

Determining the Patentability of Ranges

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Legal Update

The Federal Circuit recently addressed the patentability of ranges. In *ClearValue, Inc. v. Pearl River Polymers, Inc.*, decided on February 17, 2012, the court reversed a denial of Judgment as a Matter of Law (JMOL) seeking a ruling of anticipation and found the claimed invention, which recites a clarification process for “water of raw alkalinity less than or equal to 50 ppm” by using a blend of a high molecular weight polymer and an aluminum polymer, to be anticipated by a reference that disclosed the same blend for clarifying water of “up to 150 ppm.”

It is well settled law that disclosure of a genus in the prior art is not necessarily a disclosure of every species that is a member of that genus. However, there is a prima facie presumption of obviousness for overlapping ranges. The presumption exists even if the overlap in ranges is slight. This presumption may also exist if the ranges do not overlap but are “close enough.” The prima facie presumption of obviousness is rebutted if it can be shown: (1) that the prior art taught away from the claimed invention, or (2) that there are new and unexpected results relative to the prior art where the unexpected results are commensurate in scope with the claimed range.

In this case, ClearValue argued that the art’s disclosure of clarifying water with alkalinity of “150 ppm or less” was too broad to anticipate the “less than or equal to 50 ppm” limitation of claim 1. The court resoundingly rejected this argument, contrasting the claimed range with the ranges at issue in *Atofina v. Great Lakes Chem. Corp.*, a 2006 Federal Circuit case heavily relied on by ClearValue, where a narrower range was found not to be anticipated by a more broadly disclosed range in the prior art. In *Atofina*, the prior art taught a reaction occurring within a temperature range of 100° – 500°C while the claim recited a reaction occurring within a temperature range of 330° – 400°C. The difference between these ranges was characterized as “a broad genus” which was “considerably” different from the narrow claimed range. Thus, the court in *Atofina* considered a broad/narrow distinction to be considerable where the difference in the breadth of the ranges were slightly less than seven-fold. Also of relevance to the decision, *Atofina* clearly taught that the narrow temperature range was critical to the claimed reaction.

ClearValue also argued that the cited art taught away from the limitations of claim 1 since a prima facie case of obviousness can be rebutted if the prior art teaches away from the claimed range. However, Judge Moore of the Federal Circuit was quick to point out that that teaching away is only relevant to obviousness rejections. When a single reference anticipates each and every element of the claim, any teaching away is irrelevant.

The difference between the breadth of the claimed range (less than or equal to 50 ppm) and the range in the prior art (up to 150 ppm) is three-fold, and the prior art exemplified a clarification process with water having a raw alkalinity of 60 – 70 ppm which was close to the claimed alkalinity. The court also noted that there was no “allegation of criticality or any evidence demonstrating any difference across the range.” Thus, the claims were found to be anticipated by the prior art reference.

The holding of *ClearValue* clarifies an important distinction between obviousness and anticipation. To overcome an obviousness rejection, arguments should be made, if applicable, to any teaching away or new and unexpected results of the claimed range. In contrast, where the rejection is one of anticipation, arguments should focus on instances of criticality of the narrow range as well as any evidence demonstrating differences across the range. Thus, it is also important to clearly distinguish any unique and/or critical features of a range when drafting applications

having claims limited by ranges. Additional arguments, if applicable, should also be made to any lack of enablement in the prior art for the claimed range.

This advisory was prepared by Nutter's Intellectual Property practice. For more information, please contact your Nutter attorney at 617-439-2000.

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