

Title (en)
LCD DRIVER AND CONTROL UNIT

Publication
EP 0529934 A3 19931222 (EN)

Application
EP 92307590 A 19920819

Priority
US 74907191 A 19910823

Abstract (en)
[origin: EP0529934A2] A LCD controller/driver utilizes a bi-directional data ring to enable quick and easy data alteration and shifting. The controller/driver couples cascaded segment drivers (32, 34) to a row data serial interface (24) which links the drivers with a micro-processor unit (MPU) (18). The cascaded segment drivers coupled to the row data serial interface define the bi-directional data ring. Display data input into the segment drivers may be altered by shifting the data into the data ring and transmitting such data to, or through, other segment drivers and to the row data serial interface, where the data is altered by inputs from the MPU. Two data rings are established by coupling the respective segment drivers in series with the row data serial interface. The two data rings generally operate independently. However, when data is to be transferred from one screen to another, such as during a vertical scroll, the two data rings are coupled together and the data is transferred serially. The data rings allow for easy alterations and smooth scrolling in both the horizontal and vertical directions. <IMAGE>

IPC 1-7
G09G 3/36

IPC 8 full level
G06F 3/147 (2006.01); **G09G 3/36** (2006.01); **G09G 5/38** (2006.01)

CPC (source: EP)
G09G 3/3611 (2013.01); **G09G 3/3685** (2013.01)

Citation (search report)
• [A] EP 0406900 A2 19910109 - SHARP KK [JP]
• [A] AIICHIRO SAKUMOTO: "Driver LSIs Meet the Demands of Full-Color, Large Displays", JEE JOURNAL OF ELECTRONIC ENGINEERING., vol. 26, no. 273, September 1989 (1989-09-01), TOKYO JP, pages 11112 - 114, XP000071552
• [A] ED TEJA: "LCD-driver/controller ICs offer versatility in configuration and function.", EDN ELECTRICAL DESIGN NEWS, vol. 30, no. 18, August 1985 (1985-08-01), NEWTON, MASSACHUSETTS US, pages 83 - 88

Cited by
KR20010002527A; GB2329741A

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 0529934 A2 19930303; **EP 0529934 A3 19931222**; JP H05241768 A 19930921

DOCDB simple family (application)
EP 92307590 A 19920819; JP 24402192 A 19920821