

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 39

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HIROMI USUI, YUTAKA MASUDA
and NOBUYOSHI HANDA

Appeal No. 1996-3995
Application 08/283,721¹

HEARD: February 2, 2000

Before KIMLIN, WALTZ and KRATZ, **Administrative Patent Judges**.

WALTZ, **Administrative Patent Judge**.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1, 3, 4 and 7 through 9, which are the only claims remaining in this application.

According to appellants, the invention is directed to a method for manufacturing a fabric for ink jet printing which comprises applying an aqueous dispersion or emulsion having

¹ Application for patent filed August 1, 1994.

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specified amounts of a water-insoluble solvent dispersed or emulsified in an aqueous polymer solution containing specified amounts of water soluble polymer (Brief, page 2). Appellants state that the oil-in-water (O/W) type emulsion of appellants' invention is free from ink oozing when the treated fabric is used with ink jet printing (*Id.*). Claim 1 is illustrative of the subject matter on appeal and is reproduced below:

A method for manufacturing a fabric for ink jet printing comprising applying an aqueous dispersion or emulsion having a water-insoluble solvent dispersed or emulsified in an aqueous polymer solution containing water soluble polymer to the fabric and drying, wherein the content of said water-insoluble solvent is 20 - 70% by weight of said aqueous dispersion or emulsion and a water soluble polymer content in said aqueous dispersion or emulsion is 1/2.5 - 1/20 of the weight of the water-insoluble solvent.

The examiner has relied upon the following reference in support of the rejections:

Handa et al. (JP '677)² 2-99677 Apr. 11, 1990
(Published unexamined Japanese patent application)

Claims 1, 3, 4 and 7-9 stand rejected under 35 U.S.C.
§ 102(b) as anticipated by or, in the alternative, under

² We refer to and cite from an English translation of this document furnished by the PTO, previously made of record. Appellants' Supplemental Reply Brief dated April 17, 1996, Paper No. 35, with an English translation of JP '677 attached, has been refused entry by the examiner (see the Letter dated May 28, 1996, Paper No. 36).

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35 U.S.C. § 103 as unpatentable over JP '677 (Answer, page 2).
We reverse these rejections for reasons which follow.

OPINION

A. *The Rejection under 35 U.S.C. § 102(b)*

Under 35 U.S.C. § 102, every limitation of a claim must identically be described in a single prior art reference for it to anticipate the claim. *In re Bond*, 910 F.2d 831, 832, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990).

As stated by the examiner on page 3 of the Answer, JP '677 teaches a method of treating a cloth for ink jet printing by applying a *water-in-oil* (W/O) type emulsion with specified amounts of a water soluble polymer, a water-insoluble solvent, and water (see JP '677, paragraph bridging pages 9-10). Appellants argue that the claims on appeal require an O/W emulsion while JP '677 teaches a W/O emulsion (Brief, page 6). The examiner recognizes this distinction in language but asserts that the emulsion of JP '677 is identical to the claimed emulsion since they have identical compositions, citing Example 2(e) of JP '677 (Answer, page 3; Supplemental Answer, page 1).

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The method of claim 1 on appeal clearly requires that the "water-insoluble solvent" (e.g., an oil) is "dispersed or emulsified in an aqueous polymer solution" (thus producing an O/W type emulsion). JP '677 clearly states that their composition is formed as a W/O type emulsion (see pages 8-9). Accordingly, every claim limitation is not described by the reference and therefore the rejection of the claims on appeal under 35 U.S.C.

§ 102(b) cannot be sustained.

The examiner has not shown that Example 2(e) of JP '677 is identical in composition to that required in the claims on appeal. The examiner states that Example 2(e) contains 20.48% water "as in instant claim 3" but claim 3 recites a minimum water content of 30% by weight (Answer, page 3; see the specification, page 10, lines 2-5). Regardless, on this record the examiner has not established that identical compositions would necessarily form the same type of emulsions, independent of any method of preparation.

JP '677 does disclose an O/W type emulsion for comparative purposes but the amounts of water-insoluble solvent (turpentine) and water soluble polymer (Carbopol #934)

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are well outside of the amounts specified in claim 1 on appeal (see JP '677, pages 10-11).

For the foregoing reasons, the rejection of claims 1, 3, 4 and 7-9 under 35 U.S.C. § 102(b) is reversed.

B. The Rejection under 35 U.S.C. § 103

The examiner rejects the appealed claims under § 103 in view of the teachings of JP '677 since the "only difference being that it [JP '677] calls its treatment composition a water in oil emulsion whereas the instant claims recite that the water-insoluble solvent (oil) is dispersed or emulsified in the water." (Answer, page 4). The examiner concludes that this is not a "patentable distinction" because the components and concentrations of the treatment composition of JP '677 "anticipate or overlap" those of the treating composition as recited in the claims on appeal (*Id.*).

JP '677 teaches that the treatment composition should *preferably* be a water-in-oil type emulsion (page 8, penultimate line). The reference further teaches that the water-in-oil type emulsion "is better in smudge prevention when it is compared to the cloth using the commonly-used water-dissolved polymer or the oil-in-water type solution

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(O/W-type emulsion)." (page 9, first full paragraph). "All the disclosures in a reference must be evaluated, including nonpreferred embodiments. [Citation omitted]." *In re Mills*, 470 F.2d 649, 651, 176 USPQ 196, 198 (CCPA 1972). Nothing in the patent statute requires that the claimed subject matter be superior to the prior art to be patentable. *Ryco Inc. v. Ag-bag Corp.*, 857 F.2d 1418, 1424, 8 USPQ2d 1323, 1328 (Fed. Cir. 1988). However, to establish a *prima facie* case of obviousness, there must be some disclosure or teaching in the reference evidence, or knowledge of one of ordinary skill in the art, which would have suggested the claimed subject matter to one of ordinary skill in the art.

A specific nonpreferred O/W type emulsion treatment is disclosed on page 11 of JP '677. The amounts of each component are far outside the ranges required by the claimed subject matter.³ The examiner has failed to establish, by evidence or reasoning, why one of ordinary skill in the art would have treated a cloth fabric with the preferred composition of JP '677 with the expectation of producing a W/O

³ For example, the amount of water is greater than 96%, the amount of oil (turpentine) is 1.6%, and the amount of water-soluble polymer (Carbopol #934) is 0.6% (see pages 10-11 of JP '677).

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type emulsion, especially when the nonpreferred W/O type emulsion specifically set forth by JP '677 teaches amounts of each component far outside the amounts recited in the claims on appeal. Alternatively, the examiner has not pointed to any evidence or reasoning as to why one of ordinary skill in the art would have modified the nonpreferred O/W type emulsion embodiment specifically taught by JP '677.

For the foregoing reasons, we determine that the examiner has failed to establish a *prima facie* case of obviousness. Therefore we need not reach the issue of the sufficiency of appellants' showing of unexpected results (the Masuda Declarations under 37 CFR § 1.132 dated Mar. 24, 1994, and June 9, 1994). *In re Geiger*, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987). Accordingly, the examiner's rejection of the appealed claims under 35 U.S.C. § 103 over JP '677 is reversed.

C. Summary

The rejection of the claims on appeal under 35 U.S.C. § 102(b) over JP '677 is reversed. The rejection of the claims on appeal under 35 U.S.C. § 103 over JP '677 is reversed.

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The decision of the examiner is reversed.

REVERSED

EDWARD C. KIMLIN)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
THOMAS A. WALTZ)	
Administrative Patent Judge)	APPEALS AND
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