



- [54] **REMOVABLE MOTHER/DAUGHTER PERIPHERAL CARD**
- [75] Inventors: **Eliyahou Harari**, Los Gatos; **Daniel C. Guterman**, Fremont; **Robert F. Wallace**, Sunnyvale, all of Calif.
- [73] Assignee: **SanDisk Corporation**, Sunnyvale, Calif.
- [21] Appl. No.: **781,539**
- [22] Filed: **Jan. 9, 1997**

Related U.S. Application Data

- [63] Continuation of Ser. No. 462,642, Jun. 5, 1995, abandoned, which is a continuation of Ser. No. 398,856, Mar. 6, 1995, abandoned, which is a continuation of Ser. No. 151,292, Nov. 12, 1993, abandoned, which is a continuation-in-part of Ser. No. 115,428, Sep. 1, 1993, abandoned.
- [51] **Int. Cl.⁶** **G06F 12/00**
- [52] **U.S. Cl.** **395/282**; 395/833; 395/882; 711/103; 711/115
- [58] **Field of Search** 395/800, 282, 395/283, 309, 800.01, 800.37, 500, 833, 821, 882; 711/2, 103, 115; 365/52, 99

References Cited

U.S. PATENT DOCUMENTS

| | | | |
|-----------|--------|---------------|---------|
| 4,837,628 | 6/1989 | Sasaki | 358/209 |
| 5,018,017 | 5/1991 | Sasaki et al. | 358/209 |
| 5,293,236 | 3/1994 | Adachi et al. | 348/231 |
| 5,343,319 | 8/1994 | Moore | 359/152 |
| 5,438,359 | 8/1995 | Aoki | 348/207 |

| | | | |
|-----------|---------|-----------------|---------|
| 5,457,590 | 10/1995 | Barrett et al. | 360/133 |
| 5,475,441 | 12/1995 | Paralski et al. | 348/552 |
| 5,488,433 | 1/1996 | Washino et al. | 395/722 |
| 5,584,043 | 12/1996 | Burkart | 395/882 |
| 5,611,057 | 3/1997 | Pecone et al. | 395/282 |
| 5,615,344 | 3/1997 | Corder | 395/309 |

FOREIGN PATENT DOCUMENTS

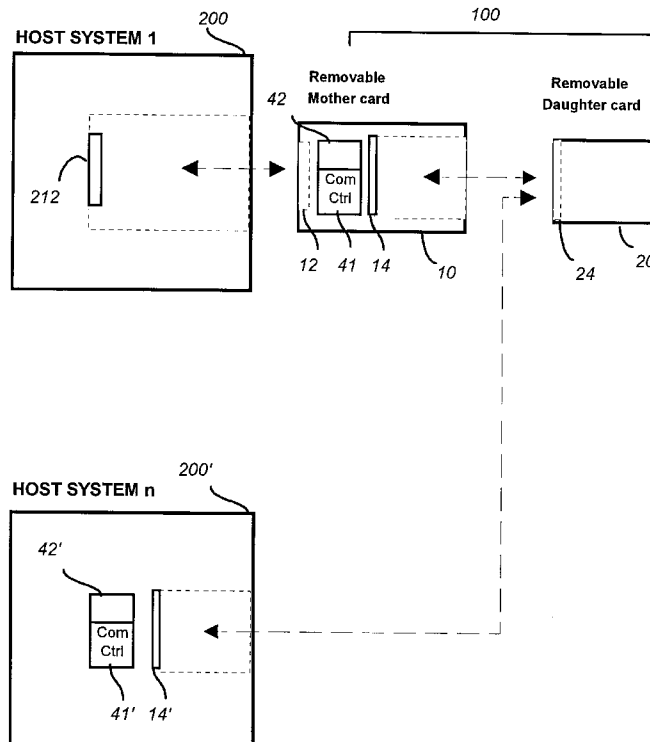
WO9300658 1/1993 WIPO .

Primary Examiner—Meng-Ai T. An
Assistant Examiner—Walter D. Davis, Jr.
Attorney, Agent, or Firm—Majestic, Parsons, Siebert & Hsue

[57] **ABSTRACT**

A peripheral card having a Personal Computer (“PC”) card form factor and removably coupled externally to a host system is further partitioned into a mother card portion and a daughter card portion. The daughter card is removably coupled to the mother card. In the preferred embodiment, a low cost flash “floppy” is accomplished with the daughter card containing only flash EEPROM chips and being controlled by a memory controller residing on the mother card. Other aspects of the invention includes a comprehensive controller on the mother card able to control a predefined set of peripherals on daughter cards connectable to the mother card; relocation of some host resident hardware to the mother card to allow for a minimal host system; a mother card that can accommodate multiple daughter cards; daughter cards that also operates directly with hosts having embedded controllers; daughter cards carrying encoded data and information for decoding it; and daughter cards with security features.

22 Claims, 9 Drawing Sheets



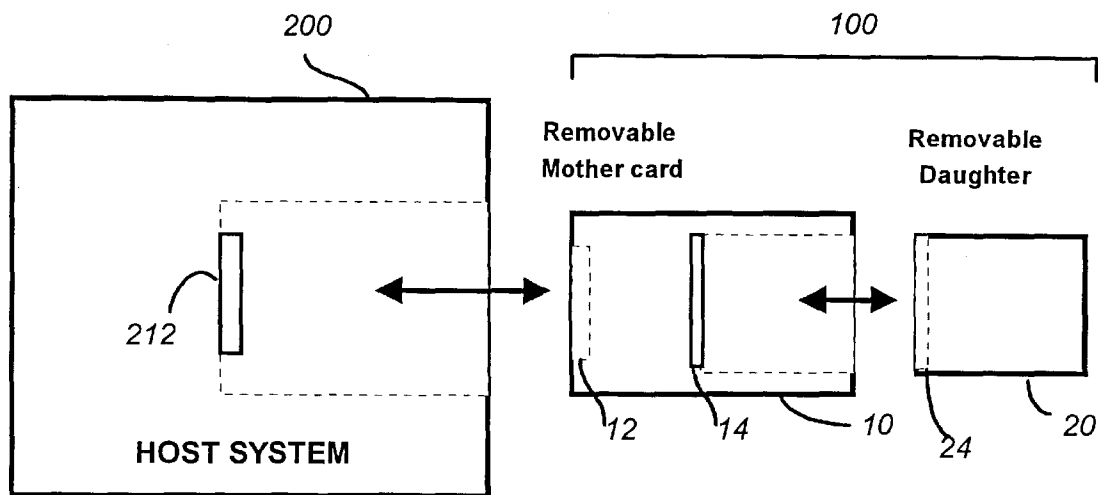


FIG. 1

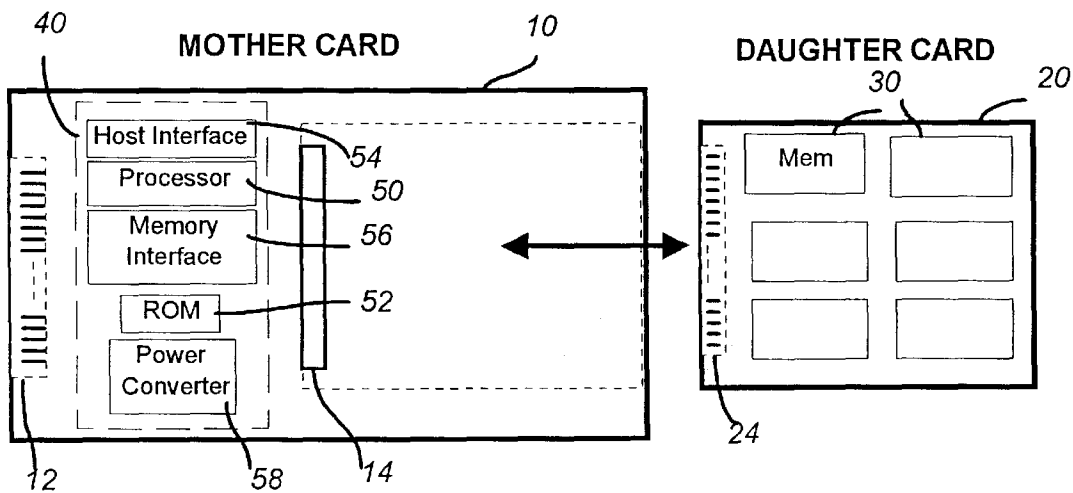


FIG. 3

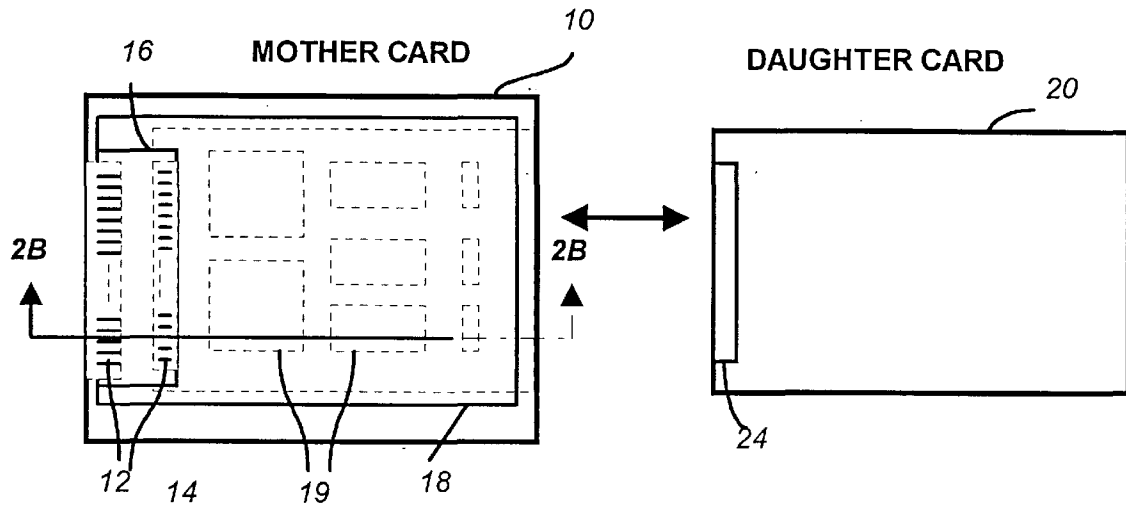


FIG. 2A

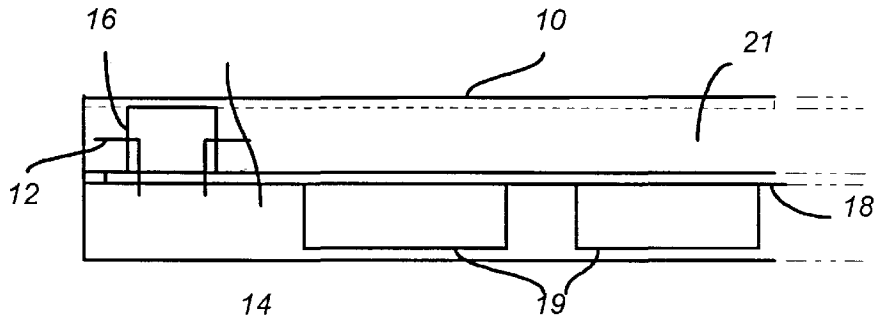


FIG. 2B

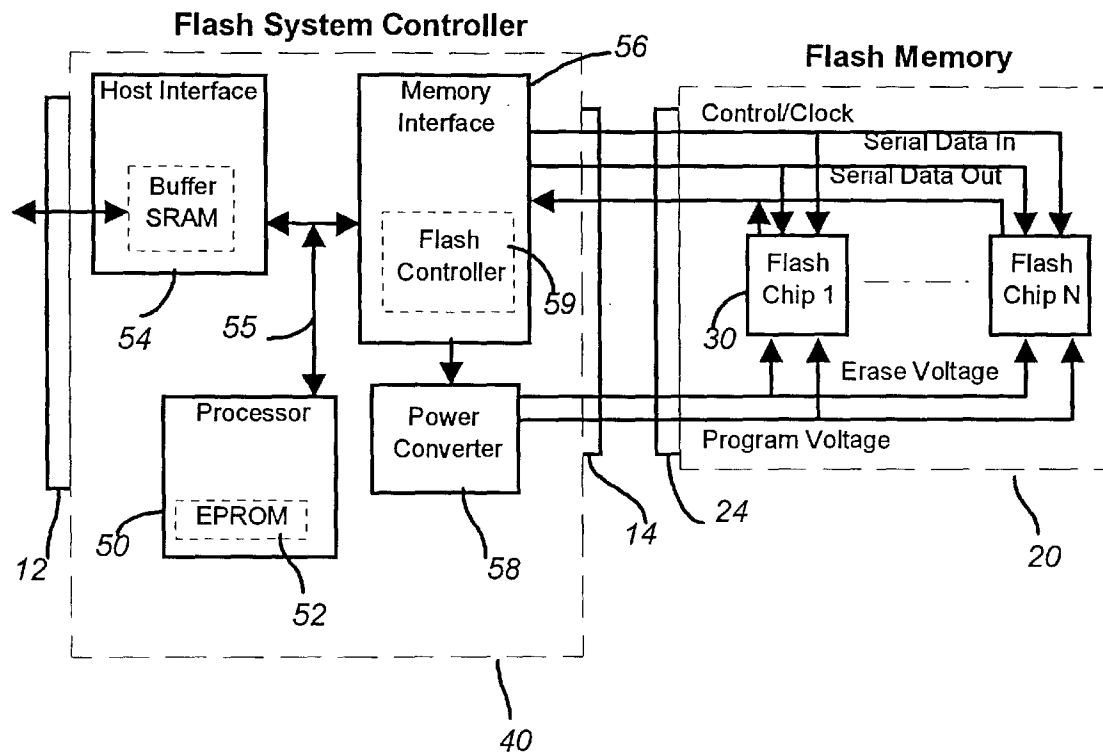


FIG. 4

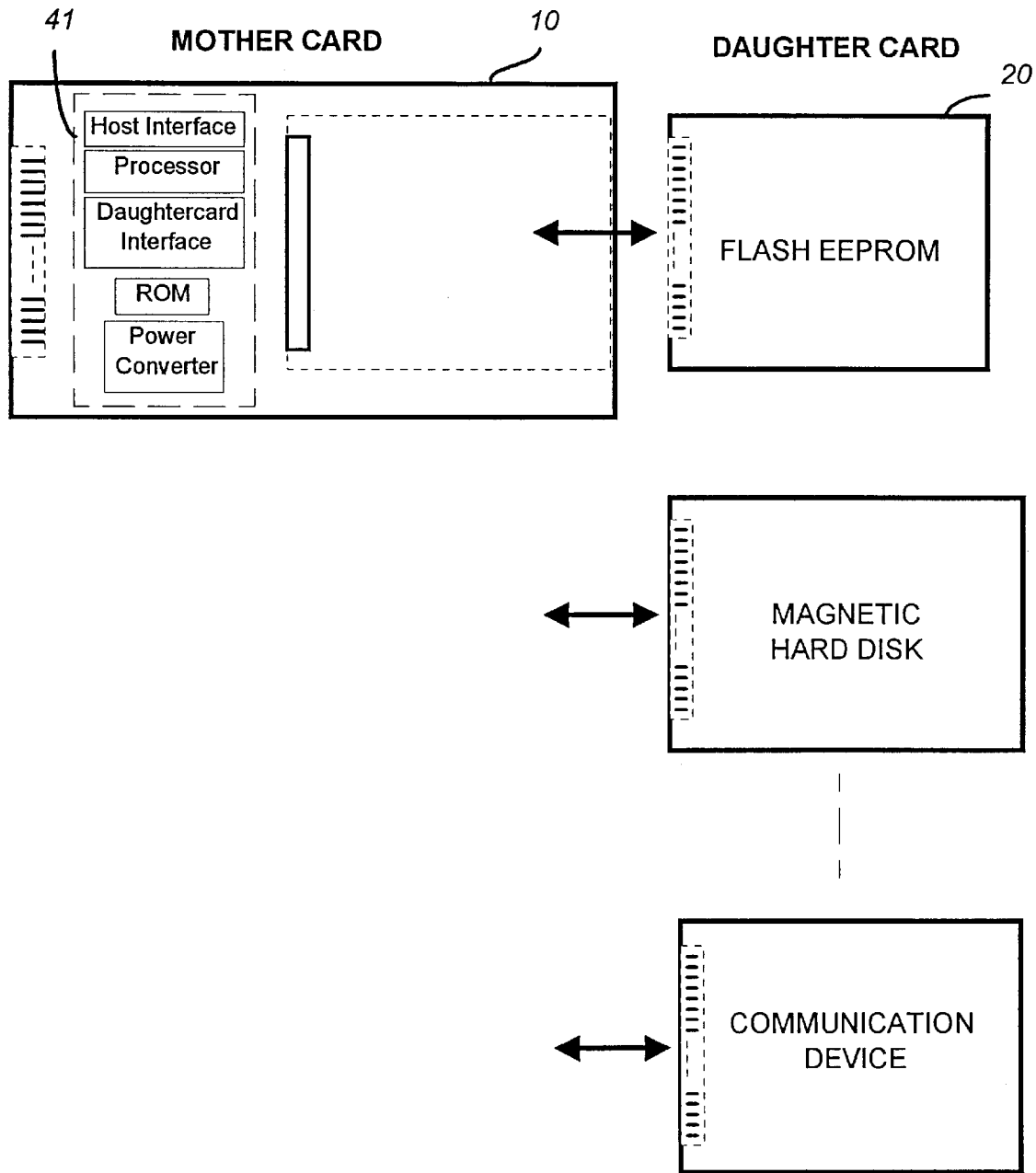


FIG. 5A

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.