

GPS (Global Positioning Satellite) trackers, configured to detect or sense motion or position of the computing device 1200.

[0105] The processor 1252 may process instructions for execution within the computing device 1250, including instructions stored in the memory 1264. The processor may also include separate analog and digital processors. The processor may provide, for example, for coordination of the other components of the device 1250, such as control of user interfaces, applications run by device 1250, and wireless communication by device 1250.

[0106] Processor 1252 may communicate with a user through control interface 1258 and display interface 1256 coupled to a display 1254. The display 1254 may be, for example, a TFT LCD display or an OLED display, or other appropriate display technology. The display interface 1256 may comprise appropriate circuitry for driving the display 1254 to present graphical and other information to a user. The control interface 1258 may receive commands from a user and convert them for submission to the processor 1252. In addition, an external interface 1262 may be provide in communication with processor 1252, so as to enable near area communication of device 1250 with other devices. External interface 1262 may provide, for example, for wired communication (e.g., via a docking procedure) or for wireless communication (e.g., via Bluetooth or other such technologies).

[0107] The memory 1264 stores information within the computing device 1250. In one implementation, the memory 1264 is a computer-readable medium. In one implementation, the memory 1264 is a volatile memory unit or units. In another implementation, the memory 1264 is a non-volatile memory unit or units. Expansion memory 1274 may also be provided and connected to device 1250 through expansion interface 1272, which may include, for example, a SIMM card interface. Such expansion memory 1274 may provide extra storage space for device 1250, or may also store applications or other information for device 1250. Specifically, expansion memory 1274 may include instructions to carry out or supplement the processes described above, and may include secure information also. Thus, for example, expansion memory 1274 may be provide as a security module for device 1250, and may be programmed with instructions that permit secure use of device 1250. In addition, secure applications may be provided via the SIMM cards, along with additional information, such as placing identifying information on the SIMM card in a non-hackable manner.

[0108] The memory may include for example, flash memory and/or MRAM memory, as discussed below. In one implementation, a computer program product is tangibly embodied in an information carrier. The computer program product contains instructions that, when executed, perform one or more methods, such as those described above. The information carrier is a computer- or machine-readable medium, such as the memory 1264, expansion memory 1274, memory on processor 1252, or a propagated signal.

[0109] Device 1250 may communicate wirelessly through communication interface 1266, which may include digital signal processing circuitry where necessary. Communication interface 1266 may provide for communications under various modes or protocols, such as GSM voice calls, SMS, EMS, or MMS messaging, CDMA, TDMA, PDC, WCDMA, CDMA2000, or GPRS, among others. Such communication may occur, for example, through radio-frequency transceiver 1268. In addition, short-range communication may occur,

such as using a Bluetooth, WiFi, or other such transceiver (not shown). In addition, GPS receiver module 1270 may provide additional wireless data to device 1250, which may be used as appropriate by applications running on device 1250.

[0110] Device 1250 may also communication audibly using audio codec 1260, which may receive spoken information from a user and convert it to usable digital information. Audio codec 1260 may likewise generate audible sound for a user, such as through a speaker, e.g., in a handset of device 1250. Such sound may include sound from voice telephone calls, may include recorded sound (e.g., voice messages, music files, etc.) and may also include sound generated by applications operating on device 1250.

[0111] The computing device 1250 may be implemented in a number of different forms, as shown in the figure. For example, it may be implemented as a cellular telephone 1280. It may also be implemented as part of a smartphone 1282, personal digital assistant, or other similar mobile device.

[0112] Various implementations of the systems and techniques described here may be realized in digital electronic circuitry, integrated circuitry, specially designed ASICs (application specific integrated circuits), computer hardware, firmware, software, and/or combinations thereof. These various implementations may include implementation in one or more computer programs that are executable and/or interpretable on a programmable system including at least one programmable processor, which may be special or general purpose, coupled to receive data and instructions from, and to transmit data and instructions to, a storage system, at least one input device, and at least one output device.

[0113] These computer programs (also known as programs, software, software applications or code) include machine instructions for a programmable processor, and may be implemented in a high-level procedural and/or object-oriented programming language, and/or in assembly/machine language. As used herein, the terms "machine-readable medium" "computer-readable medium" refers to any computer program product, apparatus and/or device (e.g., magnetic discs, optical disks, memory, Programmable Logic Devices (PLDs)) used to provide machine instructions and/or data to a programmable processor, including a machine-readable medium that receives machine instructions as a machine-readable signal. The term "machine-readable signal" refers to any signal used to provide machine instructions and/or data to a programmable processor.

[0114] To provide for interaction with a user, the systems and techniques described here may be implemented on a computer having a display device (e.g., a CRT (cathode ray tube) or LCD (liquid crystal display) monitor) for displaying information to the user and a keyboard and a pointing device (e.g., a mouse or a trackball) by which the user may provide input to the computer. Other kinds of devices may be used to provide for interaction with a user as well; for example, feedback provided to the user may be any form of sensory feedback (e.g., visual feedback, auditory feedback, or tactile feedback); and input from the user may be received in any form, including acoustic, speech, or tactile input.

[0115] The systems and techniques described here may be implemented in a computing system that includes a back-end component (e.g., as a data server), or that includes a middle-ware component (e.g., an application server), or that includes a front-end component (e.g., a client computer having a graphical user interface or a Web browser through which a user may interact with an implementation of the systems and