

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CAMBRIDGE INDUSTRIES USA INC.,

Petitioner

v.

APPLIED OPTOELECTRONICS, INC.,

Patent Owner

Case No. IPR2025-00433

U.S. Patent No. 9,523,826

**SUPPLEMENTAL DECLARATION OF DR. ANDREW G. KIRK
IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 9,523,826**

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
U.S. Patent and Trademark Office
PO Box 1450
Alexandria, Virginia 22313-1450

I, Andrew G. Kirk, do hereby declare and say as follows:

1. I am the same Dr. Andrew G. Kirk who is retained as a technical expert by counsel for Petitioner Cambridge Industries USA Inc. (“CIG USA”) and whose declaration was previously submitted accompanying the Petition for *Inter Partes* Review of U.S. Patent No. 9,523,826 (“the ’826 Patent”) as Exhibit 1003.

2. In reviewing Patent Owner’s Request to Director for Discretionary Denial of Petition for *Inter Partes* Review Of U.S. Patent No. 9,523,836, Paper No. 8, I observed that Patent Owner makes several representations concerning my analysis of the prior art Wu and Mizue references as set forth in Ex. 1003.

3. I submit this Errata to clarify certain of the annotated drawings included in the Petition for the ’826 Patent and to correct a typographical error in one paragraph of my earlier 50-page declaration.

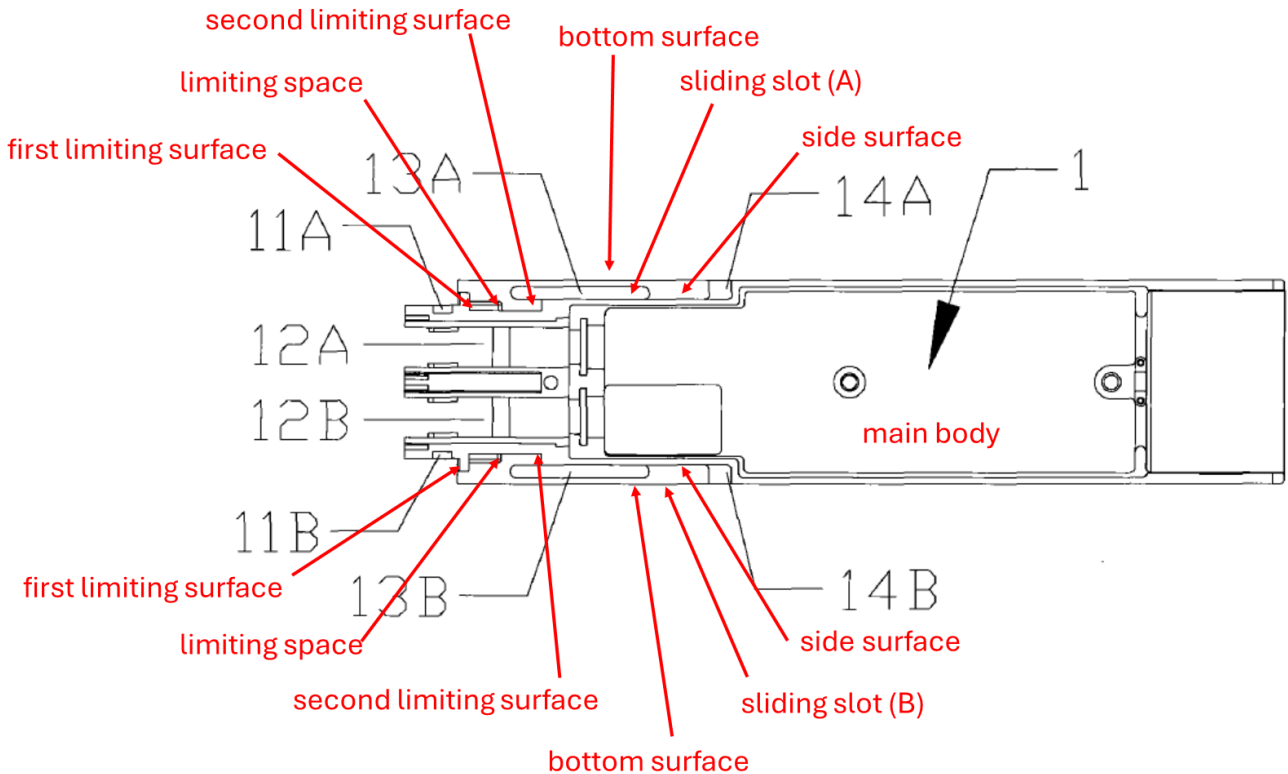
4. I am being compensated at my usual consulting rate of \$400 per hour for my time spent working on issues in this matter. My compensation does not depend on the outcome of this matter or the opinions I express.

5. Patent Owner argues in its Paper No. 8 at 22-24 that “Wu does not disclose ‘two bottom surfaces forming the two sliding slots, respectively, the two bottom surfaces are parallel to the two side surfaces’ as required by claims 1-7.”

6. Specifically, Patent Owner points to an annotated version of Wu’s FIG. 2 and argues that “Petitioner points to a *single* surface in the *X-Y plane* as

allegedly corresponding to the *two* claimed bottom surfaces 141. Petitioner then points to surfaces extending upward from the X-Y plane in the Z *axis* as the claimed side surfaces 130.”

7. I disagree. As I specifically state in ¶ 61 of Exhibit 1003, “Wu discloses that the pluggable optical transceiver module (1) includes a main body configured to be inserted into the plugging slot as illustrated above. See Ex. 1005, FIGS. 1-3; Ex. 1006, ¶¶ [0005], [0029], [0038]-[0039]. The main body has two side surfaces that are opposite to each other, each having a respective sliding slot located thereon. *Id.* ***The main body also has two bottom surfaces that are parallel to the two side surfaces and a limiting space located on each of the two side surfaces. See Ex. 1005, FIG. 3 (annotated on following page);*** Ex. 1006, ¶¶ [0007], [0030]-[0031], [0033].” Exhibit 1003, ¶ 61 (emphasis added). FIG. 3 of Exhibit 1003, reproduced on the following page, clearly shows two “bottom surface” arrows, with each arrow pointing to the plane ***parallel*** to side surface.



Ex. 1005, FIG. 3 (annotated)

8. Contrary to Patent Owner’s contention, FIG. 3 shows that there are indeed **two** “bottom surfaces” – one on either side of the main body and **parallel** (not perpendicular) to the side surfaces, which form the claimed “sliding slots” of claims 1-7. In my opinion, Wu shows the disputed “bottom surfaces” as well as all of the other limitations of the claims.

9. Patent Owner further contends, Paper No. 8 at 26-28, that Mizue also does not show a “main body has at least one limiting space and two bottom surfaces forming the two sliding slots, respectively, the two bottom surfaces are parallel to the two side surfaces, the at least one limiting space is located at one of the two

side surfaces.” Patent Owner bases that contention on a typographical error in ¶ 85 of Exhibit 1003, which states that “[t]he main body has two bottom surfaces(corresponding to bottom wall 28b) ***parallel to the side surfaces of the upper body*** (26), which together with the sidewalls (26a) of upper body (26) form two sliding slots, one on either side of the upper body (grooves 26i).”

10. I disagree. It is plain in reviewing the above sentence, as highlighted above, that it was intended that the parenthetical read “bottom wall ***of each of grooves 26i***” -- which indeed are the “two bottom surfaces” ***parallel*** to the side surfaces of the upper body that form the sliding slots. I regret the typographical error, which plainly was carried over to pages 24-25 of the Petition. However, it is plain to me, as it would be to a POSITA, that Mizue does include two bottom surfaces, one on either of the side walls, and therefore meets the limitations of claims 1-7 irrespective of the above typographical error.

11. My opinions are subject to change in view of opinions provided by the Patent Owner or its expert, or any additional information that I may receive. I reserve the right to supplement my opinions accordingly.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both,

under Section 1001 of Title 18 of the United States Code.

Executed May 25, 2025 at Montreal Canada.

A handwritten signature in blue ink, appearing to be 'A G Kirk', written above a horizontal line.

Dr. Andrew G. Kirk