



Intellectual Property Prosecution, Transactions & Portfolio Management Update

August 2026

Obviousness Rejections Reversed Based on Examiner's Mischaracterization of Prior Art

On January 14, the Patent Trial and Appeal Board (PTAB) issued a decision in *Ex parte Minfeng Chen and Shuo-Yen Chou*, Appeal 2025-002620, reversing the examiner's rejection of all claims as obvious under 35 U.S.C. § 103. The decision offers important lessons for patent practitioners regarding the proper characterization of prior art disclosures, particularly Markush group language, in the context of an obviousness rejection and the limits of relying on generic boilerplate language to support an obviousness rejection.

The patent application at issue involved an extreme ultraviolet (EUV) photomask used in semiconductor manufacturing. EUV lithography is a next-generation patterning technology important to advanced chip fabrication. The claimed invention involves a photomask with a plurality of alternately stacked reflective layers, a capping layer, and an absorber layer comprising an alloy of two or more of Sn, Ni, Te, Co, In, and Sb.

The examiner rejected all claims as obvious over a combination of references, including U.S. Publication No. 2018/0031964 (Jindal) as a secondary reference allegedly teaching the claimed alloy composition of the absorber layer. On appeal, the PTAB found the examiner had failed to establish that Jindal disclosed or suggested the claimed alloy composition of the absorber layer and reversed the rejection.

The PTAB's decision reversing the examiner rested on a pair of principal findings.

First, the PTAB found that the examiner mischaracterized the disclosure in Jindal. The examiner characterized Jindal as disclosing an absorber "comprising at least one of" Sn, Ni, Te, Co, In, and Sb. In contrast, Jindal expressly discloses a Markush group in which a material for an absorber layer is

"selected from the group consisting of" Sn, Te, Co, and Sb. The distinction between the examiner's characterization of the disclosure in Jindal and the express disclosure in Jindal mattered to the PTAB. A Markush group using "selected from the group consisting of" presents alternatives, namely one member of the Markush group is chosen to the exclusion of the others. As written, the Markush group disclosed in Jindal fails to teach or suggest combining two or more of the listed materials into an alloy. By misconstruing the language of the Markush group as "at least one of," the examiner improperly recast Jindal's single-material disclosure as a teaching of multi-material combinations constituting an alloy.

Second, the PTAB found that generic boilerplate language was insufficient to support the examiner's rejection. The examiner also cited disclosure in Jindal that "particular features, structures, materials, or characteristics may be combined in any suitable manner in one or more embodiments" as evidence that a person having ordinary skill in the art would have understood Jindal to teach combining the listed single materials into an alloy. The PTAB rejected this argument by finding the disclosure to amount to generic boilerplate language that falls short of teaching a specific combination of two listed materials into an alloy absorber layer. The appellant cleverly demonstrated in its briefs that identical language appears in other published patent applications prepared and filed by Jindal's applicant in contexts entirely unrelated to absorber materials, which further undercut any evidentiary weight the generic boilerplate language might have carried to the PTAB.

The PTAB concluded that the only description or suggestion of forming an alloy from the listed materials appeared in

the appellant's own specification and not in the prior art of record. Accordingly, the PTAB held the examiner's obviousness determination impermissibly relied on hindsight reconstruction of the claimed invention.

The decision carries several key takeaways for patent practitioners and their clients.

An examiner's characterization of the prior art should be scrutinized. This decision underscores the importance of carefully comparing the examiner's characterization of a reference to the reference's actual language. Here, the examiner's improper substitution of "at least one of" for "selected from the group consisting of" materially altered the scope of Jindal's disclosure. Practitioners should routinely verify quoted language in an office action and be prepared to identify any misquotation or paraphrasing that broadens or distorts a reference's actual teaching.

Markush group language is normally construed to mean selection, not combination. The PTAB's reasoning reinforces that a Markush group ("selected from the group consisting of A, B, C, and D") discloses alternatives construed as the selection of one member of the group. Absent additional teaching by a specification, a Markush group does not ordinarily disclose combining or alloying two or more of the listed members.

Generic boilerplate is not a substitute for an actual teaching. The PTAB's dismissal of Jindal's "may be combined in any suitable manner" language as insufficient to teach a specific combination is instructive. When an examiner relies on such generic language to fill a gap in a reference's specific disclosures, practitioners should challenge the sufficiency of that evidence, particularly where the same boilerplate appears in numerous unrelated filings from the same applicant.

Hindsight reconstruction is not permitted. The PTAB's finding that the only suggestion of alloying the listed materials came from the appellant's own specification, not from the prior art, exemplifies impermissible hindsight. Practitioners defending against obviousness rejections should assess whether the examiner's articulated reasoning for combining references draws on teachings actually present in the prior art or instead uses the applicant's disclosure as a roadmap.

FOR MORE INFORMATION

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