

SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application Number
EP 14 87 5046

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
	No further relevant documents disclosed -----		INV. H01L51/54 ADD. H01L51/50
			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 2 August 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			

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EPO FORM 1503 03.82 (P04C04)

专利名称(译)	用于有机电致发光元件的材料和使用其的有机电致发光元件		
公开(公告)号	EP3089230A4	公开(公告)日	2017-09-13
申请号	EP2014875046	申请日	2014-11-05
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IPC分类号	H01L51/50		
CPC分类号	H01L51/008 C07D333/76 C07D409/04 C07D409/08 C07D409/14 C07F5/027 C09K11/025 C09K11/06 C09K2211/1007 C09K2211/1029 C09K2211/185 H01L51/0067 H01L51/0072 H01L51/0074 H01L51/0081 H01L51/0085 H01L51/5016 H01L51/5024 H01L51/5072 H01L51/5096 H01L51/5206 H01L51/5234		
优先权	2013269272 2013-12-26 JP		
其他公开文献	EP3089230A1 EP3089230B1		
外部链接	Espacenet		

摘要(译)

本发明公开了一种有机电致发光器件（有机EL器件），其具有改进的发光效率，足够可靠的驱动稳定性和简单的结构，以及用于有机EL器件的材料。用于有机EL器件的材料包括碳硼烷化合物，其具有其中存在至少一个碳硼烷环和至少一个二苯并噻吩环的结构，并且所述至少一个碳硼烷环在位置1与至少一个二苯并噻吩环键合，此外，有机EL器件包括在层压在基板上的阳极和阴极之间的至少一个有机层，其中所述至少一个有机层包括碳硼烷化合物。

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Category	Selection of documents with indication, where appropriate, of relevant passages		H01L51/54 ADD. H01L51/50
No further relevant documents disclosed			
The JP33389230A search report has been filed on the first day of the search.			
Munich		2 August 2017	Wolfgang, Georg
CATEGORY OF CITED DOCUMENTS:			
1. Document of the same category as the document of the same category		2. Document of the same category as the document of the same category	
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