

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CLEARCORRECT OPERATING, LLC,
Petitioner,

v.

ALIGN TECHNOLOGY, INC.,
Patent Owner.

Case No. IPR2025-00820
Patent No. 11,648,090

PATENT OWNER'S PRELIMINARY SUR-REPLY

I. INTRODUCTION

At the outset, the Reply (Paper 15) states it advances identical arguments in each case (1 n.1), despite the Director raising the possibility of examiner error in only the -00818 and -00819 IPRs, not the -00820 and -00821 IPRs. *See* Paper 14, 4. Regardless, the arguments advanced by the Reply do not withstand scrutiny.

First, the Reply abandons factual and legal relevancy to argue that the petitions addressed objective indicia of nonobviousness by noting an alleged “inconsistency” between characteristics of different aligner configurations—“soft-hard-soft” (e.g., ST30 materials addressed in prosecution) and “hard-soft-hard.” Petitioner still misses the point. The petition argues a “soft-hard-soft” configuration would have been obvious but fails to rebut (let alone meaningfully address) objective indicia previously credited by the Office as showing unexpected benefits from this very same configuration. Given the petition’s failure to argue that “hard-soft-hard” was obvious, it is irrelevant if the challenged claims additionally encompass that configuration. The petition never argued that a distinction between “hard-soft-hard” and “soft-hard-soft” configurations led to a lack of nexus. And the Reply still fails to grapple with the unpredictability Petitioner conceded. The challenge is incurably deficient for at least these reasons.

Second, the Reply tries to resuscitate the petition’s unmotivated reliance on adhesive lamination, but its arguments require ignoring the petition’s distinction

among different types of lamination (including types the petition asserts would not preserve aligner properties as required for the grounds), while misrepresenting the arguments made by both Petitioner and Align. The petition's grounds should thus be rejected as failing to meet the legal requirements for obviousness.

II. PETITIONER FAILS TO OVERCOME OBJECTIVE INDICIA AND THE ART'S CONCEDED UNPREDICTABILITY

As the POPR explained, the petition itself characterizes the art as unpredictable with regard to modifications proposed in the grounds, despite premising its arguments on predictability. *See* POPR, 8-9, 11-12, 15-16, 21, 26-27, 30-31, 41 (citing Pet., 22-23 n.4, 57 n.11). This deficiency is exacerbated by the petition's failure to rebut objective indicia recognized during prosecution and directly on-point vis-à-vis its narrowly tailored prior art challenge. *See* POPR, 6-9.

The Reply still does not dispute the petition's failure to address nexus (*see* POPR, 7-8) or identify any such argument the petition. *See* Reply, 2. Instead, the Reply departs from a prior art analysis to argue alleged differences in commercial products. Reply, 1-2. But the petition (*e.g.*, 39-40) specifically argues the obviousness of soft-hard-soft configurations undisputedly matching the objective indicia submitted and credited during prosecution—it advances no ground against hard-soft-hard configurations. As such, the Reply's argument is irrelevant to Petitioner's chosen prior art invalidity theory. Regardless of the weight such evidence deserves, known objective indicia should have been factored into

Petitioner’s challenge but was not—thereby rendering its invalidity analysis incomplete and incurably defective. Nothing in the reply demonstrates otherwise.

The caselaw cited by the Reply is likewise inapposite. In *Mylan*, the Board had already concluded that the petition had sufficiently shown anticipation of all claims, rendering institution a foregone conclusion. IPR2016-01129, Paper 8 at 18. And in *Phigenix* and *Apotex*, the Board instituted where, unlike here, the petitioner submitted rebuttal evidence expressly addressing unexpected results and showing that the examiner had been “led astray.” IPR2014-00676, Paper 11 at 14-16; IPR2023-00512, Paper 7 at 51-52. Here, despite acknowledging its awareness of the objective indicia credited during prosecution, the petition offers no rebuttal evidence or meaningful argument. The petition remains deficient in this regard.

III. PETITIONER FAILS TO MOTIVATE ITS PROPOSED COMBINATIONS

Petitioner, here and in district court, argued that lamination and coextrusion of subsidiary materials is unpredictable and can alter their properties. Pet., 14-15 n.3, 39-40. Aware of this record, the petition engaged in mental gymnastics and narrowly asserts employing adhesive lamination, specifically, using tie layers is an essential element for each of its grounds. POPR, 9; Pet., 32-33, 39-42, 55, 60-62. Curiously, the Reply (4 & n.2) now mischaracterizes its own petition theory as “Patent Owner’s argument.” The petition’s hindsight-driven attempt to thread the needle through its own contrary arguments ultimately failed to establish any

explained or logical motivation to combine materials as specifically proposed. Instead, the petition selects materials using the claims as a roadmap, concocts excuses to combine those materials together, and inexplicitly cherry-picks adhesive lamination specifically to maintain them together upon lamination. *See, e.g.*, POPR, 1, 22-28, 38-41.

Attempting to blur the picture, the Reply asserts that the petition identified two “normal” techniques for making aligners—“adhesive lamination and coextrusion,” and that it cited art “disclosing *laminated* multilayer aligners.” Reply, 3-4. This turns a blind eye to what the petition actually argued. Specifically, the petition identified another “normal” technique: “extrusion lamination,” which it said *also* “would alter the polymer’s properties.” Pet., 14-15 n.3. In other words, the petition argued that disclosure of “lamination” was insufficient to reach the claims; instead, a specific technique of lamination—adhesive lamination using tie layers—was required. The Reply assiduously avoids mentioning extrusion lamination to recast the petition’s discussion of lamination writ large as discussion of the specific technique of adhesive lamination required by its grounds.

While the Reply cites to various pages in the petition that purportedly support its adhesive lamination arguments, many of these pages discuss only the broad category of “lamination” (that is, the forming of a substance into multiple layers), not the specific technique of “adhesive lamination” on which the grounds

rely. *See* Pet., 11-12, 55-56. By contrast, the citations mentioning adhesive lamination only discuss POSAs awareness of its existence, not their motivation to employ it specifically. *See* Pet, 6, 39, 40, 55. While the Reply asserts (3) that the Kalili and Wen references teach *lamination*, nowhere does Petitioner assert that either reference teaches using the adhesive lamination with tie layers required by the petition’s grounds. *See, e.g.*, Pet., 11-12 (“Kalili also discloses... laminate sheets”—that is, *layered* sheets), 67 (“Kalili’s multilayer sheet is laminated,” not adhesively laminated), 56 (Wen teaches “sheets may be laminated to one another,” not adhesively laminated to tie layers).

As the POPR explained (25-26), argument that a POSA would have been aware of adhesive lamination does not suffice for obviousness. Merely alleging awareness of elements that comprise the invention does not end the obviousness inquiry. Rather, it is also “important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements” in a way that arrives at the claimed invention. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). Petitioner’s failure to advance a rationale here for an essential ingredient in its obviousness combinations undermines all of its grounds.

IV. CONCLUSION

Accordingly, for at least the reasons set forth above, as well as those explained in the POPR, institution should be denied.

Respectfully submitted,

Date: September 24, 2025

/ Michael T. Rosato /
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CERTIFICATE OF SERVICE

I certify that the foregoing Patent Owner's Preliminary Sur-Reply was served on this 24th day of September, 2025, on Petitioner at the following electronic service addresses:

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