

Title (en)

METHOD OF DETERMINING THE PRETILT ANGLE IN A LIQUID-CRYSTAL CELL

Title (de)

VERFAHREN ZUR BESTIMMUNG DES VORNEIGUNGSWINKELS IN EINER FLÜSSIGKRISTALLZELLE

Title (fr)

PROCEDE D'EVALUATION DE L'ANGLE DE PRE-TILT DANS UNE CELLULE A CRISTAUX LIQUIDES

Publication

**EP 2089758 A1 20090819 (FR)**

Application

**EP 07822738 A 20071120**

Priority

- EP 2007062561 W 20071120
- FR 0610401 A 20061128

Abstract (en)

[origin: WO2008065025A1] To determine the tilt angle  $\theta$  in a twisted nematic liquid-crystal cell, the transmission of the cell is calculated as a function of the angle of incidence  $\alpha$  of a light ray of given wavelength  $\lambda$  using the apparent values of the thickness  $d$  of the cell cavity, the extraordinary index  $n_e$  and the twist angle  $\phi$ . To obtain a plurality of simulation curves  $Sim_1$ ,  $Sim_2$ , one per given pretilt angle  $\theta$ , the transmission curve  $M(C)$  as a function of the angle of incidence of the cell along the  $YY'$  axis, passing through the high T and low B positions of the cell, is measured for the light ray of wavelength  $\lambda$ , using a contrast measurement device, and the coincidence of this measurement curve with one among the plurality of simulation curves gives the pretilt angle of this cell.

IPC 8 full level

**G02B 11/26** (2006.01); **G02F 1/13** (2006.01)

CPC (source: EP US)

**G02F 1/1309** (2013.01 - EP US)

Citation (search report)

See references of WO 2008065025A1

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 LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**FR 2909193 A1 20080530; FR 2909193 B1 20081226**; EP 2089758 A1 20090819; US 2010045992 A1 20100225; US 7855787 B2 20101221; WO 2008065025 A1 20080605

DOCDB simple family (application)

**FR 0610401 A 20061128**; EP 07822738 A 20071120; EP 2007062561 W 20071120; US 51642807 A 20071120