

Title (en)

VARIABLE INDEX FILM FOR TRANSPARENT HEAT MIRRORS.

Title (de)

FILM MIT VARIABLEM BRECHUNGSINDEX FÜR TRANSPARENTE WÄRMESPIEGEL.

Title (fr)

FILM A INDICE VARIABLE POUR MIROIRS THERMIQUES TRANSPARENTS.

Publication

EP 0197931 A1 19861022 (EN)

Application

EP 84904237 A 19841025

Priority

US 66258184 A 19841023

Abstract (en)

[origin: WO8602775A1] A heat mirror film (12) for placement on a lamp envelope (10) in the form of an etalon or Fan-Bachner heat mirror. At least one of the layers of dielectric material of the heat mirror (12) is fabricated from a material having a non-constant index of refraction which index decreases significantly as infrared radiation frequencies are approached, thus increasing reflection at infrared frequencies as compared to a dielectric having a constant index of refraction. Such dielectrics may include semiconductors, such as indium tin oxide and heavily doped lanthanum hexaboride.

[origin: WO8602775A1] Heat mirror comprises at least one layer of highly conductive material thin enough to transmit visible light and thick enough to reflect IR and at least one dielectric layer having an index of refraction which increases in the IR range so that the dielectric causes phase matching in the visible range and mismatching in the IR range. The mirror is pref. an etalon of a dielectric layer sandwiched between layers of highly conductive material. -

Abstract (fr)

Film de miroir thermique (12) destiné à être placé sur l'enveloppe d'une ampoule (10), sous la forme d'un miroir thermique étalon ou Fan-Bachner. Au moins l'une des couches du matériau diélectrique du miroir thermique (12) se compose d'un matériau possédant un indice de réfraction non constant, qui décroît sensiblement au voisinage des fréquences de rayonnement infrarouge, augmentant ainsi la réflexion aux fréquences infrarouges par rapport à un diélectrique possédant un indice de réfraction constant. De tels diélectriques peuvent comprendre des semi-conducteurs, tels que l'oxyde d'étain-indium et l'hexaborure de lanthane fortement dopé.

IPC 1-7

H01K 1/26; **G02B 5/26**

IPC 8 full level

G02B 5/28 (2006.01); **H01K 1/32** (2006.01)

CPC (source: EP)

G02B 5/282 (2013.01); **H01K 1/325** (2013.01)

Designated contracting state (EPC)

AT BE CH DE FR GB LI NL SE

DOCDB simple family (publication)

WO 8602775 A1 19860509; AU 3615884 A 19860515; EP 0197931 A1 19861022; EP 0197931 A4 19880427; JP S62501109 A 19870430

DOCDB simple family (application)

US 8401734 W 19841025; AU 3615884 A 19841025; EP 84904237 A 19841025; JP 50411984 A 19841025