

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* HARUMI WATANABE, MINORU YAMADA,  
MITSUNORI HIRANO and HISASHI OKADA

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Appeal No. 1998-0434  
Application 08/620,745

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HEARD: February 22, 2001

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Before OWENS, KRATZ, and JEFFREY T. SMITH, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

*DECISION ON APPEAL*

This is an appeal from the examiner's final rejection of claims 1, 3-7 and 10. Claims 8, 9, 11 and 12, which are all of the other claims remaining in the application, stand withdrawn from consideration by the examiner as being directed

toward a nonelected invention.

*THE INVENTION*

The appellants claim a concentrated fixing solution which contains a thiosulfate, a water-soluble aluminum salt, and a compound selected from a Markush group of acids and their salts, and which does not substantially contain a boron compound.<sup>1</sup> The appellants also claim a method of processing a silver halide material using this fixing solution. Claim 1, directed toward the fixing solution, is illustrative:

1. A concentrated fixing solution which comprises at least a thiosulfate, a water-soluble aluminum salt, and a compound having an absorbance of from 0.25 to 1.15, and does not substantially contain a boron compound,

wherein the absorbance is measured by an absorptiometer of ultraviolet light/visible light in a solution having a pH of 4.85 and containing a buffer solution of 1.55 mol/liter of an acetic acid/sodium acetate,  $2.5 \times 10^{-4}$  mol/liter of  $\text{Al}^{3+}$ ,  $2.5 \times 10^{-5}$  mol/liter of the following compound A, and  $5 \times 10^{-3}$  mol/liter of a compound for evaluation:

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<sup>1</sup>The appellants state that "the phrase 'which does not substantially contain a boron compound' means that the concentration of the boron compound is 0.04 mol/liter in the fixing solution" (specification, page 5).

Appeal No. 1998-0434  
Application 08/620,745

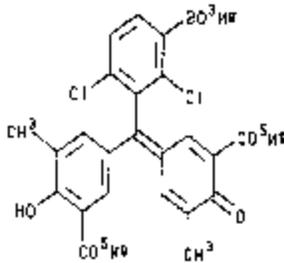
and wherein the compound having an absorbance of from 0.25 to 1.15 is selected from the group consisting of an iminodiacetic acid, and salts thereof; a gluconic acid, and salts thereof; a 5-sulfosalicylic acid, and salts thereof; and a glucoheptanic acid, and salts thereof.

*THE REFERENCES*

Yamada et al. (Yamada)	5,198,327	Mar. 30,
1993		
Nishigaki et al. (Nishigaki)	5,272,044	Dec. 21,
1993		

*THE REJECTIONS*

Claims 1, 3-7 and  
rejected under 35  
§ 102(a, b or e) as  
anticipated by Yamada  
Nishigaki or, in the  
ve, under 35 U.S.C. § 103 as being obvious over Yamada,  
Nishigaki or their combination.



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Appeal No. 1998-0434  
Application 08/620,745

*OPINION*

We reverse the rejections under 35 U.S.C. § 102 and affirm the rejections under 35 U.S.C. § 103.

The appellants state that the claims stand or fall together (brief, page 3). We therefore limit our discussion to one claim, i.e., claim 1. See *In re Ochiai*, 71 F.3d 1565, 1566 n.2, 37 USPQ2d 1127, 1129 n.2 (Fed. Cir. 1995); 37 CFR § 1.192(c)(7)(1995).

*Rejections under 35 U.S.C. § 102*

In order for a claimed invention to be anticipated under 35 U.S.C. § 102, all of the elements of the claim must be found in one reference. See *Scripps Clinic & Research Found. v. Genentech Inc.*, 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991).

Yamada discloses a fixing solution which contains a thiosulfate, can contain a water-soluble aluminum salt as a hardener, can contain gluconic acid, tartaric acid, citric

Appeal No. 1998-0434  
Application 08/620,745

acid or derivatives thereof, alone or in combination, and optionally can contain a pH buffer, one example of which is boric acid (col. 9, line 57 - col. 10, line 12). Also, fixing solutions in concentrated form are disclosed (col. 15, line 60; col. 16, lines 29-30). Nishigaki contains a similar disclosure (col. 15, lines 40-62; col. 31, line 62; col. 32, lines 29-30).

To arrive at the appellants' claimed invention, one must make a concentrated fixing solution, must choose to use a water-soluble aluminum salt hardener, must choose, from among gluconic acid, tartaric acid, citric acid or derivatives thereof, alone or in combination, gluconic acid or a mixture containing it, and must use either no buffer or no more than 0.04 mol/liter of boric acid as a buffer. A claim is not anticipated by a reference when such independent picking and choosing is required to arrive at the claimed invention. See *Arkley*, 455 F.2d at 587, 172 USPQ at 526. Accordingly, we reverse the rejections under 35 U.S.C. § 102.

*Rejections under 35 U.S.C. § 103*

Yamada teaches that his fixing solution contains a

Appeal No. 1998-0434  
Application 08/620,745

thiosulfate (col. 9, lines 57-58). The teaching that a water-soluble aluminum salt acts as a hardener (col. 9, lines 67-68) would have fairly suggested, to one of ordinary skill in the art, use of such a salt to obtain this benefit. As for the component containing tartaric, citric or gluconic acids or their derivatives, alone or in combination, the specific disclosure of only these three acids reasonably would have led one of ordinary skill in the art to use any of the three, such as gluconic acid, alone or in combination. The teaching that the pH buffer is optional (col. 10, lines 10-12) would have fairly suggested, to one of ordinary skill in the art, omitting this component along with its function. See *In re Wilson*, 377 F.2d 1014, 1017, 153 USPQ 740, 742 (CCPA 1967); *In re Larson*, 340 F.2d 965, 969, 144 USPQ 347, 350 (CCPA 1965); *In re Brown*, 228 F.2d 247, 249, 108 USPQ 232, 234 (CCPA 1955). The teaching that the fixing solution can be concentrated (col. 15, line 60; col. 16, lines 29-30) would have led one of ordinary skill in the art to make each of the fixing solutions within the scope of the disclosure in concentrated form for the conventional reasons for using a concentrated solution,

Appeal No. 1998-0434  
Application 08/620,745

e.g., economy of storage and suitability for making solutions of various concentrations.

For the above reasons, we hold that the appellants' claimed invention would have been *prima facie* obvious to one of ordinary skill in the art over Yamada. Because, as mentioned above, Nishigaki presents a disclosure which is similar to the relevant disclosure in Yamada, we also hold that appellants' claimed invention would have been *prima facie* obvious to one of ordinary skill in the art over Nishigaki.

The appellants argue that the references do not appreciate that gluconic acid contributes to the stability of a concentrated fixing solution (brief, page 4; reply brief, page 2). For a *prima facie* case of obviousness to be established, however, references need not recognize the problem solved by the appellants. See *In re Kemps*, 97 F.3d 1427, 1430, 40 USPQ2d 1309, 1311 (Fed. Cir. 1996); *In re Beattie*, 974 F.2d 1309, 1312, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992); *In re Dillon*, 919 F.2d 688, 693, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990) (*en banc*), *cert. denied*, 500 U.S. 904 (1991); *In re Lintner*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA

1972).

The appellants argue that any *prima facie* case of obviousness has been overcome by the evidence in the declaration of Watanabe, filed August 21, 1995 (paper no. 6). In this declaration Watanabe compares fixing solutions which each contain one of gluconic acid, tartaric acid and citric acid, and shows that no stains of a first fixing roller and light sensitive material were observed when glutaric acid was used, but that stains sometimes were observed when the acid used was tartaric or citric acid. For the following reasons, this evidence is not effective for overcoming the *prima facie* case of obviousness.

First, the appellants' showing of unexpected results does not provide a comparison of the claimed invention with the closest prior art. See *In re Baxter Travenol Labs.*, 952 F.2d 388, 392, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991); *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984). The references specifically disclose that the fixing solution can contain gluconic acid (Yamada, col. 10, lines 3-5; Nishigaki, col. 15, lines 55-57). Thus, the comparison with

the closest prior art would be against a fixing solution which contains gluconic acid but, as required by the appellants' claims, does not substantially contain a boron compound. We note that even if comparison to a fixing solution containing gluconic acid were considered to be a comparison of the appellants' claimed invention with itself, a mixture of gluconic acid with tartaric acid or citric acid, as disclosed by Yamada (col. 10, lines 3-5) and Nishigaki (col. 15, lines 55-57), would be closer to the appellants' claimed invention than the tartaric acid and citric acid each used alone in the declaration.

Second, the reliability of the test used has not been established. There is no indication that the test used to compare the acid components was a standard test or was recognized by those of ordinary skill in the art as being reliable.

Third, the significance of the test results is unclear. Watanabe states in Table A of the declaration that deposits were generated in some tests, but, except for tests E and G, there is no indication of the extent of these deposits, i.e.,

Appeal No. 1998-0434  
Application 08/620,745

whether they were significant or negligible. Even with respect to tests E and G, it is merely disclosed that the deposits were "marked" (page 4). There is no indication of the significance of such a stain.

For the above reasons we conclude, based upon the preponderance of the evidence, that the appellants' claimed invention would have been obvious to one of ordinary skill in the art within the meaning of 35 U.S.C. § 103.

*DECISION*

The rejections of claims 1, 3-7 and 10 under 35 U.S.C. § 102(a, b or e) as being anticipated by Yamada or Nishigaki are reversed. The rejections of claims 1, 3-7 and 10 under 35 U.S.C. § 103 as being obvious over Yamada, Nishigaki or their combination, are affirmed.

Appeal No. 1998-0434  
Application 08/620,745

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

*AFFIRMED*

TERRY J. OWENS	)
Administrative Patent Judge	)
	)
	)
	) BOARD OF PATENT
PETER F. KRATZ	)
Administrative Patent Judge	) APPEALS AND
	)
	) INTERFERENCES
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JEFFREY T. SMITH	)
Administrative Patent Judge	)

Appeal No. 1998-0434  
Application 08/620,745

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