

Title (en)

DISPLAY DEVICE HAVING A LIQUID CRYSTAL DISPLAY AND METHOD FOR PROTECTING A LIQUID CRYSTAL DISPLAY

Title (de)

ANZEIGEVORRICHTUNG MIT EINEM FLÜSSIGKRISTALLDISPLAY UND VERFAHREN ZUM SCHÜTZEN EINES FLÜSSIGKRISTALLDISPLAYS

Title (fr)

DISPOSITIF D'AFFICHAGE POURVU D'UN ÉCRAN À CRISTAUX LIQUIDES ET PROCÉDÉ DESTINÉ À PROTÉGER UN ÉCRAN À CRISTAUX LIQUIDES

Publication

EP 2724190 A1 20140430 (DE)

Application

EP 12734841 A 20120621

Priority

- DE 102011105689 A 20110622
- EP 2012061959 W 20120621

Abstract (en)

[origin: WO2012175609A1] The invention relates to a display device (1) having a liquid crystal display (2), which display device can be a heads-up display, for example, and to a method for protecting the liquid crystal display (2). The display device (1) comprises a liquid crystal display (2) for displaying an image, a sensor system (5) for detecting the illuminance of an incident optical radiation (3) and for determining the current position of the sun relative to the liquid crystal display (2), an adjustable shading device for protecting the liquid crystal display (2) from the incident optical radiation (3), and a control unit (8). The control unit (8) is designed to check if the illuminance detected by the sensor system (5) is above a predefined threshold value and if the current position of the sun is in a predefined angle range, and to control the shading device according to a result of said check in such a way that the shading device interrupts a beam path (14) of a part of the optical radiation (3) incident on the liquid crystal display (2).

IPC 8 full level

G02B 27/01 (2006.01); **G09G 3/36** (2006.01); **G09G 5/00** (2006.01)

CPC (source: EP US)

G02B 27/0149 (2013.01 - EP US); **G02F 1/13306** (2013.01 - US); **G02B 2027/0156** (2013.01 - EP US); **G09G 3/001** (2013.01 - EP US); **G09G 3/36** (2013.01 - EP US); **G09G 2330/045** (2013.01 - EP US); **G09G 2360/144** (2013.01 - EP US); **G09G 2380/10** (2013.01 - EP US)

Citation (search report)

See references of WO 2012175609A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

DE 102011105689 A1 20121227; **DE 102011105689 B4 20181115**; EP 2724190 A1 20140430; US 2014132852 A1 20140515; US 9612463 B2 20170404; WO 2012175609 A1 20121227

DOCDB simple family (application)

DE 102011105689 A 20110622; EP 12734841 A 20120621; EP 2012061959 W 20120621; US 201214127367 A 20120621