

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BOE TECHNOLOGY GROUP CO., LTD.,

Petitioner,

v.

OPTRONIC SCIENCES LLC,

Patent Owner.

Case No.: IPR2024-01130

Patent 7,168,842

**PATENT OWNER'S REPLY IN SUPPORT OF PATENT OWNER'S
MOTION TO EXCLUDE EXPERT DECLARATIONS
EX 1002 AND EX 1031**

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Patent Owner's Exhibit List for IPR2024-01130

Ex. No.	Description
2001	Docket Control Order from <i>Optronic Sciences LLC v. BOE Tech. Group Co., Ltd.</i> , No. 2:23-cv-00549-JRG, Dkt. 33 (E.D. Tex. Aug. 5, 2024).
2002	Optronic Sciences LLC's Infringement Contentions from <i>Optronic Sciences LLC v. BOE Tech. Group Co., Ltd.</i> , No. 2:23-cv-00549-JRG (E.D. Tex. July 19, 2024).
2003	BOE Technology Group Co., LTD's Invalidity Contentions from <i>Optronic Sciences LLC v. BOE Tech. Group Co., Ltd.</i> , No. 2:23-cv-00549-JRG (E.D. Tex. Oct. 25, 2024).
2004	Machine translation of JP2004-279262, retrieved from https://patents.google.com/patent/JP2004279262A/en?q=JP2004-279262 on October 26, 2024.
2005	Declaration of Benjamin T. Wang in Support of Motion to Appear <i>Pro Hac Vice</i>
2006	Declaration of Andrew D. Weiss in Support of Motion to Appear <i>Pro Hac Vice</i>
2007	Declaration of Christian W. Conkle in Support of Motion to Appear <i>Pro Hac Vice</i>
2008	Time to Trial for Rodney Gilstrap Report from Docket Navigator, accessed December 12, 2024.
2009	Declaration of Paul Kroeger in Support of Motion to Appear <i>Pro Hac Vice</i>
2010	<i>POS Solutions</i> , Cirque: Innovative Touch Solutions, available at https://web.archive.org/web/20131109010416/http://www.cirque.com/solutions/posSolutions.aspx (archived by the Wayback Machine on Nov. 9, 2013).
2011	Gu et al., <i>White LED Performance</i> , Lighting Research Center.
2012	Specifications for Nichia Chip Type White LED, NICHIA CORPORATION.
2013	Excerpts from <i>Optoelectronics Data Book</i> 1995-1996, SIEMENS.
2014	TONY KORDYBAN, HOT AIR RISES AND HEAT SINKS: EVERYTHING YOU KNOW ABOUT COOLING ELECTRONICS IS WRONG (1998).
2015	C.O. BENNET& J.E. MYERS, MOMENTUM, HEAT, AND MASS TRANSFER (3d ed. 1982).

2016	FRANK INCROPERA & DAVID DEWITT, FUNDAMENTALS OF HEAT AND MASS TRANSFER (4th ed. 1996).
2017	SHUNSUKE KOBAYASHI ET AL., LCD BACKLIGHTS (2009).
2018	ALLAN KRAUS & AVRAM BAR-COHEN, DESIGN AND ANALYSIS OF HEAT SINKS (4th ed. 1996).
2019	<i>Connect</i> , MERRIAM-WEBSTER, https://www.merriam-webster.com/dictionary/connect (last visited Apr. 21, 2025).
2020	Declaration of Dr. Eric Bretschneider in support of Patent Owner's Response ("Bretschneider Decl.")
2021	<i>Curriculum vitae</i> of Dr. Eric Bretschneider
2022	Deposition Transcript of Dr. Jacob Baker, <i>IPR2024-01130</i> , <i>IPR2024-01133</i> , <i>IPR2024-01134</i> , Volume 1.
2023	Deposition Transcript of Dr. Jacob Baker, <i>IPR2024-01130</i> , <i>IPR2024-01133</i> , <i>IPR2024-01134</i> , Volume 2.
2024	Deposition Transcript of Dr. Jacob Baker, <i>IPR2024-01130</i> .
2025	<i>Qualcomm Inc. v. Apple Inc.</i> , Nos. 2023-1208, 2023-1209 (Fed. Cir. 2025).
2026	Non-confidential excerpts of the Opening Expert Report of Dr. Baker Regarding Invalidity of U.S. Pat. No. 7,168,842 from <i>Optronic Sciences LLC, v. BOE Tech. Group Co., Ltd.</i> , No. 2:23-cv-00549 (W.D. Tex.)

I. INTRODUCTION

Dr. Baker is not a POSITA under the correct definition of a POSITA. Dr. Bretschneider's definition is consistent with the definitions in district court, and the district court definitions highlight the flaws in Petitioner's definition, which was offered to match Dr. Baker's background.

II. ARGUMENT

A. Patent Owner's Definitions of a POSITA are Consistent

Contrary to BOE's assertions, Patent Owner's definitions of a POSITA are consistent.

Dr. Bretschneider's omission of "thermal management" requirement in his litigation definition is not material or inconsistent because the claims at issue in the litigation do not require thermal management. The pertinence of the omission is clear: Petitioner's inexperience in thermal management led to propose hindsight-based combinations that a POSITA demonstrably would never have made. *See, e.g.*, Paper 24 at 17, 22–24; Paper 33 at 10–13. In contrast, the claims involving heat dissipating means were not asserted in the litigation and thus, a POSITA's understanding of thermal management was not at issue in any of the prior art asserted there. Petitioner's criticism of other aspects of Dr. Bretschneider's definition attack strawmen and show no contradiction or reason his definition is incorrect. *See Paper*

38 at 3. Further, not only is Dr. Fontecchio's proposed definition in litigation¹ consistent with Dr. Bretschneider's—it confirms that Petitioner's definition of a POSITA is too broad.

First, Dr. Fontecchio's testimony shows that he considered LED package design to be encompassed in his requirement “two years of professional experience related to the design and manufacture of LCD panels and/or displays.” Petitioner's insinuation that the deposition testimony of Dr. Fontecchio is an untethered excerpt is simply incorrect. *See* Paper 38 at 4. Immediately preceding the excerpted portion (Paper 36 at 3), Dr. Fontecchio was posed a question about whether a POSITA would have had experience with LED packages—he asked for context and counsel responded by asking the excerpted portion. His testimony shows that he “certainly” considers experience with “LCDs” and “LCD technology” to include experience with LED packages and LED backlighting. Paper 36 at 3; Ex. 1001 at 1:13–24. Dr. Fontecchio's definition is entirely consistent with Dr. Bretschneider's. Further, like Dr. Bretschneider's definition, Dr. Fontecchio's definition is *significantly* narrower than Dr. Baker's broad requirement for experience in “electronics or optoelectronics” (which, as explained at length in Paper 24 at 4–5, encompasses technology entirely unrelated to the field of the '842 Patent). *See* Ex. 1001 at 1:7–8

¹ Dr. Fontecchio is irrelevant, as he not a part of this IPR and there is no declaration that can be excluded.

(“The present invention generally relates to the packaging of light-emitting device backlights.”). Petitioner is entirely wrong that “it is undisputed that Dr. Baker qualifies under Dr. Fontecchio’s definition.” Paper 38 at 4. Dr. Baker would not qualify under Dr. Fontecchio’s definition either, but the parties have not submitted briefing on this issue because it is irrelevant for purposes of this IPR—to allege that it is “undisputed” is a gross mischaracterization.

Second, Dr. Fontecchio also omitted thermal management requirements from his definition because unlike in the instant IPR, the heat dissipating claims are not at issue in the district court litigation and Dr. Fontecchio did not have to address invalidity theories arising from technical misunderstandings of basic heat transfer.

Third, Dr. Fontecchio’s opinion that additional graduate education could “reduce or eliminate the professional experience requirement” is incorrect. Again, while Dr. Fontecchio’s opinion is not at issue here, Petitioner’s argument overlooks the obvious—for additional graduate education to substitute professional experience, the graduate education must supply the same knowledge. Dr. Baker’s education did not supply him with the knowledge required to eliminate the requirement for professional experience. *See* Paper 24 at 8–10; Paper 33 at 5.

Thus, Dr. Fontecchio and Dr. Bretschneider's opinions are consistent and show that Dr. Baker relied on an incorrect and overly broad definition of a POSITA that suited his background.

B. Patent Owner's Definition of a POSITA is Correct

As explained at length in Patent Owner's Response and Sur-Reply, Patent Owner's definition of POSITA is correct from a technical standpoint. Paper 24 at 4–10; Paper 33 at 1–5. Indeed, while Petitioner criticizes Dr. Bretschneider's application of the five factors for determining the appropriate level of skill in the art (Paper 38 at 9), Petitioner's expert did not conduct any analysis of the factors until its Reply briefing, forcibly retrofitting its analysis of the factors to fit the improper definition of a POSITA in a way that suits Dr. Baker's background. Petitioner cannot explain how experience with “electronic system design” (including, *e.g.*, RFID systems) relates to the field of the patent: “the packaging of light-emitting device backlights.” Ex. 1001 at 1:7–8. Patent Owner's proposed definition is rooted in the '842 Patent itself and is a direct product arrived at by stepping through the five factors—unlike Petitioner's definition, it is not based on the background of its expert. Thus, Patent Owner's definition of a POSITA is correct.

C. Dr. Baker is Not a POSITA

Dr. Baker does not meet the requirements for a POSITA. As explained in detail in Patent Owner's Response, Sur-Reply, and Motion to Exclude, Dr. Baker lacks experience in critical aspects. Paper 24 at 8–10; Paper 33 at 5; Paper 36 at 4–7. Petitioner's attempts to conceal Dr. Baker's lack of qualifications by identifying tangentially related experiences should be rejected. For example, Petitioner's statement that Dr. Baker's lack knowledge of convective heat transfer, Fourier's law, and heat sink design is "irrelevant" is not accurate—his lack of knowledge led him to propose combinations no POSITA would have made. *See* Paper 24 at 17, 22–24; Paper 33 at 10–13. Dr. Baker's lack of relevant knowledge and qualifications does not change regardless of whether Dr. Fontecchio phrased the definition of a POSITA differently.

III. CONCLUSION

Accordingly, Patent Owner requests that the Board exclude Exhibits 1002 and 1031 from consideration because Dr. Baker does not have experience designing LED packages and thus is not a POSITA. Additionally, his opinions about dependent claims 6 and 9 should be independently excluded for lack of thermal management experience.

Date: October 22, 2025

Respectfully submitted,

IPR2024-01130
PO's MTE Reply
Patent No. 7,168,842

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CERTIFICATION REGARDING PAGE COUNT

Pursuant to 37 C.F.R. §42.24(d), Patent Owner hereby certifies that there are under 5 pages. Pursuant to 37 C.F.R. § 42.24, this page limit is in compliance with the page limit set forth in 37 C.F.R. § 42.24(c)(2) excluding the portions exempted under 37 C.F.R. § 42.24(c).

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CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e)(1))

The undersigned hereby certifies that the above document was served on October 22, 2025, by filing this document through the Patent Trial and Appeal Board End to End system as well as delivering a copy via electronic mail upon the following attorneys of record for the Petitioner:

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