

Title (en)
DISPLAYS WITH DIRECT-LIT BACKLIGHT UNITS

Title (de)
ANZEIGEN MIT DIREKTBELEUCHTETEN RÜCKBELEUCHTUNGSEINHEITEN

Title (fr)
DISPOSITIFS D'AFFICHAGE À UNITÉS DE RÉTROÉCLAIRAGE À ÉCLAIRAGE DIRECT

Publication
EP 3532894 A1 20190904 (EN)

Application
EP 18705757 A 20180129

Priority
• US 201762466492 P 20170303
• US 201715819085 A 20171121
• US 2018015776 W 20180129

Abstract (en)
[origin: WO2018160304A1] An array of pixels in a display may be illuminated by a backlight having an array (36) of light-emitting diodes (38) in an array of respective cells. A reflector (68) is used to reflect light from the light-emitting diodes (38) through the array of pixels. Within the cells, the reflector (68) has cross-sectional profiles that help distribute light (80) emitted from the light-emitting diodes (38) toward edges of the cells. A light diffuser layer (34) for the backlight may have a partially reflective layer (96) such as a thin-film interference filter with an angularly dependent transmission. Within each cell, the reflector (68) may have cross-sectional profiles with portions that are parabolic or elliptical.

IPC 8 full level
G02F 1/1335 (2006.01)

CPC (source: CN EP KR US)
G02F 1/133603 (2013.01 - CN KR US); **G02F 1/133605** (2013.01 - CN EP KR US); **G02F 1/133606** (2013.01 - CN KR US); **G02F 1/133611** (2013.01 - KR US); **G02F 1/133614** (2021.01 - KR); **G02F 1/13362** (2013.01 - US); **G02F 1/133603** (2013.01 - EP); **G02F 1/133606** (2013.01 - EP); **G02F 1/133607** (2021.01 - CN); **G02F 1/133611** (2013.01 - EP); **G02F 1/133612** (2021.01 - CN); **G02F 1/133614** (2021.01 - EP US)

Citation (search report)
See references of WO 2018160304A1

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Designated extension state (EPC)
BA ME

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DOCDB simple family (application)
US 2018015776 W 20180129; CN 201810173014 A 20180302; CN 201820290529 U 20180302; EP 18705757 A 20180129; JP 2019528578 A 20180129; KR 20197015267 A 20180129