

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 29

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILLIAM D. EMMONS, MARTIN VOGEL,
EDWARD C. KOSTANSEK, JACK C. THIBEAULT and PETER R. SPERRY

Appeal No. 94-0822
Application No. 07/801,992¹

ON BRIEF

Before KIMLIN, JOHN D. SMITH and OWENS, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1-10, 12-25 and 27-61, all the claims remaining in the present application. Claim 1 is illustrative:

¹ Application for patent filed December 3, 1991.

Appeal No. 94-0822
Application No. 07/801,992

1. A process for preparing an aqueous dispersion of composite particles, the composite particles each comprising a plurality of polymeric latex particles adsorbed onto a titanium dioxide particle, the process comprising:

a) suspending polymeric latex particles in an aqueous medium, the polymeric latex particles having been polymerized in the absence of titanium dioxide particles;

b) suspending titanium dioxide particles in the aqueous medium, the sign of the surface charge of the polymeric latex particles being the same as the sign of the surface charge of the titanium dioxide particles, the surface potential of one of either of the polymeric latex particles or the titanium dioxide particles in the aqueous medium being greater in absolute value than the surface potential of the other of the polymeric latex particles and the titanium dioxide particles; and

c) mixing the aqueous medium containing the titanium dioxide particles and the polymeric latex particles in the absence of conditions providing gross heterocoagulation, the polymeric latex particles adsorbing onto the titanium dioxide particles in a controlled manner to provide the composite particles.

In the rejection of the appealed claims, the examiner relies upon the following references:

Pons et al. (Pons)	4,110,285	Aug. 29, 1978
Martin	4,771,086	Sep. 13, 1988
Visca et al. (Visca)	4,798,854	Jan. 17, 1989

Appellants' claimed invention is directed to a method for preparing an aqueous dispersion of composite particles. The composite particles comprise a plurality of polymeric latex particles adsorbed on a single titanium dioxide particle. The

Appeal No. 94-0822
Application No. 07/801,992

aqueous dispersion finds utility in compositions, such as paints.

Appealed claim 38 stands rejected under 35 U.S.C. § 112, fourth paragraph. Claims 29 and 30 stand rejected under 35 U.S.C. § 102(b) or, in the alternative, under 35 U.S.C. § 103 over Martin.² In addition, claims 1-10, 12-25 and 27-56 stand rejected under 35 U.S.C. § 102 or, in the alternative, under 35 U.S.C. § 103 over Pons.³ Also, claims 1-10, 12-25, 27-37 and 57-61 stand rejected under 35 U.S.C. § 102(b) or, in the alternative, under 35 U.S.C. § 103 over Visca.⁴

Upon careful consideration of the opposing arguments presented on appeal, we will not sustain the examiner's prior art rejections. However, we will sustain the examiner's rejection of claim 38 under § 112, fourth paragraph.

² The Examiner's Answer, at page 6, improperly states that claims 20-30 stand rejected under § 102/§ 103 over Martin. However, the Examiner's Supplemental Answer, at page 2, repeats the issue stated at page 2 of the Answer that claims 29 and 30 are rejected over Martin.

³ The Examiner's Answer, at page 7, improperly states the rejection over Pons as including claims 1-10, 12-25 and 26-27.

⁴ The Examiner's Answer, at page 8, continues the misstatement of the claims rejected.

Appeal No. 94-0822
Application No. 07/801,992

Regarding the examiner's rejection of claim 38 under 35 U.S.C. § 112, fourth paragraph, it is the examiner's position that claim 38 improperly depends upon more than one claim. Appellants, at page 5 of their Reply Brief, apparently acknowledge the propriety of the examiner's rejection and are prepared to amend claim 38 accordingly. Accordingly, we will sustain the examiner's rejection.

We now turn to the examiner's prior art rejections of the appealed claims. The examiner acknowledges that none of the applied references discloses the preparation of the presently claimed composite particles comprising a plurality of polymeric latex particles adsorbed onto a titanium dioxide particle. However, the basis of the examiner's rejection is that each of the references discloses the preparation of an aqueous dispersion of polymeric latex particles and pigment particles that inherently contain the structure of appellants' composite particles.

It is well settled that a determination of inherency cannot be established by probabilities or possibilities. In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981). In order to establish inherency, it is incumbent upon the

Appeal No. 94-0822
Application No. 07/801,992

examiner to establish the inevitability of the inherency which he propounds by advancing the appropriate objective evidence or persuasive scientific reasoning. In re Wilding, 535 F.2d 631, 635-36, 190 USPQ 59, 63-64 (CCPA 1976). When the prior art is silent regarding a property or characteristic of a claimed product, the examiner must demonstrate that the claimed product reasonably appears to be essentially the same as the product disclosed in the prior art. In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990); In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). In the present case, we are not satisfied that the examiner has demonstrated a sufficiently close correspondence between the processes of the prior art and appellants' process of preparing an aqueous dispersion such that it is reasonable to conclude that the dispersions of the prior art must, of necessity, or inherently, comprise composite particles of the claimed structure. Rather, we concur with appellants that the examiner's conclusion is based upon the type of speculation that cannot form the basis of a rejection under 35 U.S.C. §§

Appeal No. 94-0822
Application No. 07/801,992

102 or 103. In re Warner, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967).

In particular, Martin, rather than teach the preparation of composite particles comprising a plurality of polymeric latex particles adsorbed onto a titanium dioxide particle, expressly discloses the polymeric encapsulation of a sheath having a substantially uniform thickness onto pigment particles. The examiner's characterization of Martin's disclosure of a thin film coating as nothing more than "an ideal concept" (page 12 of Answer) and Martin's disclosure of an encapsulated filler as "a bit enthusiastic" (page 13 of Answer) is without factual support on this record. Also, the examiner's explanation at page 12 of the Answer how Martin's in situ polymerization does not fall outside the scope of the present claims, which require the polymerization of latex particles "in the absence of the titanium dioxide particles," is simply an unartful attempt to interpret Martin in a way not intended by the patentee, nor in a manner that would be interpreted by one of ordinary skill in the art.

As for Pons, not only does the reference fail to disclose composite particles, in general, let alone the specifically

Appeal No. 94-0822
Application No. 07/801,992

claimed structure of the composite particles, the reference fails to teach any of the process parameters disclosed by appellants which are necessary to obtain the claimed composite particles.

Visca, the remaining reference applied by the examiner, likewise fails to disclose a process that is essentially like the one claimed. Indeed, Visca discloses that preformed dispersions of inorganic filler and polymer must be separately prepared before mixing them together. Manifestly, this is unlike the claim requirement of suspending titanium dioxide particles in an aqueous suspension of polymeric latex particles. Also, although it may be possible to select from within the broad disclosure of Visca titanium dioxide particles and polymeric latex particles having a difference in zeta potential of at least about 30 mv, Visca provides no guidance to do so. A finding of inherency cannot be based upon an applicant's disclosure of specific process parameters that are only broadly encompassed by a prior art disclosure.

The examiner states the following at page 20 of the Answer: "[w]hile Visca only discloses a matrix wherein the particles of polymer and pigment are uniformly dispersed, it

Appeal No. 94-0822
Application No. 07/801,992

is at best speculative to assert that in fact the polymer coats pigment, rather than vice-versa." Manifestly, this statement by the examiner undermines his conclusion of inherency. As noted above, it is the examiner's burden to establish the inherency which he propounds.

We also do not understand the examiner's statement that "[t]he ZP of a component in a mixture is not claimed, and is not at issue in this case" (page 20 of Answer). We note that claim 4 specifically recites:

[T]he zeta potential of the polymeric latex particles in the aqueous medium being greater in absolute value than the zeta potential of the titanium dioxide particles in the aqueous medium, the absolute value of the difference in the zeta potential of the titanium dioxide particles and the zeta potential of the polymeric latex particles being at least about 30 mv. [Emphasis added]. While the claim does not define the specific zeta potentials of the titanium dioxide particles and the polymeric latex particles, the issue emphasized by appellants in their Brief is the difference in the absolute values of the two particles.

The examiner states the following at page 22 of the Answer:

The Examiner agrees that Visca does not disclose a process for adding inorganic pigment particles to a dispersion of a polymer. Accordingly, Visca does not render the claims of Group A obvious.

Appeal No. 94-0822
Application No. 07/801,992

However, appellants' Brief, at page 6, defines Group A as consisting of claims 1-10, 12-37 and 38-42, whereas the examiner's § 102/§ 103 rejection over Visca includes claims 1-10, 12-25 and 27-37 (see page 2 of Answer). Consequently, it would seem that the examiner has withdrawn the rejection of at least some of the appealed claims over Visca.

In conclusion, based on the foregoing, the examiner's rejection of claim 38 under 35 U.S.C. § 112, fourth paragraph, is affirmed. The examiner's rejections of the appealed claims under 35 U.S.C. §§ 102 and 103 are reversed. Accordingly, the examiner's decision rejecting the appealed claims is affirmed-in-part.

Appeal No. 94-0822
Application No. 07/801,992

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

AFFIRMED-IN-PART

EDWARD C. KIMLIN)	
Administrative Patent Judge)	
)	
)	
)	
)	
JOHN D. SMITH)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
TERRY J. OWENS)	
Administrative Patent Judge)	

clm

Appeal No. 94-0822
Application No. 07/801,992

Marc S. Adler
Rohm and Haas Co.
Independence Mall West
Philadelphia, PA 19105