter asserting
20 infringement of the ’664 and ’619 patents, SK hynix presented responses to the infringement allegations
21 concerning the ’079, ’462, and ’938 patents, raising multiple grounds for non-infringement and
22 identifying prior art that would likely invalidate the asserted claims in the ’079, ’462, and ’938 patents.
23 Representatives of SK hynix delivered this presentation to representatives of Longhorn IP and Hamilcar,
24 including Mr. Fekih-Romdhane and Mr. Breedlove.

25 48. During the discussions on June 21, 2022, the representatives of Longhorn IP and
26 Hamilcar took remarkable positions—including by stating at one point that the language of a particular
27 asserted claim need not be considered or discussed in evaluating SK hynix’s non-infringement position.
28

49. Throughout the aforementioned discussions, SK hynix consistently denied any infringement of the '079, '462, and '938 patents. As discussed herein, SK hynix also has come to the conclusion that it does not infringe the asserted claims of the '664 and '619 patents. SK hynix has reasonably concluded that further discussions concerning the merits of the infringement allegations would be unproductive. Accordingly, discussions have concluded without a resolution of the infringement allegations presented by Longhorn IP and Hamilcar.

COUNT ONE

(Declaration of Non-Infringement of the '821 Patent)

50. SK hynix restates and incorporates by reference the allegations in paragraphs 1 through 49 of this Complaint as if fully set forth herein.

51. The '821 patent has one independent claim. Independent claim 1 reads as follows:

Element	Claim Language
Pre	A method for manufacturing dual damascene structure with a trench formed first, comprising the steps of:
(a)	providing a substrate having a plurality of semiconductor devices;
(b)	forming a first metal layer on the substrate;
(c)	forming a first etching stop layer on the first metal layer;
(d)	forming a dielectric layer on the first etching stop layer;
(e)	forming a second etching stop layer on the dielectric layer;
(f)	forming a first patterned photoresist layer on the second etching stop layer;
(g)	forming a trench by etching through the second etching stop layer and stopping in the dielectric layer at a predetermined depth;
(h)	filling with a sacrificial layer into the trench;
(i)	planarizing the sacrificial layer;
(j)	forming a second patterned photoresist layer on the sacrificial layer;
(k)	forming a via by etching the sacrificial layer and the dielectric layer;
(l)	removing the sacrificial layer and the second patterned photoresist layer;
(m)	etching the first etching stop layer to expose the first metal layer;
(n)	filling with a second metal layer; and
(o)	planarizing the second metal layer.

1 52. Longhorn IP and Trenchant Blade have alleged and continue to allege that “SK hynix
2 products and fabrication technologies” infringe one or more claims of the ’821 patent. For example,
3 Longhorn IP and Trenchant Blade have alleged that “at least all integrated circuit devices made using
4 the Hynix 21 nm process node such as, for example, the H9TQ18ABJTMC LPDDR3 DRAM memory
5 chip” infringe claims 1, 2, 3, 4, 5, 6, 9, 10, 11,12, 13, and 14 of the ’821 patent.

6 53. SK hynix has not infringed and does not infringe any claim of the ’821 patent directly or
7 indirectly, either literally or under the doctrine of equivalents. In particular, SK hynix’s DRAM chips
8 with dual damascene structure (“’821 Products”) do not infringe the ’821 patent at least because the ’821
9 Products do not employ, incorporate, or otherwise make use of, for example, the step of “planarizing the
10 sacrificial layer,” as required by claim 1 and every other claim of the ’821 patent. For example, in the
11 manufacture of the ’821 Products, no sacrificial layer is filled into a trench and planarized.

12 54. A substantial, immediate, and real controversy exists between SK hynix, on the one hand,
13 and Longhorn IP and Trenchant Blade, on the other hand, regarding whether SK hynix infringes the
14 ’821 patent by making, using, selling, and/or offering for sale the ’821 Products in the United States, by
15 importing the ’821 Products into the United States, or by inducing others to perform one or more of
16 these allegedly infringing acts. A judicial declaration is necessary to determine the parties’ respective
17 rights regarding the ’821 patent.

18 55. SK hynix seeks a judgment declaring that SK hynix has not infringed and does not
19 infringe, either literally or under the doctrine of equivalents, any claims of the ’821 patent, either
20 directly or indirectly.

21 **COUNT TWO**

22 **(Declaration of Non-Infringement of the ’846 Patent)**

23 56. SK hynix restates and incorporates by reference the allegations in paragraphs 1 through
24 55 of this Complaint as if fully set forth herein.

25 57. The ’846 patent has two independent claims: 1 and 12. Exemplary independent claim 1
26 reads as follows:
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Element	Claim Language
pre	A method of forming a semiconductor structure, the method comprising:
(a)	forming a first semiconductor die and a second semiconductor die identical to the first semiconductor die, wherein each of the first and the second semiconductor dies comprises:
(b)	an identification circuit; and
(c)	a plurality of input/output (I/O) conductive paths connected to memory circuits in the respective first and second semiconductor dies, wherein the plurality of I/O conductive paths comprises through-silicon vias;
(d)	programming the identification circuit of the second semiconductor die to a different state from the identification circuit of the first semiconductor die; and
(e)	bonding the second semiconductor die onto the first semiconductor die, wherein the first and the second semiconductor dies are vertically aligned, and wherein each of the plurality of I/O conductive paths in the first semiconductor die is connected to a respective I/O conductive path in the second semiconductor die.

58. Longhorn IP and Trenchant Blade have alleged and continue to allege that “SK hynix products and fabrication technologies” infringe one or more claims of the ’846 patent. For example, in Mr. Fekih-Romdhane’s May 8, 2020 letter, Longhorn IP and Trenchant Blade have alleged that “[a]t least all integrated circuit devices made using the TSV manufacturing process in which the second semiconductor die is identical to the first semiconductor die and is vertically aligned to and bonded on the first semiconductor die to provide ability for stacking identical dies without the need of redistribution lines and/or interposers as shown, for example, in the SK hynix MD29X2GQH HBM package with TSVs” infringe “[c]laims 1, 2, 3, 4 (or 7), 5 (or 6), 8, 9, and 11, 12, 13, 14, 15 (or 16) of [the ’846 patent].” As another example, in Mr. Breedlove’s February 12, 2021 letter, Longhorn IP and Trenchant Blade have alleged that “[a]t least all integrated circuit devices made using the TSV manufacturing process in which the second semiconductor die is identical to the first semiconductor die and is vertically aligned to and bonded on the first semiconductor die to provide ability for stacking identical dies without the need of redistribution lines and/or interposers as shown, for example, in the SK hynix MD29X2GQH HBM package with TSVs” infringe “[c]laims 1, 2, 4, 6, 7, 8, 9, 11, 12, 13, 14, and 15 of [the ’846 patent].”

59. SK hynix has not infringed and does not infringe any claim of the ’846 patent directly or indirectly, either literally or under the doctrine of equivalents. In particular, SK hynix’s HBMs (“’846

1 Products”) do not infringe the ’846 patent at least because the ’846 Products do not employ, incorporate,
 2 or otherwise make use of, for example, the step of “programming the identification circuit,” as required
 3 by claim 1 and every other claim of the ’846 patent. For example, the ’846 Products are not comprised
 4 of identification circuits that include any programmable elements.

5 60. A substantial, immediate, and real controversy exists between SK hynix, on the one hand,
 6 and Longhorn IP and Trenchant Blade, on the other hand, regarding whether SK hynix infringes the
 7 ’846 patent by making, using, selling, and/or offering for sale the ’846 Products in the United States, by
 8 importing the ’846 Products into the United States, or by inducing others to perform one or more of
 9 these allegedly infringing acts. A judicial declaration is necessary to determine the parties’ respective
 10 rights regarding the ’846 patent.

11 61. SK hynix seeks a judgment declaring that SK hynix has not infringed and does not
 12 infringe, either literally or under the doctrine of equivalents, any claims of the ’846 patent, either
 13 directly or indirectly.

14 **COUNT THREE**

15 **(Declaration of Non-Infringement of the ’079 Patent)**

16 62. SK hynix restates and incorporates by reference the allegations in paragraphs 1 through
 17 61 of this Complaint as if fully set forth herein.

18 63. The ’079 patent has four independent claims: 1, 6, 13, and 18. Exemplary independent
 19 claim 13 reads as follows:

Element	Claim Language
pre	A method of forming a flip chip scheme comprising a plurality of bumps, the method comprising:
(a)	arranging some of the bumps in a first pattern, respectively, and
(b)	arranging some of the bumps in a second pattern different from the first pattern, respectively;
(c)	wherein the first pattern is an equilateral triangle arranged by three bumps, and the second pattern is a square arranged by four bumps.

26 64. Longhorn IP and Hamilcar have alleged and continue to allege that certain SK hynix
 27 products infringe one or more claims of the ’079 patent. For example, Longhorn IP and Hamilcar have
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1 alleged that “SK hynix H5WE16ECM 2GB HBM2E DRAM and other memory products using a flip-
 2 chip configuration with similar bump patterns” infringe claims 1, 2, 3, 13, 14, and 15 of the ’079 patent.

3 65. SK hynix has not infringed and does not infringe any asserted claims of the ’079 patent
 4 directly or indirectly, either literally or under the doctrine of equivalents. In particular, SK hynix’s
 5 HBMs (“’079 Products”) do not infringe claims 1, 8, 13, and 20 and every claim that depends on claims
 6 1, 8, 13, and 20 of the ’079 patent at least because the ’079 Products do not employ, incorporate, or
 7 otherwise make use of, for example, a “first pattern [that] is an equilateral triangle arranged by three
 8 bumps.” For example, the ’079 Products do not include bumps that are arranged to form an equilateral
 9 triangle.

10 66. A substantial, immediate, and real controversy exists between SK hynix, on the one hand,
 11 and Longhorn IP and Hamilcar, on the other hand, regarding whether SK hynix infringes the ’079 patent
 12 by making, using, selling, and/or offering for sale the ’079 Products in the United States, by importing
 13 the ’079 Products into the United States, or by inducing others to perform one or more of these allegedly
 14 infringing acts. A judicial declaration is necessary to determine the parties’ respective rights regarding
 15 the ’079 patent.

16 67. SK hynix seeks a judgment declaring that SK hynix has not infringed and does not
 17 infringe, either literally or under the doctrine of equivalents, any claims of the ’079 patent, either
 18 directly or indirectly.

19 **COUNT FOUR**

20 **(Declaration of Non-Infringement of the ’462 Patent)**

21 68. SK hynix restates and incorporates by reference the allegations in paragraphs 1 through
 22 67 of this Complaint as if fully set forth herein.

23 69. The ’462 patent has one independent claim. Independent claim 1 reads as follows:

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Element	Claim Language
Pre	A memory system comprising:
(a)	a memory controller packaged in a first die and powered by a first power source and a second power source, wherein the memory controller comprises:
(b)	a first input/output pin;

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Element	Claim Language
(c)	a first driver circuit, coupled to the first input/output pin, for providing to a writing signal to the first input/output pin;
(d)	a first terminal resistor coupled between the first input/output pin and the first power source; and
(e)	a first input buffer, coupled to the first input/output pin, for receiving a reading signal from the first input/output pin;
(f)	wherein the first terminal resistor is disposed on the inside of the first die, no terminal resistor is coupled between the first input/output pin and the second power source;
(g)	a memory device packaged in a second die and comprising:
(h)	a second input/output pin coupled to the first input/output pin;
(i)	a memory array for storing data;
(j)	a controlling circuit for accessing the memory array;
(k)	a second driver circuit coupled to the second input/output pin, wherein the controlling circuit reads data from the memory array to generate the reading signal, and the second driver circuit drives the reading signal and provides the driven reading signal to the second input/output pin; and
(l)	a second input buffer, coupled to the second input/output pin, for receiving the writing signal from the second input/output pin and buffering the writing signal to the controlling circuit, wherein the controlling circuit writes data to the memory array according to the writing signal.

70. Longhorn IP and Hamilcar have alleged and continue to allege that certain SK hynix products infringe one or more claims of the '462 patent. For example, Longhorn IP and Hamilcar have alleged that "SK hynix HBM5 memory, DDR4 memory modules, DDR5 memory modules, and any other systems with Pseudo Open Drain (POD) signaling and architecture" infringe claims 1, 9, and 10 of the '462 patent.

71. SK hynix has not infringed and does not infringe any claim of the '462 patent directly or indirectly, either literally or under the doctrine of equivalents. In particular, SK hynix's HBMs, DRAM chips, DDR4 Dual Inline Memory Modules ("DIMMs"), and DDR5 DIMMs ("462 Products") do not infringe the '462 patent at least because the '462 Products do not employ, incorporate, or otherwise make use of, for example, "a memory controller packaged in a first die," as required by claim 1 and every other claim of the '462 patent. For example, the '462 Products do not include a memory controller.

1 72. A substantial, immediate, and real controversy exists between SK hynix, on the one hand,
2 and Longhorn IP and Hamilcar, on the other hand, regarding whether SK hynix infringes the '462 patent
3 by making, using, selling, and/or offering for sale the '462 Products in the United States, by importing
4 the '462 Products into the United States, or by inducing others to perform one or more of these allegedly
5 infringing acts. A judicial declaration is necessary to determine the parties' respective rights regarding
6 the '462 patent.

7 73. SK hynix seeks a judgment declaring that SK hynix has not infringed and does not
8 infringe, either literally or under the doctrine of equivalents, any claims of the '462 patent, either
9 directly or indirectly.

COUNT FIVE

(Declaration of Non-Infringement of the '938 Patent)

12 74. SK hynix restates and incorporates by reference the allegations in paragraphs 1 through
13 73 of this Complaint as if fully set forth herein.

14 75. The '938 patent has one independent claim. Independent claim 1 reads as follows:

Element	Claim Language
pre	A method for processing noise interference in a data accessing device with a SATA (Serial Advanced Technology Attachment) interface, the method comprising:
(a)	an error detecting step for detecting whether there is a CRC (Cyclic Redundancy Check) error, whether an reception error primitive (R_ERR primitive) is received, whether an improper primitive is received, or whether a LINK layer error is detected, and repeating this step if there is no any error;
(b)	a type detecting step for detecting whether an FIS (Frame Information Structure) is a data type FIS;
(c)	a responding step for asserting the CHECK bit of the ATAPI Status Register when the FIS is data type; and
(d)	sending back the response.

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25 76. Longhorn IP and Hamilcar have alleged and continue to allege that certain SK hynix
26 products infringe one or more claims of the '938 patent. For example, Longhorn IP and Hamilcar have
27 alleged that "SK hynix products, devices, and systems supporting Serial ATA Revision 3.x interface and
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1 later, including but not necessarily limited to solid state drives such as SK hynix Gold S31 1TB, Gold
2 S31 500 GB, and Gold S31 250 GB SSDs” infringe claim 1 of the ’938 patent.

3 77. SK hynix has not infringed and does not infringe any claim of the ’938 patent directly or
4 indirectly, either literally or under the doctrine of equivalents. In particular, SK hynix’s Solid State
5 Drives (“SSDs”) that support Serial ATA Revision 3.0 interface (“’938 Products”) do not infringe the
6 ’938 patent at least because the ’938 Products do not employ, incorporate, or otherwise make use of, for
7 example, “a responding step for asserting the CHECK bit of the ATAPI Status Register when the FIS is
8 data type,” as required by the claim 1 and every other claim of the ’938 patent. For example, the ’938
9 Products are not ATAPI devices.

10 78. A substantial, immediate, and real controversy exists between SK hynix, on the one hand,
11 and Longhorn IP and Hamilcar, on the other hand, regarding whether SK hynix infringes the ’938 patent
12 by making, using, selling, and/or offering for sale the ’938 Products in the United States, by importing
13 the ’938 Products into the United States, or by inducing others to perform one or more of these allegedly
14 infringing acts. A judicial declaration is necessary to determine the parties’ respective rights regarding
15 the ’938 patent.

16 79. SK hynix seeks a judgment declaring that SK hynix has not infringed and does not
17 infringe, either literally or under the doctrine of equivalents, any claims of the ’938 patent, either
18 directly or indirectly.

COUNT SIX

(Declaration of Non-Infringement of the ’664 Patent)

21 80. SK hynix restates and incorporates by reference the allegations in paragraphs 1 through
22 79 of this Complaint as if fully set forth herein.

23 81. The ’664 patent has two independent claims: 1 and 8. Exemplary independent claim 8
24 reads as follows:

Element	Claim Language
pre	A semiconductor package, comprising:
(a)	a substrate;
(b)	a first pad formed on the substrate;

Element	Claim Language
(c)	a second pad formed on the substrate;
(d)	a via-plug formed in the substrate, covered by a solder resistance layer, located in a space between the first pad and the second pad, and electrically connected to the second pad;
(e)	a surface mount device mounted on the first pad and the second pad; and
(f)	a molding compound layer encapsulating the substrate, the first pad, the second pad, the solder resistance layer and the surface mount device.

82. Longhorn IP and Hamilcar have alleged and continue to allege that certain SK hynix products infringe one or more claims of the '664 patent. For example, Longhorn IP and Hamilcar have alleged that "SK hynix H25BFTMGAM9R-BDJ NAND Flash Memory; SK hynix H9HQ15AFAMADARKEM DRAM/NAND Memory; SK hynix HFB1M8MQ331A0MR NAND Flash Memory (128GB); and similar surface-mounted devices mounted on a first pad and a second pad having a via-plug located in a space between the first pad and the second pad" infringe claim 8 of the '664 patent.

83. SK hynix has not infringed and does not infringe any claim of the '664 patent directly or indirectly, either literally or under the doctrine of equivalents. In particular, SK hynix's Multi-Chip Packages ("MCPs"), Universal Flash Storages ("UFSs"), and SSDs ("'664 Products") do not infringe independent claim 8 of the '664 patent and each claim that depends on claim 8 of the '664 patent at least because the '664 Products do not employ, incorporate, or otherwise make use of, for example, any via-plugs that are "formed in the substrate, covered by a solder resistance layer, located in a space between the first pad and the second pad, and electrically connected to the second pad." For example, the '664 Products do not include any via-plugs located between pads and covered by a solder resistance layer.

84. In addition, the '664 Products do not infringe independent claim 1 of the '664 patent and each claim that depends on claim 1 of the '664 patent at least because the '664 Products do not employ, incorporate, or otherwise make use of, for example, a "bonding wire electrically connecting a first bonding area of the first conductive element and a second bonding area of the first pad." For example, the '664 Products do not include a bonding wire.

1 85. A substantial, immediate, and real controversy exists between SK hynix, on the one hand,
 2 and Longhorn IP and Hamilcar, on the other hand, regarding whether SK hynix infringes the '664 patent
 3 by making, using, selling, and/or offering for sale the '664 Products in the United States, by importing
 4 the '664 Products into the United States, or by inducing others to perform one or more of these allegedly
 5 infringing acts. A judicial declaration is necessary to determine the parties' respective rights regarding
 6 the '664 patent.

7 86. SK hynix seeks a judgment declaring that SK hynix has not infringed and does not
 8 infringe, either literally or under the doctrine of equivalents, any claims of the '664 patent, either
 9 directly or indirectly.

COUNT SEVEN

(Declaration of Non-Infringement of the '619 Patent)

12 87. SK hynix restates and incorporates by reference the allegations in paragraphs 1 through
 13 86 of this Complaint as if fully set forth herein.

14 88. The '619 patent has two independent claims: 1 and 9. Exemplary independent claim 1
 15 reads as follows:

Element	Claim Language
pre	A semiconductor device structure, comprising:
(a)	a substrate comprising a transistor thereon;
(b)	a bi-layer contact etching stop layer (CESL) structure covering the transistor, the bi-layer CESL structure comprising a first CESL and a second CESL on the first CESL, wherein the second CESL is in direct contact with the first CESL, the first CESL is in direct contact with the substrate and the transistor, and wherein the second CESL acts as a plasma discharging layer; and
(c)	a dielectric layer on the second CESL, wherein the dielectric layer is in direct contact with the second CESL;
(d)	wherein the first CESL is made of a material different from that of the second CESL, and the second CESL is made of a material different from that of the dielectric layer, and wherein the second CESL has stronger plasma immunity than that of the first CESL.

26 89. Longhorn IP and Hamilcar have alleged and continue to allege that certain SK hynix
 27 products infringe one or more claims of the '619 patent. For example, Longhorn IP and Hamilcar have
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1 alleged that the “SK hynix Hi-1332 CMOS Image Sensor used in, for example, the Huawei RNE-AL00
2 Front-Facing Camera Module, and other similar SK hynix semiconductor devices containing a multi-
3 layer CESL structure comprising a first CESL and a second CESL” infringe claims 1, 2, 3, and 5 of the
4 ’619 patent.

5 90. SK hynix has not infringed and does not infringe any claim the ’619 patent directly or
6 indirectly, either literally or under the doctrine of equivalents. In particular, SK hynix’s CMOS Image
7 Sensors (“’619 Products”) do not infringe independent claim 1 and each claim that depends on claim 1
8 of the ’619 patent at least because the ’619 Products do not employ, incorporate, or otherwise make use
9 of, for example, “a bi-layer contact etching stop layer (CESL) structure covering the transistor, the bi-
10 layer CESL structure comprising a first CESL and a second CESL on the first CESL, wherein the
11 second CESL is in direct contact with the first CESL, the first CESL is in direct contact with the
12 substrate and the transistor.” For example, the ’619 Products do not include any bi-layer structure that
13 covers the transistor, wherein one layer of the bi-layer structure directly contacts the substrate and the
14 transistor.

15 91. In addition, the ’619 Products do not infringe independent claim 9 and each claim that
16 depends on claim 9 of the ’619 patent at least because the ’619 Products do not employ, incorporate, or
17 otherwise make use of, for example, “a bi-layer contact etching stop layer (CESL) structure covering
18 both of the NMOS transistor and the PMOS transistor, the bi-layer CESL structure comprising a first
19 CESL and a second CESL on the first CESL, wherein the second CESL is in direct contact with the first
20 CESL, the first CESL is in direct contact with the substrate, the NMOS transistor and the PMOS
21 transistor.” For example, the ’619 Products do not include any bi-layer structure that covers the
22 transistors, wherein one layer of the bi-layer structure directly contacts the substrate and the transistors.

23 92. A substantial, immediate, and real controversy exists between SK hynix, on the one hand,
24 and Longhorn IP and Hamilcar, on the other hand, regarding whether SK hynix infringes the ’619 patent
25 by making, using, selling, and/or offering for sale the ’619 Products in the United States, by importing
26 the ’619 Products into the United States, or by inducing others to perform one or more of these allegedly
27 infringing acts. A judicial declaration is necessary to determine the parties’ respective rights regarding
28 the ’619 patent.

1 93. SK hynix seeks a judgment declaring that SK hynix has not infringed and does not
2 infringe, either literally or under the doctrine of equivalents, any claims of the '619 patent, either
3 directly or indirectly.

4 **PRAYER FOR RELIEF**

5 WHEREFORE, SK hynix prays for judgment and relief as follows:

6 A. Declaring that SK hynix has not infringed and is not infringing any claims of the Patents-
7 in-Suit;

8 B. Permanently enjoining Defendants and all those acting through or for them, directly and
9 indirectly, from asserting the Patents-in-Suit against any third party based on any alleged use of SK
10 hynix's accused products;

11 C. Declaring that judgment be entered in favor of SK hynix and against Defendants on each
12 of SK hynix's claims;

13 D. Finding that this is an exceptional case under 35 U.S.C. § 285;

14 E. Awarding SK hynix its costs, expenses, and attorneys' fees in connection with this
15 action; and

16 F. Such further and additional relief as the Court deems just and proper.

17 **JURY DEMAND**

18 SK hynix demands a jury trial on all issues and claims so triable.
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1 DATED: July 5, 2022

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