

Title (en)

DIFFRACTION GRATING AND METHOD FOR THE PRODUCTION THEREOF

Title (de)

BEUGUNGSGITTER UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)

RÉSEAU DE DIFFRACTION ET PROCÉDÉ DE FABRICATION

Publication

**EP 2820453 A1 20150107 (DE)**

Application

**EP 13708714 A 20130225**

Priority

- DE 102012101555 A 20120227
- EP 2013053715 W 20130225

Abstract (en)

[origin: WO2013127741A1] A diffraction grating (10) is specified, comprising: a substrate (1); a grating area (3) having, in a direction running parallel to the substrate (1), a periodic arrangement of first areas (31) with a first grating material and second areas (32) with a second grating material, wherein the first grating material and the second grating material are solid materials with different indices of refraction; and a reflection-reducing or reflection-increasing layer system (4) having at least two layers (41, 42) with different indices of refraction, wherein the reflection-reducing or reflection-increasing layer system (4) is arranged on one side of the grating area (3) facing away from the substrate (1), and an additional layer system (2) having at least two layers (21, 22) with different indices of refraction is arranged between the substrate (1) and the grating area (3). A method for producing the diffraction grating (10) is also specified.

IPC 8 full level

**G02B 1/11** (2015.01); **G02B 5/18** (2006.01)

CPC (source: EP US)

**B05D 5/061** (2013.01 - US); **G02B 1/115** (2013.01 - EP US); **G02B 5/0833** (2013.01 - EP US); **G02B 5/18** (2013.01 - EP US);  
**G02B 5/1847** (2013.01 - US); **G02B 5/1861** (2013.01 - US); **G02B 5/1866** (2013.01 - US); **B05D 2350/30** (2013.01 - US);  
**G02B 2005/1804** (2013.01 - US)

Citation (search report)

See references of WO 2013127741A1

Citation (examination)

- US 2007290607 A1 20071220 - OKADA NAOTADA [JP], et al
- US 2005275944 A1 20051215 - WANG JIAN J [US], et al

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)

**DE 102012101555 A1 20130829**; **DE 102012101555 B4 20131224**; EP 2820453 A1 20150107; US 2015022893 A1 20150122;  
WO 2013127741 A1 20130906

DOCDB simple family (application)

**DE 102012101555 A 20120227**; EP 13708714 A 20130225; EP 2013053715 W 20130225; US 201314381535 A 20130225