United States Patent [19]

Nagano

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[54] **COLOR IMAGE READING APPARATUS**

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[30] **Foreign Application Priority Data**

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Jun. 15, 1984 [JP] Japan 59-124203
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Aug. 22, 1984 [JP] Japan 59-175353
Nov. 30, 1984 [JP] Japan 59-254580

[51] Int. Cl.^{4} H04N 1/46
[52] U.S. Cl. 358/75; 358/80
[58] Field of Search 358/75, 80

[56] **References Cited**

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Primary Examiner—Randall L. Green
Attorney, Agent, or Firm—Birch, Stewart, Kolasch and Birch

[57] **ABSTRACT**

A color image reading device for reading an original by an optical scanning device which optically scans across said original line-by-line is disclosed. The color image reading device includes a green fluorescent lamp for generating a green light with an afterglow characteristics, a red fluorescent lamp for generating a red light with no afterglow characteristics, and a blue fluorescent lamp for generating a blue light with no afterglow characteristics. The green, red and blue fluorescent lamps are actuated in a predetermined time sequence. A CCD is provided for detecting an image under green during the afterglow, under red light and under blue light.
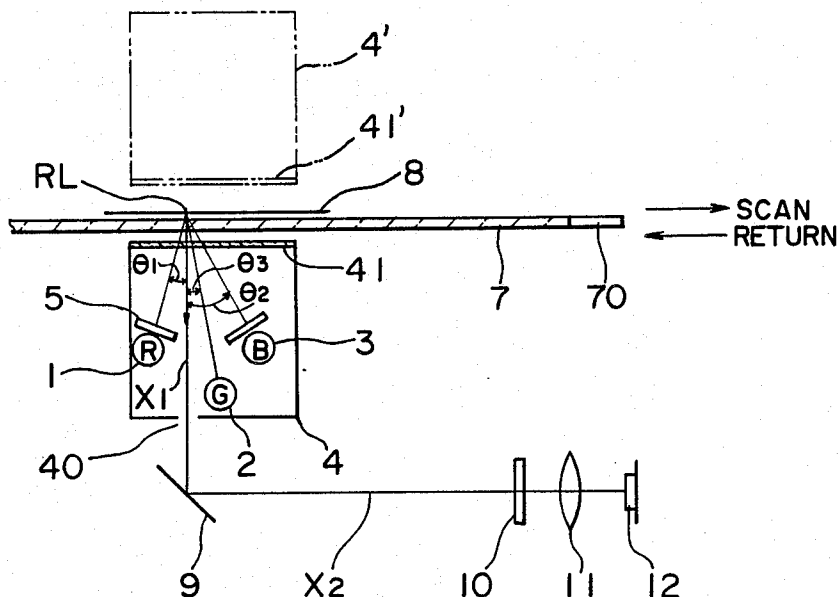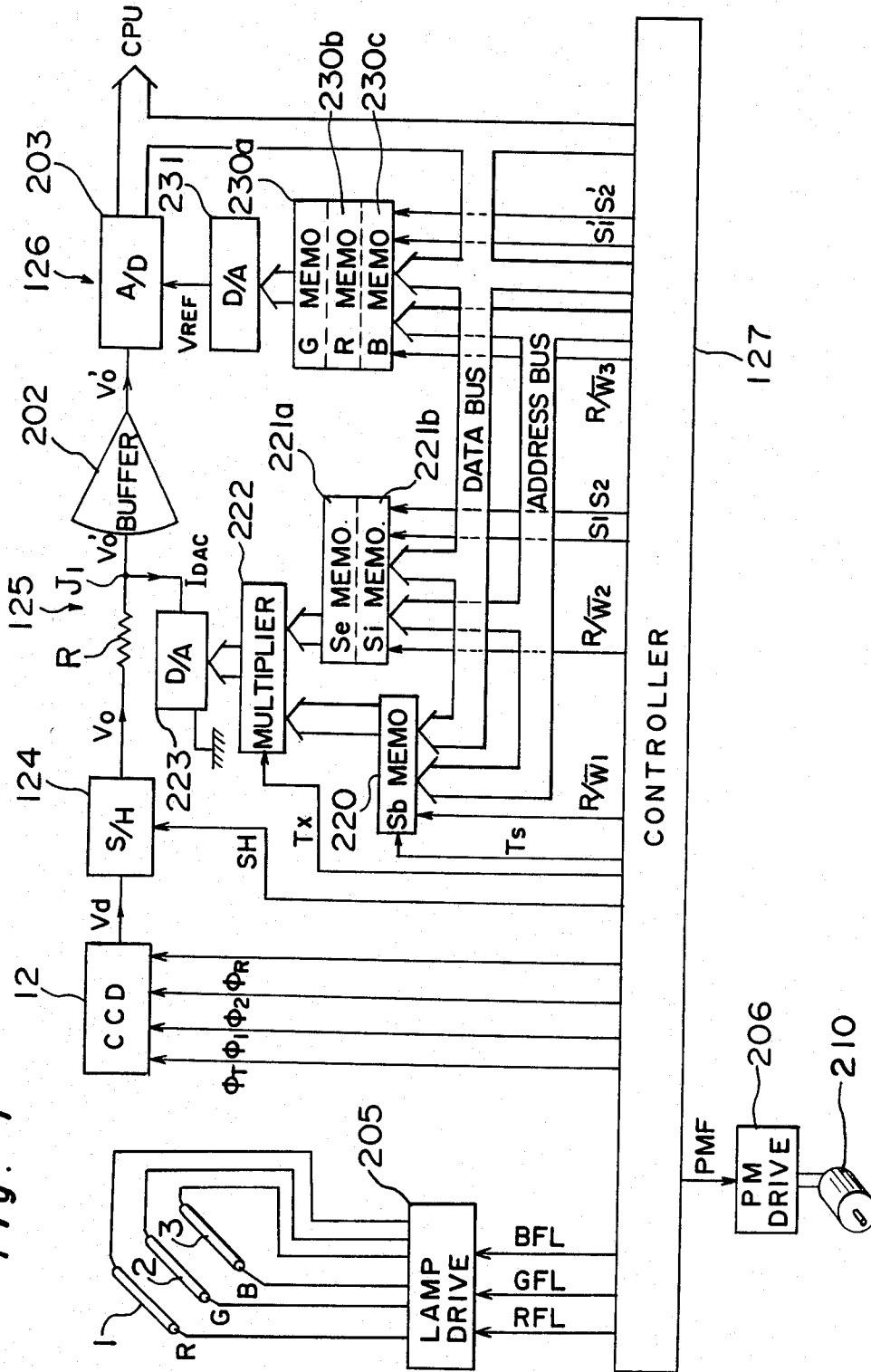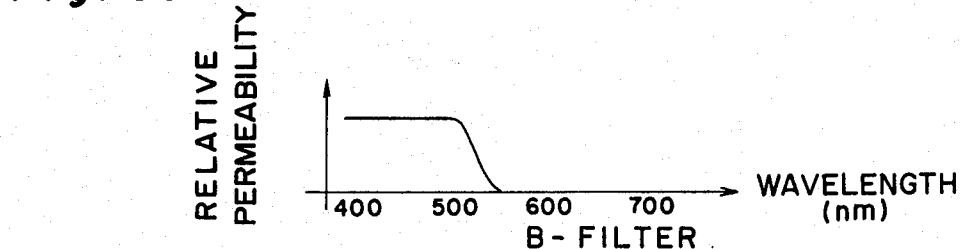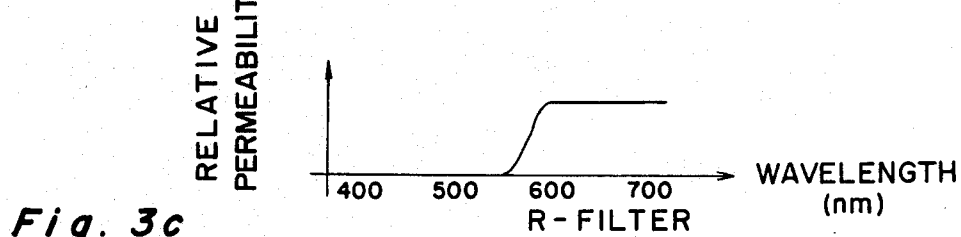
13 Claims, 27 Drawing Figures

Fig. 1

Fig. 2a — R-LIGHT

Fig. 2b — G-LIGHT

Fig. 2c — B-LIGHT

Fig. 3a — W-FILTER

Fig. 3b — R-FILTER

Fig. 3c — B-FILTER

Fig. 4a

R-LIGHT (FILTERED)

Fig. 4b

G-LIGHT (AFTERGLOW)

Fig. 4c

B-LIGHT (FILTERED)
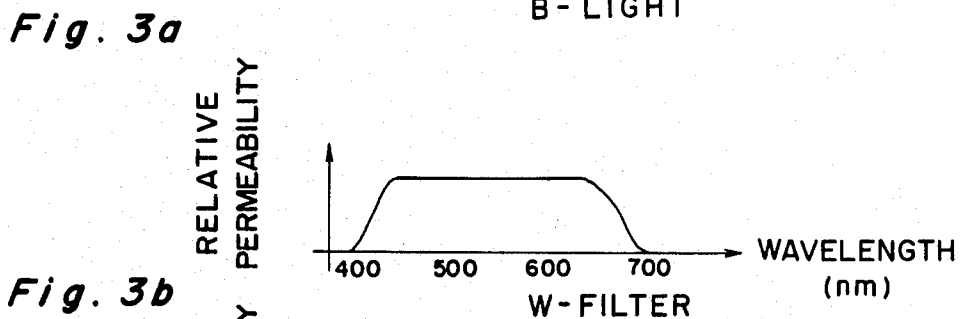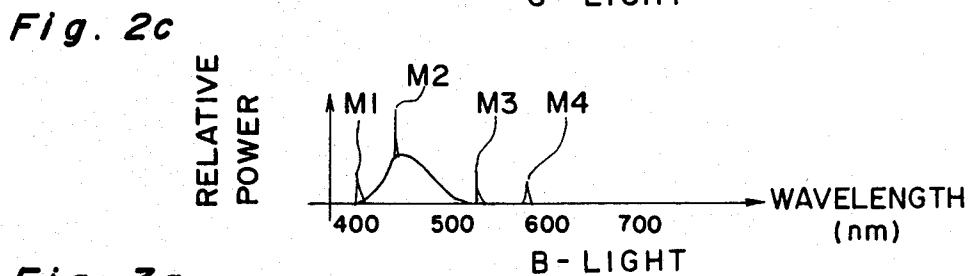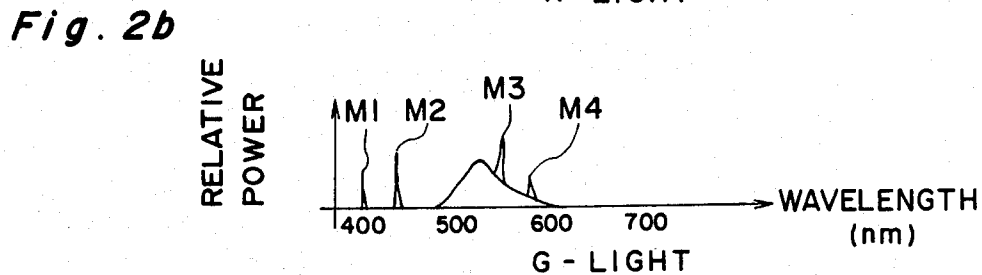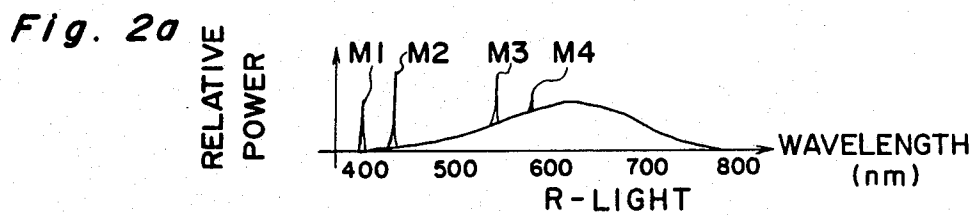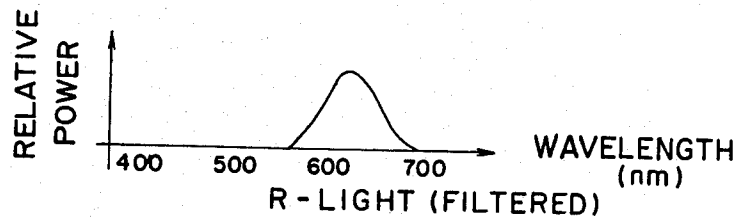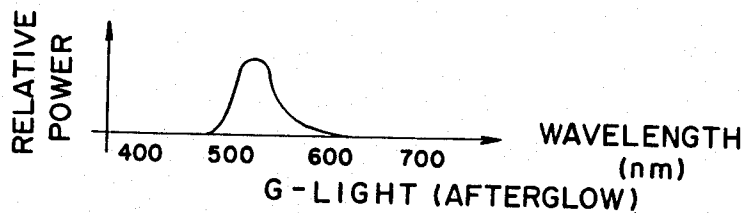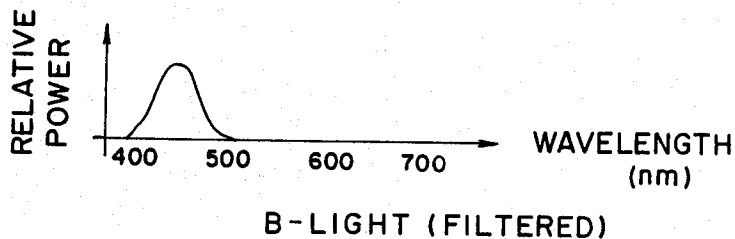
Fig. 5

Fig. 6

Fig. 7

Fig. 8a

Fig. 9

START PULSE ΦT

CLOCK PULSE Φ1

CLOCK PULSE Φ2

RESET PULSE ΦR
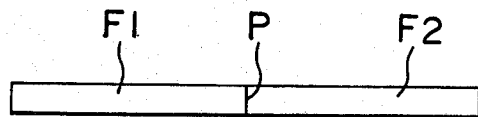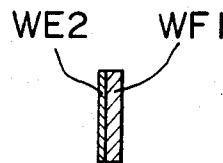
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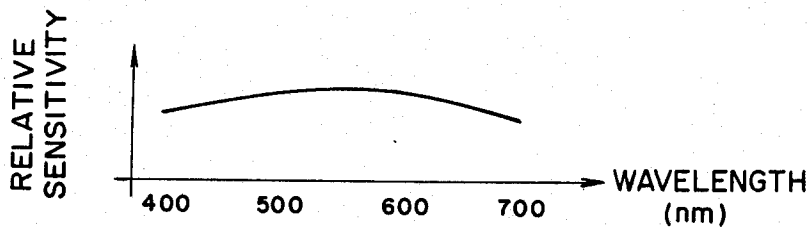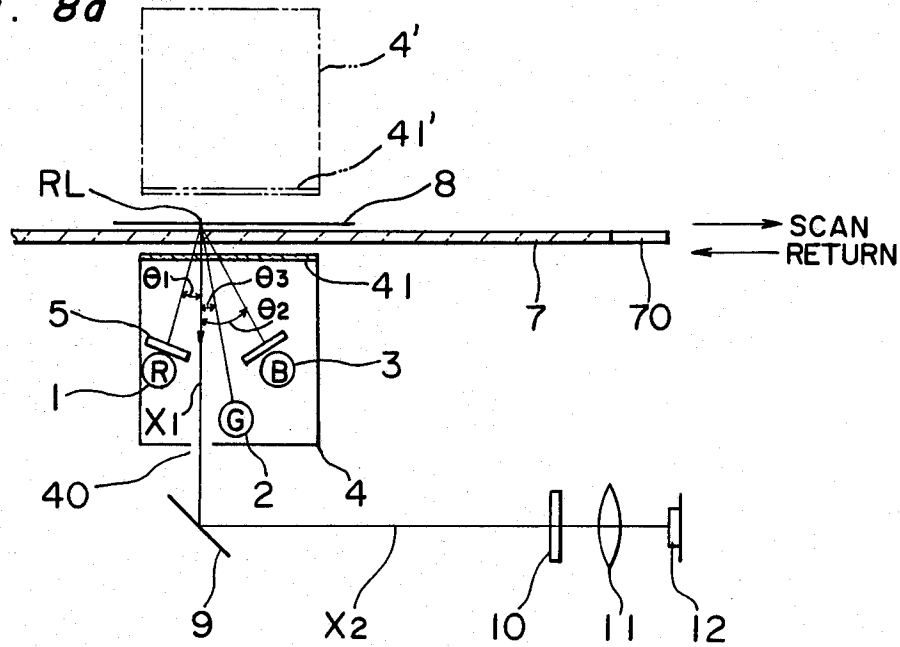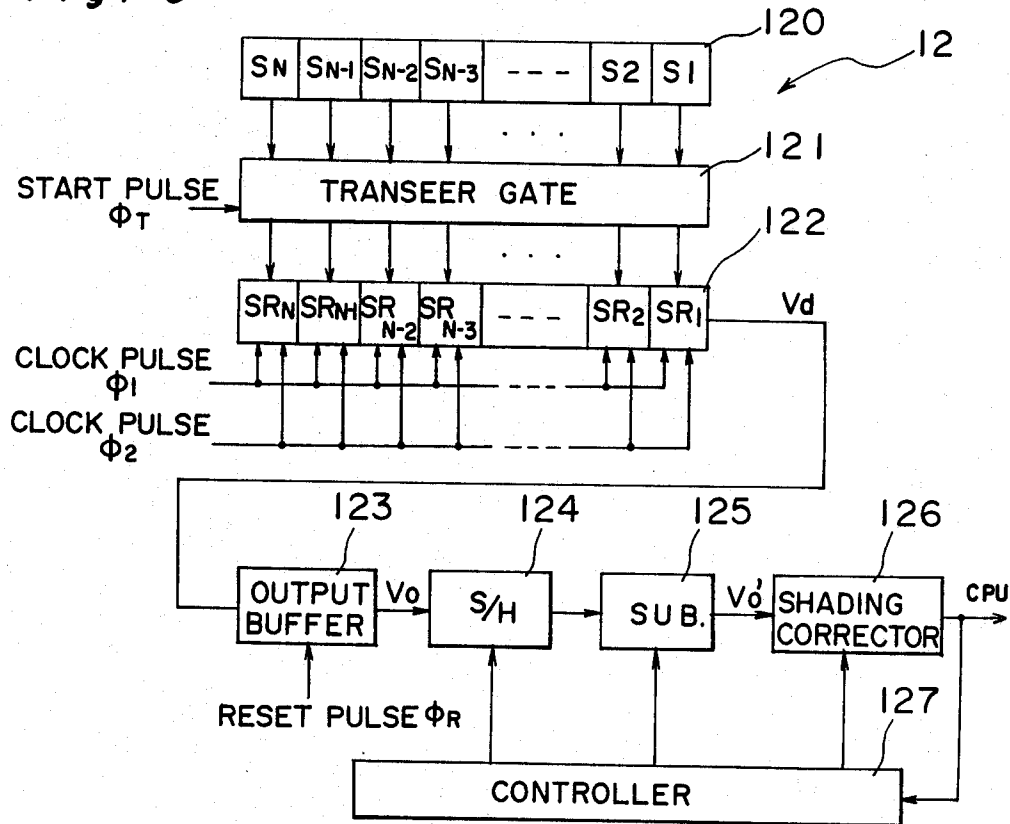
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