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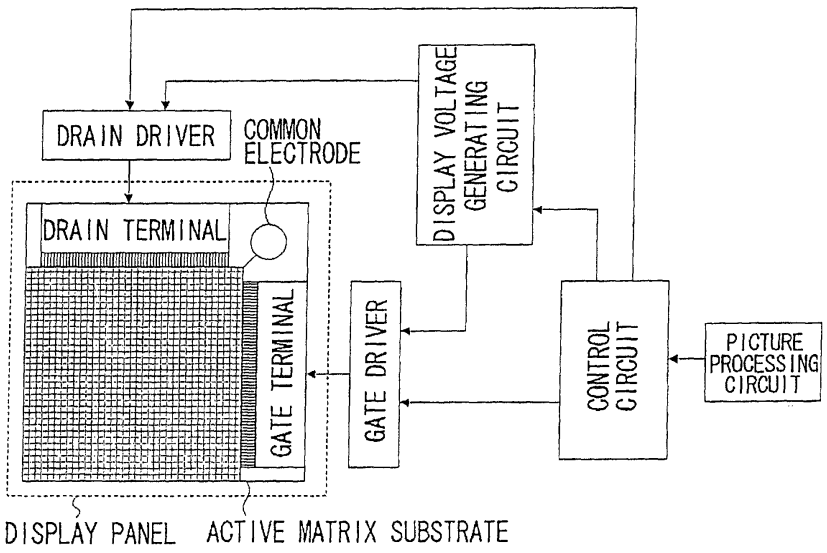
(54) Method for producing a liquid-crystal display apparatus

(57) To provide a liquid crystal display apparatus exhibiting optimum display performance despite reduction in the number of (photolithography) processes, and a method for producing the apparatus. A method for producing a liquid crystal display apparatus having a first substrate including a thin film transistor and a reflector on an insulating substrate. An etching mask(24) is formed on a metal layer(3a, 25, and 26) formed on the insulating substrate(1) and, using this etching mask, the metal layer is etched to form a constituent portion(3a) of the thin film transistor and protrusions. Only the etching mask is caused to reflow to cover exposed surface portions of the constituent portion(3a) of the thin film transistor and protrusions(26) and near-by surface portions of the insulating substrate with the etching mask as the insulating substrate is partially exposed. Using the etching mask, recesses are formed in an exposed area of the insulating substrate. A reflector(4a ,4b) is formed on the protrusions and recesses.

FIG . 1



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EUROPEAN SEARCH REPORT

Application Number
EP 02 09 0225

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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TECHNICAL FIELDS SEARCHED (Int.Cl.7)

G02F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	1 December 2003	Gill, R

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	制造液晶显示装置的方法		
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优先权	2001201850 2001-07-03 JP		
其他公开文献	EP1273961A2		
外部链接	Espacenet		

摘要(译)

提供尽管（光刻）工艺数量减少而显示出最佳显示性能的液晶显示装置，以及制造该装置的方法。一种制造液晶显示装置的方法，该液晶显示装置具有在绝缘基板上包括薄膜晶体管和反射器的第一基板。在形成在绝缘基板（1）上的金属层（3a，25和26）上形成蚀刻掩模（24），并且使用该蚀刻掩模蚀刻金属层以形成金属层的构成部分（3a）。薄膜晶体管和突起。仅使蚀刻掩模回流以覆盖薄膜晶体管的构成部分（3a）的暴露表面部分和突起（26）以及绝缘基板的附近表面部分，其中蚀刻掩模作为绝缘基板是部分的裸露。使用蚀刻掩模，在绝缘基板的暴露区域中形成凹槽。反射器（4a，4b）形成在突起和凹槽上。

FIG . 1