

Title (en)  
IRRADIATION APPARATUSES

Title (de)  
BESTRAHLUNGSVORRICHTUNGEN

Title (fr)  
APPAREIL ET PROCEDE DE MODIFICATION DE DIODES ELECTROLUMINESCENTES

Publication  
**EP 1697681 A2 20060906 (EN)**

Application  
**EP 04812644 A 20041201**

Priority

- US 2004040182 W 20041201
- US 72625703 A 20031202
- US 86923504 A 20040616
- US 86923604 A 20040616
- US 86923704 A 20040616

Abstract (en)  
[origin: WO2005057670A2] A radiation modifying apparatus comprises a plurality of solid state radiation sources to generate radiation that modifies a first material such as by curing or creating alignment through polarization. The solid state radiation sources can be disposed in an array pattern. Optical concentrators, arranged in a corresponding array pattern, receive radiation from corresponding solid state radiation sources. The concentrated radiation is received by a plurality of optical waveguides, also arranged in a corresponding array pattern. Each optical waveguide includes a first end to receive the radiation and a second end to output the radiation. The radiation modifying apparatus can be utilized for continuous substrate, sheet, piece part, spot curing, and/or 3D radiation-cure processes.

IPC 8 full level  
**F21K 99/00** (2016.01); **F21L 2/00** (2006.01); **G02B 6/06** (2006.01); **G02B 6/42** (2006.01); **G03F 7/20** (2006.01); **H01L 33/32** (2010.01); **H01L 33/48** (2010.01); **H01L 33/58** (2010.01); **H01L 33/62** (2010.01); **H01L 33/64** (2010.01); **A61C 19/00** (2006.01); **G02B 6/36** (2006.01)

CPC (source: EP KR)  
**F21V 29/80** (2015.01 - EP); **G02B 6/06** (2013.01 - EP); **G02B 6/42** (2013.01 - KR); **G02B 6/4249** (2013.01 - EP); **G02B 6/43** (2013.01 - KR); **G03F 7/70391** (2013.01 - EP); **A61C 19/004** (2013.01 - EP); **G02B 6/3644** (2013.01 - EP); **G02B 6/3668** (2013.01 - EP); **G02B 6/3672** (2013.01 - EP); **G02B 6/368** (2013.01 - EP); **G02B 6/3885** (2013.01 - EP); **G02B 6/4206** (2013.01 - EP); **G02B 6/4219** (2013.01 - EP)

Citation (search report)  
See references of WO 2005057670A2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2005057670 A2 20050623; WO 2005057670 A3 20051103**; BR PI0417172 A 20070306; BR PI0417183 A 20070306; BR PI0417190 A 20070306; EP 1690302 A2 20060816; EP 1697681 A2 20060906; EP 1697682 A2 20060906; JP 2007512954 A 20070524; JP 2007515270 A 20070614; JP 2007521622 A 20070802; KR 20060115910 A 20061110; KR 20060115911 A 20061110; KR 20060121264 A 20061128; MX PA06006279 A 20060825; MX PA06006280 A 20060825; MX PA06006281 A 20060825; WO 2005057669 A2 20050623; WO 2005057669 A3 20070208; WO 2005057671 A2 20050623; WO 2005057671 A3 20051201

DOCDB simple family (application)  
**US 2004040182 W 20041201**; BR PI0417172 A 20041201; BR PI0417183 A 20041201; BR PI0417190 A 20041201; EP 04812483 A 20041201; EP 04812644 A 20041201; EP 04812660 A 20041201; JP 2006542662 A 20041201; JP 2006542701 A 20041201; JP 2006542703 A 20041201; KR 20067013233 A 20060630; KR 20067013235 A 20060630; KR 20067013236 A 20060630; MX PA06006279 A 20041201; MX PA06006280 A 20041201; MX PA06006281 A 20041201; US 2004039962 W 20041201; US 2004040201 W 20041201