

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

Inter Partes Review No.: IPR2024-01133

U.S. Patent No. 9,263,509

**PETITIONER'S REPLY TO PATENT OWNER'S
PRELIMINARY RESPONSE**

INDEX OF EXHIBITS

Exhibit No.	Description
1001	U.S. Patent No. 9,263,509
1002	File History of U.S. Patent No. 9,263,509
1003	Declaration of R. Jacob Baker, Ph.D., P.E.
1004	U.S. Patent Publication No. 2004/0079945 (“Weaver”)
1005	U.S. Patent Publication No. 2012/0162053 (“Lee053”)
1006	U.S. Patent Publication No. 2014/0183502 (“Song”)
1007	Korean Patent Publication No. 10-2014-0088369 (“Song KR”)
1008	Certified Translation of Song KR
1009	U.S. Patent 9,088,003 (“Gupta”)
1010	U.S. Patent Publication No. 2011/0248309 (“Han”)
1011	U.S. Patent Publication No. 2009/0015149 (“Lee149”)
1012	U.S. Patent Publication 2006/0119259 (“Bae”)
1013	Wiley Electrical and Electronics Engineering Dictionary (2004)
1014	Docket Navigator Report (highlighted)

Petitioner files this Reply pursuant to the Board’s Nov. 22, 2024 email.

Auxiliary Electrode - Patent Owner (“PO”) argues “auxiliary” means “supplemental” and adds the negative limitation that it “*cannot* itself be a primary electrode that provides a sole, critical electrical connection to a load.” POPR, 6-7. This construction should be rejected. First, there is no definition or disclaimer that justifies that construction. Second, while the ’509 patent makes reference to “parallel connection,” the ’509 patent expressly states “the invention is not limited thereto.” EX1001, 6:4-9; 7:52-57. Third, neither the claims nor the specification discusses a “sole, critical electrical connection” much less distinguishes it from the “auxiliary electrode.” Fourth, no power line is recited in any of the claims. Finally, even if “auxiliary electrode” requires a parallel connection to another, unclaimed electrical connection, that is addressed by Petitioner’s alternative construction (“supplemental electrode to reduce the total resistance of the pixel structure,” Pet., 5-8), which Patent Owner ignores. POPR, 8-9.

For “electrode,” PO fails to offer a construction and instead provides two examples, “an anode or cathode,” and three negative limitations: not a “power line,” “bus line,” or “resistor.” POPR, 7-8. The Board should reject PO’s examples because they exclude all embodiments. EX1001, 4:40-42 (disclosing anode 132 and the cathode 136, which are not auxiliary electrodes 120, 220, 460). The Board should reject PO’s negative limitations because they are found nowhere in the

claims or specification of the '509 patent. PO's sole, meritless argument is simply that because a separate, unclaimed power line PL exists, an "electrode" cannot be a power line or a bus line. POPR, 8. And, the specification confirms an "electrode" includes any layer of conductive material. EX1001, 3:37-42; 4:44-46, 5:28-30.

Inconsistent Positions - Most importantly, PO's constructions contradict its positions in the litigation, wherein PO asserts "cathode ***power lines***" practice the "auxiliary electrode" limitation. EX2002, at 19 ("cathode power lines"). PO is literally accusing a "power line" of being an "auxiliary electrode" in the litigation, directly contradicting PO's construction of "electrode" here. Further, PO's infringement contentions are also inconsistent with PO's construction of "supplemental," because there is no allegation let alone showing that the first auxiliary electrode of claim 1 nor the second auxiliary electrode of claim 10 (i.e., the cathode power line) in the accused device are not the sole critical connections to a load that could be removed without depriving the load of a primary pathway electrical connection. EX2002, 7-9, 19.

And it should be noted that in IPR2024-01134 challenging related patent 9,406,733 that also includes the term "auxiliary electrode," PO filed a non-substantive preliminary response and did not raise these claim construction arguments. See Paper 7 in IPR2024-01134.

Fintiv Factors - Factor 1 is neutral because the Board should not speculate on how the Court will rule on any motion to stay filed post-institution. Pet., 81.

Factor 2 weighs in favor of institution. Trial in the litigation will occur sometime after jury selection on January 5, 2026. EX2001, 1. Trial may be substantially after that date, since ten patent cases are set for jury selection that day. EX1014, 1-2 (highlighting cases). The Final Written Decision here would be no later than January 29, 2026, such that this IPR may complete before any jury trial. Thus, this factor favors institution. See Paper 9 at 33-34, IPR2024-00613 (trial less than three months before the Final Written Decision favors institution).

Factor 3 weighs heavily in favor of institution because the deadline for institution (Jan. 29, 2025) is six weeks before the first step of claim construction in the litigation (identification of terms on March 11, 2025). EX2001, 5.

Factor 4 weighs in favor of institution. This IPR challenges claims 1-13 while the litigation will only address claims 1, 5, 10, 12. EX2002 (contentions).

Factor 5 remains slightly in favor of institution because the Board will resolve these issues before, or contemporaneously with, the district court. Pet., 82.

Factor 6 weighs heavily in favor of institution. The Petition sets forth a compelling case on the merits and PO's arguments are based on meritless claim constructions as explained above.

Date: November 27, 2024

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned certifies that on November 27, 2024, a true and correct copy of the Petitioner's Reply was served by emailing a copy of same (by agreement) to the following attorneys for the Patent Owner:

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