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(54) Active matrix display device

(57) There is provided an electronic device in which the deterioration of the device is prevented and an aperture ratio is improved without using a black mask and without increasing the number of masks. In the electronic device, a first electrode (113) is disposed on another layer different from the layer on which a gate wiring (145) is disposed as a gate electrode, and a semiconductor layer of a pixel switching TFT is superimposed on the gate wiring (145) so as to be shielded from a light. Thus, the deterioration of the TFT is suppressed, and a high aperture ratio is realized.

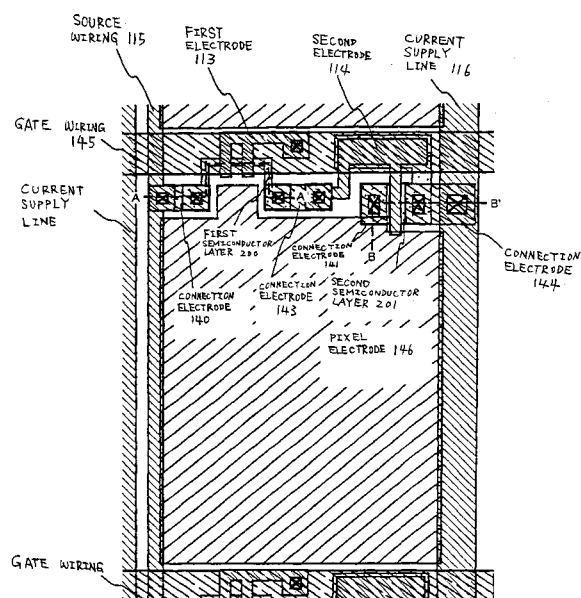


Fig. 1

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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)
A	US 5 717 224 A (ZHANG ET AL) 10 February 1998 (1998-02-10) * abstract * * column 2, line 35 - column 3, line 3; figures 1,2d *	1-9, 12-18	INV. H01L27/00
A	----- KR 225 097 B1 (LG ELECTRONICS INC) 15 October 1999 (1999-10-15) * abstract * & US 6 057 904 A (KIM ET AL) 2 May 2000 (2000-05-02) * column 4, line 1 - column 5, line 34; figures 3a,4d *	1-9, 12-18	
A	----- US 5 650 636 A (TAKEMURA ET AL) 22 July 1997 (1997-07-22) * column 4, line 14 - line 61; figures 17-19; example 13 *	1-9, 12-18	
A	----- JP 11 272235 A (SANYO ELECTRIC CO LTD) 8 October 1999 (1999-10-08) * abstract * & US 6 246 384 B1 (SANO KEIICHI) 12 June 2001 (2001-06-12) * column 4, line 45 - column 6, line 58; figure 2 *	10-17, 19,20	TECHNICAL FIELDS SEARCHED (IPC) H01L G01F G09G
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 11 April 2006	Examiner Bakos, T
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
ON EUROPEAN PATENT APPLICATION NO.**

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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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11-04-2006

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专利名称(译)	有源矩阵显示装置		
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申请(专利权)人(译)	SEL半导体能源研究所有限公司.		
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发明人	YAMAZAKI, SHUNPEI, C/O SEMICONDUCTOR ENERGY LAB.CO KOYAMA, JUN, C/O SEMICONDUCTOR ENERGY LAB.CO INUKAI, KAZUTAKA, C/O SEMICONDUCTOR ENERGY LAB.CO		
IPC分类号	H01L27/00 H01L31/12 G09G3/30 G09G3/32 H01L27/32 H01L29/786 H05B33/10		
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优先权	2000050584 2000-02-28 JP		
其他公开文献	EP1128439A2 EP1128439B1		
外部链接	Espacenet		

摘要(译)

提供一种电子装置，其中防止装置的劣化并且在不使用黑色掩模的情况下提高开口率并且不增加掩模的数量。在电子装置中，第一电极（113）设置在与其上设置有栅极布线（145）的层不同的另一层上作为栅电极，并且像素开关TFT的半导体层叠加在栅极布线上（145）以免被光线遮挡。因此，抑制了TFT的劣化，并且实现了高孔径比。

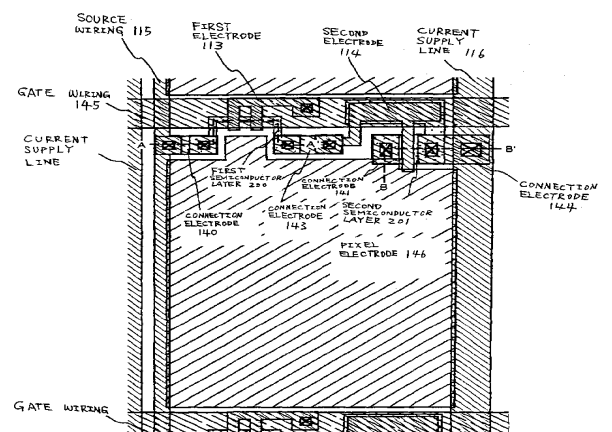


Fig. 1