

Title (en)
MAPPING IMAGE DATA SAMPLES TO PIXEL SUB-COMPONENTS ON A STRIPED DISPLAY DEVICE

Title (de)
ZUORDNUNG VON BILDDATENPROBEN ZU BILDUNKT- TEILKOMPONENTEN AUF EINER, IN STREIFEN AUFGETEILTEN ANZEIGEVORRICHTUNG

Title (fr)
MAPPAGE D'ECHANTILLONS DE DONNEES D'IMAGE AVEC DES SOUS-COMPOSANTS DE PIXELS SUR UN DISPOSITIF D'AFFICHAGE A LIGNES

Publication
EP 1155396 A1 20011121 (EN)

Application
EP 99954811 A 19991007

Priority

- US 9923552 W 19991007
- US 16801298 A 19981007
- US 24065499 A 19990129

Abstract (en)
[origin: WO0021070A1] Methods and apparatus for sampling image data (620) and mapping the samples (622, 623, 624) to pixel sub-components (632, 633, 634) which form a pixel element of an LCD display so that each pixel sub-component (632, 633, 634) has a different portion of the image (620) mapped thereto. The methods can be used with conventional color LCD displays that include pixels consisting of three non-overlapping red, green and blue rectangular pixel sub-elements or sub-components. The pixel sub-components (632, 633, 634) can be arranged on the display device to form horizontal or vertical stripes of individual colors. The separately-controllable nature of individual RGB pixel sub-components is used to effectively increase a screen's resolution in the dimension perpendicular to the dimension in which the screen is striped. A scan conversion process maps samples (622, 623, 624) of the image data (620) to individual pixel sub-components, resulting in each of the pixel sub-components representing a different portion of the image. The color values are independently generated for each of the red, green, and blue pixel sub-components based on different portions of the image (620), rather than the color values for the entire pixel being generated based on a single sample or the same portion of the image.

IPC 1-7
G09G 5/02

IPC 8 full level
G02F 1/13 (2006.01); **G02F 1/133** (2006.01); **G06T 1/00** (2006.01); **G09F 9/40** (2006.01); **G09G 3/20** (2006.01); **G09G 3/36** (2006.01); **G09G 5/00** (2006.01); **G09G 5/02** (2006.01); **G09G 5/24** (2006.01); **G09G 5/28** (2006.01); **H04N 1/387** (2006.01)

CPC (source: EP)
G09G 3/20 (2013.01); **G09G 5/24** (2013.01); **G09G 5/28** (2013.01); **G09G 3/2003** (2013.01); **G09G 2300/0443** (2013.01); **G09G 2300/0452** (2013.01); **G09G 2340/0407** (2013.01); **G09G 2340/0457** (2013.01)

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 0021070 A1 20000413; AT E511688 T1 20110615; AT E543176 T1 20120215; AU 1106900 A 20000426; AU 1443800 A 20000426; AU 6512199 A 20000426; CN 1322343 A 20011114; CN 1335976 A 20020213; EP 1155396 A1 20011121; EP 1155396 A4 20020213; EP 1155396 B1 20110601; EP 1163657 A1 20011219; EP 1163657 A4 20020213; EP 1163657 B1 20120125; JP 2002527776 A 20020827; JP 2003526803 A 20030909; JP 2012137775 A 20120719; JP 5231695 B2 20130710; JP 5231697 B2 20130710; WO 0021066 A1 20000413

DOCDB simple family (application)
US 9923552 W 19991007; AT 99954811 T 19991007; AT 99970200 T 19991007; AU 1106900 A 19991007; AU 1443800 A 19991007; AU 6512199 A 19991007; CN 99811808 A 19991007; CN 99811813 A 19991007; EP 99954811 A 19991007; EP 99970200 A 19991007; JP 2000575111 A 19991007; JP 2000575115 A 19991007; JP 2012036164 A 20120222; US 9923469 W 19991007