(12)

## **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3: **30.03.2011 Bulletin 2011/13** 

(51) Int Cl.: H01J 61/12 (2006.01) H01J 61/82 (2006.01)

H01J 61/36 (2006.01)

(43) Date of publication A2: **25.07.2007 Bulletin 2007/30** 

(21) Application number: 07001082.2

(22) Date of filing: 18.01.2007

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated Extension States:

AL BA HR MK RS

(30) Priority: 19.01.2006 JP 2006010851

(71) Applicant: USHIODENKI KABUSHIKI KAISHA Chiyoda-ku 100 Tokyo (JP) (72) Inventors:

 Ishikura, Akira Kanzaki-gun, Hyogo-ken (JP)

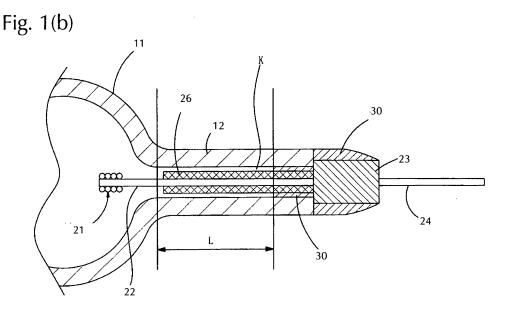
 Nose, Yoshiteru Kanzaki-gun, Hyogo-ken (JP)

(74) Representative: Tomerius, Isabel et al Lang & Tomerius Patentanwälte Landsberger Strasse 300 80687 München (DE)

## (54) Discharge lamp with a mercury - indium iodide fill

(57) The invention relates to a discharge lamp with a bulb (10) made of an arc tube part (11) and hermetically sealing tube parts (12) in the form of rod-like tubes which are integrally adjacent to the arc tube part on two sides, with a pair of electrodes (21) being arranged opposite each other within the arc tube part and mercury as well as indium iodide being filled in the same. An electrode structural body (22) is inserted into each of the hermeti-

cally sealing tube parts in such a way that a gap (K) is present between the electrode structural body and the inside wall of the hermetically sealing tube part. The electrodes (21) are arranged on a respective tip of the electrode structural body (22) in the arc tube part, and an end section of the respective hermetically sealing tube part (12) which is averted from the arc tube is hermetically sealed by means of a hermetically sealing structure (23,30).





## **EUROPEAN SEARCH REPORT**

**Application Number** EP 07 00 1082

	DOCUMENTS CONSID	ERED TO BE R	RELEVANT			
Category	Citation of document with ir of relevant passa		opriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)	
X Y	JP 2005 203177 A (CLIGHTING K) 28 July * the whole documen * paragraphs [0065] [0092]; figures 3a,	/ 2005 (2005-0 it * , [0067],	97-28)	1-4,6-12 5	INV. H01J61/12 H01J61/36 H01J61/82	
Х	US 2004/189212 A1 (AL) 30 September 20 * paragraphs [0034] figures 2,8; tables	004 (2004-09-3 , [0055] -	3Ō) -	1-4,6-10		
Х	US 2004/104677 A1 ( ET AL) 3 June 2004 * paragraphs [0056] [0122]; figures 4,5	(2004-06-03) , [0080] -		1-4,6-10		
Υ	US 6 465 940 B1 (Ik AL) 15 October 2002 * column 4, line 30 figure 2 *	(2002-10-15)	)	5	TECHNICAL FIFL DO	
A	JP 7 240184 A (TOSHIBA LIGHTING & TECHNOLOGY) 12 September 1995 (199 * abstract *			5	TECHNICAL FIELDS SEARCHED (IPC)	
A	JP 62 276740 A (IWA 1 December 1987 (19 * abstract *		C CO LTD)	1		
A	JP 8 115704 A (JAPA LTD) 7 May 1996 (19 * abstract *		TTERY CO	1		
A	JP 2004 213915 A (I 29 July 2004 (2004- * abstract *	RIC CO LTD)	1			
	The present search report has I	·				
Place of search  Munich		Date of completion of the search 21 February 2011		Examiner  Lang, Thomas		
X : parti Y : parti docu A : tech	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone cularly relevant if combined with anothent to the same category nological background		T: theory or principle E: earlier patent document eitled in D: document cited in L: document cited for	underlying the in ument, but publis the application rother reasons	evention hed on, or	
	-written disclosure rmediate document		& : member of the sar document	ne patent family,	corresponding	

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

EP 07 00 1082

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.

21-02-2011

Patent document cited in search report		Publication date	Patent family member(s)	,	Publication date
JP 2005203177	Α	28-07-2005	NONE		
US 2004189212	A1	30-09-2004	EP 1455382	2 A2	08-09-20
US 2004104677	A1	03-06-2004	CN 1490841 EP 1394838		21-04-20 03-03-20
US 6465940	В1	15-10-2002	DE 69921901 DE 69921901 EP 0971043 JP 3528610 JP 2000030662	T2 3 A2 3 B2	23-12-20 03-11-20 12-01-20 17-05-20 28-01-20
JP 7240184	Α	12-09-1995	NONE		
JP 62276740	Α	01-12-1987	NONE		
JP 8115704	Α	07-05-1996	JP 3482713	B2	06-01-20
JP 2004213915	Α	29-07-2004	NONE		

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