

SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application Number
EP 15 77 7273

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	US 2011/278555 A1 (INOUE TETSUYA [JP] ET AL) 17 November 2011 (2011-11-17) * paragraphs [0226] - [0279] * -----	1-10	INV. C09K11/06 H01L27/32 H01L51/54
			TECHNICAL FIELDS SEARCHED (IPC)
			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 Munich		Date of completion of the search 23 October 2017	Examiner Wolfbauer, Georg
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			

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

EP 15 77 7273

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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23-10-2017

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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		WO 2011132683 A1	27-10-2011
		WO 2011132684 A1	27-10-2011

专利名称(译)	多组分主体材料和包含其的有机电致发光器件		
公开(公告)号	EP3129446A4	公开(公告)日	2017-11-29
申请号	EP2015777273	申请日	2015-04-07
[标]申请(专利权)人(译)	罗门哈斯电子材料有限公司		
申请(专利权)人(译)	罗门哈斯电子材料KOREA LTD.		
当前申请(专利权)人(译)	罗门哈斯电子材料KOREA LTD.		
[标]发明人	AHN HEE CHOON KIM YOUNG KWANG MOON DOO HYEON LEE SU HYUN LEE SEON WOO KIM CHI SIK PARK KYOUNG JIN KIM NAM KYUN CHOI KYUNG HOON SHIM JAE HOON CHO YOUNG JUN LEE KYUNG JOO		
发明人	AHN, HEE-CHOON KIM, YOUNG-KWANG MOON, DOO-HYEON LEE, SU-HYUN LEE, SEON-WOO KIM, CHI-SIK PARK, KYOUNG-JIN KIM, NAM-KYUN CHOI, KYUNG-HOON SHIM, JAE-HOON CHO, YOUNG-JUN LEE, KYUNG-JOO		
IPC分类号	C09K11/06 H01L27/32 H01L51/54		
CPC分类号	H01L51/0072 C09K11/025 C09K11/06 C09K2211/1007 C09K2211/1011 C09K2211/1029 C09K2211/1033 C09K2211/1037 C09K2211/1044 C09K2211/1059 C09K2211/1088 C09K2211/1092 C09K2211/185 H01L51/0052 H01L51/0058 H01L51/0067 H01L51/0071 H01L51/0073 H01L51/0074 H01L51/0085 H01L51/0094 H01L51/5016 H01L2251/5384		
代理机构(译)	霍顿MARK PHILLIP		
优先权	1020150042704 2015-03-26 KR 1020140041844 2014-04-08 KR 1020140086754 2014-07-10 KR		
其他公开文献	EP3129446A1		
外部链接	Espacenet		
摘要(译)			

本发明涉及一种有机电致发光器件，其包括在阳极和阴极之间的至少一个发光层，其中所述发光层包含主体和磷光掺杂剂;宿主由多组分宿主化合物组成;所述多组分主体化合物的至少第一主体化合物是含有芳基的特定双咔唑衍生物，第二主体化合物是包含含氮杂芳基的特定咔唑衍生物。根据本发明，与使用单组分主体化合物的常规装置相比，使用多组分主体化合物的有机电致发光装置具有高效率 and 长寿命。



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Category	Relevant to claim	Classification of the application (IPC)
X	US 2011/278555 A1 (INOUE TETSUYA [JP] ET AL) 17 November 2011 (2011-11-17) * paragraphs [0026] - [0079] *	1-10 INT. C09K11/06 H01L51/52 H01L51/54
		TECHNICAL PROBLEMS SOLVED (IPC)
		H01L
The 3rd figure of the present report has been drawn on the basis of the 3rd figure of the present report.		
1		
Munich 23 October 2017 Wolfbauer, Georg		
CATEGORY OF CITED DOCUMENTS		
1. Priority or foreign patenting the invention		
2. Known prior art, of which the invention is based on, or		
3. Known prior art, of which the invention is based on, or		
4. Document cited for other reasons		
5. Document cited for other reasons		
6. Document cited for other reasons		
7. Document cited for other reasons		
8. Document cited for other reasons		