

(1) Publication number: **0 466 506 A3**

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: 91306354.1

(22) Date of filing: 12.07.91

(51) Int. CI.⁵: **G09G 3/36,** G09G 3/20

(30) Priority: 13.07.90 JP 184147/90

(43) Date of publication of application : 15.01.92 Bulletin 92/03

(84) Designated Contracting States : **DE FR GB**

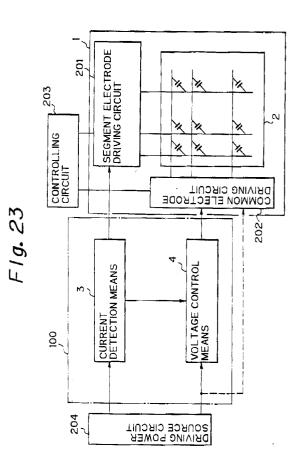
(88) Date of deferred publication of search report: 21.04.93 Bulletin 93/16

71 Applicant: Citizen Watch Co. Ltd. 1-1, 2-chome, Nishi-Shinjuku Shinjuku-ku Tokyo (JP) (72) Inventor : Ebihara, Heihachiro 1256-11, Shimotomi Tokorozawa-shi, Saitama (JP)

(74) Representative: Adams, William Gordon et al RAWORTH, MOSS & COOK 36 Sydenham Road
Croydon Surrey CR0 2EF (GB)

54 Electrooptical display device.

The present invention improves the drop of a contrast, the occurrence of cross-talk and the drop of a response speed by bringing the drive state of an electrooptical display device to theoretical values. In a display device including a display panel having common electrode groups and segment electrode groups, a common electrode drive circuit and a segment electrode drive circuit, the quantity of the current flowing through the display panel through the segment electrode drive circuit is detected by a current detection circuit consisting of a differential amplifier 101 and a resistor Ra and by a current detection circuit consisting of a differential amplifier 102 and the resistor Ra, and the common electrode drive voltage applied to the common electrode groups through the common electrode drive circuit is controlled by a differential amplifier 103 on the basis of this current detection quantity, whereby the contrast is improve, cross-talk is eliminated, and remarkable effects are obtained.



P 0 466 506 A3



EUROPEAN SEARCH REPORT

Application Number

EP 91 30 6354

ategory	Citation of document with in of relevant pas		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
·	EP-A-0 374 845 (FUJ)		1	G09G3/36
	•		1	G09G3/20
A	EP-A-0 303 510 (SEI	(O EPSON CORPORATION)	1	
D, A	PROCEEDINGS OF THE SID. vol. 31/4, 1990, LOS ANGELES US pages 333 - 336 YOSHIYA KANEKO ET AL. 'Crosstalk-free driving methods for stn-lcd's'			TECHNICAL FIELDS SEARCHED (Int. Cl.5) G09G
	The present search report has b	een drawn up for all claims Date of completion of the search		Examiner
	THE HAGUE	05 FEBRUARY 1993		FARRICELLA L.
Y:pa de A:te O:n	CATEGORY OF CITED DOCUME articularly relevant if taken alone articularly relevant if combined with an ocument of the same category chnological background on-written disclosure termediate document	E : earlier patent after the filin ther D : document cite L : document cite	document, but pug date d in the applicati d for other reasor	on