UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VIZIO, INC., Petitioner

v.

NICHIA CORPORATION, Patent Owner

Case No. 2018-00437 Patent 9,537,071

PETITIONER'S REPLY TO PATENT OWNER'S SUR-REPLY



GLOSSARY OF ABBREVIATIONS

Shorthand	Description
IPR	Inter Partes Review
BRI	Broadest Reasonable Interpretation
PO	Patent Owner
POSA	Person of Ordinary Skill in the Art
POPR	IPR2018-00386, Paper 8, Patent Owner's Preliminary Response
POR	IPR2018-00386, Paper 20, Patent Owner's Response
R	IPR2018-00386, Paper 24, Petitioner's Reply to Patent Owner's Response
SR	IPR2018-00386, Paper 28, Patent Owner's Sur-Reply (for brief section I)
	IPR2018-00437, Paper 39, Patent Owner's Sur-Reply (for brief section II)
Pap.	Paper
Loh	U.S. Patent Publication No. 2008/0012036 (Ex. 1004)

Note: All emphasis herein added unless otherwise stated. All citations are to exhibits in IPR2018-00386.



I. PO IMPROPERLY NARROWS THE TERM "...DISPOSED IN A REGION BELOW AN UPPER SURFACE OF THE METAL PART, ON FOUR OUTER LATERAL SURFACES OF THE RESIN PACKAGE"

PO argues incorrectly that under Petitioner's construction the claimed region is "not bounded by the upper surface of the metal part." PO's Sur-Reply ("SR") 1-3. To the contrary, the claim itself expressly sets forth the bounds of the region, as reflected in Petitioner's construction. The "region" must be "below" (*i.e.*, at a lower level than) "an upper surface of the metal part." In addition, the "region" is "on four outer lateral surfaces of the resin package," and is thus bounded by the resin package. Conversely, PO's narrowed proposed bounds—which limit the region to a single metal plate—are inconsistent with the claims and unsupported by the intrinsic record. During prosecution PO amended this limitation from "at least one metal plate" to "metal part" and cannot now narrow the claimed region. Ex. 1002, 165.

PO's only purported intrinsic support is the incorrect premise that the specification's concavities/convexities are an upper surface (SR3-4), but the specification and admissions by PO and its expert belie this argument. The specification expressly describes "side surfaces corresponding to the notch parts" (Ex. 1001, 13:37-41), and PO admits "etching may result in concavities in the side surfaces of the notches" (POPR 7; Ex. 2011 ¶50 (quoting Ex. 1001, 13:37-41)). Indeed, Dr. Schubert admits that "as a result of etching notches in the lead frame, concavities or convexities are formed in the regions below the upper surfaces of the



exposed leads." *Id.* Thus, PO's proposal has no intrinsic support, whereas Petitioner's construction is shown in all embodiments. R 3-7.

Contrary to PO (SR4), the different terms in the claims—"in a region below" (Cl. 1) and "in a region directly under" (Cl. 6)—connote different meaning. R 13.

PO's assertion that Petitioner's construction "fails to account for" differences in level (SR1-2) is incorrect. As an initial matter, neither the patent figures nor Loh (Ex. 1004) show differences in level "on an upper surface." PO's hypothetical illustrations and exhibits (SR2) are irrelevant extrinsic attorney arguments that do not make sense. Ex. 2021, 62:20-63:17. The first illustration depicts a single lead instead of a complete device, the second illustration depicts two leads with no resin adhering them together, and both illustrations fail to satisfy multiple other claim elements. Regardless, Petitioner's construction is consistent with PO's hypotheticals having differences in level. As in the claim, the hypotheticals show resin disposed in a region below "an" upper surface of the metal part. Thus, to the extent PO argues there are multiple upper surfaces, the claim only requires that resin be disposed in a region below (i.e., at a lower level than) one of the upper surfaces of the metal part.

PO's discussion of the "notch" limitation (SR4-5) is incorrect and irrelevant. The "notch" limitation does not refer to resin or its location. Ex. 1001, 19:49 ("a notch is formed in the metal part"), 4:13-15; Ex. 1012, 16 ("opening or indentation"). Thus, Petitioner's construction does not render the disputed limitation superfluous.



II. PO IMPROPERLY READS "SINGULATED" INTO THE CLAIM

PO's assertion that it defined the term "resin package" to mean "a singulated light emitted device" formed from "multiple devices" (SR1-3; POR 31) improperly reads a process step into apparatus claims that recite the structure of a light emitting device. Vanguard, 234 F.3d at 1372-73. PO's cite to Nordt is inapposite because the claim in that case explicitly contained the term "injection molded" and the patent described "clear structural differences." 881 F.3d 1371, 1375. In contrast, here PO improperly construes a structural limitation as a process limitation and fails to identify any structural differences. Indeed, PO does not dispute that the same resin package can be formed without singulation. Contrary to PO (SR3), burrs are merely defects that can result from processes other than singulating. Ex. 1001, 4:30-34, 12:52-13:3. PO's reliance on the Board's statement regarding '250 patent method claim 1 with a "cutting" step (SR2) is irrelevant. PO ignores the Board's statement that the different apparatus claim 17 is "drawn to the light emitting device itself" and "does not recite limitations concerning assembly methods, such as... cutting the resin package." IPR2017-01608, Pap. 72, 41. The claims here are *apparatus* claims.

Contrary to PO (SR4-5), Loh discloses a "resin package" even under PO's incorrect construction because a "metal strip" leadframe connotes multiple devices; and the language in Loh is sufficient to incorporate the confirming references in their entirety. *Paice LLC v. Ford Motor Company*, 881 F.3d 894, 907-10 (Fed. Cir. 2018).



DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

