

Title (en)

Heater with visible light reducing optical film

Title (de)

Heizelement mit optischer Beschichtung zur Reduzierung des sichtbaren Lichts

Title (fr)

Dispositif de chauffage avec film optique pour réduction de la lumière visible

Publication

**EP 2924713 A1 20150930 (EN)**

Application

**EP 14183059 A 20140901**

Priority

JP 2014062091 A 20140325

Abstract (en)

A heater (1) includes a bulb (2), a filament (3), gas (4), and a multilayer film (5). The filament (3) is arranged along a tube axis on an inside (2a) of the bulb (2). The gas (4) is filled in the inside (2a) of the bulb (2). The multilayer film (5) is formed on an outer surface (2b) of the bulb (2). Average visible ray transmittance at a wavelength of 380 nm to 780 nm of the multilayer film (5) is equal to or lower than 24%. In the filament (3), a plurality of projecting sections (31a) projecting to an inner wall (2c) of the bulb (2) when viewed from the tube axis direction are formed in a circumferential direction and the tube axis direction.

IPC 8 full level

**H01K 1/14** (2006.01); **H01K 1/18** (2006.01); **H01K 1/32** (2006.01); **H05B 3/00** (2006.01); **H05B 3/44** (2006.01)

CPC (source: EP)

**H01K 1/14** (2013.01); **H01K 1/18** (2013.01); **H01K 1/325** (2013.01); **H05B 3/0033** (2013.01)

Citation (search report)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2924713 A1 20150930**; JP 2015185442 A 20151022

DOCDB simple family (application)

**EP 14183059 A 20140901**; JP 2014062091 A 20140325