

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

MAILED

JUN 26 1996

Ex parte YOSHIHIRO KUBOTA
and MAKOTO KAWAI

PAT.&T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Appeal No. 95-0644
Application 07/857,848¹

ON BRIEF

Before KIMLIN, GARRIS and TURNER, *Administrative Patent Judges*.
GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 1 and 2. The only other claims remaining in the

¹ Application for patent filed March 26, 1992.

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application, which are claims 3 through 5, stand withdrawn from further consideration by the examiner.

The subject matter on appeal relates to an electrostatic chuck which comprises two dielectric layers made of porous electrically insulating ceramic material having an internal electrode layer integrally interposed therebetween, wherein the pores of the ceramic material are filled with an oxide of an inorganic element formed *in situ*. This appealed subject matter is adequately illustrated by independent claim 1 which reads as follows:

1. An electrostatic chuck which comprises: two dielectric layers each made from a porous electrically insulating ceramic material; and an internal electrode layer integrally interposed between the dielectric layers, the pores in the ceramic material being filled with an oxide of an inorganic element formed *in situ*.

The references relied upon by the examiner as evidence of obviousness are:

Henney et al. (Henney)	4,143,182	Mar. 6, 1979
Tojo	4,480,284	Oct. 30, 1984
Bobbio	5,001,594	Mar. 19, 1991

Per the Supplemental Examiner's Answer mailed October 18, 1995 (Paper No. 24), the examiner has withdrawn the new grounds of rejection advanced in the principal answer, thereby leaving for our consideration the sole rejection set forth below.

Claims 1 and 2 stand finally rejected under 35 U.S.C. § 103

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as being unpatentable over Bobbio in view of Tojo and Henney.² It is the examiner's basic position that it would have been obvious for one with ordinary skill in the art to impregnate the pores in the dielectric ceramic of Bobbio's electrostatic chuck with an oxide of an inorganic element in view of Tojo's teaching of impregnating the dielectric ceramic of an electrostatic chuck with a plastic material in conjunction with Henney's teaching of filling the pores of a silicon nitride body to be used as, for example, a recuperator with a refractory filler comprising cordierite or a borosilicate glass.

We will not sustain this rejection. Our reasons follow.

We agree with the appellants that the here-applied references would not have suggested filling the pores in the dielectric ceramic of an electrostatic chuck with an oxide of an inorganic element. While Tojo teaches impregnating the pores in

² On page 6 of the principal answer, the examiner has discussed certain references which are not included in the statement of the above-noted rejection but which are apparently relied upon to support the rejection. Where a reference is relied on to support a rejection, whether or not in a minor capacity, that reference should be positively included in the statement of the rejection. See *In re Hoch*, 428 F.2d 1341, 1342, f.n. 3, 166 USPQ 406, 407, f.n. 3; also see M.P.E.P Section 706.02(j) (Rev. 1, Sept. 1995). Because the aforementioned references have not been included by the examiner in the statement of the rejection on appeal, we shall not consider these references in assessing the propriety of the rejection.

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the dielectric ceramic of an electrostatic chuck in order to achieve a number of desirable benefits (e.g., see lines 18 through 41 in column 3), the reference teaching is clearly limited to plastic materials only as an impregnator. The reference contains no suggestion at all of using the here-claimed oxide of an inorganic element as such an impregnator. It is true that Henney teaches using an inorganic element oxide to fill the pores of a silicon nitride body to reduce the gas-permeability thereof. However, the Henney disclosure contains no teaching or suggestion that the so-treated silicon nitride body may be useful as the dielectric ceramic of an electrostatic chuck.

For obviousness under Section 103, at least a reasonable expectation of success is required. *In re O'Farrell*, 853 F.2d 894, 903-904, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988). The applied prior art under review provides no such expectation. That is, because Tojo discloses only plastic impregnators for the pores in the dielectric ceramic of an electrostatic chuck and because Henney contains no teaching or suggestion of using his inorganic oxide material for filling the pores of such a dielectric ceramic specifically, there would have been no reasonable expectation that Henney's materials would be successful when used for impregnating the dielectric pores of an electrostatic chuck to thereby achieve the several previously mentioned benefits desired by Tojo.

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To imbue one of ordinary skill in the art with knowledge of the invention under consideration, when no prior art reference or references of record convey or suggest that knowledge as here, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor has taught is used against its teacher. *W. L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-313 (Fed. Cir. 1983). Under the circumstances, we are convinced that the examiner, in formulating the rejection before us, has unwittingly applied impermissible hindsight derived solely from the here-claimed invention rather than the applied prior art. It follows that we cannot sustain the examiner's Section 103 rejection of claims 1 and 2 as being unpatentable over Bobbio in view of Tojo and Henney.

The decision of the examiner is reversed.

REVERSED

<i>Edward C. Kimlin</i>)	
EDWARD C. KIMLIN)	
Administrative Patent Judge)	
)	
<i>Bradley R. Garris</i>)	BOARD OF PATENT
BRADLEY R. GARRIS)	
Administrative Patent Judge)	APPEALS AND
)	
<i>Vincent D. Turner</i>)	INTERFERENCES
VINCENT D. TURNER)	
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Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte YOSHIHIRO KUBOTA and MAKOTO KAWAI

Appeal No. 95-0644
Application 07/857,848¹

ON BRIEF

Before KIMLIN, GARRIS and TURNER, Administrative Patent Judges.
GARRIS, Administrative Patent Judge.

REMAND TO EXAMINER

This application once again is being remanded to the examiner for appropriate action.

In the Answer mailed November 18, 1993, the examiner applied new grounds of rejection under 35 U.S.C § 103 against the appealed claims (i.e., claims 1 and 2) wherein claim 1 was rejected "as being unpatentable over Bobbio or Abe in view of Tojo et al., or Japanese Patent Kokai 58-137536, further in view of Henney et al.,

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Liporace et al., Collins, Tsukada et al., and Baise et al." (Answer, page 7) and claim 2 was rejected "as being unpatentable over the combination of references as applied against Claim 1 in view of Lesher et al." (Answer, page 16). In response to these new grounds of rejection, the appellants ultimately filed on May 23, 1994 an Amendment of the claims and a Reply Brief. The examiner denied entry of the claim Amendment (see the Advisory Action as well as the Supplemental Examiner's Answer both mailed on May 18, 1995) but indicated that the Reply Brief "has been entered and considered but no further response by the examiner is necessary" (see the communication mailed October 17, 1994 as Paper No. 19).

As explicitly stated in the Manual of Patent Examining Procedure (MPEP) § 1208.04 (Sixth Edition):

If the reply brief was filed in response to a new ground of rejection in the examiner's answer, the examiner must issue a supplemental answer indicating whether the new ground of rejection has been overcome, and, if it has not, explaining why not.

On the present record, the examiner has failed to issue a Supplemental Answer indicating whether the aforementioned new grounds of rejection have been overcome, and, if they have not, explaining why not. We are constrained, therefore, to remand this application to the examiner so that he can take whatever action may be necessary to rectify his failure.

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In addition to the foregoing, we note that the new grounds of rejection set forth in the Answer lack clarity with respect to the prior art applied by the examiner. This lack of clarity involves the Japanese Kokai prior art, the Henney prior art, the Haluska prior art and Woodhead prior art.

Concerning the Japanese Kokai prior art, it is unclear whether the examiner has relied upon the Japanese Kokai reference itself as indicated in the statement of rejection on page 7 of the Answer or the appellants' discussion of this Kokai as indicated on page 10 of the Answer. If the examiner has relied upon the Kokai itself as prior art, the examiner should cite and supply a copy of this reference. On the other hand, if the examiner has relied upon the appellants' discussion of the Kokai as prior art, this reliance should be explicitly communicated. The new grounds of rejection lack clarity with respect to the Henney reference because, although listed in the statement of rejection of claim 1, the reference apparently is not discussed at all in the body of the claim 1 rejection. Similarly, the rejections are confusing with respect to Haluska because this reference is discussed in the body of the rejections of claims 1 and 2 but is not listed in the statement of rejection for either of these claims. Finally, the status of the Woodhead reference is unclear because, although not listed or discussed in the new ground of rejection against either claim 1 or

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claim 2, the reference is characterized on page 2 of the Answer as applied in a new ground of rejection.

Under the circumstances recounted above, the examiner's response to this remand must include a clarification of the application file record with respect to the aforementioned prior art.

Further, the present file record reflects that the examiner has applied a large number of references and has formulated a large number of alternative rejections against the appealed claims. According to MPEP § 706.02 (Revision 6, October 1987), "[p]rior art rejections should ordinarily be confined strictly to the best available art" and "[m]erely cumulative rejections... should be avoided". The record before us suggests that the examiner has not followed these guidelines. Therefore, in the course of responding to this remand, the examiner should carefully consider whether any of the rejections he has formulated and/or the prior art references applied therein are merely cumulative and should be formally withdrawn.

As a final matter of concern, it is possible that the examiner, in responding to this remand (e.g., in clarifying the prior art applied in his rejections), may introduce a new ground of rejection against the appealed claims. If so, we emphasize that the examiner should carefully adhere to the appropriate guidelines including those set forth in MPEP § 1208.01 (Sixth Edition).

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This application, by virtue of its "special" status, requires an immediate action; see MPEP § 708.01(d) (Revision 14, November 1992). It is important that the Board be promptly informed of any action affecting the appeal in this case.

REMAND TO THE EXAMINER

Edward C. Kimlin
EDWARD C. KIMLIN)
Administrative Patent Judge)

Bradley R. Garris
BRADLEY R. GARRIS)
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