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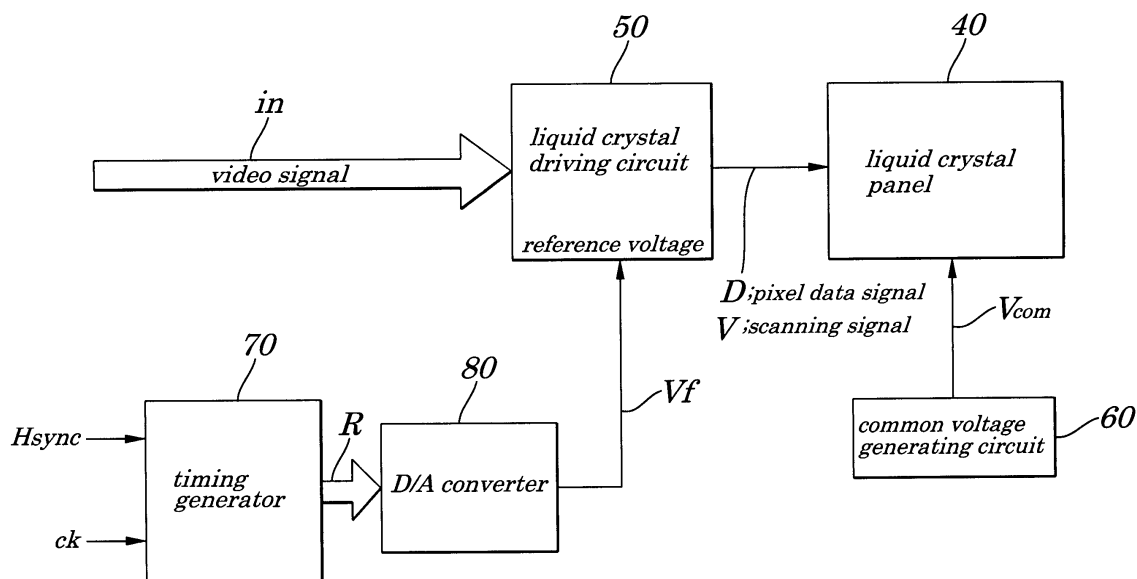
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(54) **Liquid crystal display device and method of driving the same**

(57) A liquid crystal display device is provided which is capable of reducing flicker over all areas of a liquid crystal panel (40). A common voltage having a predetermined level is fed to the liquid crystal panel (40) and a reference voltage (V_f) is fed from a digital-analog converter (80) to a liquid crystal driving circuit (50) and an image corresponding to a pixel data signal is displayed. The pixel data signal is reversed relative to a reference

voltage (V_f) for every one horizontal period. The reference voltage (V_f) having been adjusted so as to be higher in side portions rather than central portions in the liquid crystal panel (40) is applied to the liquid crystal driving circuit (50). As a result, even if a common voltage is not made uniform through entire portions of a common electrode, adjustment can be achieved so that flicker is minimized over all areas in the liquid crystal panel (40).

FIG. 1





European Patent
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EUROPEAN SEARCH REPORT

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EP 03 01 3153

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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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
Munich		4 October 2007	Harke, Michael
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 03 01 3153

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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专利名称(译)	液晶显示装置及其驱动方法		
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当前申请(专利权)人(译)	NEC显示解决方案. , LTD.		
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其他公开文献	EP1372135A2		
外部链接	Espacenet		

摘要(译)

提供一种液晶显示装置，其能够减少液晶面板（40）的所有区域上的闪烁。具有预定电平的公共电压被馈送到液晶面板（40），并且参考电压（ V_f ）从数字 - 模拟转换器（80）馈送到液晶驱动电路（50）和对应于a的图像。显示像素数据信号。对于每一个水平周期，像素数据信号相对于参考电压（ V_f ）反转。在液晶面板（40）的侧部而不是中央部分调整的基准电压（ V_f ）被施加到液晶驱动电路（50）。结果，即使公共电极的整个部分没有使公共电压均匀，也可以实现调整，使得在液晶面板（40）中的所有区域上的闪烁最小化。

FIG.1

