

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is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KASIMIR V. DZIEMBOWSKI,
HOWARD G. PERRYMAN, and LEONARD H. MOORE

Appeal No. 1998-1009
Application No. 08/656,733¹

ON BRIEF

Before PAK, KRATZ, and DELMENDO, Administrative Patent Judges.
PAK, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134
from the examiner's final rejection of claims 1 through 3 and
5 through 13 which are all of the claims pending in the above-

¹ Application for patent filed June 3, 1996.

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identified application.

Claim 1 is representative of the subject matter on appeal and reads as follows:

1. A process for cooling, demonomerizing and dedusting gas containing thermoplastic polymer dust, monomers and water from a thermoplastic polymer drier, comprising the steps of:

(a) directing an exhaust stream from a thermoplastic polymer drier, which exhaust stream contains polymer dust, monomers and water into a column which houses a packing;

(b) within the column, washing the exhaust stream with a solvent selected from the group consisting of water, alcohols, amines, organic and inorganic acids, esters, ketones, ethers, paraffins and mixtures thereof, to achieve substantial cooling, dedusting and demonomerization of the exhaust stream in a single washing step; and

(c) exiting the substantially cooled, dedusted and demonomerized exhaust stream from the column.

The examiner relies on the following prior art references:

Bolle 1960	2,952,675	Sep. 13,
Braun et al. (Braun) 1962	3,047,565	Jul. 31,
Bergman 1967	3,353,334	Nov. 21,
Scoggin 1977	4,043,773	Aug. 23,
Shimoi et al. (Shimoi)	4,425,285	Jan 10,

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1984

The appealed claims stand rejected as follows:

1) Claims 1 through 3, 5, 9 through 11 and 13 under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Scoggin and either Braun or Bolle;

2) Claims 6 through 8 under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Scoggin, Shimoi and either Braun or Bolle; and

3) Claim 12 under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Scoggin, Bergman and either Braun or Bolle.

We reverse.

The claimed subject matter is directed to using a scrubber (packed column) to remove both polymer dust and monomers simultaneously from a particular gas from a thermoplastic polymer dryer. Although the concept of the claimed subject matter appears to be simple, the examiner, on this record, has not supplied sufficient evidence to establish obviousness regarding the claimed subject matter within the meaning of

35 U.S.C. § 103. Specifically, we find that the prior art references relied upon by the examiner would not have suggested the employment of a scrubber (packed column) to

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remove both polymer dust and monomers simultaneously from the claimed gas.

We find that Scoggin teaches removing particular polymer particles entrained in a gas via a scrubber (packed column). See column 2. The gas is fed to the bottom of a scrubber and is recovered from the top of the scrubber. *Id.* A scrubbing liquid, such as water, is fed counter-currently to the gas stream in the scrubber to wash the entrained particles from the gas and collect them at the surface of a liquid level within the scrubber. See

columns 2 and 3. Scoggin does not teach **the removal of monomers**, nor does it teach a gas containing **polymer dust, monomers and water** from a thermoplastic polymer dryer. See Scoggin in its entirety.

To remedy these deficiencies, the examiner relies on the disclosure of either Bolle or Braun. See Answer, page 4. However, none of these references teaches or would have suggested removing both dust and monomers via a scrubber. Both Braun and Bolle teach recovering a monomeric lactam

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content using a scrubber. See Braun and Bolle in their entirety. In the scrubber, the lactam content of an upwardly flowing gas is absorbed in a counter-currently flowing scrubbing solution and is collected at the bottom of the scrubber, or a tank in communication with the bottom of the scrubber, for recovery. See Bolle, column 2, line 45 to column 3, lines 11 and Braun, column 2, line 30 to column 3, line 16.

Thus, we are of the view that one of ordinary skill in the art looking to recover monomeric lactam, as taught by Braun and Bolle, would not employ the same scrubber to remove polymer dust as well since to do so would cause contamination of the desired

lactam with undesired polymer dust. It then follows that there is no suggestion or motivation whatsoever in Scoggin, Braun and Bolle to arrive at the claimed subject matter within the meaning of 35 U.S.C. § 103.

The remaining prior art references of record are relied upon by the examiner for different purposes. See Answer, page

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5. They do not remedy the deficiencies indicated above.

In view of the foregoing, we reverse the examiner's decision rejecting all of the appealed claims under 35 U.S.C. § 103.

REVERSED

CHUNG K. PAK)	
Administrative Patent Judge)	
)	
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)	
PETER F. KRATZ)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
ROMULO H. DELMENDO)	
Administrative Patent Judge)	

CKP:vsh

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