

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

KAZUHIKO AIBARA,
APPELLANT

Appeal 2008-2939
Application 10/238,309¹
Technology Center 1700

Decided: May 29, 2008

Before ADRIENE LEPIANE HANLON, JEFFREY T. SMITH, and
MARK NAGUMO, *Administrative Patent Judges*.

NAGUMO, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ Application filed 10 September 2002, titled *Road Marking Aqueous Coating Composition*. The real party in interest is listed as Rohm and Haas Co. (Appeal Brief filed 9 February 2007 ("Br."), at 3.)

A. Introduction

Kazuhiko Aibara (“Aibara”) appeals from the final rejection of claims 1-5 under 35 U.S.C. § 103(a). Claim 6 has been withdrawn from consideration and is not before us. We have jurisdiction under 35 U.S.C. § 6. We AFFIRM.

The claimed subject matter relates to a composition said to be useful for marking roads, particularly because it is said to dry quickly and to be resistant to yellowing. The critical ingredient is said to be zinc phosphate or calcium zinc phosphate.

Claim 1 is representative and reads:

An aqueous coating composition comprising
a binder polymer prepared by aqueous emulsion polymerization,
a polyfunctional amine polymerized from one or more monomers, and
at least one pigment selected from the group consisting of zinc phosphate and calcium zinc phosphate.

(Br., Claims App. at 11.)

The Examiner has maintained² the rejection of claims 1-5 under 35 U.S.C. § 103(a) in view of the combined teachings of Komoto³ and Yano⁴.

² Examiner’s Answer mailed 15 June 2007 (“Ans.”) at 3. A rejection for new matter has been withdrawn. (Ans. 2.)

³ Keiji Komoto *et al.*, *Coating Composition, Process for Preparing coating Composition and Process for Preparing Dispersing Component of Inorganic Oxide Sol*, U.S. Patent 6,022,919 (8 February 2000).

According to Aibara the claims stand or fall with claim 1. (Br. 6.) We shall therefore restrict our attention to claim 1. 37 C.F.R. § 41.37(c)(1)(vii).

B. Discussion

The Examiner finds that Komoto describes aqueous coating compositions that meet all the limitations of claim 1 but for the disclosure of zinc phosphate or calcium zinc phosphate as a component of the composition. (Ans. 4-6.) The Examiner finds further that Yano describes polymeric coating compositions comprising pigments that comprise a body pigment, a color pigment, and a corrosion inhibitive pigment. (Ans. 6, ¶¶ 11-12.) Examples of the corrosion inhibitive pigment include zinc phosphate and calcium zinc phosphate. (Ans. 7, ¶ 12; see Yano 4:36-50, esp. l. 46.) The Examiner reasons that the substitution of the conventional pigments taught by Yano for the conventional pigments taught by Komoto would have been obvious to the ordinary worker in the art. (Ans. 7, ¶ 13.)

Aibara objects only that there is no suggestion in either reference to combine particular teachings of one with the other. (Br. 6.) Aibara does not explain further why the two references are incompatible.

We are not persuaded. The substitution of recognized equivalents is a classic basis for a conclusion of *prima facie* obviousness. *See, e.g., Hotchkiss v. Greenwood*, 52 U.S. 248 (1850).

⁴ Mitsuyoshi Yano *et al.*, *Coating Composition for Preparing Back Coating Film of Mirror*, U.S. Patent 5,519,542 (21 May 1996).

Aibara, however, argues that Example 2 in the Specification provides evidence of unexpected results that support a conclusion of nonobviousness. (Br. 6-7.) Example 2 reports that replacing 0.5 pigment volume concentration (“pvc”: Spec 18:24-25) of calcium carbonate out of 53.7 pvc calcium carbonate with 0.5 pvc of zinc phosphate or calcium zinc phosphate (titanium dioxide is also present as a pigment) in a coating composition results in a two-fold improvement in drying time (8 minutes versus 16 minutes) and an improvement in yellowing properties (delta E of 0.7 versus a delta E of 2.6. (Spec. 23-24.) A delta E result below 1 is said to be acceptable (Spec. 22:21.). Aibara argues that neither Komoto nor Yano suggests that pigment selection may have an effect on the properties of yellowing or dry time. (Br. 7.) Aibara concludes that the *prima facie* case of obviousness has been rebutted. (*Id.*)

The Examiner maintains that the showings do not demonstrate the presence of the required polyfunctional amine in Example 2. (Ans. 8.) In particular, the Examiner criticizes the absence of identification of the type of polyamine used in Example 2. (*Id.*)

On review of the record, including the Office Action mailed 16 November 2004 (rejection over Schlarb) and the response filed 5 January 2005 (introducing the polyfunctional amine limitation to the claims and pointing out that Schlarb does not teach that component), we understand the Examiner to be arguing that there is no credible evidence that “a polyfunctional amine polymerized from one or more monomers,” now required by claim 1, is present in the coating composition described in Example 2. (Br. 8.) We note that, after the final rejection, Aibara submitted a declaration under 37 C.F.R. § 1.132 by Dr. Donald C. Schall on 31 March

2006; but the Examiner refused to enter that document into the record because it was not timely filed. (Br. 8.) We decline Aibara's invitation to consider evidence not entered into the record by the Examiner. (*Id.*) Efficient prosecution of applications for patent requires the timely submission of evidence, and we will not countenance an end-run around matters in the Examiner's jurisdiction.⁵ We conclude that Aibara has not come forward with credible evidence that the composition of Example 2, on which Aibara relies as evidence of unexpected results, is within the scope of the claimed subject matter on appeal. As patentability may not be based on elements not present in the claims, *In re Self*, 671 F.2d 1344, 1348 (CCPA 1982), we conclude that Aibara has failed to prove unexpected results based on Example 2.

Moreover, the Examiner found that Aibara has failed to present evidence of unexpected results commensurate with the scope of the subject matter from which they seek to exclude the public. (Ans. 9.) In particular, the Examiner found that the single composition based on the single binder

⁵ We note that although the Examiner summarized the declaration (Ans. 8), the Examiner did not comment on the merits of the declaration as evidence of unexpected results. The Examiner's silence in this regard is proper, as the evidence is not of record. To the extent that it might be argued that the Examiner has in fact considered the Schall declaration and that our refusal to consider it elevates form over substance, we note that Dr. Schall testifies that he "can verify that they [binder aqueous emulsions Fastrack 3247 and Fastrack 53] contain a polyfunctional amine." (Schall Declaration 2, ¶ 4.) As already noted, however, the claims require the presence of "a polyfunctional amine polymerized from one or more monomers." Thus, Dr. Schall's declaration fails to establish that the polyamine present in the aqueous emulsion binder resin is within the scope of the claimed subject matter.

resin used in Example 2 was not representative of the full scope of the claimed coating compositions.

Initially, we reject Aibara's suggestion that the examiner has the burden of showing that the evidence offered in support of unexpected results "would not hold for other compositions within the pending claims." (Br. 7.) It has long been the law that, "[a]fter a prima facie case of obviousness has been established, the burden of going forward shifts to the applicant." *In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984). It is then "incumbent upon appellants to submit clear and convincing evidence to support their allegation of unexpected property." *In re Heyna*, 360 F.2d 222, 228 (CCPA 1966) (citation omitted). That showing of unexpected results must be commensurate in scope with the claimed range. *In re Peterson*, 315 F.3d 1325, 1330 (Fed. Cir. 2003) (citations omitted).

In this case, the scope of the claimed subject matter is vast, encompassing compositions comprising an aqueous emulsion binder polymer, a polyfunctional amine polymerized from one or more monomers, and zinc phosphate or calcium zinc phosphate pigment. There are minimal limitations as to the identity of the polymeric components, and minimal limitations as to the relative amounts of any of the components. The showing of unexpected results is limited to Example 2, which exemplifies a single, unidentified acrylic emulsion polymer, an unidentified polyamine, the function of which does not appear to be stated clearly, and small amounts of the zinc pigments. The disclosed allegedly unexpected properties, namely, rapid drying and less yellowing, would seem likely to be sensitive to the identities and relative quantities of all the components of the coating composition. For example, the porosity of the coating would likely

affect the rate of drying and the degree of penetration by iron compounds, as likely would the polarity of the composition. Yet Aibara has not explained why the single Example 2 would be fairly representative of the entire class of compositions covered by the claims, assuming *arguendo*, that the polyamine of Example 2 is within the scope of the claims.

On the present record, we conclude that Aibara has not come forward with evidence of unexpected results commensurate in scope with the claimed subject matter. Accordingly, we find that Aibara has not shown reversible error in the Examiner's conclusion that the claimed subject matter is obvious in view of the combined teachings of Komoto and Yano.

C. Summary

In view of the record and the foregoing considerations, it is:

ORDERED that the rejection of claims 1-5 under 35 U.S.C. § 103(a) in view of the combined teachings of Komoto and Yano is AFFIRMED; and

FURTHER ORDERED that no time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

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