

Title (en)  
BULB HAVING INTERIOR SURFACE COATED WITH RARE EARTH OXIDE

Title (de)  
KOLBEN MIT SELTENERDOXYD-BESCHICHTETE INNENOberFLÄCHE

Title (fr)  
BULBE A REVETEMENT INTERIEUR EN OXYDE DE METAL DE TERRES RARES

Publication  
**EP 1138054 A1 20011004 (EN)**

Application  
**EP 99965809 A 19991112**

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Abstract (en)  
[origin: WO0030142A1] A lamp bulb (1) includes a light transmissive envelope (2), a fill material disposed inside the envelope including a rare earth metal which forms a plasma discharge when excited, and a coating (3) disposed on an interior surface of the envelope which inhibits reaction between the plasma discharge and the envelope (2), wherein the coating (3) comprises an oxide of the same rare earth metal of the fill material. A process for coating the interior of a lamp bulb envelope (2) includes preparing a sol gel solution having a precursor of the desired coating, introducing the sol gel solution into a lamp preform, distributing the sol gel along an interior surface of the bulb, and drying and firing the sol gel to obtain the coated bulb.

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**H01J 17/16**; **H01J 17/20**

IPC 8 full level  
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CPC (source: EP KR)  
**H01J 9/20** (2013.01 - EP); **H01J 61/35** (2013.01 - EP KR); **H01J 65/04** (2013.01 - EP)

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