

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LTD.,

and

APPLE INC.,

Petitioners

v.

MYW SEMITECH, LLC,

Patent Owner

Inter Partes Review Case No. IPR2026-00066

U.S. Patent No. 11,538,763

**PETITIONERS' SUR-REPLY TO PATENT OWNER'S
REQUEST FOR DISCRETIONARY DENIAL**

Patent Owner's defense of the '763 Patent's examination ignores the facts and timing underlying the material errors Petitioners identified. Paper 10, 3–5. First, Patent Owner's argument that the Examiner's reference to an "inventive concept" relates to patent eligibility distorts the Examiner's Notice of Allowance. Paper 14, 1. The Examiner is explicit that the reference to an "inventive concept" is to further explain what he meant for his general statement for allowance ("*Specifically*, the limitations are material to the inventive concept of the application") and relates to the limitations that "the closest prior art does not appear to disclose." Paper 10, 3–4; EX1032, 551–52. Indeed, the Examiner did not issue any rejection under Section 101, let alone conduct an *Alice* analysis suggesting that this language is part of an *Alice* Step 2 analysis.

Thus, the Examiner's reference to the "inventive concept," taken in context, was a reference to the features of the claimed invention missing from the prior art. However, as the Patent Owner admitted, the independent claims of the '763 Patent "recite the use of a material made from silicon and oxygen such as glass" (Paper 14, 1), but do *not* recite a polymer interconnect like those in claim 1 of the '768 Patent. This further exemplifies the Examiner's error when the Examiner stated that the claims of the '763 Patent were allowed because they recite "*a polymer interconnect* with sufficient coefficient of expansion to enable holes and other features formed inside." EX1002, 294, 367.

Moreover, Patent Owner's reliance on the inherently low CTE of glass as the reason the Applicant did not include a low CTE limitation in the claims misunderstands the Examiner's error. Paper 14, 2. During the prosecution of the '763 Patent's parent, the '768 Patent, the Applicant overcame the Examiner's rejection by distinguishing the prior art's teaching of a low CTE polymer layer used in the medical field. EX1032, 405–06. Critically, the Applicant specifically argued that the use of a low CTE *polymer layer*, not just a low CTE layer, was allegedly innovative when used in semiconductor chip packages. *Id.*, 406. Thus, even if the glass limitations recited in the independent claims had a low CTE, that would not justify the Examiner's allowance of the claims. The Applicant convinced the Examiner that the low CTE polymer layer, specifically, was not known in the art, so the Examiner should not have relied on that representation to allow the '763 Patent claims.

Patent Owner next attempts to fault Petitioners for failing to explain why Haba was not returned by three of the Examiner's searches: "ppm/.degree.C," "polymer same expansion adj coefficient," and "polymer near10 expansion adj coefficient." Paper 14, 3. Patent Owner is at fault here. As to the first search, Patent Owner misquotes Haba. None of the disclosures cited by Patent Owner includes the term "ppm/°C." *Id.* Haba only ever includes that term with an added space: "ppm/ °C." EX1161, Abstract, 1:53–55, 3:36–38, 5:58–59. As to the second and third searches, Haba never recites "expansion adj coefficient." The terms are always flipped in their

order and separated in the phrase “coefficient *of thermal* expansion.” *Id.*, Abstract (“[t]he dielectric layer has a coefficient of thermal expansion...”), 1:53–55 (same), 3:36–38 (same), 5:58–59 (same). In fact, these two searches exemplify the problems with the Examiner’s searches. The word “expansion” is never “adj” to “coefficient” *even in the ’763 Patent*. EX1001, 1:64–67 (reciting “Temperature Coefficient of Expansion”), 7:46–48 (reciting “coefficient of expansion”).

Finally, Haba would not have been redundant to the Tiedtke prior art cited by the Examiner during the examination of the ’763 Patent’s parent, the ’768 Patent. Paper 14, 3. As explained above, the Applicant represented to the Examiner that the CTE limitation was innovative when applied to semiconductors in 2012 during the examination of the ’768 Patent. EX1032, 406. That representation came just after the Applicant distinguished Tiedtke because it was “in a ‘medical’ field, not in ‘chip package’ field[.]” *Id.*, 405 (emphasis added). Haba is in the chip package field, so it is not redundant to Tiedtke in the medical field.

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**CERTIFICATE OF SERVICE ON PATENT OWNER
UNDER 37 C.F.R. § 42.105**

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on March 19, 2026, a complete and entire copy of this *Petitioners' Sur-Reply to Patent Owner's Request for Discretionary Denial* was served via electronic filing with the Board and via Electronic Mail on the following practitioners of record for Patent Owner:

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