



(11) **EP 2 749 937 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
07.10.2015 Bulletin 2015/41

(51) Int Cl.:
G02F 1/13357^(2006.01) G02F 1/1333^(2006.01)
G02F 1/1335^(2006.01)

(43) Date of publication A2:
02.07.2014 Bulletin 2014/27

(21) Application number: **14152738.2**

(22) Date of filing: **22.02.2011**

(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 RS SE SI SK SM TR

(72) Inventors:
• **Wang, Chung-Min Hsin-Chu (TW)**
• **Chang, Chia-Hsin Hsin-Chu (TW)**
• **Wang, Ping-Fu Hsin-Chu (TW)**
• **Tsai, Chia-Chang Hsin-Chu (TW)**

(30) Priority: **10.11.2010 US 943285**

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
11155503.3 / 2 453 301

(74) Representative: **Lang, Christian LangPatent**
Anwaltskanzlei IP Law Firm
Rosenheimer Strasse 139
81671 München (DE)

(71) Applicant: **AU Optronics Corporation Hsin-Chu (TW)**

(54) **Liquid crystal display with backlight frame structure**

(57) In one aspect of the present invention, an LCD includes a front frame having a flange and a rear cover having a flange defining a housing therebetween, a liquid crystal (LC) panel placed in the housing, a backlight positioned between the LC panel and the rear cover, and a backlight frame having a first engaging structure configured to receive the flanges of the front frame and the rear cover, and a second engaging structure configured to retain the backlight and the LC panel in the housing.

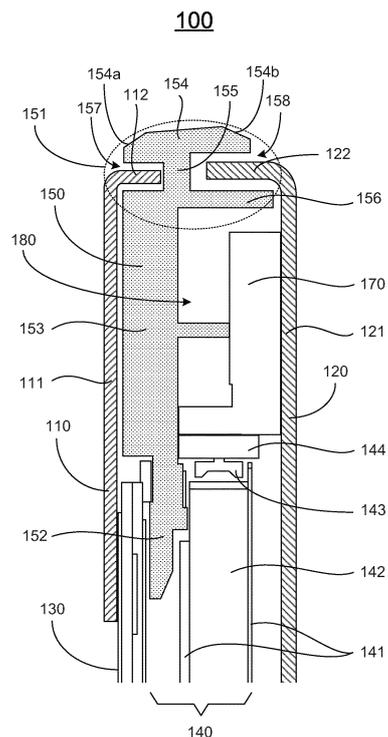


Fig. 1

EP 2 749 937 A3



EUROPEAN SEARCH REPORT

Application Number
EP 14 15 2738

5

10

15

20

25

30

35

40

45

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 2010/171897 A1 (YUN SU-YOUNG [KR] ET AL) 8 July 2010 (2010-07-08) * paragraphs [0030] - [0032], [0039], [0054]; figures 1,2 *	1-12	INV. G02F1/13357 G02F1/1333 G02F1/1335
A	WO 2010/004794 A1 (SHARP KK [JP]; HAMADA TETSUYA) 14 January 2010 (2010-01-14) * paragraphs [0028] - [0036]; figure 1 *	1-12	
			TECHNICAL FIELDS SEARCHED (IPC)
			G02F
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 28 August 2015	Examiner Aichmayr, Günther
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	

4
EPO FORM 1503 03.82 (P04C01)

4

50

55

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

EP 14 15 2738

5

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.

28-08-2015

10

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2010171897 A1	08-07-2010	KR 20100081499 A US 2010171897 A1	15-07-2010 08-07-2010
-----	-----	-----	-----
WO 2010004794 A1	14-01-2010	CN 102057209 A US 2011096569 A1 WO 2010004794 A1	11-05-2011 28-04-2011 14-01-2010
-----	-----	-----	-----

15

20

25

30

35

40

45

50

55

EPO FORM P0469

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	具有背光框架结构的液晶显示器		
公开(公告)号	EP2749937A3	公开(公告)日	2015-10-07
申请号	EP2014152738	申请日	2011-02-22
[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	WANG CHUNG MIN CHANG CHIA HSIN WANG PING FU TSAI CHIA CHANG		
发明人	WANG, CHUNG-MIN CHANG, CHIA-HSIN WANG, PING-FU TSAI, CHIA-CHANG		
IPC分类号	G02F1/13357 G02F1/1333 G02F1/1335		
CPC分类号	G02F1/133308 G02F1/133305 G02F1/133615 G02F2001/133314 G02F2001/133317 G02F2001/13332 G02F2001/133322		
代理机构(译)	LANG , CHRISTIAN		
优先权	12/943285 2010-11-10 US		
其他公开文献	EP2749937A2 EP2749937B1		
外部链接	Espacenet		

摘要(译)

在本发明的一个方面，LCD包括具有凸缘的前框架和具有在其间限定壳体的凸缘的后盖，布置在壳体中的液晶（LC）面板，位于LC面板和后盖，以及背光框架，其具有被配置为接收前框架和后盖的凸缘的第一接合结构，以及被配置为将背光和LC面板保持在壳体中的第二接合结构。

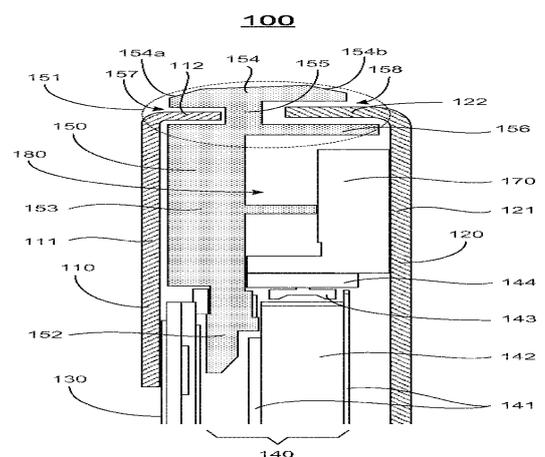


Fig. 1