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Stephen J. Akerley, State Bar No. 160757  
SJAkerley@mintz.com  
MINTZ LEVIN COHN FERRIS  
GLOVSKY AND POPEO PC  
44 Montgomery Street, 36<sup>th</sup> Floor  
San Francisco, CA 94104  
Telephone: (415) 432-6000  
Facsimile: (415) 432-6001  
Attorneys for Plaintiff Innovative Foundry  
Technologies, LLC

**IN THE UNITED STATES DISTRICT COURT  
FOR THE CENTRAL DISTRICT OF CALIFORNIA**

INNOVATIVE FOUNDRY  
TECHNOLOGIES LLC,  
  
Plaintiff,  
  
v.  
  
VIZIO, INC.  
  
Defendant.

**CASE NO.**  
**COMPLAINT**  
**JURY TRIAL DEMANDED**

1 Innovative Foundry Technologies LLC (“IFT” or “Plaintiff”), brings this action  
2 for patent infringement under 35 U.S.C. § 271 against VIZIO, Inc. (“Defendant” or  
3 “VIZIO”), and alleges as follows:  
4  
5

### 6 **THE PARTIES**

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

10 2. VIZIO, Inc. is a California company, and is located at 39 Tesla, Irvine,  
11 California, 92618. VIZIO, Inc., either itself and/or through the activities of its  
12 subsidiaries, makes, uses, sells, offers for sale, and/or imports throughout the United  
13 States, including within this District, products, such as smartphones, tablets,  
14 televisions, smartwatches, and various other products that include semiconductor  
15 devices and integrated circuits, that infringe the Asserted Patents, defined below.  
16 VIZIO, Inc. orders and purchases semiconductor devices and integrated circuits that  
17 it incorporates into downstream products that are made, used, sold, offered for sale,  
18 and/or imported throughout the United States, including within this District. These  
19 downstream products may include, but are not limited to, smartphones, tablets,  
20 televisions, smartwatches, and various other products that include semiconductor  
21 devices and integrated circuits.

### 22 **THE ASSERTED PATENTS**

23 3. United States Patent No. 7,009,226 (“the ’226 Patent”) is entitled “In-Situ  
24 Nitride/Oxynitride Processing With Reduced Deposition Surface Pattern Sensitivity”  
25 and issued on March 7, 2006 to inventor Sey-Ping Sun. The ’226 Patent issued from  
26 United States Patent Application No. 10/887,836 filed on July 12, 2004. A copy of  
27 the ’226 Patent is attached hereto as Exhibit A.

28 4. United States Patent No. 9,373,548 (“the ’548 Patent”) is entitled “CMOS

1 Circuit Having a Tensile Stress Layer Overlying an NMOS Transistor and  
2 Overlapping a Portion of Compressive Stress Layer” and issued on June 21, 2016 to  
3 inventors Gen Pei, Scott D. Luning, Johannes Van Meer. The ’548 Patent issued from  
4 United States Patent Application No. 12/199,659 filed on August 27, 2008. The ’548  
5 Patent claims priority to United States Patent Application No. 11/532,753, filed on  
6 September 18, 2006. A copy of the ’548 Patent is attached hereto as Exhibit B.

7 5. By way of assignment, Plaintiff owns all rights, title, and interest to the  
8 ’226 Patent and the ’548 Patent (collectively, the “Asserted Patents”).

9 6. The Asserted Patents are each valid and enforceable.

### 10 JURISDICTION AND VENUE

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

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

14 9. Venue in this District is proper under 28 U.S.C. § 1391(c)(3) and 28  
15 U.S.C. § 1400(b). Defendant has a principal place of business in this District and is a  
16 resident of this District. Defendant has committed acts of infringement in this District.

17 10. This Court has personal jurisdiction over Defendant. Defendant has a  
18 principal place of business in this District and is a resident of this District. Defendant  
19 has conducted and does conduct business within the State of California. Defendant,  
20 directly or through subsidiaries or intermediaries (including distributors, retailers, and  
21 others), ships, distributes, makes, uses, offers for sale, sells, imports, and/or advertises  
22 (including by providing an interactive web page) its products and/or services in the  
23 United States and the Central District of California and/or contributes to and actively  
24 induces its customers to ship, distribute, make, use, offer for sale, sell, import, and/or  
25 advertise (including the provision of an interactive web page) infringing products  
26 and/or services in the United States and the Central District of California. Defendant,  
27 directly and through subsidiaries or intermediaries (including distributors, retailers,  
28 and others), has purposefully and voluntarily placed one or more of its infringing

1 products and/or services, as described below, into the stream of commerce with the  
2 expectation that those products will be purchased and used by customers and/or  
3 consumers in the Central District of California. These infringing products and/or  
4 services have been and continue to be made, used, sold, offered for sale, purchased,  
5 and/or imported by customers and/or consumers in the Central District of California.  
6 Defendant has committed acts of patent infringement within the Central District of  
7 California.

### 8 **BACKGROUND**

9 11. Plaintiff incorporates the allegations of all of the foregoing paragraphs as  
10 if fully restated herein.

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

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

23 14. Defendant has been placed on actual notice the Asserted Patents.  
24 Defendant received actual notice of the Asserted Patents at least as early as February  
25 2019 by way of a letter to VIZIO dated February 8, 2019. Additionally, the filing of  
26 this Complaint also constitutes notice in accordance with 35 U.S.C. § 287.

27 15. After receiving actual notice of the Asserted Patents, the Defendant  
28 proceeded to make, use, test, design, sell, and/or offer to sell in this District and

1 elsewhere in the United States, and import into this District and elsewhere in the  
2 United States, semiconductor devices, integrated circuits, and products containing the  
3 same that infringe, or were manufactured using processes that infringe, the Asserted  
4 Patents.

5 16. Defendant has directly infringed, and continues to directly infringe, the  
6 Asserted Patents under 35 U.S.C. § 271(a) and (g) by one or more of making, using,  
7 selling and/or offering to sell, in this District and elsewhere in the United States, and  
8 importing into this District and elsewhere in the United States, certain infringing  
9 semiconductor devices, integrated circuits, and products containing the same  
10 including, but not limited to, semiconductor devices, integrated circuits, and products  
11 containing the same, which infringe, or were manufactured using processes that  
12 infringe, the Asserted Patents, as further described in detail in Counts I-IV *infra*  
13 (collectively, “Accused Products”).

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

25 18. Thus, Defendant has indirectly infringed, and continues to indirectly  
26 infringe, the Asserted Patents under 35 U.S.C. § 271(b) by actively inducing its  
27 customers to infringe the Asserted Patents by making, using, selling, offering for sale,  
28 marketing, advertising, and/or importing the Accused Products to its customers for

1 use in downstream products that infringe, or were manufactured using processes that  
2 infringe, the Asserted Patents, and by instructing customers to infringe the Asserted  
3 Patents, as described in detail in Counts I-IV *infra*. Additionally, Defendant has  
4 indirectly infringed, and continues to indirectly infringe the Asserted Patents under  
5 35 U.S.C. § 271(c) by materially contributing to its own customers' infringement of  
6 the Asserted Patents by making, using, selling, offering for sale, advertising,  
7 marketing, and/or importing the Accused Products to its customers for use in  
8 downstream products that infringe, or which were manufactured using processes that  
9 infringe, the Asserted Patents, and by instructing customers to infringe the Asserted  
10 Patents, as described in detail in Counts I-IV *infra*.

11 19. The Accused Products include, but are not limited to all VIZIO  
12 smartphones, tablets, televisions, smartwatches, and products that include  
13 semiconductor devices and integrated circuits manufactured at 5-65 nanometer  
14 technology nodes, including, but not limited to, VIZIO's D24F-F1, D24H-G9,  
15 D24HN-E1, D24HN-G9, D32F-F1, D32H-F0, D32HN-E0, D32HN-E4, D39F-F0,  
16 D39HN-E0, D40F-F1, D40F-G9, D43-E2, D43-F1, D43F-F1, D43N-E1, D48F-E0,  
17 D48F-F0, D50-E1, D50-F1, D50F-F1, D50N-E1, D50X-G9, D55-F2, D55F-E2,  
18 D55UN-E1, D55X-G1, D60-F3, D65-E0, D65-F1, D65X-G4, D70-F3, E43-F1, E48-  
19 D0, E50-E1, E50-F2, E55-E2, E55-F1, E60-E3, E65-E1, E65-F0, E65-F1, E70-E3,  
20 E70-F3, E75-E1, E75-E3, E75-F2, E80-E3, M50-E1, M55-E0, M55-F0, M65-E0,  
21 M65-F0, M70-F3, P55-E1, P55-F1, P55RED-F1, P65-E1, P65-F1, P75-F1, PQ65-F1,  
22 and V505-G9 products.

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

26 **COUNT I**  
27 **(Defendant's Infringement of the '226 Patent)**

28 21. Plaintiff incorporates the allegations of all of the foregoing paragraphs as

1 if fully restated herein.

2 22. Plaintiff is the assignee and lawful owner of all right, title and interest in  
3 and to the '226 Patent. The '226 Patent is valid and enforceable.

4 23. Defendant has directly infringed, and continues to directly infringe, the  
5 '226 Patent by making, using, selling, offering for sale, or importing into the United  
6 States products and/or methods covered by one or more claims of the '226 Patent  
7 including, but not limited to, semiconductor devices, integrated circuits, and products  
8 containing the same. The accused products that infringe one or more claims of the  
9 '226 Patent include, but are not limited to, at least the Accused Products. Further  
10 discovery may reveal additional infringing products and/or models.

11 24. For example, and without limitation, the Accused Products infringe  
12 claims 1-9 of the '226 Patent.

13 25. Attached hereto as Exhibit C, and incorporated into this Complaint, is a  
14 claim chart showing where in the VIZIO D40F-G9 television each limitation of Claim  
15 1 is met. This claim chart is exemplary and, on information and belief, many other  
16 products provided by VIZIO infringe the '226 Patent.

17 26. Defendant has, and continues to, indirectly infringe the '226 Patent by  
18 actively inducing and contributing to the infringement of the '226 Patent by others,  
19 such as customers, resellers, and retailers. These others include, but are not limited  
20 to, Best Buy Co., Inc. and its affiliates, who, for example, sell, offer for sale, and/or  
21 import throughout the United States, including within this District, the Accused  
22 Products.

23 27. Defendant specifically intended these others, such as customers, resellers,  
24 and retailers, to infringe the '226 Patent and knew that these others perform acts that  
25 constituted direct infringement. For example, Exhibit C shows that an exemplary  
26 product, the VIZIO D40F-G9 television, which is sold by Best Buy Co., Inc., infringes  
27 the '226 Patent. Defendant designed the Accused Products such that they would each  
28 infringe the '226 Patent as described in Exhibit C if made, used, sold, offered for sale,

1 or imported into the United States. Defendant provided, directly or indirectly,  
2 Accused Products to others, such as, but not limited to, customers, knowing and  
3 intending that those others would use, sell, offer for sale, and/or import in and into  
4 the United States the Accused Products, thereby directly infringing one or more  
5 claims of the '226 Patent.

6 28. In addition, upon information and belief, Defendant provides instructions,  
7 user guides, and/or other documentation to the infringing others regarding the use and  
8 operation of the Accused Products. When the others follow such instructions, user  
9 guides, and/or other documentation, they directly infringe one or more claims of the  
10 '226 Patent. By providing such instructions, user guides, and/or other documentation,  
11 Defendant knows and intends that those others will follow those instructions, user  
12 guides, and other documentation, and thereby directly infringe one or more claims of  
13 the '226 Patent. Defendant thus knows that its actions actively induce infringement.

14 29. The Accused Products have no substantial non-infringing uses and are a  
15 material part of the invention. As described in Exhibit C, any manufacture, use, sale  
16 offer for sale or importation in or into the United States of an Accused Product or a  
17 downstream product incorporating an Accused Product infringes the '226 patent. The  
18 Accused Products are electronic devices that incorporate semiconductor devices and  
19 integrated circuits that provide vital functionality to the Accused Products. The  
20 Accused Products cannot be used without such semiconductor devices and integrated  
21 circuits. Thus, the Accused products have no substantial non-infringing uses.

22 30. Defendant has had knowledge of the '226 Patent since at least as of  
23 receiving a letter to VIZIO dated February 8, 2019.

24 31. Defendant's continued infringement of the '226 Patent has damaged and  
25 will continue to damage Plaintiff.

26 32. Plaintiff is entitled to recover damages adequate to compensate it for  
27 Defendant's infringement.

28 **COUNT II**  
**(Defendant's Willful Infringement of the '226 Patent)**





1 claims 1-3 of the '548 Patent.

2 41. Attached hereto as Exhibit D, and incorporated into this Complaint, is a  
3 claim chart showing where in the VIZIO D40F-G9 television each limitation of Claim  
4 1 is met. This claim chart is exemplary and, on information and belief, many other  
5 products provided by VIZIO infringe the '548 Patent.

6 42. Defendant has, and continues to, indirectly infringe the '548 Patent by  
7 actively inducing and contributing to the infringement of the '548 Patent by others,  
8 such as customers, resellers, and retailers. These others include, but are not limited  
9 to, Best Buy Co., Inc. and its affiliates, who, for example, sell, offer for sale, and/or  
10 import throughout the United States, including within this District, the Accused  
11 Products.

12 43. Defendant specifically intended these others, such as customers, resellers,  
13 and retailers, to infringe the '548 Patent and knew that these others perform acts that  
14 constituted direct infringement. For example, Exhibit D shows that an exemplary  
15 product, the VIZIO D40F-G9 television, which is sold by Best Buy Co., Inc., infringes  
16 the '548 Patent. Defendant designed the Accused Products such that they would each  
17 infringe the '548 Patent as described in Exhibit D if made, used, sold, offered for sale,  
18 or imported into the United States. Defendant provided, directly or indirectly,  
19 Accused Products to others, such as, but not limited to, customers, knowing and  
20 intending that those others would use, sell, offer for sale, and/or import in and into  
21 the United States the Accused Products, thereby directly infringing one or more  
22 claims of the '548 Patent.

23 44. In addition, upon information and belief, Defendant provides instructions,  
24 user guides, and/or other documentation to the infringing others regarding the use and  
25 operation of the Accused Products. When the others follow such instructions, user  
26 guides, and/or other documentation, they directly infringe one or more claims of the  
27 '548 Patent. By providing such instructions, user guides, and/or other documentation,  
28 Defendant knows and intends that those others will follow those instructions, user

1 guides, and other documentation, and thereby directly infringe one or more claims of  
2 the '548 Patent. Defendant thus knows that its actions actively induce infringement.

3 45. The Accused Products have no substantial non-infringing uses and are a  
4 material part of the invention. As described in Exhibit D, any manufacture, use, sale  
5 offer for sale or importation in or into the United States of an Accused Product or a  
6 downstream product incorporating an Accused Product infringes the '548 patent. The  
7 Accused Products are electronic devices that incorporate semiconductor devices and  
8 integrated circuits that provide vital functionality to the Accused Products. The  
9 Accused Products cannot be used without such semiconductor devices and integrated  
10 circuits. Thus, the Accused products have no substantial non-infringing uses.

11 46. Defendant has had knowledge of the '548 Patent since at least as of  
12 receiving a letter to VIZIO dated February 8, 2019.

13 47. Defendant's continued infringement of the '548 Patent has damaged and  
14 will continue to damage Plaintiff.

15 48. Plaintiff is entitled to recover damages adequate to compensate it for  
16 Defendant's infringement.

17 **COUNT IV**  
18 **(Defendant's Willful Infringement of the '548 Patent)**

19 49. Plaintiff incorporates the allegations of all of the foregoing paragraphs as  
20 if fully restated herein.

21 50. Defendant has infringed and/or does willfully infringe the '548 Patent.

22 51. Defendant received actual notice of the '548 Patent at least as early as  
23 February 2019 by way of a letter to VIZIO dated February 8, 2019. After receiving  
24 such actual notice of the '548 Patent, Defendant proceeded to make, use, test, sell,  
25 and/or offer to sell in this District and elsewhere in the United States, and import into  
26 this District and elsewhere in the United States, the Accused Products including the  
27 Exemplary Products.

28 52. On information and belief, despite Defendant's pre-suit knowledge,

1 Defendant acted egregiously in that it did nothing to avoid infringement and, upon  
2 information and belief, continued to develop, make, use, sell, offer for sale, import,  
3 and/or market future products that infringe the '548 Patent. Defendant knew and  
4 should have known that its actions would cause direct and indirect infringement of  
5 the '548 Patent.

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8 **PRAYER FOR RELIEF**

9 53. WHEREFORE, Plaintiff respectfully requests the following relief:

- 10 a) A judgment that the Asserted Patents are valid and enforceable;
- 11 b) A judgment that Defendant has infringed, directly and indirectly, either  
12 literally or under the Doctrine of Equivalents, one or more claims of the  
13 '226 Patent;
- 14 c) A judgment that Defendant's infringement of the '226 Patent was willful,  
15 and that Defendant's continued infringement of the '226 Patent is willful;
- 16 d) A judgment that Defendant has infringed, directly and indirectly, either  
17 literally or under the Doctrine of Equivalents, one or more claims of the  
18 '548 Patent;
- 19 e) A judgment that Defendant's infringement of the '548 Patent was willful,  
20 and that Defendant's continued infringement of the '548 Patent is willful;
- 21 f) An injunction against Defendant, its officers, agents, servants, employees,  
22 all parent and subsidiary entities, all assignees and successors in interest,  
23 and those persons or entities acting in concert or participation with  
24 Defendant, including distributors, enjoining them from further  
25 infringement of the Asserted Patents;
- 26 g) A judgment that awards Plaintiff all appropriate damages under 35 U.S.C.  
27 § 284 for Defendant's past infringement, and any continuing or future  
28 infringement of the Asserted Patents, including pre or post judgment

1 interest, costs, and disbursements as justified under 35 U.S.C. § 284 and,  
2 if necessary to adequately compensate Plaintiff for Defendant’s  
3 infringement, an accounting:

- 4 i. that Plaintiff be awarded enhanced damages by reason of the
- 5 Defendant’s willful infringement of the ’226 Patent;
- 6 ii. that Plaintiff be awarded enhanced damages by reason of the
- 7 Defendant’s willful infringement of the ’548 Patent;
- 8 iii. that this case be declared exceptional within the meaning of 35
- 9 U.S.C. § 285 and that Plaintiff be awarded its reasonable
- 10 attorneys’ fees against Defendant incurred in prosecuting this
- 11 action;
- 12 iv. that Plaintiff be awarded costs and expenses incurred in
- 13 prosecuting this action; and

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

16 **DEMAND FOR JURY TRIAL**

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

19 Dated: February 14, 2019

Respectfully submitted,

21 **MINTZ LEVIN COHN FERRIS**  
22 **GLOVSKY AND POPEO, P.C.**

23 */s/ Stephen J. Akerley*

24 **By: Stephen J. Akerley**

25 OF COUNSEL:  
26 Michael T. Renaud  
27 James M. Wodarski  
28 Michael J. McNamara  
William Meunier  
Samuel F. Davenport

1 Adam S. Rizk  
2 Marguerite McConihe  
3 Catherine Xu  
4 Serge Subach  
5 MINTZ LEVIN COHN FERRIS  
6 GLOVSKY AND POPEO PC  
7 One Financial Center  
8 Boston, MA 02111  
9 617-542-6000  
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