

- (54) **METHODS AND APPARATUSES FOR PROGRAMMING USER-DEFINED INFORMATION INTO ELECTRONIC DEVICES**
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- (51) **Int. Cl.<sup>7</sup>** ..... **H04M 3/00**
- (52) **U.S. Cl.** ..... **455/418; 455/413**
- (58) **Field of Search** ..... 453/418, 414, 453/419, 420, 424, 425, 413, 567; 379/67, 815, 88.02

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

- 5,414,444 A 5/1995 Britz ..... 345/156
- 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
- 5,485,370 A 1/1996 Moss et al. .... 364/408
- 5,486,686 A 1/1996 Zdybel, Jr. et al. .... 235/375
- 5,487,671 A 1/1996 Shpiro et al. .... 434/185
- 5,490,210 A 2/1996 Sasso ..... 379/100
- 5,490,251 A 2/1996 Clark et al. .... 395/200.2
- 5,499,288 A 3/1996 Hunt et al. .... 379/88
- 5,510,777 A 4/1996 Pile et al. .... 340/825.31
- 5,513,272 A 4/1996 Bogosian, Jr. .... 382/116
- 5,517,605 A 5/1996 Wolf ..... 395/155
- 5,526,620 A 6/1996 Hallsten ..... 52/246
- 5,530,852 A 6/1996 Meske, Jr. et al. .... 395/600
- 5,533,115 A 7/1996 Hollenbach et al. .... 379/220

- 5,534,855 A 7/1996 Shockley et al. .... 340/825.3
- 5,537,586 A 7/1996 Amram et al. .... 395/600
- 5,542,046 A 7/1996 Carlson et al. .... 395/186
- 5,544,255 A 8/1996 Smithies et al. .... 382/119
- 5,544,322 A 8/1996 Cheng et al. .... 395/200.12
- 5,548,726 A 8/1996 Pettus ..... 395/200.09
- 5,550,976 A 8/1996 Henderson et al. .... 395/200.06
- 5,551,021 A 8/1996 Harada et al. .... 395/600
- 5,572,571 A 11/1996 Shirai ..... 379/58
- 5,583,763 A \* 12/1996 Atcheson et al. .... 364/551.01
- 5,598,461 A 1/1997 Greenberg ..... 379/67
- 5,606,597 A 2/1997 Newland ..... 379/61
- 5,608,786 A 3/1997 Gordon ..... 379/100
- 5,612,682 A 3/1997 DeLuca et al. .... 340/825
- 5,613,012 A 3/1997 Hoffman et al. .... 382/115
- 5,623,531 A 4/1997 Nilssen ..... 379/56
- 5,661,802 A 8/1997 Nilssen ..... 380/20
- 5,687,227 A 11/1997 Cohrs et al. .... 379/374
- 5,689,825 A 11/1997 Averbuch et al. .... 455/89

(List continued on next page.)

**FOREIGN PATENT DOCUMENTS**

- JP 09205471 8/1997
- WO 99/43136 2/1998
- WO 00/38340 12/1998

**OTHER PUBLICATIONS**

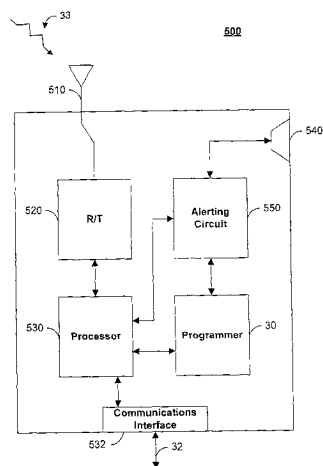
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(57) **ABSTRACT**

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.

**9 Claims, 13 Drawing Sheets**



## U.S. PATENT DOCUMENTS

|           |   |           |                       |           |           |    |          |                        |            |
|-----------|---|-----------|-----------------------|-----------|-----------|----|----------|------------------------|------------|
| 5,727,047 | A | 3/1998    | Bentley et al. ....   | 379/93    | 6,035,018 | A  | 3/2000   | Kaufman .....          | 379/88.17  |
| 5,732,216 | A | * 3/1998  | Logan et al. ....     | 395/200   | 6,035,189 | A  | 3/2000   | Ali-Vehmas et al. .... | 455/414    |
| 5,796,728 | A | 8/1998    | Rondeau et al. ....   | 370/338   | 6,058,161 | A  | 5/2000   | Anderson et al. ....   | 379/27     |
| 5,799,063 | A | * 8/1998  | Krane .....           | 379/88.04 | 6,073,003 | A  | 6/2000   | Nilsehn .....          | 455/402    |
| 5,828,956 | A | 10/1998   | Shirai .....          | 455/411   | 6,088,730 | A  | 7/2000   | Kato et al. ....       | 709/227    |
| 5,835,495 | A | * 11/1998 | Ferriere .....        | 370/465   | 6,091,947 | A  | * 7/2000 | Sumner .....           | 455/413    |
| 5,842,124 | A | 11/1998   | Kenagy et al. ....    | 455/418   | 6,094,587 | A  | * 7/2000 | Armanto et al. ....    | 379/373.03 |
| 5,884,262 | A | 3/1999    | Wise et al. ....      | 704/270   | 6,101,242 | A  | * 8/2000 | McAllister et al. .... | 379/201.02 |
| 5,915,001 | A | 6/1999    | Uppaluru .....        | 379/88.22 | 6,122,526 | A  | 9/2000   | Parulski et al. ....   | 455/556    |
| 5,926,756 | A | 7/1999    | Piosenka et al. ....  | 455/418   | 6,137,525 | A  | 10/2000  | Lee et al. ....        | 348/14.02  |
| 5,930,703 | A | 7/1999    | Cairns .....          | 455/418   | 6,144,722 | A  | 11/2000  | Anderson et al. ....   | 379/27     |
| 5,933,328 | A | * 8/1999  | Wallace et al. ....   | 361/737   | 6,167,130 | A  | 12/2000  | Rosen .....            | 379/355    |
| 5,940,752 | A | 8/1999    | Henrick .....         | 455/419   | 6,167,278 | A  | 12/2000  | Nilssen .....          | 455/462    |
| 5,940,775 | A | 8/1999    | Kim .....             | 455/567   | 6,179,682 | B1 | 1/2001   | Plaon et al. ....      | 446/141    |
| 5,948,059 | A | * 9/1999  | Schulhof et al. ....  | 395/200   | 6,219,413 | B1 | * 4/2001 | Burg .....             | 370/352    |
| 5,952,918 | A | * 9/1999  | Ohayon .....          | 340/539   | 6,222,838 | B1 | * 4/2001 | Sparks et al. ....     | 370/352    |
| 5,953,638 | A | 9/1999    | Flood et al. ....     | 455/31.2  | 6,226,532 | B1 | * 5/2001 | Ball et al. ....       | 704/270    |
| 5,999,094 | A | 12/1999   | Nilssen .....         | 340/507   | 6,229,990 | B1 | * 5/2001 | Toshida .....          | 455/69     |
| 5,999,599 | A | 12/1999   | Schaffer et al. ....  | 379/93.23 | 6,243,375 | B1 | * 6/2001 | Speicher .....         | 370/352    |
| 6,002,761 | A | 12/1999   | Sremac .....          | 379/374   | 6,256,378 | B1 | 7/2001   | Iggulden et al. ....   | 379/102.03 |
| 6,018,654 | A | 1/2000    | Valentine et al. .... | 455/414   | 6,366,791 | B1 | 4/2002   | Lin et al. ....        | 379/373.01 |
| 6,018,656 | A | 1/2000    | Shirai .....          | 455/422   |           |    |          |                        |            |

\* cited by examiner

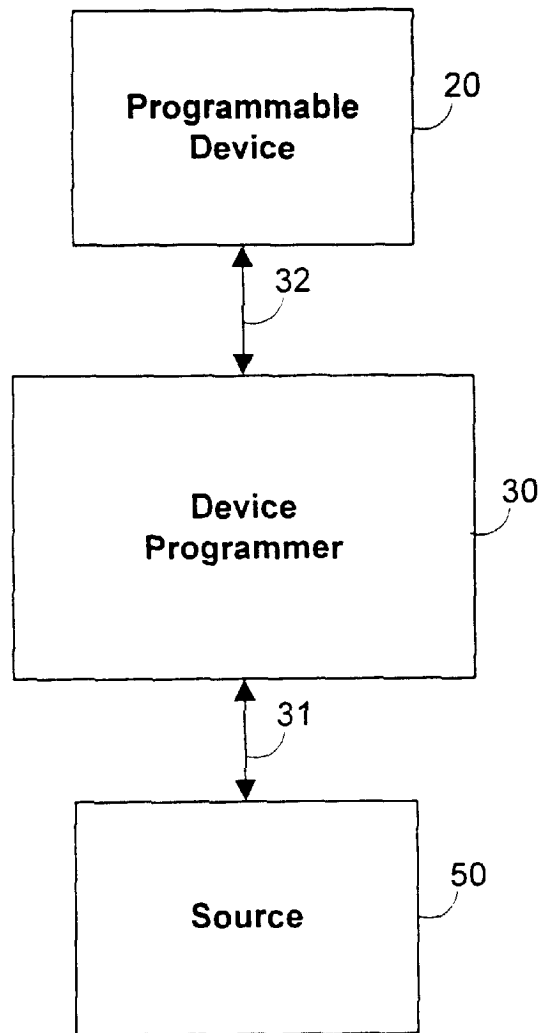


FIG. 1

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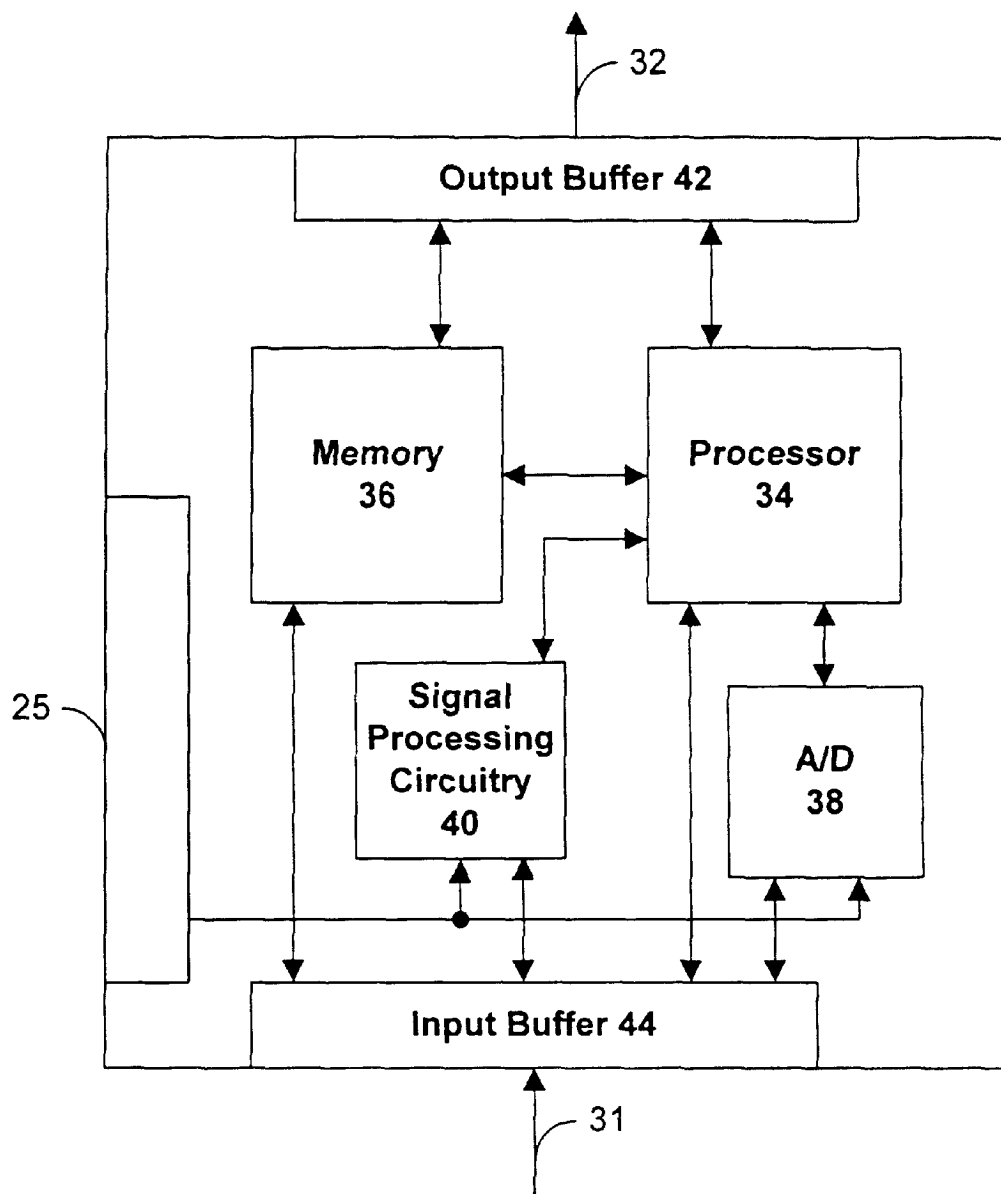
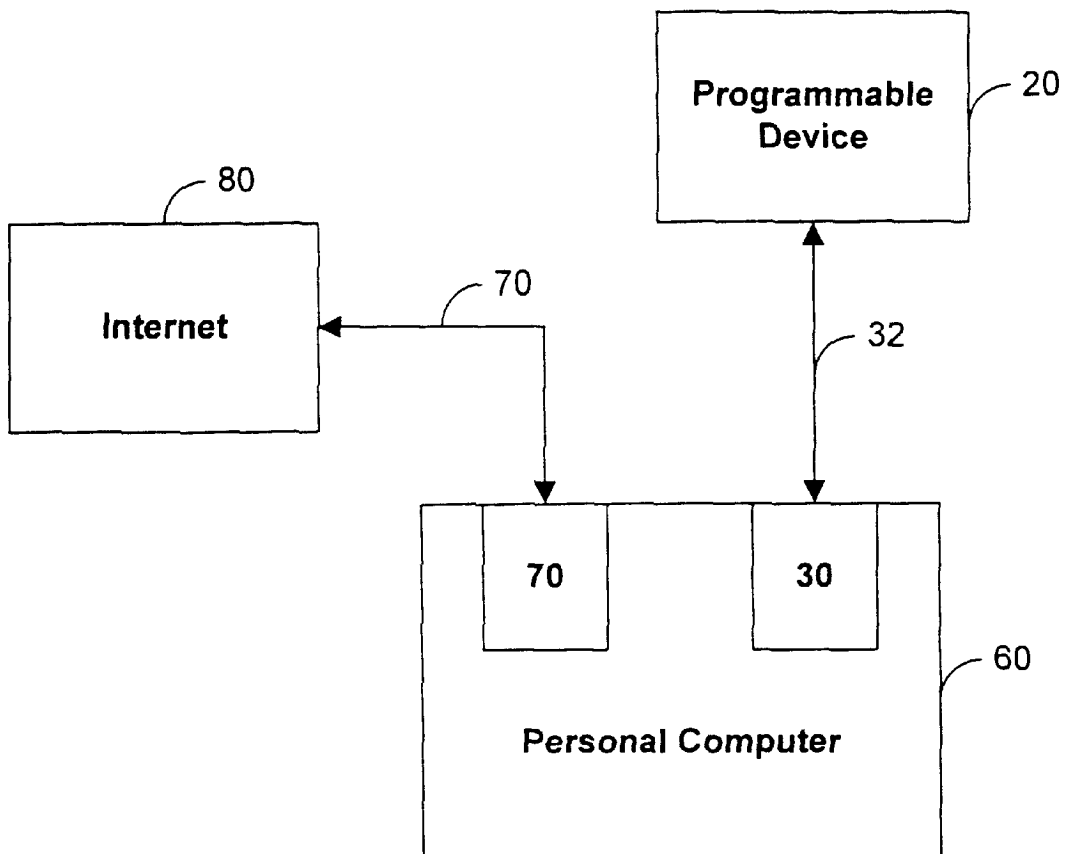


FIG. 2

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**FIG. 3**

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