

US005506692A

United States Patent [19]

Murata

[11] **Patent Number:** 5,506,692

Date of Patent: [45]

Apr. 9, 1996

[54] IMAGE HANDLING APPARATUS HAVING FILE SYSTEM EMULATION MEANS

[75] Inventor: Kazuyuki Murata, Tsuzuki, Japan

Assignee: Matsushita Electric Industrial Co.,

Ltd., Kadoma, Japan

Appl. No.: 259,530 [21]

[22] Filed: Jun. 14, 1994

Related U.S. Application Data

[62] Division of Ser. No. 36,028, Mar. 23, 1993.

[30] Foreign Application Priority Data

Apr. 9, 1992 [JP] Japan 4-088541 Aug. 7, 1992 [JP] Japan 4-211102

[51] Int. Cl.⁶ H04N 1/00; H04N 1/21; G06F 3/00; G06F 9/455; G06F 13/00

U.S. Cl. **358/442**; 358/444; 395/112; 395/115; 395/500; 395/828; 395/830; 395/882; 395/883; 395/892

358/444, 296; 395/500, 275, 112, 114,

115, 828, 830, 882, 883, 892

[56] References Cited

U.S. PATENT DOCUMENTS

5,088,033 2/1992 Binkley et al. 395/500

OTHER PUBLICATIONS

Operating Systems: Design and Implementation, Andrew S.

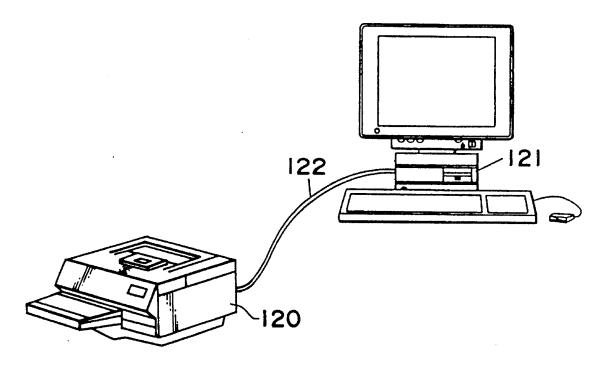
Tanenbaum, 1987, pp. 299-308.

Primary Examiner—Scott A. Rogers Attorney, Agent, or Firm-Ratner & Prestia

ABSTRACT

An image forming apparatus which is used with an external host computer. The image forming apparatus includes an interface for connecting the image forming apparatus to the external host computer. The image forming apparatus further includes a file system emulator which emulates a file system contained in the disk storage apparatus of the external host computer. The file system emulator makes the image forming apparatus look like the disk storage apparatus to the external host computer connected to the image forming apparatus to transfer images from the external host computer to the image forming apparatus via the interface device.

10 Claims, 7 Drawing Sheets





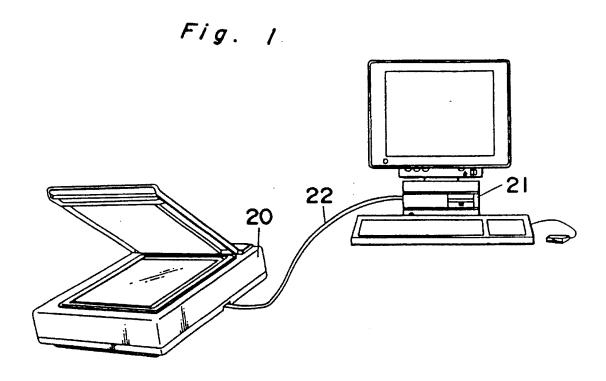
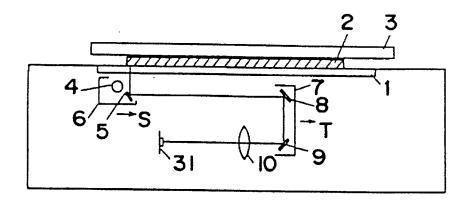
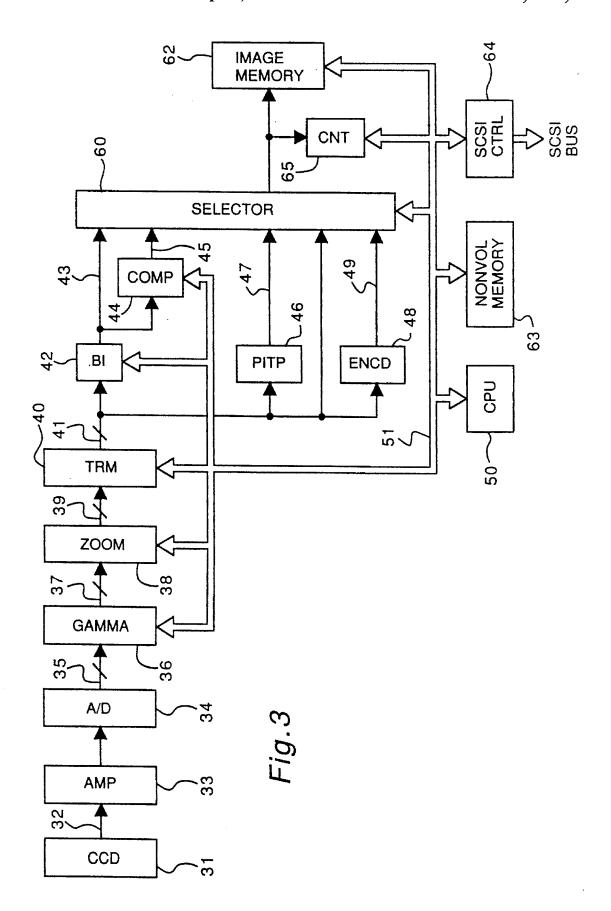


Fig. 2





```
#SCANNER PARAMETER FILE EXAMPLE
# AREA PARAMETER(inch)
# X,Y,XL,YL
1.2
2.4
5.5
6.3
#ZOOMING PARAMETER(%) XZ,YZ
100
150
#IMAGE PROCESSING PARAMETER
        SIMPLE BI-LEVEL IMAGE
                                               ->0
                                               ->1
        BI-LEVEL COMPRESSION IMAGE(MH)
        BI-LEVEL COMPRESSION IMAGE(MR)
                                               ->2
                                               ->3
       BI-LEVEL COMPRESSION IMAGE(MMR)
                                               ->4
       ERROR DIFFUSION BI-LEVEL IMAGE
                                                ->5
       88ITS GRAY SCALE IMAGE
       88ITS. GRAY SCALE COMPRESSION IMAGE ->6
#GAMMA TRANSFER PARAMETER
       LINEAR
#
        DENSITY
                          ->1
       DATE SETTABLE ->2
#GAMMA TRANSFER DATA TABLE
#DATA MUST BE 0 \langle =.255 \rangle =
00 10 17 1C 20 24 27 2A 20 30 32 35 37 3A 3C 3E
40 42 44 46 47 49 4B 4D 4E 50 51 53 54 56 57 59
5A 5C 5D 5E 60 61 62 64 65 66 67 69 6A 6B 6C 6D
6F 70 71 72 73 74 75 76 77 79 7A 7B 7C 7D 7E 7F
80 81 82 83 84 85 86 87 87 88 89 8A 8B 8C 8D 8E
8F 90 91 91 92 93 94 95 96 97 97 98 99 9A 9B 9C
9C 9D 9E 9F A0 A0 A1 A2 A3 A4 A4 A5 A6 A7 A7 A8
A9 AA AA AB AC AD AD AE AF B0 B0 B1 B2 B3 B3 B4
B5 B5 B6 B7 B7 B8 B9 BA BA BB BC BC BD BE BE BF
CO CO C1 C2 C2 C3 C4 C4 C5 C6 C6 C7 C7 C8 C9 C9
CA CB CB CC CC CD CE CE CF D0 D0 D1 D1 D2 D3 D3
D4 D4 D5 D6 D6 D7 D7 D8 D9 D9 DA DA DB DC DC DD
DD DE DE DF E0 E0 E1 E1 E2 E2 E3 E4 E4 E5 E5 E6
E6 E7 E7 E8 E9 E9 EA EA EB EB EC EC ED ED EE EE
EF F0 F0 F1 F1 F2 F2 F3 F3 F4 F4 F5 F5 F6 F6 F7
F7 F8 F8 F9 F9 FA FA FB FB FC FC FD FD FE FE FF
```



Apr. 9, 1996 Fig.5 **FILE** NO SYS. PREPARED YES "mkfs" COMMAND **MOUNT** FILE SYS. WRITE TO PARA FILE **UNMOUNT** FILE SYS. **MOUNT AGAIN READ IMAGE DATA** PARA. YES NO SHOULD BE

CHANGED

DOCKET A L A R M

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

