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United States Patent [19]
Ard

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[54] **METHOD AND SYSTEM FOR OPERATING A SCANNER WHICH EMULATES A DISK DRIVE**

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[73] Assignees: **Ricoh Company, Ltd.**, Tokyo, Japan;
Ricoh Corporation, San Jose, Calif.

[21] Appl. No.: **08/821,343**

[22] Filed: **Mar. 20, 1997**

[51] **Int. Cl.**⁶ **G06F 13/10**; G06F 13/12

[52] **U.S. Cl.** **395/500**; 395/308; 395/309

[58] **Field of Search** 395/500, 308,
395/309

[56] **References Cited**

U.S. PATENT DOCUMENTS

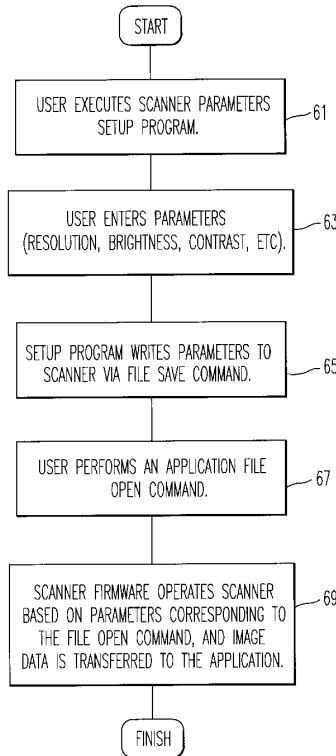
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Assistant Examiner—Hugh Jones
Attorney, Agent, or Firm—Oblon, Spivak, McClelland,
Maier & Neustadt, P.C.

[57] **ABSTRACT**

A scanner is provided with a disk drive emulator and is attached to a general purpose computer via a SCSI bus. The disk drive emulator provides signals such that the general purpose computer identifies the scanner as a disk drive. Applications running on the general purpose computer direct operation of the scanner via standard operating system disk drive commands. To facilitate the transfer of commands to the scanner, a scanner parameters setup program, also known as an Application Program Interface (API), is provided that is resident on the scanner and accessible to the general purpose computer via the disk drive emulator. When executed, the scanner parameters setup program provides a graphically oriented menu allowing a user to enter parameters such as resolution, brightness, contrast, etc. Once entered, the parameters are saved to the scanner via a File Save command. An application running on the general purpose computer then operates the scanner in accordance with the parameters thus saved by performing a File Open command on a file visible to the general purpose computer via the disk drive emulator and corresponding to the saved parameters. Image data resulting from operation of the scanner is transferred from the scanner via the disk drive emulator to the general purpose computer as if a file is being opened. Alternatively, the scanner is operated upon the saving of the parameters to the scanner, and image data resulting therefrom is saved as a file to a storage device accessible to the general purpose computer.

22 Claims, 10 Drawing Sheets



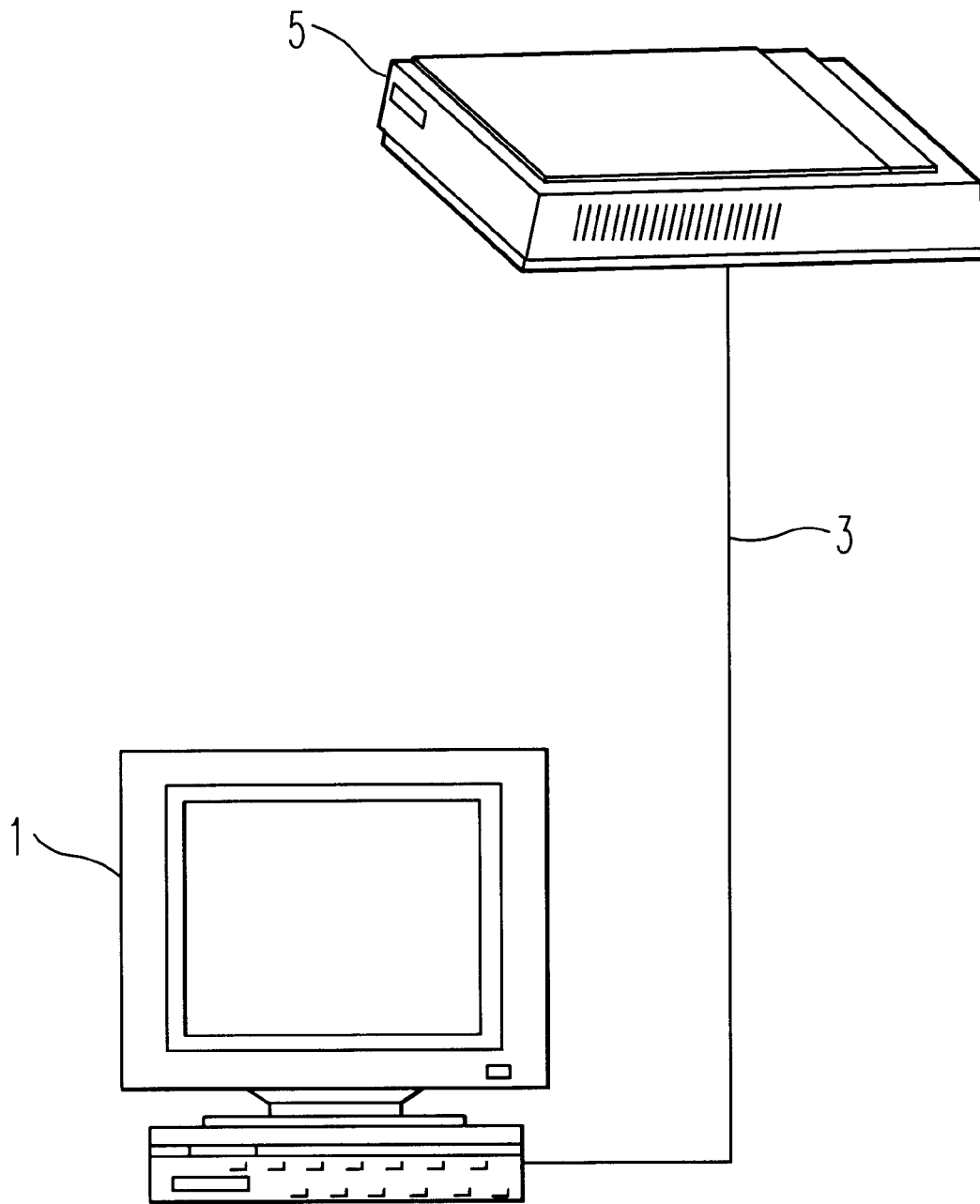


FIG. 1

PRIOR ART

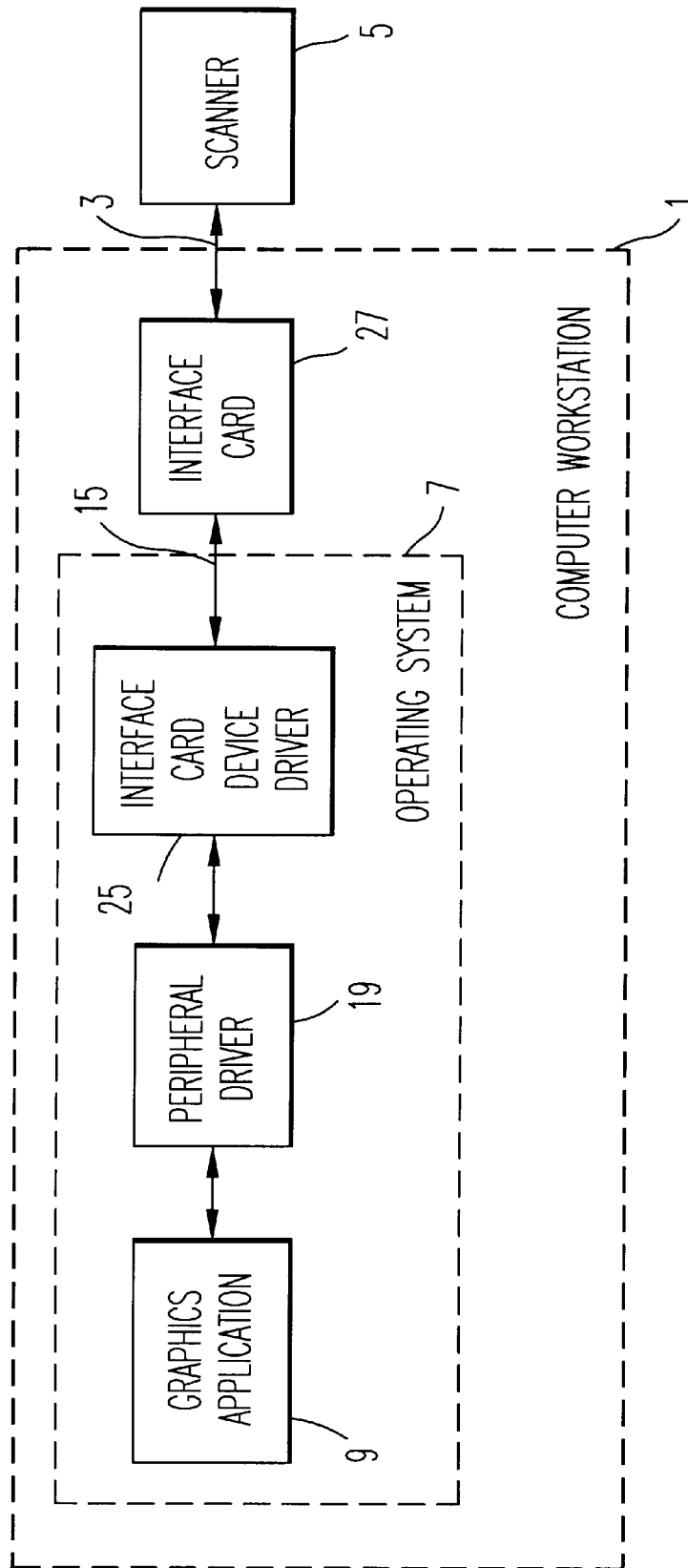


FIG. 2

RELATED ART

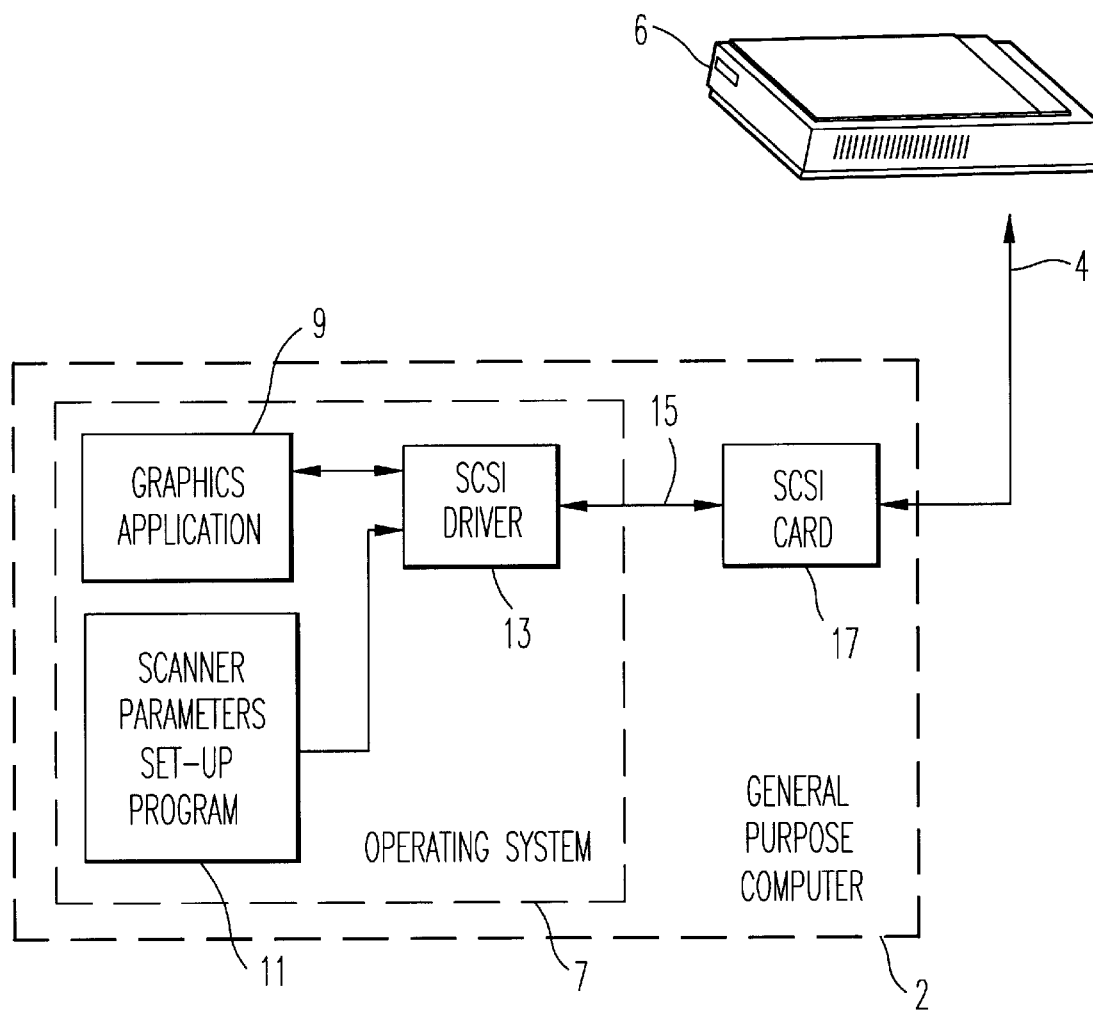


FIG. 3

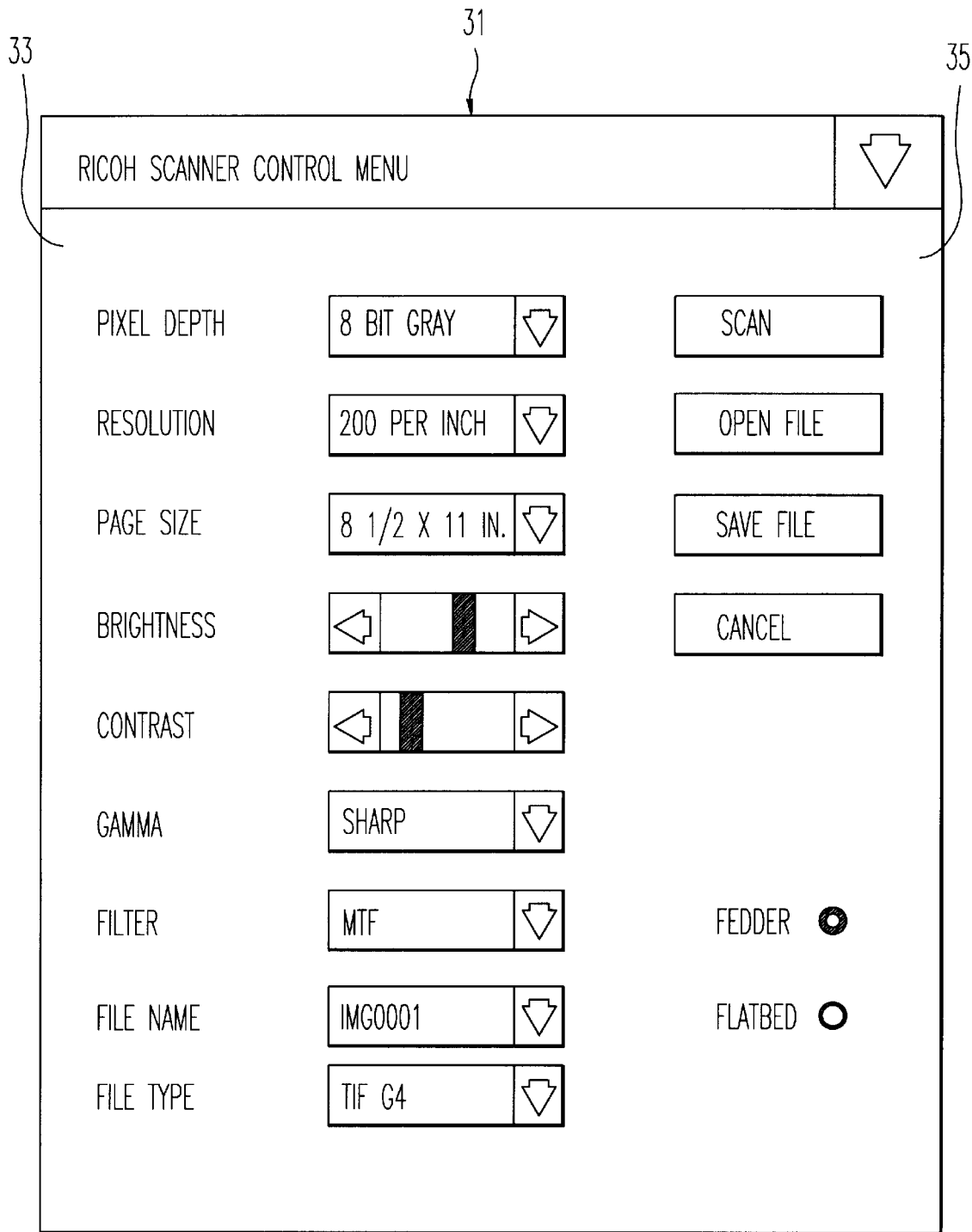


FIG. 4

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