Title (en)

DEVICE AND METHOD FOR ALTERING AN ELECTROMAGNETIC RADIATION FIELD IN THE OPTICAL SPECTRAL RANGE IN PARTICULAR A LASER RADIATION FIELD

Title (de)

VORRICHTUNG UND VERFAHREN ZUR VERÄNDERUNG EINES ELEKTROMAGNETISCHEN STRAHLUNGSFELDES DES OPTISCHEN SPEKTRALBEREICHS, INSBESONDERE EINES LASERSTRAHLUNGSFELDES

Title (fr)

DISPOSITIF ET PROCEDE POUR MODIFIER UN CHAMP DE RAYONNEMENT ELECTROMAGNETIQUE DU DOMAINE SPECTRAL OPTIQUE, EN PARTICULIER UN CHAMP DE RAYONNEMENT LASER

Publication

EP 1834196 A1 20070919 (DE)

Application

EP 04804427 A 20041230

Priority

EP 2004014842 W 20041230

Abstract (en)

[origin: WO2006074681A1] The invention relates to a device for altering the intensity distribution of a laser radiation field, comprising two substrates (3, 4) with differing refractive indices (n₂, n₃) and with two opposed, mutually corresponding optical functional boundary surfaces (5, 6), which are at least partly curved. The laser radiation field for altering can pass serially through the optical functional boundary surfaces (5, 6), whereby the difference (?n) in the refractive indices (n₂, n₃) of the first and second substrate (3, 4) is less than 0.1 and the cavity (9), between the first optical functional boundary surface (5) and the second optical functional boundary surface (6) is embodied such that the laser radiation, on propagation from the first substrate (3) into the second substrate (4), is essentially subjected to one refraction on the basis of the difference (?n) in the refractive indices (n₂, n₃) of the first and second substrate (3, 4).

IPC 8 full level

G02B 3/00 (2006.01); **B23K 26/064** (2014.01)

CPC (source: EP US)

G02B 19/0014 (2013.01 - EP US); **G02B 19/0052** (2013.01 - EP US); **G02B 26/0875** (2013.01 - EP US); **G02B 27/0927** (2013.01 - EP US); **G02B 27/095** (2013.01 - EP US)

Citation (examination)

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- See also references of WO 2006074681A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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