

2. Defendants manufactured, provided, used, sold, offered for sale, imported, and/or distributed infringing products and services, and encouraged others to use their products and services in an infringing manner, as set forth herein.

3. Plaintiff seeks past damages and prejudgment and post-judgment interest for Defendants' infringement of the Asserted Patents, as defined below.

II. PARTIES

4. Plaintiff Katana Silicon Technologies LLC is a limited liability company organized and existing under the laws of the State of Texas, with its principal place of business located at 5204 Bluewater Drive, Frisco, Texas 75036.

5. Katana is the owner of the entire right, title, and interest in the Asserted Patents, as defined below, including the right to sue for and collect all damages and to seek and obtain any other relief for infringement.

6. On information and belief, Defendant GlobalFoundries, Inc. is a Cayman Islands non-resident corporation with a registered legal address at P.O. Box 309, Uglund House, George Town KY1-1104, Cayman Islands.

7. Defendant GlobalFoundries U.S. Inc., a subsidiary of GlobalFoundries, Inc., is a Delaware corporation with a regular and established physical place of business at Travis Oaks, 5113 Southwest Parkway, Suite 300, Austin, TX 78735. GlobalFoundries U. S. Inc. is registered to transact business in the State of Texas and may be served through its registered agent Corporation Service Company d/b/a CSC-Lawyers Incorporating Service Company, at 211 E. 7th Street, Suite 620, Austin, TX 78701-3218.

8. Defendant GlobalFoundries U.S. 2 LLC, a subsidiary of GlobalFoundries U.S. Inc., is a Delaware limited liability company with a principal place of business at Santa Clara Gateway, 2600 Great America Way, Santa Clara, California 95054. GlobalFoundries U.S. 2 LLC maintains a physical place of business at Travis Oaks, 5113 Southwest Parkway, Suite 300, Austin, Texas 78735. GlobalFoundries U.S. 2 LLC is registered to transact business in the State of Texas and may be served through its registered agent for service of process in Texas, Corporation Service Company d/b/a CSC—Lawyers Incorporating Service Company, 211 East 7th Street, Suite 620, Austin, Texas 78701-3218.

III. JURISDICTION AND VENUE

9. This is an action for patent infringement, which arises under the patent laws of the United States; in particular, 35 U.S.C. §§ 271, 281, 283, 284, and 285.

10. This Court has exclusive jurisdiction over the subject matter of this action under 28 U.S.C. §§ 1331, 1332, and 1338(a).

11. This Court has personal jurisdiction over Defendants in this action pursuant to due process and/or the Texas Long Arm Statute, by virtue of at least the substantial business the Defendants conducts in this forum.

12. Defendants have committed acts of infringement in this District directly and through third parties by, among other things, making, selling, advertising (including through websites), offering to sell, distributing, and/or importing products and/or services that have infringed and continue to infringe the Asserted Patents as defined below.

13. Defendants have, directly or through their distribution network, purposefully and voluntarily placed infringing products in the stream of commerce knowing and expecting them to be purchased and used by consumers in Texas.

14. Defendants have committed direct infringement in Texas.

15. Defendants have committed indirect infringement based on acts of direct infringement in Texas.

16. Defendants have transacted, and as of the time of filing of the Complaint, continue to transact business, within this District.

17. Defendants derive substantial revenues from their infringing acts in this District, including from their manufacture and sale of infringing products in the United States.

18. Defendants have had at least one regular and established place of business in this District since at least 2009, including a regional office and design center located at Travis Oaks, 5113 Southwest Parkway, Suite 300, Austin, Texas 78735.

19. Venue is proper against Defendants in this District pursuant to 28 U.S.C. § 1400(b) because Defendants have a regular and established place of business and have committed acts of infringement in this District. Defendants' presence in this District is substantial, including at least at their regional office and design center located in Austin, Texas.

20. Additionally, Defendants—directly or through intermediaries (including distributors, retailers, and others), subsidiaries, alter egos, and/or

agents—have made, shipped, distributed, offered for sale, and/or sold their products in the United States and this District. Defendants have purposefully and voluntarily placed one or more of their products into the stream of commerce that infringed the Asserted Patents (as defined below) with the awareness and/or intent that the products would be purchased by consumers and businesses in this District. Defendants knowingly and purposefully shipped infringing products into, out of, and within, this District through an established distribution channel. These infringing products have been purchased by consumers and businesses in this District.

21. Venue is likewise convenient and appropriate for Defendants in this District and Division, as evidenced in part by GlobalFoundries U.S. Inc. filing at least 13 patent cases, against various defendants such as Google, TSMC, and Avnet, in the Waco Division of the Western District of Texas in 2019.

IV. COUNTS OF PATENT INFRINGEMENT

22. Plaintiff alleges that Defendants have infringed the following United States patents (collectively, the “Asserted Patents”):

United States Patent No. 6,291,861 (the “861 Patent”) (Exhibit A); and
United States Patent No. 7,402,903 (the “903 Patent”) (Exhibit B).

COUNT ONE **INFRINGEMENT OF U.S. PATENT 6,291,861**

23. Plaintiff incorporates by reference the allegations in all preceding paragraphs as if fully set forth herein.

24. The ’861 Patent, entitled “SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THE SAME,” was filed on June 30, 1999 and

duly and legally issued by the United States Patent and Trademark Office on September 18, 2001.

25. The '861 Patent is directed to patent-eligible subject matter and is valid and enforceable, although it expired on or about June 30, 2019.

Technical Description and Background

26. The '861 Patent is directed to a semiconductor device and a method of manufacturing such a semiconductor device, in which the source/drain region of the semiconductor occupies a smaller area than that of a conventional semiconductor device in order to overcome problems in the prior art, such as low yield and “parasitic capacitance and parasitic resistance.” '861 Patent at 1:7–11.

27. As the '861 Patent explains, prior art field effect transistors (FETs) were “more susceptible to problems such as fluctuation in the threshold voltage due to variation in the gate length caused by processing variation, an increased off-leak current due to deterioration of subthreshold characteristics, and deterioration of transistor characteristics due to short channel effects, e.g., so-called punch-through.” '861 Patent at 1:13–19. Known methods to reduce “the junction depth of the source/drain regions adjoining a channel region of a transistor” could be realized with “a structure in which source/drain regions (stacked diffusion layers) are stacked on both sides of a gate electrode so as to be located above the channel region via gate electrode lateral wall insulation films.” '861 Patent at 1:21–27. These known

methods, however, resulted in problems such as low yield “due to vertical stagger or protrusion of the gates.” ’861 Patent at 10:20–29.

28. To overcome these problems, the ’861 Patent utilizes “a device separation region and an active region,” which includes “a gate oxide film, a source/drain region, and an electrode which is electrically coupled to the source/drain region, wherein the active region is in contact with the gate oxide film at a first face, a portion of the source/drain regions being located above the first face; and wherein the electrode is in contact with the source/drain region at a second face, the second face constituting an angle with respect to the first face.” ’861 Patent at 2:13–22. In other words, the gate electrode and the source/drain regions “are formed so as to cover both the active region [] and a portion of the device separation regions [] in such a manner as to conceal any stagger between the device separation regions [] and the active region [],” resulting in substantial elimination of low yield. ’861 Patent at 10, 14–22.

29. The ’861 Patent explains that, because each source/drain region “has a surface area which is larger than the area which is occupied by the source/drain region [] on the active region surface,” the semiconductor device “has a smaller contact resistance between the source/drain region [] and the upper wiring than that of a conventional semiconductor device” and thus, “for the same contact hole [] diameter, the semiconductor device [] can provide a reduced contact resistance between the source/drain region [] and any upper wiring.” ’861 Patent at 10:60–11:3. Because of this reduction in the junction area between each source/drain region and

the semiconductor substrate, “the occupied area, the parasitic capacitance (junction capacitance), and the parasitic resistance can be reduced without increasing the contact resistance,” whereby “a very large transconductance can be obtained.” ’861 Patent at 11:9–19.

Direct Infringement

30. Defendants without authorization or license from Plaintiff, have directly infringed the ’861 Patent, either literally or equivalently, as infringement is defined by 35 U.S.C. § 271, including through making, using (including for testing purposes), designing, manufacturing, importing, distributing, selling, and offering for sale electronic devices and products that infringe one or more claims of the ’861 Patent. Defendants are thus liable for direct infringement pursuant to 35 U.S.C. § 271.

31. Exemplary infringing products and fabrication technologies include but are not limited to integrated circuit devices and similar products made using Defendants’ 14 nm node LPP FinFET, 12 nm node LP FinFET, and 12 nm node LP+ FinFET processes in which a slanted raised source/drain (S/D) is formed, which partially overlaps the isolation region for reducing the parasitic resistance at reduced device area, hereinafter “’861 Accused Products.”

32. Plaintiff names these exemplary infringing instrumentalities to serve as notice of Defendants’ infringing acts, but Plaintiff reserves the right to name additional infringing products or fabrication technologies, known to or learned by Plaintiff or revealed during discovery, and include them more specifically in the definition of ’861 Accused Products.

33. As a specific, nonlimiting example, Defendants are liable for direct infringement pursuant to 35 U.S.C. § 271 for the manufacture, sale, offer for sale, importation, or distribution of integrated circuit devices made using the 14 nm node LPP FinFET process, for example, in AMD’s RADEON RX 480, hereinafter “’861 Exemplary Accused Product.” The ’861 Exemplary Accused Product meets all limitations of at least claim 1 of the ’861 Patent, either literally or under the doctrine of equivalents.

34. The ’861 Exemplary Accused Product is a semiconductor device (A) comprising a device separation region (B) and an active region (C):

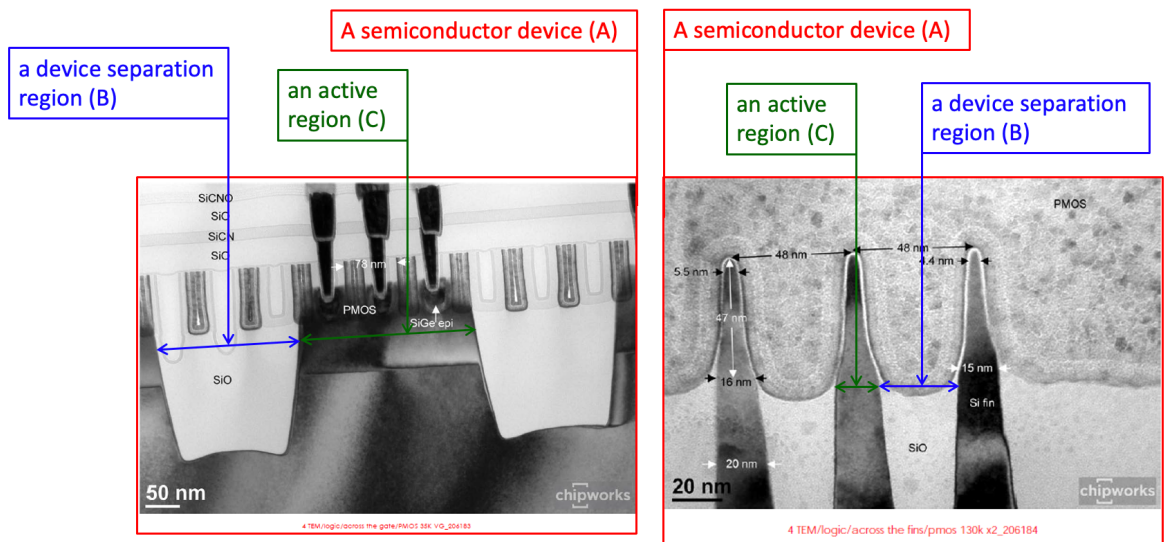
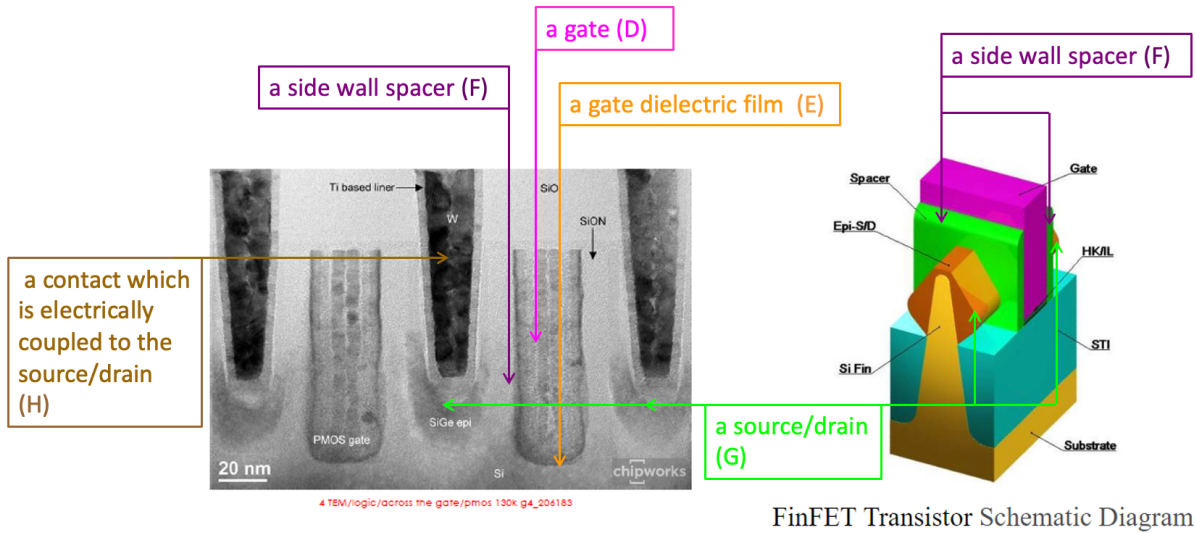


Fig 1: Cross-Sectional TEM Image of a PMOS Transistor along a FIN (Left), and perpendicular to FIN (Right)

35. The ’861 Exemplary Accused Product is a semiconductor device including a gate (D) having a gate dielectric film (E) and a side wall spacer (F), a source/drain (G), and a contact which is electrically coupled to the source/drain (H):



FinFET Transistor Schematic Diagram

Fig 2: Cross-Sectional TEM Image of a PMOS Transistor(Left), and Bird's Eye View (Right) of FINFET

36. The '861 Exemplary Accused Product is a semiconductor device wherein the active region is in contact with the gate dielectric film at a surface of the active region coincident with a first surface (I), a portion of the source/drain being located above the first surface (J):

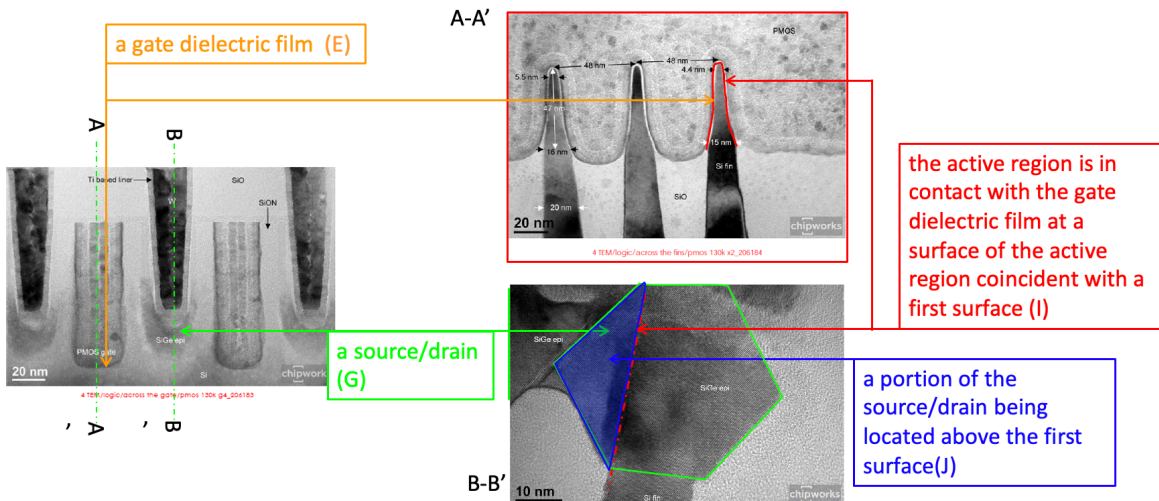
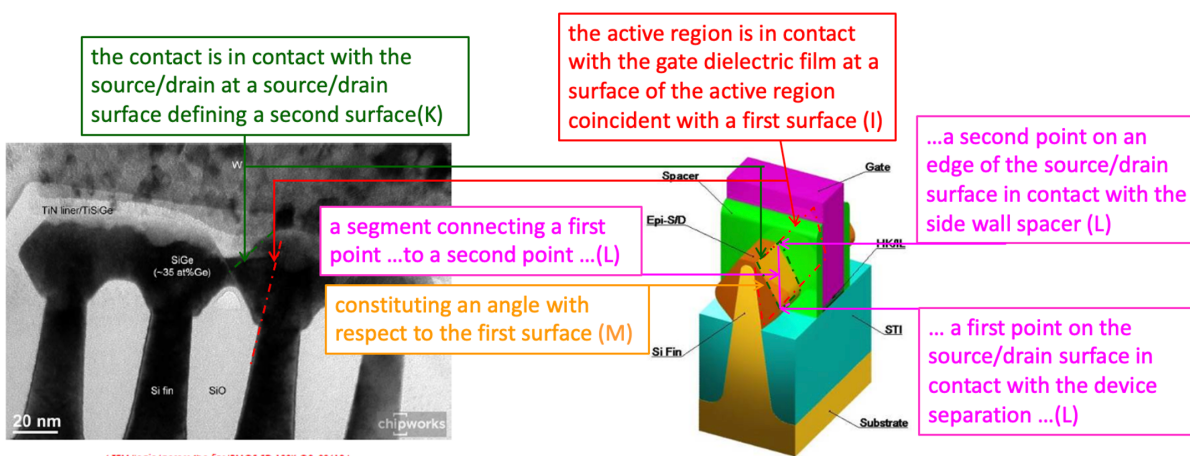


Fig 3: Cross-Sectional TEM Image of a PMOS Transistor along a FIN (Left), and perpendicular to FIN under Gate Electrode (Right-Upper), under Contact (Right-Lower)

37. The '861 Exemplary Accused Product is a semiconductor device wherein the contact is in contact with the source/drain at a source/drain surface defining a second surface (K), the second surface passing through a segment connecting a first point on the source/drain surface in contact with the device separation region to a second point on an edge of the source/drain surface in contact with the side wall spacer (L), constituting an angle with respect to the first surface (M):



FinFET Transistor Schematic Diagram

Fig 4: Cross-Sectional TEM Image of a PMOS Contact and Bird's Eye View of FINFET

Willful Infringement

38. Defendants have had actual knowledge of the '861 Patent and their infringement thereof at least as of receipt of Plaintiff's notice letter dated May 28, 2018.

39. Defendants have numerous lawyers and other active agents of Defendants who regularly review patents and published patent applications relevant to technology in the fields of the Asserted Patents.

40. Defendants have been issued over 10,000 patents held in the name of the Defendants or a related entity, many of which are patents prosecuted in the

USPTO in the same technology area as the '861 Patent, giving Defendants intimate knowledge of the art in fields relevant to this civil action. The timing, circumstances and extent of Defendants obtaining actual knowledge of the '861 Patent prior to the commencement of this lawsuit will be confirmed during discovery.

41. Defendants' infringement of the Asserted Patents was either known or was so obvious that it should have been known to Defendants.

42. Notwithstanding this knowledge, Defendants knowingly or with reckless disregard infringed the '861 Patent. Defendants continued to commit acts of infringement despite being on notice of infringement and aware of an objectively high likelihood that their actions constituted infringement of Plaintiff's valid patent rights, either literally or equivalently.

43. Defendants are therefore liable for willful infringement, and Plaintiff accordingly seeks enhanced damages pursuant to 35 U.S.C. §§ 284 and 285.

Indirect, Induced, and Contributory Infringement

44. Defendants, directly and/or through their subsidiaries, affiliates, agents, and/or business partners, committed acts of indirect infringement of at least one claim of the '861 Patent, pursuant to 35 U.S.C. §§ 271(b) and (c) by actively inducing or contributing to the acts of direct infringement performed by others in the United States, the State of Texas, and the Western District of Texas.

45. Defendants, through affirmative acts, induced their distributors, manufacturers, testers, customers, and/or end users, such as designers and end users of integrated circuit devices and similar products made using Defendants' 14 nm node

LPP FinFET process, to directly infringe the '861 Patent by making, using, selling, and/or importing the '861 Accused Products, with the specific intent to induce acts constituting infringement, and knowing that the induced acts constitute patent infringement, either literally or equivalently.

46. Defendants knowingly contributed to direct infringement by their customers through affirmative acts and by having made, imported, sold, and/or offered for sale, and knowingly making, importing, selling, and/or offering to sell within the United States the '861 Accused Products which are not suitable for substantial non-infringing use and which are especially made or especially adapted for use by their customers in an infringement of the '861 Patent.

47. The affirmative acts of inducement by Defendants included, but were not limited to, any one or a combination of: (i) designing infringing chips for manufacture according to specification; (ii) collaborating on and/or funding the development of the infringing chips and/or technology; (iii) soliciting and sourcing the manufacture of infringing chips; (iv) licensing and transferring technology and know-how to enable the manufacture of infringing chips; (v) enabling and encouraging the use, sale, or importation of infringing chips by its customers; (vi) advertising the infringing chips and/or technology; and (vii) providing data sheets, technical guides, demonstrations, software and hardware specifications, installation guides, product specifications, user manuals, marketing materials, and instructions, including on Defendants' website.

48. Defendants contributed to the direct infringement of the '861 Patent by their customers, and other third parties; and Defendants, their customers, and other third parties directly infringed.

49. Defendants imported, exported, made and/or sold parts, components, or intermediate products to customers and third parties that, once assembled, infringed the '861 Patent by the sale and/or use of the assembled memories and/or devices.

50. Defendants made, used, sold, and/or offered to sell infringing devices and/or memory products, which are especially made to design and specification, and are not staple products or commodities with substantial non-infringing use.

51. Defendants knew that the induced conduct would constitute infringement and intended that infringement at the time of committing the aforementioned acts, such that the acts and conduct were committed with the specific intent to induce infringement, or to deliberately avoid learning of the infringing circumstances at the time of committing these acts so as to be willfully blind to the infringement that was induced.

52. As a result of Defendants' infringement, Plaintiff has suffered monetary damages, and is entitled to an award of damages adequate to compensate it for such infringement which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

53. Plaintiff has incurred substantial damages, including monetary damages.

54. Therefore, Plaintiff is entitled to actual and/or compensatory damages, reasonable royalties, pre-judgment and post-judgment interest, enhanced damages, and costs.

COUNT TWO
INFRINGEMENT OF U.S. PATENT 7,402,903

55. Plaintiff incorporates by reference the allegations in all preceding paragraphs as if fully set forth herein.

56. The '903 Patent, entitled "SEMICONDUCTOR DEVICE," was filed on January 20, 2004 and duly and legally issued by the United States Patent and Trademark Office on July 22, 2008.

57. The '903 Patent is directed to patent-eligible subject matter and is valid and enforceable.

Technical Description and Background

58. The '903 Patent is directed to "a semiconductor device having through plugs, [and] more particularly, to a semiconductor device in which highly reliable through plugs are formed with good productivity." '903 Patent at 1:14–17.

59. The '903 Patent explains that demand for downsized electronic components, such as a stacked-type semiconductor device (multichip device), was increasing due to the popularity of smaller and lighter electronic equipment such as portable and mobile devices. '903 Patent at 1:14–17. A multichip device having a three-dimensionally stacked structure would typically include through plugs formed through semiconductor substrates to electrically connect a face of the semiconductor substrate in which elements are formed to a rear face side. '903 Patent at 1:27–34.

60. The prior art methods of forming a through plug failed to disclose the “measures [that] should be taken in consideration of productivity and reliability when patterns of insulating materials of various kinds, lower layer metal wiring, diffusion layers, and so on are formed on the substrate in which the through hole is to be formed.” ’903 Patent at 1:42–47. Moreover, when a through plug was formed by reactive ion etching (RIE) in a location where the shallow trench isolation (STI) film and the dummy diffusion layers exist, a constant etching speed could not be maintained in the hole, and “the resultant shape [was] inferior as the through plug, which cause[d] a defect in terms of reliability in vertical electrical joint for stacking the semiconductor devices.” ’903 Patent at 3:46–4:16.

61. The ’903 Patent describes a manufacturing process for a semiconductor device that solves these and other productivity and throughput issues that existed in the prior art. For example, the ’903 Patent discloses fabricating a semiconductor device wherein the through plug is formed either with a side surface surrounded by one of the diffusion layer patterns and without being in contact with the insulation film, or with a side surface surrounded by the insulation film without being in contact with the diffusion layer patterns. ’903 Patent at 4:17–46. Both of these configurations result in higher productivity given that the etching speed may be maintained at a constant speed in the through hole, thus “realizing processing with high shape controllability.” ’903 Patent at 4:17–46.

Direct Infringement

62. Defendants, without authorization or license from Plaintiff, have directly infringed and continue to directly infringe the '903 Patent, either literally or equivalently, as infringement is defined by 35 U.S.C. § 271, including through making, using (including for testing purposes), designing, manufacturing, importing, distributing, selling, and offering for sale electronic devices and products that were made using fabrication methods and techniques that infringed one or more claims of the '903 Patent. Defendants are thus liable for direct infringement pursuant to 35 U.S.C. § 271.

63. Exemplary infringing products include but are not necessarily limited to the GlobalFoundries 32 nm controller, found at least inside the Micron MT43A4G40200NFA-S15 ES A HMC, and other products made, imported, or sold by GlobalFoundries employing substantially the same TSV structure ("903 Accused Products").

64. Plaintiff names these exemplary infringing instrumentalities to serve as notice of Defendant's infringing acts, but Plaintiff reserves the right to name additional infringing products, known to or learned by Plaintiff or revealed during discovery, and include them more specifically in the definition of '903 Accused Products.

65. As a specific, nonlimiting example, Defendants are liable for direct infringement pursuant to 35 U.S.C. § 271 for the manufacture, sale, offer for sale, importation, or distribution of integrated circuit devices as shown in the

GlobalFoundries 32 nm controller inside the Micron MT43A4G40200NFA-S15 ES A HMC product, hereinafter “’903 Exemplary Accused Product.” The ’903 Exemplary Accused Product is made by a method that meets all limitations of at least claim 8 of the ’903 Patent, either literally or under the doctrine of equivalents.

66. The ’903 Exemplary Accused Product is a semiconductor device comprising a semiconductor substrate (A); a plurality of diffusion layer patterns (B) formed on the semiconductor substrate; an insulation film formed between the diffusion layer patterns (C) on the semiconductor substrate to isolate the diffusion layer patterns from one another:

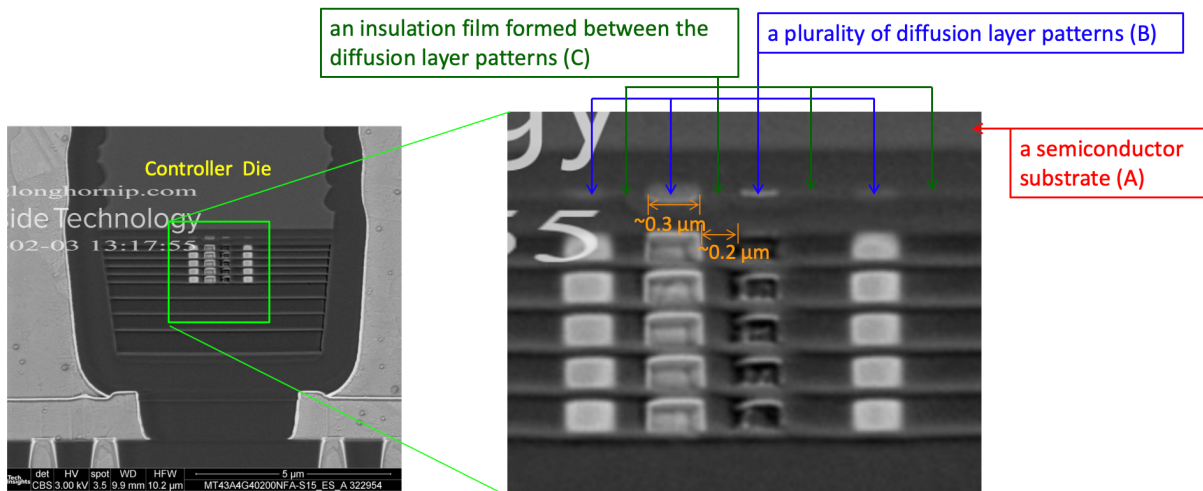


Fig 1-1: Cross-Sectional SEM Images of the Controller Device

67. The ’903 Exemplary Accused Product is a semiconductor device comprising a pattern portion (D) formed above the diffusion layer patterns and/or the insulation film, the pattern portion using as a material thereof one kind selected from a group consisting of aluminum (Al), tungsten (W), titanium (Ti), copper (Cu), tantalum (Ta), and a chemical compound composed of at least one metal out of

aluminum (Al), tungsten (W), titanium (Ti), copper (Cu), and tantalum (Ta) (E):

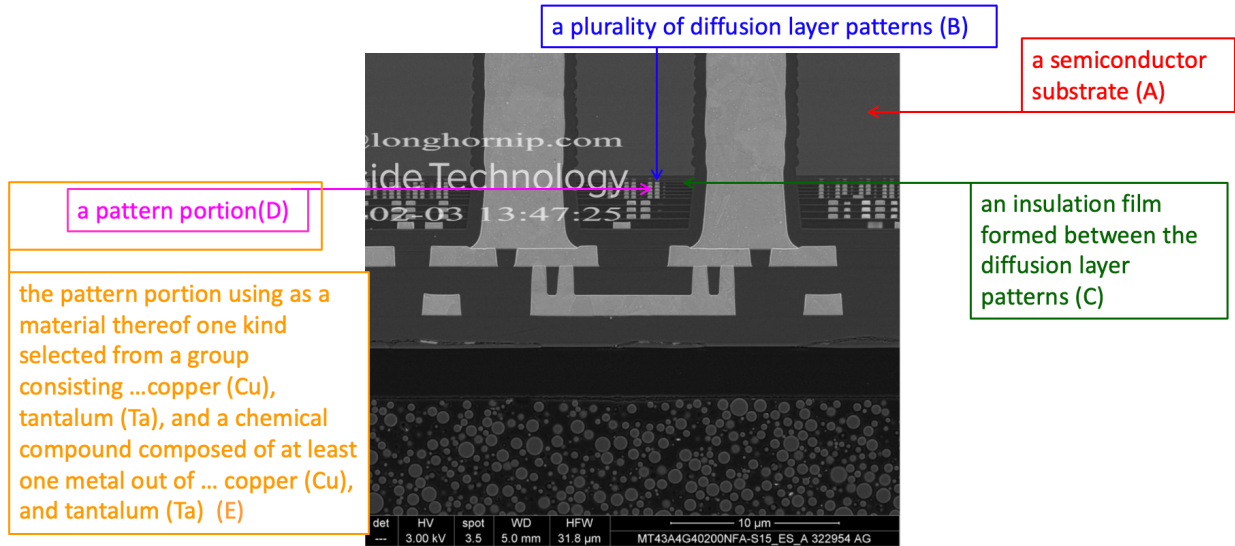


Fig 2: Cross-Sectional SEM Image of TSVs in the Controller Die

68. The '903 Exemplary Accused Product is a semiconductor device comprising a through plug (F) formed to have a side surface being in contact with the insulation film (G), the side surface being surrounded by the insulation film without being in contact with the diffusion layer patterns (H), and to pass through the insulation film and the semiconductor substrate (I):

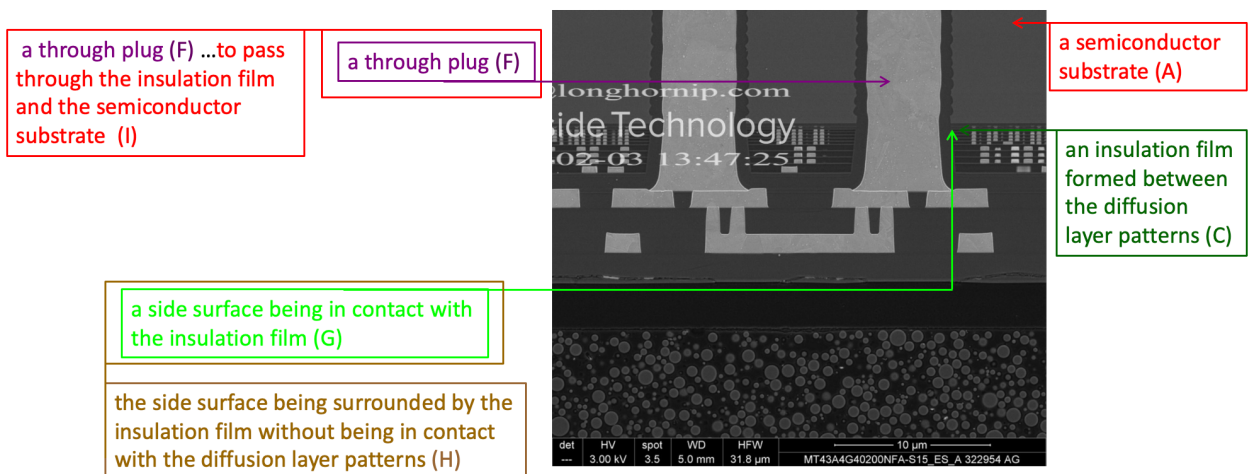


Fig 3: Cross-Sectional SEM Image of TSVs in the Controller Die

69. The '903 Exemplary Accused Product is a semiconductor device comprising a through plug (F) that is partly surrounded by the pattern portion above the diffusion layer patterns and/or the insulation (J):

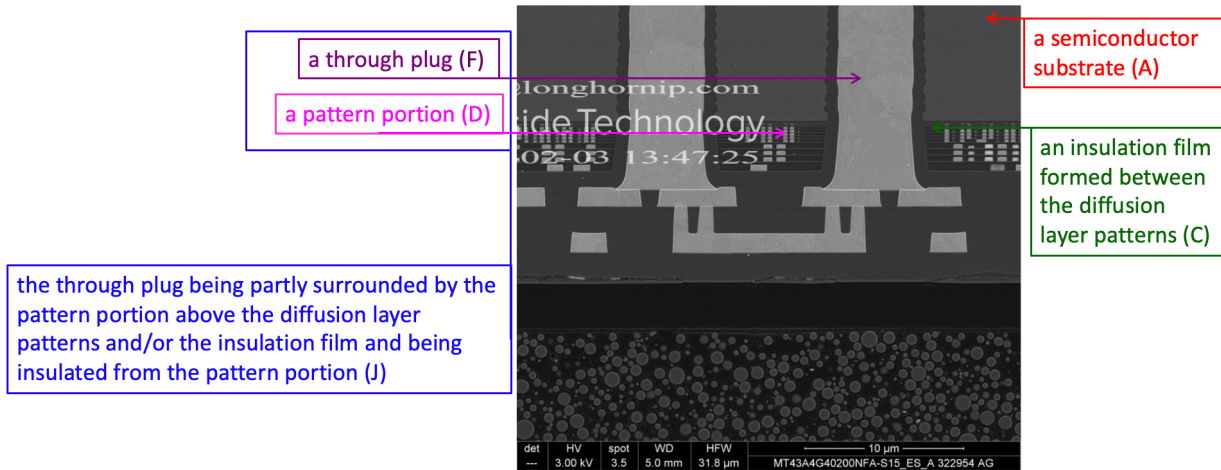


Fig 4: Cross-Sectional SEM Image of TSVs in the Controller Die

Willful Infringement

70. Defendants have had actual knowledge of the '903 Patent and its infringement thereof at least as of receipt of Plaintiff's notice letter dated January 28, 2021.

71. Defendants have numerous lawyers and other active agents who regularly review patents and published patent applications relevant to the technology in the fields of the Asserted Patents.

72. Defendants have been issued over 10,000 patents held in the name of the Defendants or a related entity, many of which are patents prosecuted in the USPTO in the same technology area as the '903 Patent, giving Defendants intimate knowledge of the art in fields relevant to this civil action. The timing, circumstances

and extent of Defendants obtaining actual knowledge of the '903 Patent prior to the commencement of this lawsuit will be confirmed during discovery.

73. Defendants' infringement of the Asserted Patents was either known or was so obvious that it should have been known to Defendants.

74. Notwithstanding this knowledge, Defendants have knowingly or with reckless disregard continued to infringe the '903 Patent. Defendants have continued to commit acts of infringement despite being on notice of an objectively high likelihood that their actions constitute infringement of Plaintiff's valid patent rights, either literally or equivalently.

75. Defendants are therefore liable for willful infringement and Plaintiff accordingly seeks enhanced damages pursuant to 35 U.S.C. §§ 284 and 285.

Indirect, Induced, and Contributory Infringement

76. Defendants, directly and/or through their subsidiaries, affiliates, agents, and/or business partners, have committed and continue to commit acts of indirect infringement of at least one claim of the '903 Patent, pursuant to 35 U.S.C. §§ 271(b) and (c) by actively inducing or contributing to the acts of direct infringement performed by others in the United States, the State of Texas, and the Western District of Texas.

77. Defendants through affirmative acts have induced their distributors, manufacturers, testers, customers, and/or end users, such as designers and end users of integrated circuit devices and products made using Defendants' 32 nm controller and products employing substantially the same TSV structure, to directly infringe

the '903 Patent by making, using, selling, and/or importing the '903 Accused Products, with the specific intent to induce acts constituting infringement, and knowing that the induced acts constitute patent infringement, either literally or equivalently.

78. Defendants have knowingly contributed to direct infringement by their customers through affirmative acts and by having imported, made, sold, and/or offered for sale, and knowingly importing, making, selling, and/or offering to sell within the United States the '903 Accused Products which are not suitable for substantial non-infringing use and which are especially made or especially adapted for use by their customers in an infringement of the '903 Patent.

79. The affirmative acts of inducement by Defendants include, but are not limited to, any one or a combination of: (i) designing infringing chips for manufacture according to specification; (ii) collaborating on and/or funding the development of the infringing chips and/or technology; (iii) soliciting and sourcing the manufacture of infringing chips; (iv) licensing and transferring technology and know-how to enable the manufacture of infringing chips; (v) enabling and encouraging the use, sale, or importation of infringing chips by its customers; (vi) advertising the infringing chips and/or technology; and (vii) providing data sheets, technical guides, demonstrations, software and hardware specifications, installation guides, product specifications, user manuals, marketing materials, and instructions.

80. Defendants have contributed to the direct infringement of the '903 Patent by their customers, and other third parties; and Defendants, their customers, and other third parties have directly infringed.

81. Defendants have imported, exported, made and/or sold parts, components, or intermediate products to customers and third parties that, once assembled, infringe the '903 Patent by the sale and/or use of the assembled memories and/or devices.

82. Defendants have made, used, sold, and/or offered to sell infringing semiconductor devices and/or memory products, which are especially made to design and specification, and are not staple products or commodities with substantial non-infringing use.

83. Defendants knew that the induced conduct would constitute infringement and intended that infringement at the time of committing and continuing to commit the aforementioned acts, such that the acts and conduct have been committed with the specific intent to induce infringement, or to deliberately avoid learning of the infringing circumstances at the time of committing these acts so as to be willfully blind to the infringement that was induced.

84. As a result of Defendants' infringement, Plaintiff has suffered monetary damages and is entitled to an award of damages adequate to compensate it for such infringement which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

85. Plaintiff has incurred and will continue to incur substantial damages, including monetary damages.

86. Therefore, Plaintiff is entitled to actual and/or compensatory damages, reasonable royalties, pre-judgment and post-judgment interest, enhanced damages, and costs.

V. NOTICE

87. Plaintiff has complied with the notice requirement of 35 U.S.C. § 287 and has not distributed, sold, offered for sale, or made products embodying the Asserted Patents. This notice requirement has been complied with by all relevant persons at all relevant times.

88. Defendants have had actual knowledge of the Asserted Patents and their infringement thereof at least as of receipt of Plaintiff's notice letters dated May 18, 2018 and January 28, 2021.

VI. JURY DEMAND

89. Plaintiff demands a trial by jury of all matters to which it is entitled to trial by jury, pursuant to FED. R. CIV. P. 38.

VII. PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays for judgment and seeks relief against Defendants as follows:

- A. That the Court determine that one or more claims of the '861 Patent has been infringed by Defendants, literally and/or under the doctrine of equivalents;
- B. That the Court determine that one or more claims of the '903 Patent has been and continues to be infringed by Defendants, literally and/or under the doctrine of equivalents;

- C. That the Court determine that one or more claims of the '861 Patent has been indirectly infringed by Defendants;
- D. That the Court determine that one or more claims of the '903 Patent has been and continues to be indirectly infringed by Defendants;
- E. That the Court award damages adequate to compensate Plaintiff for the patent infringement that has occurred, together with prejudgment and post-judgment interest and costs;
- F. That the Court find this case to be exceptional pursuant to 35 U.S.C. § 285;
- G. That the Court determine that Defendants' infringements have been willful;
- H. That the Court award enhanced damages against Defendants pursuant to 35 U.S.C. § 284;
- I. That the Court award Plaintiff its reasonable attorneys' fees; and
- J. That the Court award such other relief to Plaintiff as the Court deems just and proper.

VIII. RESERVATION OF RIGHTS

Plaintiff's investigation is ongoing, and certain material information remains in the sole possession of Defendants or third parties, which will be obtained via discovery herein. Plaintiff expressly reserves the right to amend or supplement the causes of action set forth herein in accordance with FED. R. CIV. P. 15.

Dated: February 24, 2022

Respectfully submitted,

/s/ Scott W. Breedlove

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