



US005592256A

United States Patent [19]

[11] **Patent Number:** 5,592,256

Muramatsu

[45] **Date of Patent:** Jan. 7, 1997

[54] **PHOTOMETRY DEVICE FOR A CAMERA**

4,797,942	1/1989	Burt	382/41
5,187,754	2/1993	Currin et al.	382/54
5,233,517	8/1993	Jindra	364/413.13
5,249,015	9/1993	Takagi et al. .	
5,266,984	11/1993	Muramatsu et al. .	
5,270,767	12/1993	Hamada et al.	354/430
5,319,416	6/1994	Takagi	354/432

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[73] Assignee: **Nikon Corporation**, Tokyo, Japan

[21] Appl. No.: **654,998**

[22] Filed: **May 29, 1996**

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Assistant Examiner—D. P. Malloy

Related U.S. Application Data

[63] Continuation of Ser. No. 246,424, May 20, 1994, abandoned.

Foreign Application Priority Data

Jun. 8, 1993 [JP] Japan 5-163919

[51] **Int. Cl.⁶** **G03B 7/08**

[52] **U.S. Cl.** **396/225; 348/362; 348/366; 396/234**

[58] **Field of Search** **354/430, 432; 348/362, 366**

References Cited

U.S. PATENT DOCUMENTS

4,395,099 7/1983 Terasita .
4,476,383 10/1984 Fukuhara et al. .

[57] ABSTRACT

A photometric device for use in a camera includes, but is not limited to, a segmented brightness measuring unit which segments a photographic scene of a camera into multiple areas and which outputs corresponding multiple photometric values. A spectral analysis unit performs spectral analysis of the spatial frequency of a photographic subject using the corresponding multiple photometric values output by the segmented brightness measuring unit. Also, a photometric computation unit computes photometric values based on the spectral pattern of the photographic subject output by the spectral analysis unit. The spectral analysis unit may be disposed within the photometric device, or may be located elsewhere in a camera's body.

20 Claims, 4 Drawing Sheets

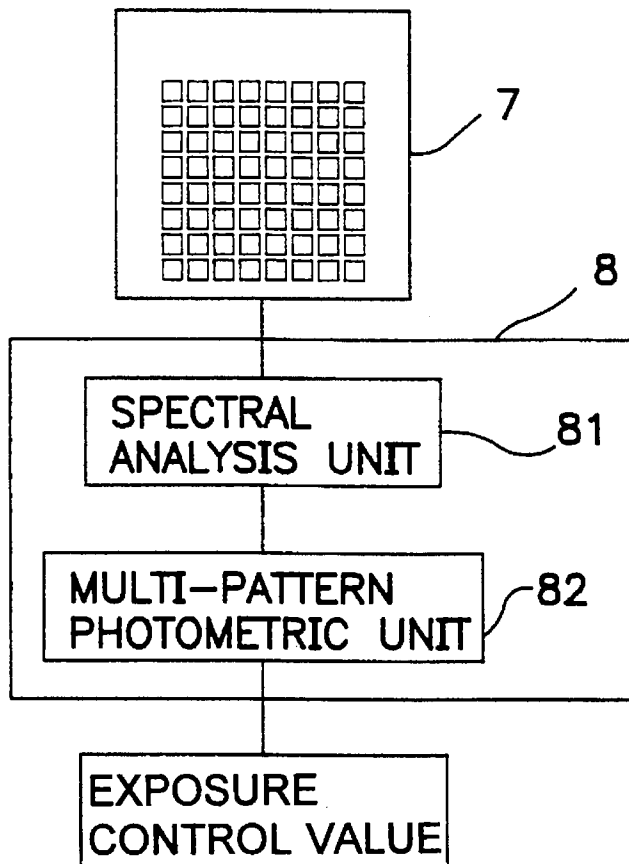


FIG. 1

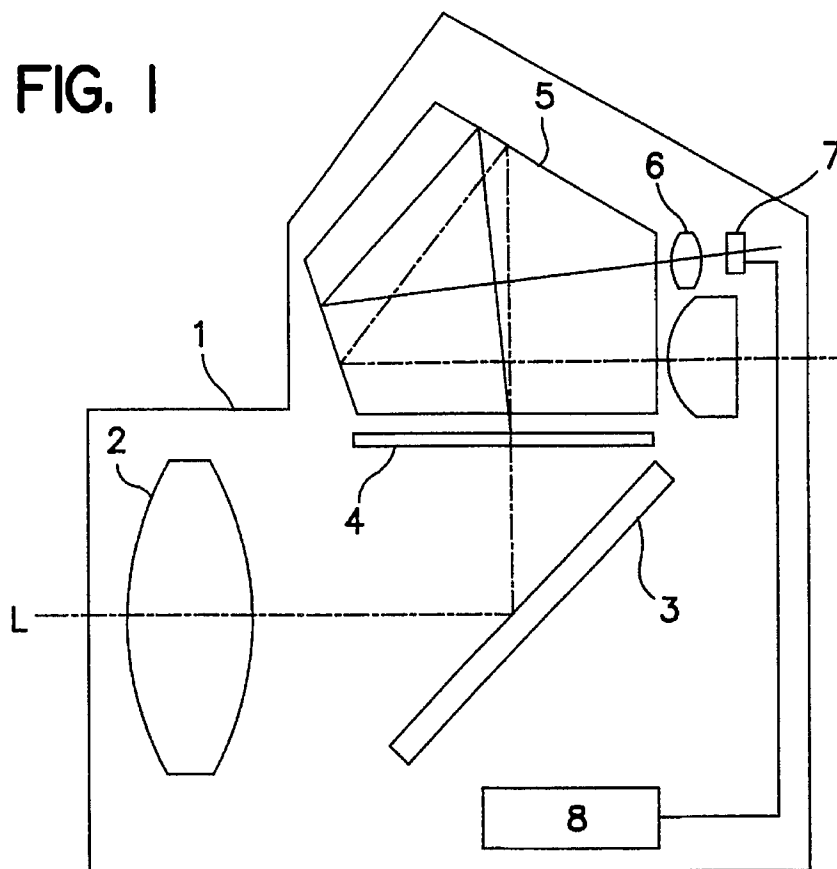


FIG. 2

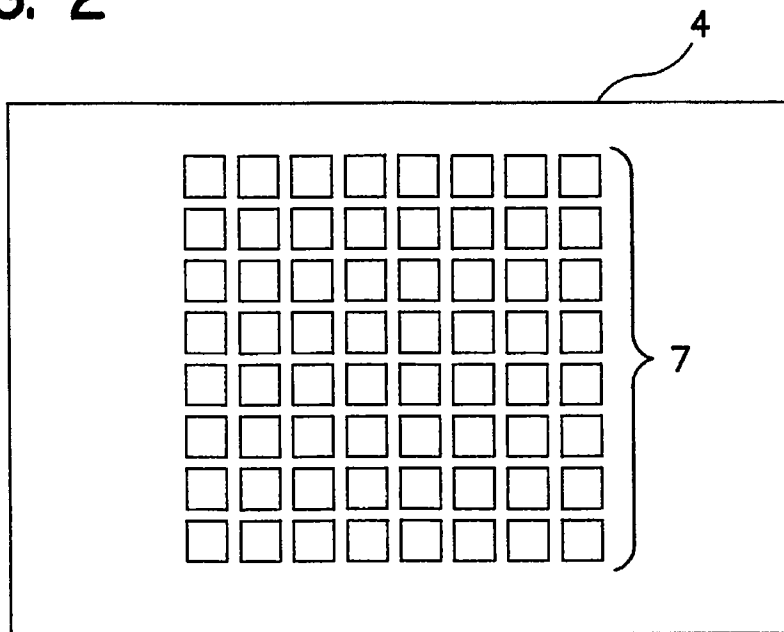


FIG. 3

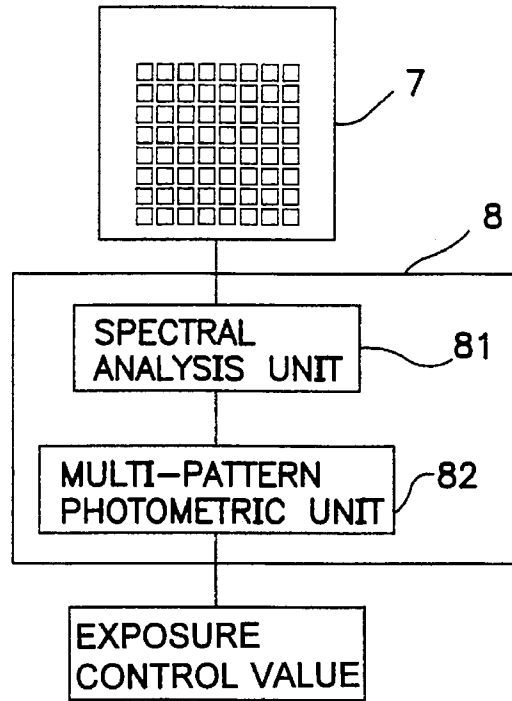


FIG. 4

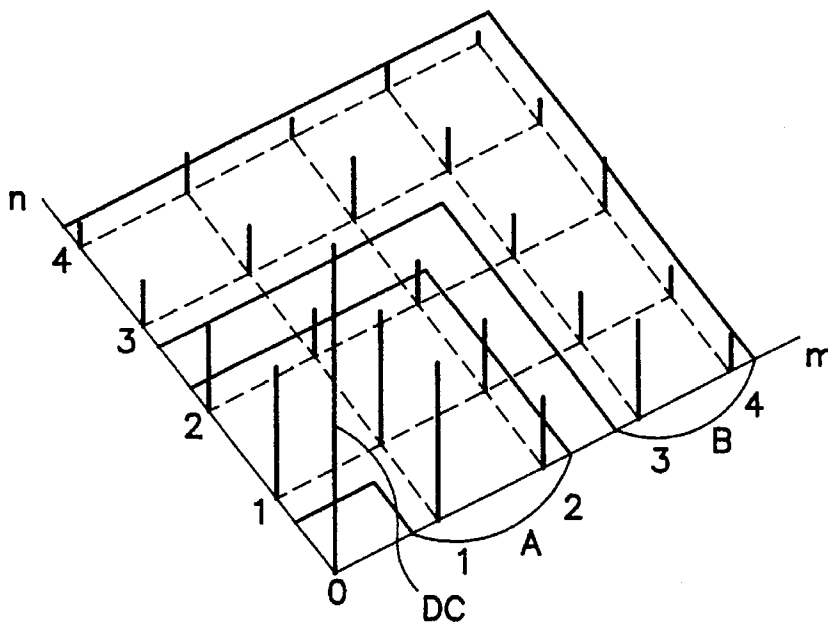


FIG. 5

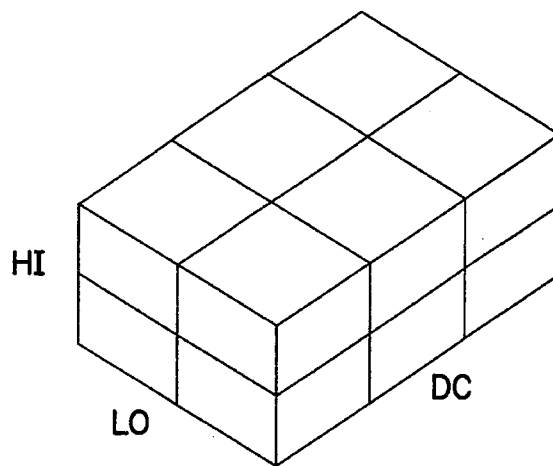


FIG. 6

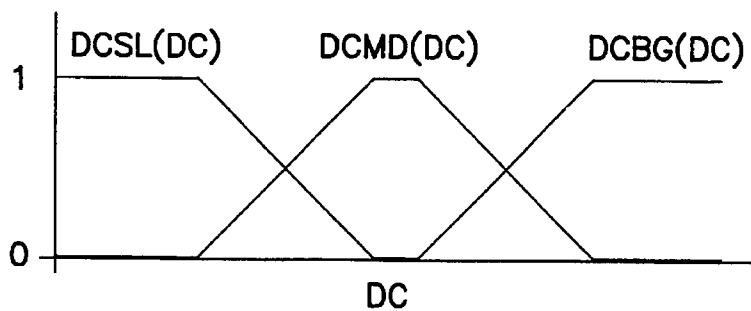


FIG. 7

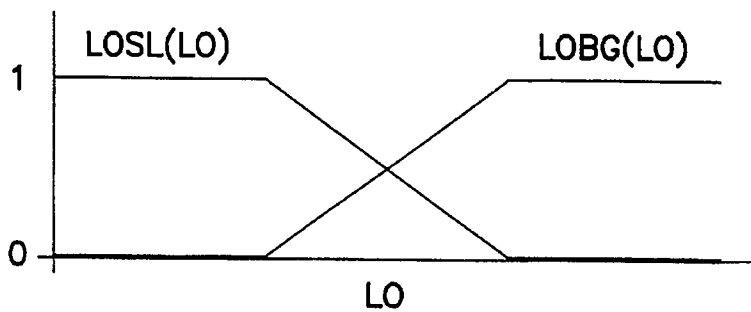
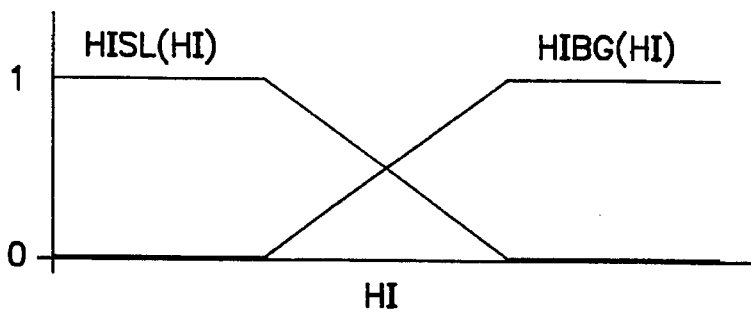


FIG. 8



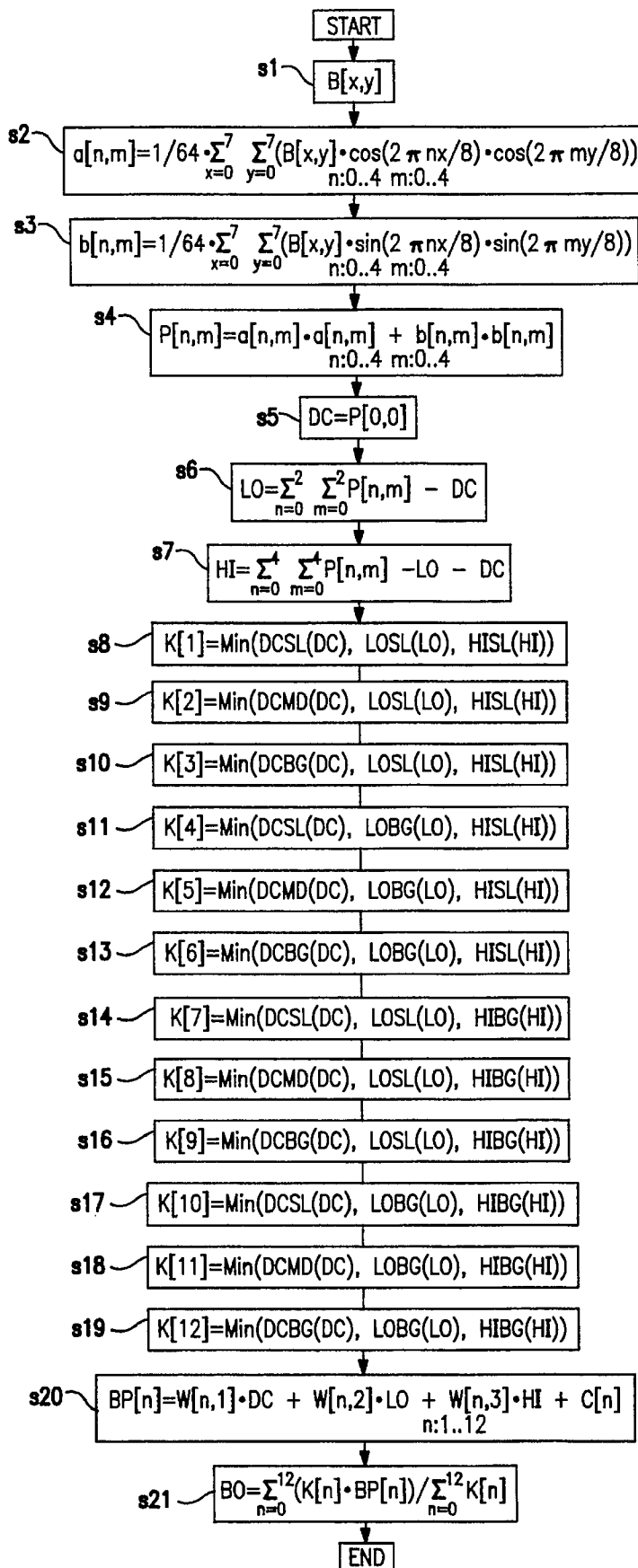


FIG. 9

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