

Keywords: enablement; *sua sponte* evidence produced by the Board

Summary: Board of Patent Appeals and Interferences committed procedural error in refusing to hear applicants' evidence, offered in response to calculations that were produced and relied on by the Board in concluding that size and distribution values for Applicants' claimed aluminum oxide particles overlapped with those disclosed in prior art reference.

In re Kumar

76 U.S.P.Q.2d 1048 (Fed. Cir. 2005)

Decided August 15, 2005

I. Facts

Kumar filed a patent application directed to aluminum oxide particles having specified size ranges and size distributions at the nanometer level. The specification describes methods of producing nanoparticles of a specified size range and size distribution. Method claims to the process were allowed in a related application and are not at issue in this case. At issue in the present case are independent claims 1 and 19 which recite particles having a specified average particle size and size distribution.

After the Examiner rejected all product claims an appeal to the Board was filed by Kumar. All claims on appeal rise or fall with claims 1 and 19. In agreeing with the Examiner, the Board found the claims to be obvious in view of the Rostoker patent which discloses aluminum oxide particles of nanometer size. Specifically, the Board found that the ranges of particle sizes and size distributions of the Rostoker particles and of Kumar's claimed particles overlapped. Kumar conceded that the Rostoker particles overlap the Kumar particles in average particle size but argues that they do not overlap in particle size distribution. On appeal, the Board made certain calculations that had not been made by the Examiner and were not presented at any time during the argument of the appeal to the Board. The Board made the calculations during its decision on appeal and included these calculations as an appendix in its decision upholding the Examiner's finding of obviousness. These calculations were based on definitions of variables provided in the Rostoker patent and purportedly demonstrated that the size distribution ranges of the Rostoker patent and the claims at issue did indeed overlap.

In response to the Board's holding, Kumar submitted a request for reconsideration and included declarations by a co-inventor stating that the Rostoker reference does not enable one of ordinary skill in the art of the invention to produce particles having Kumar's size, range, and distribution, and thus, could not render the recited subject matter obvious. Kumar further submitted a declaration by a professor of Material Science and Engineering at the University of Florida (Professor Singh) suggesting that certain descriptions in the Rostoker patent were inconsistent and not in conformity with well-known representations, thus providing further evidence that Rostoker does not enable one to produce particles having Kumar's size, range and distribution. Specifically, the professor points out that the Rostoker reference suggested using a manufacturing method taught by the Siegel patent, but opined that the Siegel patent does not produce submicron particles. The Board refused to consider the declarations ruling that Kumar had not shown good and sufficient reason why it was not earlier presented.

Kumar appealed to the Federal Circuit stating that a *prima facie* case of obviousness was not established, since Rostoker did not enable persons skilled in the art to produce particles of the size and distribution claimed by Kumar. Kumar alternatively asserted that even if a *prima facie* case of obviousness was established, the declarations sufficiently rebutted the presumption. Kumar objects to

the tardy submission of the Board's calculations and asserted that he was entitled to consideration of the professor's evidence.

II. Issue

Was Kumar entitled to respond to the evidence adduced *sua sponte* by the Board?

III. Discussion

YES. The Federal Circuit opined that the values identified by the Board's calculations were not contained in the prior art or any examination record, but appeared for the first time in the Board's opinion. Although the PTO argued that the calculations the Board included in its decision were not new evidence, but simply an additional explanation of the Board's decision, these values produced and relied on by the Board had not previously been identified by the Examiner or the Board. Accordingly, the Federal Circuit held that Kumar was indeed entitled to respond to these calculations and that the Board committed procedural error in refusing to consider the evidence proffered in response. In arriving at this conclusion, the Federal Circuit cited case law, the Federal Rules (37 C.F.R. § 1.196(b)) as well as the Administrative Procedure Act.

Specifically, the Federal Circuit recognized that the Board calculated particle distribution values based on the assumption that the Rostoker variables used by the Board to calculate the overlapping ranges would be understood by a skilled artisan in the same way in which they were understood by the Board. The Federal Circuit noted that the Singh declaration challenges the Board's view of the Rostoker variables. While the PTO now argues that there is no merit to the Singh position, the merits of the evidence were not properly debated in the first instance on appeal. Accordingly, the Federal Circuit concluded that the Board's calculations and its decision based thereon constituted a new ground of rejection which should have been treated as such.

Kumar further argued that even if a *prima facie* case of obviousness was established, Kumar rebutted that case with evidence and argument that Rostoker did not enable the Kumar product and that the Board erred in refusing to consider the rebuttal evidence. The Court noted that although published subject matter is prior art for all that it discloses, in order to render an invention unpatentable for obviousness, the prior art must enable a person of ordinary skill in the art to make and use the invention. Thus, when a *prima facie* case of obviousness is made based on similarity to a known composition or device, rebuttal may take the form of evidence that the prior art does not enable the claimed subject matter. The applicant has the burden of producing evidence in rebuttal when the prior art includes a method that appears on its face to be capable of producing the claimed composition. The burden may be met by presenting sufficient reason or authority or evidence on the facts of the case to show that the prior art method would not produce or would not be expected to produce the claimed subject matter.

The court found that since Rostoker states that its particles were made by the method shown in the Siegel patent, it was reasonable for Kumar to argue that the Siegel process would not produce Kumar's particles. Kumar's argument was supported by the declarations of the co-inventor as well as Dr. Singh. Whether these expert declarations are sufficient, without experimental data or other evidence is a question of fact to be determined on the record. The Court further noted that it was the Board's calculation that raised the new issues regarding enablement because they suggest particle size distributions Rostoker should be enabled to attain. Thus, the Federal Circuit held that the Board erred in refusing to consider the Singh declaration and held that after the Board adduced its calculations of

particle size and distribution, Kumar was entitled to offer evidence in rebuttal for consideration by the Board or on return to an Examiner.

Interestingly, the Federal Circuit also noted that the PTO's argument seemed to be that as long as the Rostoker reference enables the Rostoker invention, Rostoker renders the Kumar invention obvious, even if Kumar shows that Rostoker does not enable the Kumar invention. The Federal Circuit noted that this position is incorrect. To render a later invention unpatentable for obviousness, the prior art must enable a person of ordinary skill in the field to make and use the later invention. Thus, the relevant inquiry is not whether the Rostoker patent was invalid for lack of enablement, but whether Rostoker enabled persons of skill in the art to produce particles of the size and distribution claimed by Kumar. The Court did further note that if it was shown that the Rostoker product could not be produced by the Rostoker method, that would be relevant evidence concerning whether Rostoker rendered obvious the Kumar product.