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TRANSLATION CERTIFICATION

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- I am fluent in the Japanese and English languages, and
- I am the translator of the document attached, and certify that to the best of my knowledge and belief the following is a true and correct English translation of JP2000-056737A.

Dated this 14th day of April, 2014

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A handwritten signature in blue ink that reads "Lisa Louis".

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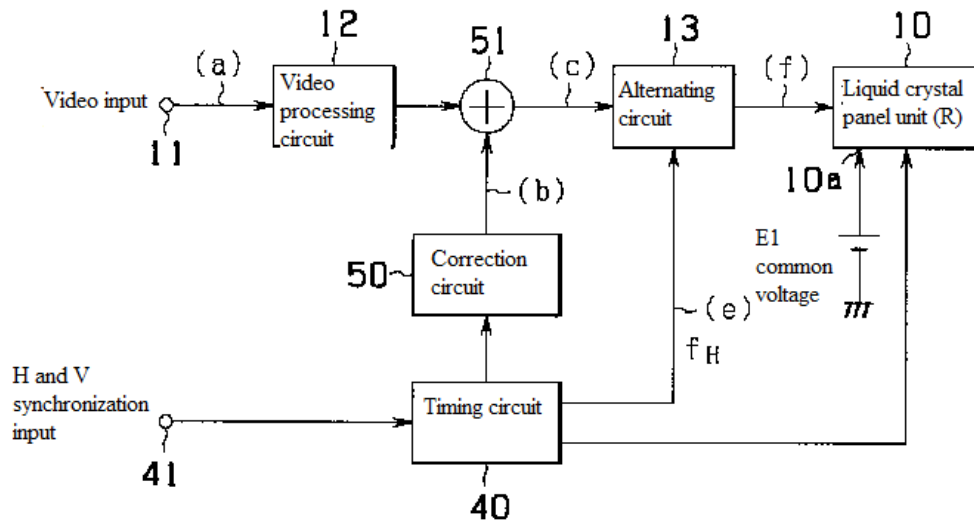
(54) [Title of the Invention] Luminance Irregularity Correction Device of a  
Liquid Crystal Panel

(57) [Abstract]

[Problem] To provide a luminance irregularity correction device of a liquid crystal panel that is able to suppress the occurrence of luminance irregularity due to liquid crystal layer thickness irregularity (gap irregularity) of a liquid crystal panel.

[Means for Solving] A correction circuit 50 for generating correction signals to correct luminance irregularity due to liquid crystal layer thickness irregularity of a liquid crystal panel is provided. With this correction circuit 50, gradually changing correction signals are generated such that the amplitude grows larger the more toward the center of the horizontal direction of the liquid crystal panel, and grows larger the more toward the

center of the vertical direction when this signal is viewed in the vertical direction. After a correction signal from the correction circuit 50 is added to the input video signal by the adding means 51, signal processing for doing alternating current drive or the like is performed, and this is supplied to the liquid crystal panel unit 10. In this way, by using a constitution for which the correction signal is superimposed on the input video signal of the liquid crystal panel, it is possible to correct luminance irregularity.



[Claims]

[Claim 1]

A luminance irregularity correction device of a liquid crystal panel, comprising:  
a liquid crystal panel for displaying video based on input video signals,  
a timing circuit for generating the timing signals necessary for performing signal processing and display processing for displaying the video on the liquid crystal panel,  
a correction circuit that is a circuit for generating correction signals to correct luminance irregularity due to liquid crystal layer thickness irregularity of the liquid crystal panel, that generates gradually changing correction signals such that the amplitude becomes larger the more to the center of the horizontal direction of the liquid crystal panel, and the amplitude becomes larger more to the center in the vertical direction when this signal is viewed in the vertical direction, and  
an adding means for adding the correction signal from the correction circuit to the input video signal.

[Claim 2]

A luminance irregularity correction device of a liquid crystal panel, comprising:  
a liquid crystal panel for displaying video based on input video signals,  
a timing circuit for generating the timing signals necessary for performing signal processing and display processing for displaying the video on the liquid crystal panel,  
a correction circuit that is a circuit for generating correction signals to correct luminance irregularity due to liquid crystal layer thickness irregularity of the liquid crystal panel, that generates gradually changing correction signals such that the amplitude becomes larger the more to the center of the horizontal direction of the liquid crystal panel, and the amplitude becomes larger more to the center in the vertical direction when this signal is viewed in the vertical direction, and  
an adding means for adding the correction signal from the correction circuit to the pixel common electrode voltage (common voltage) of the liquid crystal panel.

[Claim 3]

The luminance irregularity correction device of a liquid crystal panel of claim 1, wherein when the liquid crystal panel is driven by inverse polarity drive type video signals for each horizontal period, at the stage before signal processing that does polarity inversion of the input video signal for each horizontal period, a correction signal from the correction circuit is added to the input video signal.

[Claim 4]

The luminance irregularity correction device of a liquid crystal panel of claim 2, wherein when the liquid crystal panel is driven by a inverse polarity drive type video signal for each horizontal period, polarity inversion is performed for each horizontal period also on the correction signals added from the correction circuit to the pixel common electrode voltage (common voltage) of the liquid crystal panel.

[Detailed Description of the Invention]

[0001]

[Technical Field of the Invention]

The present invention relates to a luminance irregularity correction device of a liquid crystal panel for correcting luminance irregularity due to liquid crystal layer thickness irregularity (gap irregularity) of a liquid crystal panel.

[0002]

[Prior Art]

In recent years, display devices that use liquid crystal have become popular. For example, pocket liquid crystal television receivers, laptop computer display devices, liquid crystal projectors and the like have been commercialized.

[0003]

In particular, along with demand for display devices that have a large screen but are compact and light, there has been a great deal of development of liquid crystal projectors using liquid crystal panels. Since it is easy to make the screen large with liquid crystal projectors, there is also anticipation for these for high definition televisions. With liquid crystal projectors, as is well known, it is possible to use a liquid crystal panel as a light valve, and display an image by changing the transmittance of the light from the light

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