



(11) **EP 1 164 567 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
31.07.2002 Bulletin 2002/31

(51) Int Cl.⁷: **G09G 3/36**

(43) Date of publication A2:
19.12.2001 Bulletin 2001/51

(21) Application number: **01305137.0**

(22) Date of filing: **13.06.2001**

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR
 Designated Extension States:
AL LT LV MK RO SI

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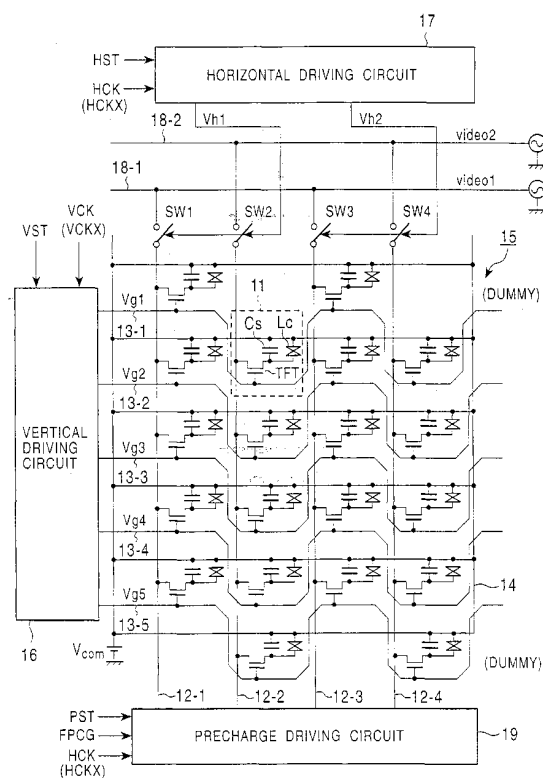
(30) Priority: **14.06.2000 JP 2000177928**

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(54) **Active matrix display device and method of driving the same**

(57) A liquid crystal display driven by a dot-line inversion driving method in combination with a 2-step dot sequential precharge driving method which, if black window or black lines are displayed, is free of horizontal trails on circumscribing portions thereof is provided. Before video signals having opposite polarities are applied to signal lines, first, a full-line precharge pulse is generated in the horizontal blanking periods, and precharge gray signals which have the same polarity as that of the previous pixel potential are written together based on the full-line precharge pulse. Then, precharge black signals having the same polarity as that of one of the video signals, and precharge gray signals having the same polarity of that of the other video signal are written in two steps.

FIG. 1





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EUROPEAN SEARCH REPORT

Application Number
EP 01 30 5137

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X,P	* page 6, column 9, line 44-53; figures 1,16,17,21 *	1,2,6,7	
X,P	* column 1, line 40 - line 41 * * page 6, column 10, line 55 - page 7, column 11, line 3 *	5,10	
X,P	* claim 10 *	4,9	
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The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 12 June 2002	Examiner Wolff, L
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

EPO FORM 1503 03.82 (P04C01)



European Patent
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EUROPEAN SEARCH REPORT

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EP 01 30 5137

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The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 12 June 2002	Examiner Wolff, L
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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专利名称(译)	有源矩阵显示装置及其驱动方法		
公开(公告)号	EP1164567A3	公开(公告)日	2002-07-31
申请号	EP2001305137	申请日	2001-06-13
[标]申请(专利权)人(译)	索尼公司		
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IPC分类号	G02F1/133 G09G3/20 G09G3/36		
CPC分类号	G09G3/3614 G09G3/3648 G09G3/3688 G09G2310/0248 G09G2310/0297 G09G2320/0209		
优先权	2000177928 2000-06-14 JP		
其他公开文献	EP1164567A2 EP1164567B1		
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摘要(译)

一种由点线反转驱动方法驱动的液晶显示器，结合2步点顺序预充电驱动方法，如果显示黑色窗口或黑线，则在其外接部分上没有水平轨迹。在将具有相反极性的视频信号施加到信号线之前，首先，在水平消隐时段中产生全线预充电脉冲，并且基于以下方式将与前一像素电位具有相同极性的预充电灰度信号一起写入。全线预充电脉冲。然后，预充电具有与视频信号之一相同极性的黑色信号，并且以两个步骤写入具有与另一个视频信号相同极性的预充电灰度信号。

