

## Prima Facie Obviousness: Much Ado “Abut” Ranges

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Addressing the issue of claims that recite a range that abuts but does not overlap that of a prior art reference, the US Court of Appeals for the Federal Circuit upheld the Patent Trial and Appeal Board’s (PTAB’s) finding of a *prima facie* case of obviousness. *In Re: Brandt*, Case No. 16-2601 (Fed. Cir., Mar. 27, 2018) (Reyna, J).

The application in issue relates to “high density polyurethane or polyisocyanurate construction boards, as well as their use in flat or low-slope roofing systems.” The independent claim recited as a feature “said coverboard having a density greater than 2.5 pounds per cubic foot and less than 6 pounds per cubic foot.”

During examination, the examiner issued a final rejection under 35 USC § 103(a) over a prior art reference disclosing a prefabricated roofing panel with a coverboard having a polymer material core layer with a density “between 6 lbs/ft<sup>3</sup> and 25 lbs/ft<sup>3</sup> and preferably a density of at least 8 lbs/ft<sup>3</sup>.” The examiner took the position that it would have been obvious to a skilled artisan to have “a cover board that had a density of less than 6 pounds per cubic feet as an obvious design choice and also due to margin of error by the slightest percentage.” The applicants appealed the rejection, and the PTAB affirmed the rejection. This appeal to the Federal Circuit followed.

Applicants challenged the PTAB’s finding of a *prima facie* case of obviousness based on the prior art coverboard density range disclosure, because that range did not overlap with the claimed density range. Specifically, applicants argued that the PTAB erred by applying a *per se* rule that whenever the differences between a prior art reference’s disclosed range and the application’s claimed range are close, a *prima facie* case of obviousness is established.

The Federal Circuit disagreed with the premise that the PTAB applied a *per se* rule. Rather, it found a *prima facie* obviousness conclusion grounded in the facts before it. The PTAB specifically agreed with the examiner’s factual finding that the difference between the claimed range and prior art range was “virtually negligible.” This finding accounted for manufacturing tolerance levels, because “precise results are not always achieved and tolerance levels are usually taken into account.” In addition, the cited reference recognized that the composition and compressive strength of the coverboard may vary through the addition of fillers during manufacturing. The Court concluded that “[t]his is a simple case in the predictable arts that does not require expertise to find that the claimed range of ‘less than 6 pounds per cubic feet’ and the prior art range of ‘between 6lbs/ft<sup>3</sup> and 25lbs/ft<sup>3</sup>’ are so mathematically close that the examiner properly rejected the claims as *prima facie* obvious.”

The Federal Circuit also noted that the applicants did not provide any evidence showing a criticality of the claimed range.

**Practice Note:** When the difference between a claim and the prior art rests on a claimed range, it is important to provide evidence of criticality of that range.

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