UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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*Ex parte* SHIGEKI TANAKA and SHIGEKI TAMAI

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Appeal 2007-3283
Application 10/271,594
Technology Center 2600

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Decided: October 30, 2007

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Before KENNETH W. HAIRSTON, LEE E. BARRETT, and ROBERT E. NAPPI, *Administrative Patent Judges*.

HAIRSTON, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. §§ 6(b) and 134 from the final rejection of claims 1, 3, 5, and 8 to 10.

Claim 1 is representative of the claimed invention, and it reads as follows:

1. A method of driving a liquid crystal panel including a plurality of pixels arranged in a matrix form, the plurality of pixels each including a pair

of electrodes and liquid crystal sandwiched therebetween, and being divided into a plurality of pixel groups each composed of plural pixels,

the method comprising:

performing a predetermined computing operation at intervals of a predetermined horizontal period by adding all gradation display data representative of gradations of pixels of one of the pixel groups;

correcting a voltage determined from gradation data of each pixel of the one pixel group, on the basis of a result of the computing operation, to obtain a corrected voltage; and

applying the corrected voltage between a pair of electrodes of each pixel of the one of the pixel groups during the predetermined horizontal period in order to reduce non-uniformity of a display.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

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|---|---|---|
| Tamai | US 5,642,127 | Jun. 24, 1997 |
| Kimura | US 5,892,494 | Apr. 6, 1999 |

The Examiner rejected claims 1, 3, 5, and 10 under 35 U.S.C. § 103(a) based upon the teachings of Kimura. The Examiner rejected claims 8 and 9 under 35 U.S.C. § 103(a) based upon the teachings of Kimura and Tamai.

Appellants contend that the claimed correction voltage is applied between a pair of electrodes of each pixel of a group of pixels during a predetermined horizontal period whereas the reference to Kimura describes correcting an application voltage based upon the length of time a pixel has been turned on (i.e., making the correction after the need for the correction has occurred) (Br. 10 to 12). According to the Examiner:

> Kimura et al disclose correcting a voltage determined from gradation data of each pixel of the one pixel group, on the basis of a result of the computing operation, to obtain corrected voltage and applying the corrected voltage between a pair of electrodes of each pixel of the one of the pixel groups during the predetermined horizontal period in order to reduce non-uniformity of a display in col. 3, lines 44-53, col. 4, lines 17-27, col. 10, lines 15-50, and col. 13, lines 55-65

(Answer 3).

In Kimura, the Abstract, column 3, lines 44 to 53, column 4, lines 17 to 27, column 5, lines 14 to 20, column 13, lines 55 to 65, and column 15, lines 31 to 56 all support the Appellants' position that the correction voltage in Kimura is applied to the switching element of a pixel after the need for the correction has occurred (i.e., after the switching element has been turned off). Kimura specifically states that the correction is made "irrespective of the horizontal scanning period" (col. 15, ll. 55 and 56). Thus, the obviousness rejection of claims 1, 3, 5, and 10 is reversed because the Examiner's articulated reasoning in the rejection does not possess a rational underpinning to support a legal conclusion of obviousness. *In re Kahn*, 441 F.3d 977, 988, (Fed. Cir. 2006). The obviousness rejection of claims 8 and 9 is reversed because the teachings of Tamai do not cure the noted shortcomings in the teachings of Kimura.

The decision of the Examiner is reversed.

REVERSED

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