IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

INNOVATIVE FOUNDRY TECHNOLOGIES LLC, Plaintiff, v. HISENSE ELECTRIC CO., LTD. Defendant.	C.A. No.: JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

Innovative Foundry Technologies LLC ("IFT" or "Plaintiff"), brings this action for patent infringement under 35 U.S.C. § 271 against Hisense Electric Co., Ltd. ("Defendant" or "Hisense"), and alleges as follows:

THE PARTIES

1. Plaintiff Innovative Foundry Technologies LLC is a Delaware corporation, and has a principal place of business at 40 Pleasant Street, Suite 208, Portsmouth, NH 03801.

2. Hisense Electric Co., Ltd. is a Chinese company, and is located at No. 218, Qianwangang Road, Economic and Technological Development, Qingdao, Shandong 266555, China. Hisense Electric Co., Ltd., either itself and/or through the activities of its subsidiaries, makes, uses, sells, offers for sale, and/or imports throughout the United States, including within this District, products, such as smartphones, tablets, televisions, smartwatches, and various other products that include semiconductor devices and integrated circuits, that infringe the Asserted Patents, defined below. Hisense Electric Co., Ltd. orders and purchases semiconductor devices and integrated circuits that it incorporates into downstream products that are made, used, sold,

offered for sale, and/or imported throughout the United States, including within this District. These downstream products may include, but are not limited to, smartphones, tablets, televisions, smartwatches, and various other products that include semiconductor devices and integrated circuits.

THE ASSERTED PATENTS

3. United States Patent No. 6,583,012 ("the '012 Patent") is entitled "Semiconductor Devices Utilizing Differently Composed Metal-Based In-Laid Gate Electrodes" and issued on June 24, 2003 to inventors Matthew S. Buynoski, Qi Xiang, and Paul R. Besser. The '012 Patent issued from United States Patent Application No. 09/781,436 filed on February 13, 2001. A copy of the '012 Patent is attached hereto as Exhibit A.

4. United States Patent No. 6,797,572 ("the '572 Patent") is entitled "Method For Forming a Field Effect Transistor Having a High-K Gate Dielectric and Related Structure" and issued on September 29, 2004 to inventors Joong S. Jeon and Huicai Zhong. The '572 Patent issued from United States Patent Application No. 10/618,273 filed on July 11, 2003. A copy of the '572 Patent is attached hereto as Exhibit B.

5. United States Patent No. 7,880,236 ("the '236 Patent") is entitled "Semiconductor Circuit Including a Long Channel Device and a Short Channel Device" and issued on February 1, 2011 to inventors Andreas Kerber and Kingsuk Maitra. The '236 Patent issued from United States Patent Application No. 12/181,180 filed on July 28, 2008. A copy of the '236 Patent is attached hereto as Exhibit C.

6. By way of assignment, Plaintiff owns all rights, title, and interest to the '012 Patent, the '572 Patent, and the '236 Patent (collectively, the "Asserted Patents").

7. The Asserted Patents are each valid and enforceable.

JURISDICTION AND VENUE

8. This action arises under the Patent Act, 35 U.S.C. § 1 *et seq*.

9. Subject matter jurisdiction is proper in this Court under 28 U.S.C. §§ 1331 and 1338(a).

10. Venue in this District is proper under 28 U.S.C. § 1391(c)(3) and 28 U.S.C. § 1400(b). Defendant Hisense Electric Co., Ltd. is not a resident of the United States and may be sued in any district, including this District. Defendant has committed acts of infringement in this District.

11. This Court has personal jurisdiction over Defendant. Defendant has conducted and does conduct business within the State of Delaware. Defendant, directly or through subsidiaries or intermediaries (including distributors, retailers, and others), ships, distributes, makes, uses, offers for sale, sells, imports, and/or advertises (including by providing an interactive web page) its products and/or services in the United States and the District of Delaware and/or contributes to and actively induces its customers to ship, distribute, make, use, offer for sale, sell, import, and/or advertise (including the provision of an interactive web page) infringing products and/or services in the United States and the District of Delaware. Defendant, directly and through subsidiaries or intermediaries (including distributors, retailers, and others), has purposefully and voluntarily placed one or more of its infringing products and/or services, as described below, into the stream of commerce with the expectation that those products will be purchased and used by customers and/or consumers in the District of Delaware. These infringing products and/or services have been and continue to be made, used, sold, offered for sale, purchased, and/or imported by customers and/or consumers in the District of Delaware. Defendant has committed acts of patent infringement within the District of Delaware.

BACKGROUND

12. Plaintiff incorporates the allegations of all of the foregoing paragraphs as if fully restated herein.

13. The Asserted Patents stem from the research and design of innovative and proprietary technology developed by IFT's licensee, Advanced Micro Devices, Inc. ("AMD"). AMD is an American multinational company and pioneer of cutting-edge semiconductor technology. Founded in 1969 in Santa Clara, California, AMD has made substantial investments to research, develop, and/or have manufactured high quality semiconductor devices, integrated circuits, and products containing the same. The Asserted Patents cover inventions relating to important aspects of AMD's integrated circuit and microfabrication technology.

14. Defendant made, used, sold, offered for sale, imported, tested, designed, and/or marketed in the United States semiconductor devices, integrated circuits, and products containing the same that infringe, or were manufactured using processes that infringe, the Asserted Patents.

15. Defendant has been placed on actual notice of the Asserted Patents. Defendant received actual notice of the Asserted Patents at least as early as February 2019 by way of a letter to Hisense dated February 8, 2019. Additionally, the filing of this Complaint also constitutes notice in accordance with 35 U.S.C. § 287.

16. After receiving actual notice of the Asserted Patents, the Defendant proceeded to make, use, test, design, sell, and/or offer to sell in this District and elsewhere in the United States, and import into this District and elsewhere in the United States, semiconductor devices, integrated circuits, and products containing the same that infringe, or were manufactured using processes that infringe, the Asserted Patents.

17. Defendant has directly infringed, and continues to directly infringe, the Asserted Patents under 35 U.S.C. § 271(a) and (g) by one or more of making, using, selling and/or offering

to sell, in this District and elsewhere in the United States, and importing into this District and elsewhere in the United States, certain infringing semiconductor devices, integrated circuits, and products containing the same including, but not limited to, semiconductor devices, integrated circuits, and products containing the same, which infringe, or were manufactured using processes that infringe, the Asserted Patents, as further described in detail in Counts I-VI *infra* (collectively, "Accused Products").

18. Defendant has also indirectly infringed, and continues to indirectly infringe, the Asserted Patents under 35 U.S.C. § 271(b) and (c). Defendant knew and intended to induce and contribute to the infringement of the Asserted Patents. The Accused Products, and the processes of manufacture of the Accused Products, have no substantial non-infringing use. After receiving actual notice of the Asserted Patents, the Defendant proceeded to actively induce, and materially contribute to, its customers' infringement of the Asserted Patents by making, using, selling, offering for sale, marketing, advertising, and/or importing semiconductor devices, integrated circuits, and products containing the same that infringe, or were manufactured using processes that infringe, the Asserted Patents, and instructing customers to infringe the Asserted Patents.

19. Thus, Defendant has indirectly infringed, and continues to indirectly infringe, the Asserted Patents under 35 U.S.C. § 271(b) by actively inducing its customers to infringe the Asserted Patents by making, using, selling, offering for sale, marketing, advertising, and/or importing the Accused Products to its customers for use in downstream products that infringe, or were manufactured using processes that infringe, the Asserted Patents, and by instructing customers to infringe the Asserted Patents, as described in detail in Counts I-VI *infra*. Additionally, Defendant has indirectly infringed, and continues to indirectly infringe the Asserted Patents under 35 U.S.C. § 271(c) by materially contributing to its own customers' infringement of the Asserted

Patents by making, using, selling, offering for sale, advertising, marketing, and/or importing the Accused Products to its customers for use in downstream products that infringe, or which were manufactured using processes that infringe, the Asserted Patents, and by instructing customers to infringe the Asserted Patents, as described in detail in Counts I-VI *infra*.

20. The Accused Products include, but are not limited to all Hisense smartphones, tablets, televisions, smartwatches, and products that include semiconductor devices and integrated circuits manufactured at 5-65 nanometer technology nodes, including, but not limited to, Hisense's 120L10E, 100L10E, 100L8D, 65H9100E Plus, 65H9E Plus, 65R6E, 65R7E, 65H9E, 65H8E, 65H6E, 60R6E, 60H6E, 58H6550E, 55H9100E Plus, 55H9E Plus, 55R6E, 55R7E, 55H9E, 55H8E, 55H6E, 50R6E, 50R7E, 50H6E, 50H5E, 43R6E, 43R7E, 43H6E, 43H5E, 40H5E, 40H4050E, 40EU3000, and 32H5E products.

21. Defendant's acts of infringement have caused damage to Plaintiff. Plaintiff is entitled to recover from Defendant the damages incurred by Plaintiff as a result of Defendant's wrongful acts.

COUNT I
(Defendant's Infringement of the '012 Patent)

22. Plaintiff incorporates the allegations of all of the foregoing paragraphs as if fully restated herein.

23. Plaintiff is the assignee and lawful owner of all right, title and interest in and to the '012 Patent. The '012 Patent is valid and enforceable.

24. Defendant has directly infringed, and continues to directly infringe, the '012 Patent by making, using, selling, offering for sale, or importing into the United States products manufactured using processes that infringe the '012 Patent including, but not limited to, semiconductor devices, integrated circuits, and products containing the same. The accused

products that infringe one or more claims of the ’012 Patent include, but are not limited to, at least the Accused Products. Further discovery may reveal additional infringing products and/or models.

25. For example, and without limitation, the Accused Products were manufactured using processes that infringe claims 1-11 of the ’012 Patent.

26. Attached hereto as Exhibit D, and incorporated into this Complaint, is a claim chart showing that the manufacture of the Hisense 55H9D Plus television is covered by at least Claim 1 of the ’012 Patent. This claim chart is exemplary and, on information and belief, many other products provided by Hisense infringe the ’012 Patent.

27. Defendant has, and continues to, indirectly infringe the ’012 Patent by actively inducing and contributing to the infringement of the ’012 Patent by others, such as customers, resellers, and retailers. These others include, but are not limited to, Best Buy Co., Inc. and its affiliates, who, for example, sell, offer for sale, and/or import throughout the United States, including within this District, the Accused Products.

28. Defendant specifically intended these others, such as customers, resellers, and retailers, to infringe the ’012 Patent and knew that these others perform acts that constituted direct infringement. For example, Exhibit D shows that an exemplary product, the Hisense 55H9D Plus television, which is sold by Best Buy Co., Inc., is manufactured using processes that infringe the ’012 Patent. Defendant designed the Accused Products such that they would each infringe the ’012 Patent as described in Exhibit D if made, used, sold, offered for sale, or imported into the United States. Defendant provided, directly or indirectly, Accused Products to others, such as, but not limited to, customers, knowing and intending that those others would use, sell, offer for sale, and/or import in and into the United States the Accused Products, thereby directly infringing one or more claims of the ’012 Patent.

29. In addition, upon information and belief, Defendant provides instructions, user guides, and/or other documentation to the infringing others regarding the use and operation of the Accused Products. When the others follow such instructions, user guides, and/or other documentation, they directly infringe one or more claims of the ’012 Patent. By providing such instructions, user guides, and/or other documentation, Defendant knows and intends that those others will follow those instructions, user guides, and other documentation, and thereby directly infringe one or more claims of the ’012 Patent. Defendant thus knows that its actions actively induce infringement.

30. The Accused Products have no substantial non-infringing uses and are a material part of the invention. As described in Exhibit D, any manufacture, use, sale offer for sale or importation in or into the United States of an Accused Product or a downstream product incorporating an Accused Product infringes the ’012 patent. The Accused Products are electronic devices that incorporate semiconductor devices and integrated circuits that provide vital functionality to the Accused Products. The Accused Products cannot be used without such semiconductor devices and integrated circuits. Thus, the Accused products have no substantial non-infringing uses.

31. Defendant has had knowledge of the ’012 Patent since at least as of receiving a letter to Hisense dated February 8, 2019.

32. Defendant’s continued infringement of the ’012 Patent has damaged and will continue to damage Plaintiff.

33. Plaintiff is entitled to recover damages adequate to compensate it for Defendant’s infringement.

COUNT II
(Defendant's Willful Infringement of the '012 Patent)

34. Plaintiff incorporates the allegations of all of the foregoing paragraphs as if fully restated herein.

35. Defendant has infringed and/or does willfully infringe the '012 Patent.

36. Defendant received actual notice of the '012 Patent at least as early as February 2019 by way a letter to Hisense dated February 8, 2019. After receiving such actual notice of the '012 Patent, Defendant proceeded to make, use, test, sell, and/or offer to sell in this District and elsewhere in the United States, and import into this District and elsewhere in the United States, the Accused Products.

37. On information and belief, Defendant engaged in such activities despite an objectively high likelihood that its actions constituted infringement of valid patents, including the '012 Patent. Defendant knew and should have known that its actions would cause direct and indirect infringement of the '012 Patent.

COUNT III
(Defendant's Infringement of the '572 Patent)

38. Plaintiff incorporates the allegations of all of the foregoing paragraphs as if fully restated herein.

39. Plaintiff is the assignee and lawful owner of all right, title and interest in and to the '572 Patent. The '572 Patent is valid and enforceable.

40. Defendant has directly infringed, and continues to directly infringe, the '572 Patent by making, using, selling, offering for sale, or importing into the United States products manufactured using processes that infringe the '572 Patent including, but not limited to, semiconductor devices, integrated circuits, and products containing the same. The accused

products that infringe one or more claims of the ’572 Patent include, but are not limited to, at least the Accused Products. Further discovery may reveal additional infringing products and/or models.

41. For example, and without limitation, the Accused Products were manufactured using processes that infringe claims 1-7 of the ’572 Patent.

42. Attached hereto as Exhibit E, and incorporated into this Complaint, is a claim chart showing that the manufacture of the Hisense 55H9D Plus television is covered by at least Claim 1 of the ’572 Patent. This claim chart is exemplary and, on information and belief, many other products provided by Hisense infringe the ’572 Patent.

43. Defendant has, and continues to, indirectly infringe the ’572 Patent by actively inducing and contributing to the infringement of the ’572 Patent by others, such as customers, resellers, and retailers. These others include, but are not limited to, Best Buy Co., Inc. and its affiliates, who, for example, sell, offer for sale, and/or import throughout the United States, including within this District, the Accused Products.

44. Defendant specifically intended these others, such as customers, resellers, and retailers, to infringe the ’572 Patent and knew that these others perform acts that constituted direct infringement. For example, Exhibit E shows that an exemplary product, the Hisense 55H9D Plus television, which is sold by Best Buy Co., Inc., is manufactured using processes that infringe the ’572 Patent. Defendant designed the Accused Products such that they would each infringe the ’572 Patent as described in Exhibit E if made, used, sold, offered for sale, or imported into the United States. Defendant provided, directly or indirectly, Accused Products to others, such as, but not limited to, customers, knowing and intending that those others would use, sell, offer for sale, and/or import in and into the United States the Accused Products, thereby directly infringing one or more claims of the ’572 Patent.

45. In addition, upon information and belief, Defendant provides instructions, user guides, and/or other documentation to the infringing others regarding the use and operation of the Accused Products. When the others follow such instructions, user guides, and/or other documentation, they directly infringe one or more claims of the '572 Patent. By providing such instructions, user guides, and/or other documentation, Defendant knows and intends that those others will follow those instructions, user guides, and other documentation, and thereby directly infringe one or more claims of the '572 Patent. Defendant thus knows that its actions actively induce infringement.

46. The Accused Products have no substantial non-infringing uses and are a material part of the invention. As described in Exhibit E, any manufacture, use, sale offer for sale or importation in or into the United States of an Accused Product or a downstream product incorporating an Accused Product infringes the '572 patent. The Accused Products are electronic devices that incorporate semiconductor devices and integrated circuits that provide vital functionality to the Accused Products. The Accused Products cannot be used without such semiconductor devices and integrated circuits. Thus, the Accused products have no substantial non-infringing uses.

47. Defendant has had knowledge of the '572 Patent since at least as of receiving a letter to Hisense dated February 8, 2019.

48. Defendant's continued infringement of the '572 Patent has damaged and will continue to damage Plaintiff.

49. Plaintiff is entitled to recover damages adequate to compensate it for Defendant's infringement.

COUNT IV
(Defendant's Willful Infringement of the '572 Patent)

50. Plaintiff incorporates the allegations of all of the foregoing paragraphs as if fully restated herein.

51. Defendant has infringed and/or does willfully infringe the '572 Patent.

52. Defendant received actual notice of the '572 Patent at least as early as February 2019 by way of a letter to Hisense dated February 8, 2019. After receiving such actual notice of the '572 Patent, Defendant proceeded to make, use, test, sell, and/or offer to sell in this District and elsewhere in the United States, and import into this District and elsewhere in the United States, the Accused Products.

53. On information and belief, Defendant engaged in such activities despite an objectively high likelihood that its actions constituted infringement of valid patents, including the '572 Patent. Defendant knew and should have known that its actions would cause direct and indirect infringement of the '572 Patent.

COUNT V
(Defendant's Infringement of the '236 Patent)

54. Plaintiff incorporates the allegations of all of the foregoing paragraphs as if fully restated herein.

55. Plaintiff is the assignee and lawful owner of all right, title and interest in and to the '236 Patent. The '236 Patent is valid and enforceable.

56. Defendant has directly infringed, and continues to directly infringe, the '236 Patent by making, using, selling, offering for sale, or importing into the United States products and/or methods covered by one or more claims of the '236 Patent including, but not limited to, semiconductor devices, integrated circuits, and products containing the same. The accused

products that infringe one or more claims of the ’236 Patent include, but are not limited to, at least the Accused Products. Further discovery may reveal additional infringing products and/or models.

57. For example, and without limitation, the Accused Products infringe claims 1-18 of the ’236 Patent.

58. Attached hereto as Exhibit F, and incorporated into this Complaint, is a claim chart showing where in the Hisense 55H9D Plus television each limitation of Claim 1 is met. This claim chart is exemplary and, on information and belief, many other products provided by Hisense infringe the ’236 Patent.

59. Defendant has, and continues to, indirectly infringe the ’236 Patent by actively inducing and contributing to the infringement of the ’236 Patent by others, such as customers, resellers, and retailers. These others include, but are not limited to, Best Buy Co., Inc. and its affiliates, who, for example, sell, offer for sale, and/or import throughout the United States, including within this District, the Accused Products.

60. Defendant specifically intended these others, such as customers, resellers, and retailers, to infringe the ’236 Patent and knew that these others perform acts that constituted direct infringement. For example, Exhibit F shows that an exemplary product, the Hisense 55H9D Plus television, which is sold by Best Buy Co., Inc., infringes the ’236 Patent. Defendant designed the Accused Products such that they would each infringe the ’236 Patent as described in Exhibit F if made, used, sold, offered for sale, or imported into the United States. Defendant provided, directly or indirectly, Accused Products to others, such as, but not limited to, customers, knowing and intending that those others would use, sell, offer for sale, and/or import in and into the United States the Accused Products, thereby directly infringing one or more claims of the ’236 Patent.

61. In addition, upon information and belief, Defendant provides instructions, user guides, and/or other documentation to the infringing others regarding the use and operation of the Accused Products. When the others follow such instructions, user guides, and/or other documentation, they directly infringe one or more claims of the ’236 Patent. By providing such instructions, user guides, and/or other documentation, Defendant knows and intends that those others will follow those instructions, user guides, and other documentation, and thereby directly infringe one or more claims of the ’236 Patent. Defendant thus knows that its actions actively induce infringement.

62. The Accused Products have no substantial non-infringing uses and are a material part of the invention. As described in Exhibit F, any manufacture, use, sale offer for sale or importation in or into the United States of an Accused Product or a downstream product incorporating an Accused Product infringes the ’236 patent. The Accused Products are electronic devices that incorporate semiconductor devices and integrated circuits that provide vital functionality to the Accused Products. The Accused Products cannot be used without such semiconductor devices and integrated circuits. Thus, the Accused products have no substantial non-infringing uses.

63. Defendant has had knowledge of the ’236 Patent since at least as of receiving a letter to Hisense dated February 8, 2019.

64. Defendant’s continued infringement of the ’236 Patent has damaged and will continue to damage Plaintiff.

65. Plaintiff is entitled to recover damages adequate to compensate it for Defendant’s infringement.

COUNT VI
(Defendant's Willful Infringement of the '236 Patent)

66. Plaintiff incorporates the allegations of all of the foregoing paragraphs as if fully restated herein.

67. Defendant has infringed and/or does willfully infringe the '236 Patent.

68. Defendant received actual notice of the '236 Patent at least as early as February 2019 by way a letter to Hisense dated February 8, 2019. After receiving such actual notice of the '236 Patent, Defendant proceeded to make, use, test, sell, and/or offer to sell in this District and elsewhere in the United States, and import into this District and elsewhere in the United States, the Accused Products.

69. On information and belief, Defendant engaged in such activities despite an objectively high likelihood that its actions constituted infringement of valid patents, including the '236 Patent. Defendant knew and should have known that its actions would cause direct and indirect infringement of the '236 Patent.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests the following relief:

a) A judgment that the Asserted Patents are valid and enforceable;

b) A judgment that Defendant has infringed, directly and indirectly, either literally or under the Doctrine of Equivalents, one or more claims of the '012 Patent;

c) A judgment that Defendant's Infringement of the '012 Patent was willful, and that Defendant's continued infringement of the '012 Patent is willful;

d) A judgment that Defendant has infringed, directly and indirectly, either literally or under the Doctrine of Equivalents, one or more claims of the '572 Patent;

e) A judgment that Defendant's infringement of the '572 Patent was willful, and that Defendant's continued infringement of the '572 Patent is willful;

f) A judgment that Defendant has infringed, directly and indirectly, either literally or under the Doctrine of Equivalents, one or more claims of the '236 Patent;

g) A judgment that Defendant's Infringement of the '236 Patent was willful, and that Defendant's continued infringement of the '236 Patent is willful;

h) An injunction against Defendant, its officers, agents, servants, employees, all parent and subsidiary entities, all assignees and successors in interest, and those persons or entities acting in concert or participation with Defendant, including distributors, enjoining them from further infringement of the Asserted Patents;

i) A judgment that awards Plaintiff all appropriate damages under 35 U.S.C. § 284 for Defendant's past infringement, and any continuing or future infringement of the Asserted Patents, including pre or post judgment interest, costs, and disbursements as justified under 35 U.S.C. § 284 and, if necessary to adequately compensate Plaintiff for Defendant's infringement, an accounting:

   i. that Plaintiff be awarded enhanced damages by reason of the Defendant's Willful Infringement of the '012 Patent;

   ii. that Plaintiff be awarded enhanced damages by reason of the Defendant's Willful Infringement of the '572 Patent;

   iii. that Plaintiff be awarded enhanced damages by reason of the Defendant's Willful Infringement of the '236 Patent;

iv. that this case be declared exceptional within the meaning of 35 U.S.C. § 285 and that Plaintiff be awarded its reasonable attorneys' fees against Defendant incurred in prosecuting this action;

v. that Plaintiff be awarded costs and expenses incurred in prosecuting this action; and

j) A judgment that Plaintiff be awarded such further relief at law or in equity as the Court deems just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Under Fed. R. Civ. P. 38, Plaintiff hereby demand trial by jury on all claims and issues so triable.

Dated: February 13, 2019

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Respectfully submitted,

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