

Title (en)

METHOD AND APPARATUS FOR DRIVING A DIGITAL DISPLAY BY DISTRIBUTING PWM PULSES OVER TIME

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ANSTEUERUNG EINER DIGITALEN ANZEIGEVORRICHTUNG MIT ZEITLICHER VERTEILUNG DER PULSE DER PULSWEITENMODULATION

Title (fr)

PROCEDE ET APPAREIL DE COMMANDE D'UN AFFICHAGE NUMERIQUE PAR LA REPARTITION TEMPORELLE DE LA MODULATION D'IMPULSIONS EN DUREE

Publication

EP 1269455 B1 20111123 (EN)

Application

EP 01915598 A 20010326

Priority

- IB 0100477 W 20010326
- US 53552800 A 20000327

Abstract (en)

[origin: WO0173736A1] This invention provides a method and apparatus to distribute pulses of a pulse width modulated signal over a time period. When applied to a digital display, the invention provides a signal representing the digital data comprising a plurality of smaller pulses distributed over the refresh time period to drive the display element. A logic circuit is provided to generate a plurality of combinable signals so that the incoming data can be combined with the signals to determine the mix of signals generated as a final output. The individual signals are generated by identifying the lowest order active bit of a counter that is subdividing the appropriate time period into smaller time divisions and generating a pulse on one of a plurality of outputs with each unique lowest order bit identified output on a separate output and successive common lowest order bits identified generating pulses on the same output.

IPC 8 full level

G02F 1/133 (2006.01); **G09G 3/20** (2006.01); **G09G 3/14** (2006.01); **G09G 3/36** (2006.01); **H04N 5/66** (2006.01)

CPC (source: EP KR)

G09G 3/14 (2013.01 - EP); **G09G 3/20** (2013.01 - KR); **G09G 3/2018** (2013.01 - EP); **G09G 2320/0261** (2013.01 - EP)

Cited by

WO2018208850A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0173736 A1 20011004; AT E534984 T1 20111215; AU 4268001 A 20011008; AU 779338 B2 20050120; CA 2403939 A1 20011004; CA 2403939 C 20120327; CN 1272757 C 20060830; CN 1421028 A 20030528; EA 005964 B1 20050825; EA 200201021 A1 20030227; EP 1269455 A1 20030102; EP 1269455 B1 20111123; HK 1052789 A1 20030926; HK 1052789 B 20120309; JP 2003529100 A 20030930; KR 20020093011 A 20021212; MY 126157 A 20060929; TW 581999 B 20040401

DOCDB simple family (application)

IB 0100477 W 20010326; AT 01915598 T 20010326; AU 4268001 A 20010326; CA 2403939 A 20010326; CN 01807359 A 20010326; EA 200201021 A 20010326; EP 01915598 A 20010326; HK 03104704 A 20030702; JP 2001571376 A 20010326; KR 20027012890 A 20020927; MY PI20011399 A 20010327; TW 90107242 A 20010327