

Title (en)
Liquid crystal element and apparatus

Title (de)
Flüssigkristallelement und Flüssigkristallvorrichtung

Title (fr)
Élément et appareil à cristaux liquides

Publication
EP 0717305 A2 19960619 (EN)

Application
EP 96102488 A 19910821

Priority

- EP 91114021 A 19910821
- JP 22170990 A 19900822
- JP 22171090 A 19900822
- JP 19204891 A 19910731

Abstract (en)
Disclosed is a liquid crystal element comprising a liquid crystal exhibiting spontaneous polarization, a pair of electrode substrates for sandwiching said liquid crystal therebetween, characterized in that insulating layers are formed between said electrode substrates and said liquid crystal, wherein a spontaneous polarization P_s value of said liquid crystal, an interelectrode composite capacitance C_i of said insulation layers, and a voltage threshold value V_{th} of optical response of said liquid crystal in said liquid crystal element satisfy the following condition: $\langle \text{MATH} \rangle \langle \text{IMAGE} \rangle$

IPC 1-7
G02F 1/137; **G09G 3/36**

IPC 8 full level
G02F 1/1333 (2006.01); **G02F 1/137** (2006.01); **G09G 3/36** (2006.01); **G09G 3/20** (2006.01)

CPC (source: EP)
G09G 3/3651 (2013.01); **G09G 3/2011** (2013.01); **G09G 3/207** (2013.01); **G09G 2310/06** (2013.01); **G09G 2310/061** (2013.01); **G09G 2310/065** (2013.01)

Cited by
US6368679B1; WO9905238A1

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)
EP 0717305 A2 19960619; **EP 0717305 A3 19961120**; **EP 0717305 B1 20021106**; AT E150570 T1 19970415; AT E227437 T1 20021115; DE 69125228 D1 19970424; DE 69125228 T2 19970828; DE 69133146 D1 20021212; DE 69133146 T2 20040205; ES 2098286 T3 19970501

DOCDB simple family (application)
EP 96102488 A 19910821; AT 91114021 T 19910821; AT 96102488 T 19910821; DE 69125228 T 19910821; DE 69133146 T 19910821; ES 91114021 T 19910821