Title (en)

ARRANGEMENT FOR TRANSFORMING AN OPTICAL RADIATION FIELD

Title (de)

ANORDNUNG ZUR TRANSFORMATION EINES OPTISCHEN STRAHLUNGSFELDS

Title (fr)

ENSEMBLE POUR LA TRANSFORMATION D'UN CHAMP DE RAYONNEMENT OPTIQUE

Publication

EP 1651994 A2 20060503 (DE)

Application

EP 04763076 A 20040702

Priority

- EP 2004007219 W 20040702
- DE 10331442 A 20030710

Abstract (en)

[origin: WO2005006054A2] The invention relates to a system for transforming an optical radiation field propagating in a z direction and comprising a symmetrical beam radiation parameter product in x and y directions into a radiation field having an asymmetrical product of beam parameters by means of a transformation optics, wherein the x, y and z directions forming an orthogonal co-ordinate system. The inventive arrangement is characterised in that the radiation field is first and foremost segmented into at least two partial radiation fields by the transformation optics in the y direction by the transformation optics, and said partial radiation fields are offset in the y direction by the transformation optics in such a way that the centres of gravity thereof is located on a line which is perpendicular with respect to the line where the centres of gravity of the partial radiation fields are situated before entering the transformation optics. Said arrangement is also characterised in that the radiation field is first and foremost segmented into at least two partial radiation fields by the transformation optics in the y direction, said transformation optics turns said partial radiation fields to 90 DEG around the axis Z respectively and the partial radiation fields after being exposed to rotation are put together into a line in the direction y.

IPC 1-7

G02B 27/09

IPC 8 full level

G02B 27/09 (2006.01)

CPC (source: EP)

G02B 27/09 (2013.01); G02B 27/0927 (2013.01); G02B 27/0972 (2013.01)

Citation (search report)

See references of WO 2005006054A2

Citation (examination)

- DE 4438368 A1 19960509 FRAUNHOFER GES FORSCHUNG [DE]
- US 4530565 A 19850723 MARKLE DAVID A [US]
- WO 9014316 A1 19901129 NAT RES DEV [GB]

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

WO 2005006054 A2 20050120; **WO 2005006054 A3 20051124**; DE 10331442 A1 20050203; DE 10331442 B4 20080306; EP 1651994 A2 20060503

DOCDB simple family (application)

EP 2004007219 W 20040702; DE 10331442 A 20030710; EP 04763076 A 20040702