Title (en)

Clocked drive unit for a display matrix in the form of an IC.

Title (de)

Als IC ausgeführte taktsteuerbare Ansteuereinheit einer Anzeigematrix.

Title (fr)

Unité de commande recevant un signal d'horloge pour une matrice d'affichage sous forme de circuit integré.

Publication

EP 0489757 B1 19941019

Application

EP 90911990 A 19900801

Priority

- EP 9001265 W 19900801
- EP 89116142 A 19890831

Abstract (en)

[origin: WO9103807A1] Described is an integrated circuit (IC) serving as a timed drive (CLK, SCK) of a display matrix (LCD) intended for the display of multi-character text comprising letters, numbers and/or other symbols and including the following features: the display matrix (LCD) has very many more columns than lines in order to display at least one line of text; several identical integrated circuits (IC1...ICn), i.e. a series of such circuits, provide column signals (S) for the control of the columns of the display matrix (LCD), each circuit controlling only some of the columns; the integrated circuit includes a shift register (SR1) into which those bits (Byte 1, Byte 2....) are shifted which correspond to the text displayed on the display matrix, or at least a section of this text; the input (SIN) and output (SOUT) of the shift register (SR1) are connected directly, or at the most via isolating switches (S2) and/or driver units, with pins (SIN, SOUT) of the integrated circuit in order to make it possible, when necessary, to shift the bits (Byte 1, Byte 2....), under fixed-cycle control (SCK), successively through the shift registers (SR1) of the series of integrated circuits (IC1...ICn); the integrated circuit is controlled by a control processor when the former is in operation; in the integrated circuit, a character generated (CG) with its own memory unit (ROM) is connected in series with the shift register (SR1); the character generator (CG), when in operation, converts at least some of the bits, each of which basically corresponds only to a short code representing the meaning of the relevant character, by means of the memory unit (ROM/CG) which is addressed by these bits (Byte 1, Byte 2....), into output signals which correspond to the output signals (S) of the integrated circuit and only these output signals are supplied as column signals (S) to the display matrix column inputs associated with said integrated circuit.

IPC 1-7

G09G 3/36; G09G 3/18

IPC 8 full level

G09G 3/18 (2006.01); **G09G 3/36** (2006.01)

CPC (source: EP)

G09G 3/18 (2013.01); **G09G 3/3674** (2013.01)

Citation (examination)

E.D.N ELECTRICAL DESIGN NEWS, vol. 30, No. 18, August 1985, (New York, US) pages 83-88; E. Teja: "LCD-driver/controller ICs offer versatility in configuration and function", siehe Seiten 85-86: "Increasing display versatility" see figures 1-3

Cited by

DE19625898A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

WO 9103807 A1 19910321; AU 6157090 A 19910408; DE 59007523 D1 19941124; EP 0489757 A1 19920617; EP 0489757 B1 19941019

DOCDB simple family (application)

EP 9001265 W 19900801; AU 6157090 A 19900801; DE 59007523 T 19900801; EP 90911990 A 19900801