

Title (en)

LAMP BULB, LAMP BULB WITH REFLECTING MIRROR, AND LIGHTING SYSTEM

Title (de)

LAMPENBIRNE, LAPENBIRNE MIT REFLEXIONSSPIEGEL UND BELEUCHTUNGSSYSTEM

Title (fr)

AMPOULE DE LAMPE, AMPOULE DE LAMPE AVEC MIROIR REFLECHISSANT ET SYSTEME D'ECLARAGE

Publication

**EP 1722400 A1 20061115 (EN)**

Application

**EP 05806860 A 20051115**

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- JP 2004331537 A 20041116
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- JP 2005193386 A 20050701

Abstract (en)

To make a filament assembly compact and improve converging efficiency, a lamp to be built into a reflection mirror or a reflection-mirror-equipped lamp of the present invention includes a filament assembly including a plurality of filament elements each formed with a single wound coil. A central filament element is placed such that a coil axis thereof is the same as an optical axis of the reflection mirror, and peripheral filament elements are placed such that winding axes thereof are parallel to the coil axis of the central filament element. An outline of each filament element is substantially noncircular. Also, to improve central luminance and light distribution properties,  $0.2 \leq L_S / L_C \leq 0.9$  is satisfied, where  $L_C$  is a length of the central filament element and  $L_S$  is a length of the peripheral filament element. Further, to realize a long life,  $0.25 \leq r/R \leq 0.75$  is satisfied, where  $R$  is a maximum inner diameter of the bulb and  $r$  is a maximum outer diameter of the filament assembly.

IPC 8 full level

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CPC (source: EP)

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