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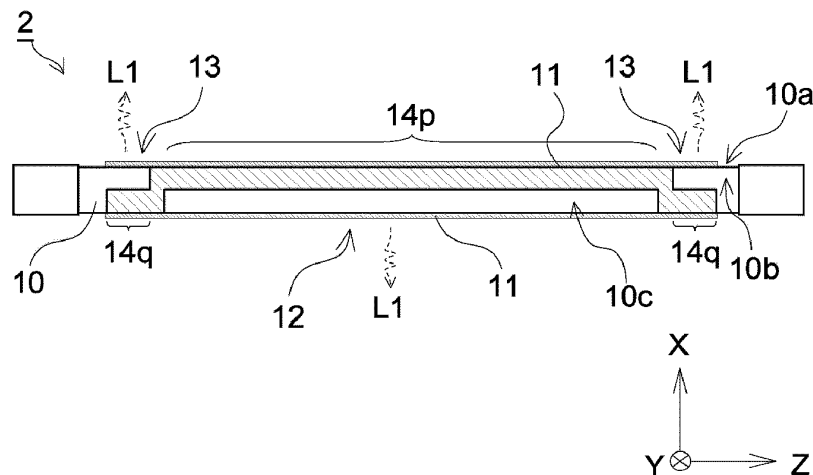
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(54) **EXCIMER LAMP AND LIGHT IRRADIATION DEVICE INCLUDING THE SAME**

(57) An excimer lamp (2) includes a long light-emitting tube (10) transparent to ultraviolet light, a pair of electrodes (11) disposed separately along the radial direction of the light-emitting tube (10), and a reflective coating (14) formed on the inner wall surface (10b) of the light-emitting tube (10). The reflective coating (14) includes a first reflective area (14p) facing a light-emitting surface (12) that emits light toward a light irradiation target area, and a second reflective area (14q) facing a light-collecting area (13) disposed at a position different from the light-emitting surface (12).

FIG. 15





EUROPEAN SEARCH REPORT

Application Number

EP 21 15 9519

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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 2009 117148 A (USHIO ELECTRIC INC) 28 May 2009 (2009-05-28) * abstract * * paragraphs [0017] - [0025]; figures 1,2 *	1-5	INV. H01J61/16 F21V7/00 F21V23/04 H01J61/35 H01J65/04
X	US 2009/096377 A1 (MIZOJIRI TAKAFUMI [JP] ET AL) 16 April 2009 (2009-04-16) * abstract * * paragraphs [0034] - [0065]; figures 1-3 *	1-4	
X	JP 2010 055971 A (USHIO ELECTRIC INC) 11 March 2010 (2010-03-11) * abstract * * paragraphs [0015] - [0029]; figures 1,2 *	1-4	
X	JP 2015 056303 A (USHIO ELECTRIC INC) 23 March 2015 (2015-03-23) * abstract * * paragraphs [0001] - [0005], [0016] - [0041]; figures 1,3 *	1-6	TECHNICAL FIELDS SEARCHED (IPC) H01J F21V
X	JP 2013 098015 A (USHIO ELECTRIC INC) 20 May 2013 (2013-05-20) * abstract * * paragraphs [0013] - [0024]; figures 1-4 *	1-3, 6	

The present search report has been drawn up for all claims

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Place of search Munich	Date of completion of the search 7 April 2022	Examiner Lang, Thomas
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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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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

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Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

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No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

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LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

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see sheet B

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All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

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As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

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Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

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None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

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The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).

LACK OF UNITY OF INVENTION
SHEET BApplication Number
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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

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1. claims: 1-5

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An excimer lamp comprising: a long light-emitting tube transparent to ultraviolet light, the light-emitting tube having a light-emitting surface that emits the light toward a light irradiation target area; a pair of electrodes disposed separately along the radial direction of the light-emitting tube; a reflective coating formed on the inner wall surface of the light-emitting tube; and a light-collecting area disposed on the wall surface of the light-emitting tube; wherein the reflective coating includes a first reflective area facing the light-emitting surface, and a second reflective area facing the light-collecting area disposed at a position different from the light-emitting surface (claim 1); wherein the light-collecting area is formed on the opposite surface of the light-emitting surface (claim 3).

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2. claim: 6

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A light irradiation device comprising the excimer lamp according to any one of claims 1 to 5; and a light sensor including a light-receiving part and having a light-receivable area, the light sensor for detecting the light incident on the light-receiving part, wherein the light sensor is disposed such that the light-receivable area of the light-receiving part is included in the light-collecting area.

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

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5 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.

07-04-2022

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