

SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application Number
EP 15 82 5334

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	JP 2013 163710 A (NISSAN CHEMICAL IND LTD) 22 August 2013 (2013-08-22)	1-4,6-14	INV. H01L51/50 C09K11/06	
Y	* page 4 - page 5; claims 4-7; compound (21) * * page 21, paragraph 61; compounds (24)-(26) * * page 21, paragraph 63 * * page 28, paragraph 94; example 1 * * page 28, paragraph 96; example 2 * * page 29, paragraph 98 - paragraph 99; examples 3-4 * * page 29, paragraph 102 - paragraph 103; examples 5-6 *	5		
A	----- EP 2 339 659 A1 (NISSAN CHEMICAL IND LTD [JP]) 29 June 2011 (2011-06-29) * page 4, paragraph 9 * * page 8, paragraph 22 * * page 37, paragraph 156 *	1-14		
A	----- WO 2012/140905 A1 (PANASONIC CORP [JP]; TAZMO CO LTD [JP]; YOSHIDA KAZUSHI; KUZUOKA YOSHI) 18 October 2012 (2012-10-18) * page 9, paragraph 32 - page 10, paragraph 33 *	1-14		TECHNICAL FIELDS SEARCHED (IPC)
Y	----- WO 2010/058777 A1 (NISSAN CHEMICAL IND LTD [JP]; YOSHIMOTO TAKUJI [JP]; YAMADA TOMOHISA []) 27 May 2010 (2010-05-27)	5		C07D C07C H01L C09K
A	* page 15, paragraph 34 * * page 19, paragraph 40 - paragraph 41 * -----	1-4,6-14		
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 28 November 2017	Examiner Jeanjean, Fabien	
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.**

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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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28-11-2017

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优先权	2014150768 2014-07-24 JP		
其他公开文献	EP3174116A1		
外部链接	Espacenet		

摘要(译)

该电荷输送材料包括电荷输送物质，卤代四氰基喹啉并二甲烷，和包含酰胺化合物如1,3-二甲基-2-咪唑烷酮的络合剂，并且能够与卤素形成络合物 - 四氰基喹啉并二甲烷，其中卤代四氰基喹啉并二甲烷和络合剂形成络合物，使得可以提供具有优异电荷传输性能的薄膜，并且当将所述薄膜应用于孔时实现具有低驱动电压的有机EL元件注入层。

 European Patent Office Patent Office 2015-07-22		SUPPLEMENTARY EUROPEAN SEARCH REPORT		Application Number EP 15 82 5334
DOCUMENTS CONSIDERED TO BE RELEVANT				
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Y	EP 2 339 659 A1 (NISSAN CHEMICAL IND LTD [JP]) 29 June 2011 (2011-06-29) * page 4, paragraph 9 * * page 8, paragraph 22 * * page 37, paragraph 156 *	1-14		
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Y	WO 2010/058777 A1 (NISSAN CHEMICAL IND LTD [JP]; YOSHIMOTO TAKUJI [JP]; YAHADA TORIHIISA [J]) 27 May 2010 (2010-05-27) * page 15, paragraph 34 * * page 15, paragraph 40 - paragraph 41 *	5	1-4,6-14	
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Place of search	Munich		Date of completion of the search	28 November 2017
Examiner	Jeanjean, Fabien			
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