

Title (en)
LIQUID CRYSTAL MATERIALS

Title (de)
FLÜSSIGKRISTALLMATERIALIEN

Title (fr)
MATERIAUX POUR CRISTAUX LIQUIDES

Publication
EP 0946672 A1 19991006 (EN)

Application
EP 97939250 A 19970911

Priority
• KR 9700169 W 19970911
• US 71539396 A 19960912

Abstract (en)
[origin: WO9811173A1] Chiral liquid crystalline compounds of Formula (1): $R<1>- (A')a-2<1>- (A<2>)b-(2<2>)c-(A<3>)d-R<2>$ are particularly useful in a ferroelectric liquid crystal display device. These cyclic-containing compounds are chiral and contain lateral substituents. The compounds exhibit a low temperature smectic C phase and have a broad smectic C phase region.

IPC 1-7
C09K 19/10; **C09K 19/38**; **C07C 43/184**; **C07C 43/205**; **C07C 43/21**; **G02F 1/137**

IPC 8 full level
G02F 1/13 (2006.01); **C07C 43/20** (2006.01); **C07C 43/205** (2006.01); **C07C 43/21** (2006.01); **C07C 43/215** (2006.01); **C07C 43/225** (2006.01); **C07C 43/23** (2006.01); **C07C 45/62** (2006.01); **C07C 45/67** (2006.01); **C07C 49/657** (2006.01); **C07C 49/683** (2006.01); **C07C 49/753** (2006.01); **C07C 69/013** (2006.01); **C07C 255/46** (2006.01); **C07D 213/00** (2006.01); **C09K 19/04** (2006.01); **C09K 19/10** (2006.01); **C09K 19/12** (2006.01); **C09K 19/30** (2006.01); **C09K 19/38** (2006.01); **C09K 19/42** (2006.01)

CPC (source: EP KR)
C07C 43/215 (2013.01 - EP); **C07C 43/225** (2013.01 - EP); **C07C 43/23** (2013.01 - EP); **C07C 45/62** (2013.01 - EP); **C07C 45/676** (2013.01 - EP); **C07C 49/657** (2013.01 - EP); **C07C 49/683** (2013.01 - EP); **C07C 49/753** (2013.01 - EP); **C07C 69/013** (2013.01 - EP); **C09K 19/04** (2013.01 - EP); **C09K 19/12** (2013.01 - KR); **C09K 19/126** (2013.01 - EP); **C09K 19/3003** (2013.01 - EP); **C09K 19/3098** (2013.01 - EP); **C09K 19/42** (2013.01 - EP); **C07C 2601/14** (2017.04 - EP); **C07C 2601/16** (2017.04 - EP)

Citation (search report)
See references of WO 9811173A1

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
WO 9811173 A1 19980319; AU 4138097 A 19980402; EP 0946672 A1 19991006; JP 2001500502 A 20010116; KR 20000036036 A 20000626

DOCDB simple family (application)
KR 9700169 W 19970911; AU 4138097 A 19970911; EP 97939250 A 19970911; JP 51351998 A 19970911; KR 19997002026 A 19990310