

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

INNOSCIENCE (ZHUHAI) TECHNOLOGY COMPANY, LTD.,
AND
INNOSCIENCE AMERICA, INC.
Petitioner,

v.

EFFICIENT POWER CONVERSION CORPORATION,
Patent Owner

Case IPR2023-01383
U.S. Patent No. 8,404,508

**PATENT OWNER'S RESPONSIVE SUPPLEMENTAL
CLAIM CONSTRUCTION BRIEF**

The Board sought the “proper claim construction” of Claim Element [1e4] and whether “there can be a region of the doped GaN layer outside the gate contact that is entirely unetched.” Paper 34, 2-3. Petitioner’s brief fails to advance a “proper claim construction” of Claim [1e4] and instead suggests a claim construction not only explicitly eschewed by Patent Owner in the parallel ITC proceeding but also contrary to the parties own prior agreed-upon construction in that proceeding. Paper 35, at 1-2. But here, seeking to emphasize invalidity instead of non-infringement, Petitioner advocates for a new results-oriented interpretation that is incompatible with Petitioner’s previous ITC position and expert testimony. That same previous ITC position was adopted by the ITC in the Final Initial Determination (“FID”) and Commission Opinion to achieve a finding of non-infringement.

I. NO PARTY ADVANCED PETITIONER’S PROPOSED CONSTRUCTION

As explained in Patent Owner’s Opening Supplemental Brief, although Patent Owner initially proposed a construction similar to the one now advocated by Petitioner, Patent Owner ultimately agreed to the construction proposed by the Chief Administrative Law Judge (“CALJ”). Paper 35 at 1-3. Likewise, Petitioner also moved from its initial claim construction position to agree to the construction proposed by the CALJ. *Id.*

Moreover, the ITC rejected Petitioner’s now proposed construction. The

FID adopted Petitioner’s ITC interpretation of Claim Element [1e4], as explained by Petitioner’s expert. *See* EX1055 at 54; EX1053 at 1185:6-1188:2 (“means etching *everywhere* that’s not masked.”).¹ Adopting Petitioner’s ITC interpretation and expert analysis directly resulted in the ITC finding non-infringement.

II. PETITIONER’S CONSTRUCTIONS ARE INCONSISTENT

Petitioner’s PTAB construction is incompatible with its advanced and obtained ITC construction and interpretation.² The plain language of Petitioner’s two constructions is conflicting. *Compare* EX1053 at 11:85:17-1188:2 (“So my understanding of the agreed construction...means etching everywhere that’s not

¹ Patent Owner again urges the Board to take judicial notice of the FID that shows both the agreed construction and that the ITC adopt Petitioner’s ITC interpretation of the construction. *See* IPR2023-01381, EX2022, at 25, 56-62 (P.T.A.B. Aug. 16, 2024) (“Because a section of the GaN layer that is not beneath the gate contact remains entirely unetched, I find that Innoscience’s process ... does not practice step [1e4], which requires ‘etching away the doped [GaN] layer where it is not beneath the gate contact.’”).

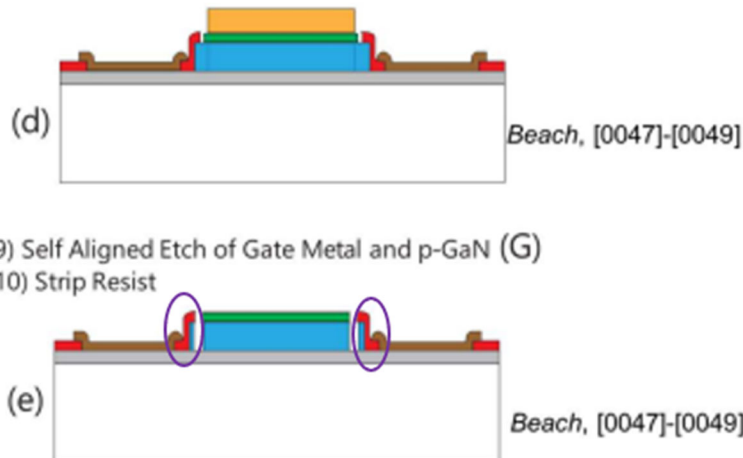
² Unlike Petitioner’s interpretation of the agreed construction, the ITC rejected Patent Owner’s proposed interpretation of the agreed construction. *Supra* §I.

masked...” (ITC Construction) *with* Paper 35 at 1 (“permitting ‘remnant p-type GaN Islands’ outside the gate region.”) (PTAB Construction).

Further, contrary to Petitioner’s argument, it is irrelevant whether remnant islands were before the ITC when it conducted its claim construction analysis. The same parties agreed upon the construction, and claim construction begins with the words of the claims. *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998). Indeed, the ITC addressed the same issue – whether doped GaN material not under the gate contact could remain entirely unetched based upon the language of the construction. And the ITC found it could not. *See supra* n.1.

III. REMNANT ISLANDS DO NOT SATISFY CLAIM ELEMENT [1E4]

Remnant islands clearly do not meet the parties previously agreed-upon construction (Patent Owner’s PTAB proposed construction), because unetched doped GaN material remains outside the gate contact – as explained by Petitioner’s own expert. *See* Paper 36 at 2-5; EX1053 at 11:85:17-1188:2. The disjointed doped GaN remnant islands are located outside the gate contact and “gate photo resistant pattern” and are entirely unetched during the gate contact and doped GaN material etching steps, and therefore, modified Yoshida does not meet Element [1e4] under the agreed upon construction. This is shown by an annotated reproduction of Petitioner’s proposed Yoshida-based combination.



The purple circles reflect the remnant islands, which are doped GaN material beyond the yellow “gate photo resistant pattern” and green gate contact. Thus, according to Patent Owner’s expect, the remnant islands would not meet the parties agreed upon construction of Claim Element [1e4]. *See* EX1053 at 1185:6-1188:2.

As a catchall, Petitioner further contends that its modified Yoshida could optionally not include remnant GaN islands. Paper 35, at n.1. This argument, however, was not presented in the Petition or Petitioner’s Reply. Instead, Petitioner only generically proposed a D-O-G process in the context of a hypothetical embodiment relating to claim construction (and not tied to specific prior art references). *See* Paper 18 at 6-8. But this speculative modification was never proposed in the context of Grounds 1-3 or Yoshida. Instead, as proposed by Petitioner, Yoshida’s combination explicitly includes remnant islands. *See id.* at 14. Petitioner never identified a proposal to further modify Yoshida to not include

remnant islands, and indeed asserted a POSITA would find remnant islands beneficial. *See id.* at 6. Thus, a hypothetical combination of Yoshida that does not include remnant islands was never properly before the Board and should not be considered.

IV. CONCLUSION

For the foregoing reasons, the Board should adopt the parties previously agreed upon construction of Claim Element [1e4] and find Yoshida in view of Beach and Sheppard as proposed by Petitioner do not teach or suggest this limitation.

Dated: January 21, 2025

Respectfully submitted,

/s/ Walter D. Davis, Jr.

Walter D. Davis, Jr. (Reg. No. 45,137)

Blank Rome LLP

1825 Eye St NW

Washington, D.C. 20006

Tel: (202) 420-2200

Fax: (202) 420-2201

Email: walter.davis@blankrome.com

Counsel for Patent Owner

CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing **PATENT OWNER'S RESPONSIVE CLAIM CONSTRUCTION BRIEF** is being served on counsel of record by filing this document through the Patent Trial and Appeal Case Tracking System (P-TACTS), with a copy served via electronic mail to the following email address, as authorized in the Petition:

lionel.lavenue@finnegan.com
kara.specht@finnegan.com
cory.bell@finnegan.com
forrest.jones@finnegan.com
chen.zang@finnegan.com
yi.yu@finnegan.com
luke.macdonald@finnegan.com
carlos.duarte-guevara@finnegan.com

Dated: January 21, 2025

/s/ Walter D. Davis, Jr.

Walter D. Davis, Jr. (Reg. No. 45,137)
Blank Rome LLP
1825 Eye Street NW
Washington, D.C. 20006
Tel: (202) 420-2200
Fax: (202) 420-2201
Email: walter.davis@blankrome.com

Counsel for Patent Owner