Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte MICHAEL JOHN ROBERT WHITE

Appeal No. 2002-0751
Application No. 09/336,051

ON BRIEF

Before WINTERS, WILLIAM F. SMITH, and GRIMES, Administrative Patent Judges.

GRIMES, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 37-40, all of the claims remaining. Claim 38 is representative and reads as follows:

38. A process for forming a toilet block for use in a toilet bowl consisting essentially of the sequential steps of:

(i) extruding polyvinyl alcohol or 50-90% partially hydrolyzed polyvinyl acetate having a number average molecular weight of from about 15,000 up to about 68,000 and containing 0-15% by weight polar plasticizer with from 1 up to about 20% by weight of a compatible fragrance comprising a major proportion of at least one highly polar

organic primary alcohol for [sic] form an extrudate which is water-soluble at a temperature in the range of 25-35°C;

(ii) chilling and pelletizing the resulting extrudate at a temperature in the range of from about 5°C up about 60°C;

(iii) cryogenically grinding the resultant pelletized product at a pressure in the range of from about 1 atmosphere up to about 50 atmospheres to a particle size in the range of from about 10 up to about 500 microns to form cryogenically-ground particles;

(iv) subsequently comminuting the resulting cryogenically-ground particles in order to form a powder;

(v) mixing the resulting powder with:

(a) at least one compatible sulfonate or sulfate-containing surfactant having both detergent and foaming properties; and

(b) from 25 to 45% by weight of a filler selected from the group consisting of alkali metal bicarbonates, alkali metal sulfates, alkali metal carbonates, alkali metal citrates, alkali metal phosphates and sodium chloride; and then

(vi) molding the resultant mixture into a toilet block.

The examiner relies on the following reference:

McDermott et al. (McDermott)	5,543,439	Aug. 06, 1996

Claims 37-40 stand rejected under 35 U.S.C. § 103 as obvious in view of McDermott.

We reverse.

Discussion

The claims are directed to a method of making products (toilet blocks) intended for long-term release of fragrance, and optionally other agents, when

the product is placed in a toilet bowl. The claimed process has essentially five sequential steps:

(1) extruding a mixture of polyvinyl alcohol (PVA)[1] and a plasticizer to form an extrudate, which is then cooled and pelletized;
(2) cryogenically grinding the pellets to particles in the size range of 10 to 500 microns;
(3) comminuting the particles to form a powder;
(4) mixing the powder with at least a surfactant and a water-soluble filler; and
(5) molding the resulting mixture into a toilet block.

The fragrance can be added either in the first step (in claim 38) or in the mixing step (in claim 37). Claims 39 and 40 are directed to the toilet blocks made in the process of claims 37 and 38, respectively.

The examiner rejected the claims as obvious in view of McDermott. The examiner characterized McDermott as teaching a method of making toilet blocks that uses essentially the same combination of ingredients as recited in the instant claims, and differs only in two ways: (1) McDermott does not specify a particle size for the treated extrudate, and (2) the "cryogenic step" occupies a different place in McDermott's process than in the claims. See the Examiner's Answer, pages 3-4. The examiner concluded that these differences did not distinguish the instant claims from the prior art because "one of ordinary skill in the art would have been motivated to create a toilet rim block using the process disclosed by McDermott, regardless of the specific order of the method steps, and the specific particle size." Id., page 4.

[1] Instead of PVA, a partially hydrolyzed polyvinyl acetate can also be used.

Appellant argues that the examiner has not made out a prima facie case of obviousness. In particular, Appellant argues that the examiner has pointed to nothing in the prior art that would have suggested a cryogenic grinding step, as required by the claims. See the Appeal Brief, page 5. Appellant also argues that, even if a prima facie case had been made, the specification presents evidence of unexpected results to rebut a conclusion of obviousness. See the Appeal Brief, pages 5-7.

"In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. Only if that burden is met, does the burden of coming forward with evidence or argument shift to the applicant." In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). "It is well-established that before a conclusion of obviousness may be made based on a combination of references, there must have been a reason, suggestion, or motivation to lead an inventor to combine those references." Pro-Mold and Tool Co. v. Great Lakes Plastics Inc., 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1629 (Fed. Cir. 1996). "Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316-17 (Fed. Cir. 2000).

In this case, we agree with Appellant that the cited reference does not support a prima facie case of obviousness. McDermott discloses a process of

making toilet blocks by extruding a mixture of PVA, a plasticizer, and a fragrance (col. 10, line 63, to col. 11, line 7). As in the claimed process, the extrudate is then cooled and pelletized (col. 11, lines 7-8). This pelletizing step is also referred to as comminution (see col. 12, lines 3-8). McDermott discloses that "[t]he pelletized product may be marketed as is or it may be formed into toilet rim blocks, for example." Col. 11, lines 8-10.

Thus, McDermott discloses only the first and last steps of the process defined by the instant claims. McDermott does not disclose or suggest a step of cryogenically grinding the pellets resulting from the extrudate, or a step of comminuting the ground pellets into a powder, or a mixing step in which the powder is combined with, at least, a surfactant and a water-soluble filler.

The examiner attempted to meet the "cryogenically grinding" step of the claimed process by pointing to McDermott's disclosure that the pellets resulting from the pelletizing of the extrudate could be cooled by passing through a stream of liquid nitrogen (col. 17, lines 38-40). See the Examiner's Answer, page 4: "It is the position of the examiner that McDermott teaches applicant's claimed process, because both processes rely on grinding the extrudate into particles, and both processes involve the use of liquid nitrogen."

We do not agree with this reasoning. The specification discloses that cryogenic grinding involves

> first extruding a mixture of fragrance and polymer and quickly chilling the extrudate through a pelletizing operation and into an inert cooling liquid having a temperature in the range of from about 5°C to about 60°C; then cryogenically grinding the resultant product

> using liquid nitrogen, liquid air or other cryogenic cooling agent at a pressure of from about 1 atmosphere up to about 50 atmospheres.

Pages 11-12. The specification also discloses several cryogenic grinding apparatuses suitable for use in the disclosed process. See page 12. Thus, the claimed process requires more than simply a step of cooling with liquid nitrogen; the claim requires that the extruded pellets be ground while cooled under liquid nitrogen.

The examiner argues that "one of ordinary skill in the art would have been motivated to create a toilet rim block using the process disclosed by McDermott, regardless of the specific order of the method steps, and the specific particle size." The examiner, however, has pointed to nothing in McDermott that would have suggested the specific steps recited in the claims, in the recited order. The examiner's unsupported assertion is not enough to support a prima facie case of obviousness. See In re Grasselli, 713 F.2d 731, 739, 218 USPQ 769, 775 (Fed. Cir. 1983) ("It is fundamental that rejections under 35 U.S.C. § 103 must be based on evidence comprehended by the language of that section."); In re Lee, 277 F.3d 1338, 1342, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002) (The "factual question of motivation is material to patentability, and [must] not be resolved on subjective belief and unknown authority.").

Since the examiner has not shown that the cited reference would have suggested the claimed method, we conclude that the examiner has not carried the initial burden of showing prima facie obviousness. We therefore need not address Appellant's evidence of unexpected results.

Summary

McDermott does not suggest the method recited in the instant claims. The rejection under 35 U.S.C. § 103 is therefore reversed.

REVERSED

Sherman D. Winters Administrative Patent Judge	))))) BOARD OF PATENT
William F. Smith Administrative Patent Judge	)) APPEALS AND)) INTERFERENCES
Eric Grimes Administrative Patent Judge	))

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