

Title (en)

Improvements in or relating to spatial light modulators.

Title (de)

Verbesserungen für räumliche Lichtmodulatoren.

Title (fr)

Améliorations concernant les modulateurs de lumière spatiaux.

Publication

**EP 0685830 A1 19951206 (EN)**

Application

**EP 95108531 A 19950602**

Priority

- US 25438894 A 19940602
- US 25940294 A 19940613

Abstract (en)

A method of implementing pulse-width modulated image display systems (10, 20) with a spatial light modulator (SLM) (15) configured for split-reset addressing. Display frame periods are divided into time slices. Each frame of data is divided into bit-planes, each bit-plane having one bit of data for each pixel element and representing a bit weight of the intensity value to be displayed by that pixel element. Each bit-plane has a display time corresponding to a number of time slices, with bit-planes of higher bit weights being displayed for more time slices. The bit-planes are further formatted into reset groups, each reset group corresponding to a reset group of the SLM (15). The display times for reset groups of more significant bits are segmented so that the data can be displayed in segments rather than for a continuous time. During loading, segments of corresponding bit-planes are temporally aligned from one reset group to the next. The display times for less significant bits are not segmented but are temporally aligned to the extent possible without loading conflicts. <IMAGE>

IPC 1-7

**G09G 3/34**

IPC 8 full level

**G09G 3/20** (2006.01); **G09G 3/34** (2006.01)

CPC (source: EP)

**G09G 3/2033** (2013.01); **G09G 3/34** (2013.01); **G09G 3/2022** (2013.01); **G09G 3/346** (2013.01)

Citation (applicant)

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- US 5079544 A 19920107 - DEMOND THOMAS W [US], et al
- EP 94116984 A 19941027
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- US 4956619 A 19900911 - HORNBECK LARRY J [US]
- US 5278652 A 19940111 - URBANUS PAUL M [US], et al

Citation (search report)

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- [AP] EP 0610665 A1 19940817 - TEXAS INSTRUMENTS INC [US]
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