

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,P	WO 2014/146752 A1 (MERCK PATENT GMBH [DE]) 25 September 2014 (2014-09-25) * pages 37 - 38, compounds 87, 93; pages 67 - 70, compounds S1 - S8; page 83 85, compounds S64 - S68; claims *	1,2,6-12	INV. C09K11/06 C07C255/58 C07D209/86 H01L51/50
X	EP 2 039 737 A2 (FUJIFILM CORP [JP]) 25 March 2009 (2009-03-25) * claims; examples *	1-9,11, 12	
Y		10	
Y	HIROKI UOYAMA ET AL: "Highly efficient organic light-emitting diodes from delayed fluorescence", NATURE, vol. 492, no. 7428, 12 December 2012 (2012-12-12), pages 234-238, XP55048388, ISSN: 0028-0836, DOI: 10.1038/nature11687 * the whole document *	10	
			TECHNICAL FIELDS SEARCHED (IPC)
			C07C C09K H01L
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 The Hague		Date of completion of the search 25 September 2017	Examiner Zervas, Brigitte
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.**

EP 15 75 5183

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.

25-09-2017

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 2014146752	A1	25-09-2014	CN 105051014 A	11-11-2015
			EP 2976329 A1	27-01-2016
			JP 2016516085 A	02-06-2016
			KR 20150132872 A	26-11-2015
			US 2016072076 A1	10-03-2016
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			EP 2039737 A2	25-03-2009
			JP 5624270 B2	12-11-2014
			JP 2009094486 A	30-04-2009
			US 2009072727 A1	19-03-2009

专利名称(译)	发光材料，有机发光元件和化合物		
公开(公告)号	EP3112439A4	公开(公告)日	2017-11-01
申请号	EP2015755183	申请日	2015-02-25
申请(专利权)人(译)	KYULUX, INC.		
当前申请(专利权)人(译)	KYULUX, INC.		
[标]发明人	TANEDA MASATSUGU SHIZU KATSUYUKI TANAKA HIROYUKI NODA HIROKI NAKANOTANI HAJIME ADACHI CHIHAYA		
发明人	TANEDA MASATSUGU SHIZU KATSUYUKI TANAKA HIROYUKI NODA HIROKI NAKANOTANI HAJIME ADACHI CHIHAYA		
IPC分类号	C09K11/06 C07C255/58 C07D209/86 H01L51/50		
CPC分类号	C07C255/58 C07D209/86 C09K11/06 C09K2211/1007 C09K2211/1014 C09K2211/1029 C09K2211/1033 C09K2211/1037 C09K2211/1044 H01L51/0059 H01L51/0072 H01L51/5012		
优先权	2014037719 2014-02-28 JP		
其他公开文献	EP3112439A1		
外部链接	Espacenet		

摘要(译)

由通式(1)表示的化合物可用作发光材料。R1, R3和R5各自表示氟基, 或R1, R2, R4和R5各自表示氟基; R1至R6中的其他基团各自表示由以下通式(4)中的任一个表示的基团等。

DOCUMENTS CONSIDERED TO BE RELEVANT		Relevant to claim:	CLASSIFICATION OF THE APPLICATION (IPC)
X, P	NO 2014/146752 A1 (MERCK PATENT GMBH [DE]) 25 September 2014 (2014-09-25) pages 37 - 38, compounds 87, 93; pages 67 - 70, compounds 51 - 58; page 63, compounds 564 - 568; claims *	1, 2, 6-12	INV. C09K11/06 C07C255/58 C07D209/86 H01L51/50
X	EP 2 829 237 A2 (FUJIFILM CORP [JP]) 25 March 2009 (2009-03-25) * claims; examples *	1-9, 11, 12, 10	
Y	HIROKI HOYAMA ET AL: "highly efficient organic light-emitting diodes from delayed fluorescence". NATURE, vol. 482, no. 7428, 12 December 2012 (2012-12-12), pages 234-238, XP55048358, ISSN: 0028-0836, DOI: 10.1038/nature11687 * the whole document * ----	10	TECHNICAL FIELD (IPC) C07C C09K H01L

The supplementary search report has been based on the text set out above, valid as at the start of the examination.

NO OF PAGES	NO OF DOCUMENTS OF THE REPORT	CLASSIFICATION
1	25	Zervos, Brigitte

CATEGORY OF CITED DOCUMENTS

1: Disclosed or otherwise underlying the invention or
2: Disclosed or otherwise underlying the invention or
3: Disclosed or otherwise underlying the invention or
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5: Disclosed or otherwise underlying the invention or
6: Disclosed or otherwise underlying the invention or
7: Disclosed or otherwise underlying the invention or
8: Member of the same patent family, corresponding document