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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte REINER VOGT

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Appeal No. 2000-1085
Application 08/980,349[1]

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ON BRIEF

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Before PAK, WALTZ, and LIEBERMAN, Administrative Patent Judges.

PAK, Administrative Patent Judge.

DECISION ON APPEAL

been indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

According to appellant (Brief, page 2), "[s]eparate consideration is respectfully requested for claims 5-7. Separate arguments in support of patentability for these claims are advanced below." The appellant, however, has not supplied any separate substantive argument as to the patentability of the subject matter recited in claims 5 through 7. Therefore, for purposes of this appeal, we select claim 1 from all of the claims on appeal and determine the propriety of the examiner's rejections based on this claim alone consistent with 37 CFR § 1.192(c)(7)(1999)[2]. Claim 1 is reproduced below:

1. A conductive pigment, comprising a substrate coated with a conductive layer containing tin oxide doped with phosphorus.

As evidence of obviousness, the examiner relies on the following prior art:

Stahlecker et al.(Stahlecker)	5,320,781	Jun. 14, 1994
Bruckner et al.(Bruckner)	5,472,640	Dec. 5, 1995
Okuda et al.(Okuda)	0 582 371 A1	Sep. 2, 1994

Claims 1 through 7, 10 through 12, 14, 15 and 18 stand rejected under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Bruckner and Okuda. Claims 1 through 12 and 14 through 18 stand rejected under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Stahlecker and Okuda.

Upon careful consideration of the opposing arguments and evidence presented on appeal, we concur with the examiner that the claimed subject matter as a whole would have been obvious to one of ordinary skill in the art. Accordingly, we will sustain the examiner's § 103 rejections for essentially those reasons set forth in the Answer and below.

The appellant does not dispute the examiner's finding that either Bruckner or Stahlecker discloses a conductive pigment comprising a lamellar or platelet-like substrate coated with a conductive layer. Compare the Answer, pages 4 and 6, with the Brief and the Reply Brief in their entirety. The lamellar or platelet-like substrate material described in Bruckner or Stahlecker includes mica, kaolin, talc, glass and mica coated

The dispositive question is whether it would have been obvious to one of ordinary skill in the art to employ tin oxide doped with phosphorus as the conductive layer material of the conductive pigment described in either Bruckner or Stahlecker. On this record, we answer this question in the affirmative.

Although both Bruckner and Stahlecker teach that any conventional conductive metal oxide or mixtures of metal oxides can be used as the conductive layer material of their conductive pigment, they indicate a preference for tin dioxide doped with antimony as the conductive layer material. See Bruckner, column 2, line 65 to column 3, line 10 and Stahlecker, column 2, line 64 to column 3, line 25. However, Okuda teaches (page 2, lines 6-11) that:

> As an electroconductive powder, carbon black has been known, but its use is highly restricted because of its black colour, poor dispersibility in vehicles, of containing carcinogenic substances, and like limitations. Recently, tin oxide powder doped with antimony, or titanium dioxide powder coated with a layer of tin oxide doped with antimony have been developed and used.

powder doped with phosphorus as a substitute for tin oxide powder doped with antimony. See page 2, line 25 to page 3, line 51. The specifically prepared tin oxide powder doped with phosphorus is said to have "a powder electrical resistance of less than 500 Ωcm, preferably less than 200 Ωcm, more preferably , less than 100 Ωcm." See page 3, lines 1-3. This powder is "a very fine, transparent powder having superior electroconductive properties as well as being safe to handle." See the abstract.

Given these and other advantages taught in Okuda, we concur with the examiner that it would have been *prima facie* obvious to employ the specifically prepared tin oxide doped with phosphorus taught in Okuda as the conductive layer material of the conductive pigment of the type described in Bruckner or Stahlecker. From the combined teachings of the applied prior art references, one of ordinary skill in the art would have had a reasonable expectation of successfully obtaining the advantages indicated above by employing the specifically prepared tin oxide doped with phosphorus as the conductive material for the

oxide doped with phosphorus taught in Okuda since such powder is not expected to be dispersible in forming a conductive layer. See the Brief, pages 4-5. This argument, however, is not persuasive as it is not supported by any objective evidence. It is well settled that mere arguments in the Brief or conclusory statements in the specification cannot take the place of objective evidence. *See In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984). In any event, by indicating superiority of its specifically prepared tin oxide doped with phosphorus over both tin oxide doped with antimony and carbon, Okuda impliedly teaches that its conductive material does not suffer from the drawbacks of both carbon and tin oxide doped with antimony (drawbacks include dispersibility problems).

The appellant argues (Brief, page 5) that:

> the pigment of the invention possesses unexpected advantages over Bruckner's pigment (mica flakes crated with antimony doped tin oxide) with respect to temperature and weathering stability. Bruckner's pigment is generally calcined at 800°C. (*See, e.g.*, col. 4, lines 9-10), and the highest temperature of the acceptable range of heating temperatures in only 900°C (*See, e.g.*, col. 3, lines 28-30); on information and

However, it is well settled that mere conclusory statements of superiority in the specification unsupported by objective evidence are of little probative value. *See In re Greenfield*, 571 F.2d 1185, 1188, 197 USPQ 227, 229 (CCPA 1978). Moreover, these alleged advantages are reasonably expected from the sintering temperature and improved shelf-life stability of the tin oxide doped with phosphorus described at page 2, lines 32-35 and 49-55, of Okuda. *See, e.g., In re Skoner*, 517 F.2d 947, 950, 186 USPQ 80, 82 (CCPA 1975)("[e]xpected beneficial results are evidence of obviousness of a claimed invention just as unexpected beneficial results are evidence of unobviousness").

The appellant also relies on the Vogt declaration and the specification examples to show that the claimed subject matter unexpectedly imparts lower resistance. The burden is on the appellant to show that the claimed invention imparts unexpected results. *In re Klosak*, 455 F.2d 1077, 1080, 173 USPQ 14, 16 (CCPA 1972). However, on this record, we determine that the

177 USPQ 139, 143 (CCPA 1973); *Klosak*, 455 F.2d at 1080, 173 USPQ at 16. As indicated *supra*, however, Okuda teaches that the improvement alleged by the appellant is expected from using its specially prepared tin oxide doped with phosphorus. The appellant has not demonstrated that the tin oxide doped with phosphorus taught in Okuda would not have the same property, when it is used in the conductive pigment of the type described in Bruckner or Stahlecker.

Second, the evidence relied upon is not reasonably commensurate in scope with the degree of protection sought by the claims on appeal. *In re Clemens*, 622 F.2d 1029, 1035, 206 USPQ 289, 296 (CCPA 1980). While the showing is limited to applying a specifically prepared tin oxide doped with phosphorus on a specific substrate, the claims are not so limited. As indicated at page 2 of Okuda, not all tin oxides doped with phosphorus, for example, would behave in the same manner.

Finally, to the extent that the showing in the Vogt declaration and the specification evidences that the appellant

obvious, known advantages of employing Okuda's tin oxide doped with phosphorus outweigh the newly discovered advantages. *See In re Nolan*, 553 F.2d 1261, 1267, 193 USPQ 641, 645 (CCPA 1977).

Thus, having considered all of the evidence of record, we determine that the evidence of obviousness, on balance, outweighs the evidence of nonobviousness. Hence, we determine that the claimed subject matter as a whole would have been obvious to one of ordinary skill in the art in view of the applied prior art references. Accordingly, we affirm the examiner's decision rejecting all of the appealed claims under 35 U.S.C. § 103.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

CHUNG K. PAK)
Administrative Patent Judge)
)

PAUL LIEBERMAN)
Administrative Patent Judge)

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