



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 0 884 782 A (MOTOROLA, INC) 16 December 1998 (1998-12-16) * column 6, line 40 - column 7, line 10; figure 3 *	1-4,7,8	INV. G09G3/36 H01L27/15
X	----- PATENT ABSTRACTS OF JAPAN vol. 1999, no. 10, 31 August 1999 (1999-08-31) -& JP 11 126691 A (NEC CORP), 11 May 1999 (1999-05-11) col. 5, l. 39-47, col. 2, l. 10-19, col. 6, l. 8-10 * abstract; figures 5,8,9 *	1-4,7,8	
P,X	-& US 6 201 346 B1 (KUSAKA TERUO) 13 March 2001 (2001-03-13) -----	1-4,7,8	
X	US 5 693 170 A (LI ET AL) 2 December 1997 (1997-12-02) * column 5, line 26 - line 39 *	1	
X	----- WO 99/41788 A (SARNOFF CORPORATION) 19 August 1999 (1999-08-19) * page 5, line 20 - line 31; figure 1 * * page 9, line 25 - page 10, line 8; figures 3,4 * * page 9, lines 30,31 * * page 5, lines 6,7 *	1-4,7,8	TECHNICAL FIELDS SEARCHED (IPC) H01L G02F
X	* page 2, line 2 - line 5 *	5	
	* page 23, line 1 - line 2 *		
	* page 23, line 31 - line 34 *		
X	* page 15, line 6 *	6	
X	* page 7, lines 24-26 *	9	
	* page 8, lines 1-6 *		
	* page 8, lines 14-19; figure 2 *		
	* page 14, lines 8-10; figure 10 *		
X	* page 12, lines 9-21 *	10	
	* page 16, lines 1-3; figure 12 *		
	* page 17, line 27 - line 29 *		

The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search Munich		Date of completion of the search 24 July 2006	Examiner Pusch, C
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	



CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-4, 7, 8

Claim 1 solves the problem of connecting the electrodes of the display to a driving circuit on the backside of the substrate of the display by providing vias through the substrate. Claims 2 - 4 are dependent on claim 1. Independent method claims 7 and 8 are concerned with forming a plurality of vias extending from the bottom surface of the substrate to the top surface of the substrate.

2. claim: 5

The common concept of claims 5, 6, 9, and 10 could be considered to be the feature of a tiled display, however tiled displays are already known (see e.g. abstract of US5693170) and hence this feature cannot serve as a common concept linking the above claims. Claim 5 solves the problem of securing the glass substrate to the transparent front panel.

3. claim: 6

Claim 6 solves the problem of enhancing the contrast of the display by providing a transparent front panel having a plurality of rows and columns of dark coloured lines.

4. claim: 9

Claim 9 solves the problem of preventing short circuits between the display section and the electronics section being formed on the same side of a single glass substrate by providing a passivation layer between them.

5. claim: 10

Claim 10 solves the problem of providing a seam between adjacent tiled displays of the same width as the one between pixel so that the seam is invisible to the observer.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 98 8262

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.

24-07-2006

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			US	2005078104 A1	14-04-2005

专利名称(译)	使用有机发光材料显示瓷砖结构		
公开(公告)号	EP1332487A4	公开(公告)日	2006-09-06
申请号	EP2001988262	申请日	2001-11-09
[标]申请(专利权)人(译)	萨尔诺夫公司		
申请(专利权)人(译)	Sarnoff公司		
当前申请(专利权)人(译)	Sarnoff公司		
[标]发明人	MATTHIES DENNIS LEE		
发明人	MATTHIES, DENNIS, LEE		
IPC分类号	G09G3/36 H01L51/50 G02F1/1333 G02F1/1345 G09F9/00 G09F9/30 G09F9/40 G09G3/20 G09G3/30 G09G3/32 H01L25/16 H01L27/15 H01L27/32 H01L51/52 H04N9/12 H04N9/30		
CPC分类号	H01L27/3288 G02F1/13336 G02F1/1345 G02F2201/42 G09G3/20 G09G3/2085 G09G3/2088 G09G3/3208 G09G2300/026 G09G2300/0426 G09G2310/0278 G09G2320/043 G09G2320/048 G09G2360/141 H01L25/167 H01L27/3276 H01L27/3293 H01L51/5203 H01L51/5281 H01L2924/0002 H01L2924/09701 H01L2924/3011 H04N9/12 H04N9/30		
优先权	09/709904 2000-11-10 US		
其他公开文献	EP1332487A2		
外部链接	Espacenet		

摘要(译)

在单个基板上制造平铺显示结构，该单个基板也用作包含电子元件的电路板。在基板上形成电极，在电极上形成显示部分的其余部分。像素元件使用图案化的显示材料，并且仅占据像素结构的一部分。使用特别长的引线将电子元件安装在基板上，以有助于瓷砖的热管理。或者，每个瓦片包括在电路板表面上的鳍片结构，电子元件安装在该鳍片结构上并且不与基板接触。或者，每个瓦片包括安装在基板上的柔性电路板，其一部分远离基板弯曲。电子元件耦合到柔性电路板的这部分，使得元件不与衬底接触以辅助热管理。

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4	Place of search Munich	Date of completion of the search 24 July 2006	Examiner Pusch, C
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