

Title (en)

SUPERTWISTED NEMATIC LIQUID CRYSTAL DISPLAYS, LIQUID CRYSTAL COMPOSITIONS AND COMPOUNDS

Title (de)

SUPERTWIST-NEMATISCH FLÜSSIGKRISTALLANZEIGEN ,FLÜSSIGKRISTALLZUSAMMENSETZUNGEN-UND VERBINDUNGEN

Title (fr)

AFFICHAGES A CRISTAUX LIQUIDES NEMATIQUES EN HELICE, COMPOSITIONS ET COMPOSES DE CRISTAUX LIQUIDES

Publication

**EP 1261679 A1 20021204 (EN)**

Application

**EP 00987402 A 20001214**

Priority

- EP 00987402 A 20001214
- DE 10009234 A 20000228
- EP 0012732 W 20001214
- EP 00104080 A 20000228

Abstract (en)

[origin: WO0164814A1] The invention relates to supertwist liquid-crystal displays (STN-LCDs) having short switching times and good steepnesses and angle dependencies, and to the novel nematic liquid-crystal mixtures used therein, which comprise compounds of formula (A) together with compounds of formula (IB), wherein R<3>, R<4>, L<1>, L<2>, m, Y<1>, Y<2> and W have the meanings given in the text and to compounds of formula (IA).

IPC 1-7

**C09K 19/42**; C09K 19/46; C09K 19/04; C09K 19/34; C07D 319/06; C07D 239/26; C07D 333/04; C07D 333/78

IPC 8 full level

**G02F 1/133** (2006.01); **C07D 239/26** (2006.01); **C07D 319/06** (2006.01); **C07D 333/04** (2006.01); **C07D 333/38** (2006.01); **C07D 333/78** (2006.01); **C09K 19/04** (2006.01); **C09K 19/20** (2006.01); **C09K 19/30** (2006.01); **C09K 19/34** (2006.01); **C09K 19/42** (2006.01); **C09K 19/44** (2006.01); **C09K 19/46** (2006.01)

CPC (source: EP)

**C07D 239/26** (2013.01); **C07D 319/06** (2013.01); **C07D 333/04** (2013.01); **C07D 333/38** (2013.01); **C07D 333/78** (2013.01); **C09K 19/0403** (2013.01); **C09K 19/34** (2013.01); **C09K 19/42** (2013.01); **C09K 19/46** (2013.01)

Citation (search report)

See references of WO 0164814A1

Citation (examination)

- WO 8908102 A1 19890908 - SECR DEFENCE BRIT [GB]
- EP 0919536 A1 19990602 - DAINIPPON INK & CHEMICALS [JP]
- GRAY G.W. ET AL: "The synthesis and transition temperatures of some fluoro-substituted 4-cyanophenyl and 4-cyanobiphenyl-4'-yl 4-pentyl- and 4-butoxy-benzoates", MOLECULAR CRYSTALS AND LIQUID CRYSTALS, vol. 172, 1989, XP000050356

Cited by

DE10235340B4

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

**WO 0164814 A1 20010907**; AU 2365601 A 20010912; CN 1248033 C 20060329; CN 1437647 A 20030820; EP 1261679 A1 20021204; JP 2003525474 A 20030826; JP 5236140 B2 20130717

DOCDB simple family (application)

**EP 0012732 W 20001214**; AU 2365601 A 20001214; CN 00819217 A 20001214; EP 00987402 A 20001214; JP 2001564304 A 20001214