

Title (en)
HIGH INTENSITY DISCHARGE LAMP WITH SINGLE CRYSTAL SAPPHIRE ENVELOPE

Title (de)
HOCHINTENSITÄTSENTLADUNGSLAMPE MIT EINKRISTALL-SAPHIRHÜLLE

Title (fr)
LAMPE A DECHARGE A HAUTE INTENSITE A ENVELOPPE EN SAPHIR MONOCRISTALLIN

Publication
EP 1470569 A1 20041027 (EN)

Application
EP 02707608 A 20020128

Priority
US 0202566 W 20020128

Abstract (en)
[origin: WO03030212A1] A high intensity discharge lamp constructed with a tubular envelope composed of single crystal sapphire (100) in which a continuous non-flash arc is created across multiple electrodes (207, 209) to generate a radiation emitting plasma. The lamp may operate at higher temperatures and pressures than conventional high intensity discharge lamps to produce greater luminance at any given power output. A wide range of gases and additives may be chosen. The lamp is a small powerful light source, has a longer effective life, and maintains a selected color temperature over the live of the lamp. The lamp may be operated without electrodes utilizing microwave or radio frequency radiation as a power source.

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H01J 61/88

IPC 8 full level
H01J 61/88 (2006.01); **H01J 61/30** (2006.01); **H01J 61/36** (2006.01); **H01J 61/86** (2006.01); **H01J 65/04** (2006.01)

CPC (source: EP)
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WO 03030212 A1 20030410; CA 2465786 A1 20030410; EP 1470569 A1 20041027; EP 1470569 A4 20071017; JP 2005527935 A 20050915

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