

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 31

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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***Ex parte*** JOHN A. HOFFMANN III

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Appeal No. 1999-0256  
Application No. 08/828,616

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HEARD: March 8, 2000

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Before ABRAMS, STAAB, and GONZALES, ***Administrative Patent Judges***.

ABRAMS, ***Administrative Patent Judge***.

**DECISION ON APPEAL**

This is an appeal from the decision of the examiner finally rejecting claims 1, 4-13 and 16, which at that point constituted all of the claims remaining of record in the application. Subsequently, in the Answer, the examiner indicated that claims

9-13 were allowable, leaving claims 1, 4-8 and 16 before us on appeal.

The appellant's invention as recited in the claims on appeal is directed to a self molding supportive insole for a shoe. The subject matter is illustrated by reference to claim 1, which reads as follows:

1. A self molding supportive insole for a shoe comprising a flexible pouch containing a curable material, means for rendering said material thixotropic whereby when thixotropic said material is moldable, retains its shape after molding and before substantial curing, and is capable of curing to retain its shape for supporting the arch of a foot, and means for curing said moldable material, wherein said pouch is shaped and sized to fit beneath a user's foot in a shoe.

**THE REFERENCES**

The references relied upon by the examiner to support the final rejection are:

Bradley <i>et al.</i> (Bradley)	4,236,268	Dec. 2,
1980		
Lyden	5,101,580	Apr. 7.
1992		

**THE REJECTION**

Claims 1, 4-8 and 16 stand rejected under 35 U.S.C. § 103 as being unpatentable over Lyden in view of Bradley.

Rather than attempt to reiterate the examiner's full commentary with regard to the above-noted rejections and the conflicting viewpoints advanced by the examiner and the appellant regarding the rejections, we make reference to the Examiner's Answer (Paper No. 26) and the Appellant's Brief (Paper No. 25).

#### OPINION

The appellant's invention is directed to a moldable insert for a shoe that is customized to the user's foot. The insert comprises a flexible pouch containing a curable material and means for rendering the curable material thixotropic. The user can install the insert in a shoe, place the sole of the foot upon it, which renders the insert moldable by virtue of its thixotropic property, and then immediately remove the foot, whereupon the thixotropic material holds this form until the material is fully cured. The advantages are two-fold: First, a material with a long curing time can be used so that the user need not hurry to complete the impression portion of the procedure, as is the case when materials with a short cure time are used. Second, the foot need not remain in the shoe for the

entire time that this long curing process takes, but can be removed as soon as the user is satisfied that a correct impression has been made.

It is the examiner's position that the subject matter recited in the claims would have been obvious in view of the combined teachings of Lyden and Bradley. We do not agree. Our reasons for arriving at this conclusion follow.

The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. See, for example, *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In establishing a *prima facie* case of obviousness, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See,

for example, **Uniroyal, Inc. v. Rudkin-Wiley Corp.**, 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir.), *cert. denied*, 488 U.S. 825 (1988).

Lyden discloses a personalized insert for a shoe which comprises a resilient material and a reagent for causing it to cure. Like the appellant's invention, the insert is installed in a shoe and an impression is taken of the user's foot prior to the time at which the material in the insert becomes cured. Lyden recognizes the problem of properly holding the impression of the user's foot until curing of the material is complete, and solves it by utilizing a material that has a short cure time, for example, 5-15 minutes, teaching that the user's foot must remain "relatively motionless" until the material has set or cured (column 14, lines 5-31). The Lyden insole material is not disclosed as having thixotropic properties.

The Bradley patent is directed to a strip which will form a rigid shoe shank when applied to the bottom of an insole and cured. The strip includes a carrier sleeve that contains a plurality of fiberglass strands in a thermosetting plastic matrix. It is initially flexible and is put in place over the

insole to conform thereto. A thermosetting process is then activated, whereupon the strip hardens and adheres to the insole. In passing, Bradley teaches that thixotropic agents can be added to the thermosetting resin "where necessary to preserve viscosity" (column 6, lines 25-27), which is not further explained. It is the examiner's view that, based upon this statement and the fact that Lyden discloses that low viscosity is preferred (column 5, lines 64 and 65), and that

it may be desirable to use so-called "retarding" or "accelerating" co-catalysts or agents with the primary catalyst for forming the elastomer or resilient material (column 7, lines 4-7),

it would have been obvious to provide the Lyden material with a thixotropic agent to keep it at a low viscosity (Answer, page 4).

From our perspective, however, there exists no teaching, suggestion or incentive which would have led one of ordinary skill in the art to do so. Lyden has solved the problem of maintaining the impression intact until the material is cured, and the solution is to use quick-curing material and keep the user's foot in place until curing is complete. While Lyden prefers low viscosity, there is no explicit teaching in the

reference concerning how to achieve low viscosity, much less that such be accomplished by the addition of means for rendering the insole material thixotropic. Bradley states that the thixotropic agent be added "where necessary to preserve viscosity," and this need has not been established in Lyden, nor is it apparent. Moreover, the above-quoted statement in Lyden concerning additives is in regard to the regulation of the setting time of the insole material, and not the viscosity, so it provides no basis for incorporating the thixotropic agent discussed in Bradley. Finally, it is speculative to assume that the addition of a thixotropic agent to the insole material of Lyden would not have an adverse effect upon the method of operation, particularly in view of the relatively short cure time, which is a key element thereof. This uncertainty would operate as a disincentive to the artisan to do so, in our view.

The mere fact that the prior art could be modified does not make such a modification obvious absent suggestion of the desirability of doing so. See ***In re Gordon***, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). In our opinion, the only suggestion for adding means for rendering the Lyden insole material thixotropic is found in the luxury of the hindsight

accorded one who first viewed the appellant's disclosure.  
This, of course, is not a proper basis for establishing  
obviousness. See *In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d  
1780, 1784 (Fed. Cir. 1992).

SUMMARY

The rejection is not sustained.

The decision of the examiner is reversed.

REVERSED

NEAL E. ABRAMS	)	
Administrative Patent Judge	)	
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	)	
	)	
	)	BOARD OF PATENT
LAWRENCE J. STAAB	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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JOHN F. GONZALES	)	
Administrative Patent Judge	)	

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