

Title (en)
Liquid crystal display.

Title (de)
Flüssigkristallanzeigegerät.

Title (fr)
Dispositif d'affichage à cristaux liquides.

Publication
EP 0558059 A2 19930901 (EN)

Application
EP 93103104 A 19930226

Priority
JP 7597792 A 19920228

Abstract (en)
A liquid crystal display includes a liquid crystal sealed in a space between a pair of substrates through the intermediary of a spacer, and electrodes provided on the substrates for applying voltages between selected electrodes on one of the substrates and corresponding ones on the other so as to control the orientation of the liquid crystal in order to effect displays. While one of the substrates is an active-matrix substrate on which pixel electrodes are disposed in a matrix pattern with a transistor being disposed for each pixel electrode, the other substrate supports thereon both opposite electrodes divided into sections parallel with scanning lines and a potential controlling device for controlling the potential of the opposite electrodes. Since the opposite electrodes are inverted and driven by the potential controlling device on the same substrate as the opposite electrodes, power consumption can be decreased while the number of wiring elements between the substrates is decreased to improve reliability.
<IMAGE>

IPC 1-7
G09G 3/36

IPC 8 full level
G02F 1/133 (2006.01); **G02F 1/136** (2006.01); **G02F 1/1368** (2006.01); **G09F 9/30** (2006.01); **G09F 9/35** (2006.01); **G09G 3/36** (2006.01); **G09G 3/20** (2006.01)

CPC (source: EP)
G09G 3/3655 (2013.01); **G09G 3/3688** (2013.01); **G09G 3/2011** (2013.01); **G09G 3/3614** (2013.01); **G09G 2310/0251** (2013.01)

Cited by
US7084852B2; EP0622655A3; US6999054B2; US6862014B2; EP1414009A1; US6914589B2; US7420533B2; FR2736733A1; US6177965B1; WO0173743A1; US7764260B2; US8035602B2; US7161593B2; US7336249B2; EP1139327B1; US6906692B2; US7268761B2; US9240153B2; US9697784B2

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 0558059 A2 19930901; **EP 0558059 A3 19940713**; JP 3069930 B2 20000724; JP H05241124 A 19930921

DOCDB simple family (application)
EP 93103104 A 19930226; JP 7597792 A 19920228