



EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
06.04.2016 Bulletin 2016/14

(51) Int Cl.:
H01L 27/32 ^(2006.01)
G09G 5/10 ^(2006.01)
G09G 3/32 ^(2006.01)

(43) Date of publication A2:
23.03.2016 Bulletin 2016/12

(21) Application number: **15180452.3**

(22) Date of filing: **16.08.2010**

(84) Designated Contracting States:
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO SE SI SK SM TR**

(30) Priority: **11.03.2010 US 722040**

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
10172977.0 / 2 365 529

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(54) **AMOLED DISPLAY WITH OPTICAL FEEDBACK COMPENSATION**

(57) In one aspect, the present invention relates to a display. In one embodiment, the display has a substrate, and a plurality of pixels formed on the substrate and arranged in an array. Each pixel includes a driving transistor and a read-out transistor spatially formed on the substrate, where each transistor has a gate electrode, a drain electrode and a source electrode, an organic light emitting diode (OLED) having a cathode layer, a anode layer

and an emissive layer formed between the cathode layer and the anode layer, and formed over the driving transistor and the read-out transistor such that the anode layer of the OLED is electrically connected to the source electrode of the driving transistor, and a photo sensor having a photosensitive layer formed between the anode layer of the OLED and the source electrode of the read-out transistor.

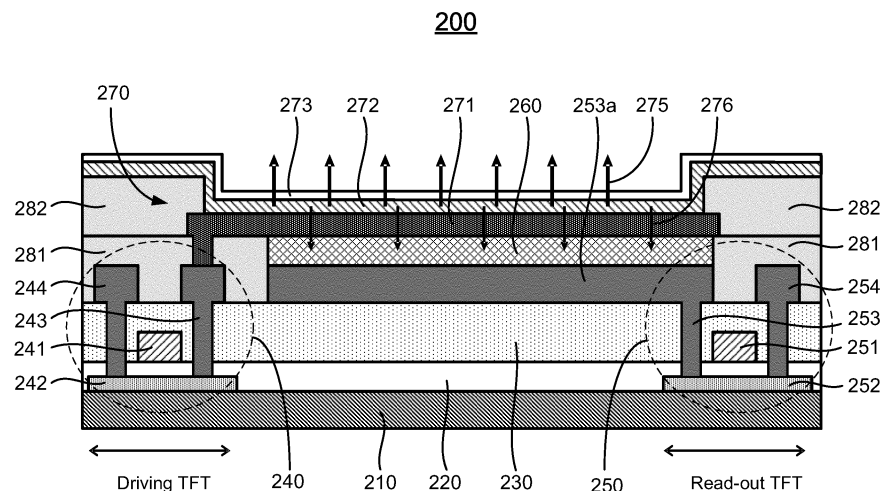


Fig. 2



PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 62a and/or 63 of the European Patent Convention.
This report shall be considered, for the purposes of
subsequent proceedings, as the European search report

EP 15 18 0452

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	US 2005/200293 A1 (NAUGLER W E JR [US] ET AL) 15 September 2005 (2005-09-15) * figures 8-10,13 *	8-10	INV. H01L27/32 G09G3/32 G09G5/10
Y	US 2004/262614 A1 (HACK MICHAEL [US] ET AL) 30 December 2004 (2004-12-30) * paragraphs [0031] - [0048], [0051] - [0061]; figures 1, 3-5 *	8-10	
Y	WO 2004/088627 A1 (KONINKL PHILIPS ELECTRONICS NV [NL]; FISH DAVID A [GB]) 14 October 2004 (2004-10-14) * pages 8-13; figures 2-5 *	8-10	
Y	WO 01/20591 A1 (KONINKL PHILIPS ELECTRONICS NV [NL]) 22 March 2001 (2001-03-22) * figure 3 *	8-10	
A	EP 1 194 013 A1 (EASTMAN KODAK CO [US]) 3 April 2002 (2002-04-03) * figures 2-4 *	8-10	
			TECHNICAL FIELDS SEARCHED (IPC)
			H01L G09G
INCOMPLETE SEARCH			
The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out. Claims searched completely : Claims searched incompletely : Claims not searched : Reason for the limitation of the search: see sheet C			
Place of search		Date of completion of the search	Examiner
Munich		24 February 2016	Bernabé Prieto, A
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			

EPO FORM 1503 03/02 (P04E07)

**INCOMPLETE SEARCH
SHEET C**

Application Number

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Claim(s) completely searchable:
8-10

Claim(s) not searched:
1-7, 11

Reason for the limitation of the search:

As a result of an invitation under Rule 62(a) EPC the applicant has indicated in his letter of reply dated 03.02.16 that the search should be based on claims 8-10. The present opinion is therefore based upon these claims. Other subject-matter must be excised from the application(137(5)EPC).

**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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专利名称(译)	具有光学反馈补偿的Amoled显示器		
公开(公告)号	EP2998996A3	公开(公告)日	2016-04-06
申请号	EP2015180452	申请日	2010-08-16
[标]申请(专利权)人(译)	友达光电股份有限公司		
申请(专利权)人(译)	友达光电股份有限公司		
当前申请(专利权)人(译)	友达光电股份有限公司		
[标]发明人	KUO TZU YIN TSAI TSUNG TING		
发明人	KUO, TZU-YIN TSAI, TSUNG-TING		
IPC分类号	H01L27/32 G09G3/32 G09G5/10		
CPC分类号	G09G3/3258 G09G5/10 H01L27/3269		
代理机构(译)	LANG , CHRISTIAN		
优先权	12/722040 2010-03-11 US		
其他公开文献	EP2998996B1 EP2998996A2		
外部链接	Espacenet		

摘要(译)

在一个方面，本发明涉及一种显示器。在一个实施例中，显示器具有基板，以及形成在基板上并以阵列布置的多个像素。每个像素包括驱动晶体管 and 空间上形成在基板上的读出晶体管，其中每个晶体管具有栅电极，漏电极和源电极，具有阴极层的有机发光二极管（OLED），阳极层在所述阴极层与所述阳极层之间形成发光层，并形成在所述驱动晶体管和所述读出晶体管上方，使得所述OLED的阳极层与所述驱动晶体管的源极电连接，以及光电传感器具有在OLED的阳极层和读出晶体管的源极之间形成的光敏层。

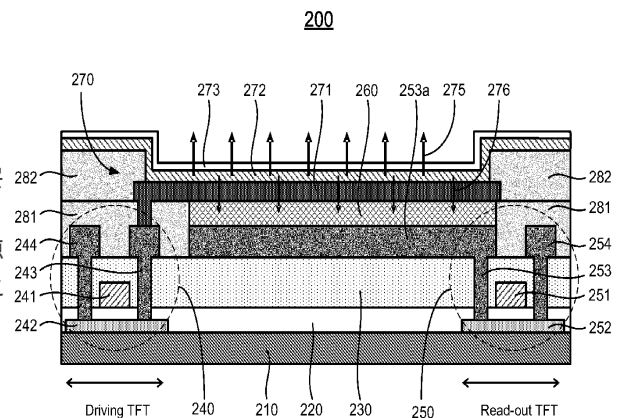


Fig. 2