

Title (en)

Apparatus for reformatting pixel data.

Title (de)

Vorrichtung zur Umformatierung von Pixeldaten.

Title (fr)

Appareil de reformatage de données de pixel.

Publication

EP 0662679 A1 19950712 (EN)

Application

EP 94309871 A 19941228

Priority

US 17711994 A 19940103

Abstract (en)

Method and apparatus for effecting a hardware assisted pixel reformat during bit boundary block transfers (BITBLTs) is disclosed. In a preferred embodiment, hardware reformat logic is incorporated into a BITBLT engine of a computer system for automatically reformatting pixels from an m-bit source format to an n-bit destination format during screen refresh. The reformat logic comprises a lookup table, for mapping each bit of an m-bit pixel data word to a position in an n-bit destination pixel data word, and reformat engine connected to the lookup table for physically routing each bit of source pixel data to the appropriate destination position, as indicated by the lookup table. In this manner, bits may be mapped from one bit plane in a source bitmap to a second bit plane in a destination bitmap, thereby reformatting the pixel data, by simply programming the appropriate entries in the lookup table. <IMAGE>

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G09G 5/02; **G09G 1/16**

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CPC (source: EP)

G09G 5/02 (2013.01); **G09G 5/393** (2013.01)

Citation (search report)

- [A] EP 0410777 A2 19910130 - TEXAS INSTRUMENTS INC [US]
- [A] GB 2234096 A 19910123 - APPLE COMPUTER [US]
- [A] "Data Width and Format Conversion Subsystem for a Graphics Coprocessor", IBM TECHNICAL DISCLOSURE BULLETIN., vol. 33, no. 3A, August 1990 (1990-08-01), NEW YORK US, pages 145 - 152

Cited by

EP1764777A3; EP0885529A4; EP1503291A1; WO0019403A1

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