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(54) **LCD display visual enhancement driving circuit and method**

(57) A pixel in a liquid crystal display panel comprises a first sub-pixel area having a first sub-pixel electrode and a second sub-pixel area having a second sub-pixel electrode. Each sub-pixel electrode is associated with a capacitor. When a gate-line signal and a data voltage is provided to the pixel, the voltage level on the first sub-pixel electrode is substantially equal to or slightly higher than the voltage level on the second sub-pixel electrode and the capacitor associated with each sub-pixel electrode is charged. When the gate-line signal has entirely passed on partially passed, a circuit element causes the capacitor associated with the second sub-pixel electrode to transfer its charge to another capacitor, resulting in a reduction of the voltage level on the second sub-pixel electrode.

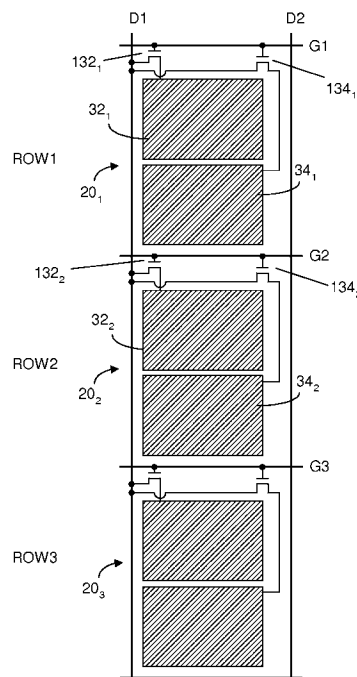


FIG.4



EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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A	US 2009/027325 A1 (KIM DONG-GYU [KR] ET AL) 29 January 2009 (2009-01-29) * paragraph [0072]; figure 2 *	1-15	
A	US 2009/027581 A1 (YOU HYE-RAN [KR] ET AL) 29 January 2009 (2009-01-29) * figure 12 *	1-15	
A	US 2010/007594 A1 (LAI MING-SHENG [TW] ET AL) 14 January 2010 (2010-01-14) * paragraph [0062] - paragraph [0064]; figures 5,6 *	1-15	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			G09G
Place of search		Date of completion of the search	Examiner
The Hague		21 March 2012	van Wesenbeeck, R
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			

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EPO FORM 1503 03 82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 10 19 1779

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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21-03-2012

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专利名称(译)	LCD显示器视觉增强驱动电路和方法		
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代理机构(译)	LANG , CHRISTIAN		
优先权	12/660315 2010-02-23 US		
其他公开文献	EP2362374A2 EP2362374B1		
外部链接	Espacenet		

摘要(译)

液晶显示面板中的像素包括具有第一子像素电极的第一子像素区域和具有第二子像素电极的第二子像素区域。每个子像素电极与电容器相关联。当向像素提供栅极线信号和数据电压时，第一子像素电极上的电压电平基本上等于或略高于第二子像素电极上的电压电平和与每个相关联的电容器。子像素电极充电。当栅极线信号完全通过部分通过时，电路元件使与第二子像素电极相关的电容器将其电荷转移到另一电容器，导致第二子像素电极上的电压电平降低。

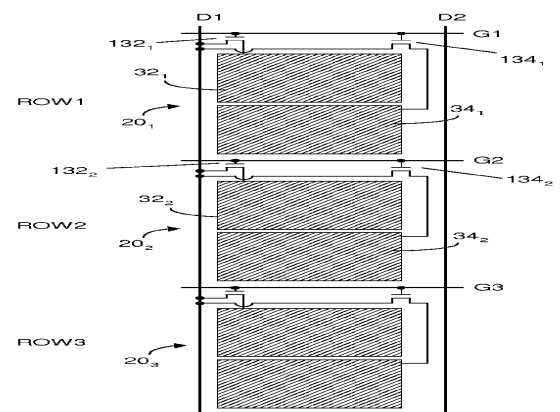


FIG.4