

The opinion in support of the decision being entered today  
is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* JOSE WALTER

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Appeal 2007-2082  
Application 10/795,457  
Technology Center 1700

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Decided: June 29, 2007

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Before EDWARD C. KIMLIN, BRADLEY R. GARRIS, and  
THOMAS A. WALTZ, *Administrative Patent Judges*.

WALTZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the Primary Examiner's final rejection of claims 1, 3, 5, 6, and 13 (Br. 1). Claims 7, 9-12, and 15 are the only other claims pending in this application, but Appellant has not appealed from the Examiner's rejection of these claims (Br. 1-2). We have jurisdiction pursuant to 35 U.S.C. § 6(b).

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According to Appellant, the invention is directed to a method of producing a customized molding material by adding to dry gypsum-containing molding material an aqueous solution of polytetrafluoroethylene (PTFE) (Br. 2). Independent claim 1 is representative of the invention and is reproduced below:

1. A method of producing, without a polymerization step such as heating, a customized hardening molding materials comprising the steps of:

(a) preparing an aqueous moistening solution containing from 0.001 to 35% polytetrafluoroethylene, and

(b) then moistening dried gypsum containing molding material with the solution prepared in step a.

The Examiner has relied upon the following prior art references as evidence of unpatentability:

Morrell	US 3,620,778	Nov. 16, 1971
Wada	US 5,154,771	Oct. 13, 1992
Horiuchi	US 5,718,749	Feb. 17, 1998
Hoshino	JP 53-149224	Dec. 26, 1978
(as translated)		

#### ISSUES ON APPEAL

Claims 1, 3, 5, 6, and 13 stand rejected under 35 U.S.C. § 112, second paragraph, as failing to set forth the subject matter which Appellant regards as his invention (Answer 4).

Claims 1, 3, 5, 6, and 13 stand rejected under 35 U.S.C. § 112, first paragraph, “as the specification as originally filed does not provide support for the invention as now claimed” (Answer 5).<sup>1</sup>

Claims 1, 3, 5, 6, and 13 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Wada, Morrell, or Hoshino (Answer 7).<sup>2</sup>

Appellant contends that the disputed phrase “without a polymerization step such as heating” has support on page 5 of the Specification (Br. 3 and 5).<sup>3</sup>

Appellant contends that Wada discloses formation of a hydraulic powder which is then moistened, Morrell suggest that the polymeric organic substance is added before/after the hydration of the “stone,” and Hoshino does not teach preparation of a moistening solution containing PTFE to be added to a gypsum-containing material (Br. 5-6).

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<sup>1</sup> The Examiner also bases this rejection on 35 U.S.C. § 132, but this section relates to the introduction of new matter into the *Specification*, not the claims.

<sup>2</sup> We note that each of the Examiner’s rejections also included claims 7, 9-12, and 15 (Answer 4, 5, and 7). However, as discussed above, claims 7, 9-12, and 15 are not before this merits panel for review in this appeal (Br. 1-2). Accordingly, we also do not review the rejection of claims 7, 9-12, and 15 under § 102(b)/§ 103(a) over Horiuchi (Answer 6). We note that the Examiner inadvertently included claim 13, which depends on method claim 1, in the rejection over Horiuchi (*id.*). From the Examiner’s statement on page 7 of the Answer, it is clear that Horiuchi was not meant to be applied against any method claims. Therefore, on this record, we do not consider claim 13 as rejected over Horiuchi.

<sup>3</sup> Appellant also requests that the Amendment after the final rejection be entered if all art rejections are “deemed inappropriate” (Br. 3). However, the Examiner’s refusal to enter the proposed Amendment is not reviewable in this proceeding. See *In re Mindick*, 371 F.2d 892, 894, 152 USPQ 566, 568 (CCPA 1967); see also *In re Hengehold*, 440 F.2d 1395, 1403, 169 USPQ 473, 479 (CCPA 1971).

The Examiner contends that the term “such as” renders the scope of the claims indefinite since it is not clear what other polymerization means or methods are within the claimed scope (Answer 4).

The Examiner contends that the phrase “without a polymerization step such as heating” is new matter because Appellant’s Specification only requires this omission “*when used to make models*” (Answer 5).

The Examiner contends that Wada, Morrell, and Hoshino all disclose or suggest the claimed components, with Wada and Hoshino adding the ingredients in a different order than required by claim 1 on appeal, while Morrell teaches the same order of adding the ingredients (Answer 10-12). The Examiner further contends that mixing the same ingredients in any order would have been an obvious choice to one of ordinary skill in this art, absent any showing of criticality (Answer 12).

Accordingly, the issues presented from the record in this appeal are as follows: (1) could one of ordinary skill in this art ascertain the scope of the phrase “without a polymerization step such as heating?”; (2) does Appellant provide support in the originally filed Specification for this phrase?; and (3) does Wada, Morrell, or Hoshino disclose the same method of adding the claimed ingredients, or methods varying only in the order of addition of ingredients, to make a molding material?

We determine that the Examiner has not established that the claimed language is indefinite in scope, or that the disputed phrase fails to find support in the originally filed Specification, essentially for the reasons stated in the Brief and those reasons set forth below. Therefore we REVERSE the rejections based on § 112. We determine that the Examiner has established a *prima facie* case of obviousness in view of the reference evidence, which

prima facie case has not been adequately rebutted by Appellant's arguments. Therefore we AFFIRM the rejections under § 103(a) over Wada, Morrell, or Hoshino, essentially for the reasons stated in the Answer, as well as those reasons set forth below. Accordingly, the Examiner's decision to reject the claims on appeal is AFFIRMED.

A. The Rejection under § 112, ¶2

The legal standard for definiteness under paragraph two of 35 U.S.C. § 112 is whether a claim reasonably apprises those of skill in the art of its scope. *See Amgen, Inc. v. Chugai Pharmaceutical Co., Ltd.*, 927 F.2d 1200, 1217, 18 USPQ2d 1016, 1030 (Fed. Cir. 1991). The definiteness of the language employed must be analyzed, not in a vacuum, but always in light of the teachings of the prior art and the application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art. *See In re Angstadt*, 537 F.2d 498, 501, 190 USPQ 214, 217 (CCPA 1976).

Applying the preceding legal principles to the specific facts of this appeal, we determine that one possessing the ordinary level of skill in this art would be able to ascertain if any additional step in the claimed method as recited in claim 1 on appeal would produce polymerization, and thus be excluded from the scope of the claim. We determine that the phrase "such as heating" is merely exemplary, and one of ordinary skill in this art would have been apprised that the scope of the claim excludes any step which produces polymerization. Therefore, we find that the claim language reasonably apprises those of skill in the art of its scope.

For the foregoing reasons, we reverse the rejection of the claims on appeal under the second paragraph of § 112.

B. The Rejection under § 112, ¶1

It is well established that the claimed subject matter need not be described *ipsis verbis* in order to satisfy the disclosure requirement of § 112. *See In re Lukach*, 442 F.2d 967, 969, 169 USPQ 795, 796 (CCPA 1971). The disclosure need only reasonably convey to persons skilled in the art that the inventor had possession of the subject matter in question. *See In re Edwards*, 568 F.2d 1349, 1351-52, 196 USPQ 465, 467 (CCPA 1978). In rejecting a claim under the first paragraph of § 112, it is incumbent upon the Examiner to establish that the originally filed disclosure would not have reasonably conveyed to one having ordinary skill in the art that Appellant had possession of the now claimed subject matter. *See Wang Laboratories, Inc. v. Toshiba Corp.*, 993 F.2d 858, 865, 26 USPQ2d 1767, 1774 (Fed. Cir. 1993); *see also In re Alton*, 76 F.3d 1168, 1175, 37 USPQ2d 1578, 1584 (Fed. Cir. 1996).

Applying the preceding legal principles to the specific facts of this appeal, we determine that the Examiner has not met the initial burden of establishing that the originally filed disclosure would not have reasonably conveyed to one of ordinary skill in the art that Appellant had possession of the claimed “without a polymerization step such as heating.” As correctly argued by Appellant, this phrase appears in the originally filed Specification at page 6 (Br. 3). The Examiner contends that this phrase must be modified by the disclosed “when used to make models” and this modification does not appear in claim 1 on appeal (Answer 5-6). However, we determine that this phrase would have reasonably conveyed to persons skilled in this art that Appellant had possession of the now claimed subject matter directed to a method of producing molding materials in general (*see* claim 1 on appeal).

For the foregoing reasons and those stated in the Brief, we cannot sustain the rejection of the claims on appeal under the first paragraph of § 112.

C. The Rejections under § 103(a)

We determine the following factual findings from the record in this appeal:

- (1) Wada discloses a hydraulic inorganic composition that is plastic and moldable and used to produce a hardened molded article, where the composition includes gypsum, 3-10% of PTFE fibers, and water; Wada exemplifies a method of producing the hardened molding material where water is added to the gypsum-PTFE powder mixture (Abstract; col. 1, ll. 5-13; col. 2, ll. 32-40 and 49-50; col. 5, ll. 5-12 and 48-65; and Example 1, col. 6, ll. 54-60);
- (2) Morrell discloses an aqueous suspension of polymeric organic substances having elastomeric and plastic properties which are added to conventional dental casting compositions to produce dental impressions, casts, and models, where the composition includes alginates, gypsum (calcium sulfate), and certain fluorides such as PTFE (in an amount of 1-10%) (Abstract; col. 1, ll. 22-35 and 58-72; col. 6, ll. 4-6 and 49; col. 10, ll. 45-48; col. 12, l. 30 and 36-40; col. 17, ll. 4-7; and claim 2, col. 20, l. 25);
- (3) Morrell discloses various methods of mixing the ingredients, i.e., all the solid materials are mixed and then water is added to form an impression or adding an aqueous suspension of PTFE to a mixture of “stone” (gypsum) (col. 2, ll. 28-31; col. 4, ll. 19-22;

col. 4, l. 65-col. 5, l. 11; col. 12, ll. 36-44; Table II, Group (D), 1a; and col. 15, ll. 66-75); and

- (4) Hoshino discloses a mortar material including gypsum kneaded with 0.1-20 parts by weight of a fluororesin fibrillating polymer such as PTFE, with water kneaded into the mortar material to produce a hardened material (claims 1-3, p. 2; p. 3, third full paragraph; p. 6, l. 18; p. 7, last full paragraph; and Example 2 on p. 10).

Under 35 U.S.C. § 103, the factual inquiry into obviousness requires a determination of (1) the scope and content of the prior art; (2) the differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) secondary considerations. *See Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

“[A]nalysis [of whether the subject matter of a claim is obvious] need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1740-41, 82 USPQ2d 1385, 1396 (2007), quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336-37 (Fed. Cir. 2006). The analysis supporting obviousness, however, should be made explicit and should “identify a reason that would have prompted a person of ordinary skill in the art to combine the elements” in the manner claimed. *KSR*, 127 S. Ct. at 1731, 82 USPQ2d at 1389.

Applying the preceding legal principles to the factual findings in the record of this appeal, we determine that the Examiner has established a prima facie case of obviousness, which prima facie case has not been

adequately rebutted by Appellant's arguments. As shown by factual findings (1) and (4) listed above, we determine that Wada and Hoshino disclose a method of producing, without a polymerization step, a hardened molding material comprising adding water to gypsum and PTFE (in an amount overlapping the claimed range). Therefore, we determine that the only difference between the methods of Wada and Hoshino and the claimed method is the order of adding the ingredients. We agree with the Examiner that changes in the sequence of adding ingredients would have been obvious to one of ordinary skill in the art, absent some evidence of unobvious or unexpected results (Answer 9 and 12). We determine that the final mixture of Wada and Hoshino is the same as the claims on appeal, and it would have been obvious to add the ingredients in any order to achieve this final mixture. We note that Appellant has not responded to or disputed the Examiner's statement that any sequence of adding ingredients would have been within the ordinary skill in the art.

As shown by factual findings (2) and (3) listed above, we determine that Morrell teaches embodiments where an aqueous suspension of PTFE is prepared, and this suspension is then added to the gypsum material (either dry or with water). Therefore we determine that Morrell clearly teaches and suggests the claimed method and order of adding the ingredients, including specific examples directed to 4 wt. % aqueous suspensions of PTFE "to be added [to the gypsum material or "stone"] as aqueous suspension" (*see* Table II, Group (D), 1a).

For the foregoing reasons and those stated in the Answer, we affirm the rejections of claims 1, 3, 5, 6, and 13 under 35 U.S.C. § 103(a) over Wada, Morrell, or Hoshino.

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D. Summary

The rejections of claims 1, 3, 5, 6, and 13 under 35 U.S.C. § 112, first and second paragraphs, are reversed.

The rejections of claims 1, 3, 5, 6, and 13 under 35 U.S.C. § 103(a) over Wada, Morrell, or Hoshino are affirmed.

The decision of the Examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) .

AFFIRMED

tf/ls

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