

Title (en)

OPTICAL WAVELENGTH FILTERING STRUCTURE AND ASSOCIATED IMAGE SENSOR

Title (de)

OPTISCHE WELLENLÄNGENFILTERSTRUKTUR UND ASSOZIIERTER BILDSENSOR

Title (fr)

STRUCTURE DE FILTRAGE OPTIQUE EN LONGUEUR D'ONDE ET CAPTEUR D'IMAGES ASSOCIÉ

Publication

EP 2347290 A1 20110727 (FR)

Application

EP 09736973 A 20091020

Priority

- EP 2009063750 W 20091020
- FR 0857157 A 20081022

Abstract (en)

[origin: WO2010046369A1] The invention relates to an optical filtering structure made up of at least two adjacent elementary optical filters, one elementary optical filter being centred on an optimum transmission frequency, characterized in that it comprises a stack of n metal layers (m1-m3) and n-1 dielectric layers (d2-d3), each metal layer alternating with a dielectric layer in such a way that the central layer of the stack is a metal layer (m2), each of the layers of the stack having a constant thickness with the exception of the central metal layer, the variable thickness of which sets the optimum transmission frequency of an elementary filter. Application to miniature image sensors.

IPC 8 full level

G02B 5/20 (2006.01); **H01L 27/146** (2006.01)

CPC (source: EP US)

G02B 5/201 (2013.01 - EP US); **G02B 5/288** (2013.01 - EP US); **H01L 27/14621** (2013.01 - EP US); **H01L 27/14645** (2013.01 - EP US)

Citation (search report)

See references of WO 2010046369A1

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

FR 2937425 A1 20100423; **FR 2937425 B1 20101231**; EP 2347290 A1 20110727; US 2011204463 A1 20110825; US 8675280 B2 20140318; WO 2010046369 A1 20100429

DOCDB simple family (application)

FR 0857157 A 20081022; EP 09736973 A 20091020; EP 2009063750 W 20091020; US 200913124007 A 20091020