

[54] COLOR SENSOR

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[73] Assignee: Hitachi Maxell, Ltd., Osaka, Japan

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Nov. 22, 1982 [JP]	Japan	57-203763
Nov. 27, 1982 [JP]	Japan	57-206856
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[51] Int. Cl.⁴ G01J 3/50

[52] U.S. Cl. 356/402; 356/420; 250/226

[58] Field of Search 356/41, 44, 402, 406, 356/407, 409, 410, 411, 414, 420, 425, 40, 446; 250/564, 565, 226; 209/577, 580, 581, 582

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Attorney, Agent, or Firm—Birch, Stewart, Kolasch & Birch

[57] ABSTRACT

A color sensor includes a plurality of light emitting source of different colors each of which is driven in a time divisional manner to emit the different colors sequentially, a light receiving element for receiving the light from an object illuminated by the respective color lights from the light emitting sources and a circuit arrangement for producing output signals representing the color of the object.

10 Claims, 11 Drawing Figures

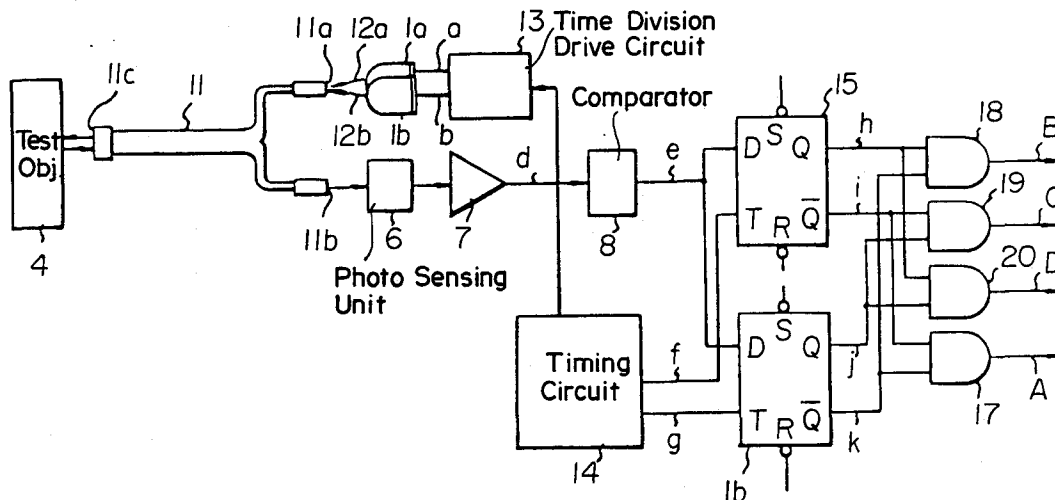


FIG. 1 Background Art

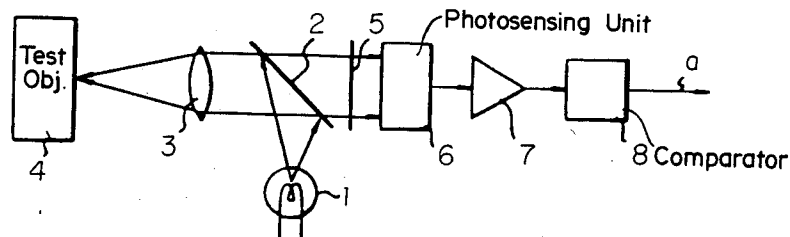


FIG. 2 Background Art

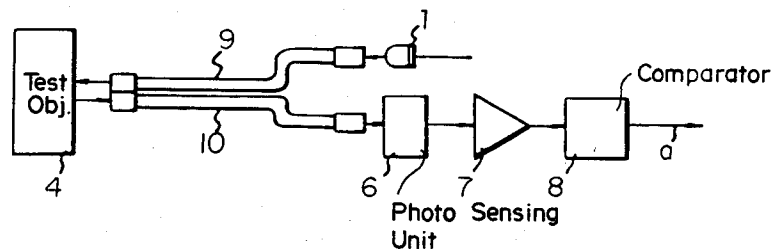


FIG. 3

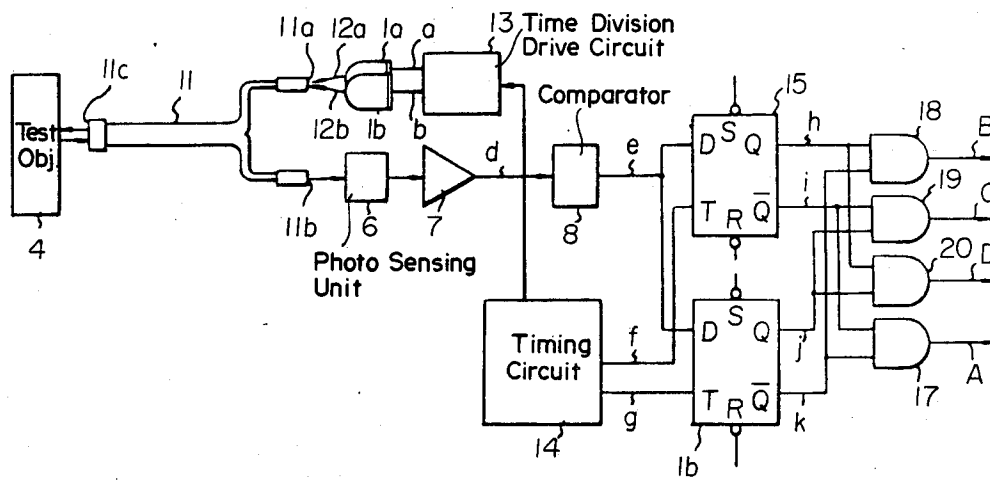


FIG. 4

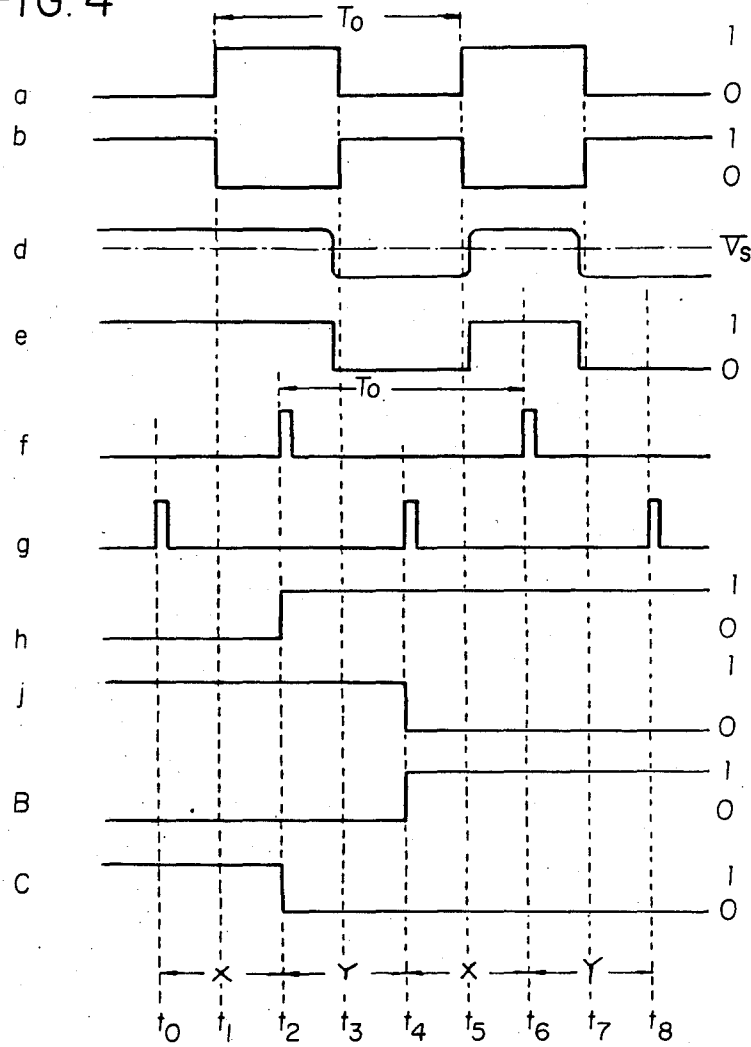
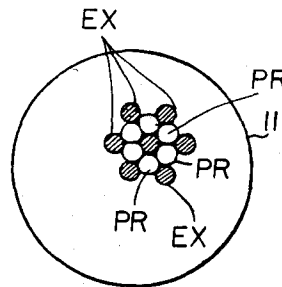


FIG. 5



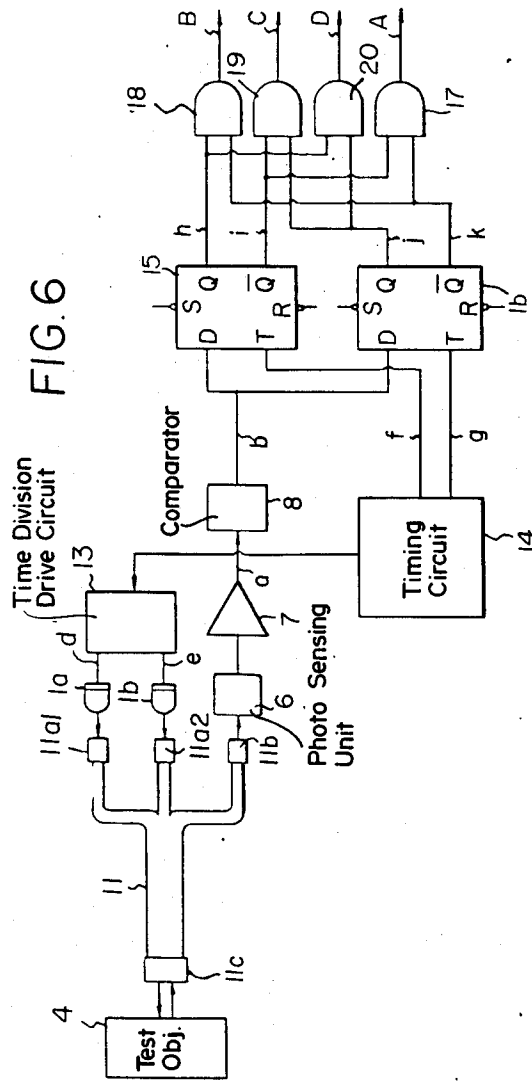


FIG. 7

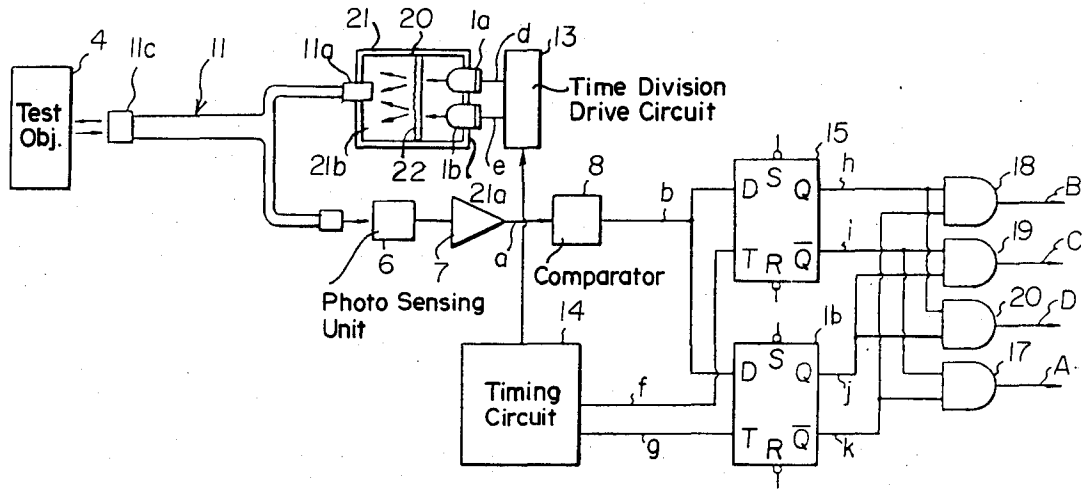


FIG. 8

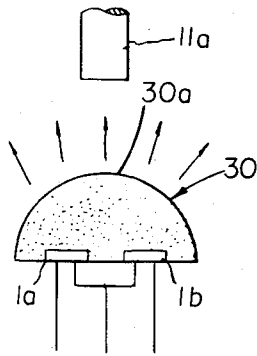


FIG. 9

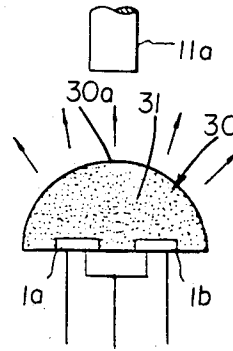


FIG. 10

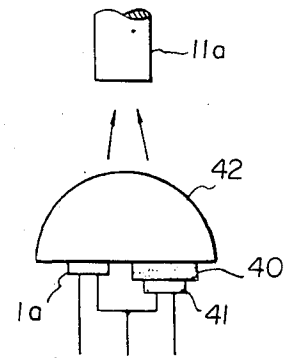
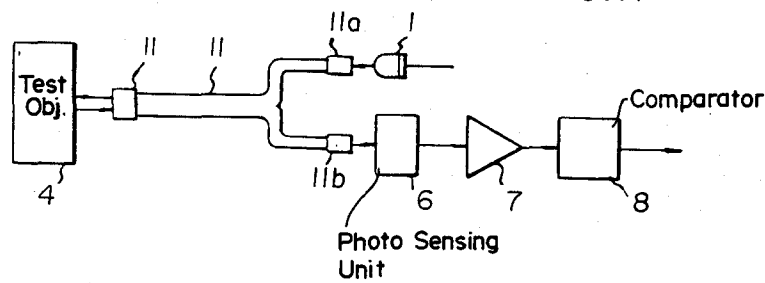


FIG. 11



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