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United States Patent [19]

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Mikuni

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[54] **IMAGE PROCESSING SYSTEM CAPABLE OF DISPLAYING PHOTOGRAPHED IMAGE IN COMBINATION WITH RELEVANT MAP IMAGE**

5,296,884	3/1994	Honda et al.	396/311
5,383,128	1/1995	Nishida et al.	701/210
5,396,430	3/1995	Arakawa et al.	364/449
5,396,431	3/1995	Shimizu et al.	364/449
5,617,319	4/1997	Arakawa et al.	701/207
5,784,059	7/1998	Morimoto et al.	345/353
5,832,406	11/1998	Iwami	701/202
5,938,719	8/1999	Arakawa et al.	701/207

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FOREIGN PATENT DOCUMENTS

[21] Appl. No.: **08/860,612**

WO 90/08371 7/1990 WIPO .

[22] PCT Filed: **Nov. 13, 1996**

WO 95/07516 3/1995 WIPO .

[86] PCT No.: **PCT/JP96/03322**

OTHER PUBLICATIONS

§ 371 Date: **Jul. 2, 1997**

Patent Abstracts of Japan, vol. 17, No. 673, Dec. 1993; & JP 05-224599 (Kenwood Corp.).

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Assistant Examiner—Tung Vo

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Attorney, Agent, or Firm—Frishauf, Holtz, Goodman, Langer & Chick, P.C.

[30] Foreign Application Priority Data

[57] ABSTRACT

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[51] **Int. Cl.⁷** **H04N 7/18**

In an image processing system utilized with a car navigation system, an image photographed by a digital camera is coordinated with a map image in relation to this photographed image, so that a driver can readily confirm where this photographed image has been acquired with respect to the map. The image processing system includes: an image storage unit for storing photographed image data and positional information data acquired in correspondence with the photographed image data; a map image storage unit for storing map image data; a retrieval unit for retrieving a position with respect to the map image data stored in the map image storage unit based upon the positional information data stored in the image storage unit; and an image output unit for outputting a map image of the map image data about the position retrieved by the retrieval unit, and a photographed image of the photographed image data in correspondence with the map image data.

[52] **U.S. Cl.** **348/143**; 348/148; 348/101; 701/202

[58] **Field of Search** 348/143, 144, 348/145, 148, 149, 151, 155, 161, 164, 169, 170; 340/995; 364/449, 450; 345/353; 382/1; 701/202, 207, 210; H04N 7/18

[56] References Cited

U.S. PATENT DOCUMENTS

4,360,876	11/1982	Girault et al.	701/207
4,939,662	7/1990	Nimura et al.	701/211
5,072,396	12/1991	Fizpatrick et al.	364/450
5,122,961	6/1992	Toyama et al.	364/449
5,130,709	7/1992	Toyama et al.	340/995
5,155,774	10/1992	Numagami	382/1
5,231,584	7/1993	Nimura et al.	701/202
5,257,023	10/1993	Furuya	340/995

2 Claims, 16 Drawing Sheets

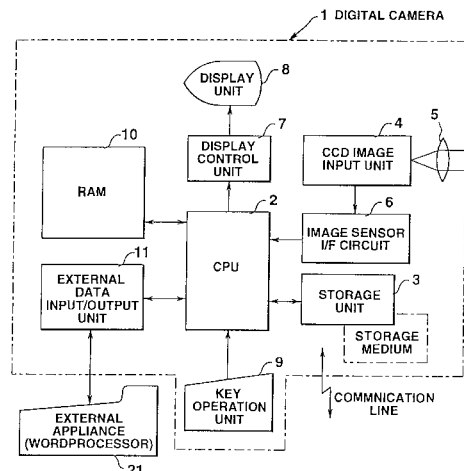


FIG. 1

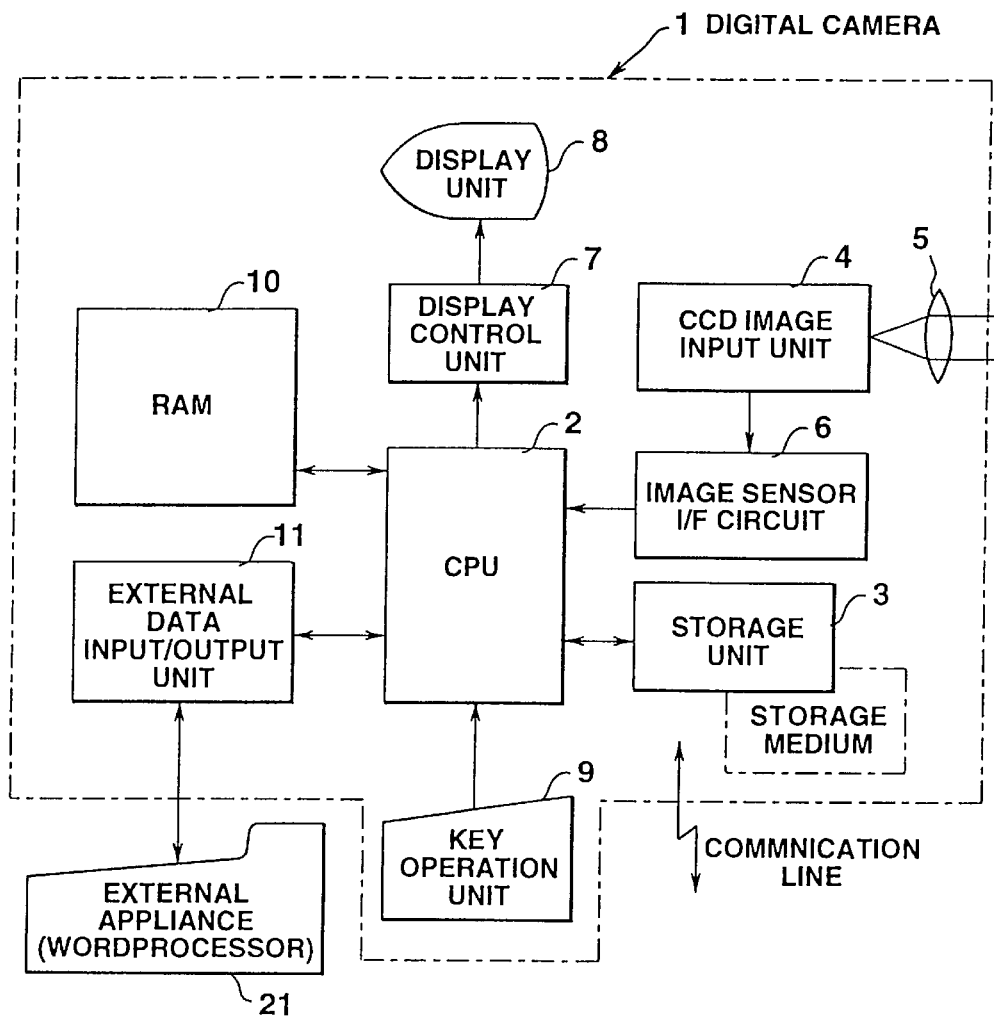


FIG.2

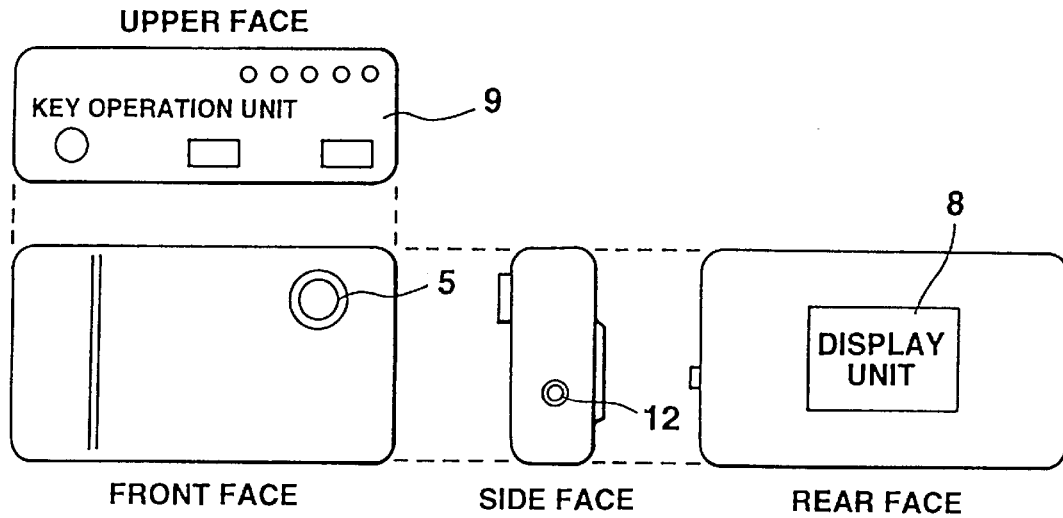


FIG.3

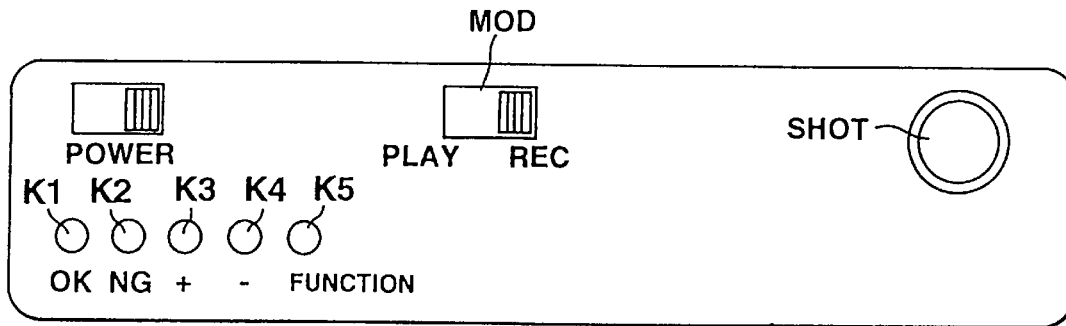


FIG. 4

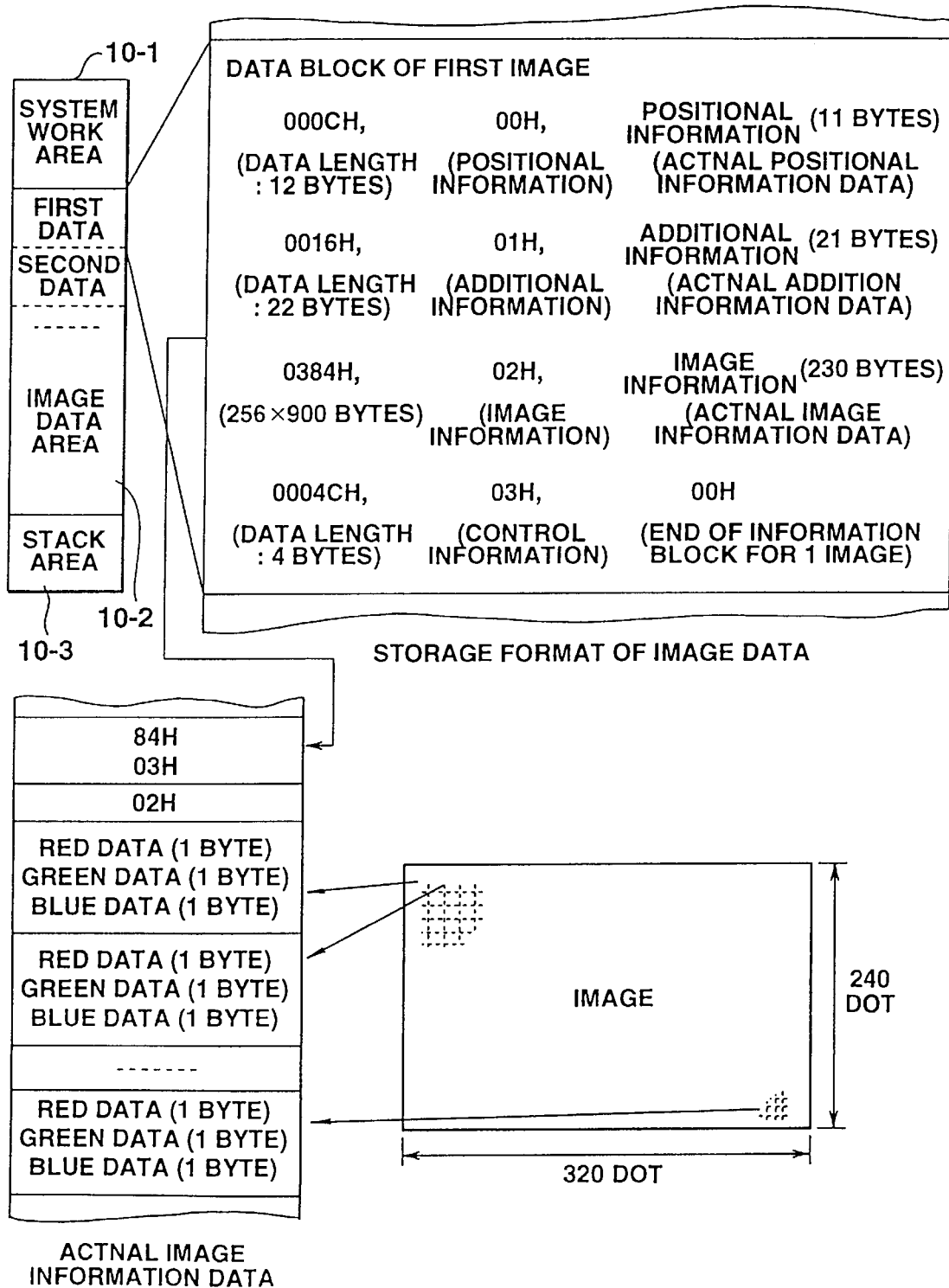
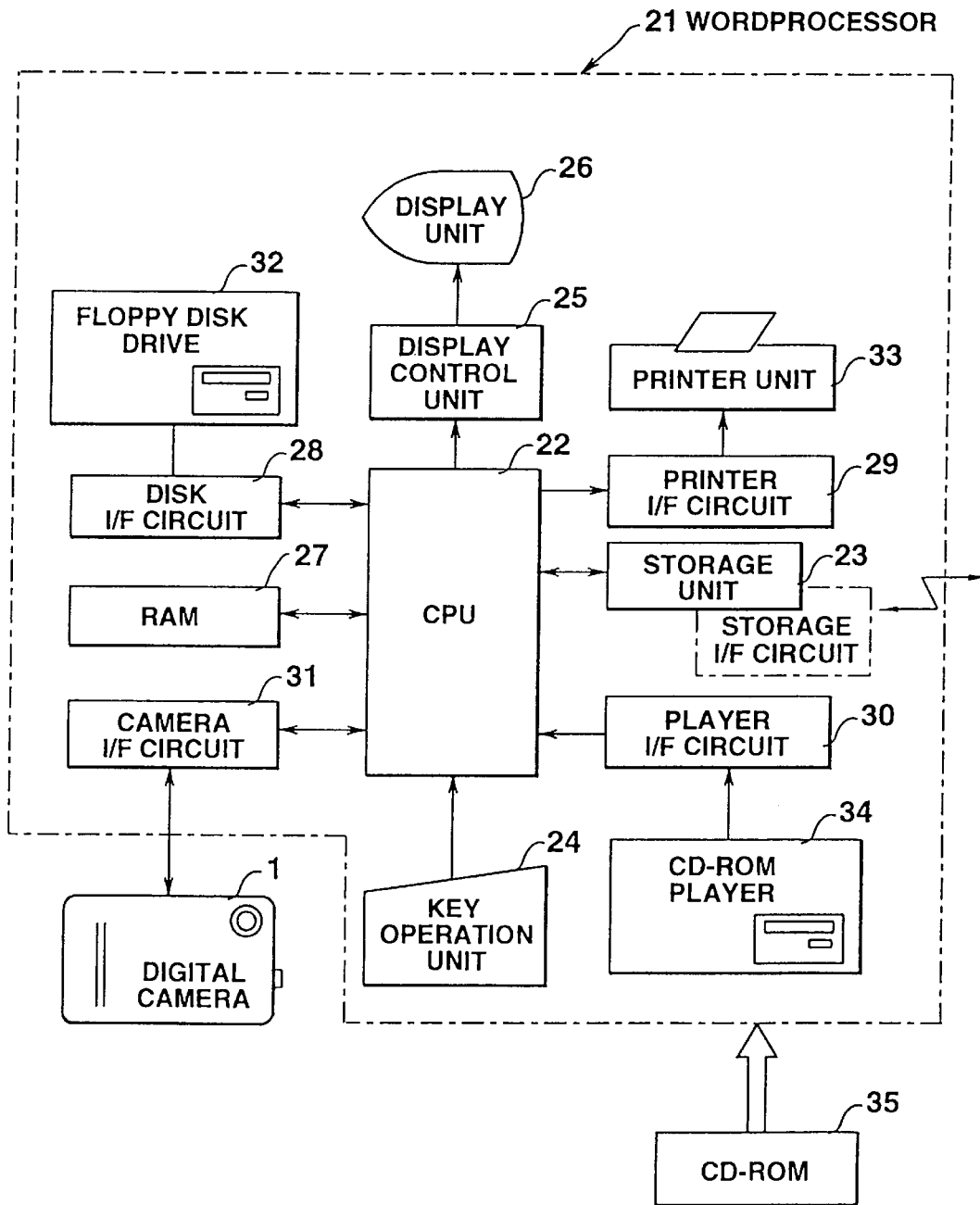


FIG.5



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