

Title (en)
Method for maintaining the white colour point over time in a field-sequential colour LCD

Title (de)
Verfahren zum Erhaltung des Weisspunktes über die Betriebsdauer in einer Anzeigevorrichtung mit zeitsequentiellen Farbwiedergabeverfahren

Title (fr)
Procédé pour maintenir le point blanc pendant le temps d'utilisation dans un dispositif d'affichage à cristaux liquides à séquence de trames couleur

Publication
EP 1646033 A1 20060412 (EN)

Application
EP 04104887 A 20041005

Priority
EP 04104887 A 20041005

Abstract (en)
A field sequential liquid crystal display maintains its white colour point through compensation values to at least one colour light emitting diode that illuminates the display. The compensation values may be impedances to control the current or pulsing of the current source according to a pulse width modulation technique. A degradation curve may be used to calculate extrapolate the theoretical forward voltage of the light emitting diode. Additional complexity arises from the need for calculating uptime for multiple light emitting diodes of different colours. Brightness levels may also be factored in.

IPC 8 full level
G09G 3/34 (2006.01)

CPC (source: EP)
G09G 3/3413 (2013.01); **G09G 2310/0235** (2013.01); **G09G 2320/043** (2013.01); **G09G 2320/064** (2013.01); **G09G 2320/0666** (2013.01)

Citation (applicant)

- US 4975692 A 19901204 - TATEYAMA JIRO [JP]
- US 2003011559 A1 20030116 - ADACHI KATSUMI [JP], et al
- EP 1225557 A1 20020724 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- US 6897837 B1 20050524 - SAKUMOTO KAZUMI [JP], et al
- US 2003095091 A1 20030522 - ENOMOTO HIROMI [JP], et al
- US 4455576 A 19840619 - HOSHI HIDEO [JP]
- US 6188379 B1 20010213 - KANEKO YASUSHI [JP]
- US 5920298 A 19990706 - MCKNIGHT DOUGLAS [US]
- US 6151004 A 20001121 - KANEKO YASUSHI [JP]
- US 2005062691 A1 20050324 - TAMURA MITSUYASU [JP], et al

Citation (search report)

- [XY] US 4975692 A 19901204 - TATEYAMA JIRO [JP]
- [YX] EP 1398204 A1 20040317 - OPTREX KK [JP]
- [Y] US 5440208 A 19950808 - USKALI ROBERT G [US], et al
- [A] EP 1077444 A2 20010221 - AGILENT TECHNOLOGIES INC [US]
- [A] WO 0237454 A2 20020510 - NOKIA CORP [FI]
- [A] US 2003117364 A1 20030626 - MIYAKE SHIRO [JP]

Citation (examination)

- US 2003011559 A1 20030116 - ADACHI KATSUMI [JP], et al
- EP 1225557 A1 20020724 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- JP 2001056670 A 20010227 - SEIKO INSTR INC
- US 2003095091 A1 20030522 - ENOMOTO HIROMI [JP], et al
- US 4455576 A 19840619 - HOSHI HIDEO [JP]
- US 6188379 B1 20010213 - KANEKO YASUSHI [JP]
- US 5920298 A 19990706 - MCKNIGHT DOUGLAS [US]
- US 6151004 A 20001121 - KANEKO YASUSHI [JP]
- WO 2004040542 A1 20040513 - SONY CORP [JP], et al
- US 2004046757 A1 20040311 - YAMADA TADASHI [JP]
- JP 2002006796 A 20020111 - FUJITSU GENERAL LTD
- US 2002033783 A1 20020321 - KOYAMA JUN [JP] & US 6897837 B1 20050524 - SAKUMOTO KAZUMI [JP], et al & US 2005062691 A1 20050324 - TAMURA MITSUYASU [JP], et al

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