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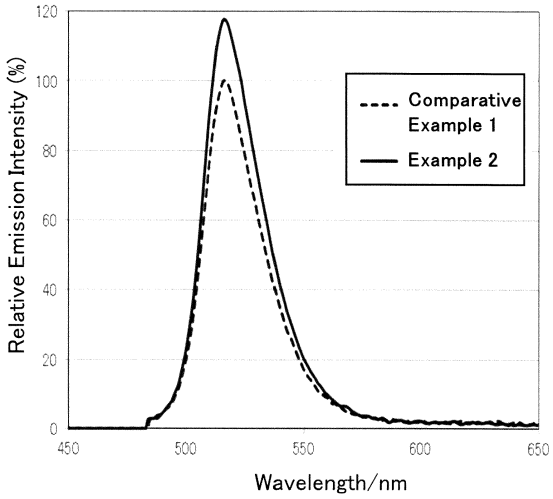
(54) METHOD OF PRODUCING ALUMINATE FLUORESCENT MATERIAL, ALUMINATE FLUORESCENT MATERIAL, AND LIGHT EMITTING DEVICE

(57) Disclosed are a method of producing an aluminate fluorescent material having a high emission intensity, such an aluminate fluorescent material, and a light emitting device. The aluminate fluorescent material production method includes a step of subjecting a first mixture prepared by mixing a compound containing at least one metal element selected from the group consisting of Ba, Sr and Ca, and at least one selected from compound of a compound containing Mn and a compound containing Eu and a compound containing Al, and optionally a compound containing Mg, to a first heat treatment to give a first calcined product having an average particle diameter D1, as measured according to a Fisher Sub-Sieve Sizer method, of 6 μm or more, and a step of subjecting a second mixture prepared by mixing a compound containing at least one metal element selected from the group consisting of Ba, Sr and Ca, at least one compound selected from a compound containing Mn and a compound containing Eu, a compound containing Al, and the first calcined product whose content is 10% by mass or more and 90% by mass or less relative to the total amount of the second mixture, and optionally a compound containing Mg, to a second heat treatment to give a second calcined product.

FIG. 2



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EUROPEAN SEARCH REPORT

Application Number
EP 18 15 1279

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2016/355731 A1 (AOYAGI KENICHI [JP] ET AL) 8 December 2016 (2016-12-08) * claims 1-12; examples 1,2; table 1 * -----	1-9	INV. C09K11/77
X	US 2009/154195 A1 (ISHII TSUTOMU [JP] ET AL) 18 June 2009 (2009-06-18) * claims 1-22; table 4 * -----	10-15	
X	US 2011/006334 A1 (ISHII TSUTOMU [JP] ET AL) 13 January 2011 (2011-01-13) * claims 1-40; examples 2,3,5 * -----	10-15	
X	US 2016/347999 A1 (MORIKAWA MOTOHARU [JP] ET AL) 1 December 2016 (2016-12-01) * claims 1-11 * -----	1-9	
A	EP 2 157 152 A2 (SAMSUNG SDI CO LTD [KR]) 24 February 2010 (2010-02-24) * claims 1-16 * -----	1-15	
A	EP 3 135 746 A1 (NICHIA CORP [JP]) 1 March 2017 (2017-03-01) * paragraphs [0081] - [0082]; claims 1-15 * -----	1-15	TECHNICAL FIELDS SEARCHED (IPC) C09K
A	JIACHI ZHANG ET AL: "The ultraviolet irradiation degradation of fluorescent lamp used BaMgAlO:Eu,Mnphosphor", JOURNAL OF LUMINESCENCE, ELSEVIER BV NORTH-HOLLAND, NL, vol. 132, no. 8, 8 March 2012 (2012-03-08), pages 1949-1952, XP028423190, ISSN: 0022-2313, DOI: 10.1016/J.JLUMIN.2012.03.033 [retrieved on 2012-03-16] * abstract * -----	1-15	

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	28 August 2018	Kövecs, Monika

CATEGORY OF CITED DOCUMENTS

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28-08-2018

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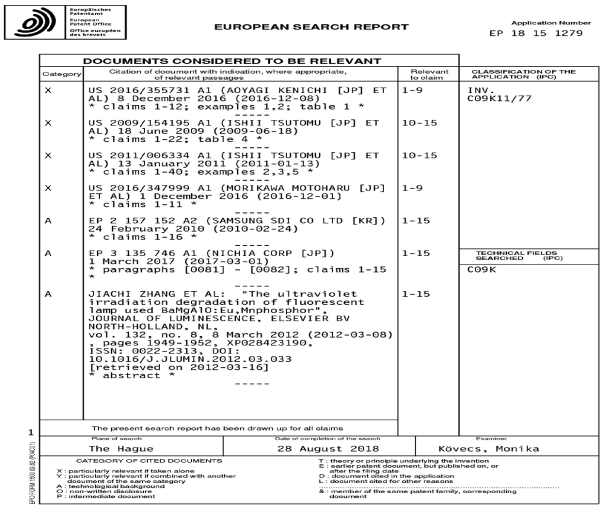
For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	制造铝酸盐荧光材料的方法，铝酸盐荧光材料和发光器件		
公开(公告)号	EP3375839A3	公开(公告)日	2018-10-10
申请号	EP2018151279	申请日	2018-01-11
申请(专利权)人(译)	日亚公司		
当前申请(专利权)人(译)	日亚公司		
[标]发明人	NISHIMATA KAZUYA YOSHIDA TOMOKAZU HOSOKAWA SHOJI		
发明人	NISHIMATA, KAZUYA YOSHIDA, TOMOKAZU HOSOKAWA, SHOJI		
IPC分类号	C09K11/77		
CPC分类号	C09K11/643 C09K11/7734 H01L33/504 C09K11/55 C09K11/57 C09K11/64		
优先权	2017050486 2017-03-15 JP 2017244375 2017-12-20 JP		
其他公开文献	EP3375839A2		
外部链接	Espacenet		

摘要(译)

公开了一种制备具有高发射强度的铝酸盐荧光材料的方法，例如铝酸盐荧光材料和发光器件。铝酸盐荧光材料的制备方法包括对通过混合含有至少一种选自Ba，Sr和Ca的金属元素的化合物和选自含Mn的化合物的化合物中的至少一种制备的第一混合物的步骤。含有Eu的化合物和含有Al的化合物，以及任选的含Mg化合物，进行第一次热处理，得到平均粒径D1的第一煅烧产物，根据Fisher Sub-Sieve Sizer法测量，为6μm或者，对通过混合含有至少一种选自Ba，Sr和Ca的金属元素的化合物，至少一种选自含Mn的化合物和含Eu的化合物的化合物制备的第二混合物的步骤，含有Al的化合物，相对于第二混合物的总量，第一煅烧产物的含量为10质量％以上且90质量％以下，并且可选将含Mg的化合物进行第二次热处理，得到第二煅烧产物。



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