

Title (en)

A lighting unit having a lamp and a reflector.

Title (de)

Beleuchtungseinheit mit Lampe und Reflektor.

Title (fr)

Unité d'éclairage comprenant une lampe et un réflecteur.

Publication

**EP 0460913 A2 19911211 (EN)**

Application

**EP 91305037 A 19910604**

Priority

JP 14448690 A 19900604

Abstract (en)

The lighting unit of the present invention is composed of a lamp (11) having a first interference multi-layer, filter as the first film (25) and a reflector (31) having a second interference multi-layer filter as the second film (35). The first interference multi-layer filter forms a visible light transparency/ infrared-ray reflecting film and the second interference multi-layer filter forms a infrared-ray transmitting/ visible light reflecting film. Both the first interference multi-layer filter and the second interference multi-layer filter are likely to cause the range of wavelength of light transmitting and light reflecting to vary from the specific range. Therefore both the first film (25) and the second film (35) have means for preventing the above described variation (thickness varying according to the position of the films (25) and (35)). <IMAGE>

IPC 1-7

**F21V 7/22; F21V 9/00; F21V 9/04; H01K 1/32**

IPC 8 full level

**F21S 8/10** (2006.01); **F21V 7/22** (2006.01); **F21V 9/00** (2006.01); **F21V 9/04** (2006.01); **F21V 13/08** (2006.01); **G02B 5/28** (2006.01); **H01K 1/32** (2006.01); **H01K 7/00** (2006.01)

CPC (source: EP KR US)

**F21S 41/13** (2017.12 - EP); **F21S 41/37** (2017.12 - EP); **F21V 7/06** (2013.01 - KR); **F21V 7/22** (2013.01 - EP US); **F21V 9/00** (2013.01 - EP US); **H01K 1/32** (2013.01 - EP US)

Cited by

EP0986093A1; CN104641172A; US6578990B2; EP0886102A3; US5548182A; EP1614960A1; CN102939500A; EP0752156A4; ITTV20100105A1; US2013154466A1; US9431231B2; US8016468B2; WO9410590A1; WO2014046808A1; WO02067024A1; WO2006110379A3; WO2005029537A3; WO2012014044A1; US7244049B2; US7345427B2; US9702519B2; EP2612346B1; WO2007078665A1; WO2011141377A1

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

**EP 0460913 A2 19911211; EP 0460913 A3 19920826**; JP H0439854 A 19920210; KR 920001123 A 19920130; KR 930007438 B1 19930810

DOCDB simple family (application)

**EP 91305037 A 19910604**; JP 14448690 A 19900604; KR 910009144 A 19910603