

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DIRK NEMEGEER and YVES VANCRAEYNEST

Appeal No. 96-0002
Application No. 07/860,523¹

ON BRIEF

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

JOHN D. SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal pursuant to 35 U.S.C. § 134 from the final rejection of claims 2, 3, and 21-24, all the claims remaining in this application. Representative claim 21 is reproduced below:

¹ Application for patent filed April 1, 1992. According to the appellants, the application is a continuation of Application No. 07/523,524, filed May 15, 1990.

Appeal No. 96-0002
Application No. 07/860,523

21. A process for preparing a castable hot mixture of bituminous concrete, comprising the steps of:

introducing into a mixture of hot bituminous concrete a multiplicity of steel wire pieces adapted for strengthening said mixture of hot bituminous concrete after its solidification;
and

mixing said steel wire pieces in said mixture of hot bituminous concrete until said steel wire pieces are equally distributed in said mixture of hot bituminous concrete, wherein

said steel wire pieces are introduced in the form of bundles of such steel wire pieces that are held together into said bundles by a binding substance which is adapted to disintegrate by water when mixed into a wet cementitious concrete and which disintegrates by melting when mixed in a hot bituminous concrete mixture, and wherein said steel bundles disintegrate during mixing of said mixture of hot bituminous concrete.

The references of record relied upon by the examiner are:

Gallmann	4,382,988	May
10, 1983		
Rettenmaier	5,028,266	July 2,
1991		

The appealed claims stand rejected under 35 U.S.C. § 103 as unpatentable over Gallmann in view of Rettenmaier.

Additionally, claim 23 stands rejected under 35 U.S.C. § 112, second paragraph. We can not sustain either rejection.

The subject matter on appeal is directed a process of preparing a heated castable hot mixture of bituminous concrete

Appeal No. 96-0002
Application No. 07/860,523

by introducing into a bituminous mixture a plurality of steel wire pieces adapted to reinforce the concrete. Significantly, the steel wire pieces are introduced in the form of bundles held together by a binding substance which disintegrates by melting when mixed in the hot bituminous concrete mixture. The binding substance must also be adapted to disintegrate by water when mixed into a wet cementitious concrete. Because of these dual binder capabilities, it is not necessary to maintain separate inventories of wire pieces at construction sites.

After careful consideration of the opposing arguments presented on appeal, we find ourselves in agreement with appellants that the prior art applied by the examiner fails to establish a prima facie case of obviousness for the claimed subject matter. We reverse the stated obviousness rejection for essentially those reasons set forth in appellants' briefs.

The examiner's rejection is predicated on his finding that "Rettenmaier teaches a method of incorporating fibers of any type into bituminous compositions (emphasis added)" by incorporating the fibers into a pellet (granulate) using a binder which disintegrates by melting when mixed with hot

Appeal No. 96-0002
Application No. 07/860,523

fluid bitumen, or a binder which loses its binding effect because it dissolves in a solvent present in the bitumen to maintain its fluidity. See the answer at the bottom of page 3 and the top of page 4. Thus, in view of Rettenmaier, according to the examiner, it would have been obvious to introduce the steel fibers of Gallmann in the form of pellets having a meltable binder "to obtain uniform mixing". See the answer at page 4.

While Gallmann incorporates steel fibers into a bituminous composition to render a bituminous surface "substantially tougher and/or more resistant to fracture" (column 1, lines 49-51), Rettenmaier incorporates "fibrous filler material" to bitumen to influence the flow properties of the bitumen, i.e., to provide a thixotropic effect in the bitumen. See column 1, lines 15-25 of Rettenmaier. Although Rettenmaier "theoretically" contemplates the use of any fibrous filler "suitable as thixotropic means" (column 4, lines 6-16), no objective evidence is of record which teaches that the significantly larger² steel fibers of Gallmann are

² See Gallmann at column 3, lines 41-51 and compare Rettenmaier at column 3, lines 44-55.

Appeal No. 96-0002
Application No. 07/860,523

"thixotropic means" in the sense of Rettenmaier's defined "fibrous fillers". In short, we cannot subscribe to the examiner's position that Rettenmaier suggests the use of "fibers of any type" inclusive of steel reinforcing fibers as required by Gallmann.

We also agree with appellants that it is speculative to contend that Rettenmaier suggests the use of a binding substance having the dual disintegration properties required by the present claims. In this regard, Rettenmaier teaches that the binding agent is preferably bitumen itself, a water insoluble material. See column 4, lines 2-5 of Rettenmaier.

In light of the record before us, we are constrained to reverse the stated rejection of the appealed claims for obviousness. We also reverse the separate rejection of appealed claim 23 under 35 U.S.C. § 112, second paragraph. While the claim language "stiff" may be broad in scope, we agree with appellants that the claim in question sets out and circumscribes a particular area with a reasonable degree of particularity.

Appeal No. 96-0002
Application No. 07/860,523

The decision of the examiner is reversed.

REVERSED

JOHN D. SMITH)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
CHUNG K. PAK)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
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PETER F. KRATZ)	
Administrative Patent Judge)	

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