

Title (en)

FIBER AMPLIFIED BASED LIGHT SOURCE FOR SEMICONDUCTOR INSPECTION

Title (de)

AUF FASERVERSTÄRKUNG BASIERTE LICHTQUELLE ZUR PRÜFUNG VON HALBLEITERN

Title (fr)

SOURCE DE LUMIERE A BASE D'UN AMPLIFICATEUR DE FIBRE SERVANT A CONTROLER DES SEMI-CONDUCTEURS

Publication

EP 1782510 A4 20100407 (EN)

Application

EP 05813080 A 20050816

Priority

- US 2005028993 W 20050816
- US 60454004 P 20040825
- US 5685505 A 20050211

Abstract (en)

[origin: WO2006023448A2] A laser illuminator for use in an inspection system, such as a semiconductor wafer inspection system or photomask inspection system is provided. The gain medium in the illuminator comprises optical fiber, and amplification, beam splitting, frequency and/or bandwidth conversion, peak power reduction, and q-switching or mode locking may be employed. Certain constructs including doped fiber, gratings, saturable absorbers, and laser diodes are disclosed to provide enhanced illumination.

IPC 8 full level

H01S 3/03 (2006.01); **G01N 21/95** (2006.01)

CPC (source: EP)

G01N 21/8806 (2013.01); **H01S 3/06708** (2013.01); **H01S 3/06754** (2013.01); **H01S 3/2383** (2013.01); **G01N 21/9501** (2013.01); **G02B 6/02347** (2013.01); **G02B 6/02366** (2013.01); **H01S 3/005** (2013.01); **H01S 3/0057** (2013.01); **H01S 3/06729** (2013.01); **H01S 3/06741** (2013.01); **H01S 3/06745** (2013.01); **H01S 3/06791** (2013.01); **H01S 3/094007** (2013.01); **H01S 3/094019** (2013.01); **H01S 3/09415** (2013.01); **H01S 3/1118** (2013.01)

Citation (search report)

- [X] US 2003008448 A1 20030109 - KAFKA JAMES D [US], et al
- [X] US 6014249 A 20000111 - FERMANN MARTIN E [US], et al
- [A] JP 2003008115 A 20030110 - MITSUBISHI CABLE IND LTD
- See references of WO 2006023448A2

Cited by

CN106644391A

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 2006023448 A2 20060302; **WO 2006023448 A3 20061019**; EP 1782510 A2 20070509; EP 1782510 A4 20100407; EP 2369695 A2 20110928; EP 2369695 A3 20120208; EP 2369695 B1 20131113; JP 2008511177 A 20080410; JP 5255838 B2 20130807

DOCDB simple family (application)

US 2005028993 W 20050816; EP 05813080 A 20050816; EP 11001760 A 20050816; JP 2007529941 A 20050816