

600, Novi, Michigan, 48375.

4. Upon information and belief, Defendant Microchip Technology, Inc. is a Delaware corporation with a principal place of business at 80 Arkay Drive, Suite 100, Hauppauge, New York 11788. Upon information and belief, Microchip Technology, Inc. may be served with process by serving its agent for service of process, The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801.

5. Defendant Microsemi Corporation is owned by Defendant Microchip Technology, Inc. Upon information and belief, Defendant Microsemi Corporation is a Delaware corporation with a principal place of business at One Enterprise, Aliso Viejo, CA 92656. Upon information and belief, Microsemi Corporation may be served with process by serving its agent for service of process, United States Corporation Company, 251 Little Falls Drive, Wilmington, Delaware 19808.

6. On May 29, 2018, Microchip announced that it had completed its acquisition of Microsemi.

JURISDICTION

7. This is an action for patent infringement arising under the patent laws of the United States of America, more specifically under 35 U.S.C. § 1, *et seq.*, including 35 U.S.C. §271. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

8. This Court has personal jurisdiction over Defendants because Defendants, among other things, conduct business in, and avail themselves of the laws of, the State of New York. Upon information and belief, Defendant Microchip Technology has a physical place of business in this District. In addition, upon information and belief, Defendants through their own acts and/or through the acts of their affiliated companies (acting as its agents or alter egos) make, use, offer to sell, sell (directly or through intermediaries), import, license and/or supply, in this District and elsewhere in the United States, the Accused Products (as defined below), through regular distribution channels, knowing such products would be used, offered for sale and/or sold in this District. Plaintiff's cause of action arises directly from Defendants' business contacts and other

activities in the State of New York and in this District.

VENUE

9. Venue properly lies within this judicial District and division, pursuant to 28 U.S.C. §§ 1391(b), (c), and (d), and 1400(b).

10. Upon information and belief, this District is where Defendants have committed acts of infringement. Defendant Microchip has a regular and established place of business at 80 Arkay Drive, Suite 100, Hauppauge, New York 11788. Defendant Microsemi has a regular and established place of business at 80 Arkay Drive, Suite 100, Hauppauge, New York 11788, and Microsemi lists this location on its website. (**Exhibit N**). For the additional reasons set forth below, in the Section “General Allegations,” venue is proper in this District individually for both Defendant Microchip and Defendant Microsemi. Defendants conduct substantial business directly and/or through third parties or agents in this District by selling and/or offering to sell the Accused Products and/or by conducting other business in this District.

THE PATENTS-IN-SUIT

U.S. Patent No. 6,617,641

11. The ‘641 Patent, entitled “High Voltage Semiconductor Device Capable of Increasing a Switching Speed,” was duly and lawfully issued by the United States Patent and Trademark Office on September 9, 2003. The ‘641 Patent issued from U.S. Patent Application No. 10/059,186 filed on January 31, 2002 by inventors Akio Nakagawa and Tomoko Matsudai. A true and correct copy of the ‘641 Patent is attached hereto as **Exhibit A**.

12. The ‘641 Patent is valid and enforceable.

13. The ‘641 Patent is generally directed to a high voltage semiconductor device, such as an Insulated Gate Bipolar Transistor (IGBT).

14. Plaintiff is the assignee and the owner of all right, title and interest in and to the ‘641 Patent, and has the right to sue and recover damages for infringement thereof.

U.S. Patent No. 6,620,653

15. The ‘653 Patent, entitled “Semiconductor Device and Method of Manufacturing the

Same,” was duly and lawfully issued by the United States Patent and Trademark Office on September 16, 2003. The ‘653 Patent issued from U.S. Patent Application No. 09/961,361 filed on September 25, 2001 by inventors Tomoko Matsudai, Hidetaka Hattori, Akio Nakagawa. A true and correct copy of the ‘893 Patent is attached hereto as **Exhibit B**.

16. The ‘653 Patent is valid and enforceable.

17. The ‘653 Patent is generally directed to a high voltage semiconductor device such as an IGBT.

18. Plaintiff is the assignee and the owner of all right, title and interest in and to the ‘653 Patent, and has the right to sue and recover damages for infringement thereof.

GENERAL ALLEGATIONS

26. The Accused Products include at least Microsemi’s IGBT Power MOS 8 with PT and IGBT Power MOS 7 with PT devices (collectively defined as the “Accused Products”). As stated on Microsemi’s website with respect to some of the Accused Products and in Microsemi’s 2017 Annual Report, some of the Accused Products are designed for use in medical imaging, powertrain & EV charging, communications infrastructure systems, wireless and wired LAN systems, implantable pacemakers and defibrillators, radar systems, military and commercial satellites and aircraft, and enterprise storage and hyperscale data centers. Microsemi’s components are used in products that are manufactured and sold to the aerospace & defense, communications, data center, and industrial markets. These products are sold and/or offered for sale throughout the United States, including New York.

27. Defendants manufacture the Accused Products and directly, and/or through their affiliates, make, use, import, sell and offer to sell the same throughout the United States, including New York. Defendants also support and encourage others to import, use, offer for sale and sell throughout the United States, including New York, products incorporating the Accused Products as material components.

19. Defendant Microchip and Defendant Microsemi are each directly liable for all allegations of infringement set forth herein. Microchip is directly liable because, *inter alia*,

Microchip is the parent company of Microsemi, Microchip's leadership directly manages Microsemi, Microchip manages sales of Microsemi's products, Microchip handles all product and support for Microsemi's products, Microchip directly hires and fires employees at Microsemi, and Microchip has publicly announced that "Microsemi is Now Microchip."

28. Microchip owns and is the parent company of Microsemi by way of a 2018 acquisition.

29. Microchip's management directly manages Microsemi. Microchip's executive management is the same as Microsemi's executive management. Steve Sanghi is CEO of both Microchip and Microsemi; Ganesh Moorthy is President and COO of both Microchip and Microsemi; J. Eric Bjornholt is CFO of both Microchip and Microsemi; Mitch Little is VP of Sales and Apps of both Microchip and Microsemi; Lauren Carr is VP of human resources for both Microchip and Microsemi. (*Compare Exhibits F and Exhibit G*). Indeed, there are no Microsemi leadership positions that are not held by Microchip executives. Microchip publicly announced that Microchip replaced all leadership at Microsemi, and Microsemi is now led directly by Microchip's management. (**Exhibit H**).

30. Microchip manages sales of Microsemi's products, including the Accused Products (as defined below). All of the Sales Offices listed on Microsemi's website are staffed by Microchip employees, who have Microchip email addresses. (**Exhibit I**). Microsemi's LinkedIn page now directs all "product and support questions" to Microchip. (**Exhibit K**).

31. Microchip directly manages employment at Microsemi. The career section on Microsemi's website links visitors directly to Microchip's career page. Microchip's LinkedIn page lists 38 job postings to work within a Microsemi division. (**Exhibit J**). After the acquisition, Microsemi's website announced that "Microsemi is Now Microchip", indicated it would no longer publish content on the Microsemi LinkedIn page, and ceased updating the Microsemi blog. (**Exhibit K**).

32. Prior to commencing this action, North Plate's President corresponded with in-house counsel at Microchip, after North Plate sent a draft complaint for patent infringement to

both Defendants. That draft complaint named both Microchip and Microsemi as defendants. During those discussions, Microchip's in-house counsel purported to speak on behalf of both Microsemi and Microchip, and never indicated that they were not acting in any capacity for Microsemi. The parties also executed a non-disclosure agreement. Microchip's in-house counsel signed the non-disclosure agreement nominally on behalf of Microchip, but subsequently disclosed information that was deemed confidential under the non-disclosure agreement related to the Accused Products (as defined below).

COUNT I: INFRINGEMENT OF U.S. PATENT NO. 6,617,641

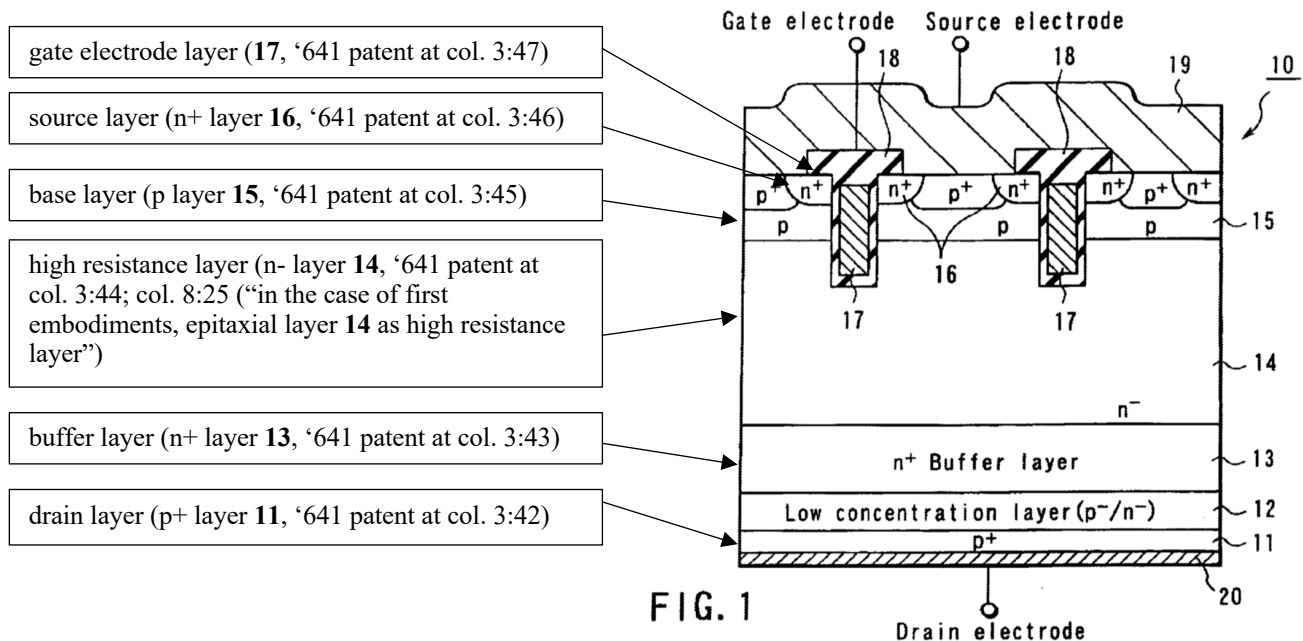
33. Plaintiff incorporates by reference the allegations set forth in the preceding paragraphs.

34. Defendants have each directly infringed and are infringing literally and/or under the doctrine of equivalents, in violation of §271(a), the '641 Patent at least during the period prior to the expiration of the patent by making, using, importing, offering for sale and/or selling the semiconductor devices identified below, including but not limited to device model numbers listed in **Exhibit C** ("Accused Devices"), in this judicial district and elsewhere throughout the United States.

35. As non-limiting examples of Defendants' infringement of the '641 Patent, the Accused Products infringe at least Claim 1 of the '641 patent.

36. The '641 patent discloses that the claims are generally directed to punch-through IGBT devices. Claim 1 of the '641 patent recites, *inter alia*, a drain layer, a buffer layer, a high resistance layer, a base layer, a source layer and a gate electrode. Claim 1 further recites that the foregoing elements (with the exception of the gate electrode) have a certain conductivity type (first or second). The '641 patent discloses that conductivity corresponds to being "p type" or "n type." ('641 patent col. 4:52-53). Claim 1 further recites how the elements are positioned relative to one another. These foregoing elements are identified below within one of the preferred embodiments disclosed in FIG. 1 of the '641 patent.

'641 Patent, FIG. 1



37. Microsemi’s marketing materials describe the Accused Products as punch-through (PT) insulated gate bipolar transistor (IGBT) devices. (See **Exhibit L** at 3-4 (Microsemi Power Portfolio 2018)). A tutorial on IGBT technology authored by Microsemi discloses the non-exhaustive list of elements that a person of skill in the art would understand to be included in a punch-through IGBT device. (**Exhibit M** (hereinafter, the “Microsemi IGBT Tutorial”). The tutorial also explains that the “p” and “n” designations correlate to “p type” or “n type”. (See e.g., *id.* at 1). The figure below is taken from the Microsemi IGBT Tutorial. As shown in the figure below, because the Accused Devices are IGBT devices, they contain the claimed drain layer, high resistance layer, base layer, source layer, and gate electrode as required by Claim 1 of the ‘641 patent. As shown in the figure below, these elements are arranged relative to one another as required by Claim 1 of the ‘641 patent, and with the appropriate conductivity type as required by Claim 1 of the ‘641 patent.

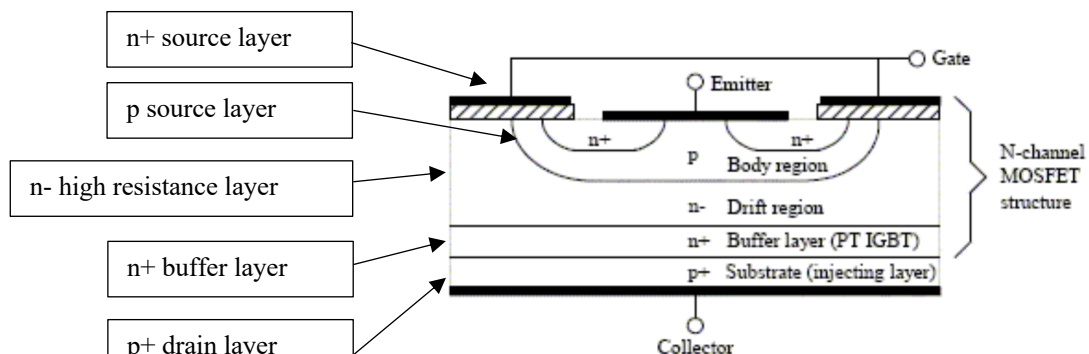
Microsemi IGBT Tutorial

Figure 1 N-Channel IGBT Cross Section

38. The Microsemi IGBT Tutorial explicitly suggests the accused IGBT Power MOS 7 with PT devices have the general basic structure shown above since those devices are specifically described within the tutorial. (**Exhibit M** at 4).

39. The Microsemi IGBT Tutorial does not expressly identify the p+ -type substrate (injecting layer) as a “drain” layer. The Microsemi IGBT Tutorial indicates that the current flowing into this region is a “collector current.” (**Exhibit M** at 3). A person of ordinary skill would understand that, under the proper construction of the term “drain layer” in the ‘641 patent, the Accused Products have a drain layer as required by the claims. For example, the ‘641 patent, FIG. 1, describes an IGBT device with a “drain layer.” (‘641 patent, col. 3:35-55). This is especially so given that the p+ -type substrate (injecting layer) in the Microsemi IGBT Tutorial otherwise satisfies the other structural requirements of the “drain layer” of Claim 1.

40. As shown in the figure above, the claimed buffer layer from Claim 1 of the ‘641 patent is also included in the Accused Products. Microsemi’s IGBT Tutorial explains that, “IGBTs [that] incorporate an n+ buffer layer . . . are called punch-through (PT)” (**Exhibit M** Microsemi IGBT Tutorial). Thus, because the Accused Products are specifically described by Defendants as *punch-through* IGBT devices, they contain the claimed buffer layer as required by

Claim 1 of the ‘641 patent.

41. Because the Accused Products are IGBT devices, which necessarily include “insulated gates” as shown by the descriptive title of IGBT devices, they also contain the claimed “gate electrode formed in the base layer with an insulating film interposed between them”.

42. Claim 1 of the ‘641 patent also recites a “low concentration layer”. The patent discloses that for punch-through IGBT devices that lack a low-concentration layer, at turn off the “drain voltage oscillates as shown in FIG. 21,” which is shown below. (‘641 patent col. 2:15-21).

‘641 Patent – FIG. 21 – PRIOR ART

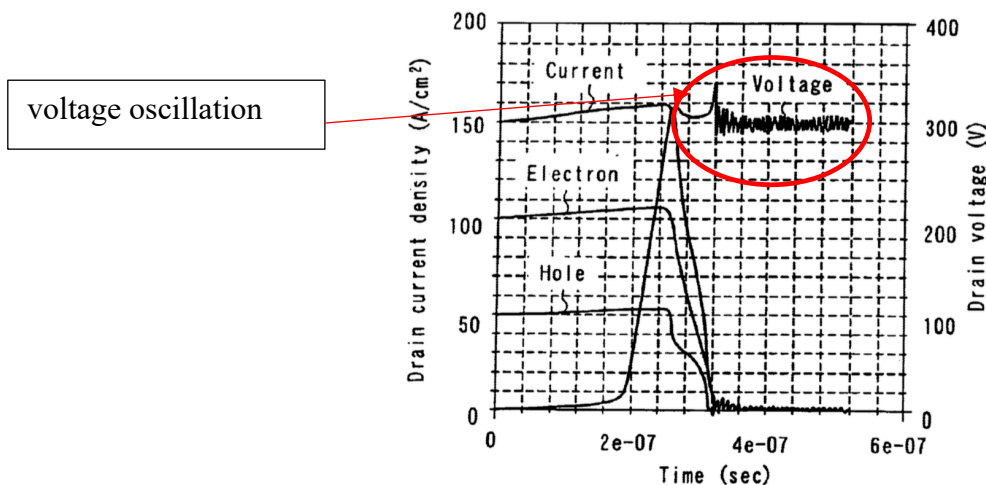


FIG. 21 PRIOR ART

43. The ‘641 patent further discloses that because the claimed punch-through IGBT device contains the “low concentration layer,” then at turn off “the drain voltage is prevented from oscillating,” as shown in FIG. 6 below. (‘641 patent col. 5:12-27).

'641 Patent – FIG. 6

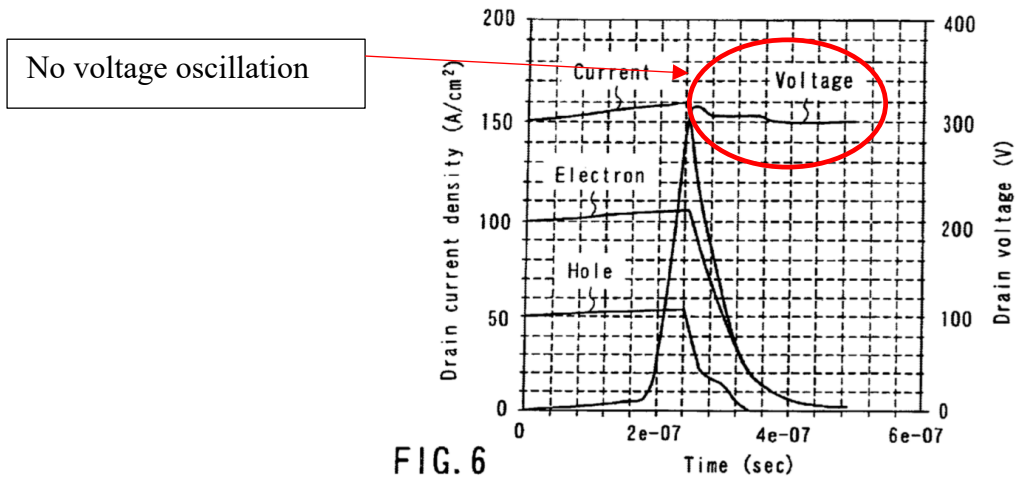


FIG. 6

44. Data sheets for the accused Power-MOS-Devices show that the drain/collector voltages at turn off do not oscillate, and therefore, the Accused Products contain the claimed “low concentration layer,” as recited in Claim 1 of the ‘641 patent. This is illustrated below. For the reasons described above, including in paragraph 39, and under the proper construction of the term “drain layer” in the ‘641 patent, a person of ordinary skill would understand that a “collector voltage” described in the Accused Products corresponds to a “drain voltage” disclosed in the ‘641 patent.

Power MOS 7 Device (Exhibit D)

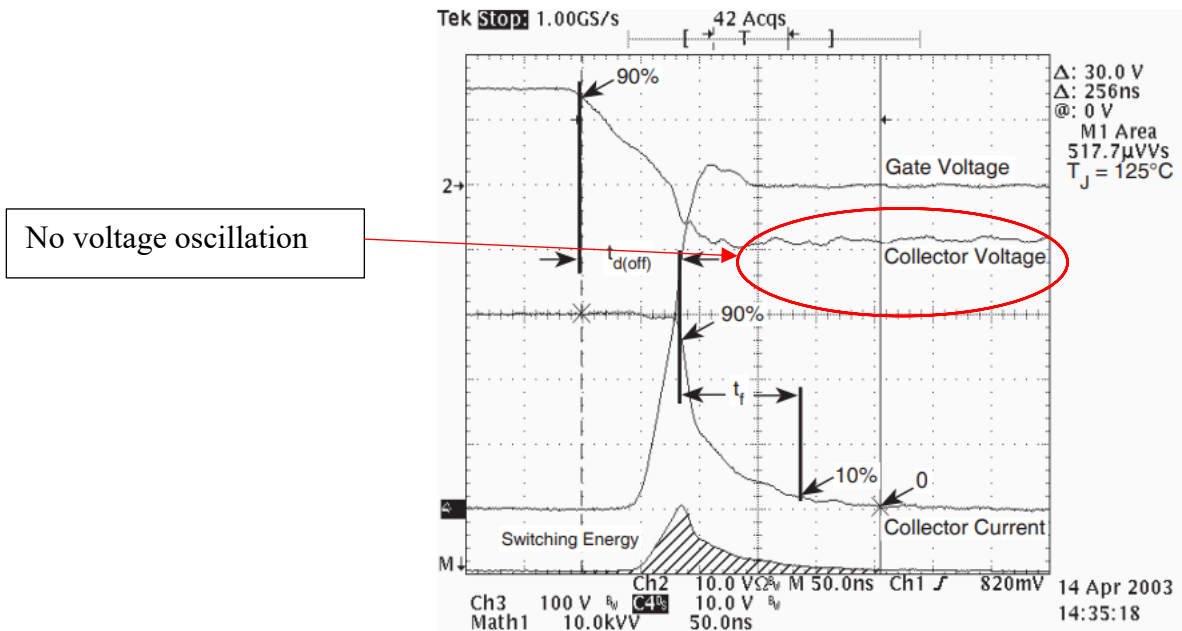


Figure 23, Turn-off Switching Waveforms and Definitions

Power MOS 8 Device (Exhibit E)

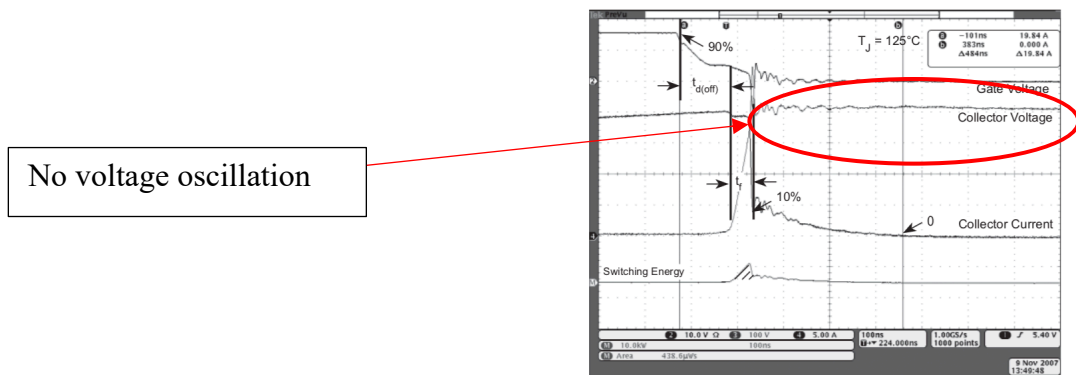


Figure 22, Turn-off Switching Waveforms and Definitions

43. As further support that the Accused Products include the “low concentration layer,” the ‘641 patent further discloses that by virtue of lowering oscillation of the drain/collector voltage, then “noise may not generate at the turn-off time.” (‘641 patent col. 5:25-27). A person of ordinary

skill in the art would understand that this noise may include EMI, or electromagnetic interference. A datasheet for the IGBT Power MOS 8 with PT devices shows that it has “low EMI.” (**Exhibit E** at 1).

45. Claim 1 of the ‘641 patent also recites, “wherein the drain layer is an impurity diffusion layer”. The Microsemi IGBT Tutorial shows that the drain layer is p+ type, and therefore, it is an impurity diffusion layer. Though not necessarily a requirement of the claim, the ‘641 patent discloses that the p+ type drain layer can be doped, or impurity diffused, through ion-implantation and heat treatment. (‘641 patent col. 4:22-25). Defendants’ marketing materials indicate that their “IGBT solutions” include “[h]igh temperature ion implantation” and “high temperature annealing”. (**Exhibit O** at 3). Thus, the Accused Devices satisfy the “impurity diffusion” limitation of Claim 1 of the ‘641 patent. Claim 1 of the ‘641 patent also recites that “a total amount of impurities contained in the drain layer is at most $5 \times 10^{14} \text{cm}^{-2}$.” The ‘641 patent discloses that the amount of impurities in the drain layer is reduced to increase the switching speed. (‘641 patent col. 5:8-11, col. 5:31-34 (explaining that by virtue of “reduc[ing] the dosage of the impurity into drain **11**,” then “the switching speed can be increased”)). Microsemi’s IGBT Tutorial describes Power MOS 7 series as “unique in that they are designed to switch extremely fast” (**Exhibit M**). Microsemi’s marketing materials described the Power MOS 8 series as “fast switching.” (**Exhibit L** at 4). Thus, the accused Accused Products satisfy the impurity limitation of the drain layer recited in Claim 1 of the ‘641 patent.

46. Upon information and belief, Defendants have and continue to intentionally induce others to directly infringe in violation of 35 U.S.C. §271(b), and those actions are undertaken with the specific intent that they will, in fact, induce direct infringement and with full knowledge that Defendants’ products infringe one or more claims of the ‘641 Patent both literally and/or under the doctrine of equivalents. By way of example only, Defendants sell and deliver the infringing Accused Devices to U.S. distributors including Arrow Electronics located in Plymouth, MI, Mouser Electronics located in Mansfield, TX, Digi-Key Electronics located in Thief River Falls, MN and others, and thereafter induce these distributors to sell and offer for sale the infringing

products to customers in the United States thereby directly infringing the '641 Patent. Arrow Electronics, Mouser Electronics and Digi-Key maintain websites (arrow.com, mouser.com, and digikey.com) available to U.S.-based customers that, as a result of Defendants' inducement, stock, sell, and offer for sale the Accused Devices.

47. Defendants further induce third parties to incorporate the Accused Devices as components into additional products for various applications to be used in the United States, by, for example, providing datasheets, application notes, product briefs, and other collateral on the Internet website (<http://www.Microsemi.com>) available to U.S. customers. As disclosed in Microsemi's 2017 Annual Report, Microsemi markets and sells a portion of the accused products to third party distributors and resellers.

48. Upon information and belief, pursuant to Microsemi's 2017 Annual Report, one or more of the Accused Devices were imported, used and sold in the United States as components of third-party end products, including, but not limited to, airplanes, satellites, commercial and military avionics systems, wireless communications products, data center products that enable high-speed communications between servers, switches and storage devices, industrial controls, medical devices, implantable defibrillators, pacemakers, MRI machines and portable medical equipment.

49. Defendants have been on notice of the '641 Patent and Defendants' infringement of the '641 Patent by the Accused Products since, at least, January 22, 2018 pursuant to a letter from Plaintiff's President, Mark Foster to James Peterson, former CEO of Microsemi, and a letter from Mr. Foster to Kimberly Van Herk, VP and General Counsel at Microchip, and since at least, June 2, 2018, pursuant to a letter from Mr. Foster to David Goren, Chief Legal and Compliance Officer and Senior Vice President of Business Affairs at Microsemi, as well as communications regarding infringement of the '641 Patent following that letter between Mr. Foster and IP Litigation Counsel at Microchip Technology Inc. During those discussions, Microchip's IP Litigation Counsel purported to speak on behalf of both Microsemi and Microchip, and never indicated that they were not acting in any capacity for Microsemi.

50. Upon information and belief, Defendants' continued infringement of the '641 Patent has been and continues to be willful at least as of the date of the Complaint, and warrants the enhancement of damages awarded as a result of its infringement. In particular, despite Defendants' knowledge of their infringement, Defendants have failed to stop infringing the '641 Patent.

51. Defendants are not licensed or otherwise authorized to make, use, import, sell or offer to sell any semiconductor devices encompassed by the claims in the '641 Patent, and Defendants' conduct is, in every instance, without Plaintiff's consent.

52. Defendants' willful infringement of the '641 Patent renders this an exceptional case within the meaning of 35 U.S.C. §285, justifying an award to Plaintiff of its reasonable attorneys' fees and costs incurred in connection with this litigation.

53. By reason of Defendants' infringing activities, Plaintiff has suffered, and will continue to suffer, substantial damages in an amount to be proven at trial.

COUNT II: INFRINGEMENT OF U.S. PATENT NO. 6,620,653

54. Plaintiff incorporates by reference the allegations set forth in the preceding paragraphs.

55. Defendants have each directly infringed and are infringing literally and/or under the doctrine of equivalents, in violation of the §271(a), the '653 Patent at least during the period prior to the expiration of the patent by making, using, importing, offering for sale and/or selling the semiconductor devices identified below including but not limited to device model numbers listed in **Exhibit C**, in this judicial district and elsewhere throughout the United States.

56. As non-limiting examples of Defendants' infringement of the '653 Patent, the Accused Products infringe at least claims 10 and 14 of the '653 Patent.

57. The '653 patent discloses that the claims are generally directed to punch-through IGBT devices. Claim 10 of the '653 patent recites, *inter alia*, a first base layer, a collector layer, a buffer layer, a second base layer, an emitter layer and a gate electrode. The '653 patent discloses, and a person of skill in the art would understand, that conductivity corresponds to being "p type"

or “n type.” (See e.g., ‘653 Patent FIG. 2). Claim 10 further recites how the elements are positioned relative to one another. These foregoing elements are identified below within one of the preferred embodiments disclosed in FIG. 21 of the ‘653 patent.

‘653 Patent, FIG. 21

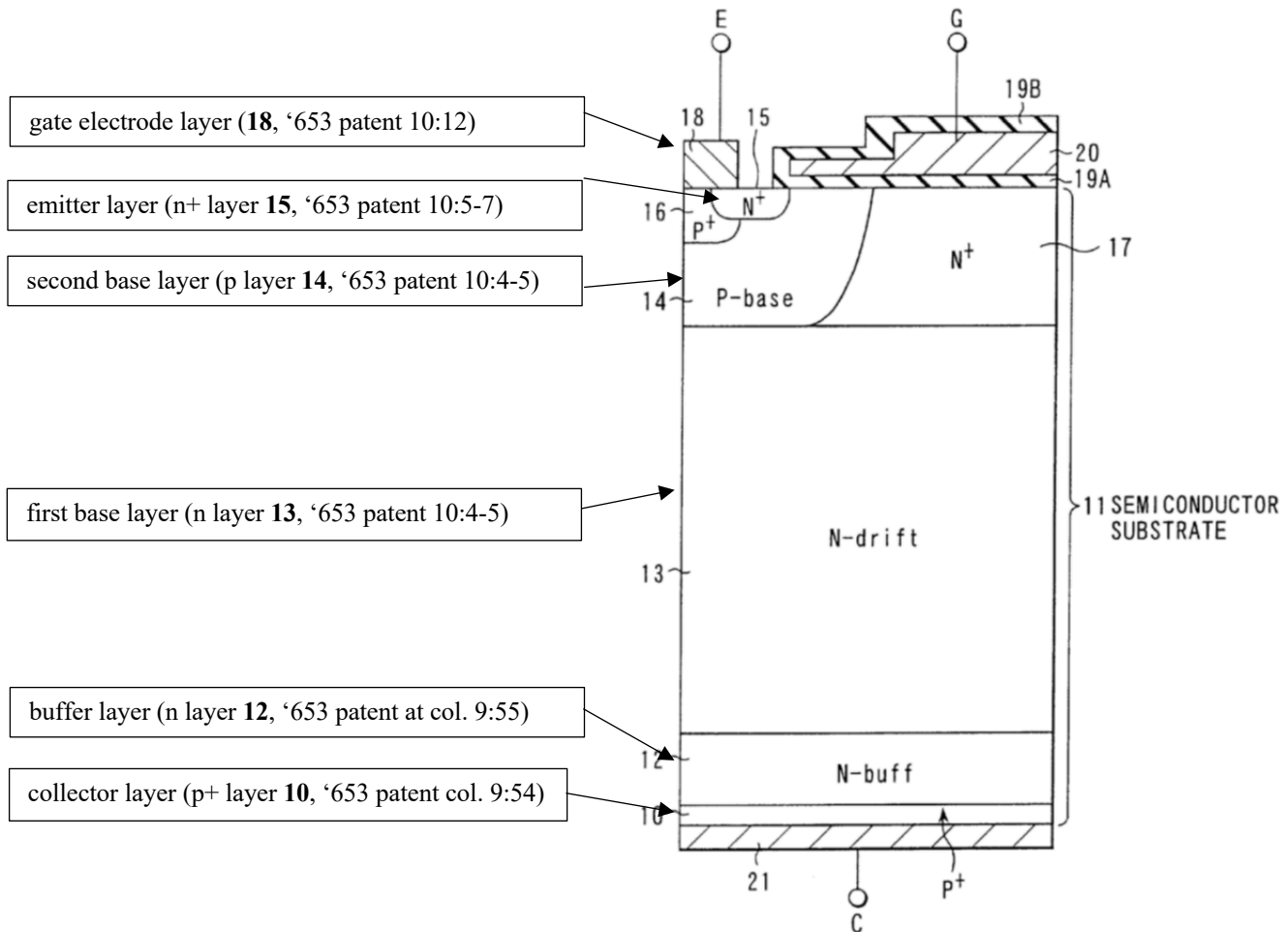


FIG. 21

Microsemi’s marketing materials describe the Accused Devices as punch-through (PT) insulated gate bipolar transistor (IGBT) devices. (See **Exhibit M** at 3-4 (Microsemi Power Portfolio 2018)). Microsemi’s IGBT Tutorial discloses the non-exhaustive list of elements that a person of skill in

the art would understand to be included in a punch-through IGBT device. The tutorial also explains that the “p” and “n” designations correlate to “p type” or “n type”. As shown in the annotated figure below, because the Accused Devices are punch-through IGBT devices, they contain the claimed first layer, collector layer, buffer layer, second base layer, and emitter layer and gate electrode with the appropriate conductivity types and respective spatial relations required by Claim 10 of the ‘653 patent. Microsemi’s IGBT Tutorial explains that, “IGBTs [that] incorporate an n+ buffer layer . . . are called punch-through (PT) . . .” (**Exhibit M** Microsemi IGBT Tutorial). Thus, because the Accused Products are specifically described by Defendants as *punch-through* IGBT devices, they contain the claimed buffer layer. Because the Accused Products are IGBT devices, which necessarily include “gates” as shown by the descriptive title of IGBT devices, they also contain the claimed “gate electrode above said second base layer between said emitter layer and said first base layer,” which is shown in the figure below.

Microsemi IGBT Tutorial

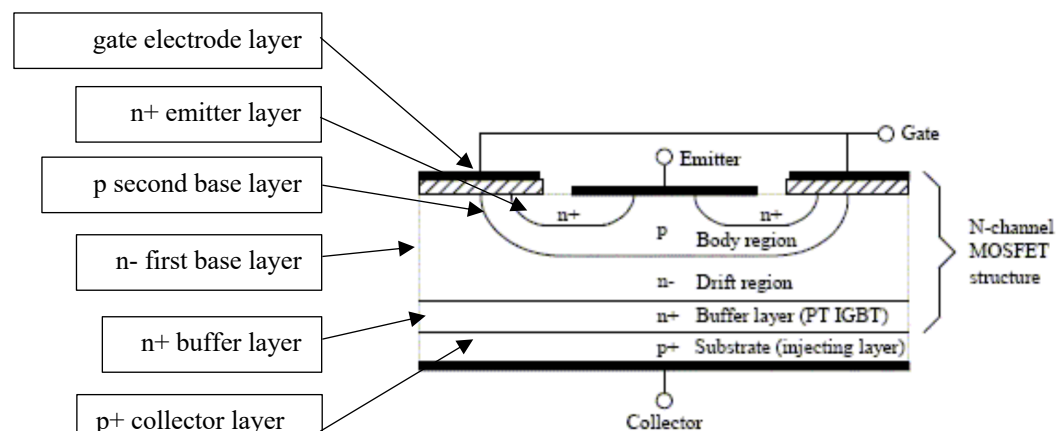


Figure 1 N-Channel IGBT Cross Section

58. Claim 10 of the ‘653 patent also recites that the following condition: $5 \geq bDP * QP / bDN * QN$. The ‘653 patent discloses that this condition equates with the current amplification factor (hFE). (‘653 patent col. 13:9-18). While not a requirement of the claims, the ‘653 patent discloses that by satisfying the foregoing condition such that hFE is equal to or less than five, then the fall time t_f may be near 200 nano seconds or shorter, and the turn off loss E_{off}

may be 1 milli Joule or lower. ('653 patent col. 56-61). A datasheet for the IGBT Power MOS 7 with PT devices shows that the Current Fall Time (t_f) is 46 nano seconds at 25 degrees C and 80 nano seconds at 125 degrees C, and E_{off} is 0.250 milli Joules (typical) and 0.330 milli Joules (max) at 25 degrees C and 0.520 milli Joules (typical) and 0.750 milli Joules (max) at 125 degrees C. (See **Exhibit D** at 2). A datasheet for the IGBT Power MOS 8 with PT devices shows that the Current Fall Time (t_f) is 77 nano seconds at 25 degrees C and 113 nano seconds at 125 degrees C, and E_{off} is 0.307 milli Joules (typical) at 25 degrees C and 0.439 milli Joules (typical) at 125 degrees C. (See **Exhibit D** at 2). Thus, the Accused Products satisfy the last limitation of Claim 10 of the '653 patent. They also infringe at least Claim 14 because they are IGBT devices, as explained above.

59. Upon information and belief, Defendants' have and continue to intentionally induce others to directly infringe in violation of 35 U.S.C. §271(b), and those actions are undertaken with the specific intent that they will, in fact, induce direct infringement and with full knowledge that Defendants' products infringe one or more claims of the '653 Patent both literally and/or under the doctrine of equivalents. By way of example only, Defendants sell and deliver the infringing Accused '653 Devices to U.S. distributors including Arrow Electronics located in Plymouth, MI, Mouser Electronics located in Mansfield, TX, Digi-Key Electronics located in Thief River Falls, MN and others, and thereafter induces these distributors to sell and offer for sale the infringing products to customers in the United States thereby directly infringing the '653 Patent. Arrow Electronics, Mouser Electronics and Digi-Key maintain websites (arrow.com, mouser.com, and digikey.com) available to U.S.-based customers that, as a result of Defendants' inducement, stock, sell, and offer for sale the Accused Devices.

60. Defendants further induce third parties to incorporate the Accused Devices as components into additional products for various applications to be used in the United States, by, for example, providing datasheets, application notes, product briefs, and other collateral on the Internet website (<http://www.Microsemi.com>) available to U.S. customers. As disclosed in Microsemi's 2017 Annual Report, Microsemi markets and sells the accused products to third party

distributors and resellers.

61. Upon information and belief, pursuant to Microsemi's 2017 Annual Report, one or more of the Accused Devices were imported, used and sold in the United States as components of third-party end products, including, but not limited to, airplanes, satellites, commercial and military avionics systems, wireless communications products, data center products that enable high-speed communications between servers, switches and storage devices, industrial controls, medical devices, implantable defibrillators, pacemakers, MRI machines and portable medical equipment.

62. Defendants have been on notice of the '653 Patent and Defendants' infringement of the '653 Patent by the Accused Products since, at least, January 22, 2018 pursuant to a letter from Plaintiff's President, Mark Foster to James Peterson, former CEO of Microsemi, and a letter from Mr. Foster to Kimberly Van Herk, VP and General Counsel at Microchip, and since at least, June 2, 2018, pursuant to a letter from Mr. Foster to David Goren, Chief Legal and Compliance Officer and Senior Vice President of Business Affairs at Microsemi, as well as communications regarding infringement of the '653 Patent following that letter between Mr. Foster and IP Litigation Counsel at Microchip Technology Inc. During those discussions, Microchip's in-house counsel purported to speak on behalf of both Microsemi and Microchip, and never indicated that they were not acting in any capacity for Microsemi.

63. Upon information and belief, Defendants' continued infringement of the '653 Patent has been and continues to be willful at least as of the date of the Complaint, and warrants the enhancement of damages awarded as a result of its infringement. In particular, despite Defendants' knowledge of its infringement, Defendants have failed to stop infringing the '653 Patent.

64. Defendants are not licensed or otherwise authorized to make, use, import, sell or offer to sell any semiconductor devices encompassed by the claims in the '653 Patent, and Defendants' conduct is, in every instance, without Plaintiff's consent.

65. Defendants' willful infringement of the '653 Patent renders this an exceptional case

within the meaning of 35 U.S.C. §285, justifying an award to Plaintiff of its reasonable attorneys' fees and costs incurred in connection with this litigation.

66. By reason of Defendants' infringing activities, Plaintiff has suffered, and will continue to suffer, substantial damages in an amount to be proven at trial.

PRAYER FOR RELIEF

Wherefore, Plaintiff requests this Court enter judgment as follows:

- A. That the '641 and '653 Patents are valid and enforceable;
- B. That Defendants have directly and indirectly infringed the '641 Patent and the '653 Patent.
- C. That such infringement is willful;
- D. That Defendants account for and pay to Plaintiff all damages pursuant to 35 U.S.C. § 284 to adequately compensate Plaintiff for Defendants' infringement of the Patents-in-Suit, but in no event less than a reasonable royalty for the use made by Defendants of the invention set forth in the Patents-in-Suit;
- E. That Plaintiff receives enhanced damages, in the form of treble damages, pursuant to 35 U.S.C. § 284;
- F. That this is an exceptional case under 35 U.S.C. § 285;
- G. That Defendants pay Plaintiff all of Plaintiff's reasonable attorneys' fees and expenses pursuant to 35 U.S.C. § 285;
- H. That Plaintiff be granted pre-judgment and post-judgment interest in accordance with 35 U.S.C. § 284 on the damages caused to it by reason of Defendants' infringement of the Patents-in-Suit, including pre-judgment and post-judgment interest on any enhanced damages or attorneys' fees award;
- I. That costs be awarded in accordance with 35 U.S.C. § 284 to Plaintiff; and
- J. That Plaintiff be granted such other and further relief as the Court may deem just and proper under the circumstances.

DEMAND FOR JURY TRIAL

Plaintiff hereby demands a trial by jury on all issues so triable in this action.

Respectfully submitted,

DATED: March 12, 2019

Kroub, Silbersher & Kolmykov PLLC



By: _____

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