

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte W. WAYNE FREED

Appeal No. 1997-2071
Application No. 08/336,529¹

ON BRIEF

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

WALTZ, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1 through 16, 18 through 29, 43 and 44, which are the only claims remaining in this application.

¹ Application for patent filed November 9, 1994. According to appellant, the application is a continuation of Application No. 08/112,431, filed August 26, 1993, now abandoned.

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According to appellant, the invention is directed to a method for inhibiting organisms throughout a concrete product, and the resultant product, by introducing an antimicrobial agent into a plurality of fibers before the fibers are blended with the concrete to form a reinforced concrete product (Brief, page 2). Claims 1 and 18 are illustrative of the subject matter on appeal and are reproduced below:

1. A reinforced concrete product comprising:

concrete; and

a plurality of fibers, said fibers individually including an effective amount of at least one antimicrobial agent and uniformly dispersing said antimicrobial agent throughout the concrete product to inhibit organisms therein.

18. A method for inhibiting organisms throughout a concrete product comprising the steps of:

introducing at least one antimicrobial agent to a plurality of fibers; and

subsequently distributing said fibers throughout the concrete product during formation of the concrete product, thereby uniformly dispersing said antimicrobial agent throughout said the concrete product.

The examiner has relied upon the following references as evidence of obviousness:

Zonsveld et al. (Zonsveld)	3,591,395	July 6, 1971
Goldfein	3,645,961	Feb. 29, 1972

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Morrison (Morrison '556)	3,959,556	May 25, 1976
Morrison (Morrison '853)	4,343,853	Aug. 10, 1982

This merits panel of the Board cites and discusses the following two references of record:

Smith et al. (Smith) 1990	4,961,790	Oct. 9,
Valle et al. (Valle) 1993	5,203,629	Apr. 20,

All of the appealed claims stand rejected under 35 U.S.C. § 103 as unpatentable over Zonsveld in view of Morrison '556 (Answer, page 3) or Goldfein in view of Morrison '853 (Answer, page 4). We reverse both of the examiner's rejections and *remand* this application to the examiner for reasons which follow.

OPINION

A. *The Rejections under 35 U.S.C. § 103*

The examiner finds that Zonsveld discloses products with improved strength made of concrete with polymeric fibers used for reinforcement (Answer, page 4). Similarly, the examiner applies Goldfein for the disclosure of a concrete product with a plurality of fibers uniformly distributed throughout the

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mixture (Answer, page 5). Appellant does not contest these findings and admits that "[i]ncorporating fibers into concrete has long been known in the art." (Brief, page 5). However, appellant argues that his invention uses fibers as a carrier for the antimicrobial agent so that this agent can be effectively and efficiently dispersed throughout the concrete (*Id.*).

The examiner applies Morrison '556 to show "antimicrobial fibers particularly polypropylene and polyethylene" (Answer, page 4). From the reference evidence of Zonsveld and Morrison '556, the examiner concludes

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the anti microbial fibers of Morrison [sic, '556] in Zonsveld because they would provide reinforcement and would be equivalent to the fibers of Zonsveld but they would be inherently antimicrobial and thus provide fungicidal action within the concrete product and would be expected to function as the claimed product. (Answer, page 4).

The examiner similarly applies Morrison '853 to show antimicrobial fibers with the ability of the antimicrobial agent to migrate to the surface of the fiber in the presence of moisture (Answer, page 5). From this reference evidence of Goldfein and Morrison '853, the examiner concludes

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the fibers, antimicrobial fibers, of Morrison '853 in Goldfein and produce the claimed reinforced concrete product because each reference suggests the same kind of fibers with about the same length which are known to reinforce concrete compositions but those fibers of Morrison '853 are antimicrobial and would be expected to function as fungicides in the claimed composition of applicant. (Answer, page 5).

We agree with appellant's argument that the examiner has failed to present any motivation, teaching or suggestion to combine the references as proposed (Brief, page 5). *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999); *In re Rouffet*, 149 F.3d 1350, 1356, 47 USPQ2d 1453, 1456 (Fed. Cir. 1998). Whether the evidence of a teaching or suggestion to combine comes from the references themselves, the knowledge of one of ordinary skill in the art, or from the nature of the problem to be solved, the showing of evidence must be clear and particular. *Dembiczak*, 175 F.3d at 999, 50 USPQ2d at 1617. Morrison '556 discloses the use of antimicrobial synthetic fibers with natural fibers in producing garments where the antimicrobial agent will transfer from the synthetic to the natural fiber (column 2, lines 14-34). Morrison '853 is a variation of Morrison '556 (see

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column 1, lines 39-67) and achieves the same antimicrobial effect in garments by constructing a two-face fabric using synthetic yarn which has been treated with an antimicrobial agent as one face (column 1, line 67-column 2, line 11). We determine that the examiner has failed to present any reasoning or evidence of any suggestion, teaching or motivation in the references to support the proposed combination, i.e., why would one of ordinary skill in the art have used the antimicrobial fibers of the garments of Morrison '556 or '853 in the concrete compositions of Zonsveld or Goldfein, respectively. The examiner has only pointed to generalities such as the fiber material, the fiber length, and the ability of the antimicrobial agent to migrate to the surface of the fiber in the presence of moisture (Answer, pages 4-5) but has failed to present any particular reasons or evidence to support the proposed combination of references.

For the foregoing reasons, we determine that the examiner has failed to establish a *prima facie* case of obviousness in view of the reference evidence presented. Accordingly, the rejections of the claims on appeal under 35 U.S.C. § 103 are reversed.

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B. Remand

This application is being remanded to the examiner for appropriate action. The examiner should determine the scope of the claimed subject matter, especially claims 1, 43 and 44, directed to the reinforced concrete product, and compare the claimed subject matter with the disclosure and teachings of Smith and Valle, previously made of record. The examiner should also note the product-by-process form of claims 43 and 44 and the lesser burden of proof needed to establish a *prima facie* case of obviousness. See *In re Fitzgerald*, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980); *In re Fessman*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974).

Smith discloses that compositions of fiber reinforcement and hydraulic cement are well known (column 1, lines 21-26; see also Brief, page 5). Smith further teaches the addition of admixtures to these well known compositions, with an admixture used to modify the properties of the concrete in such a way to make it more suitable for a particular purpose (column 1, lines 26-28). Smith teaches that fungicidal, germicidal and insecticidal admixtures can be used in

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reinforced concrete compositions (column 6, lines 16-21). Smith further teaches that the ingredients of the admixture are suspended or dissolved in the concrete mixture by sufficient agitation or stirring (column 7, lines 56-64).

Valle similarly discloses adding admixtures to concrete compositions (column 1, lines 21-26), including fungicidal, germicidal and insecticidal admixtures (column 5, line 67-column 6, line 4). Valle further teaches that the admixture is uniformly distributed in the concrete mixture (column 3, lines 4-10).

Smith and Valle do not disclose or teach the method of producing the concrete product as claimed by appellant (e.g., see claim 18). However, with regard to claims 1, 43, and 44 on appeal, appellant is claiming a product. The examiner should compare the scope of the independent product claims, and claims dependent thereon, with the product disclosed by the prior art Smith and Valle references. If the prior art discloses a product that appears to be either identical with or only slightly different from the products claimed, a rejection is proper. *Fitzgerald*, 619 F.2d at 70, 205 USPQ at 596; see also *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655,

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1657 (Fed. Cir. 1990); *In re Best*, 562 F.2d 1252, 1255, 195
USPQ 430, 433 (CCPA 1977).

Accordingly, this application is remanded to the examiner
for review and consideration of the foregoing matters.

C. Summary

The rejection of the appealed claims under § 103 as
unpatentable over Zonsveld in view of Morrison '556 is
reversed. The rejection of the appealed claims under § 103 as
unpatentable over Goldfein in view of Morrison '853 is
reversed.

The decision of the examiner is reversed. This
application is remanded to the examiner for appropriate action
as noted above.

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This application, by virtue of its "special" status requires an immediate action. Manual of Patent Examining Procedure

§ 708.01 (7th ed., July 1998). It is important that the Board be informed promptly of any action affecting the appeal in this case.

REVERSED/REMANDED

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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)	
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THOMAS A. WALTZ)	
Administrative Patent Judge)	

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DECISION: REVERSED/REMAND
Send Reference(s): Yes No
or Translation (s)
Panel Change: Yes No
Index Sheet-2901 Rejection(s):

Prepared: January 19, 2001

Draft Final

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OB/HD GAU

PALM / ACTS 2 / BOOK
DISK (FOIA) / REPORT