

Title (en)

A DRIVE CIRCUIT FOR DRIVING AN LCD APPARATUS

Publication

EP 0391654 A3 19910410 (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 pulsewidth 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 pulsewidth-amplitude conversion circuit for converting the pulse signal into an analog signal the amplitude of which corresponds to the pulsewidth 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

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 (search report)

- [A] GB 2205191 A 19881130 - PHILIPS ELECTRONIC ASSOCIATED
- [A] EP 0254805 A2 19880203 - HOSIDEN ELECTRONICS CO [JP]
- [AP] GB 2212361 A 19890719 - CITIZEN WATCH CO LTD [JP]
- [A] GB 2162674 A 19860205 - CITIZEN WATCH CO LTD

Cited by

US5852425A; EP0433054A3; US5317401A; US5448258A; US6054976A; US5523772A; EP0793215A1; EP0631271A1; US5926158A;
EP0631289A3; US5894296A; US7164403B2; US6281870B1; US7460098B2; WO9207352A1; EP0597536B1; EP0657863B1; KR100321433B1;
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KR 900016935 A 19901114; KR 930005376 B1 19930619

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