

Title (en)
ILLUMINATED LIGHT BOX WITH LIGHT-EMITTING DIODES

Title (de)
BELEUCHTETER LEUCHTKASTEN MIT LEUCHTDIODEN

Title (fr)
BOITE A LUMIERE A DIODES ELECTROLUMINESCENTES

Publication
EP 1794631 A1 20070613 (FR)

Application
EP 05794596 A 20050906

Priority
• EP 2005054378 W 20050906
• FR 0410270 A 20040928

Abstract (en)
[origin: WO2006034943A1] The invention concerns an illuminated light box designed in particular for backlighting liquid crystal displays, the box comprising: a light guide (62) in the form of a thin plate having two opposite main faces (64, 66) and at least two edges (B1, B4), the guide having on one of its faces a light-diffusing optical structure (70); light-emitting diodes (Lnm) arranged linearly along at least one of the edges of the light guide, the light emitted by the light-emitting diodes, illuminating the guide through the edge, being diffused through the face of the guide comprising the optical structure. The light-emitting diodes arranged along each of the edges of the guide are organized into at least two rows (Rb1 to Rb8) such that one light-emitting diode (Lnm) of a row powered by an electric power source (S1 to S8) is immediately followed by a light-emitting diode (L(n+1)m) of the other row powered by another electric power source.

IPC 8 full level
G02B 6/00 (2006.01)

CPC (source: EP US)
G02F 1/133603 (2013.01 - EP US); **H05B 45/20** (2020.01 - US); **H05B 45/22** (2020.01 - US); **H05B 45/32** (2020.01 - EP)

Citation (search report)
See references of WO 2006034943A1

Citation (examination)
• US 2004119908 A1 20040624 - SAKAI SEIJI [JP]
• US 2006056178 A1 20060316 - LEN-LI KEVIN L [MY], et al

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DOCDB simple family (publication)
FR 2875993 A1 20060331; **FR 2875993 B1 20061208**; BR PI0516198 A 20080826; CA 2581593 A1 20060406; CA 2581593 C 20140708; EP 1794631 A1 20070613; RU 2007116159 A 20081110; RU 2416811 C2 20110420; US 2008062116 A1 20080313; US 8215818 B2 20120710; WO 2006034943 A1 20060406

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