

Title (en)

MICROWAVE EXCITED LIGHTING DEVICE USING AN ELECTRON CYCLOTRON RESONANCE PHENOMENA

Title (de)

MIKROWELLENERREGTE BELEUCHTUNGSEINRICHTUNG MIT EINEM ELEKTRONENZYKLOTRONRESONANZPHÄNOMEN

Title (fr)

DISPOSITIF D'ECLAIRAGE EXCITE PAR MICRO-ONDES UTILISANT LE PHENOMENE DE RESONANCE CYCLOTRONIQUE D'ELECTRONS

Publication

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Application

EP 06778782 A 20060705

Priority

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Abstract (en)

[origin: WO2007006918A1] The invention relates to a microwave-excited lightening device (1) using an electron cyclotron resonance phenomena (ECR) for generating light (L) comprising a microwave generating means (2, 3), at least one cavity (6) provided with microwave-tight walls for confining the microwaves, wherein at least one cavity (6) wall is transparent to the light (L), the light (L) concave-shaped reflector is provided for directing said light to the cavity wall transparent to the light (L), at least one plasma-containing enclosure (4) arranged inside the cavity (6) comprises at least one permanent magnet (5), wherein the enclosure(s), cavity(ies), magnet(s) and the microwave generating means are arranged in such a way that the ECR is generated inside the enclosure(s) for transmitting the light (L) and the device is constructed in such a way that each enclosure is placed immediately near at least one permanent magnet.

IPC 8 full level

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CPC (source: EP)

H01J 65/044 (2013.01)

Citation (search report)

See references of WO 2007006918A1

Citation (third parties)

Third party :

- WO 9605600 A1 19960222 - RUXAM INC [US]
- US 6327338 B1 20011204 - GOLOVANIVSKY KONSTANTIN S [FR], et al
- US 5461656 A 19951024 - GOLOVANIVSKY KONSTANTIN S [FR], et al

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