

Title (en)

A drive circuit for driving an LCD apparatus.

Title (de)

Treiberschaltung zum Treiben einer Flüssigkristallvorrichtung.

Title (fr)

Circuit d'attaque pour commander un dispositif à cristal liquide.

Publication

EP 0391654 B1 19941102 (EN)

Application

EP 90303539 A 19900403

Priority

- JP 8552489 A 19890404
- JP 8552589 A 19890404

Abstract (en)

[origin: EP0391654A2] A drive device for driving a display apparatus having a display unit which includes a plurality of signal electrodes arranged in juxtaposition is disclosed. The drive device comprises: a signal electrode drive circuit for amplitude-modulating an input digital video signal by performing digital-analog conversion, and supplying the resulting analog signal to one of the signal electrodes; a memory for storing the input digital video signal; a pulselength conversion circuit for converting the stored digital video signal into a pulse signal, the width of the pulse signal corresponding to the information contained in the stored digital video signal; a pulselength-amplitude conversion circuit for converting the pulse signal into an analog signal the amplitude of which corresponds to the pulselength of the pulse signal; and an output circuit for supplying a drive signal to one of the signal electrodes, in accordance with the analog signal.

IPC 1-7

G09G 3/18; G09G 3/36; H04N 3/12

IPC 8 full level

G09G 3/20 (2006.01); **G09G 3/36** (2006.01)

CPC (source: EP KR)

G09G 3/2011 (2013.01 - EP); **G09G 3/36** (2013.01 - KR); **G09G 3/3648** (2013.01 - EP); **G09G 3/3688** (2013.01 - EP);
G09G 3/3614 (2013.01 - EP); **G09G 2310/0259** (2013.01 - EP); **G09G 2310/027** (2013.01 - EP); **G09G 2310/0283** (2013.01 - EP)

Citation (examination)

Television Engineering Handbook, I. Benson & K. Blair, McGraw-Hill Book Company, pages 13.16-13.17

Cited by

US5852425A; US5317401A; EP0433054A3; US5448258A; US6054976A; US5523772A; EP0793215A1; EP0631271A1; US5926158A;
EP0631289A3; US5894296A; US7164403B2; US6281870B1; US7460098B2; WO9207352A1; EP0597536B1; EP0657863B1; KR100321433B1;
EP0996108B1

Designated contracting state (EPC)

DE FR GB NL

DOCDB simple family (publication)

EP 0391654 A2 19901010; EP 0391654 A3 19910410; EP 0391654 B1 19941102; DE 69013736 D1 19941208; DE 69013736 T2 19950504;
KR 900016935 A 19901114; KR 930005376 B1 19930619

DOCDB simple family (application)

EP 90303539 A 19900403; DE 69013736 T 19900403; KR 900004630 A 19900404