

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte FRANK JAEKEL, GERD REINHARDT,
and
GERHARD NOLTNER

Appeal No. 1996-1185
Application 08/063,985¹

ON BRIEF

Before KIMLIN, JOHN D. SMITH and KRATZ, Administrative Patent
Judges.

JOHN D. SMITH, Administrative Patent Judge.

¹ Application for patent filed May 19, 1993.

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DECISION ON APPEAL

This is an appeal pursuant to 35 U.S.C. § 134
from the final rejection of claims 1-14.

Claim 1 is representative and is reproduced below:

1. A process for the preparation of low-dust granules, which comprises applying an aqueous solution or suspension of a hydrate-forming compound to a particulate starting material, the particulate starting material being at a temperature below the transition temperature of the hydrate-forming compound during the application of the aqueous solution or suspension and the aqueous solution [sic or suspension]² being at a temperature above the transition temperature, effecting granulation subsequently or simultaneously and, if desired, drying the granules obtained.

The references of record relied upon by the examiner
are:

Johnston	4,126,573	Nov. 21, 1978
Choy	4,867,895	Sep. 19, 1989

Appealed claims 1-5, 7, 8, and 10-14 stand rejected
under 35 U.S.C. § 103 as unpatentable over Choy. Claims 6 and

² Appellants' specification indicates that the suspension must also be above the "transition temperature." See page 2, lines 8-10 of the specification. We trust that the examiner and appellants will insure that the appealed claims are appropriately amended prior to allowance of this application.

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9 stand similarly rejected under the same section of the statute over Choy in view of Johnston.

We cannot sustain the stated rejections.

The subject matter on appeal is directed to a process for the preparation of low-dust granules which involves the application of either an aqueous solution or aqueous suspension of a hydrate-forming compound at a temperature above the "transition temperature" of the hydrate-forming compound (the temperature at which the hydrate-forming compound releases or takes up bound water of crystallization)³ to a particulate starting material (such as a bleach component) at a temperature below the "transition temperature." Granulation of the materials into low-dust granules is effected either simultaneously or subsequently to the "applying" step. Appellants characterize the claimed process as resulting in "unexpectedly superior low-dust granulated material" which further advantageously enables the granulation of heat-sensitive materials such as enzymes which

³ For appellants' preferred compound, sodium sulfate, the "transition temperature" is 32.5°C. See the specification at page 6, lines 8-21.

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suffer thermal breakdown when granulated by conventional processes. See the brief at page 3 and the specification at page 9, lines 25-28. In contrast, prior art processes described

in appellants' specification (page 1, lines 13-27) form dust-free granules by mixing a solid bleach component with a hydrate-forming inorganic compound such as sodium sulfate at a temperature lower than the "transition temperature."

As evidence of obviousness, the examiner principally relies on Choy, a reference which teaches a method of forming a coated bleach granule by spraying an aqueous solution of sodium sulfate onto bleach particles in a spray granulator. Referring to column 1, lines 30-40 of Choy, the examiner argues in his answer at page 3,

because Choy is silent as to the temperatures utilized in the coating process, it would have been obvious to one having ordinary skill in the art to have determined the optimum coating temperatures through routine experimentation, otherwise the skilled artisan would not be able

to practice the invention.

We agree with appellants that Choy's "silence" regarding temperature conditions is not evidence of obviousness of the herein specifically claimed process. In fact, it is our view that one skilled in this art would have reasonably inferred from Choy's example 1 at column 7, lines 26-40 that the bleach particles were sprayed with the 25 wt. % aqueous solution of sodium sulfate at ambient conditions, absent any express disclosures to the contrary. In this regard, Choy expressly and rather precisely describes the drying temperature of this example "at about 65E C. for about 1 min." Thus, arguably, the Choy reference suggests a prior art process wherein a particulate starting material is at a temperature below the "transition temperature," i.e., 32.5EC, of the hydrate-forming compound, sodium sulfate. However, we find no adequate reason, suggestion, or motivation in Choy⁴ to modify the

⁴ At column 6, lines 5-13, Choy incorporates by reference U.S. Pat. No. 3,983,254 issued September 28, 1976 to Alterman, copy attached. Alterman teaches at column 7, lines 18-22 that "in some cases" the coating solution reservoir and pipe lines are heated to prevent solidification of the coating material in solution. There is no evidence of record that Choy's sodium sulfate solution presents the problem of in situ equipment solidification, however.

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described process in a manner corresponding to the herein claimed process, which also requires that the aqueous solution or suspension of a hydrate-forming compound be at a temperature above the "transition temperature." Nor is there any appreciation in Choy that such a process results in the formation of "low-dust" granules, as claimed.

Because the disclosures of Choy are insufficient to establish a prima facie case of obviousness for the subject matter defined by the appealed claims and because the Johnston reference fails to remedy the basic deficiencies in Choy, we are constrained to reverse the stated rejections of the appealed claims.

The decision of the examiner is reversed.

REVERSED

	EDWARD C. KIMLIN)	
	Administrative Patent Judge)	
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PATENT)	
	JOHN D. SMITH)	
	Administrative Patent Judge)	APPEALS AND
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