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BEFORE THE PATENT TRIAL  
AND APPEAL BOARD

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*Ex parte* JOSEPH A. GROHOWSKI

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Appeal 2011-013683  
Application 11/450,059  
Technology Center 1700

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Before RICHARD E. SCHAFER, KAREN M. HASTINGS, and  
MICHAEL P. COLAIANNI, *Administrative Patent Judges*.

COLAIANNI, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 the final rejection of claims 1-7, 11-13, 33, and 40-53. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

We REVERSE.

Appellant's invention is directed to a porous article having, *inter alia*, a porous portion with a substantially uniform pore distribution and a pore size distribution wider than 50 microns (Claim App'x, claim 1).

Claim 1 is illustrative:

1. A porous article comprising a porous portion having a substantially uniform pore distribution and a pore size distribution of wider than 50 microns, the porous portion being one of a metal and a ceramic free of a matrix substrate.

Appellant appeals the following rejections:

1. Claims 1-4, 33, and 40-43 are rejected under 35 U.S.C. § 102(b) as being unpatentable over Wheeler (US 3,852,045 issued Dec. 3, 1974).
2. Claims 5-7, 44 and 45 are rejected under 35 U.S.C. § 103(a), as being unpatentable over Wheeler.
3. Claims 11-13, and 46-52 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wheeler in view of Lindstrom (US 3,802,878 issued Apr. 9, 1974).

REJECTIONS (1) to (3)

#### ISSUE

Did the Examiner reversibly err in finding that Wheeler discloses a porous portion of an article having a pore size distribution wider than 50 microns as required by independent claims 1, 7, 11, and 33? We decide this issue in the affirmative.

### FINDINGS OF FACT AND ANALYSES

The Examiner's findings regarding Wheeler may be located on pages 3-5 and 7-9 of the Answer. Specifically, the Examiner finds that Wheeler discloses at column 5, line 42 to column 6, line 26 that the porous article portion has pore size distribution wider than 50 microns (Ans. 3-4, 7-8). The Examiner finds that Wheeler's broad disclosure that the pore sizes are in the range of 275 to 460 microns teaches that more than one particle size is present within the porous article, thus satisfying the pore size distribution of wider than 50 microns (*id.* at 8). The Examiner further finds that Wheeler teaches a uniform pore distribution in the porous article (*id.* at 3-4).

Appellant argues that Wheeler fails to teach a portion of the porous article having a uniform pore distribution and a pore size distribution of wider than 50 microns (App. Br. 4-8). Appellant contends that Wheeler teaches settling the pore formers into a mold using a vibration device that would inherently separate the pore formers with the larger pore formers at the top of the mold and smaller pore formers at the bottom of the mold (*id.* at 7). Appellant argues that Wheeler exemplifies forming a uniform pore distribution by using pore formers that are essentially mono-sized (e.g., 275 microns, 460 microns, or 650 microns) and thus do not have a large pore size distribution (*id.* at 6). Appellant contends that Wheeler's only disclosure of a porous article with a large pore size distribution is an article having graded layers, which would not constitute a uniform pore distribution (*id.* at 5).

The preponderance of the evidence favors the Appellant's argument of novelty. While Wheeler broadly teaches that the pore sizes in the porous

metal is in the range of 275 to 460 microns, Wheeler further exemplifies that porous articles are made with an average pore size of 275, 460 or 650 microns. Wheeler, by the examples, explains the proper meaning of the broader disclosure that the pore sizes are in the range of 275 to 460 microns. We agree with Appellant that within context, Wheeler's column 5 disclosure of the porous article having pore sizes in the range of 275 to 460 microns means that the porous article is designed around a pore size within the range. However, we do not find and the Examiner does not explain why Wheeler's disclosure of a broad range of pore sizes necessarily teaches a blend of more than one size of pore forming material such that the pore size distribution is wider than 50 microns. Indeed, as found by the Examiner, Wheeler's Example 1 teaches that the pore forming particle size ranges from 250 to 297 microns, which provides a particle size distribution of 47 microns that is outside the claimed pore size distribution range of wider than 50 microns.

The Examiner's reliance on Wheeler's disclosure of a multi-layer article having different pore sizes in different layers to teach a portion with the claimed pore size distribution is misplaced (Ans. 7). As argued by Appellant (Reply Br. 3), the Specification at paragraph [0019] discloses that "the tailored porosity may be in the form of a controlled uniform pore distribution or by way of multiple metal layers varying [in] porosity provided within a single article." Appellant's claims are limited to the "uniform pore distribution" embodiment as argued (Reply Br. 3).

The Examiner has not established that Wheeler teaches the claimed particle size distribution so as to anticipate the claimed invention. Regarding § 103 rejections (2) and (3), the Examiner relies on Wheeler as the primary reference. However, the Examiner does not explain why the

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claimed pore size distribution would have been obvious in light of Wheeler's disclosure as part of the § 103 rejection. Rather, the Examiner relies solely on the finding that Wheeler teaches the claimed pore size distribution. On this record and for the above reasons, we reverse the Examiner's rejections.

DECISION

The Examiner's decision is reversed.

ORDER  
REVERSED

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