book computers, and so forth. The portable electronic device may also be a portable electronic device without wireless communication capabilities such as a handheld electronic game device, digital photograph album, digital camera, or other device.

[0018] A block diagram of an exemplary embodiment of a portable electronic device **20** is shown in FIG. **1**. The portable electronic device **20** includes a number of components such as a processor **22** that controls the overall operation of the portable electronic device **20**. Communication functions, including data and voice communications, are performed through a communication subsystem **24**. Data received by the portable electronic device **20** may be decompressed and decrypted by a decoder **26**, operating according to any suitable decompression techniques, e.g., YK decompression, and other known techniques, and encryption techniques, e.g., using an encryption technique such as Data Encryption Standard (DES), Triple DES, or Advanced Encryption Standard (AES). The communication subsystem **24** receives messages from and sends messages to a wireless network **100**.

[0019] In the shown example of the portable electronic device **20**, the communication subsystem **24** is configured in accordance with the Enhanced Data GSM Environment (EDGE) and Universal Mobile Telecommunications Service (UMTS). The portable electronic device **20** may also be operable under other standards, such as the Global System for Mobile Communication (GSM), General Packet Radio Services (GPRS), or any other standards in currently existence or that may be developed in the future. The wireless link connecting the communication subsystem **24** with the wireless network **100** represents one or more different Radio Frequency (RF) channels, operating according to defined protocols specified for the communications standard. In newer network protocols, these channels are capable of supporting both circuit switched voice communications and packet switched data communications. The different types of wireless networks that may be employed include, for example, data-centric wireless networks, voice-centric wireless networks, and dual-mode networks that may support both voice and data communications over the same physical base stations. Combined dual-mode networks include, but are not limited to, Code Division Multiple Access (CDMA) or CDMA2000 networks, GSM/GPRS networks, and third-generation (3G) networks like EDGE and UMTS. Some other examples of data-centric networks include WiFi 802.11, Mobitex™ and DataTAC™ network communication systems. Examples of other voice-centric data networks include Personal Communication Systems (PCS) networks like GSM and Time Division Multiple Access (TDMA) systems.

[0020] The processor **22** also interacts with additional subsystems such as a Random Access Memory (RAM) **28**, a persistent, updatable memory **30**, a touch-sensitive display **33** comprising a display **32** and a touch-sensitive overlay **34**, one or more actuators **37**, an auxiliary input/output (I/O) subsystem **36**, a data port **38**, a speaker **40**, a microphone **42**, short-range communications **44**, and other device subsystems **46**. The processor **22** interacts with the touch-sensitive display **33** via a processor such as a controller **35**. The actuator(s) **37** may also interact with the controller **35** and may communicate to the processor **22** through the controller **35**.

[0021] Some of the subsystems of the portable electronic device **20** perform communication-related functions, whereas other subsystems may provide "resident" or on-device functions. By way of example, the touch-sensitive display **33** may be utilized for both communication-related functions, such as entering a text message for transmission over the wireless network **100**, and device-resident functions such as a calculator or task list.

[0022] The portable electronic device **20** may send and receive communication signals over the wireless network **100** after network registration or activation procedures have been completed. Network access is associated with a subscriber or user of the portable electronic device **20**. To identify a subscriber according to the present embodiment, the portable electronic device **20** utilizes a SIM/RUIM card **48** (i.e., Subscriber Identity Module or a Removable User Identity Module) inserted into a SIM/RUIM interface **50** for communication with a network such as the network **100**. The SIM/RUIM card **48** is one type of a conventional "smart card" that may be utilized to identify a subscriber of the portable electronic device **20** and to personalize the portable electronic device **20**. The portable electronic device **20** may not be fully operational for communication with the wireless network **100** without the SIM/RUIM card **48**. By inserting the SIM/RUIM card **48** into the SIM/RUIM interface **50**, a subscriber may access all subscribed services. Services may include: web browsing and messaging such as e-mail, voice mail, Short Message Service (SMS), and Multimedia Messaging Services (MMS). More advanced services may include: point of sale, field service and sales force automation. The SIM/RUIM card **48** may include a processor and memory for storing information. The SIM/RUIM card **48** is inserted into the SIM/RUIM interface **50**, which is coupled to the processor **22**. In order to identify the subscriber, the SIM/RUIM card **48** may include some user parameters such as an International Mobile Subscriber Identity (IMSI). An advantage of the SIM/RUIM card **48** is that a subscriber need not be limited to any single physical portable electronic device because the SIM/RUIM card **48** is transferable. The SIM/RUIM card **48** may store additional information for a portable electronic device as well, including datebook (or calendar) information and recent call information. Alternatively, user identification information may also be programmed into the memory **30**.

[0023] The portable electronic device **20** is a battery-powered device and includes a battery interface **52** for receiving one or more batteries **54**. The batteries **54** may be rechargeable and/or may be a smart battery with an embedded microprocessor. The battery interface **52** is coupled to a regulator (not shown), which assists the battery **54** in providing power V+ to the portable electronic device **20**.

[0024] The portable electronic device **20** also includes an operating system **56** and software components **58** to **68** which are described in more detail below. The operating system **56** and the software components **58** to **68** that are executed by the processor **22** are typically stored in an updatable, persistent store such as the memory **30**, which may be read-only memory (ROM), flash memory, and/or other storage element (s). Portions of the operating system **56** and the software components **58** to **68**, such as specific device applications, or parts thereof, may be temporarily loaded into a volatile store such as the RAM **28**.

[0025] The subset of example software applications **58** that control basic device operations, including data and voice communication applications, may be installed on the portable electronic device **20** during manufacture. Software applications may include a message application **60** that may be any suitable software program that provides a user with the ability to send and receive electronic messages via the portable elec-