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(71) Applicant: APPLE COMPUTER, INC. [US/US]; One Infinite Loop, Cupertino, CA 95014 (US).

(72) Inventor: ANDERSON, Eric, C.; 931 Brentwood Drive, San Jose, CA 95129 (US).

(74) Agents: SUEOKA, Greg, T.; Fenwick & West, Suite 600, Two Palo Alto Square, Palo Alto, CA 94306 (US) et al.

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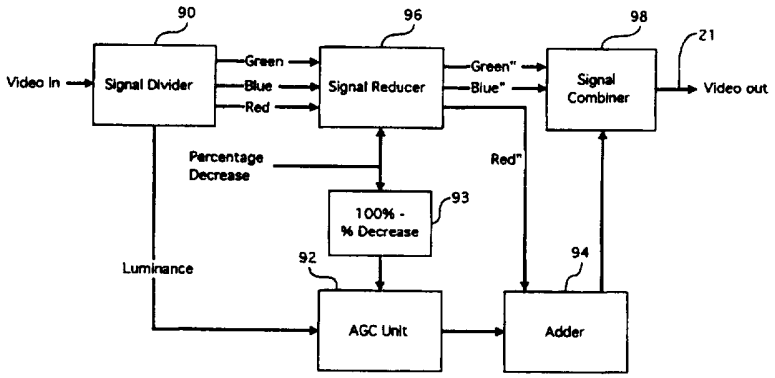
(54) Title: SYSTEM AND METHOD FOR GENERATING A CONTRAST OVERLAY AS A FOCUS ASSIST FOR AN IMAGING DEVICE



(57) Abstract

A system for generating and displaying a contrast false color overlay as a focus assist includes a signal divider, an automatic gain control unit, an adder, a signal reducer and a signal combiner. The signal divider receives a signal representing an image and divides the signal into a red channel signal, a green channel signal and a blue channel signal. The red, green and blue channel signals are input to the signal reducer and respectively reduced by a percentage value. The reduced Green and Blue channel signals are input to the signal combiner and combined with the output of the adder. A luminance signal is also input or generated from the channel signals and is fed to the automatic gain control unit which produces a contrast signal whose brightness is proportional to the contrast in the image. The contrast signal is input to the adder along with a reduced version of the red channel signal where the two signals are added together, and the output of the adder is provided to the combiner. The output of the combiner is then provided to the output device for display of the image. The present invention also comprises a method for adjusting the display to provide a false color contrast overlay as a focus assist, the method comprising the steps of: receiving a signal representing an image; separating the signal into channels; receiving or generating a luminance signal; producing a contrast signal with an amplitude that varies with the contrast in the image from the luminance signal; reducing the contrast signal; reducing the channel signals; combining the reduced contrast signal with one of the reduced channel signals; and generating an image on the output device using the combined signal and the reduced channel signals.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 H04N5/232 G03B13/00 G02B7/36

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 H04N G03B G02B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO,A,91 19383 (EASTMAN KODAK CO) 12 December 1991 see the whole document ---	1,10,14, 15
A	JP,A,05 292 373 (IKEGAMI TSUSHINKI CO LTD) 5 November 1993 see abstract; figures ---	1,2,10, 11,14-16
A	US,A,4 660 092 (NUTTING THOMAS C) 21 April 1987 see the whole document ---	1,10,14, 15
A	JP,A,62 104 278 (NIPPON HOSO KYOKAI) 14 May 1987 see abstract; figures ---	1,10,14, 15

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[X] Further documents are listed in the continuation of box C.

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Date of the actual completion of the international search	Date of mailing of the international search report
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP,A,01 241 276 (SHARP CORP) 26 September 1989 see abstract; figures -----	1,10,14, 15

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INTERNATIONAL SEARCH REPORT

Information on patent family members

In national Application No
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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		DE-D- 69111377	24-08-95
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