

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MASAMI TORIZUKA,
YOSHIRO MURAOKA and
RENSHI NAKAMURA

Appeal No. 96-1709
Application 08/149,361¹

ON BRIEF

Before KRASS, JERRY SMITH and FLEMING, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

¹ Application for patent filed November 9, 1993.

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This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-3, 5, 6, 10-15 and 17-19. Claims 4, 7-9 and 16 stand withdrawn from consideration by the examiner as being directed to a nonelected invention.

The disclosed invention pertains to a liquid crystal display system having first and second displays for providing images respectively to the left and right eyes of a viewer. More particularly, the system has a video signal supplying means which includes a single driver circuit for providing a common drive signal to both of the first and second displays.

Representative claim 1 is reproduced as follows:

1. A liquid crystal display system comprising:

a pair of first and second liquid crystal displays for providing respective images to left and right eyes;

video signal supplying means for supplying a video signal corresponding to an image to the liquid crystal displays, said video signal supplying means including a single driver circuit which provides a common drive signal to both said first and second liquid crystal displays;

display controlling means for receiving said video signal and for controlling said first and second liquid crystal displays in response to an input control signal supplied in accordance with the video signal by producing a timing control signal to command one of a write operation to write the video signal into said first and second liquid

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crystal displays, and a hold operation to inhibit the write operation and instead to cause said first and second liquid crystal displays to hold a previous signal of a previous field; and

distributing means for receiving said timing signal from said controlling means and for distributing said timing control signal between the pair of said first and second liquid crystal displays.

The examiner relies on the following references:

Suntola	4,907,862	Mar. 13, 1990
Fujisawa et al. (Fujisawa)	4,926,166	May 15, 1990
Sakariassen	5,032,912	July 16, 1991
Shirochi	5,155,477	Oct. 13, 1992
Nakayoshi et al. (Nakayoshi)	5,357,277	Oct. 18, 1994

(filed Sep. 28,

1992)

Claims 1-3, 5, 6, 10-13, 15 and 17-19 stand rejected under 35 U.S.C. § 103 as being unpatentable over the collective teachings of Shirochi, Fujisawa and Sakariassen, or the collective teachings of Shirochi, Fujisawa and Nakayoshi. Claim 14 stands rejected under 35 U.S.C. § 103 on either combination of teachings cited above, in further view of Suntola.

Rather than repeat the arguments of appellants or the examiner, we make reference to the brief and the answer for the respective details thereof.

OPINION

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We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the brief along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the collective evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 1-3, 5, 6, 10-15 and 17-19. Accordingly, we reverse.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why

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one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

1. The rejection of claims 1-3, 5, 6, 10-13, 15 and 17-19 as unpatentable over the teachings of Shirochi, Fujisawa and Sakariassen.

These claims stand or fall together [brief, page 7], and we shall consider claim 1 as the representative claim.

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The examiner cites Shirochi as teaching a liquid crystal display system in which a controller receives a video input signal from a video tape recorder (VTR) and control signals for controlling write and hold actions. Shirochi was also cited by appellants as a teaching in generating noiseless speed change reproduction in a VTR. Shirochi does not disclose a display for each eye of the viewer. The examiner cites Sakariassen as teaching the feature of separate displays for the left and right eyes, and the examiner asserts the obviousness of combining the teachings of Sakariassen with those of Shirochi. This combination still lacks the recitation in claim 1 of a single driver circuit. The examiner cites Fujisawa as a teaching of a single driver for driving two displays. According to the examiner, the collective teachings of these three references meet all the limitations recited in claim 1.

Although appellants make three specific arguments of error in the examiner's position, we are primarily concerned with the error designated as the second error by appellants. This error relates to the propriety of using Fujisawa in the manner suggested by the examiner. Appellants argue that

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Fujisawa does not meet or suggest the recitation in claim 1 of a "single driver circuit which provides a common drive signal to both said first and second liquid crystal displays" [brief, page 11]. Appellants point out that Fujisawa applies one drive signal to the CRT (CRT SYNC SIGNAL) and a different drive signal to the LCD (LCD DRIVER CONTROL SIGNAL). The examiner responds that the single driver circuit in Fujisawa (controller 4) provides a common drive signal to drive both the CRT and the LCD [answer, page 11].

Notwithstanding the examiner's assertion to the contrary, Fujisawa does not suggest the single driver circuit providing a common drive signal to two displays. Although the controller in Fujisawa may generate the drive signals based on a common video input signal, the output of the controller is in the form of two different drive signals as argued by appellants. It appears to be the examiner's position that since the video drive signals are derived from the same input signals, then the recitations of the independent claims are satisfied. However, the drive signals exist at the output of the controller and not at the input. As pointed out by

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appellants, the two displays in Fujisawa receive separate drive signals rather than a common drive signal as claimed.

In view of the above remarks, the examiner has either failed to properly interpret the claim language or has improperly interpreted the teachings of Fujisawa or perhaps both. Therefore, the examiner has failed to properly address the obviousness of the claimed recitation of providing a common drive signal to both displays using a single driver circuit. In the absence of this explanation, we agree with appellants that the examiner has failed to establish a prima facie case of the obviousness of the invention set forth in the appealed claims.

In light of the above observations, the examiner's rejection of claims 1-3, 5, 6, 10-13, 15 and 17-19 cannot be sustained.

2. The rejection of claim 14 as unpatentable over the teachings of Shirochi, Fujisawa, Sakariassen and Suntola.

Claim 14 depends from independent claim 11 considered above. The additional citation of Suntola does not cure the deficiencies in the combined teachings of Shirochi, Fujisawa

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and Sakariassen discussed above. Therefore, this rejection of claim 14 is also not sustained.

3. The rejection of claims 1-3, 5, 6, 10-13, 15 and 17-19 as unpatentable over the teachings of Shirochi, Fujisawa and Nakayoshi.

This rejection is similar to the first rejection discussed above except that Nakayoshi is now cited instead of Sakariassen. The examiner cites Nakayoshi for the exact same reason as Sakariassen, that is, as a teaching of a stereoscopic image LCD for the left and right eyes of a viewer. Since the examiner relies on Fujisawa for the same reasons discussed above, and since the examiner's reasons have been found to be erroneous, we also do not sustain this separate rejection of claims 1-3, 5, 6, 10-13, 15 and 17-19. The additional separate rejection of dependent claim 14 based on this combination of references with Suntola added is deficient for the same reasons already discussed.

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In summary, we have not sustained either of the examiner's rejections of claims 1-3, 5, 6, 10-15 and 17-19 under 35 U.S.C. § 103. Therefore, the decision of the examiner rejecting these claims is reversed.

REVERSED

ERROL A. KRASS)
Administrative Patent Judge)
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) BOARD OF PATENT
JERRY SMITH)

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