

Title (en)

ARRANGEMENT FOR PROJECTING AN IMAGE ONTO A PROJECTION SURFACE AND ASSOCIATED TRANSFORMATION LENS SYSTEM

Title (de)

ANORDNUNG ZUM PROJIZIEREN EINES BILDES AUF EINE PROJEKTIONSFLÄCHE UND ZUGEHÖRIGE TRANSFORMATIONSOPTIK

Title (fr)

ENSEMBLE POUR PROJETER UNE IMAGE SUR UNE SURFACE DE PROJECTION ET OPTIQUE DE TRANSFORMATION ASSOCIÉE

Publication

EP 1554890 A1 20050720 (DE)

Application

EP 03773658 A 20031021

Priority

- DE 10249338 A 20021022
- EP 0311653 W 20031021

Abstract (en)

[origin: WO2004039084A1] The invention relates to an arrangement for projecting an image, which is made of pixels, onto a projection surface, comprising at least one light source whose intensity can be altered and which emits a light beam, also comprising a deflection device which deflects the light beam onto the projection surface, and a two-stage transformation lens system which is arranged between the deflection device and the projection surface. The invention also relates to optical systems for adjusting the angle of an incident light beam by means of a two-stage transformation lens. The invention is characterised in that the transformation lens system (109) is made up of two partial systems having positive refractive power such that when seen in the direction of the propagation of the light, the entrance pupil (EP) is arranged in front of the first lens apex (2) of the transformation lens system (109) and the exit pupil (AP) of the transformation lens system is arranged between the lens apex of the last lens (14) and the projection surface (121), and a diaphragm (111) is arranged inside the exit pupil (AP).

IPC 1-7

H04N 9/31; **G02B 13/16**; **G02B 27/00**

IPC 8 full level

G02B 13/16 (2006.01); **G02B 26/12** (2006.01); **G02B 27/00** (2006.01)

CPC (source: EP US)

G02B 13/16 (2013.01 - EP US); **G02B 26/125** (2013.01 - EP US); **G02B 27/0031** (2013.01 - EP US)

Citation (search report)

See references of WO 2004039084A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 2004039084 A1 20040506; AU 2003282043 A1 20040513; DE 10249338 A1 20040519; EP 1554890 A1 20050720; US 2005264879 A1 20051201; US 7347567 B2 20080325

DOCDB simple family (application)

EP 0311653 W 20031021; AU 2003282043 A 20031021; DE 10249338 A 20021022; EP 03773658 A 20031021; US 53245405 A 20050422