

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 MOTION TO
EXCLUDE EXPERT DECLARATIONS
EX 1002 AND EX 1031**

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Table of Authorities

Cases

Billerud Aktiebolag (Publ) v. Westrock MWV, LLC,
IPR2023-01206, Paper 60 (PTAB Mar. 12, 2025)..... 1

Kyocera Senco Indus. Tools Inc. v. Int’l Trade Comm’n,
22 F.4th 1369 (Fed. Cir. 2022)..... 1

Rules

Fed. R. Evid. 702 1

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

Patent Owner moves to exclude the Declaration of Dr. R. Jacob Baker in Support of Petition for *Inter Partes Review* of U.S. Patent No. 7,168,842 (Ex. 1002) and the Reply Declaration of Petitioner's Reply to Patent Owner's Response (Ex. 1031). These exhibits should be excluded because Dr. Baker is not a POSITA of thermal management or designing LED packages. Non-POSITA "expert" declarations are inadmissible because they fail to meet the requirements of Fed. R. Evid. 702.

II. ARGUMENT: Dr. Baker is Not a POSITA

Dr. Baker's declarations (Ex. 1002 and Ex. 1031) are irrelevant as a matter of law because he is not a POSITA. "[T]o be qualified to offer expert testimony on issues from the vantage point of an ordinarily skilled artisan in a patent case, an expert must at a minimum possess ordinary skill in the art." *Kyocera Senco Indus. Tools Inc. v. Int'l Trade Comm'n*, 22 F.4th 1369, 1377-78 (Fed. Cir. 2022); *see Billerud Aktiebolag (Publ) v. Westrock MWV, LLC*, IPR2023-01206, Paper 60 at 10, 61 (PTAB Mar. 12, 2025) (excluding expert testimony because "although [the witness had] a Master's of Science in chemical engineering, he lack[ed] any experience or specialization in paperboard manufacturing" as required by the Board's definition of a POSITA).

A. Patent Owner's Definition of a POSITA is Consistent

As explained in Patent Owner's Response (Paper 24) and Patent Owner's Sur-Reply (Paper 33), a POSITA would have a Bachelor's degree in a field of engineering or physics (*i.e.*, a degree in mechanical engineering, chemical engineering, or related field) and would have had at least one year of practical experience in design of LED packages and one year of practical experience in design of thermal management systems for LEDs. Paper 24 at 4–8; Paper 33 at 1–5. Dr. Baker does not qualify as a POSITA because he does not have heat transfer experience, nor does he have experience designing LED packages.

Patent Owner's definition of a POSITA in this IPR does not contradict Dr. Bretschneider's definition in litigation. *Compare* POR at 4–5, *with* Ex. 1033 ¶ 83. As best understood, Petitioner intends to argue that Dr. Bretschneider's definition of a POSITA in district court litigation did not require expertise in thermal management systems. *See* Ex. 3002. But in the district court litigation, claims 6 and 9 that recite “heat dissipating” limitations were not asserted. Ex. 1001 at claims 6, 9 (reciting “heat dissipating” limitations); *see* Ex. 2002 (omitting claims 6 and 9 from patent owner's litigation infringement contentions). Accordingly, Dr. Bretschneider's proposed definitions of a POSITA are consistent and appropriately tailored to the

scope of each proceeding. In contrast, Petitioner's POSITA definitions overlook the "heat dissipating" technology of claims 6 and 9.

In litigation, Dr. Fontecchio's¹ report also has no contradictions. *See* Ex. 1032 ¶ 22. Dr. Fontecchio's definition of a POSITA required, at the relevant time, "at least two years of professional experience related to the design and manufacture of LCD panels and/or displays." Ex. 1032, ¶ 22. The design and manufacture of LCD displays at the time involved LED backlights. Ex. 1001 at 1:13–33. Dr. Fontecchio testified in his September 30, 2025 litigation deposition, on page 17, further clarifying his experience LCD by the relevant time: "we've had a lot of packages and we've had to do [LED] backlighting."

15 Q What is your experience in LED packages?
16 A In LED packages? So as a graduate
17 student, I worked on displays, and then when I
18 transitioned to Drexel University, I also worked
19 on display technologies. I've used them for a
20 number of different things. But certainly, when
21 we're using LCDs and used LCD technology, we've
22 had a lot of packages and we've had to do
23 backlighting. And so I've worked on instituting
24 them myself and putting them into my own research.

¹ Dr. Fontecchio is not part of this IPR, and he is irrelevant here. There is no Fontecchio declaration in this IPR that can be excluded.

In view of this clarifying experience provided by Dr. Fontecchio that includes LED backlighting and packaging, Dr. Fontecchio's definition of a POSITA does not contradict Patent Owner's POSITA definition in this IPR, and Dr. Fontecchio also has the requisite experience.

B. Dr. Baker Lacks Thermal Management Experience for Claims 6, 9

As explained in Patent Owner's Response and Sur-Reply, Dr. Baker lacks experience with thermal management. Paper 24 at 8–10; Ex. 2020 at ¶¶ 88–90; Paper 33 at 1–5; *see* Ex. 2024 at 27:10–11 (“Well, when I have something that’s dissipating a lot of power I just buy the heat sink . . .”). Dr. Bretschneider opined on various, specific ways Dr. Baker demonstrated a lack of familiarity with heat transfer. Ex. 2020 at ¶¶ 88–90 (“ . . . He incorrectly described convective heat transfer when referring to radiative heat transfer, and seemingly equated the two. Ex. 2024, 34:14–35:6. He was not familiar with Fourier’s law for calculating thermal conductivity. *Id.*, 36:7–9. He described a lack of experience designing heat sinks, stating that he would just buy a heatsink as needed. *Id.*, 27:4–21. . . .”); *see* Ex. 2020 at ¶ 80 (explaining the importance of thermal management). Indeed, Dr. Baker’s unfamiliarity with thermal management led him to offer opinions that include distant heat plates and heat plates that cover ventilation holes. *See* Ex. 1002 at 72, 103–04, 141, 145; Paper 33 at 17–18, 23–24; Paper 24 at 43–47, 57–58.

Further, Petitioner's attempt to rebut Patent Owner's observation that Dr. Baker does not have the requisite thermal management experience falls short. Specifically, the only thing Petitioner addresses is Petitioner's expert's time at Cirque, arguing that he fit "components into a backlight display package." Paper 33 at 8. However, Petitioner does not deny that Dr. Baker worked on capacitive touch technology and did nothing with the design of LED packages or thermal management. Paper 30 at 8; Ex. 2024 at 24:17–23 (With respect to his experience working at Cirque, Dr. Baker "didn't work on the actual mechanical design of the LED package."). At best, Dr. Baker argues that "I have substantial experience with heat generation from LED," because any use of LEDs inherently generates heat. Ex. 1031 ¶ 38. But heat **generation** is not the same as experience with thermal **management**, so Dr. Baker remains unqualified in that area. When asked "So have you ever designed any sort of thermal management system [f]or an LED system?" Dr. Baker answered "I don't remember. Maybe." Ex. 2024, 27:4–6.

Accordingly, Petitioner has failed to provide evidence that Dr. Baker has the minimum required one year of practical experience in design of thermal management systems for LEDs, and his opinions with respect to the heat dissipating claims (*e.g.*, claims 6 and 9) should be excluded.

C. No Experience Designing LED Packages

Dr. Baker does not even have one year of practical experience in design of LED packages. *See* Paper 20 at 8–10; Ex. 2020 at ¶¶ 88–90; Paper 33 at 1–5; Ex. 2024, 24:20–21 (“I didn’t work on the actual design of the LED package”). In its Reply, Petitioner’s statement that “[t]he ’842 patent *specifically* discloses that the *use* of LED packages is a subpart of the electronic backlight system that is being designed” is inaccurate—the patent instead discloses that it relates to the ***packaging*** of light-emitting device backlights, not the use. Paper 30 at 4 (citing Ex. 1001 at 1:7–27) (emphasis in original); Ex. 1001 at 1:7–11 (“The present invention generally relates to the ***packaging*** of light-emitting device backlights. In particular, the present invention relates to a light-emitting device backlight package which requires minimal space while producing maximum luminosity.”) (emphasis added).

When asked what experience he had designing LED packages, Dr. Baker responded that he “worked on the design of detectors. . . . [and] would design light sources for characterizing the detectors.” Ex. 2024 at 15:20–24. In other words, he has no experience with designing LED packages, and the closest thing was designing detectors and sources (not their packages). When asked what experience he had around 2004, Petitioner’s expert explained work he did over two decades prior to the relevant time frame. *Id.* at 16:7–18 (“Back in the ’80s, I worked on the design of a

touch screen, for example, which packaged infrared LEDs and infrared photodetectors in a grid around a CRT display.”). The 1980’s work he described was outdated and was not packaging LEDs for the backlight of a display. Instead, he used LEDs for signaling in conjunction with photosensors that were placed adjacent to a CRT display. *Id.* When asked for his “closest” experience to LED packaging, his answer was “using a --- a Frenzel lens.” *Id.* at 17:3–13. Similarly, Dr. Baker’s experience in the context of designing capacitive touch sensing also failed to provide him with any experience designing LED packages. *See* Ex. 2022 at 37:19–41:24; Ex. 1021 at 2 (“Consulting on the design of analog-to-digital interfaces for capacitive touch displays and pads”); Ex. 2010 (describing “capacitive touch solutions”).

In its Reply, Petitioner does not deny that Dr. Baker worked on capacitive touch technology and did nothing with the design of LED packages. Paper 30 at 8; Ex. 2024 at 24:17–23 (With respect to his experience working at Cirque, Dr. Baker “didn’t work on the actual mechanical design of the LED package.”). Thus, Dr. Baker is not a POSITA for the ’842 Patent because he does not have experience designing LED packages, and all of his declarations (Ex. 1002, Ex. 2020) about the patent titled “Light Emitting Diode Backlight **Package**” should be excluded in its entirety. Ex. 1001, cover (emphasis added).

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 8, 2025

Respectfully submitted,

/ Qi Tong /

Qi Tong (Reg. No. 74,292)
RUSS AUGUST & KABAT
8080 N. Central Expy., Suite 1503
Dallas, TX 75206
(310) 826-7474
Attorney for Patent Owner

CERTIFICATION REGARDING PAGE COUNT

Pursuant to 37 C.F.R. §42.24(d), Patent Owner hereby certifies that there are under 15 pages in this motion. Pursuant to 37 C.F.R. § 42.24, this page count is in compliance with the page limit set forth in 37 C.F.R. § 42.24(a)(1) excluding the portions exempted under 37 C.F.R. § 42.24(a)(1).

Date: October 8, 2025

/ Qi Tong /

Qi Tong (Reg. No. 74,292)
RUSS AUGUST & KABAT
8080 N. Central Expy., Suite 1503
Dallas, TX 75206
(310) 826-7474

Attorney for Patent Owner

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

The undersigned hereby certifies that the above document was served on October 8, 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:

Brian Erickson
Michael Saulnier
Brian.Erickson@us.dlapiper.com
Michael.saulnier@us.dlapiper.com
dla-boe-optronicsciences-IPR@us.dlapiper.com

Date: October 8, 2025

/ Qi Tong /

Qi Tong (Reg. No. 74,292)
RUSS AUGUST & KABAT
8080 N. Central Expy., Suite 1503
Dallas, TX 75206
(310) 826-7474

Attorney for Patent Owner