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United States Patent [19]

Hastings et al.

[56]

3.853.379

4,596,907

4,835,737

4,875,867

4,999,787

5,003,431

5,010,426

5,191,970

5,247,619

5,310,998

5,317,482

5,317,483

5,428,507

5,454,080

5,473,499

5,504,656

5,513,329

5,530,302

5,555,510

5/1994

9/1995

4/1996

5,822,196 [11] **Patent Number:**

Oct. 13, 1998 **Date of Patent:** [45]

[54]	SECURIN DEVICE	IG A CARD IN AN ELECTRONIC
[75]	Inventors:	Robert J. Hastings, Humble; Paily T. Varghese; Joseph R. Allen, both of Tomball, all of Tex.
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[21]	Appl. No.:	658,385
[22]	Filed:	Jun. 5, 1996
[58]		earch

References Cited

U.S. PATENT DOCUMENTS

3,767,974 10/1973 Donovan, Jr. et al. 361/798

12/1974 Goodman et al. 439/261

6/1986 LaGreco et al. 200/50 A

3/1991 McNally et al. 364/514

4/1991 Krenz 361/726 X

3/1993 Brockway et al. 200/335

9/1993 Mutoh et al. 395/325

5/1994 Swindler 361/801

6/1995 Chatel et al. 361/798

6/1996 Hamre et al. 307/147

Okuno 235/380

Fasig et al. 395/283

5,581,712	12/1996	Herrmann 395/283
5,625,238	4/1997	Ady et al 307/147
5,629,836	5/1997	Wright 361/755

FOREIGN PATENT DOCUMENTS

0 241 905 A2	10/1987	European Pat. Off
0 254 456 A2	1/1988	European Pat. Off
2850440	11/1977	Germany .
3409021	3/1984	Germany.
WO 93/15459	8/1993	WIPO .

OTHER PUBLICATIONS

Hot Plug Receptacle Actuated Mechanical Latch; pp. 363–364; IBM Technical Disclosure Bulletin, vol. 34, No. 6; Nov. 1991.

CompactPCI™ Specification; Revision 1.0; pp. 14, 36, and 50; PCI Industrial Computers; Nov. 1, 1995.

Don Anderson; Card Bus System Architecture, PC System Architecture Series, Second Edition; pp. 17-29, 39-58, 227-236, 321-361; Minshare, Inc., Richardson, TX.; ©1996.

Don Anderson; PCMCIA System Architecture, PC System Architecture Series, Second Edition; pp. 21–83, 113–141, 145-162, 229-309, 321-332; Mindshare, Inc., Richardson, TX., ©1995.

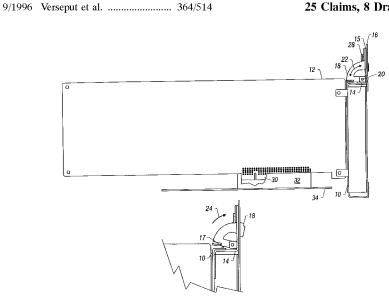
Maintenance & Service Guide, Compaq Deskpro XL Series of Personal Computers, Compaq Corporation, Houston, Texas (Dec. 15, 1995).

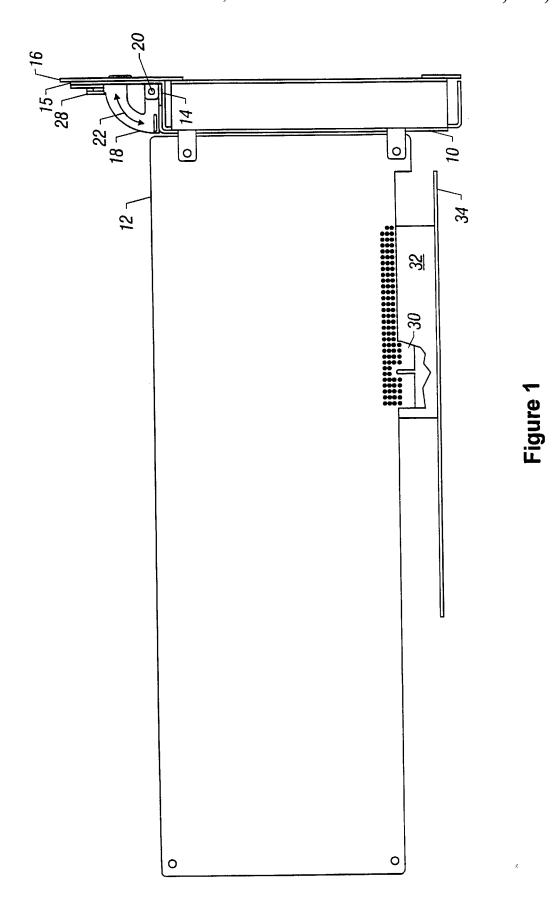
Primary Examiner—Michael W. Phillips Assistant Examiner-Jayprakash N. Gandhi Attorney, Agent, or Firm-Fish & Richardson P.C.

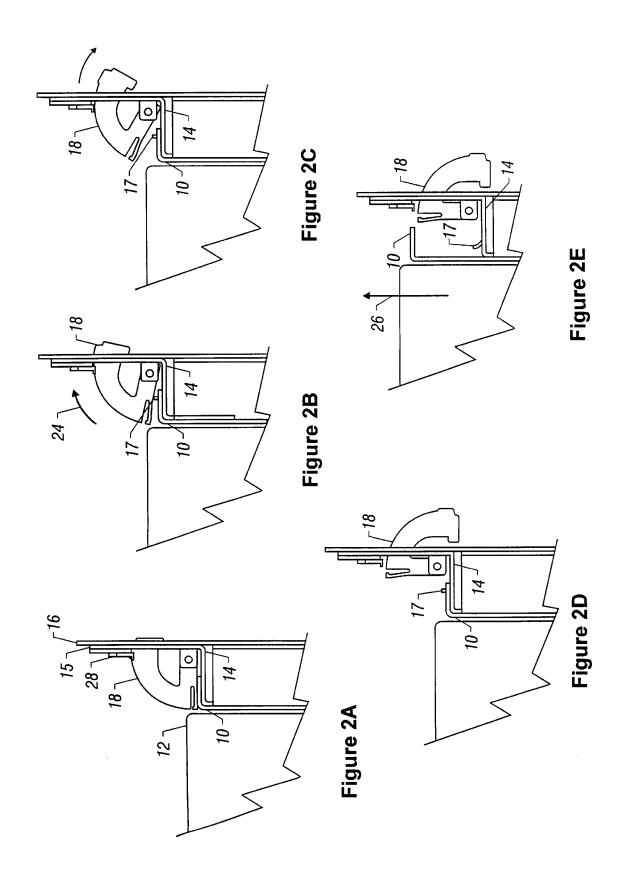
ABSTRACT [57]

An add-in circuit card is secured in an electronic device. A clamp is movably coupled to the electronic device and is configured to releasably engage the card upon movement of the clamp from a card engagement position to a card disengagement position. A switch may control electrical power to the card, the switch operated by the clamp such that movement of the clamp between the engagement and disengagement positions closes and opens the switch.

25 Claims, 8 Drawing Sheets







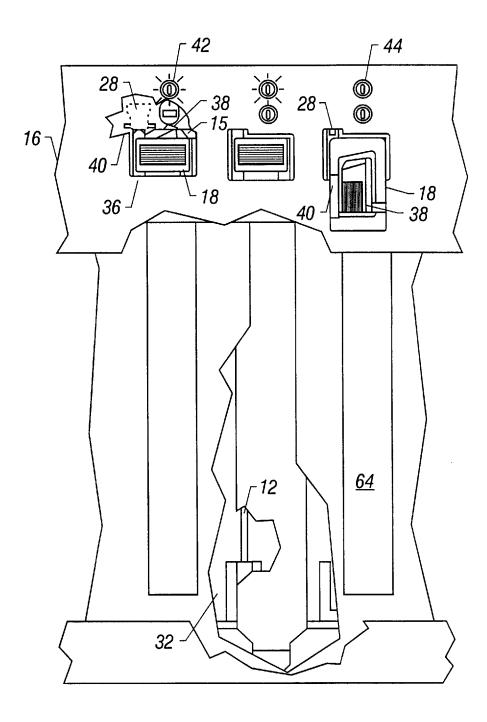


Figure 3



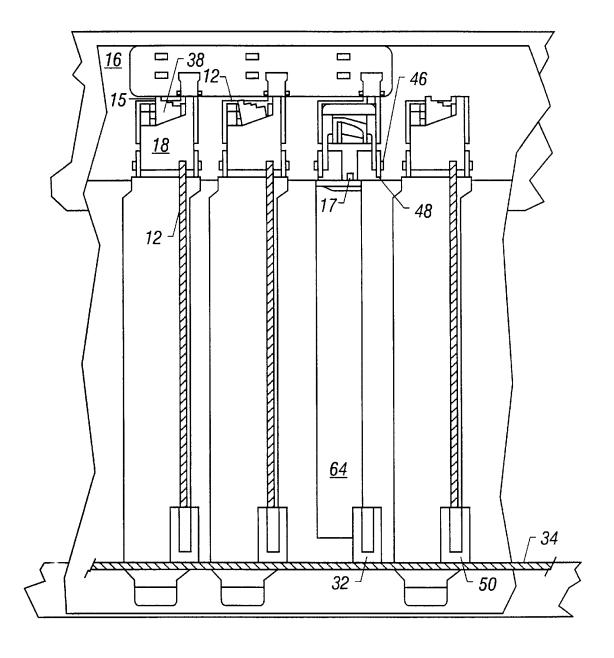


Figure 4



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