

The opinion in support of the decision being entered today was **not** written for publication and 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 USHA VARSHNEY

Appeal No. 1999-2077
Application No. 08/589,251

ON BRIEF

Before COHEN, McQUADE and BAHR, Administrative Patent Judges.
BAHR, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1, 2, 10 and 11. Claims 3-9 and 12-24, the only other claims pending in this application, stand objected to as being dependent upon a rejected claim.

BACKGROUND

The appellant's invention relates to "reduced volume, light weight, low profile, planar magnetic modules for

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied Lemelson reference, and to the respective positions articulated by the appellant and the examiner. For the reasons which follow, we cannot sustain either of the examiner's rejections.

Each of claims 1 and 10 expressly calls for a magnetic core material deposited into a cavity¹ in a non-magnetic substrate. Lemelson discloses an apparatus for fabricating products such as electronic circuits or devices requiring the selective and controlled deposition of predetermined amounts of doping materials, conducting and semi-conducting materials as well as insulating or isolating materials in a manner to form a desired composite electrical device or circuit (col. 1, lines 58-65). An example of a product fabricated with the disclosed apparatus is a work member comprising a base 82 having an upper stratum 84 of material such as semi-conducting material, metal or insulating material deposited thereon and a

¹ Consistent with appellant's underlying disclosure, we understand a "cavity" as used in the claims to be a hollowed out recess in the substrate.

domain 86 of material other than that forming stratum 84 deposited in an opening or cavity provided in stratum 84. The domain material may be comprised of "any suitable metal, semi-conducting materials or insulating material having characteristics which are different than those of the material defining layer 84 and may be utilized, for example, to form part of an active element of a semiconductor device, an insulating or isolating element or domain adjacent to or surrounding an active element or a conducting element disposed in cooperative relationship to other materials (not shown) similarly deposited on or within the stratum 84" (col. 7, lines 42-52).

Recognizing that Lemelson does not expressly disclose a magnetic material for the domain 86, the examiner points out that an artisan would have been aware that many metals are magnetic and concludes that suitable metals for the domain material 86 "would be iron or steel or nickel, which are magnetic materials" (answer, page 4). In this case, the examiner has not presented any factual basis to support the conclusion that one skilled in the art at the time of appellant's invention would have understood from Lemelson's

teachings that iron, steel, nickel or any other magnetic metal would have been a suitable metal for the domain 86. In this regard, we note that the examiner has adduced no evidence to contradict appellant's characterization of the state of the art at the time of appellant's invention wherein "[t]raditionally, magnetic components, such as inductors and transformers, have been built as discrete devices for incorporation onto printed [circuit] boards" (specification, page 1, lines 28-30).

While we are satisfied that a person skilled in the art at the time of appellant's invention would have been aware that some metals are non-magnetic and other metals are magnetic, we find nothing in the teachings of Lemelson to support a conclusion that such a person would have at once envisaged magnetic materials as suitable metals² for the uses contemplated by Lemelson and the examiner has not provided any explanation or evidence to support such a conclusion. The evidence adduced by the examiner is thus insufficient to

² Compare In re Petering, 301 F.2d 676, 682, 133 USPQ 275, 280 (CCPA 1962) (in addition to disclosing a generic chemical formula, the prior art reference disclosed preferred substituents from which the court determined that one skilled in the art would have at once envisaged each member of the claimed class of compounds).

establish that the subject matter of claims 1 and 10 is anticipated by Lemelson.

We turn now to the obviousness rejection of claims 2 and 11 as being unpatentable over Lemelson. Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases, the nature of the problem to be solved. In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. Broad conclusory statements standing alone are not "evidence." See In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316-17 (Fed. Cir. 2000).

Especially when considered against the background of appellant's invention as described in the specification (page

1, lines 28-30), the broad teaching by Lemelson of "any suitable metal" is insufficient in this instance to teach or suggest a magnetic material. Therefore, the evidence relied upon by the examiner in rejecting claims 2 and 11 is insufficient to establish that the subject matter of these claims would have been obvious within the meaning of 35 U.S.C. § 103(a).

CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 2, 10 and 11 is reversed.

REVERSED

IRWIN CHARLES COHEN)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOHN P. McQUADE)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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JENNIFER D. BAHR)	
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