

(12) **United States Patent**  
**Shanahan**

(10) **Patent No.:** **US 7,257,395 B2**  
(45) **Date of Patent:** **Aug. 14, 2007**

(54) **METHODS AND APPARATUSES FOR PROGRAMMING USER-DEFINED INFORMATION INTO ELECTRONIC DEVICES**

(76) Inventor: **Michael E Shanahan**, P.O. Box 381, Nyack, NY (US) 10960

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 323 days.

(21) Appl. No.: **10/223,200**

(22) Filed: **Aug. 16, 2002**

(65) **Prior Publication Data**

US 2003/0008646 A1 Jan. 9, 2003

**Related U.S. Application Data**

(63) Continuation of application No. 09/518,712, filed on Mar. 3, 2000, now Pat. No. 6,496,692.

(60) Provisional application No. 60/169,158, filed on Dec. 6, 1999.

(51) **Int. Cl.**  
**H04M 3/00** (2006.01)

(52) **U.S. Cl.** ..... **455/418**; 455/412.1; 455/414.1

(58) **Field of Classification Search** ..... 455/418, 455/413, 414.1, 412, 1, 419, 420, 424, 425; 379/67.1, 68, 88.01, 88.02

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,866,766 A 9/1989 Mitzlaff ..... 379/374  
4,868,561 A 9/1989 Davis ..... 340/825.44  
5,220,420 A 6/1993 Hoarty et al.  
5,247,347 A 9/1993 Litter et al.

5,253,275 A 10/1993 Yurt et al.  
5,262,875 A 11/1993 Mincer et al.  
5,341,474 A 8/1994 Gelman et al.  
5,414,444 A 5/1995 Britz ..... 345/156  
5,414,751 A 5/1995 Yamada ..... 379/88  
5,428,606 A 6/1995 Moskowitz  
5,440,336 A 8/1995 Buhro et al.  
5,442,749 A 8/1995 Northcutt et al.  
5,452,354 A 9/1995 Kyronlahti et al. .... 379/375  
5,461,666 A 10/1995 McMahan et al. .... 379/67  
5,479,510 A 12/1995 Olsen et al. .... 380/24  
5,481,599 A 1/1996 MacAllister et al. .... 379/101  
5,483,580 A 1/1996 Brandman et al. .... 379/88  
5,483,581 A 1/1996 Hird et al. .... 379/132

(Continued)

FOREIGN PATENT DOCUMENTS

EP 0 851 649 A2 12/1997

(Continued)

OTHER PUBLICATIONS

SGS Thompson Microelectronics ST 5092 Datasheet pp. 1-29.

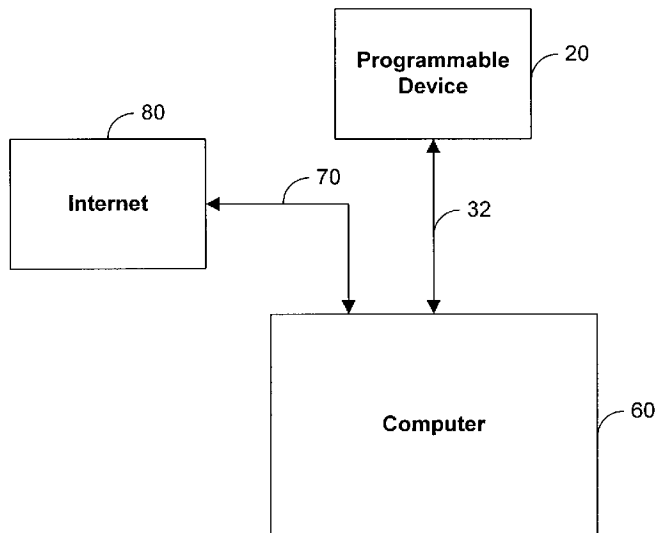
(Continued)

*Primary Examiner*—CongVan Tran  
(74) *Attorney, Agent, or Firm*—Kaliko & Yeager, LLC; Scott H. Kaliko

(57) **ABSTRACT**

A device for programming user-defined information into an electronic device is provided. The programmer allows a user to program customized information, such as user-selected audio, video, or Internet access information into his or her programmable device. Such electronic devices include wireless telephones, pagers, and personal digital assistants. The programmer allows a user to, among other things, customize the device to suit his or her particular taste.

**46 Claims, 13 Drawing Sheets**



## U.S. PATENT DOCUMENTS

5,485,370 A	1/1996	Moss et al. ....	364/408	5,926,756 A	7/1999	Piosenka et al. ....	455/418
5,486,686 A	1/1996	Zdybel, Jr. et al. ....	235/375	5,930,703 A	7/1999	Cairns .....	455/418
5,487,671 A	1/1996	Shapiro et al. ....	434/185	5,940,752 A	8/1999	Henrick .....	455/419
5,490,210 A	2/1996	Sasso .....	379/100	5,940,775 A	8/1999	Kim .....	455/567
5,490,251 A	2/1996	Clark et al. ....	395/200.2	5,943,046 A	8/1999	Cave et al.	
5,499,288 A	3/1996	Hunt et al. ....	379/88	5,953,408 A	9/1999	Blanvillain et al. ....	379/374
5,508,733 A	4/1996	Kassatly		5,953,638 A	9/1999	Flood et al. ....	455/31.2
5,510,777 A	4/1996	Pilc et al. ....	340/825.31	5,963,877 A	10/1999	Kobayashi	
5,513,272 A	4/1996	Bogosian, Jr. ....	382/116	5,983,069 A	11/1999	Cho et al.	
5,517,605 A	5/1996	Wolf .....	395/155	5,986,690 A	11/1999	Hendricks	
5,524,141 A	6/1996	Braun et al.		5,987,323 A	11/1999	Huotari .....	455/433
5,526,620 A	6/1996	Hallsten .....	52/246	5,999,094 A	12/1999	Nilssen .....	340/507
5,528,281 A	6/1996	Grady et al.		5,999,599 A	12/1999	Shaffer et al. ....	379/93.23
5,530,852 A	6/1996	Meske, Jr. et al. ....	395/600	6,002,720 A	12/1999	Yurt et al.	
5,533,115 A	7/1996	Hollenbach et al. ....	379/220	6,002,761 A	12/1999	Sremac .....	379/374
5,534,855 A	7/1996	Shockley et al. ....	340/825.3	6,014,569 A *	1/2000	Bottum .....	455/466
5,537,586 A	7/1996	Amram et al. ....	395/600	6,018,654 A	1/2000	Valentine et al. ....	455/414
5,541,917 A	7/1996	Farris		6,018,656 A	1/2000	Shirai .....	455/422
5,542,046 A	7/1996	Carlson et al. ....	395/186	6,035,018 A	3/2000	Kaufman .....	379/88.17
5,544,255 A	8/1996	Smithies et al. ....	382/119	6,035,189 A	3/2000	Ali-Vehmas et al. ....	455/414
5,544,322 A	8/1996	Cheng et al. ....	395/200.12	6,058,161 A	5/2000	Anderson et al. ....	379/27
5,548,726 A	8/1996	Pettus .....	395/200.09	6,073,003 A	6/2000	Nilsenn .....	455/402
5,550,577 A	8/1996	Verbiest et al.		6,075,998 A	6/2000	Morishima .....	455/567
5,550,578 A	8/1996	Hoarty et al.		6,088,730 A	7/2000	Kato et al. ....	709/227
5,550,863 A	8/1996	Yurt et al.		6,094,587 A	7/2000	Armanto et al. ....	455/567
5,550,976 A	8/1996	Henderson et al. ....	395/200.06	6,122,526 A	9/2000	Parulski et al. ....	455/556
5,551,021 A	8/1996	Harada et al. ....	395/600	6,137,525 A	10/2000	Lee et al. ....	348/14
5,553,311 A	9/1996	McLaughlin et al.		6,138,006 A	10/2000	Foti .....	455/414
5,557,675 A	9/1996	Schupak		6,140,568 A	10/2000	Kohler .....	84/616
5,561,688 A	10/1996	Jones, Jr.		6,144,722 A	11/2000	Anderson et al. ....	379/27
5,563,649 A	10/1996	Gould et al.		6,151,491 A *	11/2000	Farris et al. ....	455/412.2
5,566,353 A	10/1996	Cho et al.		6,163,711 A	12/2000	Juntunen et al.	
5,568,181 A	10/1996	Greenwood et al.		6,167,130 A	12/2000	Rosen .....	379/355
5,570,126 A	10/1996	Blahut et al.		6,167,278 A	12/2000	Nilssen .....	455/462
5,572,571 A	11/1996	Shirai .....	379/58	6,179,682 B1	1/2001	Plain et al. ....	446/141
5,577,190 A	11/1996	Peters		6,198,941 B1 *	3/2001	Aho et al. ....	455/552.1
5,598,461 A	1/1997	Greenberg .....	379/67	6,253,061 B1 *	6/2001	Helferich .....	340/7.22
5,600,712 A	2/1997	Hanson et al. ....	379/142.06	6,256,378 B1	7/2001	Iggulden et al. ....	379/102.03
5,606,597 A	2/1997	Newland .....	379/61	6,308,086 B1	10/2001	Yoshino .....	455/567
5,608,786 A	3/1997	Gordon .....	379/100	6,366,791 B1	4/2002	Lin et al. ....	455/567
5,612,682 A	3/1997	DeLuca et al. ....	340/825.34	6,385,305 B1	5/2002	Gerszberg et al.	
5,613,012 A	3/1997	Hoffman et al. ....	382/115	6,389,124 B1	5/2002	Schnarel et al. ....	379/142.01
5,613,190 A	3/1997	Hylton et al.		6,392,640 B1 *	5/2002	Will .....	345/184
5,613,191 A	3/1997	Hylton et al.		6,400,958 B1 *	6/2002	Isomursu et al. ....	455/466
5,619,247 A	4/1997	Russo		6,477,580 B1 *	11/2002	Bowman-Amuah .....	709/231
5,623,531 A	4/1997	Nilssen .....	379/56	6,483,531 B1	11/2002	Ryu .....	348/14.01
5,625,404 A	4/1997	Grady et al.		6,564,056 B1 *	5/2003	Fitzgerald .....	455/435.1
5,625,405 A	4/1997	DuLac et al.		6,599,147 B1 *	7/2003	Mills et al. ....	439/377
5,644,354 A	7/1997	Thompson et al.		6,754,509 B1 *	6/2004	Khan et al. ....	455/556.1
5,661,802 A	8/1997	Nilssen .....	380/20	6,829,618 B1	12/2004	Abraham et al.	
5,675,738 A	10/1997	Suzuki et al.		6,845,398 B1	1/2005	Galensky et al.	
5,677,905 A	10/1997	Bigham et al.		6,928,468 B2	8/2005	Leermakers	
5,680,325 A	10/1997	Rohner		7,088,990 B1	8/2006	Isomursu et al.	
5,687,227 A	11/1997	Cohrs et al. ....	379/374	2005/0054379 A1	3/2005	Cao et al.	
5,689,825 A	11/1997	Averbuch et al. ....	455/89				
5,694,455 A	12/1997	Goodman					
5,724,411 A	3/1998	Eisdorfer et al. ....	379/93.23				
5,727,047 A	3/1998	Bentley et al. ....	379/93				
5,790,423 A	8/1998	Lau et al.					
5,793,413 A	8/1998	Hylton et al.					
5,793,980 A	8/1998	Glaser et al.					
5,796,728 A	8/1998	Rondeau et al. ....	370/338				
5,828,956 A	10/1998	Shirai .....	455/411				
5,842,124 A	11/1998	Kenagy et al. ....	455/418				
5,870,683 A	2/1999	Wells et al. ....	455/566				
5,880,770 A	3/1999	Ilcisin et al.					
5,884,262 A	3/1999	Wise et al. ....	704/270				
5,907,604 A	5/1999	Hsu .....	379/142.06				
5,915,001 A	6/1999	Uppaluru .....	379/88.22				
5,926,624 A	7/1999	Katz et al.					

## FOREIGN PATENT DOCUMENTS

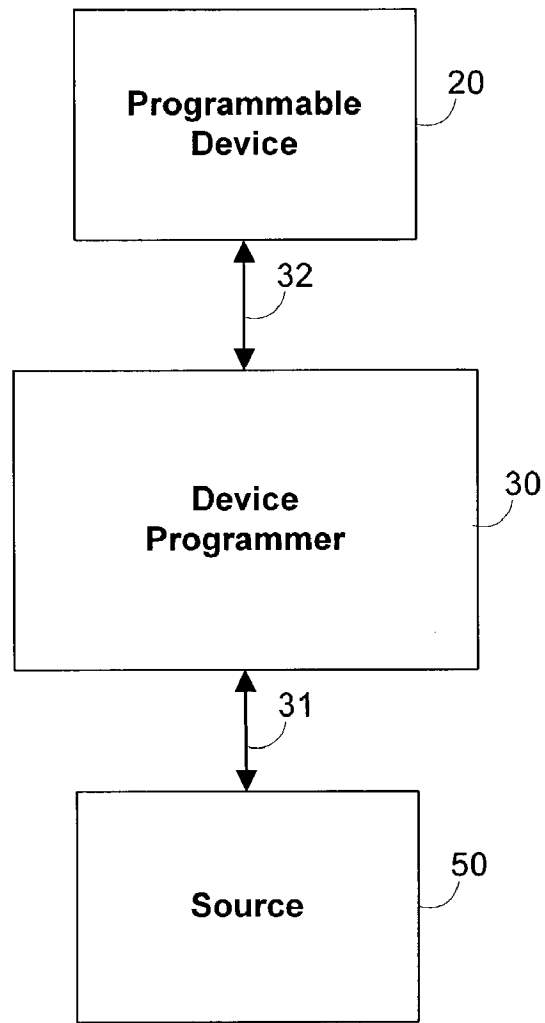
JP	09205471	8/1997
WO	WO 9928897	12/1997
WO	WO 9943136	2/1998
WO	WO-98/11487	3/1998
WO	WO 0038340	12/1998
WO	WO 00/36857	6/2000

## OTHER PUBLICATIONS

CA Office Action, Apr. 21, 2004.  
CA Office Action, Dec. 19, 2004.  
CA Office Action, Mar. 31, 2005.  
CA Office Action, Sep. 28, 2005.  
Related cases cited in IDS, Various.  
CA Office Action Copy Included, Sep. 19, 2006.

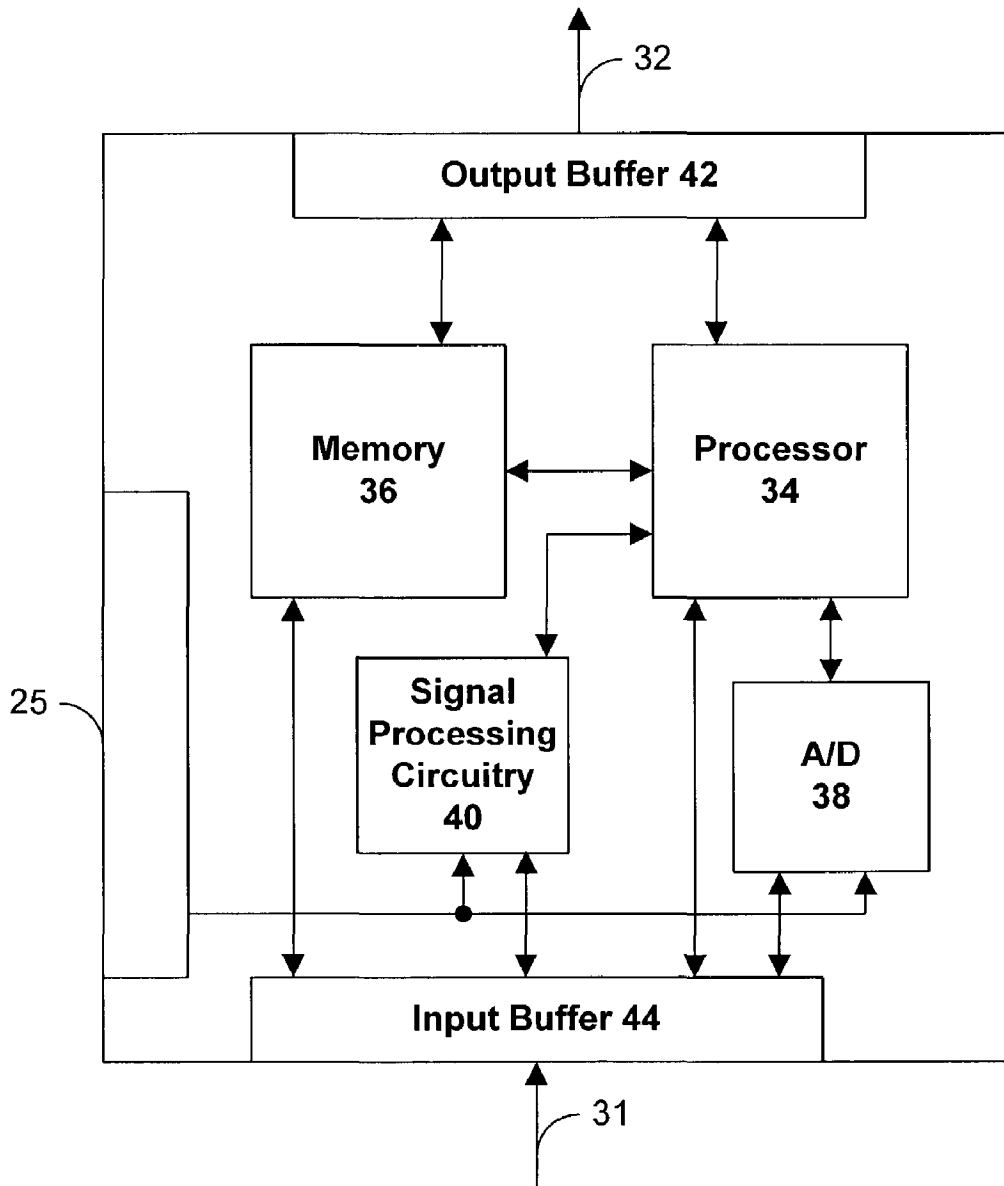
\* cited by examiner

**10**



**FIG. 1**

30



**FIG. 2**

100

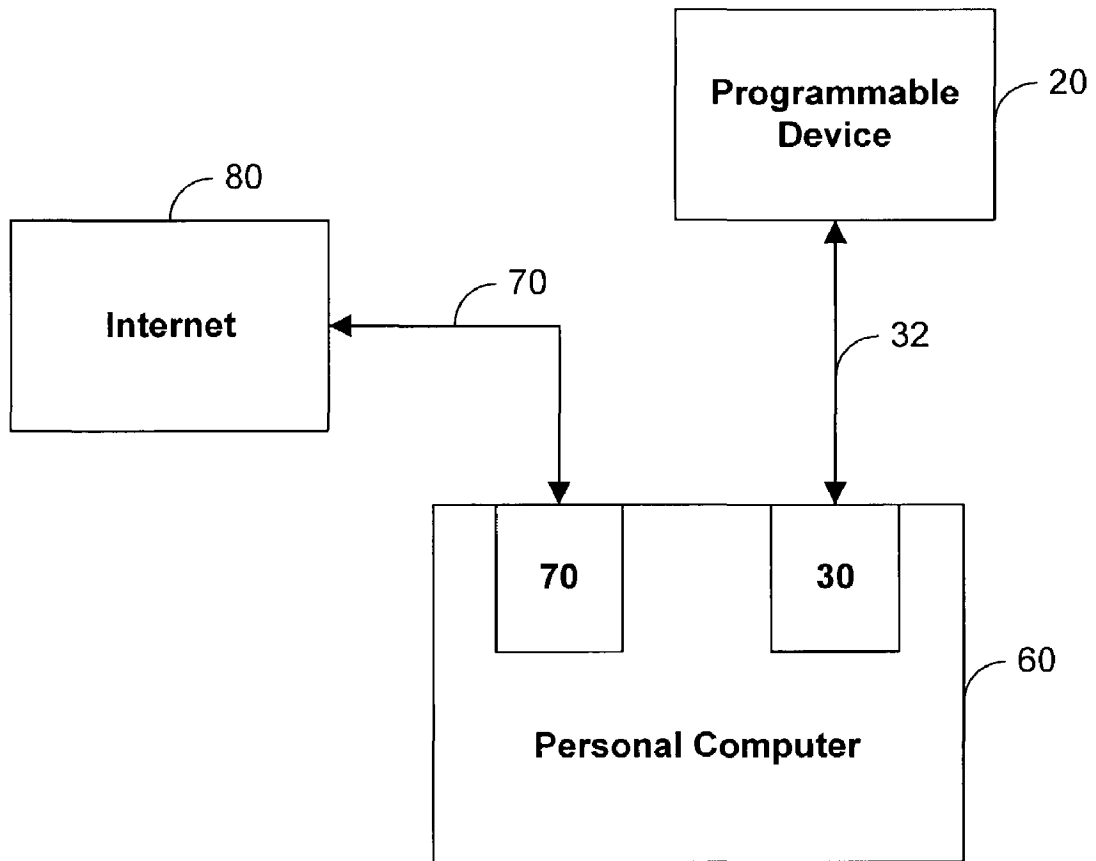


FIG. 3

# 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.