

PTAB’s Written Description Ruling Goes Up in Smoke as Federal Circuit Clarifies Requirements for Claim Ranges *Rai Strategic Holdings, Inc. v. Philip Morris Products S.A. (Feb. 9, 2024)*

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On February 9, 2024, in [*Rai Strategy Holdings Inc. v. Philip Morris Products S.A.*](#), the Federal Circuit vacated the Patent Trial and Appeal Board’s (PTAB) finding that claimed ranges of length rendered Rai’s vape device claims invalid for lack of written description. The Federal Circuit rejected Philip Morris’ rigid argument that the claims lacked written description support because the specification did not identify the specific claimed range. The Court found the claims not invalid because the claimed range was within a broader range disclosed in the specification and there was no evidence that the claimed ranges resulted in a different invention than what was disclosed.

The written description requirement of 35 U.S.C. § 112 requires that a patent’s specification include sufficient detail to reasonably convey to a person of ordinary skill that the inventor had possession of what is claimed. Rai’s patent disclosed heating element-to-disposable aerosol ratio ranges between 75%-125%, 80%-120%, 85%-115% and 90%-110%. Rai’s claims at issue, however, recited a subrange between 75%-85%. The PTAB had found that the claims lacked written description support because no range described in the specification contained an upper limit of about 85%.



In reviewing the PTAB’s decision, the Federal Circuit explained that evaluating whether there is written description support for a claimed range involves not just comparing the claimed range with those disclosed in the specification, but also whether the disclosed broad ranges describes the subrange or whether the subrange is drawn to a different invention. This is especially true in complex or unpredictable technologies where the invention may have different characteristics across the broader range. The Federal Circuit held that there was no evidence suggesting that the broader ranges described in Rai’s patent specification disclosed a different invention than the claimed range. The Court also stated that given the lack of complexity of the claim limitation at issue—heating element length—a lower level of detail was required. The Court vacated the PTAB’s decision but noted that its determination was highly factual and dependent on the nature of the invention and the disclosure.

Patent prosecutors should be aware of the written description requirement as it relates to claiming ranges in patent applications. If a claim is amended to overcome prior art by narrowing a claimed range, a written description problem may arise if the new range does not fall within a broader range described in the specification or if the characteristics and behaviors of the invention vary across the disclosed broader range. Likewise, Rai provides a helpful roadmap to litigators challenging or defending written description support of claimed subranges.