

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SHIGERU MITSUHASHI, YOSHIMASA MATSUSHIMA, TAKASHI
IMAI, KIICHI MORI, MAMORU YAMADA, HIROSHI SUGIYAMA, MISAO
YAGI, HITOSHI KONDO and TOSHIMITSU HAGIWARA

Appeal No. 1996-0896
Application No. 08/091,406¹

HEARD: November 2, 1999

Before OWENS, WALTZ, and KRATZ, Administrative Patent Judges.

WALTZ, Administrative Patent Judge.

DECISION ON APPEAL

¹ Application for patent filed July 14, 1993. According to appellants, the application is a continuation of Application No. 07/779,528, filed October 18, 1991, now abandoned.

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

According to appellants, the invention is directed to optically active compounds for use in liquid crystal displays, where the compounds are phenyl pyrimidine type compounds having a 2- or 3-fluoro-substituted asymmetric carbon and, in addition, another asymmetric carbon atom in the molecular terminal side as specified by the formula (1)(Brief, page 2). Illustrative claim 1 is reproduced and attached as an Appendix to this decision.

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

Saito et al. (Saito)	5,120,468	June 9,
1992		
		(filed Aug. 6,
1990)		

Appellants have relied upon the following references in rebuttal of the examiner's rejections:

Goodby et al. (Goodby), "Helical Twist Sense and Spontaneous Polarization Direction in Ferroelectric Smectic Liquid Crystals," *J. Am. Chem. Soc.* **1986**, 108, 4729-4735;

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Walba et al. (Walba), "Design and Synthesis of a New Ferroelectric Liquid Crystal Family," *J. Am. Chem. Soc.* **1986**, *108*, 5210-5221; and

Patel et al. (Patel), "Observation of Polarization Sign Inversion in Ferroelectric Liquid Crystals Produced by Doping S_c Liquid Crystals," *J. Phys. Chem.* **1987**, *91*, 5838-5840.

Claims 1 through 3 stand rejected under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103 as unpatentable over Saito (Answer, page 4). We reverse these rejections for reasons which follow.

OPINION

A. The Rejection under § 102(e)

As noted by appellants on page 7 of the Brief, under 35 U.S.C. § 102, every limitation of a claim must identically appear 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). Appellants argue that Saito discloses liquid crystal compounds whose formula generically encompasses the claimed subject matter but this reference has no specific example directed to any species within the scope of the claims or even to any compound containing two asymmetric carbon atoms (Brief, pages 8-14). The examiner finds that Saito discloses

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pyrimidyl-phenyl compounds which have the same terminal group as the claimed compounds, i.e., R² of formula(I) of Saito can be branched alkyl and is attached to an asymmetric carbon with a fluorine substituent (Answer, page 4).

Appellants state a "rule" on page 7 of the Brief that "a prior genus which does not explicitly disclose a species does not anticipate a later claim to that species." However, a genus may, under the appropriate circumstances, constitute a description of a specific compound falling within the genus but not specifically named. See *In re Schaumann*, 572 F.2d 312, 316, 197 USPQ 5, 9 (CCPA 1978). It is the examiner who bears the initial burden of presenting any *prima facie* case of unpatentability. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Here we determine that the examiner has not met the initial burden of establishing that the disclosure and teachings of Saito constitute a description of the claimed subject matter within the meaning of 35 U.S.C. § 102. See *Schaumann, supra*; *In re Petering*, 301 F.2d 676, 681, 133 USPQ 275, 280 (CCPA 1962). The examiner has not met the initial burden by merely pointing to possible

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substituents from the generic formula disclosed by Saito that would encompass the claimed subject matter (see the Answer, page 4). Accordingly, we do not sustain the examiner's rejection of claims 1 through 3 under 35 U.S.C. § 102(e) as anticipated by Saito.

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

Appellants and the examiner agree that the generic disclosure of Saito encompasses the claimed subject matter. As noted by appellants on page 16 of the Brief, *In re Baird*² states that "[t]he fact that a claimed compound may be encompassed by a disclosed generic formula does not by itself render that compound obvious." See also *In re Jones*, 958 F.2d 347, 350, 21 USPQ2d 1941, 1943 (Fed. Cir. 1992). The examiner does not contradict appellants' argument that Saito does not exemplify any compounds with a terminal group of "branched alkyl" and also does not exemplify any compounds with two asymmetric carbon atoms in the terminal chain (Answer, page 6). The examiner states that Saito "suggests" asymmetric carbon substituents by disclosing, at column 3, lines 5-10,

²16 F.3d 380, 382, 29 USPQ2d 1550, 1552 (Fed. Cir. 1994).

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that "R² is preferably a linear or branched chain alkyl group of 2 to 10 carbon atoms, but in the case of the branched groups, they may have optical activity." (See the Answer, sentence bridging pages 6-7).

We agree with appellants that there is nothing in Saito that would have suggested or motivated one of ordinary skill in the art to select the appropriate variables from the many possibilities to arrive at the claimed compounds (Brief, page 17). *See Baird, supra*. The examiner has not pointed to any preferences taught by Saito that would have led the artisan to the claimed subject matter, nor has the examiner pointed to any examples where R² is branched alkyl or where there are two asymmetric carbon atoms. The examiner has stated that Saito teaches that branched alkyl substituents possess optical activity and concluded that this "would lead one of ordinary skill in the art to R³ [sic, R²] as branched alkyl." (Answer, paragraph bridging pages 5-6). However, the examiner has not established any reason or suggestion as to why the artisan would be led to an optically active substituent such as branched alkyl other than to take notice of the "well known fact" that "[o]ptically active carbons in liquid crystal

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compounds are known to increase spontaneous polarization” (Answer, page 6). Appellants have challenged this notice of a well known fact and submitted evidence in rebuttal (Reply Brief, pages 2 and 4-6, citing Goodby, Walba, and Patel). The examiner, in the Answer to the Reply Brief, does not rebut appellants’ challenge but merely repeats the “known fact” (page 2). Therefore we cannot accept the examiner’s contention as fact. *In re Ahlert*, 424 F.2d 1088, 1091-92, 165 USPQ 418, 420-21 (CCPA 1970); *In re Lundberg*, 244 F.2d 543, 551, 113 USPQ 530, 537 (CCPA 1957). Accordingly, the examiner has not established, on this record, the prerequisite motivation, suggestion or reason to select the appropriate variables from the generic disclosure of Saito to arrive at the claimed subject matter.

For the foregoing reasons, we find that the examiner has not established a *prima facie* case of obviousness in view of the reference evidence. Because we reverse on this basis, we need not reach the issue of the sufficiency of the showing of unexpected results (see the Brief, pages 16-17 and 19-23). *In re Geiger*, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir.

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1987). Accordingly, the examiner's rejection of claims 1 through 3 under 35 U.S.C. § 103 as unpatentable over Saito is reversed.

C. Summary

The rejection of claims 1 through 3 under 35 U.S.C. § 102(e) as anticipated or, in the alternative, under 35 U.S.C. § 103 as unpatentable over Saito is reversed.

REVERSED

TERRY J. OWENS)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
THOMAS A. WALTZ)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
PETER F. KRATZ)	
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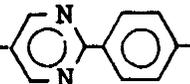
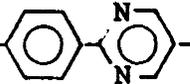
APPENDIX

1. An optically active compound represented by formula (I):

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wherein A represents R^2 - or R^2 -, wherein R^2

alkyl group having from 8 to 12 carbon atoms; R^1 represents a straight chain alkyl group having from 2 to 5 carbon atoms; X represents a methyl group; n represents 1 or 2; m represents an integer of from 0 to 3; and C^* represents an asymmetric carbon atom.

Leticia

Appeal No. 96-0896
Application No. 08/091,406

APJ WALTZ

APJ KRATZ

APJ OWENS

DECISION: REVERSED
Send Reference(s): Yes No
or Translation (s)
Panel Change: Yes No
Index Sheet-2901 Rejection(s):

Prepared: August 8, 2000

Draft Final

3 MEM. CONF. Y N

OB/HD GAU

PALM /ACTS 2/BOOK
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