

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

In the Matter of

CERTAIN SEMICONDUCTOR DEVICES
AND PRODUCTS CONTAINING THE
SAME

Investigation No. 337-TA-1414

COMMISSION OPINION

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I. INTRODUCTION

On February 2, 2026, the Commission determined to review in part the final initial determination (“FID”) issued by the presiding administrative law judge (“ALJ”) on December 2, 2025. 91 Fed. Reg. 5259-61 (Feb. 5, 2026). Upon consideration of the parties’ submissions and the record as a whole, the Commission has determined to affirm in part based on modified reasoning, take no position in part, and reverse in part the issues under review. The Commission adopts a modified construction of the claim term “lateral transistor device,” and finds that under this modified construction the Accused Products infringe asserted claims 1-4, 6, and 17 of U.S. Patent No. 9,899,481 (“the ’481 patent”), but the Redesign Products do not infringe the asserted claims.¹ The Commission further finds that claims 1-3 and 6 of the ’481 patent are invalid as obvious. The Commission has determined that Infineon satisfied the technical prong of the domestic industry requirement under the modified claim construction, and Infineon satisfied the economic prong of the domestic industry requirement. The Commission has therefore determined that there has been a violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, with respect to claims 4 and 17 of the ’481 patent.

Having found a violation of section 337, the Commission has determined to issue a limited exclusion order (“LEO”) and cease and desist orders (“CDOs”) as set forth below. The Commission finds that the public interest factors do not preclude the issuance of these remedial orders. The Commission has determined that a bond of one hundred percent (100%) is required for infringing products imported during the Presidential review period. This opinion sets forth the Commission’s reasoning in support of that determination.

¹ The thirty-three (33) “Accused Products” are identified in the FID on pages 4-5. The three (3) representative “Redesign Products” are identified in the FID on page 7.

II. BACKGROUND

A. Procedural History

The Commission instituted this investigation on August 30, 2024, based on a complaint filed by Infineon Technologies Americas Corp. of El Segundo, California and Infineon Technologies Austria AG of Villach, Austria (“Infineon” or “Complainants”). 89 Fed. Reg. 70,667-68 (Aug. 30, 2024). The complaint, as supplemented, alleges violations of section 337 in the importation into the United States, the sale of importation, and the sale within the United States after importation of certain semiconductor devices and products containing the same that infringe certain patent claims. *Id.* at 70,667. At the time of the evidentiary hearing, Infineon alleged infringement of claims 1-4, 6, and 17 of the ’481 patent and claims 1-4, 8, and 9 of U.S. Patent No. 9,070,755 (“the ’755 patent”).² FID at 23, 90. The respondents are Innoscience (Suzhou) Technology Holding Company, Ltd.; Innoscience (Suzhou) Semiconductor Co., Ltd.; Innoscience (Zhuhai) Technology Company, Ltd. (“Innoscience Zhuhai”); and Innoscience America, Inc. 90 Fed. Reg. at 5260. The Office of Unfair Import Investigations is not a party to the investigation. *Id.*

The FID issued on December 2, 2025, and found a violation of section 337 with respect to all asserted claims of the ’481 patent, but no violation as to the ’755 patent. *See* 91 Fed. Reg. at 5260. The FID included a Recommended Determination on Remedy and Bond (“RD”), which recommends that the Commission issue a limited exclusion order and cease and desist orders and impose a bond of one hundred percent (100%) during the Presidential review period. *Id.* at 5260;

² Complainants also initially asserted claim 9 of the ’481 patent and certain claims of U.S. Patent Nos. 8,686,562 and 8,264,003, but those claims were terminated after Infineon filed unopposed motions for partial termination of the investigation as to those claims. *See* 89 Fed. Reg. at 70,667; Order No. 27 (Apr. 3, 2025), *unreviewed by* Comm’n Notice (Apr. 29, 2025); Order No. 46 (Apr. 30, 2025), *unreviewed by* Comm’n Notice (May 20, 2025).

RD at 157-64. The Commission did not instruct the ALJ to make findings and recommendations concerning the public interest.

The Commission determined to review the following aspects of the FID's finding of violation as to the '481 patent: construction of the term "lateral transistor device," infringement, validity, and both the technical and economic prongs of the domestic industry requirement. 91 Fed. Reg. at 5260. The Commission determined not to review the remainder of the FID. *Id.* The Commission asked the parties to brief several questions regarding certain issues under review as well as remedy and the public interest. *Id.* at 5260-61. The parties submitted initial and reply submissions on February 17 and February 24, 2026, respectively.³

B. Products at Issue

The products at issue in this investigation are gallium nitride ("GaN") semiconductors, specifically "GaN-on-Si semiconductor devices, GaN Field Effect Transistors ('FETs'), GaN high electron mobility transistors, and products incorporating such transistors, which are discrete chips, integrated circuits (ICs), wafers, modules, and demo boards." 89 Fed. Reg. at 70,667. The properties of gallium and nitrogen together allow GaN semiconductors to turn on and off much more quickly, meaning they have higher "switching speeds" than silicon semiconductors, and can operate at higher voltages and temperatures with less waste. Compl. Pet. for Review at 1 (Dec. 15, 2025). The parties stipulated to three representative Accused Products, one each for what the parties refer to as Group A, Group B, and Group C, which together comprise 33

³ Complainants' Written Submission on the Issues Under Review and Remedy, Public Interest, and Bonding (Feb. 17, 2026) ("Compl. Init. Sub."); Respondents' Response to the Commission's Notice and Request for Written Submissions (Feb. 17, 2026) ("Resp. Init. Sub."); Complainants' Reply Written Submission on the Issues Under Review and Remedy, Public Interest, and Bonding (Feb. 24, 2026) ("Compl. Reply Sub."); Respondents' Reply Submission to the Commission's Notice and Request for Written Submissions (Feb. 24, 2026) ("Resp. Reply Sub.").

Accused Products. FID at 4-5; *see* JX-0013C. Innoscience also identified redesigns for each of the three representative Accused Products (the “Redesign Products”). FID at 7.

Infineon’s domestic industry products (“DI products”) are high-voltage, enhancement mode (“e-mode”) GaN-on-Silicon high electron mobility transistors (“HEMT”), marketed under the name “CoolGaN.” FID at 6; Compl. Corrected Pre-Hearing Br. at 17-18 (May 18, 2025).

The 29 DI products fall into two groups: the “IG” DI products, rated between 600V and 650V; and the “GS” DI products, rated between 650V to 700V. FID at 6-7. The GS DI products were produced and sold by GaN Systems prior to its acquisition by Infineon in October 2023. *Id.*

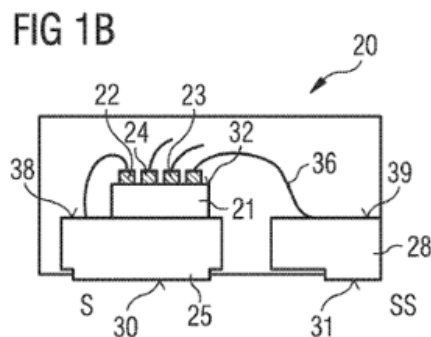
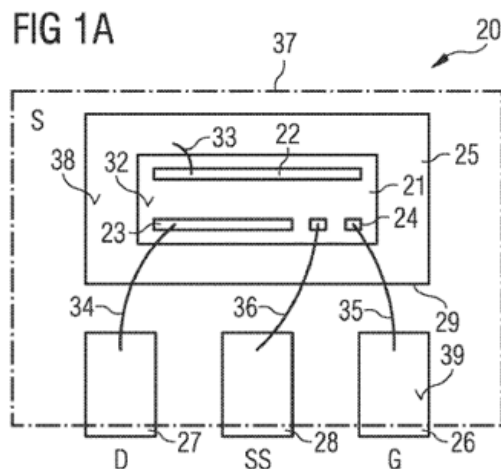
Infineon identified six representative DI products. *Id.* at 49.

C. The Asserted Patent

The ’481 patent, entitled “Electronic Component and Switch Circuit,” issued from application no. 14/997,914 (“the ’914 application”) on February 20, 2018. JX-0004.0001 (’481 patent). The ’914 application was filed on January 18, 2016. *Id.* The named inventors are Ralf Otremba and Klaus Schiess. *Id.* The patent is assigned to Complainant Infineon Technologies Austria AG. *Id.* Because the ’914 application was filed after March 16, 2013, the ’481 patent is subject to the provisions of the America Invents Act. *See* Manual of Patent Examining Procedure § 1440.

The ’481 patent relates to the packaging of semiconductors. “The package includes internal electrical connections from the semiconductor device to a substrate or leadframe which includes outer contacts,” which are used to mount the claimed electronic component on a printed circuit board. JX-0004 at 1:7-12. The ’481 patent is specifically directed to the configuration of

electrical connections between a compound⁴ semiconductor and other components of the packaging as depicted in Figures 1A (plain view) and 1B (cross-sectional view):



JX-0004 at Figs. 1A, 1B. Electronic component **20** includes a compound semiconductor transistor device **21** which comprises a first current electrode **22**, a second current electrode **23** and a control electrode **24**. *Id.* at 4:12-15. The compound semiconductor transistor device **21** is a “lateral device”: it has a lateral drift path and electrodes **22**, **23**, and **24** are all arranged on the upper surface of the device **21**. *Id.* at 4:37-41. Electronic component **20** further includes a die

⁴ GaN semiconductors are considered “compound” semiconductors because they comprise two different chemical elements, compared to conventional semiconductors which contain only crystalline silicon. Compl. Opening Claim Construction Br. at 1 (Dec. 6, 2024).

pad **25**, a first lead **26**, a second lead **27**, and a third lead **28**, with the leads **26**, **27**, and **28** spaced apart from the die pad **25**. *Id.* at 4:15-18. The control electrode **24** is connected to the first lead **26**, the first current electrode **22** is coupled to the die pad **25**, the second current electrode is coupled to the second lead **27**, and the third lead **28** is coupled to the compound semiconductor transistor device **21**. *Id.* at 4:42-47. The specification explains that the third lead **28** thus provides a “source sensing” functionality. *Id.* at 4:45-47. Source sensing is useful to “exclude the parasitic source inductance from the driver circuit.” *Id.* at 5:46-53. That is, the connection to the source (here, the compound semiconductor device) helps reduce resistance from the source that can cause voltage spikes and switching losses in the electronic component. *See* RX-0134.1. The issues under review relate to (1) the compound semiconductor device being a “lateral transistor device”; and (2) the source sensing functionality of the third lead.

The FID found that the Accused Products infringe, the Redesign Products do not infringe, and the DI products practice, independent claim 1, dependent claims 2-4 and 6, and independent claim 17 of the '481 patent. FID at 28-45; 50-64. The asserted claims are reproduced below (disputed limitations in bold, limitation labeling per the FID):

- | | |
|--------|---|
| 1[PRE] | An electronic component, comprising: |
| 1[A] | a compound semiconductor transistor device comprising a first current electrode, a second current electrode and a control electrode; |
| 1[B] | a die pad; and |
| 1[C] | a first lead, a second lead and a third lead, |
| 1[D] | wherein the first lead, the second lead and the third lead are spaced at a distance from the die pad, |
| 1[E] | wherein the control electrode is coupled to the first lead, the first current electrode is coupled to the die pad, the second current electrode is coupled to the second lead and |
| 1[F] | the third lead is coupled to the compound semiconductor transistor device and provides a source sensing functionality, |
| 1[G] | wherein the compound semiconductor transistor device is a lateral transistor device and |
| 1[H] | a drain or a source of the compound semiconductor transistor device is coupled to the die pad, |

- 1[I] wherein the first current electrode is coupled to the die pad by a plurality of bond wires or a contact clip.
- 2[PRE]
2[A] The electronic component of claim 1, wherein the compound semiconductor transistor device is one of a SiC transistor device, a III-V compound semiconductor transistor device and a Group III-nitride transistor device.
- 3[PRE]
3[A] The electronic component of claim 1, wherein the compound semiconductor transistor device has a blocking voltage capability of at least 400V and a switching frequency capability of at least 100 kHz.
- 4[PRE]
4[A] The electronic component of claim 1, further comprising a housing, wherein lower surfaces of the die pad, the first lead, the second lead and the third lead are exposed from the housing and provide substantially planar contact surfaces.
- 6[PRE]
6[A] The electronic component of claim 1, wherein the second current electrode is coupled to the second lead by a plurality of bond wires or a contact clip.
- 17[PRE]
17[A] An electronic component, comprising:
a Group III nitride-based transistor device having a blocking voltage capability of at least 400V and a switching frequency capability of at least 100 kHz,
17[B] a first current electrode, a second current electrode and a control electrode, wherein
17[C] the control electrode is coupled to a first lead, the first current electrode is coupled to a die pad, the second current electrode is coupled to a second lead and
17[D] **a third lead is coupled to the Group III nitride-based transistor device and provides a source sensing functionality; and**
17[E] a housing,
17[F] wherein the first lead, the second lead and the third lead are spaced at a distance from the die pad,
17[G] wherein lower surfaces of the die pad, of the first lead, of the second lead and of the third lead are exposed from the housing and provide substantially planar contact surfaces,
17[H] **wherein the Group III nitride-based transistor device is a lateral transistor device and**

- 17[I] a drain or a source of the Group III nitride-based transistor device is coupled to the die pad,
 17[J] wherein the first current electrode is coupled to the die pad by a plurality of bond wires or a contact clip.

III. COMMISSION REVIEW OF THE FID

When the Commission reviews an initial determination, in whole or in part, it reviews the determination *de novo*. *Certain Electronic Stud Finders, Metal Detectors and Electrical Scanners*, Inv. No. 337-TA-1221, Comm’n Op. at 9 (Mar. 14, 2022) (citation modified), *aff’d*, *Zircon Corp. v. Int’l Trade Comm’n*, 101 F.4th 817 (Fed. Cir. 2024). On review, the “Commission has all the powers which it would have in making the initial determination, except where the issues are limited on notice or by rule.” *Certain Electronic Devices, Including Streaming Players, Televisions, Set Top Boxes, Remote Controllers, and Components Thereof* (“*Streaming Players*”), Inv. No. 337-TA-1200, Comm’n Op. at 7 (Dec. 3, 2021) (citation modified), *aff’d*, *Roku, Inc. v. Int’l Trade Comm’n*, 90 F.4th 1367 (Fed. Cir. 2024). With respect to the issues under review, “the Commission may affirm, reverse, modify, vacate, or remand for further proceedings, in whole or in part, the initial determination of the administrative law judge.” 19 C.F.R. § 210.45(c). The Commission also “may take no position on specific issues or portions of the initial determination,” and “may make any finding or conclusions that in its judgment are proper based on the record in the proceeding.” *Id.*; *see also Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1423 (Fed. Cir. 1984).

IV. ANALYSIS OF THE ISSUES UNDER REVIEW

Upon consideration of the FID, the parties’ submissions on review, and the record as a whole, the Commission has determined to modify the FID’s construction of “lateral transistor device” and affirm, under the modified construction, the FID’s infringement findings for the Accused Products and non-infringement findings for the Redesign Products. As to validity, the

Commission has determined to: (1) affirm claims 1, 2, 4, and 6 are not obvious over Liu⁵ under the modified construction of “lateral transistor device”; (2) affirm that claims 3 and 17 are not obvious over Liu in view of Roberts⁶ for the same reasons as Liu alone, but take no position on the FID’s motivation to combine analysis; and (3) reverse the FID and find claims 1-3 and 6 are invalid as obvious over Nega⁷ in view of Roberts. With respect to the domestic industry requirement, the Commission has determined to affirm the FID’s finding that Infineon satisfied the technical prong as to claims 4 and 17 under the modified claim construction but reverse as to invalid claims 1-3 and 6, and to affirm with supplemental reasoning the FID’s economic prong analysis. Thus, the Commission finds a violation as to claims 4 and 17 of the ’481 patent, but no violation as to claims 1-3 and 6 of the ’481 patent.⁸ We address the remedy for that violation in Section V below.

A. Claim Construction

The FID construed the term “lateral transistor device” as used in claims 1 and 17 to mean “a transistor in which current flows in a direction parallel to the surface of the transistor.” FID at 28. Innoscience petitioned for review of that construction, arguing that a “lateral transistor” is a device in which the electrodes are on the upper surface of the device. Resp. Pet. for Review at 6-19 (Dec. 15, 2025) (“RPet.”). As set forth below, the Commission finds the proper construction of “lateral transistor device” is a device in which the current *generally* flows in the lateral direction *and* has electrodes on the upper surface of the device.

⁵ U.S. Patent No. 10,930,524 (RX-0122) (“Liu”).

⁶ U.S. Patent Appl. Pub. No. 2014/0175454 (RX-0118) (“Roberts”).

⁷ U.S. Patent Appl. Pub. No. 2014/0110760 (RX-0117) (“Nega”).

⁸ The Commission affirms and adopts the ID’s findings, conclusions, and supporting analysis that are not inconsistent with the Commission’s opinion.

Claim terms are normally construed according to their ordinary and customary meaning in the art, as understood by a person of ordinary skill in the art in the context of the entire patent. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005), *cert. denied*, 546 U.S. 1170 (2006). Claim construction focuses mainly on the intrinsic evidence, which consists of the claims themselves, the specification, and the prosecution history. *Id.* at 1313-1317. If the intrinsic evidence does not establish the meaning of a claim, then extrinsic evidence may be considered. Extrinsic evidence consists of all evidence external to the patent and the prosecution history, and includes inventor testimony, expert testimony, and learned treatises, and it may be considered if a court deems it helpful in determining the true meaning of language used in the patent claims. *Id.* at 1317.

Beginning with the intrinsic record, the specification of the '481 patent explains that “lateral” should be understood to mean “a direction or extent that runs generally parallel to” the surface of a semiconductor, whereas “vertical” means “generally perpendicular to these surfaces,” and thus “runs in the thickness direction of the semiconductor material.” JX-0004 at 3:15-25. When describing “lateral transistors” in particular, the specification begins by describing lateral devices as having both a lateral current flow (or drift path)⁹ and electrodes on the same surface:

- “The compound semiconductor transistor device **21** is a lateral device which has a lateral drift path. A first current electrode **22**, second current electrode **23** and the control electrode **24** are arranged on an upper surface **32** of the compound semiconductor transistor device **21**.” *Id.* at 4:37-41.

⁹ The parties and the FID use the terms “drift path” and “current flow” interchangeably. We do the same.

- “In some embodiments, such as that illustrated in FIG. 1, the compound semiconductor transistor device **21** is a lateral device which has a lateral drift path. In a lateral device, the first current electrode **22**, the second current electrode **23** and the control electrode **24** are arranged on the upper surface **32** of the compound semiconductor transistor device **21**.” *Id.* at 5:54-60.

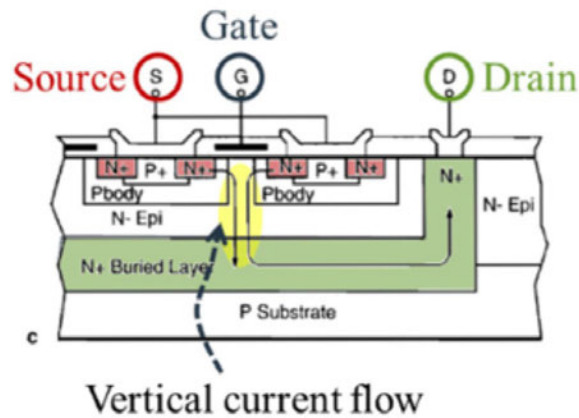
The specification contrasts lateral devices with vertical devices “having a vertical drift path, in which case one of the current electrodes is arranged on [sic] lower surface of the body of the compound semiconductor transistor device and the other current electrode and control electrode are arranged on the opposing surface of the compound semiconductor transistor device.” *Id.* at 5:65-6:3; *see id.* at 6:7-13. However, subsequent references to lateral transistors in the specification note only the presence of the electrodes on the upper surface of the device and do not describe the current flow. *Id.* at 6:14-19; 7:50-54, 9:2-5, 10:24-27, 11:4-8; 11:63-12:2, 14:44-47.

The prosecution history of the '914 application (which issued as the '481 patent) reflects the importance of both the electrode placement and current flow for defining a lateral transistor. In response to a non-final rejection of the draft claims as anticipated and obvious, the applicant amended the claims that issued as claims 1 and 17 to include the limitations referred to in this investigation as 1[G]-[I] and 17[H]-[J]. JX-0008.137, .141. The applicant argued that the reference cited by the examiner in the rejection “fails to teach the feature of a **lateral transistor device** as recited in amended claim 1,” and instead teaches a “vertical transistor which includes current electrodes on opposing surfaces.” *Id.* at .143 (emphasis in original). The applicant further explained that it is “well-known in the semiconductor arts” that “a lateral transistor device is a bipolar transistor in which **current flows across the base in the direction parallel to the wafer surface.**” *Id.* at .144 (emphasis in original). The amended claims were then allowed. *Id.* at .158. The Federal Circuit has explained that “the prosecution history can often inform the

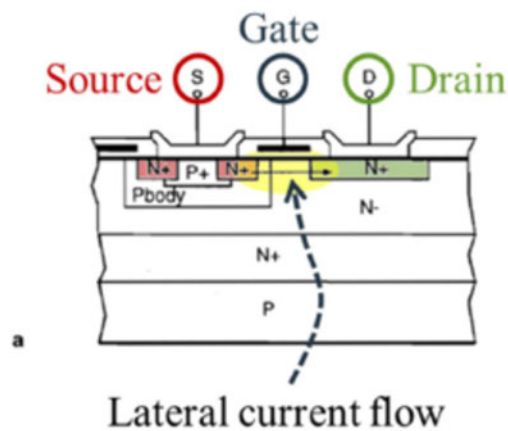
meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Phillips*, 415 F.3d at 1317. Here, the prosecution history reflects that the patentee elected to limit the scope of the claimed “lateral transistor” to devices with current flow parallel to the surface of the device, in addition to the electrode placement recited in the specification.

Taken as a whole, the Commission finds that the intrinsic record demonstrates that a person of ordinary skill in the art would understand a lateral transistor requires *both* a lateral current flow and electrodes on the same surface. The FID’s and Innoscience’s proposed constructions are incomplete insofar as each omits one of the two elements the person of ordinary skill would recognize are required for a lateral transistor.

The extrinsic record further demonstrates that the proper construction of “lateral transistor” requires both a generally parallel current flow and electrodes on the upper surface of the transistor. Infineon’s expert, Dr. Baker, explained that transistors with all electrodes located on a single surface *may* be, but are not necessarily, lateral transistors. Dr. Baker cited a prior art textbook (Murari, RX-0137) as providing an example of transistor with the electrodes on the upper surface but characterized as having a vertical current flow:

Example of a Vertical Transistor

CX-0001C at Q/A 62 (annotating RX-0137 Fig. 1.7c). A different transistor, also with electrodes on the upper surface, may be a lateral transistor based on the current flow:

Example of a Lateral Transistor

Id. at Q/A 68 (annotating RX-0137 Fig. 1.7a). Dr. Baker explains that it is not the location of the electrodes on the upper surface, but the N+, Pbody, N- epi, and N+ buried layers that determine the direction of current flow in these two different transistors. *Id.* at Q/A 66. Thus, a person of ordinary skill would understand “lateral transistor device” as used in the ’481 patent, to mean a

device that satisfies both the current flow and electrode requirements recited in the specification (and depicted in Murari).

Innoscence relies on the testimony of inventor Ralf Otremba for the proposition that a person of ordinary skill distinguishes between lateral and vertical devices solely based on the location of the electrodes. RPet. at 11 (Dec. 15, 2025) (quoting JX-0025C at 133:2-22). Mr. Otremba testified that “as [a] packaging expert,” if the source and electrodes are on opposite sides, “for me that means a vertical device.” JX-0025C at 133:21-22. Mr. Otremba’s testimony is entirely consistent with Dr. Baker’s testimony and the examples in Murari reproduced above: if the electrodes are on opposite sides, it is a vertical device; if the electrodes are on the same side, it may or may not be a lateral device, depending on the current flow. As Mr. Otremba explained, it is the inner structures that “[t]ell[] the device expert how the arrangement or current flow is in the end.” *Id.* at 133:2-5.

Innoscence further argues that the FID’s construction is overbroad insofar as “[i]f there is *any* current flow in a direction parallel to the upper surface, the [F]ID would, presumably, conclude it is a ‘lateral transistor.’” RPet. at 12 (emphasis added); *see id.* at 17 (annotating Murari Fig. 1.7c). The ’481 patent acknowledges that current flow is not perfectly parallel or perpendicular to the surface of a transistor, explaining that “lateral” should be understood to mean “*generally* parallel to the lateral extent of a semiconductor,” while “vertical” means “*generally* perpendicular to the[] surface[].” JX-0004 at 3:15-22. Therefore, the Commission finds that “lateral transistor device” as used in the asserted claims of the ’481 patent means “a transistor in which the current generally flows in the lateral direction and has electrodes on the upper surface of the device.”

B. Infringement

The FID found that the '481 patent Accused Products infringe asserted claims 1-4, 6, and 17, but the Redesign Products do not infringe any asserted claim. FID at 28-45. Innoscience did not petition for review of the FID's infringement findings as to the Accused Products despite its petition for review regarding claim construction. Nonetheless, the Commission determined to review the FID's infringement findings.

Section 337 prohibits "[t]he importation into the United States, the sale for importation, or the sale within the United States after importation . . . of articles that infringe a valid and enforceable United States patent" 19 U.S.C. § 1337(a)(1)(B). Direct infringement includes making, using, offering to sell, or selling a patented invention or importing a patented invention into the United States, without consent of the patent owner. 35 U.S.C. § 271(a). To prove direct infringement, the complainant must establish by a preponderance of the evidence that each of the claim limitations is found in the accused device. *Allen Eng'g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1345 (Fed. Cir. 2002); *Advanced Cardiovascular Sys., Inc. v. Scimed Life Sys., Inc.*, 261 F.3d 1329, 1336 (Fed. Cir. 2001). As discussed below, the evidence cited in the FID's infringement analysis shows the Accused Products infringe the asserted claims, satisfying both requirements of the modified construction of "lateral transistor device."¹⁰

1. First Requirement - The current flow of the Accused Products is generally parallel to the surface of the transistor.

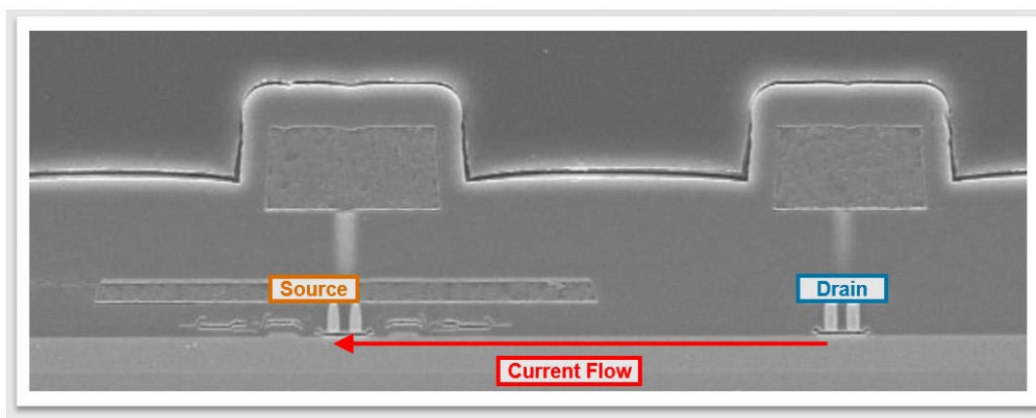
The FID's infringement analysis focused on current flow, and credits Infineon's evidence that in the Accused Products the current flow is parallel to the surface of the transistor. FID at

¹⁰ Infineon did not present any evidence of infringement as to the '481 patent Redesign Products. FID at 45. The FID found that the '481 patent Redesign Products lack a connection from a third lead to the source of the transistor and therefore do not practice limitations 1[F] and 17[D]. *Id.* Infineon did not petition for review of these findings. We affirm these findings for the reasons stated in the FID.

29-32. The FID acknowledged that a lateral transistor may have “nominal current flow or leakage in other directions,” but the Accused Products “primarily” exhibit lateral current flow. *Id.* at 30, n.13; CX-0001C at Q/A 272, 274. Innoscience did not petition for review of the FID’s finding that Dr. Baker’s testimony established the current in the Accused Products flows primarily parallel to the surface of the transistor. That testimony and the other evidence cited in the FID that the current flow is *primarily* parallel to the surface of the transistor is sufficient to show that the current flow in the Accused Products is *generally* parallel to the surface of the transistor and thus satisfies the first element of the modified construction of “lateral transistor device.” FID at 29-32.

2. Second Requirement - The electrodes of the Accused Products are on the upper surface of the transistor.

Before the ALJ, Infineon presented secondary electron microscope (“SEM”) images of cross-sections of the sample Accused Product dies:



FID at 30 (reproducing CDX-0002C.262) (SEM image for Group A representative Accused Product); *see also* CX-0001C at Q/A 268, 282, 284; CX-0893C-CX0895C (laboratory reports of SEM analysis of representative Accused Products). This SEM image, as annotated by Dr. Baker, shows the source and drain electrodes on the upper surface of the transistor. The FID reproduced the SEM images for the Group B and Group C representative Accused Products, which likewise

show the source and drain electrodes on the upper surface of the transistor. FID at 31 (reproducing CDX-0002C.263, .264); CX-0001C at Q/A 282 (Group B representative Accused Product); CX-0001C at Q/A 284 (Group C representative Accused Product). Innoscience did not argue in its petition for review that the infringement finding should be reversed under its proffered claim construction of “lateral transistor” (*i.e.*, “a transistor with electrodes on the upper surface”), and logically so in light of the SEM images. The SEM images relied upon by the FID are sufficient to show the source and drain electrodes of the Accused Products are on the upper surface of the transistor and thus satisfy the second requirement of a “lateral transistor.”¹¹ Therefore, we affirm the finding that the Accused Products but not the Redesign Products, infringe all asserted claims.

C. Validity

Innoscience asserted three grounds for invalidity:

- Claims 1, 2, 4, and 6 are invalid as obvious over Liu;
- Claims 3 and 17 are invalid as obvious over Liu in combination with Roberts; and
- Claims 1-3 and 6 are invalid as obvious over Nega in combination with Roberts.

The FID found that Innoscience failed to make a *prima facie* case of obviousness as to any of the three asserted grounds. *See* FID at 81.

Pursuant to section 103 of the Patent Act:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains.

¹¹ *See also* CX-0031.5 (Innoscience Introduction of InnoGaN Characteristics) (depicting source and drain electrodes on the upper surface of the device); JX-0016C at 114:19-22 (confirming CX-0031 describes the characteristics of the '481 patent Accused Products).

35 U.S.C. § 103. To determine whether a patent claim would have been obvious, the Commission must evaluate (1) the scope and content of the prior art, (2) the differences between the prior art and the claims at issue, (3) the level of ordinary skill in the art, and (4) any relevant secondary considerations, such as commercial success, long felt but unsolved needs, and the failure of others. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). “Obviousness is a question of law based on underlying questions of fact.” *Scanner Techs. Corp. v. ICOS Vision Sys. Corp. N.V.*, 528 F.3d 1365, 1379 (Fed. Cir. 2008). A determination of obviousness “requires finding that a person of ordinary skill in the art would have been motivated to combine or modify the teachings in the prior art and would have had a reasonable expectation of success in doing so.” *Adapt Pharma Operations Ltd. v. Teva Pharms. USA, Inc.*, 25 F.4th 1354, 1365 (Fed. Cir. 2022). The party challenging the patent must show invalidity by clear and convincing evidence. *Apotex USA, Inc. v. Merck & Co.*, 254 F.3d 1031, 1036 (Fed. Cir. 2001).

For the reasons discussed below, the Commission finds as follows:

- Affirm that claims 1, 2, 4, and 6 are not invalid as obvious over Liu under the modified construction of “lateral transistor device”;
- Affirm that claims 3 and 17 are not invalid as obvious over Liu in combination with Roberts for the same reasons as Liu alone, but take no position on motivation to combine;¹² and
- Reverse as to claims 1-3 and 6 and find those claims are invalid as obvious over Nega in combination with Roberts. Further, upon consideration of the *Graham* factors, the Commission finds that the evidence of secondary considerations does not overcome the strong *prima facie* case of obviousness for claims 1-3 and 6.

¹² The Commission affirms that the combination of Liu in view of Roberts does not disclose or suggest every asserted claim limitation (FID at 72-76), so the Commission need not make a finding as to the motivation to combine those references and thus takes no position on the motivation to combine the references. *Beloit*, 742 F.2d at 1423.

1. Obviousness over Liu (U.S. Patent No. 10,930,524)

Liu is entitled “Semiconductor Component and Method of Manufacture.” RX-0122.0001. Liu is directed to “semiconductor components” comprised of a semiconductor device bonded to a support structure, along with electrical interconnections between the leadframe within the support structure and the electrodes of the semiconductor device. *See* RX-0122 at cl. 1. Innoscience points to Figure 12 of Liu as depicting a lateral transistor:

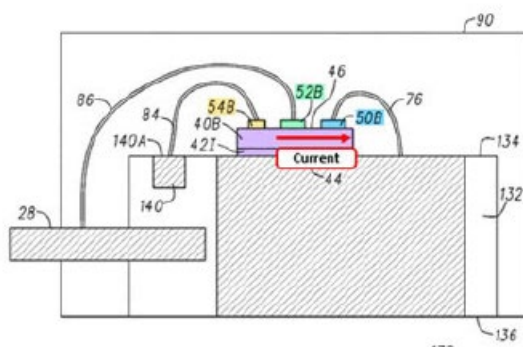


FIG. 12

RX-0002C at Q/A 70. Specifically, Innoscience’s expert, Dr. Zane, explained that electrodes **50B**, **52B**, and **54B** “are spread laterally across the semiconductor material and thus create a lateral drift path.” *Id.* The FID was unpersuaded, noting that Dr. Zane did not cite any disclosures in Liu in support of his assertion that the current flows laterally in the device depicted. FID at 71 & n.24. The FID explained that Liu does not describe this or any other embodiment in the patent as a lateral transistor, and the location of the electrodes on the upper surface was not dispositive of the current flow. *Id.* at 71.

The Commission finds that under the modified construction of “lateral transistor device,” Innoscience cannot show that Liu teaches a lateral transistor for the reasons stated in the FID. Innoscience’s petition for review on this issue rests largely on the flawed argument that because the electrodes in the embodiment in Figure 12 are on the top of the device, the current by

definition must flow laterally to some extent. RPet. at 20, 27. This is incorrect. *See supra*, at 13-15; FID at 26-27. The Commission affirms the FID's finding that Dr. Zane offers nothing more than the location of the electrodes to establish the direction of the current flow in the transistor depicted in Liu. FID at 71-72. Dr. Zane simply asserts that "the current in Liu's device flows from source contact 52B to the drain contact 50B" with no support or further reasoning. *Id.* By contrast, to show infringement by the Accused Products, Dr. Baker relied on various sources of evidence, including images "show[ing] a uniform material composition of the substrate in horizontal bands," and internal Innoscience documents referring to the Accused Products as "lateral devices." FID at 31-32.

Innoscience further contends that "[t]he transistor disclosed by Liu has current flowing in a direction parallel to the surface of the transistor *in the same manner disclosed by the '481 patent specification* with the electrodes on the same surface." RPet. at 24 (emphasis by Innoscience). But the '481 patent does not suggest that the current flow of a lateral transistor is inherent given the location of the electrodes on the upper surface; rather, it defines a lateral transistor based on both the location of the electrodes and the direction of current flow. *See, e.g.*, 4:37-41, 5:54-60; JX-0008.144.

Finally, Innoscience argues that the transistor in Figures 11 and 12 must be a lateral transistor because elsewhere Liu discloses a vertical field effect semiconductor device. *See* RX-0122 at 3:66-67 (describing Fig. 10). The fact that Liu explicitly identifies Figure 10 as a vertical device but does not characterize the embodiment in Figures 11 and 12 as vertical or lateral undermines Innoscience's assertion that Figure 12 depicts a lateral device. The lack of a label suggests it could be either lateral or vertical.

Innoscence failed to show that Liu teaches a lateral transistor under either the FID's construction (requiring current flow parallel to the surface of the device) or the modified construction (requiring current flow *generally* parallel to the surface of the device). Therefore, we affirm the FID's finding that Innoscence failed to show claims 1, 2, 4, and 6 are invalid as obvious over Liu.

2. Obviousness over Liu/Roberts (U.S. Patent Appl. Pub. No. 2014/0175454)

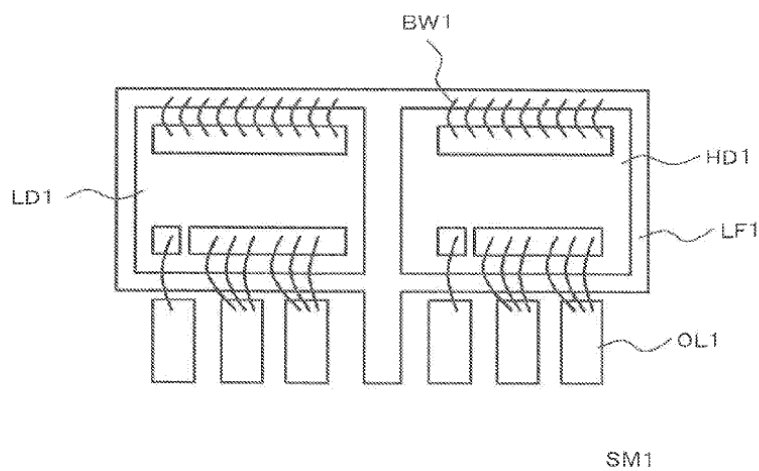
Innoscence relies on Roberts to teach the limitations of claims 3 and 17 missing from Liu, specifically “a blocking voltage capability of at least 400V and a switching frequency capability of at least 100 kHz.” JX-0004 at cl. 3, 17. Roberts is entitled “Devices and Systems for Power Conversion Circuits.” RX-0118.0001. Roberts is directed to packaging a GaN transistor with a complementary metal-oxide semiconductor (“CMOS”) driver using a “flip-chip” configuration. RX-0118 at Fig. 2. By replacing traditional wire connections with direct electrical interconnects of the dies, the claimed device reduces inductance and resistance and improves thermal characteristics. *See id.*, ¶ [0059].

The FID noted that because Liu does not disclose the lateral transistor required by claim 1 (from which claim 3 depends) and claim 17, the asserted combination of references does not invalidate claims 3 or 17. FID at 73-76. For the same reasons as discussed with respect to Liu alone, we agree with this finding under the modified construction, and therefore the Commission affirms that Liu in combination with Roberts does not render claims 3 and 17 obvious. The Commission takes no position regarding the FID's finding of no motivation to combine Liu and Roberts. FID at 73-74; *see Beloit*, 742 F.2d at 1423.

3. Obviousness over Nega (U.S. Patent Appl. Pub. No. 2014/0110760)/Roberts

As an alternative to Liu, Innoscience argued that claims 1-3 and 6 would have been obvious over Nega in view of Roberts. FID at 76. Nega is entitled simply “Semiconductor Device,” and is directed to DC/DC converter circuits. RX-0117.0001. Innoscience’s invalidity case is built around Figure 4 of Nega:

FIG. 4



RX-0117.5. Figure 4 is a plain view of one embodiment of the claimed semiconductor device SM1. *Id.*, ¶ [0090]. Figure 4 comprises a high-side switching device HD1 “constituted by the transistor HT1 and a low-side switching device LD1 constituted by transistor LT1.” *Id.*, ¶ [0091]. The high-side transistor HT1 is a compound semiconductor and may be a GaN transistor. *Id.*, ¶ [0049], [0090]; RX-0002C at Q/A 126. Both the high-side and low-side devices can be mounted to the same packaging. RX-0117, ¶ [0091]. Transistors HT1 and LT1 are

separate chips and can be connected to the outer leads OL1 via bonding wires BW1. *Id.*,

¶ [0093]-[0094]. Nega discloses a combination of connections that tracks limitation 1[E]:

'481 Patent limitation 1[E]	Nega discussion of Fig. 4, ¶ [0095]
wherein the control electrode is coupled to the first lead,	gate electrode GE1 is connected to the outer lead OL1
the first current electrode is coupled to the die pad	one of the source electrode SE1 and the drain electrode DE1 is connected to the lead frame LF1 and the other thereof is connected to the outer lead OL1
the second current electrode is coupled to the second lead	

RX-0002C at Q/A 131. Infineon did not dispute that Nega teaches limitation 1[E]. FID at 76.

The only element of claim 1 of the '481 patent missing from Nega is a third lead that is coupled to the compound semiconductor transistor device and provides a source sensing functionality (limitation 1[F]). RX-0002C at Q/A 128.

For the third lead, Innoscience's expert Dr. Zane testified that a person of ordinary skill in the art would use Robert's discussion of source sensing to modify Nega to include a third lead. RX-0002C at Q/A 133-35. Dr. Zane testified that it was well known in the art that using Kelvin Source Sense ("Kelvin SS" or "KSS") connections would reduce transients that may result in unwanted switching. *Id.* at Q/A 133. Figure 1A of Roberts shows a circuit comprising a cascode arrangement of a normally-on GaN HEMT power transistor **114** and a normally off low voltage MOSFET **112**

MOSFETs. RX-0140.3. Huang is a 2015 paper discussing high voltage enhancement mode GaN devices. RX-0134.1. Huang explains that GaN devices switch at much faster speeds than Si MOSFETS, which means the packaging is even more important to reduce common source inductance. *Id.* at .2. Huang notes that Kelvin connections can minimize common source inductance for high voltage GaN devices. *Id.*; *see id.* at .4 (“The best way to improve the di/dt immunity is to minimize common source inductance by improving packaging and the PCB layout. Separating the gate and power loops with a Kelvin connection is helpful to reduce common source inductance.”). Dr. Zane opines that a person of ordinary skill would have been motivated to implement source sensing connection in Nega given the well-known advantages to reducing source inductance in high voltage GaN devices. RX-0002C at Q/A 134-35. Dr. Zane further explains that the person of ordinary skill would have looked to Roberts to implement source sensing in Nega because both Nega and Roberts relate to packaging compound semiconductor transistor devices. *Id.* at Q/A 136.

The FID faulted Dr. Zane for “not identify[ing] anything deficient in Nega such that a skilled artisan would look to Roberts to make the suggested change.” *Id.* at 78 n. 29. The FID erred in focusing on the lack of a purported “problem” in Nega for Roberts to solve. Recently, in *Medivis, Inc. v. Novarad Corp.*, the Federal Circuit faulted the U.S. Patent and Trademark Office’s Patent Trial and Appeal Board (“PTAB”) for “requiring Medivis to provide a specific reason for a POSA to look to Amira [the second reference], using Doo [the primary reference] as the starting point.” No. 24-1794, Slip Op. at 8 (Mar. 3, 2026). The Federal Circuit explained that “*KSR* explicitly eschews such a rigid approach to obviousness.” *Id.* (citation modified). “There is a motivation to combine when a known technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar

devices in the same way.” *Intel Corp. v. PACT XPP Schweiz AG*, 61 F.4th 1373, 1380 (Fed. Cir. 2023) (citation modified). “Rather than requiring a specific reason to modify a particular prior-art reference with another, in a certain order, the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.” *Medivis*, Slip Op. at 8-9. In *Medivis*, it was sufficient that Doo’s AR system would “take advantage” of Amira’s visualization technology to show a motivation to combine. *Id.* at 8. Here, Innoscience was not required to show some problem or flaw with the device in Nega and a particularized motivation to select Roberts to solve that problem, as the FID and Infineon suggest. *See* Compl. Response to RPet. for Review at 34-35 (Dec. 23, 2025). It was sufficient that Innoscience showed that adding a source sensing connection—which was known in the art to reduce source inductance in high voltage GaN power devices—would improve the operation of the GaN high side transistor in Nega. *See* RX-0002C at Q/A 128, 134.

The FID also rejected Innoscience’s proposed combination because the Kelvin SS connection in Roberts is connected to the normally-off low voltage MOSFET, not the compound semiconductor. FID at 79-80. The FID emphasized the differences between the devices in Nega and Roberts, including that Roberts describes a “very high power microwave integrated hybrid device,” whereas Nega discloses a 2MHz DC/DC converter, and the packaged device in Roberts has terminals that make driving the GaN transistor easier, while Nega is packaged such that the transistors behave as separate transistors. *Id.* at 80.

“[A] reference qualifies as prior art for an obviousness determination only when it is analogous to the claimed invention.” *LKQ Corp. v. GM Glob. Tech. Operations LLC*, 102 F.4th 1280, 1296 (Fed. Cir. 2024). The Federal Circuit has articulated two tests to define the scope of analogous art: “(1) whether the art is from the same field of endeavor, regardless of the problem

addressed and, (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved." *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004). As to the first test, whether a reference is from the same "field of endeavor" as the patent is based on "explanations of the invention's subject matter in the patent application, including the embodiments, function, and structure of the claimed invention." *Id.* at 1325.

As background, the '481 patent explains that the patent relates to packaging one or more semiconductor devices. JX-0004 at 1:6-10. Historically, semiconductors comprised silicon material, but newer devices like GaN semiconductors are emerging as attractive alternatives because they can carry large currents and high voltages at fast switching times. *Id.* at 17-29. However, the high voltages and fast switching times result in additional challenges for packaging that the '481 patent seeks to address. *Id.*

Nega broadly describes the application as generally relating to DC/DC converter circuits. RX-0017, ¶¶ [0003]-[0004]. Nega describes configurations including high-side GaN transistors designed to reduce switching losses and improve efficiency. *See, e.g., id.*, ¶¶ [0007], [0106]. Nega further teaches forming semiconductor packaging using the embodiments. *Id.*, ¶¶ [0091]-[0092]. Given that both Nega and the '481 patent are directed to configuring and packaging GaN semiconductors to address switching issues and power efficiency.

Viewed from the lens of the "field of endeavor" test, the same is true for Roberts. Roberts concerns "co-packaging of a GaN transistor die and a CMOS driver die" using a "flip-chip, stacked" configuration that lowers inductance and resistance and improves thermal efficiency. RX-0118.1 (Abstract). Again, this reference relates to packaging GaN semiconductor devices and configurations that improve high performance power transistors. The

fact that Roberts and Nega concern different types of circuits does not mean they are not analogous art.

The Federal Circuit’s decision in *Tyco Healthcare Group LP v. Ethicon Endo-Surgery, Inc.*, 774 F.3d 968 (Fed. Cir. 2014), illustrates when a reference from a different “field of endeavor” is nonetheless “reasonably pertinent.” In *Tyco*, the asserted combination was a prototype ultrasonic surgical device and a patent directed to surgical instrumentation not involving ultrasonic devices. 774 F.3d at 972, 979. The Federal Circuit found that even though the patent was not directed to ultrasonic surgical devices, a person of ordinary skill would nonetheless look to the reference because it disclosed a movable jaw structure for surgical instruments that was similar to the claimed invention’s movable jaw structure. *Id.* The fact that the patent was not directed to ultrasonic technology was irrelevant in *Tyco* because there was “no evidence demonstrating any meaningful relation between [the jaw structure] and the type of energy a surgical device employs.” The same is true here. Dr. Zane’s testified that a person of ordinary skill would readily understand that the Kelvin connection taught in Roberts as generally applicable to GaN transistors susceptible to inductance noise, even though the specific combination of transistors identified in Roberts differ from the circuits in Nega. RX-0002C at Q/A 135. Thus, even if Roberts and Nega are from different fields of endeavor, Roberts is still reasonably pertinent. The Commission therefore finds Innoscience met its burden to show both Roberts and Nega are analogous art and thus reverse the FID’s finding of no motivation to combine.

b. Reasonable Expectation of Success

Dr. Zane identified two possible ways a person of ordinary skill would have incorporated a Kelvin source sense connection into the Nega device:

Ground 2: Element 1[F]

'481

Innoscence

Only
disputed for
motivation
to combine

CLAIM 1

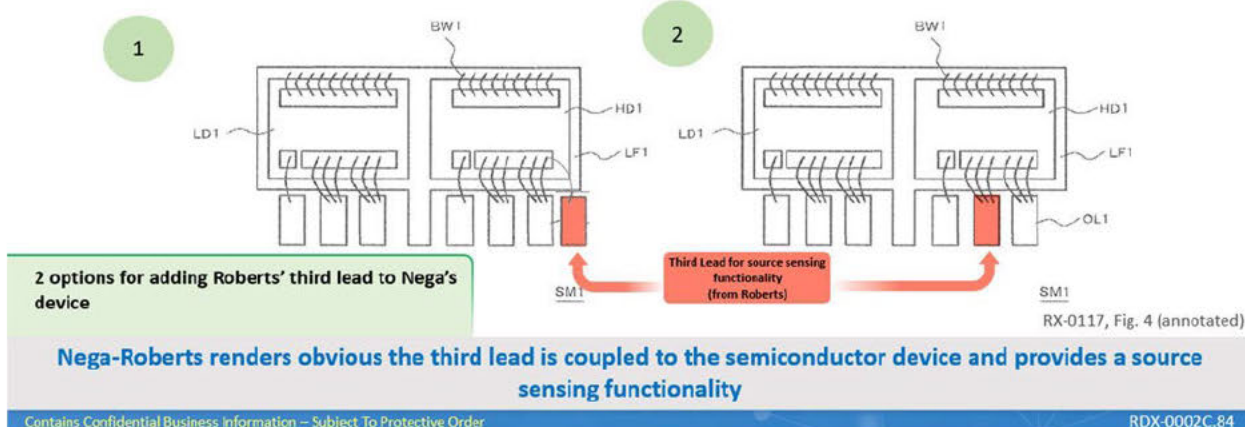
1[F]

the third lead is coupled to the compound semiconductor transistor device and provides a source sensing functionality,



FIG. 4

FIG. 4



RX-0002C.79. The first modification would add a lead to the high-side portion of the device that would connect to the compound semiconductor device and provide a source sensing functionality. RX-0002C at Q/A 136. The second (alternative) modification would repurpose one of the existing leads to serve as a source sensing lead. *Id.* at Q/A 137. Dr. Zane explained that Nega itself teaches the repurposing leads to meet the needs of a particular application, and it would have been within the skill set of a person ordinary skill to do so with a reasonable expectation of success. *Id.*

Infineon met its burden to show a reasonable expectation of success. This is the entirety of Dr. Baker's response to Dr. Zane's first configuration:

A POSA would have understood Nega (RX-0117, [0063]) to suggest that adding this additional lead would be problematic because the transistor HT1 (which comprises HD1) in Nega's first embodiment is compliant with the TO220 standard. Adding the purported "third lead" that Dr. Zane identifies would destroy that compliance, and Nega's first embodiment would no longer work as intended. Thus, a POSA would not have added Dr. Zane's proposed "third lead for

source sensing functionality” based on Roberts or for any other reason.

CX-1926C at Q/A 112. However, nothing in Nega suggests that compliance with the TO220 standard is important to the claimed invention. There is a single reference to the standard in Nega: in reference to Figure 2, Nega states that “[t]he transistor HT1 having such a configuration is sealed in, for example, the package of TO220.” RX-0117, ¶ [0063]. The phrase “for example,” would suggest alternative packages existed, and TO200 compliance is not a key characteristic of the invention.

Infineon offers no explanation as to why the TO220 standard would have been important to a person of ordinary skill considering adding an additional lead. To the contrary, Huang suggests that compliance with the standard is not important, explaining that “TO220 and DFN packages are typically used for high voltage e-mode GaN devices,” and furthermore, with a Kelvin connection, “the DFN package is able to decouple the power loop and driving loop, and therefore it can minimize the common source inductance. RX-0134.2. Moreover, the inductance of DFN package is much smaller than TO220 package which also helps to reduce the loss and ringing issue.” *Id.* Thus, a person of ordinary skill in the art would have known that there are advantages to non-TO220 packaging for GaN semiconductors with Kelvin connections, which reinforces the motivation to combine and reasonable expectation of success in combining Nega and Roberts in the manner suggested by Dr. Zane. Therefore, the Commission reverses the FID and finds Innoscience proved that a person of ordinary skill would have had a reasonable expectation of success in adding a source sensing connection to Nega by adding an additional lead,¹³ thus demonstrating a *prima facie* case of obviousness as to claims 1-3 and 6.

¹³ The Commission take no position regarding the reasonable expectation of success as to the second configuration proposed by Dr. Zane. RX-0002 at Q/A 137; *see Beloit*, 742 F.2d at 1423.

c. Secondary Indicia of Non-Obviousness

“For objective evidence of secondary considerations to be accorded substantial weight,” Infineon must “establish a nexus between the evidence and the merits of the claimed invention.” *In re Huai-Hung Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011) (citation modified). “Where the offered secondary consideration actually results from something other than what is both claimed and novel in the claim, there is no nexus to the merits of the claimed invention.” *Id.* Infineon offers evidence of commercial success, long felt need, industry praise, and copying to show claims 1-3 and 6 would not have been obvious over Nega in view of Roberts. Compl. Init. Sub. at 4-7.

Commercial Success. When asked by the Commission to address secondary indicia of non-obviousness, Infineon asserts that its DI products were commercially successful, but does not provide sales, revenue, or other figures to demonstrate commercial success of the products that embody the relevant claims. Dr. Baker states that Christopher Zegarelli, Infineon’s Senior Vice President of Finance and the Chief Financial Officer of the GaN Business Line “testified to the commercial success” of the DI products. CX-1926C at Q/A 249. Mr. Zegarelli’s witness statement authenticates the exhibits containing revenue data, but at no point states the sales revenue for the DI products, claims that the products were “commercially successful” or otherwise opines as to the success of the products. CX-0005C at Q/A 48-62. Based on the revenue data discussed in response to the Commission’s economic prong questions, the Commission understands that the DI products generated worldwide revenue of [REDACTED] from FY2021-FY2024. CDX-0005C.25. Infineon does not offer any context for this figure, for example, a comparison to products without Kelvin Source Sense connections or market share analysis. The Commission finds that even if Infineon established a nexus between the sales of the DI products and the novel aspects of the claimed invention, the purported “commercial

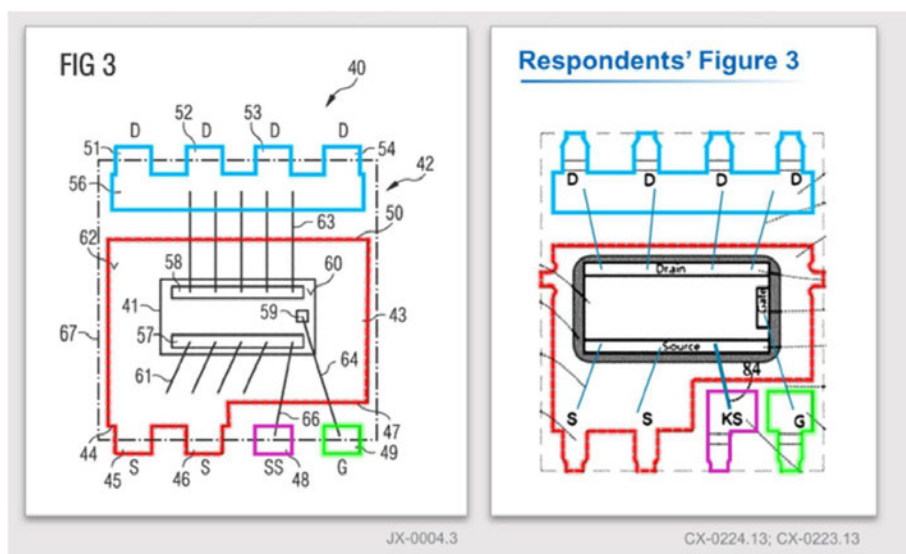
success” of the DI products is entitled to limited weight given Infineon’s failure to provide any contextual analysis or anything more than attorney argument that the products were in fact successful.

Long Felt Need and Industry Praise. Infineon argues that the ’481 patent satisfied a long-felt need for “packaging solutions suitable for high voltages and fast switching times characteristic of GaN devices.” Compl. Init. Sub. at 6. Dr. Baker testified that “Respondents and others in the industry” recognized the important solution provided by the ’481 patent, specifically excluding parasitic source inductance from the driver circuitry through a source connection. CX-1926C at Q/A 250. Infineon points to purported praise by Innoscience “tout[ing] the benefits achieved given the claimed package configurations with source sensing.” Compl. Init. Sub. at 5; *see id.* at 7.

Innoscience argues that there is no nexus between the alleged industry praise and the claimed invention because the solution Dr. Baker and the industry highlighted—source sensing—was known in the art. Resp. Init. Sub. at 19-20; *see, e.g.*, RX-0134 (prior art explaining the benefits of Kelvin source connections to reduce parasitic inductance in GaN semiconductors). In its reply, Infineon clarifies that the novelty of the invention is a “particularly advantageous execution of source sensing featuring a lateral current flow and enabling a die pad contact with source potential.” Compl. Reply Sub. at 9. But none of the industry praise cited by Infineon reflects a purported novel implementation of source sensing. The Innoscience layout design guide cited by Infineon does not draw any connection between the lateral transistor layout and the use of Kelvin source connections. *See* CX-0220.6. Nor does the market report cited by Infineon make any reference to lateral GaN transistors when discussing the utility of Kelvin source connections. *See* CX-0718C.274. Infineon did not show that the

industry praise arose out of the more specific combination of source sensing with a lateral GaN semiconductor and cannot rely on references to source sensing alone to show secondary considerations. *See S. Alabama Med. Sci. Found. v. Gnosis S.P.A.*, 808 F.3d 823, 827 (Fed. Cir. 2015) (finding the PTAB properly discounted praise based on administration of one element of a compound where that element was known in the art).

Copying. Finally, Infineon alleges that Innoscience copied figure 3 of the '481 patent in a Chinese patent application filed by Innoscience:



Compl. Init. Sub. at 7. Infineon argues this constitutes “flattering praise” for the “inventive feature” of the '481 patent, “namely, the particular combination of components and how they are connected.” *Id.* at 8.

Viewing the totality of Infineon’s evidence of secondary indicia and the other *Graham* factors, the Commission finds that the strength of Innoscience’s obviousness case far outweighs the evidence of secondary indicia. Infineon offers no context for its sales figure, leaving the Commission unable to adequately evaluate the commercial success of the DI products. The evidence of long felt need and industry praise lacks a nexus to the specific novel aspect of the

invention as articulated by Infineon. If anything, the evidence of a long-felt need to reduce parasitic inductance issues with GaN semiconductors reinforces the motivation to combine Nega with a source-sensing lead as taught in Roberts. Even if Innoscience copied a figure from the '481 patent in its own application, that evidence is insufficient to overcome a strong showing of invalidity. Accordingly, the Commission reverses the FID and finds claims 1-3 and 6 are invalid as obvious over Nega in combination with Roberts.

D. Domestic Industry

When a section 337 investigation is based on allegations of patent infringement, the complainant must show that “an industry in the United States, relating to the articles protected by the patent . . . exists or is in the process of being established.” 19 U.S.C. § 1337(a)(2). “[A]n industry is considered to exist if there is in the United States, with respect to the articles protected by the patent . . . concerned –

(A) significant investment in plant and equipment;

(B) significant employment of labor or capital; or

(C) substantial investment in its exploitation, including engineering, research and development, or licensing.”

19 U.S.C. § 1337(a)(3). The “domestic industry requirement” consists of a so-called “technical prong” and a so-called “economic prong.” *Philip Morris Products S.A. v. Int’l Trade Comm’n*, 63 F.4th 1328, 1341 (Fed. Cir. 2023). A complainant satisfies the technical prong by showing it is practicing, licensing, or otherwise exploiting the patents at issue. *Certain Movable Barrier Operator Systems and Components Thereof* (“Movable Barrier Operators”), Inv. No. 337-TA-1118, Comm’n Op. at 16 (Jan. 12, 2021), *aff’d*, *Chamberlain Group, Inc. v. Int’l Trade Comm’n*, 2023 WL 3115579 (Fed. Cir. Apr. 27, 2023). The test for “practicing” a patent is essentially the same as it is for infringement, only it involves comparing the complainant’s own “domestic

industry products” to one or more claims of the patent. *Alloc, Inc. v. Int’l Trade Comm’n*, 342 F.3d 1361, 1375 (Fed. Cir. 2003). It is sufficient that the domestic industry product practices at least one claim of each patent that serves as a basis for relief; it is not necessary for the complainant to practice the same claims it is asserting against the respondent. *Broadcom Corp. v. Int’l Trade Comm’n*, 28 F.4th 240, 250 (Fed. Cir. 2022). We address the technical prong and economic prong in turn, finding that Infineon satisfied both.

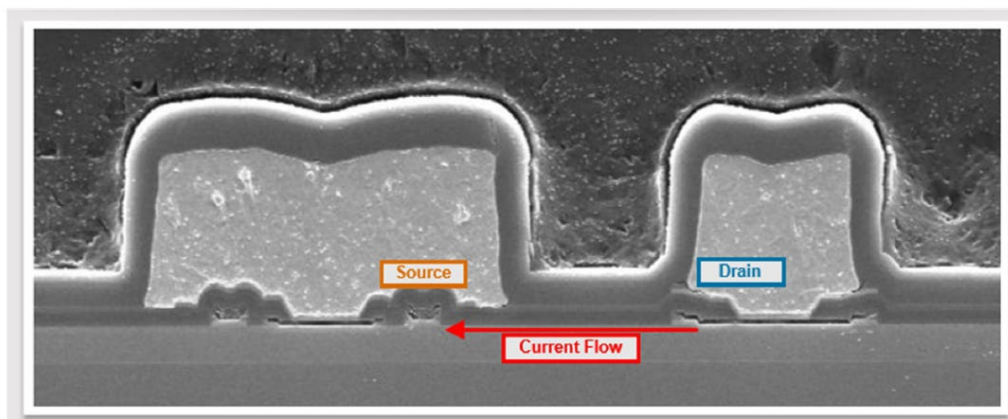
1. Technical Prong

Infineon alleges that the DI products practice the same claims asserted for infringement purposes, namely claims 1-4, 6, and 17. FID at 45. The technical prong of domestic industry requires that a complainant show that a domestic industry product practices at least one valid claim of the asserted patent. *Movable Barrier Operators*, Comm’n Op. at 22 (Dec. 20, 2024). Because claims 1-3 and 6 are invalid, Infineon cannot rely on those claims to satisfy the technical prong. The Commission therefore reverses the FID’s technical prong finding as it relates to those claims.

As to claims 4 and 17, the evidence cited in the FID is sufficient to show that the DI products practice these claims under the modified construction of “lateral transistor device.” The FID noted that the parties’ arguments regarding “lateral transistor device” as it relates to the DI products were coextensive with their infringement arguments. FID at 51. As to current flow, the FID credited Dr. Baker’s testimony that concludes, based on technical documents, SEM images, design files, and corporate witnesses, that the DI products have a current flow parallel to the transistor surface. *Id.* at 51-54. Among other evidence, technical documents for the IG DI products describe the devices as “planar transistor[s], whereby the charge carriers move laterally across the device.” *Id.* at 54 (quoting CX-0153.2-3(600V CoolGaN application note)); CX-0833.7-8 (Infineon CoolGaN White Paper 10-2018)); *see* CX-0153.2 (“The GaN High Electron

Mobility Transistor (HEMT) is a planar device with lateral current flow, compared to a Si SJ MOSFET in which the current flow is predominantly vertical”). Dr. Rohan Samsi, who served as a vice president of GaN Systems before its acquisition by Infineon, likewise explained that for the GS DI products “current will flow predominantly in a lateral direction . . . from the drain electrode to the source electrode.” FID at 54 (quoting CX-0007C at Q/A 55). Innoscience did not petition for review of the FID’s finding that in the DI products the current flows laterally to the surface of the transistor. The evidence in the FID likewise proves that in the DI products the current flows generally parallel to the surface of the transistor as required by the modified claim construction.

In terms of the location of the electrodes in the DI products, like the Accused Products, Dr. Baker’s SEM images demonstrate the electrodes in the DI products are on the upper surface of the device. The FID reproduced SEM images for each of the six representative DI products,



for example:

IGLD60R190D1 (CDX-0002C.265); *see also* CDX-0002C.266 (IGLD65R140D2); CDX-0002C.267 (IGT60R070D1); CDX-0002C.268 (IGT65R055D2); CDX-0002C.269 (GS-065-011-1-L); CDX-0002C.270 (GS-065-011-6-L). Each SEM image shows the source and drain electrodes on the upper surface of the device, as required by the modified claim construction. Infineon’s technical documents confirm Dr. Baker’s analysis of these images. *See, e.g.*, CX-

0833.7 (diagram of the CoolGaN HEMT depicting the source and drain on the upper surface of the device); CX-0153.2-.3 (same). Innoscience did not dispute that the DI products would practice the asserted claims under the construction it put forth before the ALJ and in its petition for review. This evidence is sufficient to show that the DI products meet the modified construction of “lateral transistor device.” Therefore, the Commission finds that the DI products practice claims 4 and 17, and on that basis Infineon satisfied the technical prong of the domestic industry requirement.

2. Economic Prong

The FID found that the Infineon satisfied the economic prong for the ‘481 patent under section 337(a)(3)(A) (significant investment in plant and equipment) and section 337(a)(3)(B) (significant employment of labor). FID at 139-55. Innoscience did not petition for review of these findings. On review, the Commission affirms the FID’s finding that Infineon satisfied the economic prong for the ‘481 patent under section 337(a)(3)(A) and (B) based on the facts as summarized in the FID, modifying the FID’s analysis to consider those facts together based on a holistic review of the record.¹⁴ *Wuhan Healthgen Biotechnology Corp. v. Int’l Trade Comm’n*, 127 F.4th 1334, 1338 (Fed. Cir. 2025) (citing *Lelo Inc. v. Int’l Trade Comm’n*, 786 F.3d 879, 883 (Fed. Cir. 2015)). In this regard, the Commission notes that it considers what the FID broke into determinations of “quantitative significance” and “qualitative significance” together as an integrated analysis of whether Infineon’s asserted investments, based on a holistic review of all relevant considerations, satisfy the domestic industry requirement.

¹⁴ Commissioner Kearns finds the economic prong satisfied under only section 337(a)(3)(B) (significant employment of labor) for the reasons stated in footnote 15 and takes no position as to section 337(a)(3)(A) (significant investment in plant and equipment).

The Commission finds Infineon's investments in plant and equipment and labor to be significant based upon a holistic review of the record, including the number of full-time employees and the nature and amount of Infineon's research, design, development, and engineering ("RDDE") expenditures relating to the DI products in the United States. The record demonstrates that Infineon employs more than [REDACTED] in the United States working on RDDE activities related to the DI products. FID at 150. The Chandler, Arizona facility includes a design center with three labs used for research, development, and product maintenance work for GaN transistor products. *Id.* at 147. The El Segundo, California facility houses "component verification" and packaging labs. *Id.* The component verification lab is used for specialized testing used in bug analysis, performance improvement, and data collection. *Id.* at 147-48. The packaging lab is used for creating packaged prototypes and samples for qualification and validation. *Id.* at 148. The Richardson, Texas facility houses GaN Systems' legacy operations, which include a design and development center for the GS DI products. *Id.* The RDDE activities performed in connection with the DI products at these facilities include initial concept development, wafer technology development, discrete and multi-chip development, product testing, qualification, and quality control. CX-0004C at Q/A 65. Infineon employees spent a total of [REDACTED] on RDDE activities for all high voltage GaN product lines between FY 2021 and FY 2024. *See* CX-0004C at Q/A 110.

While a domestic-to-foreign comparison¹⁵ is not required to establish the economic prong, Infineon further presented evidence to support its domestic industry by showing its

¹⁵ In Commissioner Kearns' view, the significance analysis under sections 337(a)(3)(A) and (B) should be based on a full picture of all expenses associated with the domestic industry products, not a selective subset of those expenses or limited to a single category like RDDE. *See Certain Smart Wearable Devices, Systems, and Components Thereof*, Inv. No. 337-TA-1398, Comm'n Op. at 6, n.4 (Aug. 21, 2025). Here, Commissioner Kearns finds that the record evidence

domestic RDDE investments in the DI products as a share of its worldwide RDDE investments for the DI products:

U.S. RDDE Investments in DI Products As Share of Worldwide RDDE Investments in DI Products					
	Infineon FY2021-FY2024			GaN Systems CY2021-CY2023	
Labor					
Plant & Equipment					

FID at 154; CX-0004C at Q/A 39; *see Movable Barrier Operators*, Comm’n Op. at 25-26 (Jan. 12, 2021), *aff’d as to the relevant patent, Chamberlain Grp., Inc. v. Int’l Trade Comm’n*, Nos. 2020-1965, 2021-1829, 2023 WL 3115579 (Fed. Cir. Apr. 27, 2023).

In view of these facts and the FID’s qualitative findings (FID at 154-55), the Commission finds that Infineon has satisfied the domestic industry based upon significant investment in plant and equipment and labor under subsections 337(a)(3)(A) and (B).

V. REMEDY, THE PUBLIC INTEREST, AND BONDING

A. Remedy

The Commission has “broad discretion in selecting the form, scope, and extent of the remedy.” *Philip Morris Products S.A. v. Int’l Trade Comm’n*, 63 F.4th 1328, 1339-1340 (Fed. Cir. 2023). Having considered the totality of the record, including the parties’ submissions on review, we agree with the RD and the Commission shall issue its standard LEO and CDOs as to

supports the existence of a domestic industry under section 337(a)(3)(B) based on Infineon’s labor investments for the GS DI products. Specifically, Infineon’s domestic labor investments in GS DI products of approximately [REDACTED] comprised [REDACTED] of Infineon’s worldwide COGS for the GS DI products, which Commissioner Kearns finds significant. *See* Compl. Init. Sub. at 14-15; *see also* CDX-0005C.29, .147, .155; CX-0004C.18-19; CX-0005C.11 (Q/A 56) (discussing CX-0605C)). However, Commissioner Kearns takes no position on the significance of Infineon’s domestic investments in plant and equipment under section 337(a)(3)(A).

all respondents, and impose a bond of one hundred percent (100%) during the Presidential review period.

1. Limited Exclusion Order

Section 337(d)(1) provides that “[i]f the Commission determines, as a result of an investigation under this section, that there is a violation of this section, it shall direct that the articles concerned, imported by any person violating the provision of this section, be excluded from entry into the United States, unless, after considering the [public interest], it finds that such articles should not be excluded from entry.” 19 U.S.C. § 1337(d)(1); *see also Spansion, Inc. v. Int’l Trade Comm’n*, 629 F.3d 1331, 1358 (Fed. Cir. 2010) (“[T]he Commission is required to issue an exclusion order upon the finding of a Section 337 violation absent a finding that the effects of one of the statutorily-enumerated public interest factors counsel otherwise.”).

The RD recommended that the Commission issue an LEO with the standard certification provision. RD at 137. Innoscience asserts that any LEO should identify the specific products found to infringe the relevant claims and exclude the Redesign Products. Resp. Init. Sub. at 24; *see also* Resp. Reply Sub. at 12 n.3 (citing past Commission LEOs with carve outs for products “found to be non-infringing”). Infineon opposes this request but argues in the alternative that if the Commission includes a carve-out, it should be limited to the specific model numbers for the adjudicated Redesign Products. Compl. Reply Sub. at 12-13.

The Commission declines to list specific products as non-infringing in the LEO itself. Innoscience can utilize U.S. Customs and Border Protection’s (“CBP’s”) certification process for the adjudicated Redesign Products. This opinion, in conjunction with the FID, serves as guidance to CBP to determine whether a particular product has been adjudicated as non-infringing. Therefore, the Commission issues its standard limited exclusion order.

2. Cease and Desist Order

Section 337(f)(1) provides that in addition to, or in lieu of, the issuance of an exclusion order, the Commission may issue a cease and desist order (“CDO”) as a remedy for a violation of section 337. *See* 19 U.S.C. § 1337(f)(1). CDOs are generally issued when, with respect to the imported infringing products, respondents maintain commercially significant inventories in the United States or have significant domestic operations that could undercut the remedy provided by an exclusion order. *See, e.g., Certain Tobacco Heating Articles and Components Thereof*, Inv. No. 337-TA-1199, Comm’n Op. at 49 (Oct. 19, 2021), *aff’d*, *Philip Morris Products S.A.*, 63 F.4th at 1332; *Certain Audio Players and Controllers, Components Thereof, and Products Containing Same*, Inv. No. 337-TA-1191, Comm’n Op. at 26 (Feb. 1, 2022), *aff’d*, *Sonos, Inc. v. Int’l Trade Comm’n*, 2024 WL 1507605 (Fed. Cir. Apr. 8, 2024). Complainants bear the burden on this issue. “A complainant seeking a cease and desist order must demonstrate, based on the record, that this remedy is necessary to address the violation found in the investigation so as to not undercut the relief provided by the exclusion order.” *Tobacco Heating Articles*, Comm’n Op. at 49-50 (citation modified); *Audio Players*, Comm’n Op. at 26-27; *see also* H.R. REP. No. 100-40, at 160 (1987).

The RD recommended issuing CDOs against all four Innoscience respondents. The RD finds that [REDACTED]

[REDACTED] RD at 159. These units are product samples used to generate customer interest. *Id.* Purchase orders from those customers are then directed to Innoscience Zhuhai for fulfillment. *Id.* The RD found the inventory to be commercially significant, noting the similar finding in Inv. No. 337-TA-1366 that 4,300 Innoscience samples were commercially significant. *Id.* [REDACTED]

[REDACTED]

██████████. *Id.* at 159-60. The RD thus finds Innoscience’s commercially significant inventory and significant domestic operations make it necessary to issue CDOs against all four respondents. *Id.* at 160.

The Commission agrees with the RD. The dollar value of Innoscience’s domestic inventory is relatively low, but the Commission previously explained that similar inventory held by Innoscience was commercially significant because Innoscience was “using these inventories to attract new business from potential customers even though they have not yet made any ‘real sales.’” *Certain Semiconductor Devices, and Methods of Manufacturing Same, and Products Containing the Same*, Inv. No. 337-TA-1366, Comm’n Op. at 39 (Dec. 5, 2024) (“*Semiconductor Devices*”). The Commission also found that ██████████ ██████████ in combination with the domestic inventory are significant domestic operations that “[if] allowed to continue,” would undermine a limited exclusion order. *Id.* Accordingly, the Commission will issue a CDO as to Innoscience America.

Although neither the RD nor the parties distinguish between the four Innoscience entities named as respondents when analyzing whether CDOs should issue, the Commission finds that CDOs should issue against the foreign Innoscience entities in this investigation. The Commission may issue CDOs against foreign respondents if their domestic distributor is not a respondent, so as to effectively bind the domestic distributor. *See, e.g., Certain Power Converter Modules and Computing Sys. Containing the Same*, Inv. No. 337-TA-1370, Comm’n Op. at 117 (Feb. 26, 2025). The record indicates that Innoscience America distributes some products shipped by Innoscience Zhuhai, but both Innoscience Zhuhai and Innoscience Suzhou Semiconductor also use non-party distributors in the United States. *See* JX-0030C at 46:1-48:6 (identifying Richardson RFPD as a distributor); CX-0101C.72, .76, .83 (invoices to Richardson

RFPD from different Innoscience entities). Because at least one distributor for each of Innoscience Zhuhai and Innoscience Suzhou Semiconductor are not respondents in this investigation, the Commission has determined to issue CDOs as to both of these entities.

The Commission may also issue CDOs against a foreign respondent if their domestic distributor is a respondent and has a commercially significant domestic inventory. *See Certain Toner Cartridges & Components Thereof*, Inv. No. 337-TA-740, Comm’n Op. at 8 (Oct. 5, 2011). Innoscience Suzhou Technology’s 2024 Annual Report for 2024 identified Innoscience America as a distributor of chips in the United States.¹⁶ As discussed above, the Commission agrees with the RD that Innoscience America maintains a commercially significant inventory and engages in significant domestic operations. Therefore, the Commission will issue a CDO as to Innoscience Suzhou Technology along with the other three Innoscience respondents in this investigation.

B. Public Interest

Section 337 requires the Commission, upon finding a violation of section 337, to issue an LEO “unless, after considering the effect of such exclusion upon the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers, it finds that such articles should not be excluded from entry.” 19 U.S.C. § 1337(d)(1). Similarly, the Commission must consider these public interest factors before issuing a CDO. 19 U.S.C. § 1337(f)(1). Under appropriate facts and circumstances, the Commission may determine that a remedy should be tailored or no remedy should issue because of the adverse impacts on the public interest. *See*,

¹⁶ InnoScience (Suzhou) Technology Holding Co. Ltd. 2024 Annual Report at 122-23, available at <chrome-extension://efaidnbmninnibpcapjpcglclefindmkaj/https://www1.hkexnews.hk/listedco/listconews/schk/2025/0409/2025040901267.pdf> (last accessed April 13, 2026).

e.g., Certain Power Converter Modules and Computing Sys. Containing the Same, Inv. No. 337-TA-1370, Comm’n Op. at 119-20 (Feb. 26, 2025) (collecting cases). The statute requires the Commission to consider and make findings on the public interest in every case in which a violation is found regardless of the quality or quantity of public interest information supplied by the parties. 19 U.S.C. § 1337(d)(1), (f)(1). The Commission publishes a notice inviting the parties as well as interested members of the public and interested government agencies to gather and present evidence on the public interest at multiple junctures in the proceeding. 19 U.S.C. § 1337(d)(1) & (f)(1). No third-party submissions were received in response to the Commission’s *Federal Register* notices seeking submissions on the public interest. *See* 90 Fed. Reg. 56798-99; 91 Fed. Reg. 5260-61. Upon consideration of the parties’ submissions, and absent any record evidence that the exclusion of the infringing semiconductor device would raise public health and welfare issues, the Commission finds that the issuance of remedial orders would not adversely affect the public interest.

For context, the Commission notes that the accused products here overlap with the products subject to the remedial orders issued in *Semiconductor Devices*. On November 7, 2024, the Commission issued a limited exclusion order and cease and desist orders against Innoscience Zhuhai and Innoscience America as to GaN-on-Si semiconductor devices, GaN FETs, GaN high electron mobility transistors, and products incorporating such transistors that infringe certain claims of U.S. Patent No. 8,350,294, owned by Efficient Power Conversion Corporation. 89 Fed. Reg. 90,051-53 (Nov. 14, 2024). Those orders took effect on January 7, 2025. *See* 19 U.S.C. § 1337(j)(4). While certain redesigns of products at issue in *Semiconductor Devices* have

recently been found not to be subject to the LEO issued in that investigation,¹⁷ at the time of the Commission’s investigation in *Semiconductors* the Commission considered the effect of an exclusion order covering the same GaN semiconductor devices as covered in this investigation and found that exclusion of such devices would not adversely affect the public interest.

1. Public Health and Welfare

Infineon explains that the Accused Products are “general purpose semiconductor devices that can be used across a wide variety of applications,” and are not specialized for public health, safety, or welfare applications. Compl. Init. Sub. at 23. Infineon notes that the Commission recently found the accused products subject to exclusion in *Semiconductor Devices* did not raise any public health or welfare concerns. *Id.* at 23-24, 26; *see Semiconductor Devices*, Comm’n Op. at 47-48. Innoscience did not specifically address this factor in any of its submissions.

The Commission has previously determined that the exclusion of an overlapping set of GaN semiconductor products does not pose any public health, safety, or welfare concerns under the facts of that investigation, and no facts have been presented in this investigation that suggest a public health or welfare concern. *Semiconductor Devices*, Comm’n op. at 48 (collecting cases). Notably, the Accused Products at issue here have been subject to an LEO and CDOs issued against Innoscience Zhuhai and Innoscience America since January 7, 2025, and the Commission previously determined that there would be no impact of the exclusion of these products on the public interest factors. Only upon CBP’s determination in February 2026 were the 1366 redesigns adjudicated to be outside the scope of the LEO issued in *Semiconductor Devices*.

¹⁷ February 2026, CBP found that certain redesigns of Innoscience products at issue in the *Semiconductor Devices* investigation are not subject to the LEO resulting from that investigation and can be imported. Resp. Reply Sub. at 13. These “1366 redesigns” would still be within the scope of the remedial orders in this investigation. *Id.*; Compl. Init. Sub. at 26-27. Innoscience represented that as of February 24, 2026, it had not begun importing the 1366 redesigns.

Respondents have introduced no evidence demonstrating that the exclusion of the '481 patent Accused Products, including the 1366 redesigns, will have any adverse impact on the public health and welfare. They likewise have introduced no evidence to suggest that the public health and welfare has been adversely affected in any manner due to the exclusion of these goods between January 2025 and February 2026.

2. Competitive Conditions in the United States

Innoscence argues that the exclusion orders in *Semiconductor Devices* “have already caused a significant shortage in the U.S. market for important GaN power semiconductor devices—a shortage that other suppliers cannot remedy in the foreseeable future,” but offers no evidence in support of that assertion. Resp. Init. Sub. at 30. Infineon explains that Innoscence’s Chairwoman testified in *Semiconductor Devices* that Innoscence had no “real sales yet” in the United States. Compl. Init. Sub. at 28. Infineon argues that the market for GaN semiconductors in the United States is highly competitive with a number of competitors—including Renesas Electronics, Navitas, ST Microelectronis, ROHM Semiconductor, Nexperia, and Central Semiconductor—which could easily supply any U.S. market demand for Innoscence’s Accused Products. Compl. Init. Sub. at 24.

We agree with Infineon that remedial orders would not adversely affect competitive conditions in the United States. Innoscence has not had “any real sales yet” in the United States, meaning it holds little to no U.S. market share. *Semiconductor Devices*, Comm’n Op. at 51; see also CX-0039.21 (in 2023, U.S. sales accounted for 0.5% of Innoscence’s revenue; for the six months ending June 30, 2024, U.S. sales accounted for 1.5% of revenue). There are numerous competitors in the GaN market available to supply the U.S. market. CX-0660C.134. Moreover, more companies continue to enter the GaN market, including Samsung. *Semiconductor Devices*, Comm’n Op. at 49-50; CX-0660C.34, .126. There is also no evidence in the record to suggest

that the exclusion of Innoscience’s products between January 2025 and February 2026 adversely affected competitive conditions in the United States. And even absent the *Semiconductor Devices* remedial orders, there is no evidence to suggest that excluding a fledgling U.S. market participant would adversely affect competitive conditions in the United States.

3. The Production of Like of Directly Competitive Articles in the United States

Neither the Domestic Industry Products nor the Accused Products are manufactured in the United States, and there is otherwise no evidence in the record to indicate that issuing remedial orders in this investigation would adversely affect this factor.

4. United States Consumers

The record contains no evidence that remedial orders will adversely impact United States consumers. There is no evidence that the exclusion of these products between January 2025 and February 2026 adversely affected United States consumers. Moreover, as we previously held, in the absence of “any real sales,” there is no real argument that excluding the Accused Products would harm U.S. consumers and as noted above there are a number of competitors in the GaN semiconductor market in the United States to meet demand for such products. *Semiconductor Devices*, Comm’n Op. at 51. Thus, exclusion of their products will have no impact on domestic consumers of GaN products.

In sum, the public interest factors do not preclude the issuance of remedial orders in this investigation.

C. Bonding

If the Commission enters an exclusion order or a cease and desist order, a respondent may continue to import and sell its products during the 60-day period of Presidential review under a bond in an amount determined by the Commission to be “sufficient to protect the

complainant from any injury.” 19 U.S.C. § 1337(j)(3); *see also* 19 C.F.R. § 210.50(a)(3). When reliable price information is available in the record, the Commission has often set the bond in an amount that would eliminate the price differential between the domestic product and the imported, infringing product. *See Streaming Players*, Comm’n Op. at 41-42 (citations omitted); *Tobacco Heating Articles*, Comm’n Op. at 77 (citations omitted). The Commission also has used a reasonable royalty rate to set the bond amount where a reasonable royalty rate could be ascertained from the evidence in the record. *See, e.g., id.* Where the record establishes that the calculation of a price differential is impractical or there is insufficient evidence in the record to determine a reasonable royalty, the Commission has imposed a one hundred percent (100%) bond. *See, e.g., id.*

The RD finds that a bond is necessary because Infineon and Innoscience are direct competitors within the GaN semiconductor market, and thus continued sales of the Accused Products during the Presidential review period would likely injure Infineon by way of lost sales, reduced market share, and/or price erosion. RD at 162. The RD notes that Infineon has licensed portfolios of patents that include the ’481 patent, but the record “provide[d] no guidance as to the value of a one-way license” to the ’481 patent. *Id.* at 163, n.85 (citation modified). The RD further agrees with Infineon that a price differential analysis is impractical given the limited pricing information produced by Innoscience, the range of prices offered for individual products, and the wide variety of product configurations. *Id.* at 163-64 & n.86. The RD thus recommends that the Commission impose a bond of one hundred percent (100%). *Id.* at 164.

We agree with the RD’s recommendation. Innoscience cites the prior investigation involving the same accused products and expert testimony that the average royalty for the semiconductor industry is four point three percent (4.3%) to suggest a reasonable royalty in this

case would not exceed five percent (5%). Resp. Init. Sub. at 25; RX-0535C at Q/A 69-72. The Commission finds that the record does not otherwise allow a reasonable royalty rate to be ascertained for the specific patent asserted in this investigation. We agree with the RD that the range of products, prices, and Innoscience's limited production of pricing data make a price differential impractical in this case. Furthermore, in February 2026, CBP found that the 1366 redesigns are not subject to the LEO in *Semiconductor Devices* and can be imported. Resp. Reply Sub. at 13. Those redesigns are within the scope of the remedial orders in this investigation. *Id.* Although Innoscience represented that as of February 24, 2026, it had not begun importing the 1366 redesigns, the potential for such imports is sufficient to warrant imposing a bond here. Accordingly, the Commission imposes a bond of one hundred percent (100%) of the entered value of infringing products during the Presidential review period.

VI. CONCLUSION

The Commission has considered all of the other arguments by the parties and does not find them persuasive. Therefore, for the reasons set forth herein, the Commission determines that Infineon has established a violation of section 337 with respect to claims 4 and 17 of the '481 patent, but no violation as to claims 1-3 and 6. Accordingly, the investigation is terminated with a finding of violation of section 337. The Commission determines that the appropriate remedy is a limited exclusion order, cease and desist orders, the public interest does not preclude that remedy, and the bond during the period of Presidential review is set at one hundred percent (100%) of entered value.

By order of the Commission.

A handwritten signature in black ink, appearing to read 'L.R. Barton', enclosed within a thin black rectangular border.

Lisa R. Barton
Secretary to the Commission

Issued: May 26, 2026