

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(2) is not binding precedent of the Board.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. 10

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JAMES D. SAMPICA,
MELVIN L. CAMPBELL, C. JOHN ANDERSON,
AND DUANE SCHLATTER

Appeal No. 97-3474
Application 08/431,211¹

ON BRIEF

Before THOMAS, HAIRSTON, and KRASS, Administrative Patent Judges.
KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1, 2, 4 through 7 and 11 through 14. Claim 3 has been canceled and claims 8 through 10, 15 and 16 have been indicated by the examiner as being allowable.

The invention pertains to liquid crystal displays and, more particularly, to a liquid crystal display [LCD] laminated with a silicon gel adhesive to which optical components are attached.

¹ Application for patent filed April 28, 1995.

This is said to minimize strain on the LCD and to allow disassembly of the optical components without damaging the LCD.

Representative independent claim 1 is reproduced as follows:

1. A liquid crystal display stack-up comprising:
a liquid crystal display having a first surface;
a first optical component having a first surface;

the first surface of the liquid crystal display and the first surface of the first optical component are substantially planar glass surface; and

a first layer of silicone gel positioned between the first surface of the liquid crystal display and the first surface of the first optical component, the first layer of silicone gel attaching the first optical component to the liquid crystal display.

The examiner relies on the following references:

Iwashita et al. (Iwashita)	4,715,686	Dec. 29, 1987
Filas et al. (Filas)	5,217,811	Jun. 8, 1993
Kawaguchi et al. (Kawaguchi)	5,243,453	Sep. 7, 1993
Sirkin et al. (Sirkin)	5,275,680	Jan. 4, 1994

Claims 1, 2, 6, 7 and 11 stand rejected under 35 U.S.C. ' 103 as unpatentable over Sirkin in view of Filas. Claims 12 and 13 stand rejected under 35 U.S.C. ' 103 as unpatentable over Sirkin in view of Filas in further view of Iwashita. Claims 1, 4, 5, 11 and 14 stand rejected under 35 U.S.C. ' 103 as unpatentable over Kawaguchi.

Reference is made to the brief and answer for the respective positions of appellants and the examiner.

OPINION

We have carefully considered the evidence before us and, based on such evidence, we will sustain the examiner's rejections.

First, with regard to the rejection based on Kawaguchi, and specifically focusing on independent claim 1, the examiner identifies (at the top of page 3 of Paper No. 4) various sections of the Kawaguchi reference which disclose the claimed invention. As we understand the examiner's position, looking at Figure 4 of the reference, Kawaguchi clearly shows a LCD 15, an outer casing 17 and a silicone gel 19 sandwiched therebetween. Clearly, the outer casing 17 is an "optical component," as claimed.

Appellants argue, at pages 3-5 of the brief, that Kawaguchi fails to show a "glass to glass" bond and that the examiner's reliance on glass substrates being known is misplaced because the claims are directed to more than "just a piece of glass."

We do not find appellants' arguments to be persuasive. Kawaguchi clearly discloses a LCD 15 having a first surface and an optical component 17 having a first surface wherein a layer of silicone gel is positioned between the first surfaces and attaches the optical component to the LCD. The only issue is whether Kawaguchi suggested that these two first surfaces should be "substantially planar glass surfaces," as claimed. There is

no argument that the surfaces depicted by Kawaguchi are "substantially planar." Therefore, we must determine if there is a fair suggestion by Kawaguchi that these surfaces be "glass."

It is clear to us, for the reasons given by the examiner at page 4 of the answer, that Kawaguchi strongly suggests that these surfaces should be of glass. Since Kawaguchi indicates, at column 7, line 19, that "outer case 17 has high transparency" and, at lines 26-27, that the outer case also is "formed of strong hard material," it is our view, as it was the examiner's, that such a description of the properties of the outer case would have led the artisan to employ glass as the outer case. While there may be materials, other than glass, which would fit this description, it is our view that given the description of a strong, hard material that is also transparent, the artisan would have first been led to glass. This is made even more suggestive, in our view, by the disclosure, by Kawaguchi, at column 7, lines 42-45, that LCD 15 is made by "sandwiching a liquid crystal material between two glass plates..." [emphasis ours]. Quite clearly, when Kawaguchi was interested in a strong, hard transparent material for sandwiching liquid crystal material, Kawaguchi turned to glass.

Thus, we are persuaded that the skilled artisan, viewing the totality of the Kawaguchi reference, would have been led to use glass as the first surface of both the LCD and the optical component.

Turning now to the rejections based on Sirkin as the primary reference, we will also sustain these rejections because appellants' only argument is to point to the glass to glass bond limitation of the claims, as they did with the rejection based on Kawaguchi, and reassert the same arguments "except that all references to the 'Kawaguchi' [sic, Kawaguchi reference] therein should be changed to the 'Sirkin' reference" [brief, page 5].

The examiner has reasonably explained, at pages 4-5 of Paper No. 4, how Sirkin, in combination with other references, is applied against the instant claims, identifying the liquid crystal cells and an optional anti-reflective sheet of glass in Sirkin as optical elements and pointing out how the lamination of these elements with a silicone gel is fairly suggested. Therefore, in our view, the examiner has clearly established a prima facie case of obviousness and, contrary to appellants' assertion, has clearly considered the glass to glass bond limitation of the claims.

Since appellants have made no other arguments, and the examiner has established a reasonable case for a finding of obviousness of the claimed subject matter, we will sustain the rejections of claims 1, 2, 4 through 7 and 11 through 14 under 35 U.S.C. ' 103.

The examiner's decision is affirmed.

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

AFFIRMED

James D. Thomas)	
Administrative Patent Judge)	
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Kenneth W. Hairston)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
Errol A. Krass)	
Administrative Patent Judge)	

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John D. Veldhuis-Kroeze
Rockwell International Corporation
400 Collins Road NE
Cedar Rapids, IA 52498