



United States Patent [19]
Sarbadhikari et al.

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 [45] **Date of Patent:** **Dec. 19, 1995**

[54] **ELECTRONIC IMAGING SYSTEM USING A REMOVABLE SOFTWARE-ENHANCED STORAGE DEVICE**

5,153,729 10/1992 Saito 358/209
 5,155,513 10/1992 Matsumura et al. 354/106
 5,226,145 7/1993 Moronaga 348/231
 5,262,868 11/1993 Kaneko 348/233

[75] Inventors: **Kamal K. Sarbadhikari**, Penfield;
John R. Fredlund; **Kenneth A. Parulski**, both of Rochester, all of N.Y.

OTHER PUBLICATIONS

USSN 988,517 filed Dec. 10, 1992, Entitled "Electronic Camera with Memory Card Interface to a Computer", Kenneth A. Parulski et al.

[73] Assignee: **Eastman Kodak Company**, Rochester, N.Y.

USSN 085,519 filed Jun. 30, 1993, Entitled "Apparatus and Method for Adaptively Interpolating a Full Color Image Utilizing Chrominance Gradients", Claude A. Laroche et al. Personal Computer Memory Card International Association (PCMCIA) "PC Card Standard", Release 2.0, Sep. 1991.

[21] Appl. No.: **219,608**

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Assistant Examiner—Sherrie Hsia
Attorney, Agent, or Firm—David M. Woods

[22] Filed: **Mar. 29, 1994**

[51] **Int. Cl.⁶** **H04N 5/76**
 [52] **U.S. Cl.** **348/231; 348/233; 348/552**
 [58] **Field of Search** **348/222, 231, 348/232, 233, 552; 358/909.1, 906; 258/903, 909; H04N 5/76; 5/907, 5/92**

[57] **ABSTRACT**

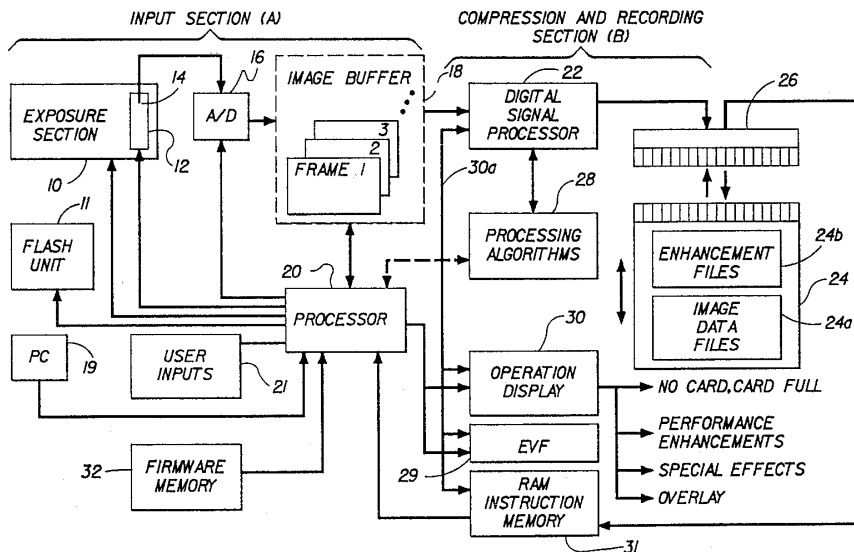
An electronic imaging system includes a digital electronic camera for capturing and storing images in a removable storage device, which is also preloaded with enhancement files for effecting the operation of the system. The camera includes an optical section for establishing the optical parameters of image capture, an image sensing section for electrically capturing the image, and a signal processing section for operating upon the electrically captured image prior to storage. The several sections of the camera are coordinated and controlled by a programmable processor, which is capable of receiving the enhancement files preloaded into the storage device. These files may contain software for updating the operating code of the camera, for modifying the electrically captured image in selected ways, for modifying camera in special situations, or for communicating non-captured image-like data, such as text and image overlays, to the camera.

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,500,183	2/1985	Tanikawa	354/21
4,524,381	6/1985	Konishi	358/29
4,574,319	3/1986	Konishi	358/335
4,728,978	3/1988	Inoue et al.	354/289.1
4,853,733	8/1989	Watanabe et al.	354/412
4,855,779	8/1989	Ishikawa et al.	354/412
4,994,844	2/1991	Azuma et al.	354/412
5,016,107	5/1991	Sasson et al.	358/209
5,018,017	5/1991	Sasaki et al.	358/209
5,023,637	6/1991	Lorton et al.	354/106
5,027,214	6/1991	Fujimori	358/209
5,032,855	7/1991	Taniguchi et al.	354/21
5,070,355	12/1991	Inoue et al.	354/413
5,086,311	2/1992	Naka et al.	354/195.1
5,103,250	4/1992	Arifuku et al.	354/106
5,138,459	8/1992	Roberts	348/552
5,142,310	8/1992	Taniguchi et al.	354/106

47 Claims, 11 Drawing Sheets



Sony, Ex. 1017, p.1

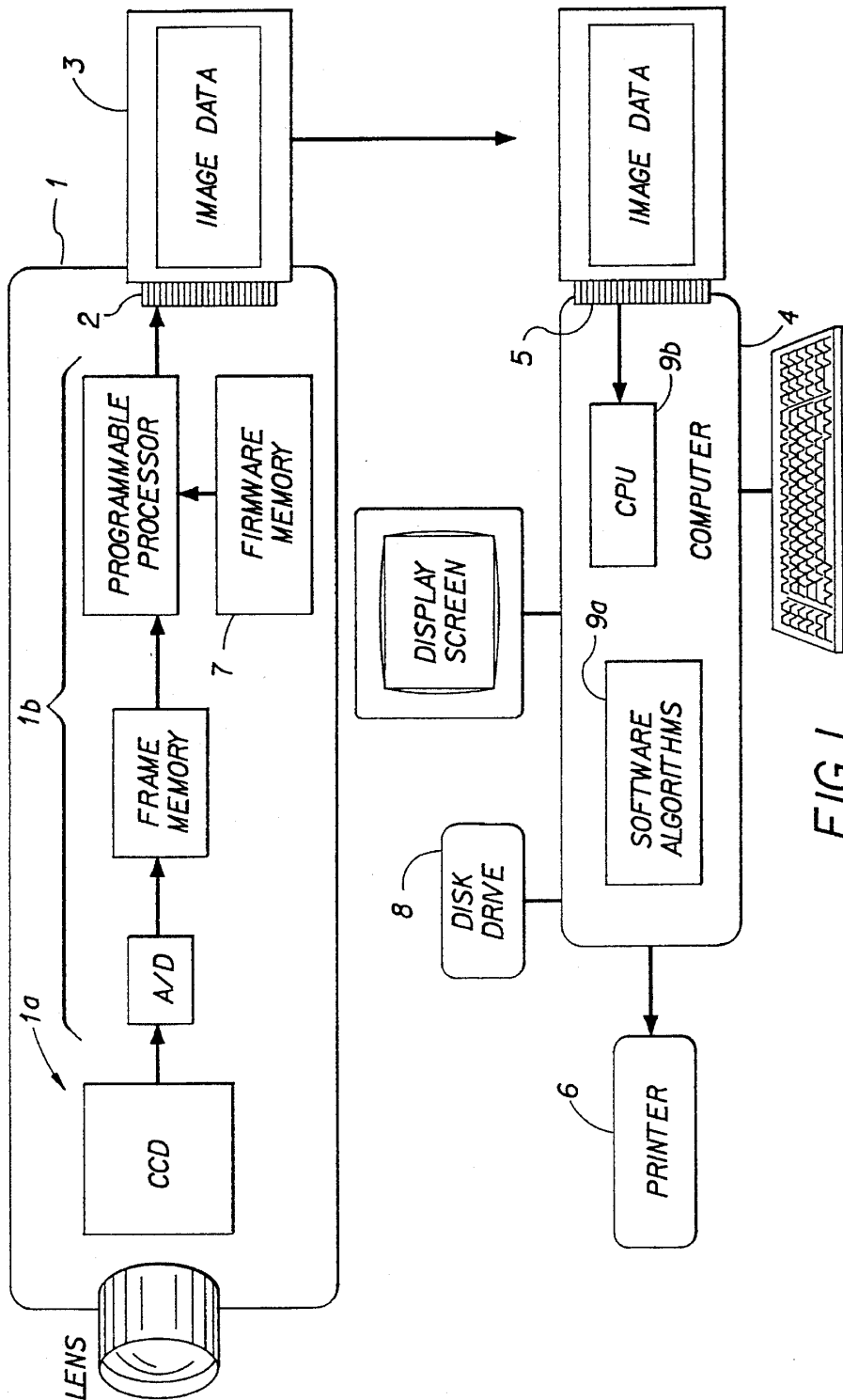


FIG. 1
(PRIOR ART)

Sony, Ex. 1017, p.2

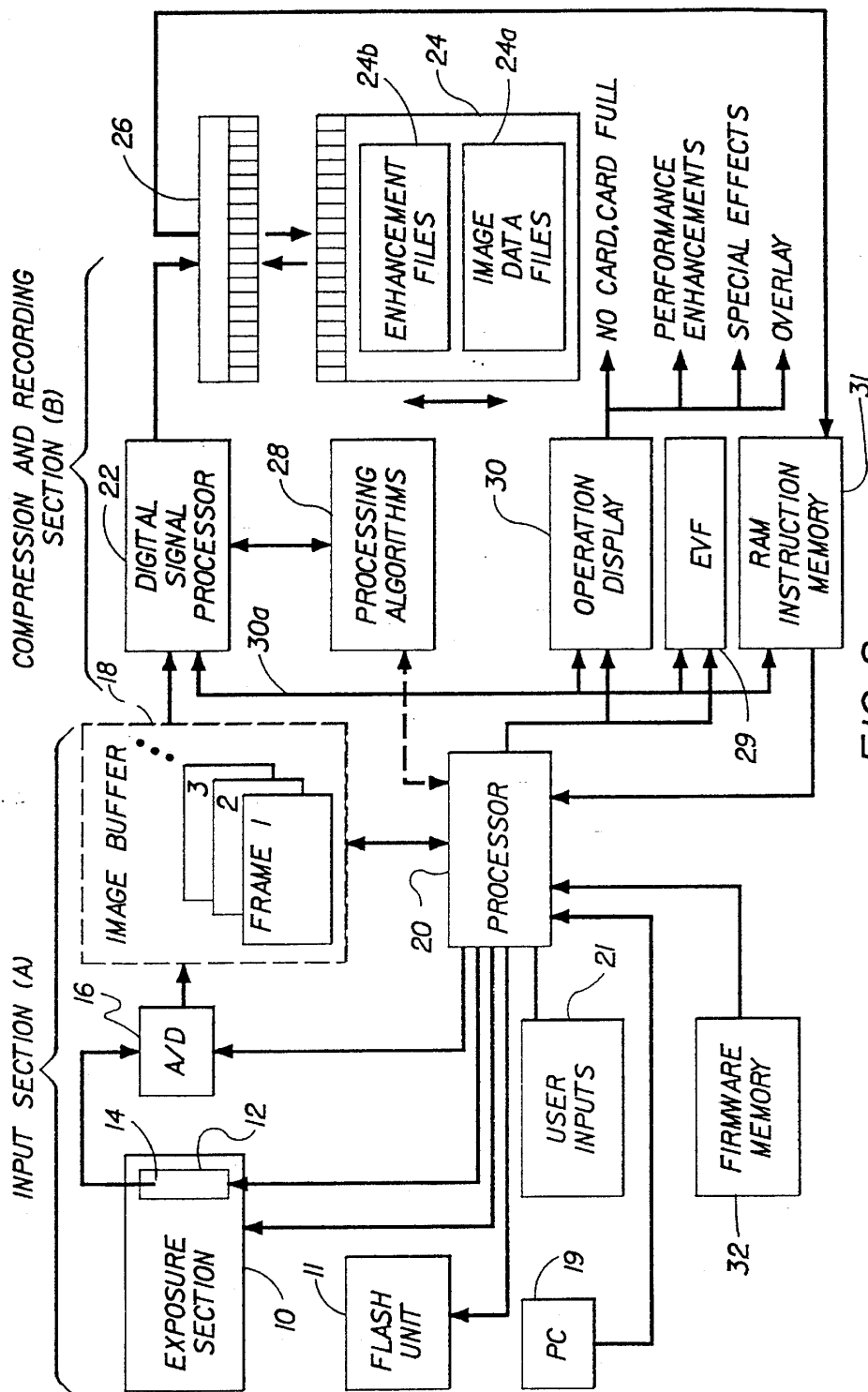


FIG. 2

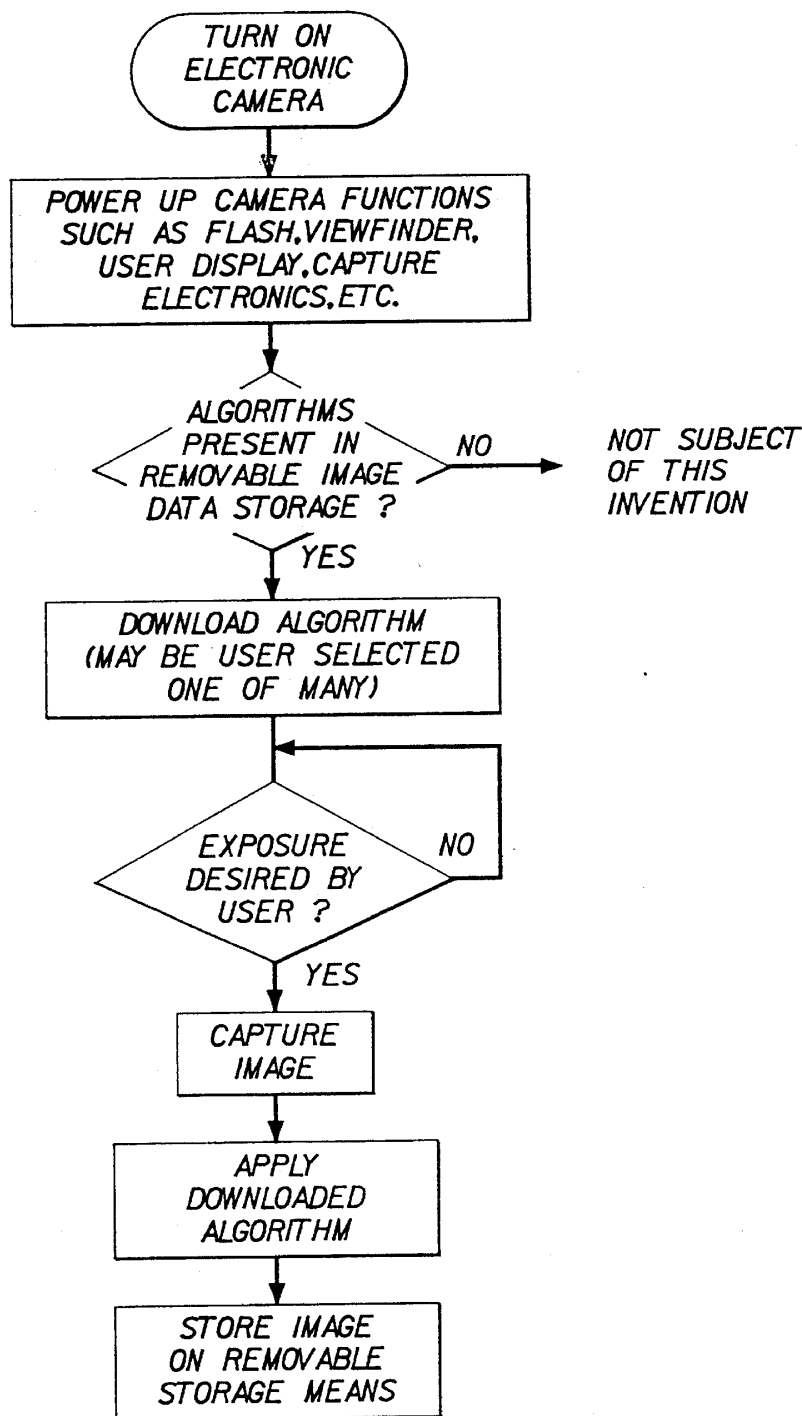


FIG. 3

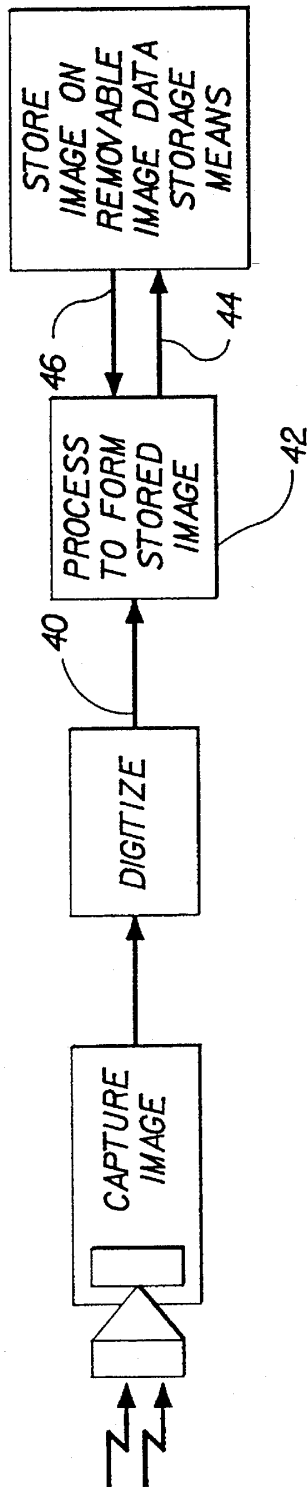


FIG. 4

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