

Title (en)
Long-life excimer radiator, processes for manufacturing and for increasing the life of such a radiator and device for implementing said last process

Title (de)
Langlebiger Excimerstrahler, Verfahren zu seiner Herstellung und zur Lebensdauerverlängerung sowie Vorrichtung zur Durchführung des letztgenannten Verfahrens

Title (fr)
Source de rayonnement à excimer à longue durée de vie, son procédé de fabrication et procédé pour l'allongement de sa durée de vie ainsi qu'un dispositif pour la mise en oeuvre de ce dernier procédé

Publication
EP 0800201 B1 20000920 (DE)

Application
EP 97105297 A 19970327

Priority
DE 19613502 A 19960404

Abstract (en)
[origin: EP0800201A2] In an excimer emitter with a halogen-containing gas-filled discharge space, the halogen content of the discharge space (16) is $\geq 1 \times 10^{-10}$, preferably $1 \times 10^{-10} - 1 \times 10^{-5}$ mol/cm³ per cm² of its interior surface and is also adjusted in accordance with the maximum power density (in W/cm of emitter length) of the emitter (11) to a value of $1 \times 10^{-7} - 1 \times 10^{-5}$ mol/cm³ per unit power density. Also claimed are: (i) the production of a long life excimer emitter as above, in which the interior surfaces of the discharge space (16) are exposed to a halogen-containing passivating gas, preferably chlorine, prior to gas filling; (ii) a process for extending the life of an excimer emitter, having a halogen-containing gas-filled discharge space, by exposing the discharge space (16) to IR radiation or by releasing halogen from a halogen reservoir (17) located in the discharge space (16); and (iii) an apparatus for carrying out the above processes (i) and (ii).

IPC 1-7
H01J 61/12; **H01J 65/04**

IPC 8 full level
G21K 5/00 (2006.01); **H01J 61/12** (2006.01); **H01J 61/70** (2006.01); **H01J 65/00** (2006.01); **H01J 65/04** (2006.01); **H01S 3/036** (2006.01); **H01S 3/225** (2006.01)

CPC (source: EP US)
H01J 61/12 (2013.01 - EP US); **H01J 61/70** (2013.01 - EP US)

Cited by
EP1009016A1; WO2012110074A1; WO2006086942A3

Designated contracting state (EPC)
CH DE GB IT LI NL

DOCDB simple family (publication)
EP 0800201 A2 19971008; **EP 0800201 A3 19980128**; **EP 0800201 B1 20000920**; DE 19613502 A1 19971009; DE 19613502 C2 19980709; DE 59702367 D1 20001026; JP 4004590 B2 20071107; JP H1051081 A 19980220; US 5889367 A 19990330

DOCDB simple family (application)
EP 97105297 A 19970327; DE 19613502 A 19960404; DE 59702367 T 19970327; JP 8346997 A 19970402; US 83228197 A 19970403