Title (en)

LIGHT GUIDE SYSTEM FOR EXTRACTING LIGHT WITH CONTROLLED OUTPUT

Title (de)

LICHTLEITSYSTEM ZUM EXTRAHIEREN VON LICHT MIT KONTROLLIERTER AUSGABE

Title (fr)

GUIDE D'ONDES LUMINEUSES POUR L'EXTRACTION DE LUMIÈRE CONTRÔLÉE

Publication

EP 2384455 A2 20111109 (EN)

Application

EP 09809010 A 20091231

Priority

- US 2009006763 W 20091231
- US 31917109 A 20090102
- US 31917209 A 20090102

Abstract (en)

[origin: WO2010077363A1] A flat panel display uses pixels (2060) that are turned on or off by the enabling or disabling total internal reflection, TIR, of a light guide (2010). A reflective surface (2070) directs the switched light towards the viewer. An optional mask may be employed to provide extremely high contrast ratios in low and in high ambient lighting conditions. The elements (2080) that enable TIR may be enabled quickly because of their small size and weight, resulting in a very fast switching speed. The fast switching speed allows colors to be generated and displayed in a sequential manner.

IPC 8 full level

G02F 1/19 (2006.01); **G02B 26/08** (2006.01); **G09G 3/34** (2006.01)

CPC (source: EP KR)

G02B 6/0051 (2013.01 - KR); **G02B 6/0068** (2013.01 - KR); **G02F 1/195** (2013.01 - EP KR); **G09G 3/2014** (2013.01 - KR); **G09G 3/3413** (2013.01 - KR); **G09G 3/3473** (2013.01 - EP KR); G02B 6/0051 (2013.01 - EP); G02B 6/0068 (2013.01 - EP); G09G 3/2014 (2013.01 - EP); G09G 3/3413 (2013.01 - EP); G09G 2310/0235 (2013.01 - EP KR)

Citation (search report)

See references of WO 2010077367A2

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DOCDB simple family (publication)

WO 2010077363 A1 20100708; CN 102341748 A 20120201; CN 102395922 A 20120328; EP 2384454 A1 20111109; EP 2384455 A2 20111109; JP 2012514761 A 20120628; JP 2012514835 A 20120628; KR 20110139193 A 20111228; KR 20110139194 A 20111228; WO 2010077367 A2 20100708; WO 2010077367 A3 20101028

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US 2009006757 W 20091231; CN 200980156270 A 20091231; CN 200980156272 A 20091231; EP 09799444 A 20091231; EP 09809010 A 20091231; JP 2011544418 A 20091231; JP 2011544420 A 20091231; KR 20117018088 A 20091231; KR 20117018090 A 20091231; US 2009006763 W 20091231