



## **THE PARTIES**

1. Harbor Island Dynamic, LLC (“HID”) is a limited liability company organized and existing under the laws of the State of Texas, with its principal place of business located at 101 East Park Boulevard, Suite 600, Plano, Texas 75074.

2. Defendant NXP Semiconductors N.V. (“NXP N.V.”) is a corporation organized and existing under the laws of the Netherlands, with its principal place of business at High Tech Campus 60, 5656 AG Eindhoven, Netherlands. Upon information and belief, NXP N.V. does business in Texas, directly or through intermediaries, and offers its products and/or services, including those accused herein of infringement, to customers and potential customers located in Texas, including in the Judicial District of the Eastern District of Texas.

3. Defendant NXP B.V. (“NXP B.V.”) is a direct wholly-owned subsidiary of NXP N.V. and upon information and belief, the principal owner of Defendants’ intellectual property,<sup>2</sup> organized and existing under the laws of the Netherlands, with its principal place of business located at High Tech Campus 60, Eindhoven 5656 AG, Netherlands. NXP N.V. owns one hundred percent (100%) of the shares of NXP B.V. Upon information and belief, NXP B.V. does business in Texas, directly or through intermediaries, and offers its products and/or services, including those accused herein of infringement, to customers and potential customers located in Texas, including in the Judicial District of the Eastern District of Texas.

4. NXP Semiconductors Guangdong Ltd. (“NXP Guangdong”) is a corporation organized and existing under the laws of China, with its principal place of business at Tianmei Industrial North District A Section, Huangjiang Town, 523750 Dongguan City, P.R. China. Upon information and belief, NXP Guangdong does business in Texas, directly or through

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<sup>2</sup> <https://www.nxp.com/company/about-nxp/investor-relations/investor-faqs:INVESTORS-FAQS>

intermediaries, and places its products and/or services, including those accused herein of infringement, into the stream of commerce which terminates in the Judicial District of the Eastern District of Texas.

5. NXP Semiconductors (Beijing) Ltd. (“NXP Beijing”) is a corporation organized and existing under the laws of China, with its principal place of business at Exchange Bldg. 23F, No. 118 Jianguo Rd., Chaoyang District, Beijing, China. Upon information and belief, NXP Beijing does business in Texas, directly or through intermediaries, and places its products and/or services, including those accused herein of infringement, into the stream of commerce which terminates in the Judicial District of the Eastern District of Texas.

6. NXP Semiconductors (Tianjin) Ltd (“NXP Tianjin”) is a corporation organized and existing under the laws of China, with its principal place of business at No. 15 Xinghua Avenue, Xiqing Economic Development Area, Tianjin (ATTJ) 300385, China. Upon information and belief, NXP Tianjin does business in Texas, directly or through intermediaries, and places its products and/or services, including those accused herein of infringement, into the stream of commerce which terminates in the Judicial District of the Eastern District of Texas.

7. NXP Semiconductors Hong Kong Ltd. (“NXP Hong Kong”) is a corporation organized and existing under the laws of Hong Kong, with its principal place of business at Units 2109-2111, 21/F No. 9 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong. Upon information and belief, NXP Hong Kong does business in Texas, directly or through intermediaries, and places its products and/or services, including those accused herein of infringement, into the stream of commerce which terminates in the Judicial District of the Eastern District of Texas.

8. NXP Semiconductors India Pvt. Ltd. (“NXP India”) is a corporation organized and existing under the laws of India, with its principal place of business at Plot 18 and 2 and 3 Sector 16A, Noida- 201 301, Uttar Pradesh, India. Upon information and belief, NXP India does business in Texas, directly or through intermediaries, and places its products and/or services, including those accused herein of infringement, into the stream of commerce which terminates in the Judicial District of the Eastern District of Texas.

9. NXP Semiconductors Japan Ltd. (“NXP Japan”) is a corporation organized and existing under the laws of Japan, with its principal place of business at Yebisu Garden Place Tower 24F, 4-20-3, Ebisu, Shibuya-ku, Tokyo 150-6024, Japan. Upon information and belief, NXP Japan does business in Texas, directly or through intermediaries, and places its products and/or services, including those accused herein of infringement, into the stream of commerce which terminates in the Judicial District of the Eastern District of Texas.

10. NXP Semiconductors Korea Ltd. (“NXP Korea”) is a corporation organized and existing under the laws of Korea, with its principal place of business at 4th floor, 39 Sejong-daero, Jung-gu, Seoul (04513) South Korea. Upon information and belief, NXP Korea does business in Texas, directly or through intermediaries, and places its products and/or services, including those accused herein of infringement, into the stream of commerce which terminates in the Judicial District of the Eastern District of Texas.

11. NXP Semiconductors Malaysia Sdn. Bhd. (“NXP Malaysia”) is a corporation organized and existing under the laws of Malaysia, with its principal place of business at Jalan SS 8/2, Sungai Way, Free Trade Zone, Petaling Jaya, 47300 Kuala Lumpur, Malaysia. Upon information and belief, NXP Malaysia does business in Texas, directly or through intermediaries,

and places its products and/or services, including those accused herein of infringement, into the stream of commerce which terminates in the Judicial District of the Eastern District of Texas.

12. NXP Semiconductors Singapore Pte. Ltd. (“NXP Singapore”) is a corporation organized and existing under the laws of Singapore, with its principal place of business at 1 Fusionopolis Walk, #02-11 North Tower, Solaris, Singapore 138628. Upon information and belief, NXP Singapore does business in Texas, directly or through intermediaries, and places its products and/or services, including those accused herein of infringement, into the stream of commerce which terminates in the Judicial District of the Eastern District of Texas.

13. NXP Semiconductors (Thailand) Co., Ltd. (“NXP Thailand”) is a corporation organized and existing under the laws of Thailand, with its principal place of business at 303 Moo 3 Chaengwattana Road Laksi, 10210, Bangkok, Thailand. Upon information and belief, NXP Thailand does business in Texas, directly or through intermediaries, and places its products and/or services, including those accused herein of infringement, into the stream of commerce which terminates in the Judicial District of the Eastern District of Texas.

14. NXP Semiconductors Taiwan Ltd. (“NXP Taiwan”) is a corporation organized and existing under the laws of Taiwan, with its principal place of business at 6F, No.66, Sanchong Road, Nangang District, Taipei City, Taiwan 11560. Upon information and belief, NXP Taiwan does business in Texas, directly or through intermediaries, and places its products and/or services, including those accused herein of infringement, into the stream of commerce which terminates in the Judicial District of the Eastern District of Texas.

15. Upon information and belief, each of the NXP Defendants are subsidiaries of NXP N.V., a global semiconductor company with operations in more than 25 countries, including the United States.

16. The NXP Defendants are affiliated operating entities. Together with the other subsidiary entities of the parent entity, NXP N.V., they form a global group comprising over 50 operating companies.

17. On information and belief, the NXP Defendants are in the business of researching, developing, making, using, and selling semiconductor products, including the NXP-branded products accused of infringement in this case (the “Accused Products,” defined below).

18. The NXP Defendants have authorized intermediaries, distributors, importers, retail partners, agents, customers, and subsidiaries that offer and sell products pertinent to this Complaint through the State of Texas, including in this Judicial District, and to consumers throughout this Judicial District.

### **JURISDICTION AND VENUE**

19. This is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1, *et seq.* This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331, 1332, 1338, and 1367.

20. This Court has specific and personal jurisdiction over each of the NXP Defendants consistent with the requirements of the Due Process Clause of the United States Constitution and the Texas Long Arm Statute. Upon information and belief, the NXP Defendants have, directly or through intermediaries, distributors, importers, retail partners, agents, customers, and subsidiaries, committed and continues to commit acts of patent infringement in the State of Texas and in this Judicial District as alleged in this Complaint, as alleged more particularly below. Further, the NXP Defendants have sufficient minimum contacts with the forum because the NXP Defendants transact substantial business in the State of Texas and in this Judicial District and purposefully availed themselves of the privilege of conducting activities within this Judicial District.

21. Upon information and belief, the NXP Defendants engage in the research, design, manufacture, marketing, sale, offer for sale, importation, and/or provision of technical support, for one or more of the Accused Products. The NXP Defendants directly sell and/or facilitate the shipments of the Accused Products to customers in the United States and Texas, including to third-party distributors and end customers. The NXP Defendants have thereby committed acts of direct infringement in the United States and Texas in violation of HID's intellectual property rights.

22. Upon information and belief, NXP Defendants further purposefully and voluntarily placed one or more of the Accused Products into the stream of commerce with the expectation and intent that they will be purchased and used by consumers in Texas, including by (a) selling and/or shipping infringing products to NXP Defendants' United States entities and/or to third-party entities, including into downstream infringing products, with the knowledge and expectation that such products will be imported into the United States and Texas; and (b) directly or indirectly working with other intermediaries, distributors, importers, retail partners, agents, subsidiaries, affiliates, and other entities located in Texas and abroad, to ensure that infringing products (whether in the form of standalone components or as integrated into downstream products) reach Texas.

23. The NXP Defendants maintain ongoing and systematic contacts within, and/or has otherwise purposefully directed activities toward, the State of Texas and this Judicial District including, but not limited to by: (i) conducting infringing acts in the United States and Texas, (ii) regularly conducting or soliciting business, engaging in other persistent courses of conduct, and/or deriving substantial revenue from goods and services directed to the residents of the United States and Texas, and/or (iii) by placing infringing products into the stream of commerce with the purpose, intent, and knowledge that they will be used by consumers in the United States and Texas.

24. The NXP Defendants act as part of a global network and supply chain of sales and manufacturing subsidiaries which operate as agents of one another and vicariously as parts of the same business group to work in concert together and enter into agreements that are nearer than arm's length. The NXP Defendants, individually and/or in concert, conduct business and have conducted business in the United States, including importing, using, testing, distributing, offering to sell, and selling the Accused Products that incorporate devices, systems, and processes that infringe the Asserted Patents in this Judicial District.

25. This Court has general and specific personal jurisdiction over the NXP Defendants pursuant to due process and/or the Texas Long Arm Statute because the NXP Defendants have, through intermediaries, distributors, importers, retail partners, agents, subsidiaries and/or others, committed and continue to commit acts of patent infringement in the State of Texas, including importing, offering to sell, and/or selling Accused Products in Texas, including through Internet sales (including acts of infringement via NXP.com's highly interactive website) and/or sales via retail and wholesale stores, inducing others to commit acts of patent infringement in Texas (including inducement via NXP.com's highly interactive website), and/or committing a least a portion of any other infringements alleged herein.

26. In addition, the NXP Defendants have placed, and are continuing to place, infringing products into the stream of commerce, via established distribution channels, with the knowledge and/or understanding that such products are sold in Texas, including in this Judicial District. The NXP Defendants have derived substantial revenues from their infringing acts occurring within Texas and within this Judicial District. The NXP Defendants have substantial business in this State and Judicial District by regularly doing or soliciting business, engaging in other persistent conduct, and/or deriving substantial revenue from infringing goods offered for



sale, sold, and/or imported, and services provided to Texas residents vicariously through and/or in concert with their respective alter egos, intermediaries, agents, distributors, importers, customers, subsidiaries, and/or consumers.

27. This Court also has personal jurisdiction over Defendants because, *inter alia*, this action arises from activities the NXP Defendants purposefully directed towards the State of Texas and this Judicial District (including the NXP Defendants' activities via NXP.com's highly interactive website).

28. Exercising personal jurisdiction over the NXP Defendants in this Judicial District would not be unreasonable given the NXP Defendants' contacts in this Judicial District, the interest in this Judicial District of resolving disputes related to products sold herein, and the harm that would occur to Plaintiff who resides in this Judicial District.

29. To the extent the NXP Defendants are not subject to jurisdiction in any state's court of general jurisdiction, exercising jurisdiction over the NXP Defendants in this State and this Judicial District would be consistent with due process and this State's long-arm statute in light of the facts alleged in this Complaint.

30. Through the NXP Defendants' alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers that maintained a business presence, operating in, and/or residing in the United States, the NXP Defendants' products, including products and processes accused of infringing the Asserted Patents, are or have been widely distributed and sold in Texas including within this Judicial District.

31. The NXP Defendants, as applicable, are seen to have overlapping executives, interlocking corporate structures, and close relationships as manufacturer, importer, distributor, and/or seller of the Accused Products. For example, the NXP Defendants' website states that Ron

Martino is the Executive Vice President and Chief Sales Officer. Mr. Martino is located in Texas,<sup>3</sup> but has previously signed and executed SEC Form 4's in Eindhoven, Netherlands. William Betz is the Executive Vice President and Chief Financial Officer. Mr. Betz is located in Texas,<sup>4</sup> and has previously signed and executed SEC Form 4's and Form SD's in Eindhoven, Netherlands, and on behalf of NXP N.V. Chris Jensen is the Executive Vice President and Chief People Officer. Mr. Jensen is located in Texas<sup>5</sup> and has previously signed and executed SEC Form 4's in Eindhoven, Netherlands. Jennifer Wuamett is the Executive Vice President, General Counsel, Corporate Secretary and Chief Sustainability Officer. Ms. Wuamett is located in Texas<sup>6</sup> and has previously signed and executed SEC Form 4's and Form SD's in Eindhoven, Netherlands, and on behalf of NXP N.V.

32. This Court has personal jurisdiction over the NXP Defendants through its intermediaries, distributors, importers, retail partners, agents, customers, and/or subsidiaries, as applicable. Through direction and control of such intermediaries, distributors, importers, retail partners, agents, customers and/or subsidiaries, the NXP Defendants have committed acts of direct and/or indirect patent infringement within Texas, giving rise to this action.

33. The NXP Defendants have also placed infringing products and/or products that practiced infringing processes into the stream of commerce via established distribution channels comprising at least their subsidiaries, affiliates, distributors, retail partners, and/or agents, with the knowledge and/or intent that those products were imported, used, offered for sale, and sold in the

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<sup>3</sup> <https://www.nxp.com/company/about-nxp/nxp-leadership:NXP-LEADERSHIP#management-team;>  
<https://www.linkedin.com/in/ronmartino/>

<sup>4</sup> <https://www.nxp.com/company/about-nxp/nxp-leadership:NXP-LEADERSHIP#management-team;>  
<https://www.linkedin.com/in/williambetz/>

<sup>5</sup> <https://www.nxp.com/company/about-nxp/nxp-leadership/chris-jensen:CHRIS-JENSEN;>  
<https://www.linkedin.com/in/christopher-jensen-1b29291/>

<sup>6</sup> <https://www.nxp.com/company/about-nxp/nxp-leadership/jennifer-wuamett:JENNIFER-WUAMETT;>  
<https://www.linkedin.com/in/jenniferwuamett/>

United States and Texas, including in this Judicial District. The NXP Defendants' website clearly states that all the office locations of the NXP Defendants engage in sales, design, R&D, manufacturing, and/or testing.<sup>7</sup>

34. NXP N.V. and NXP BV are not holding companies. Importation records show that the NXP Defendants' exported products to Houston Texas and exported products to the United States. As a result, the NXP Defendants have, vicariously through and/or in concert with other alter egos, agents, intermediaries, distributors, affiliates, importers, customers, subsidiaries, and/or consumers, placed the Accused Products into the stream of commerce via established distribution channels with the knowledge and/or intent that those products were sold and continue to be sold in the United States and Texas, including in this Judicial District.

35. The NXP Defendants, directly or through other affiliates, subsidiaries, agents, and/or intermediaries, have placed infringing products into the stream of commerce knowing they would be sold and used in Texas, and economically benefit from the retail sale of infringing products in this State, including in this Judicial District. On information and belief, the NXP Defendants control or otherwise direct and authorize all activities of their agents and/or sales and/or distribution subsidiaries, as applicable. Where the NXP Defendants act as part of a global network and supply chain of sales and manufacturing subsidiaries which operate as agents of one another and vicariously as parts of the same business group to work in concert together, the NXP Defendants conducted infringing activities in this Judicial District because the NXP Defendants' U.S.-based sales and/or distribution intermediaries, distributors, retail partners, and/or agents were

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<sup>7</sup> <https://www.nxp.com/company/about-nxp/worldwide-locations/netherlands:NETHERLANDS> (for example, the NXP Defendants' website states that NXP N.V. and NXP B.V.'s geographical locations in the Netherlands engage in product design at its' Delft location, and product manufacturing, testing, R&D, and design at its' Nijmegen location, and product design, R&D, and sales at its' Eindhoven location. The website additionally contains links to each of the NXP Defendants', similarly showing that each NXP Defendants' geographical location engage in product sales, manufacturing, testing, and/or R&D.)

authorized to import, distribute, sell, or offer for sale the Accused Products on behalf of the NXP Defendants.

36. On information and belief, placing these infringing products into the stream of commerce gave the NXP Defendants substantially the same business advantages that they would have enjoyed if the NXP Defendants conducted their business through their own offices or paid agents in Texas.

37. In addition, the NXP Defendants have established minimum contacts with Texas such that personal jurisdiction over the NXP Defendants would not offend traditional notions of fair play and substantial justice.

38. The NXP Defendants' website, owned by NXP N.V., has, among other things, a webpage advertising its' product distributor network, many of which are located in Texas, including links where consumers can purchase products,<sup>8</sup> links leading to a webpage of job postings, including jobs located in Texas,<sup>9</sup> multiple webpages aimed at and/or targeting Texas,<sup>10</sup> and even a webpage with a contractual agreement for terms and conditions of commercial sales.<sup>11</sup> According to the Federal Circuit, the presence of the aforementioned website features is sufficient to show personal jurisdiction. In addition, the NXP Defendants, as applicable, have knowingly induced infringement within this Judicial District by advertising, marketing, offering for sale and/or selling products with infringing functionality within this Judicial District, to consumers, customers, manufacturers, distributors, resellers, partners, and/or end users, and providing

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<sup>8</sup> <https://www.nxp.com/support/sample-and-buy/distributor-network:DISTRIBUTORS#UNITEDSTATES>

<sup>9</sup> <https://nxp.wd3.myworkdayjobs.com/careers?q=texas>

<sup>10</sup> <https://www.nxp.com/company/about-nxp/our-team-members/community-outreach/americas-community-impact:AMERICAS-COMMUNITY-IMPACT> (article stating that the 2023 NXP Community Impact Grant was granted to The Texas Conference for Women); <https://www.nxp.com/company/about-nxp/newsroom/NW-NXP-AWARDED-BY-CISCO> (Article describing Cisco ® awarding NXP N.V. the 2017 Excellence in Quality Award, with the article providing Austin, Texas as the relevant location)

<sup>11</sup> <https://www.nxp.com/company/about-nxp/our-terms-and-conditions-of-commercial-sale:TERMSCONDITIONSSALE>

instructions, user manuals, advertising, and/or marketing materials which facilitate, direct or encourage the use of infringing functionality with knowledge thereof (including such activities provided via the NXP Defendants' NXP.com website).

39. The NXP Defendants have purposefully targeted the United States market and this Judicial District as to the Accused Products by merging with and acquiring United States companies as evidenced by NXP N.V.'s merger with Freescale Semiconductor, Ltd., headquartered in Texas, in 2015, and NXP N.V.'s acquisition of Marvell Technology, Inc.'s Wi-Fi Connectivity Business in 2019. Additionally, the NXP Defendants purposefully target United States users of their NXP.com website to: gather privacy information; provide instruction materials, training, support, and user guides of NXP products, including the Accused Products; and/or offers for sale, shipping, distribution, importation, and/or sales of NXP products, including the Accused Products, from the NXP Defendants via its intermediaries, alter egos, agents, distributors, affiliates, and/or importers.

NXP N.V. and NXP B.V. regularly enter into contracts to sell goods within the United States, and as such, the NXP Defendants have significant contacts and a direct financial interest in U.S.-based activities.

40. In the alternative, the Court has personal jurisdiction over the NXP Defendants under Federal Rule of Civil Procedure 4(k)(2), because the claims for patent infringement in this action arise under federal law, so the NXP Defendants are not subject to the jurisdiction of the courts of general jurisdiction of any state, and exercising jurisdiction over the NXP Defendants is consistent with the U.S. Constitution.

41. Venue is proper in this Judicial District pursuant to 28 U.S.C. § 1391 because each of the NXP Defendants is subject to personal jurisdiction in this Judicial District and has

committed acts of patent infringement in this Judicial District. The NXP Defendants, through their own acts, the acts of each NXP Defendant, and/or the acts of their alter egos, agents, intermediaries, distributors, affiliates, importers, customers, and/or subsidiaries, make, use, sell, and/or offers to sell infringing products within this Judicial District, regularly does and solicits business in this Judicial District, and has the requisite minimum contacts with the Judicial District such that this venue is a fair and reasonable one. Venue is proper in this Judicial District because each of the NXP Defendants are foreign entities formed under the laws of the numerous foreign countries with a principal places of business in each of those countries, and may be sued in any judicial district under 28 U.S.C. 1391(c)(3).

#### **FACTUAL BACKGROUND**

42. On August 10, 2010, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 7,772,673 (the “’673 Patent”) entitled “Deep Trench Isolation and Method for Forming Same.” A true and correct copy of the ’673 Patent is available at <https://image-ppubs.uspto.gov/dirsearch-public/print/downloadPdf/7772673>.

43. On June 29, 2010, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 7,745,886 (the “’886 Patent”) entitled “Semiconductor on Insulator (SOI) Switching Circuit.” A true and correct copy of the ’886 Patent is available at <https://image-ppubs.uspto.gov/dirsearch-public/print/downloadPdf/7745886>.

44. HID is the sole and exclusive owner of all right, title, and interest to and in the ’673 Patent and the ’886 Patent (together, the “Patents-in-Suit”), and holds the exclusive right to take all actions necessary to enforce its rights to the Patents-in-Suit, including the filing of this patent infringement lawsuit. HID also has the right to recover all damages for past, present, and future infringement of the Patents-in-Suit and to seek injunctive relief as appropriate under the law.

45. HID has at all times complied with the marking provisions of 35 U.S.C. § 287 with respect to the Patents-in-Suit. On information and belief, prior assignees and licensees have also complied with the marking provisions of 35 U.S.C. § 287.

46. The NXP Defendants infringe each of the Patents-in-Suit by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of each of the Patents-in-Suit. These products include those that use at least the NXP BGU8019 low noise amplifier with respect to the '673 Patent, and the NXP TDF8530TH car audio amplifier with respect to the '886 Patent (“the Accused Products”).

47. The NXP BGU8019 is a low noise amplifier product that adapts itself to the changing environment resulting from co-habitation of different radio systems in modern cellular handsets. It has been designed for low power consumption and optimal performance when jamming signals from co-existing cellular transmitters are present. At low jamming power levels it delivers 18.5 dB gain at a noise figure of 0.55 dB. During high jamming power levels, resulting, for example, from a cellular transmit burst, it temporarily increases its bias current to improve sensitivity.

48. For example, The NXP BGU8019 is used in at least the NXP Defendants' products AN11368, BGU8019, and AN11527 (the "'673 Accused Products"), that each infringe the '673 Patent.

49. The NXP TDF8530TH car audio amplifier is a high-efficiency quad Bridge-Tied Load (BTL) car audio amplifier comprising an NDMOST output stage based on SOI BCDMOS technology. Low power dissipation enables the TDF8530 high-efficiency, class-D amplifier to be used with a smaller heat sink than those normally used with standard class-AB amplifiers.

50. For example, the NXP TDF8530TH is used in at least the NXP Defendants' products I2C-Bus Controlled Dual Channel 43 W/2  $\Omega$ , Single Channel 85 W/1  $\Omega$  Class-D Power Amplifier with Full Diagnostics, and SOT1131-1 (the "'886 Accused Products"), that each infringe the '886 Patent.

**COUNT I**  
**(Infringement of the '673 Patent)**

51. Paragraphs 1 through 50 are incorporated by reference as if fully set forth herein.

52. The NXP Defendants have manufactured, used, marketed, distributed, sold, offered for sale, and imported into the United States, products that infringe the '673 Patent.

53. HID has not licensed or otherwise authorized any of the NXP Defendants to make, use, offer for sale, sell, or import any products that embody the inventions of the '673 Patent.

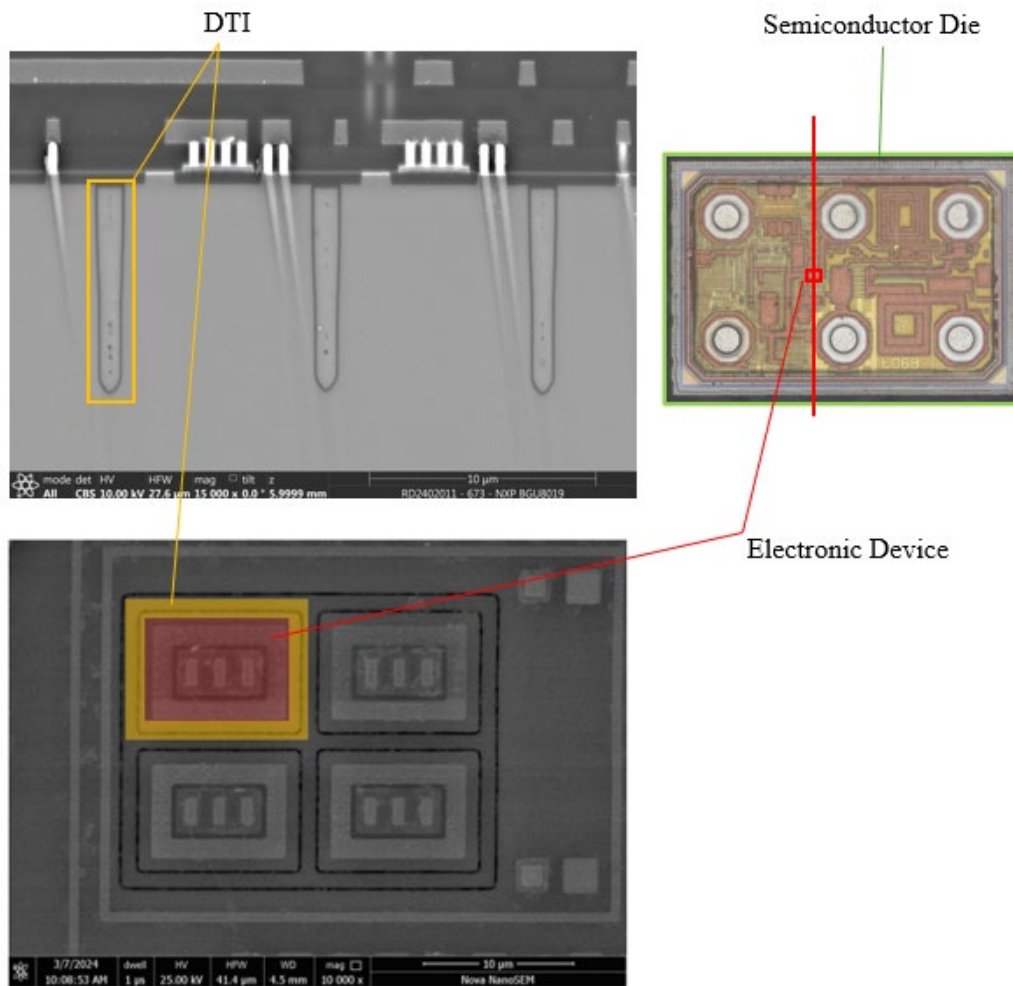
54. The NXP Defendants have and continue to directly infringe the '673 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '673 Patent. For example, the NXP Defendants manufacture, import, use, sell, or offer for sale the NXP BGU8019 low noise amplifier and use it in at least the NXP Defendants' products AN11368, BGU8019, and AN11527, that each infringe the '673 Patent.

55. The NXP Defendants have and continue to directly infringe at least claim 1 of the '673 Patent by making, using, offering to sell, selling, and/or importing into the United States products that comprise a semiconductor die comprising at least one deep trench isolation region for isolating an electronic device, said at least one deep trench isolation region comprising: a trench situated in a substrate of said semiconductor die, said trench having a plurality of sides surrounding said electronic device, and at least one trench chamfered corner formed between and connecting



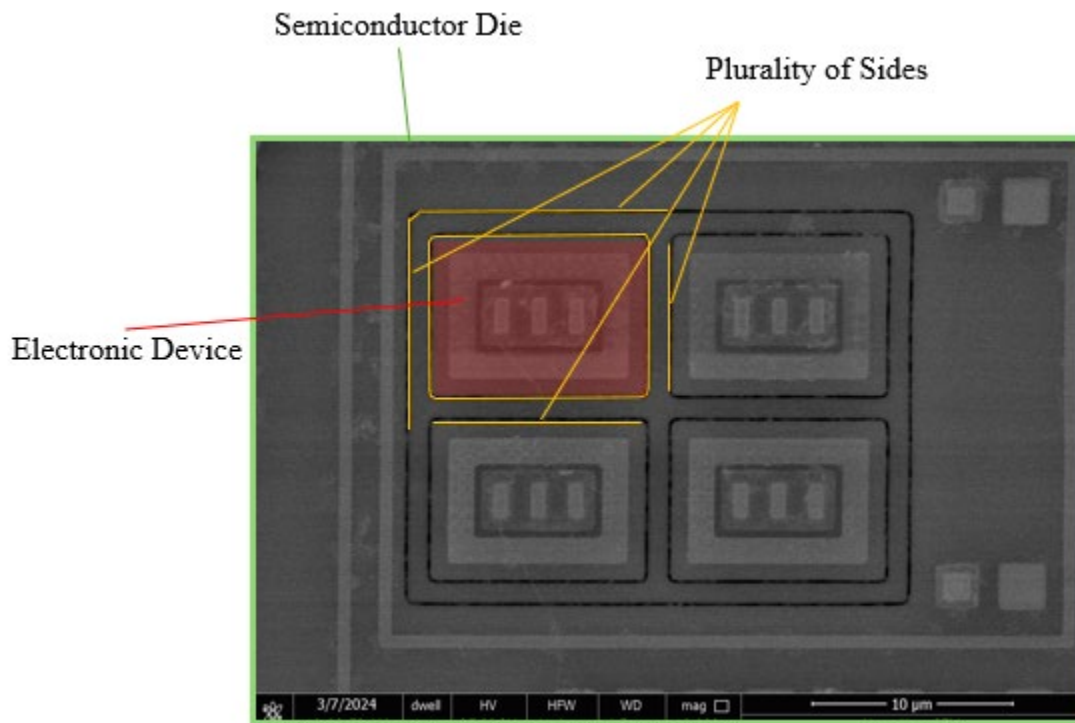
said plurality of sides; wherein said at least one trench chamfered corner causes a reduction in a thickness of a polysilicon layer within said trench.

56. The '673 Accused Products comprise a semiconductor die including at least one deep trench isolation region for isolating an electronic device, said at least one deep trench isolation region comprising: a trench situated in a substrate of said semiconductor die. For example, SEM analysis shows that the NXP BGU8019 includes a deep trench isolation region (“DTI”) that isolates an electronic device.

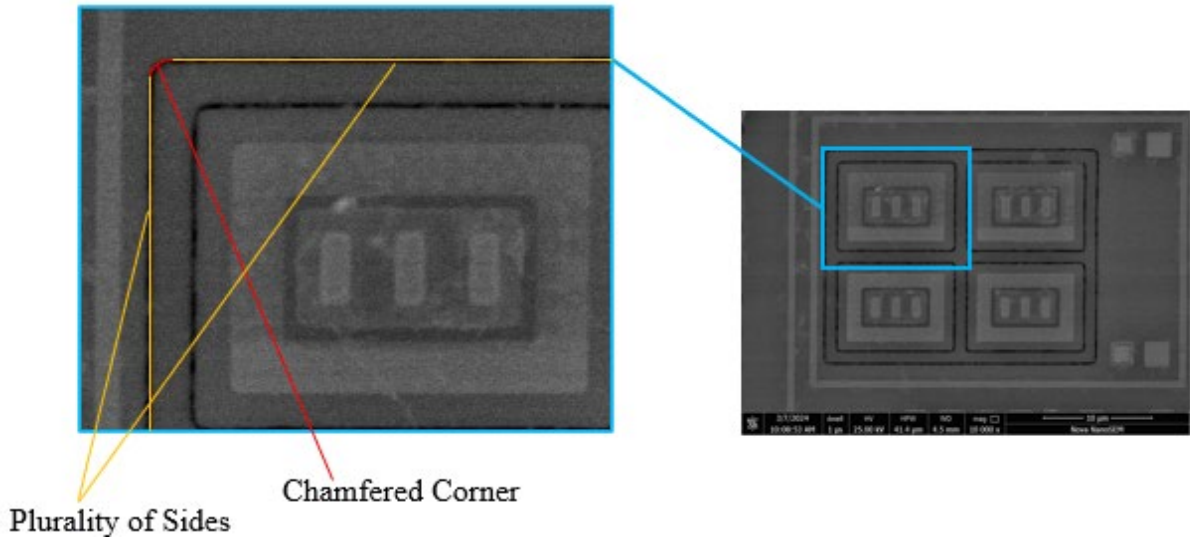


57. The trench of the '673 Accused Products has a plurality of sides surrounding said electronic device. For example, the DTI of the NXP BGU8019 comprises a trench situated in a

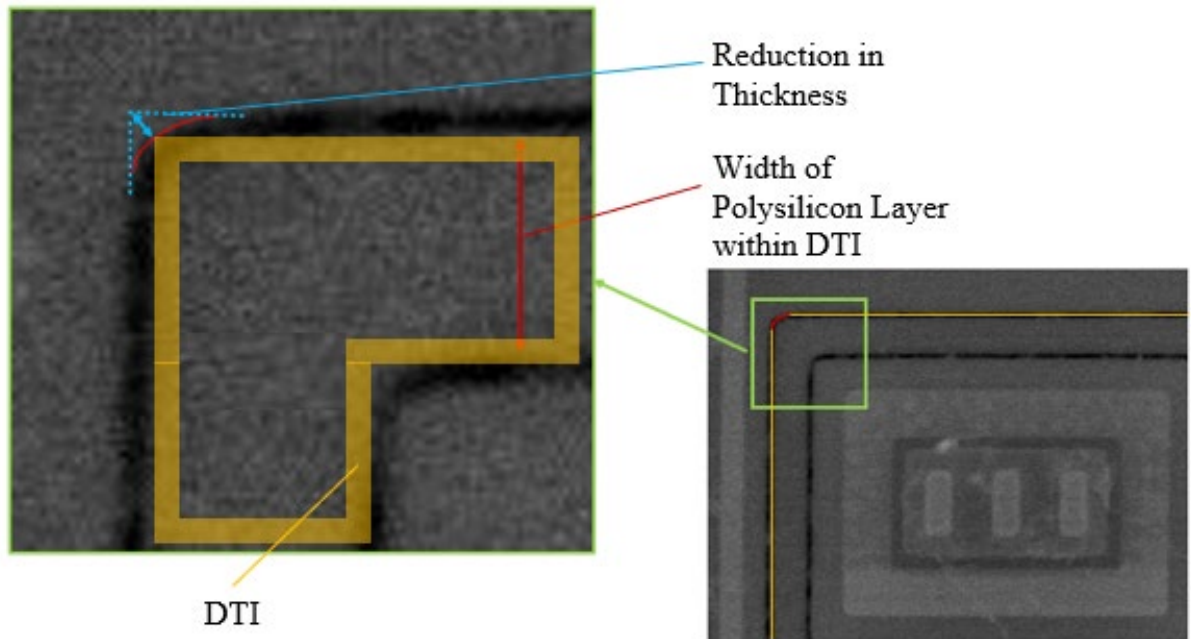
substrate of said semiconductor die, said trench having a plurality of sides surrounding said electronic device.



58. The at least one deep trench isolation region of the '673 Accused Products further comprises at least one trench chamfered corner formed between and connecting said plurality of sides. For example, the DTI of the NXP BGU8019 comprises at least one trench chamfered corner connecting said plurality of sides.



59. The trench chamfered corner of the '673 Accused Products causes a reduction in a thickness of a polysilicon layer within said trench. For example, the trench chamfered corner of the NXP BGU8019 reduces the thickness of the polysilicon layer within the DTI trench.



60. The NXP Defendants have and continue to indirectly infringe one or more claims of the '673 Patent by knowingly and intentionally inducing others, including the NXP Defendants'

customers and end-users of the '673 Accused Products, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling, and/or importing into the United States products that include infringing technology, such as the NXP BGU8019. The NXP Defendants further have and continue to indirectly infringe one or more claims of the '673 Patent by knowingly and intentionally inducing others, including each of the NXP Defendants' customers, to include the '673 Accused Products within their own downstream products that they make, use, sell, or offer for sale in the United States or import into the United States.

61. The NXP Defendants have induced infringement by others, including customers and distributors, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end-users, infringe the '673 Patent, but while remaining willfully blind to the infringement.

62. HID has suffered damages as a result of the NXP Defendants' direct and indirect infringement of the '673 Patent in an amount to be proved at trial.

**COUNT II**  
**(Infringement of the '886 Patent)**

63. Paragraphs 1 through 50 are incorporated by reference as if fully set forth herein.

64. The NXP Defendants have manufactured, used, marketed, distributed, sold, offered for sale, and imported into the United States, products that infringe the '886 Patent.

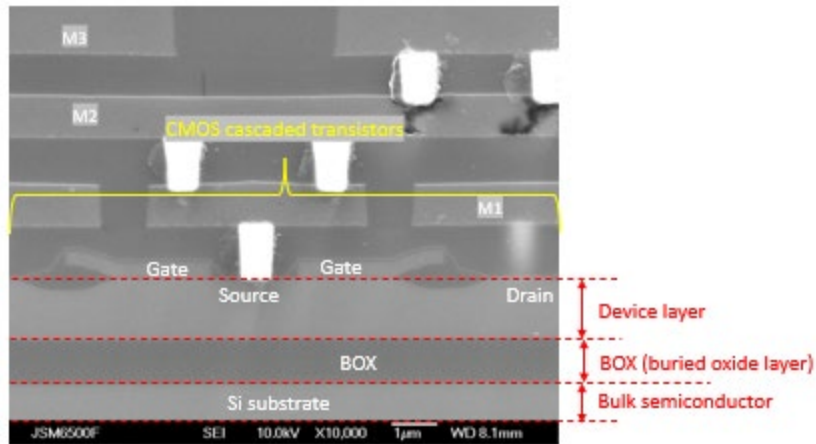
65. HID has not licensed or otherwise authorized any of the NXP Defendants to make, use, offer for sale, sell, or import any products that embody the inventions of the '886 Patent.

66. The NXP Defendants have and continue to directly infringe the '886 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '886 Patent. For example, the NXP

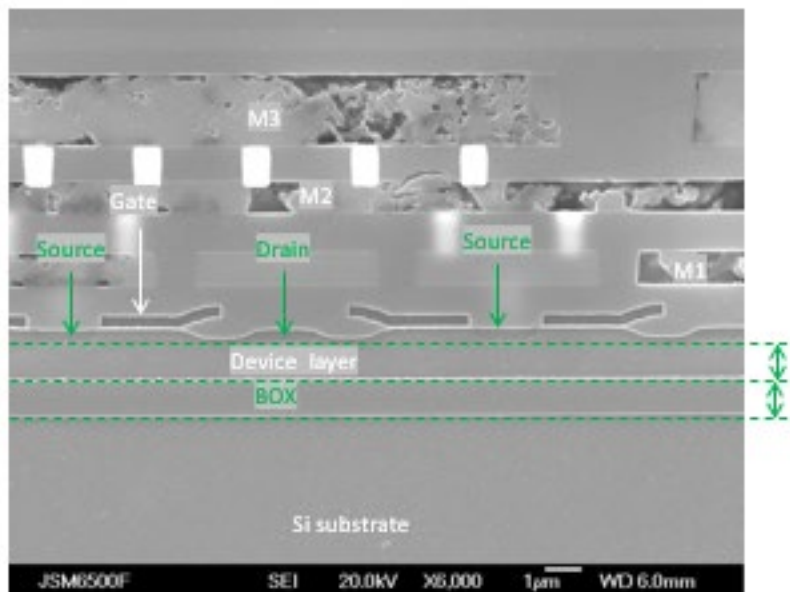
TDF8530TH car audio amplifier is used in at least the NXP Defendants' products I2C-Bus Controlled Dual Channel 43 W/2  $\Omega$ , Single Channel 85 W/1  $\Omega$  Class-D Power Amplifier with Full Diagnostics, and SOT1131-1 that each infringe the '886 Patent.

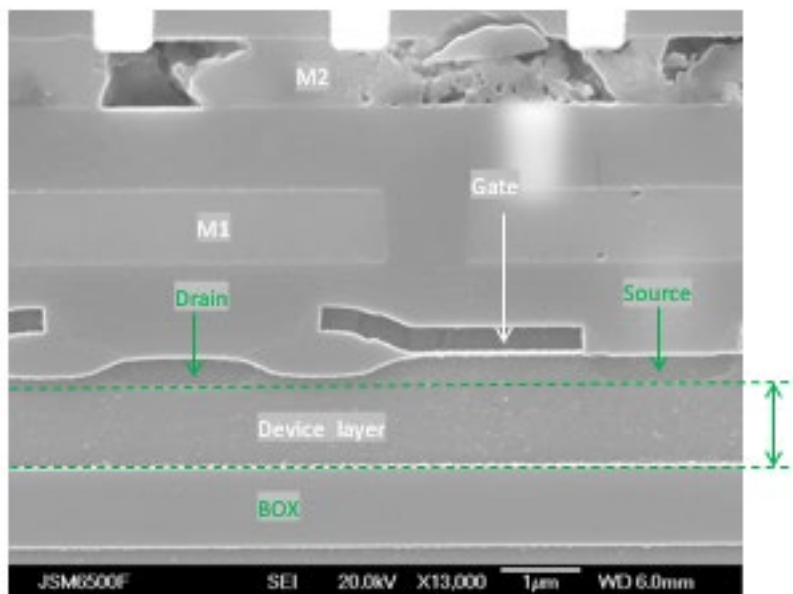
67. The NXP Defendants have and continue to directly infringe at least claim 1 of the '886 Patent by making, using, offering to sell, selling, and/or importing into the United States products that comprise a switching circuit comprising: a plurality of cascaded transistors fabricated in a device layer situated over a buried oxide layer and a bulk semiconductor layer; each of said plurality of cascaded transistors having a source/drain junction that does not contact said buried oxide layer, thereby forming a source/drain junction capacitance; at least one trench extending through said device layer and contacting a top surface of said buried oxide layer, thereby electrically isolating at least one of said plurality of cascaded transistors in said switching circuit so as to reduce voltage and current fluctuations in said device layer.

68. The '886 Accused Products comprise a switching circuit comprising: a plurality of cascaded transistors fabricated in a device layer situated over a buried oxide layer and a bulk semiconductor layer. For example, the NXP TDF8530TH comprises a switching circuit comprising: a plurality of cascaded transistors fabricated in a device layer situated over a buried oxide layer and a bulk semiconductor layer.

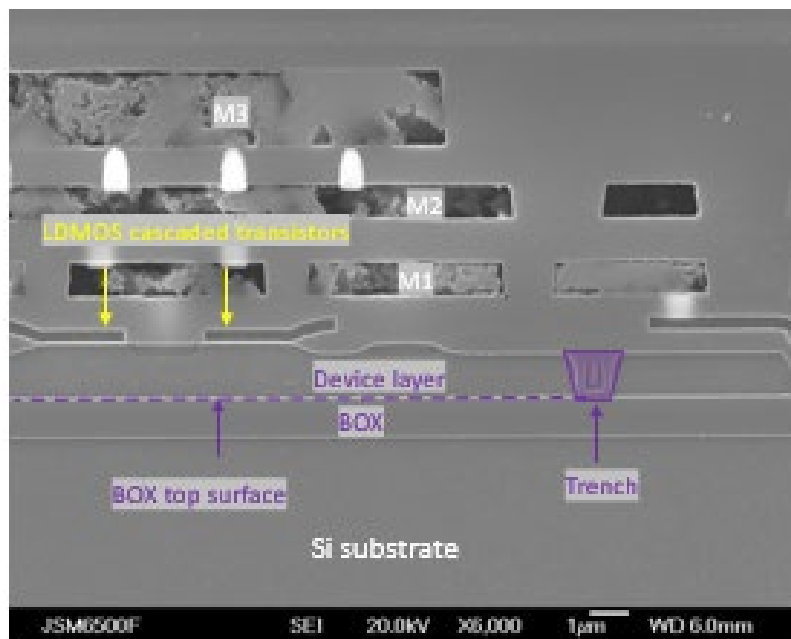


69. Each of the plurality of cascaded transistors in the '886 Accused Products have a source/drain junction that does not contact said buried oxide layer, thereby forming a source/drain junction capacitance. For example, the NXP TDF8530TH has a source/drain junctions that are contained in the device layer and do not contact the buried oxide layer, thereby forming a source/drain junction capacitance.





70. The '886 Accused Products have at least one trench extending through said device layer and contacting a top surface of said buried oxide layer, thereby electrically isolating at least one of said plurality of cascaded transistors in said switching circuit so as to reduce voltage and current fluctuations in said device layer. For example, the NXP TDF8530TH has a STI trench that extends through the device layer and contacts a top surface of the buried oxide layer. The STI trench electrically isolates at least one of the cascaded transistors and thereby reduces voltage and current fluctuations in the device layer.



71. The NXP Defendants have and continue to indirectly infringe one or more claims of the '886 Patent by knowingly and intentionally inducing others, including the NXP Defendants' customers and end-users of the '886 Accused Products, to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling, and/or importing into the United States products that include infringing technology, such as the NXP TDF8530TH. The NXP Defendants further have and continue to indirectly infringe one or more claims of the '886 Patent by knowingly and intentionally inducing others, including each of the NXP Defendants' customers, to include the '886 Accused Products within their own downstream products that they make, use, sell, or offer for sale in the United States or import into the United States.

72. The NXP Defendants have induced infringement by others, including customers and distributors, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end-users, infringe the '886 Patent, but while remaining willfully blind to the infringement.



73. HID has suffered damages as a result of the NXP Defendants' direct and indirect infringement of the '886 Patent in an amount to be proved at trial.

**DEMAND FOR JURY TRIAL**

HID hereby demands a jury for all issues so triable.

**PRAYER FOR RELIEF**

WHEREFORE, HID prays for relief against each of the NXP Defendants as follows:

a. Entry of judgment declaring that each of the NXP Defendants have directly and/or indirectly infringed one or more claims of each of the Patents-in-Suit;

b. An order awarding damages sufficient to compensate HID for the NXP Defendants' infringement of the Patents-in-Suit, but in no event less than a reasonable royalty, including supplemental damages post-verdict, together with pre-judgment and post-judgment interest and costs;

c. Entry of judgment declaring that this case is exceptional and awarding HID its costs and reasonable attorney fees under 35 U.S.C. § 285;

d. An accounting for acts of infringement;

e. Such other equitable relief which may be requested and to which the HID is entitled; and

f. Such other and further relief as the Court deems just and proper.

Dated: August 30, 2024

Respectfully submitted,

/s/ Alfred R. Fabricant

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