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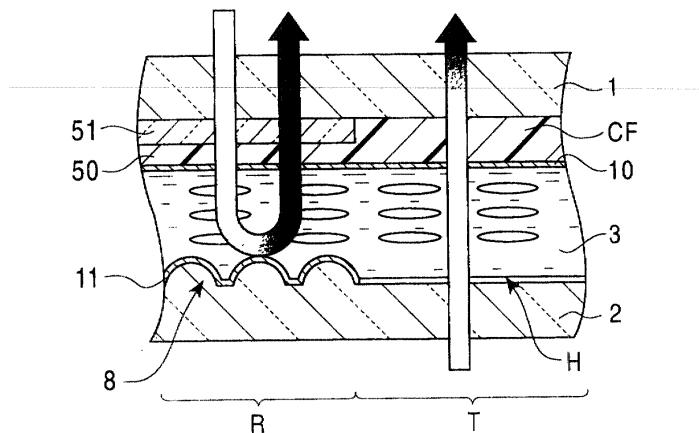
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(54) Display apparatus with colour filter and method of manufacturing the same

(57) A hybrid type display apparatus capable of maintaining color purity in a case of transmission mode display, and improving lightness of color in a case of reflection mode display is provided. This hybrid type display apparatus is comprised of: a pair of first and second substrates (1,2); a first electrode (10) provided on an internal surface of the first substrate (1); a second electrode (11) provided on an internal surface of the second substrate (2); a color filter (CF) provided on the first sub-

strate (1), aligned with a pixel in a portion between the first electrode and the second electrode; a liquid crystal layer (3) interposed between the pair of substrates; and a reflection layer (8) provided on the second substrate. The reflection layer (8) has a hole provided for each pixel, which divides a plane of each pixel into a transmission portion (T) within the hole and a reflection portion (R) outside the hole. The color filter comprises a lamination of a colored layer (50) and a transparent layer (51).

FIG. 1A





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EUROPEAN SEARCH REPORT

Application Number
EP 00 40 3497

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.?)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
D, A	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 05, 31 May 1999 (1999-05-31) & JP 11 052366 A (TOPPAN PRINTING CO LTD), 26 February 1999 (1999-02-26) * abstract *	1,7,13	G02F1/1335
D, A	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 12, 29 October 1999 (1999-10-29) & JP 11 183892 A (CASIO COMPUT CO LTD), 9 July 1999 (1999-07-09) * abstract *	1,7,13	
			TECHNICAL FIELDS SEARCHED (Int.Cl.?)
			G02F
<p>The present search report has been drawn up for all claims</p>			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	7 June 2001	Gill, R	
CATEGORY OF CITED DOCUMENTS		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	
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			

**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. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

07-06-2001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 11052366 A	26-02-1999	NONE	
JP 11183892 A	09-07-1999	NONE	

专利名称(译)	具有滤色器的显示装置及其制造方法		
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当前申请(专利权)人(译)	索尼公司		
发明人	TETSUO, URABE, C/O SONY CORPORATION NOBUYUKI, SHIGENO, C/O SONY CORPORATION TAKAYUKI, FUJIOKA, C/O SONY CORPORATION		
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CPC分类号	G02F1/133555 G02B5/201 G02F1/133514 G02F2001/133519 G02F2001/133638		
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其他公开文献	EP1109053A2 EP1109053B1		
外部链接	Espacenet		

摘要(译)

提供一种混合型显示装置，其能够在透射模式显示的情况下保持色纯度，并且在反射模式显示的情况下改善颜色的亮度。该混合型显示装置包括：一对第一和第二基板(1,2)；第一电极(10)设置在第一基板(1)的内表面上；第二电极(11)设置在第二基板(2)的内表面上；滤色器(CF)设置在第一基板(1)上，与第一电极和第二电极之间的部分中的像素对准；液晶层(3)介于一对基板之间；和设置在第二基板上的反射层(8)。反射层(8)具有为每个像素设置的孔，其将每个像素的平面划分为孔内的透射部分(T)和孔外的反射部分(R)。滤色器包括着色层(50)和透明层(51)的叠层。

FIG. 1A

