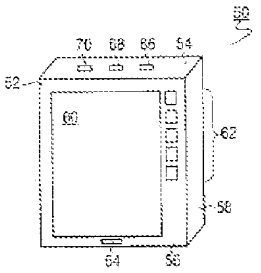
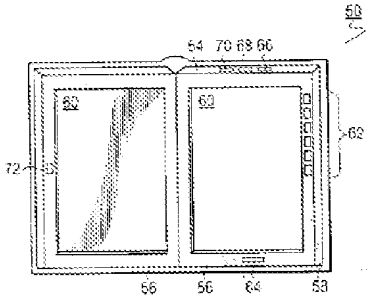
Appendix

Claim chart comparing claims 1-37 to Santamäki (Ex. 1007) in view of Holshouser (Ex. 1008) and Heutschi (Ex. 1009).

GROUND OF UNPATENTABILITY

Ground	Claim(s)	Statute	Prior Art
1	1-3, 5, 7, 8-11, 13, 15-17, 19, 21-23, 25, 27, 29, 31-34, 36	103	Santamäki (Ex. 1007) in view of Holshouser (Ex. 1008)
2	4, 6, 12, 14, 18, 20, 24, 26, 28, 30, 35, 37	103	Santamäki (Ex. 1007) in view of Holshouser (Ex. 1008) and Heutschi (Ex. 1009)

'537 Claim	
Claim 1	**Santamäki and Holshouser**
[1.0] An electronic wireless hand held multimedia device, comprising:	To the extent the preamble is limiting, Santamäki discloses *an electronic wireless hand held multimedia device* (portable electronic book). **E.g., Santamäki**: **[Abstract]** "**An electronic book (e-book) system is disclosed for advancing distribution of electronic reading materials using an electronic book (e-book) server at different locations over different data networks.** Such an electronic book system may comprise a private network; a central server connected to the private network, which stores a collection of electronic documents; an e-book server which stores an electronic document selected from the central server converted in an e-book format for later downloading to a remote e-book terminal, via a public network; and a host computer connected to the private network, which selects the electronic document from the central server, and uses a print function of an operating system to transfer the selected electronic document from the central server for storage in an e-book format at the e-book server for later downloading to a remote e-book terminal, via the public network." FIG. 5A  FIG. 5B  **[Column 4, Lines 46-67]** "The present invention is applicable for use with all types of data networks, communication services, and electronic written materials. For example, data networks may be private or public networks, including a local area network (LAN), a wide area network (WAN), a plain old telephone service (POTS), a public switched telephone network (PSTN), an integrated services digital network (ISDN), **a mobile network, a satellite network**, an Internet, and networks such as **terrestrial digital TV or radio, cellular, short-range radio (Bluetooth, Home RF protocol, wireless LAN) networks.** The electronic written materials may include text, documents, pictures and graphics, such as, for example, artwork, audio clips, books, E-mail, faxes, games, magazines, movies, musical compositions, newspapers, photographs,

	software, video clips, etc. Likewise, **the electronic book (e-book) or e-book terminal may be substituted with a portable viewer, a personal digital assistant, a palm-top computer, or any other known remote display device.** However, for the sake of simplicity, discussions will concentrate mainly on a generic data network and electronic written materials, although the scope and implementation of the present invention is not limited thereto."
[1.1] at least one of a wireless unit and a tuner unit supporting bi-directional data communications of data including video and text for the electronic wireless hand held multimedia device with remote data resources	Santamäki and Holshouser disclose or at least renders obvious *at least one of a wireless unit* (Santamäki's communications means) *and a tuner unit* (Holshouser's transceiver unit 80) *supporting bi-directional data communications of data including video and text for the electronic wireless hand held multimedia device with remote data resources* (e.g., Santamäki's teachings of an e-book terminal communicating with access to servers over multiple types of wireless networks electronic to access written materials, movies and video clips). In the combination, Holshouser's transceiver unit 80 for tuning between different frequencies during communications is included in Santamäki's e-book terminal with its communication means for establishing wireless communications via a public network. The specification describes a "tuner" in reference to "[t]he electronic wireless hand held multimedia device 11 of FIGS. 1-3 can be configured as a hand held device adapted for use with a cartridge/module, such as module 50. The cartridge/module 50 can contain the electronics (e.g., **tuner**, filter, etc.) to allow a hand held device to be adapted for receiving multimedia data." '537 Patent, Col. 10, Lines 28-33. Therefore, an example of a "tuner unit" in the '537 Patent is electronics that allow a user to tune to and retrieve multimedia data communications from different transmission sources. Holshouser discloses details regarding the functionality of its transceiver unit 80 which includes baseband processing circuits and RF circuits for bi-directional data communications with different transmitters/frequencies, such as 900 MHz and/or 1800 MHz bands used for wireless communications. Holshouser's transceiver unit 80 is further described as including a receiver/amplifier and demodulator within the RF circuits for detecting and demodulating received signals. Santamäki discloses an example where: "the communications means built into the e-book terminal 50 may comprise a cellular modem/telephone as shown in FIGS. 5A-5B and 6 that communicates with the public network 40 via two-way wireless radio waves to a local telephone office or receiving station." Santamäki, Column 12, Lines 11-15. Santamäki also discloses that the e-book terminal can access and communicate with a "public network" to retrieve electronic materials,

	where the "public network" may include a mobile network, a satellite network, an Internet, a terrestrial digital TV network, a cellular network, and a short-range radio (Bluetooth, Home RF protocol, wireless LAN) network. Santamäki therefore discloses a wireless communications means supporting bidirectional data communications via a cellular modem and two-way wireless radio waves over a public network including cellular, wireless LAN and Bluetooth protocols. For the reasons provided in further detail in the Request, a POSITA would have been motivated to combine, and would have had a reasonable expectation of success in combining, Santamäki's e-book terminal 50 and its communications means, applicable for use with many types of data networks, communication services, and electronic written materials, and Holshouser's teachings of a transceiver unit 80 capable of tuning between different frequencies so that Santamäki's communication means comprises Holshouser's transceiver unit. A POSITA would look to Holshouser for implementation details of the "communications means" of Santamäki, as Holshouser is directed to a circuit and antenna level disclosure of a personal communication terminal such as Santamäki. *See* Section II.B.3; Ex. 1005, ¶ 65. **E.g., Santamäki**: **[Column 11, Lines 35-58]** "Another enhancement of the e-book terminal 50 may be to provide the capability to send one or more page images or selected passages to a printer to a obtain hard copy printout of the selected information. A printer connection is implemented by providing a parallel printer port with associated circuitry and software drivers; or a serial communications port with associated circuitry and software drivers; or an infrared data port with associated circuitry and software drivers to beam pages of information through the air to an infrared equipped printer, or **by sending the information via the internal communication means or the e-book terminal 50 to a modem-equipped computer**, a facsimile device or a printer equipped with a telephone line interface and modem; or the like." **[Column 11, Line 59 – Column 12, Line 10]** "**As described with reference to FIGS. 5A-5B and 6, the user may use the e-book terminal 50 in the same fashion as the printed book. An e-book server icon is provided to automatically initiate and establish communications with a designated e-book server 30, via a public network 40**. When the user touches this icon or presses a corresponding function switch 62 (see FIG. 6), the e-book terminal 50 requests the user to enter a user identification code and/or a password that will uniquely identify the user to the e-book server 30 and then the e-book terminal 50 uses the build-in communications means to automatically dial out over a telephone link, for example, to access the remote e-book server 30 via the public network 40. This user

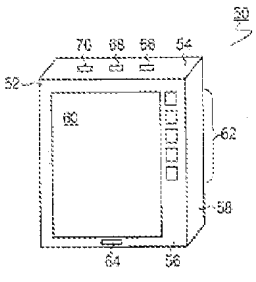
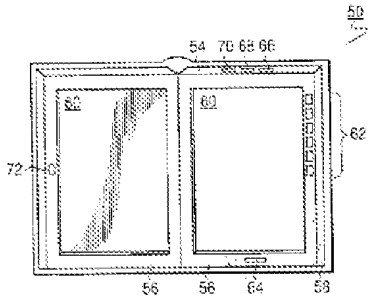
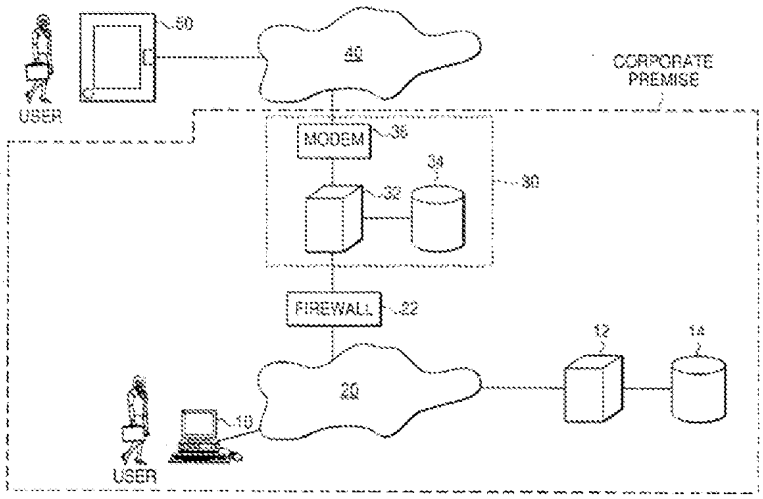
	identification code and/or password can be the same code or password used to initially active the e-book functions when said code or password is enabled. An alternative embodiment uses a user identification code encoded into a particular e-book terminal 50 when the unit is procured and then only request the user's password for access. **[Column 12, Lines 11-21]** "**The communications means built into the e-book terminal 50** may comprise a cellular modem/telephone as shown in FIGS. 5A-5B and 6 that communicates with the public network 40 via two-way wireless radio waves to a local telephone office or receiving station, thus eliminating the need for a hard-wired connection; or a data modem with telephone jack, or the like, which is connected via a telephone cable to your telephone line and then to the local telephone office; or any modem/telephone interface device that can establish a communications link with the public network 40." FIG. 5A  FIG. 5B  **[Col. 8, Lines 24-41]** "When the selected electronic document in an e-book format is stored at the e-book server 30, the user may access the e-book server 30 from a remote e-book terminal 50 via a public network 40 and request for downloading or automatic delivery of the selected electronic document in an e-book format to the remote e-book terminal 50 via the public network 40. **The public network 40 may include a** plain old telephone service (POTS), a public switched telephone network (PSTN), an integrated services digital network (ISDN), **a mobile network, a satellite network, an Internet, a terrestrial digital TV network, a cellular network, and a short-range radio (Bluetooth, Home RF protocol, wireless LAN) network**. Since the selected electronic document is already stored in an e-book format at the e-book server 30, the electronic document from the e-book server 30 may be quickly and efficiently distributed to different e-book terminals at different locations over a plurality of networks in order to improve data access efficiency."

FIG. 1



[Column 4, Lines 46-67] "**The present invention is applicable for use with all types of data networks, communication services, and electronic written materials. For example, data networks may be private or public networks, including a local area network (LAN), a wide area network (WAN), a plain old telephone service (POTS), a public switched telephone network (PSTN), an integrated services digital network (ISDN), a mobile network, a satellite network, an Internet, and networks such as terrestrial digital TV or radio, cellular, short-range radio (Bluetooth, Home RF protocol, wireless LAN) networks. The electronic written materials may include text, documents, pictures and graphics, such as, for example, artwork, audio clips, books, E-mail, faxes, games, magazines, movies, musical compositions, newspapers, photographs, software, video clips, etc**. Likewise, the electronic book (e-book) or e-book terminal may be substituted with a portable viewer, a personal digital assistant, a palm-top computer, or any other known remote display device. However, for the sake of simplicity, discussions will concentrate mainly on a generic data network and electronic written materials, although the scope and implementation of the present invention is not limited thereto."

[Column 12, Lines 11-21] "**The communications means built into the e-book terminal 50 may comprise a cellular modem/telephone as shown in FIGS. 5A-5B and 6 that communicates with the public network 40 via two-way wireless radio waves** to a local telephone office or receiving station, thus eliminating the need for a hard-wired connection; or a data modem with telephone jack, or the like, which is connected via a telephone cable to your telephone line and then to the local telephone office; or any modem/telephone interface device that can establish a communications link with the public network 40."

FIG. 5A

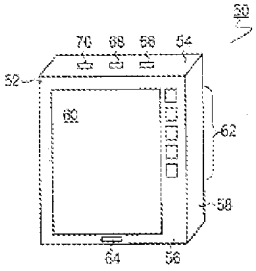
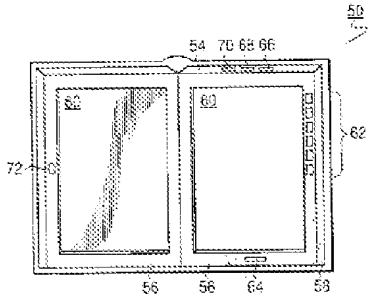


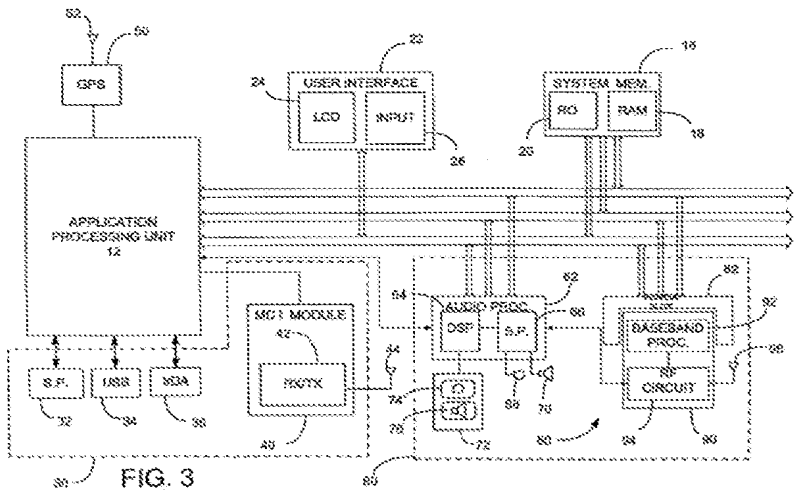
FIG. 5B



E.g., Holshouser:

[Column 3, Lines 31-45] "The audio processing circuits 62 process audio signals transmitted and received by the telephone unit 60. The audio processing circuits 62 includes a digital signal processor 64 and audio interface 66. The audio interface 66 includes a built-in microphone 68 and speaker 70. The audio interface 66 also connects to a hands-free unit 72 which includes an external microphone 74 and speaker 76 for hands-free operation. **The transceiver unit 80 comprises a radio card 90 that plugs into a standard PCMCIA slot 82. The radio card 90 includes baseband processing circuits 92, RF circuits 94, and a long-range cellular phone antenna 96. The RF circuits 94 include a modulator and RF amplifier for modulating and amplifying signals passed to it by the audio processing circuits 62. The RF circuits also include a receiver/amplifier and demodulator for detecting and demodulating received signals.**"

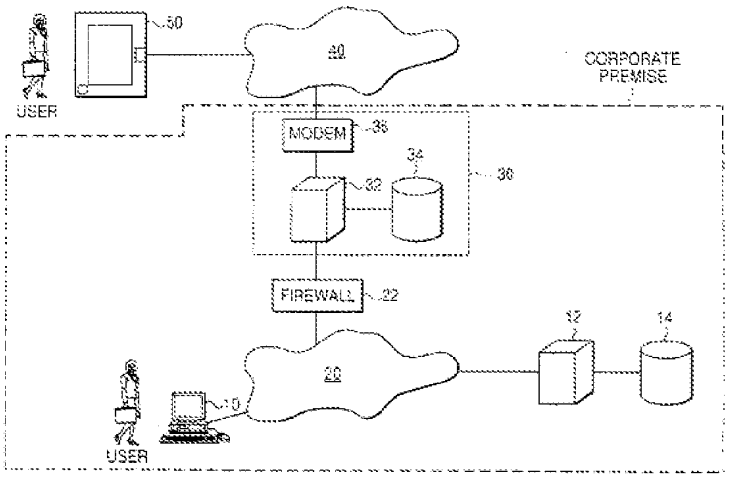
[Column 3, Lines 23-40] "The telephone unit 60 functions as a conventional cellular phone. **The telephone unit 60 includes audio processing circuits 62 and transceiver unit 80. The transceiver unit 80 is a conventional cellular phone transceiver that communicates over a cellular network according to known standards, such as IS-54 and IS-136. The transceiver unit 80 typically operates in the 900 MHz and/or 1800 MHz bands used for cellular communication**.

	 FIG. 3
[1.2] over cellular telecommunications networks,	Santamäki discloses [*bi-directional data communications*] *over cellular telecommunications networks* (the electronic book can communicate using multiple networks including **a cellular network**, a wireless local area network (LAN) and a Bluetooth network). **E.g., Santamäki**: **[Abstract]** "An electronic book (e-book) system is disclosed for advancing distribution of electronic reading materials using an electronic book (e-book) server at different locations over different data networks. Such **an electronic** book **system may comprise a private network; a central server connected to the private network, which stores a collection of electronic documents; an e-book server which stores an electronic document selected from the central server converted in an e-book format for later downloading to a remote e-book terminal, via a public network; and a host computer connected to the private network**, which selects the electronic document from the central server, and uses a print function of an operating system to transfer the selected electronic document from the central server for storage in an e-book format at the e-book server for later downloading to a remote e-book terminal, via the public network." **[Column 4, Lines 46-67]** "The present invention is applicable for use with all types of data networks, communication services, and electronic written materials. For example, data networks may be private or public networks, including a local area network (LAN), a wide area network (WAN), a plain old telephone service (POTS), a public switched telephone network (PSTN), an integrated services digital network (ISDN), a mobile network, a satellite network, an Internet, and networks such as terrestrial digital TV or radio, **cellular**, short-range radio (Bluetooth, Home RF protocol, wireless LAN) networks. The electronic written

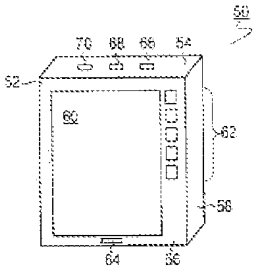
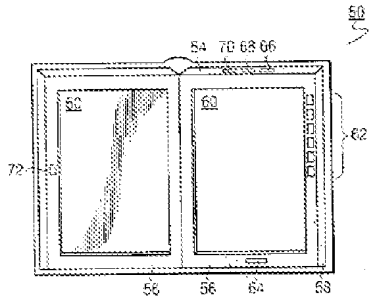
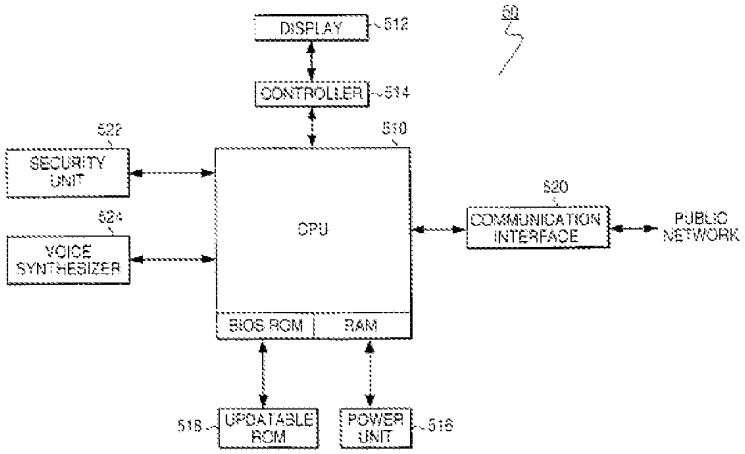
materials may include text, documents, pictures and graphics, such as, for example, artwork, audio clips, books, E-mail, faxes, games, magazines, movies, musical compositions, newspapers, photographs, software, video clips, etc. Likewise, the electronic book (e-book) or e-book terminal may be substituted with a portable viewer, a personal digital assistant, a palm-top computer, or any other known remote display device. However, for the sake of simplicity, discussions will concentrate mainly on a generic data network and electronic written materials, although the scope and implementation of the present invention is not limited thereto."

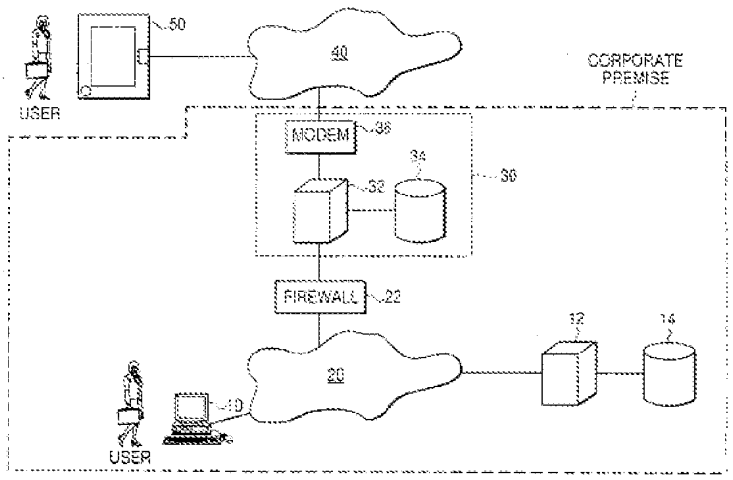
[Column 8, Lines 24-41] "When the selected electronic document in an e-book format is stored at the e-book server 30, the user may access the e-book server 30 from a remote e-book terminal 50 via a public network 40 and request for downloading or automatic delivery of the selected electronic document in an e-book format to the remote e-book terminal 50 via the public network 40. The public network 40 may include a plain old telephone service (POTS), a public switched telephone network (PSTN), an integrated services digital network (ISDN), a mobile network, a satellite network, an Internet, a terrestrial digital TV network, **a cellular network**, and a short-range radio (Bluetooth, Home RF protocol, wireless LAN) network. Since the selected electronic document is already stored in an e-book format at the e-book server 30, the electronic document from the e-book server 30 may be quickly and efficiently distributed to different e-book terminals at different locations over a plurality of networks in order to improve data access efficiency."

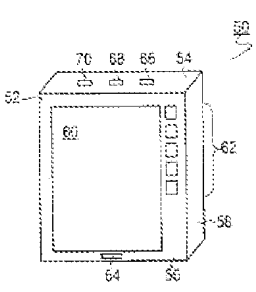
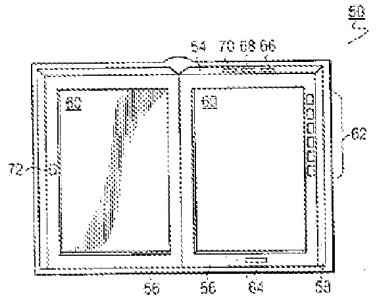
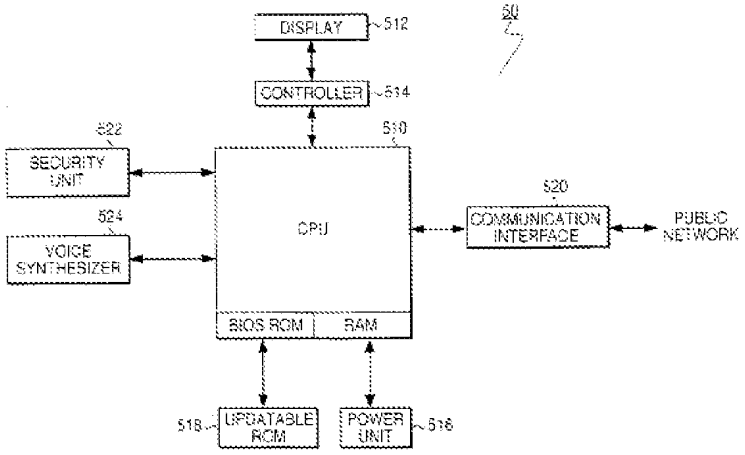
FIG. 1



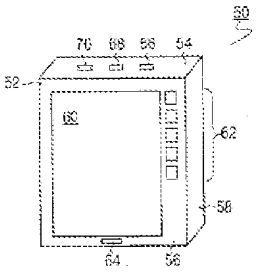
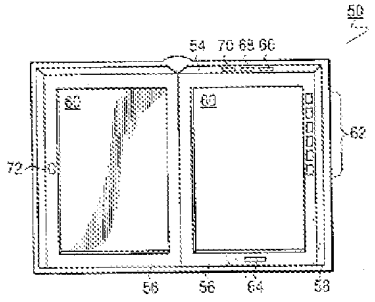
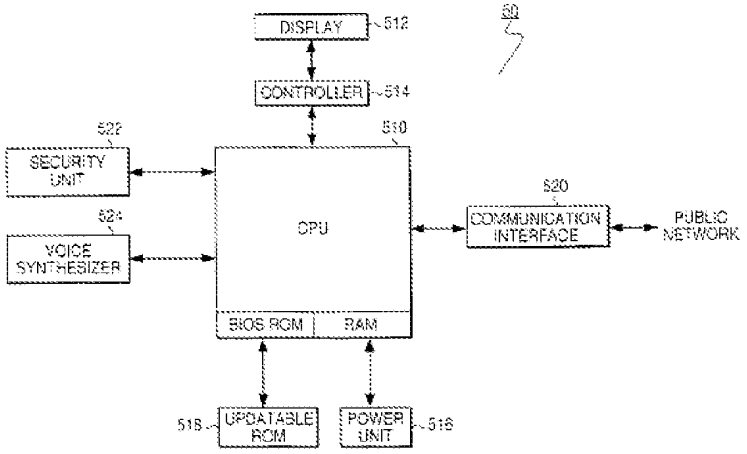
[Column 12, Lines 11-21] "**The communications means built into the e-book terminal 50 may comprise cellular modem/telephone as shown in FIGS. 5A-5B and 6 that communicates with the public network 40 via two-way wireless radio waves to a local telephone office or receiving station**, thus eliminating the need for a hard-wired connection; or a

	data modem with telephone jack, or the like, which is connected via a telephone cable to your telephone line and then to the local telephone office; or any modem/telephone interface device that can establish a communications link with the public network 40." FIG. 5A  FIG. 5B  FIG. 6 
[1.3] over wireless local area networks and	Santamäki discloses a method to distribute [*bi-directional data communications*] *over wireless local area networks* (the electronic book can communicate using multiple networks including a cellular network, a wireless local area network (LAN) and a Bluetooth network to distribute reading material to the electronic book). **E.g., Santamäki**: **[Abstract]** "An electronic book (e-book) system is disclosed for advancing distribution of electronic reading materials using an electronic book (e-book) server at different locations over different data networks. Such an electronic book system may comprise a private network; a central server connected to the private network, which stores a collection of electronic documents; **an e-book server which stores an electronic document selected from the central server converted in an e-book format for later downloading to a remote e-book terminal, via a public network; and a host computer connected to the private network**, which selects the electronic document from the central server, and uses a print function

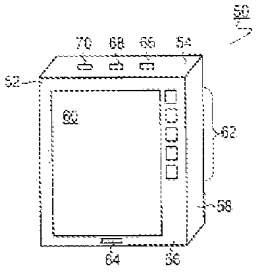
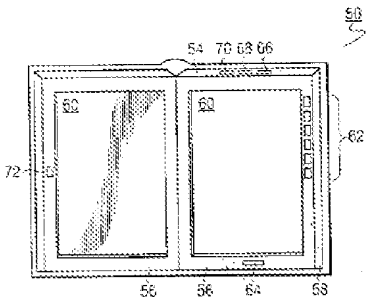
	of an operating system to transfer the selected electronic document from the central server for storage in an e-book format at the e-book server for later downloading to a remote e-book terminal, via the public network." FIG. 1  **[Column 4, Lines 46-67]** "The present invention is applicable for use with all types of data networks, communication services, and electronic written materials. For example, **data networks may be private or public networks, including a local area network (LAN), a wide area network (WAN),** a plain old telephone service (POTS), a public switched telephone network (PSTN), an integrated services digital network (ISDN), a mobile network, a satellite network, an Internet, and networks such as terrestrial digital TV or radio, cellular, short-range radio (Bluetooth, Home RF protocol, **wireless LAN**) networks. The electronic written materials may include text, documents, pictures and graphics, such as, for example, artwork, audio clips, books, E-mail, faxes, games, magazines, movies, musical compositions, newspapers, photographs, software, video clips, etc. Likewise, the electronic book (e-book) or e-book terminal may be substituted with a portable viewer, a personal digital assistant, a palm-top computer, or any other known remote display device. However, for the sake of simplicity, discussions will concentrate mainly on a generic data network and electronic written materials, although the scope and implementation of the present invention is not limited thereto." **[Column 8, Lines 24-41]** "When the selected electronic document in an e-book format is stored at the e-book server 30, the user may access the e-book server 30 from a remote e-book terminal 50 via a public network 40 and request for downloading or automatic delivery of the selected electronic document in an e-book format to the remote e-book terminal 50 via the public network 40. The public network 40 may include a plain old telephone service (POTS), a public switched telephone network (PSTN), an integrated services digital network (ISDN), a mobile network, a satellite

	network, an Internet, a terrestrial digital TV network, a cellular network, and a short-range radio (Bluetooth, Home RF protocol, **wireless LAN**) network. Since the selected electronic document is already stored in an e-book format at the e-book server 30, the electronic document from the e-book server 30 may be quickly and efficiently distributed to different e-book terminals at different locations over a plurality of networks in order to improve data access efficiency." FIG. 5A  FIG. 5B  FIG. 6 
[1.4] over a direct wireless connection with electronic devices located within short range using Bluetooth communications	Santamäki discloses a method to distribute [*bi-directional data communications*] *over a direct wireless connection with electronic devices located within short range using Bluetooth communications* (the electronic book can communicate using multiple networks including a cellular network, a wireless local area network (LAN) and a Bluetooth network to distribute reading material to the electronic book). **E.g., Santamäki**: **[Abstract]** "An electronic book (e-book) system is disclosed for advancing distribution of electronic reading materials using an electronic book (e-book) server at different locations over different data networks. Such an electronic book system may comprise a private network; a central server connected to the private network,

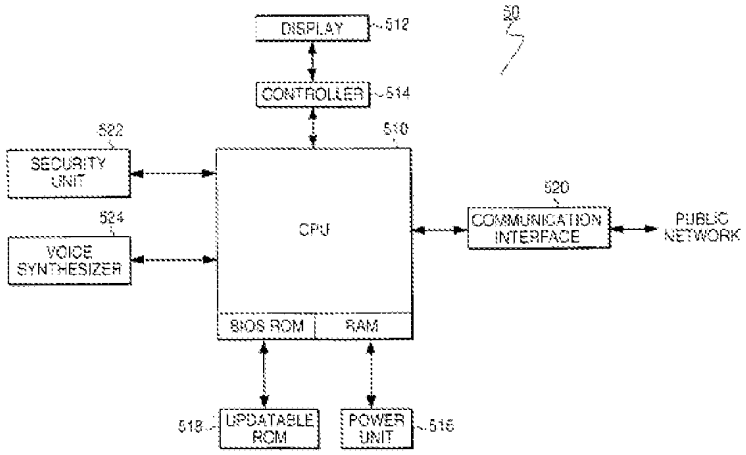
	which stores a collection of electronic documents; **an e-book server which stores an electronic document selected from the central server converted in an e-book format for later downloading to a remote e-book terminal, via a public network; and a host computer connected to the private network**, which selects the electronic document from the central server, and uses a print function of an operating system to transfer the selected electronic document from the central server for storage in an e-book format at the e-book server for later downloading to a remote e-book terminal, via the public network." **[Column 4, Lines 46-67]** "The present invention is applicable for use with all types of data networks, communication services, and electronic written materials. For example, data networks may be private or public networks, including a local area network (LAN), a wide area network (WAN), a plain old telephone service (POTS), a public switched telephone network (PSTN), an integrated services digital network (ISDN), a mobile network, a satellite network, an Internet, and networks such as terrestrial digital TV or radio, cellular, **short-range radio (Bluetooth**, Home RF protocol, wireless LAN) networks. The electronic written materials may include text, documents, pictures and graphics, such as, for example, artwork, audio clips, books, E-mail, faxes, games, magazines, movies, musical compositions, newspapers, photographs, software, video clips, etc. Likewise, the electronic book (e-book) or e-book terminal may be substituted with a portable viewer, a personal digital assistant, a palm-top computer, or any other known remote display device. However, for the sake of simplicity, discussions will concentrate mainly on a generic data network and electronic written materials, although the scope and implementation of the present invention is not limited thereto." **[Column 8, Lines 24-41]** "When the selected electronic document in an e-book format is stored at the e-book server 30, the user may access the e-book server 30 from a remote e-book terminal 50 via a public network 40 and request for downloading or automatic delivery of the selected electronic document in an e-book format to the remote e-book terminal 50 via the public network 40. The public network 40 may include a plain old telephone service (POTS), a public switched telephone network (PSTN), an integrated services digital network (ISDN), a mobile network, a satellite network, an Internet, a terrestrial digital TV network, a cellular network, and **a short-range radio (Bluetooth**, Home RF protocol, wireless LAN**) network**. Since the selected electronic document is already stored in an e-book format at the e-book server 30, the electronic document from the e-book server 30 may be quickly and efficiently distributed to different e-book terminals at different locations over a plurality of networks in order to improve data access efficiency."

	FIG. 5A  FIG. 5B  FIG. 6 
[1.5] after accepting a passcode from a user of the electronic wireless hand held multimedia device during the communications;	Santamäki discloses [*bi-directional data communications of data*] *after accepting a passcode* (identification code and/or password) *from a user of the electronic wireless hand held multimedia device during the communications* (the e-book terminal 50 connects to the e-book server 30 via the public network 40; if the terminal is pre-programmed with a user ID, only the password is needed for access, simplifying the login process while ensuring security). The specification discusses "pass codes" in the context of accessing data: "[a] security module can be provided to enable protected data retrieval and management by enabling the use of pass codes, passwords and/or biometrics as well as communications security over communications signals during hand held device use." Column 3, Lines 16-20; "A security module can be provided to enable protected data retrieval and management by enabling the use of pass codes, passwords and/or biometrics and communications security during hand held device communications." Column 8, Lines 15-19. The application to which the '537 Patent claims priority—US7630721B2 (the "'721 Patent")—is similar: "[a]lthough data can be transferred and eventually rendered at the DRD 84 without a passcode, a passcode can be required 83. The passcode can be entered

	at the DRD prior to data transfer 82, or prior to data rendering 84 at the DRD. If a passcode is required, data will be rendered by the DRD 85 after the passcode has been entered." '721 Patent, Col. 11, 50-55. **E.g., Santamäki**: **[Column 11, Lines 8-20]** "**The security circuit 522 may be incorporated with a unique e-book terminal security identification code that is used in conjunction with the individual owner or user identification code to identify a particular e-book terminal 50 to the e-book server 30**, to code each updatable ROM 518 to a particular e-book terminal 50 so that the data stored in memory storage can only be accessed by the e-book terminal 50 that downloaded the information or product from the e-book server 30 and to discourage theft of the e-book terminal 50. **The e-book server 30 may terminate communications with an e-book terminal 50 if the user identification code or the security identification code is invalid**." **[Column 11, Lines 59-67; Column 12, Lines 1-10]** "As described with reference to FIGS. 5A-5B and 6, the user may use the e-book terminal 50 in the same fashion as the printed book. An e-book server icon is provided to automatically initiate and establish communications with a designated e-book server 30, via a public network 40. **When the user touches this icon or presses a corresponding function switch 62 (*See* FIG. 6), the e-book terminal 50 requests the user to enter a user identification code and/or a password that will uniquely identify the user to the e-book server 30 and then the e-book terminal 50 uses the build-in communications means to automatically dial out over a telephone link, for example, to access the remote e-book server 30 via the public network 40. This user identification code and/or password can be the same code or password used to initially active the e-book functions when said code or password is enabled. An alternative embodiment uses a user identification code encoded into a particular e-book terminal 50 when the unit is procured and then only request the user's password for access**."
[1.6] a touch sensitive display screen configured to display the data including video and text received by the electronic wireless hand held multimedia device by selecting a particular	Santamäki discloses *a touch sensitive display screen configured to display the data including video and text received by the electronic wireless hand held multimedia device by selecting a particular data represented by a soft button on the touch sensitive display screen of the electronic wireless hand held multimedia device* (an e-book terminal display screen to display the document, where the display screen 60 may be touch sensitive so that icons can be directly touched to cause display documents, graphics, such as, for example, artwork, audio clips, books, E-mail, faxes, games, magazines, movies, musical

data represented by a soft button on the touch sensitive display screen of the electronic wireless hand held multimedia device; and	compositions, newspapers, photographs, software, video clips, etc. on the screen). **E.g., Santamäki**: **[Column 4, Lines 56-63] "The electronic written materials may include text, documents, pictures and graphics, such as, for example, artwork, audio clips, books, E-mail, faxes, games, magazines, movies, musical compositions, newspapers, photographs, software, video clips, etc.** Likewise, the electronic book (e-book) or e-book terminal may be substituted with a portable viewer, a personal digital assistant, a palm-top computer, or any other known remote display device." **[Column 9, Lines 13-30]** "FIG. 5B illustrates another example e-book terminal 50 for use to download or request for automatic delivery of a selected electronic document stored in an e-book format at a designated e-book server 30 via a public network 40 according to the principles of the present invention. As shown in FIG. 5B, the e-book terminal 50 may be sized and configured to be book size and to open like a book for use. The e-book terminal 50 has two opposing pages and contains similar components as that described with reference to FIG. 5A, such as a front face 52 which supports display screens 60, a top 54, a base 56 and opposite sides 58. The e-book terminal 50 may also include a LCD adjust switch 64 located at the base 56, a power switch 66, a phone jack (modem) 68, and a power adapter 70 located at the top 54. In a preferred embodiment, **the display screens 60 may be touch sensitive such that the plurality of keys or function switches 62 used to select icons displayed on the display screens 60 may not be necessary.**" FIG. 5A  FIG. 5B  **[Column 9, Lines 31-45] "When opened, the user may see two facing page-like touch sensitive, display screens 60 with black print on a white background. Icons 62 may represent different electronic documents and user-selectable functions. When an electronic document is selected, information may be displayed and the user can read page by page or go directly to a particular page by touching the page number of the desired selection as listed.** Closing the e-book terminal 50 automatically shuts down the device.

	Additional electronic documents can be downloaded from a designated e-book server 30, and can be deleted to make room for the new material. **Inputs to the e-book terminal 50 may be through the touch-sensitive display screens 60** and the communication link established with the designated e-book server 30 via the phone jack (modem) 70."
[1.7] a microprocessor configured to facilitate operation of and communications by the electronic wireless hand held multimedia device.	Santamäki discloses *a microprocessor configured to facilitate operation of and communications by the electronic wireless hand held multimedia device* (an e-book terminal comprising a central processing unit to control the operation of the system, in particular, the data communications by the portable e-book). **E.g., Santamäki**: **[Column 9, Lines 1-11]** "Located on the top 54 of the e-book terminal 50 may be a power switch 66 for powering the e-book terminal 50 on or off, a phone jack 68 or other communication interface device for establishing communication with the e-book server 30 via a public network 40, and a power adapter 70 for providing power supply to the e-book terminal 50. **The e-book terminal 50 may also include an electronic module (not shown) which supports circuitry such as a central processing unit (CPU),** memory devices such as a BIOS read-only-memory (ROM), a random-access-memory (RAM) and an updatable ROM which will be described in detail hereinbelow." **[Column 9, Lines 46-67]** "Turning now to FIG. 6, a simplified circuit diagram of an exemplary e-book terminal 50 shown in FIGS. 5A and 5B for use to download or request for automatic delivery of a selected electronic document stored in an e-book format at a designated e-book server 30 via a public network 40 according to the principles of the present invention is illustrated. As shown in FIG. 6, **the exemplary e-book terminal 50 includes an electronic module 510 which provides a central processing unit (CPU) to control all operations of the e-book terminal 50 under instructions of the propriety operating system embedded in a solid-state device, the BIOS ROM, and random-access-memory (RAM) which provides the primary memory space to write, store and retrieve information and program instructions used by the CPU.** The e-book terminal 50 also includes a display 512 and a display controller 514 which support the display screen 60, a power unit 516 which provides power supply, an updatable ROM 518 which supports additional memory capacity, a communication interface 520 which supports communications with a designated e-book server 30 via a public network 40, a security unit 522 which provides overall security, and optionally, a voice synthesizer 522 which

	provides a spoken auditory display of pages of an electronic document downloaded from the e-book server 30." FIG. 6 
Claim 2	**Santamäki and Holshouser**
[2.0] The electronic wireless hand held multimedia device of claim 1, further comprising a global positioning module configured to provide location information for the electronic wireless hand held multimedia device.	As discussed, claim 1 is obvious over the combination of Santamäki and Holshouser. Further, Santamäki in combination with Holshouser discloses, or at least renders obvious, the new limitations of claim 2. Santamäki in combination with Holshouser discloses, or at least renders obvious a *global positioning module configured to provide location information for the electronic wireless hand held multimedia device*. Holshouser discloses a personal communications terminal (PCT) (electronic wireless hand held multimedia device) that consists of a GPS receiver 50 (global positioning module) that is used to determine location of the PCT. Ex. 1005, ¶ 70. For the reasons provided in further detail in the Request, a POSITA would have been motivated to combine, and would have had a reasonable expectation of success in combining, Santamäki's e-book terminal 50 and Holshouser's teachings of a GPS receiver 50 (global positioning module) that is used to determine location of the e-book terminal 50 so that the e-book terminal 50 of Santamäki could operate with mapping resources and provide location information. *See* Section II.B.3; Ex. 1005, ¶ 73; *see, also, e.g.*, [a] hand-held navigation, mapping and positioning device contains a GPS receiver, a database capable of storing vector or bit mapped graphics, a viewing port, an embedded processor, a simplified user interface, a data compression algorithm, and other supporting electronics." Ex. 1011 (US5902347A) Abstract; "In operation, the device then becomes self-contained, housing a GPS receiver, internal rechargable [sic] batteries, map data, and a user display. Using a menu driven interface, the user can see where they are on the map and perform other functions such

	as calculating the distance to a particular point, or panning and zooming the image to investigate map details; i*d.*, Column 2, Lines 28-35; "A map display device is presented including an information memory device for storing map data, a display device for displaying a map based on map data stored in the information memory device, and a display control device"; Ex. 1012 (US6282490B1), Abstract; "[t]he present position detection device 2 comprises an absolute directional sensor 24 such as a geomagnetic sensor, etc., a relative directional sensor 25 such as a steering sensor, or a gyro sensor, etc., a velocity sensor 26 for detecting travel distance from the number of revolutions of a wheel, a GPS receiver 21 which utilizes a global positioning system (GPS)"; *id.*, Column 4, Lines 11-20; "The present invention includes a map information storage unit which stores map information, an information read-out device which reads out the map information stored in said map information storage unit, a display which displays on a screen the map information read out by the map information read-out device from the map information storage unit"; EX. 1013 (US5473324A), Abstract; "FIG. 1 is a block diagram of the functional portions of the map display apparatus of one embodiment of the present invention, in which reference numeral 20 denotes an input means by which the user inputs the routes, reference numeral 21 denotes a map storage means, a CD-ROM, where the map information is stored, reference numeral 22 denotes an information read-out means for reading out the map information stored in the map information storage means 21, reference numeral 26 denotes a means for detecting the present position of one's vehicle by GPS or another assisting systems, reference numeral 24 denotes a display means for displaying the vehicle's present position detected by the detecting means 26 together with a map whose scale can be arbitrarily changed by the user." *Id.*, Column 3, Lines 15-27; Ex. 1005, ¶¶ 74-77. Thus, Santamäki in combination with Holshouser teaches a *global positioning module configured to provide location information for the electronic wireless hand held multimedia device*. **E.g., Holshouser**: **[Column 3, Lines 17-21]** "**The PCT [personal communications terminal] may also include a GPS receiver 50 that can be used to determine the location of the PCT 10.** The GPS receiver 50 includes an antenna 52 to receive GPS signals from a satellite. The signals from the satellite are used to calculate the position of the PCT 10**.**"

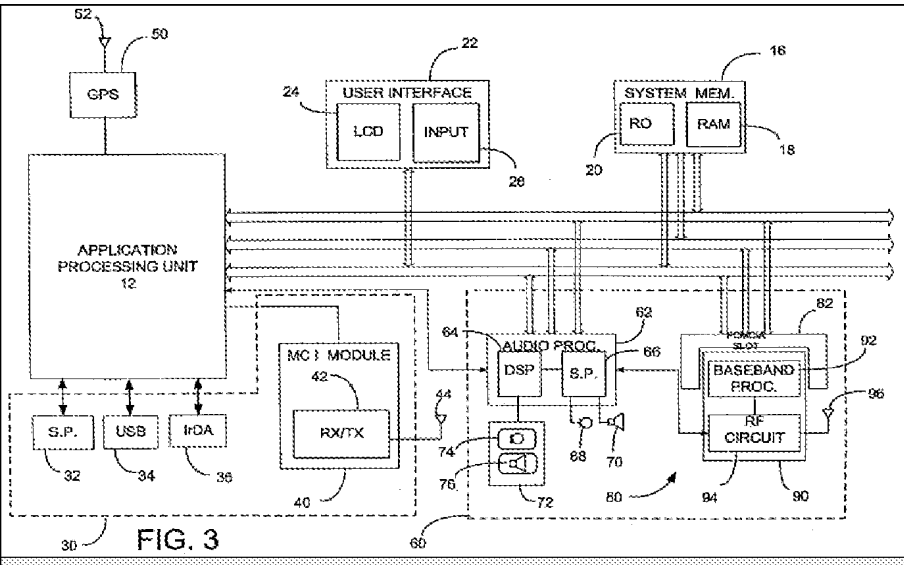
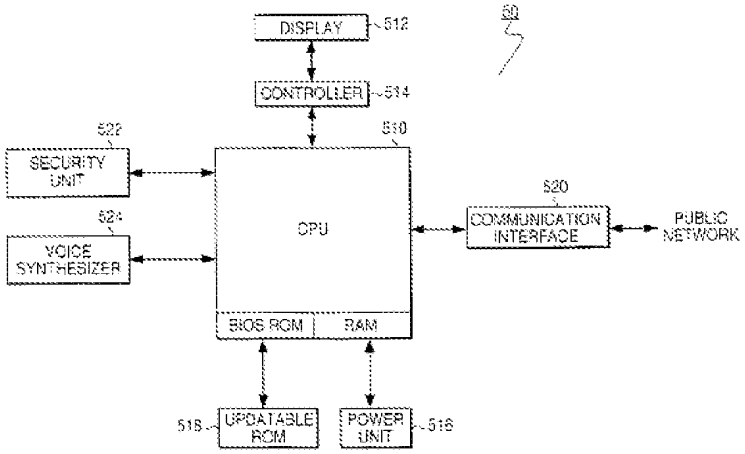


FIG. 3

Claim 3	Santamäki and Holshouser
[3.0] The electronic wireless hand held multimedia device of claim 1, further comprising a cartridge reader configured to transfer data with an electronic cartridge.	As discussed, claim 1 is obvious over the combination of Santamäki and Holshouser. Further, Santamäki discloses, or at least renders obvious, the new limitations of claim 3. Santamäki discloses a *cartridge reader configured to transfer data with an electronic cartridge* (e-book terminal 50 comprising a PCMCIA slot to receive a PCMCIA memory to store the electronic document). **E.g., Santamäki**: **[Column 10, Lines 26-54] "When the e-book terminal 50 is opened, power is automatically applied and the electronic module 510 automatically loads the proprietary operating system and any prestored settings from previous operations. Typically, the electronic module 510 initializes the e-book terminal 50 by displaying the icons for the electronic document stored in the updatable ROM 518 and any function icons such as the connect-to-the-bookstore icon**. This screen display information is sent from the electronic module 510 via display controller 514 to the display screens 60 (left and right display screens 60). The display controller 370 can be a dual-screen graphic controller or a separate graphic controller can be provided for each display. Alternatively, the display controller(s) can provide independent, coordinated, or complementary (a single page of material spanning both display screens 60) display of material across the two display screens 60 (if the e-book terminal 50 of FIG. 5B is used). **The updatable ROM 518 may comprise hundreds of megabytes or more of memory such as provided by PCMCIA memory storage cards**, solid state EEPROMs, flash memory devices, bubble memory, a compact, large-capacity, miniature hard disk drive, or the like. Each embodiment of the e-book terminal 50 has sufficient storage to store several books of textual information in their entirety. The number of

	electronic documents that can be stored varies depending on the storage requirements of the individual items, the compression techniques used and the amount of memory available in a particular e-book terminal 50.."

FIG. 6

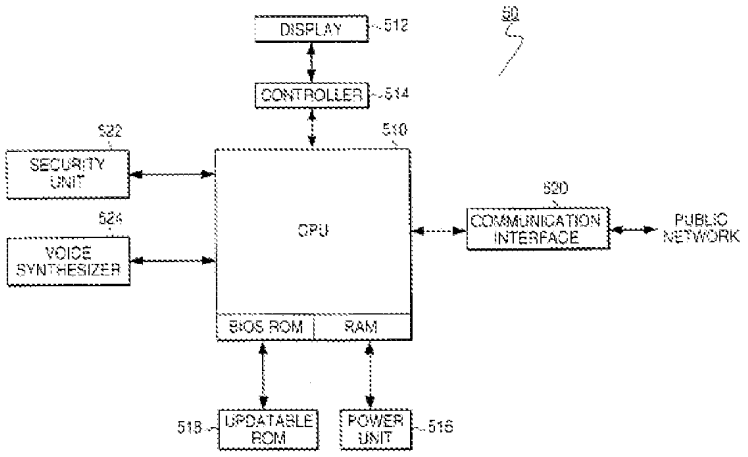


	[Column 12, Lines 44-57] "When the user is finished with a stored selection, the user can easily delete this selection to make room for more selections to be downloaded from the e-book server 30, via the public network 40. To delete a selection, the user merely touches a delete icon, touches the icon for the selection to be deleted or touches the item when presented in a textual list and then touches a confirmation icon. The e-book terminal 50 then deletes the selection and thus frees up memory storage. **Further, instead of deleting selections, the user can save downloaded selections to a memory card and then swap memory cards by removing the memory card currently installed and then inserting another memory card in its place. In this fashion, the user can retain a personal collection of favorite electronic documents**."
Claim 4	**Santamäki and Holshouser and Heutschi**
[4.0] The electronic wireless hand held multimedia device of claim 1, further comprising a mobile payment module enabling mobile payments via a variety of billing arrangements.	As discussed, claim 1 is obvious over the combination of Santamäki and Holshouser. Further, Santamäki in combination with Holshouser and Heutschi discloses, or at least renders obvious, the new limitations of claim 4. Heutschi discloses *a mobile payment module enabling mobile payments via a variety of billing arrangements* (an electronic book where a user can be charged for the data received, using suitable payment systems, where billing can take place by way of a GSM chip card or SIM card (the cards housed in the electronic book)). Ex. 1005, ¶ 90. For the reasons provided in further detail in the Request, a POSITA would have been motivated to combine, and would have had a reasonable expectation of success in combining, Santamäki's e-book

	terminal and Heutschi's teachings of a *mobile payment module* (billing by way of GSM card or SIM card to allow the data supplier to charge for the data retrieved). *See* Section II.B.3; Ex. 1005, ¶ 102. Thus, Santamäki in combination with Holshouser and Heutschi teaches *an electronic wireless hand held multimedia device* with *a mobile payment module enabling mobile payments via a variety of billing arrangements*. *Id*. **E.g., Heutschi**: **[Column 3, Lines 38-44]** "The block diagram in FIG. 1 shows as an example of an electronic book store, which is connected to the Internet by an online interface. The various books, magazines, newspapers, documents are stored electronically in a data bank. **The electronic book store has an accounting system, which allows the data supplier to charge for the data retrieved**." **[Column 2, Line 66 – Column 3, Line 3]** "In commercial use, the relevant information and data will be charged to the customer or reader (clearing). **The billing can take place by way of a GSM chip cards [sic] SIM card,** SET, credit card, micropayment or other suitable payment systems." **[Column 6, Lines 36-54]** "1. **An electronic device comprising: a housing** . . . a station operable to receive and send signals by way of a radio network, **said station being provided in said housing, wherein provided in said station is at least one receiving module operable to receive a GSM chip or an SIM chip**."
Claim 5	**Santamäki and Holshouser**
[5.0] The electronic wireless hand held multimedia device of claim 1, further comprising a security module enabling protected data management and communications security.	As discussed, claim 1 is obvious over the combination of Santamäki and Holshouser. Further, Santamäki discloses, or at least renders obvious, the new limitations of claim 5. Santamäki discloses *a security module enabling protected data management and communications security*(a security unit providing internetwork security tools and user authentication measures for users accessing the terminal device, thus providing overall data and communication security to the terminal). **E.g., Santamäki**: **[Column 3, Lines 9-29]** "The remote e-book terminal for use to download or request automatic delivery of a selected electronic document stored in an e-book format from the e-book server may comprise an electronic module which provides a central processing unit (CPU) to control all operations of the e-book terminal under instructions of the operating system, a BIOS read-only-memory

	(ROM), and a random-access-memory (RAM) which provides the primary memory space to write, store and retrieve information and program instructions used by the CPU; a display and a display controller which support a visual display of the selected electronic document on a display screen; a power unit which provides power supply to the e-book terminal; an updatable read-only-memory (ROM) which supports additional memory capacity; a communication interface which supports communications with the e-book server via the public network; and **a security unit which provides overall security to the e-book terminal.** The updatable ROM may comprise hundreds of megabytes or more of memory such as provided by PCMCIA memory storage cards, solid state EEPROMs, flash memory devices, bubble memory, a compact, large-capacity, miniature hard disk drive, or the like, for storage of the selected electronic document downloaded from the e-book server." **[Column 09, Lines 46-67]** "Turning now to FIG. 6, a simplified circuit diagram of an exemplary e-book terminal 50 shown in FIGS. 5A and 5B for use to download or request for automatic delivery of a selected electronic document stored in an e-book format at a designated e-book server 30 via a public network 40 according to the principles of the present invention is illustrated. As shown in FIG. 6, the exemplary e-book terminal 50 includes an electronic module 510 which provides a central processing unit (CPU) to control all operations of the e-book terminal 50 under instructions of the propriety operating system embedded in a solid-state device, the BIOS ROM, and random-access-memory (RAM) which provides the primary memory space to write, store and retrieve information and program instructions used by the CPU. The e-book terminal 50 also includes a display 512 and a display controller 514 which support the display screen 60, a power unit 516 which provides power supply, an updatable ROM 518 which supports additional memory capacity, a communication interface 520 which supports communications with a designated e-book server 30 via a public network 40, **a security unit 522 which provides overall security**, and optionally, a voice synthesizer 522 which provides a spoken auditory display of pages of an electronic document downloaded from the e-book server 30."

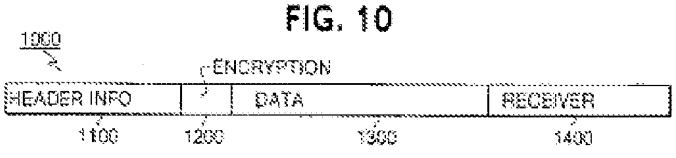
FIG. 6



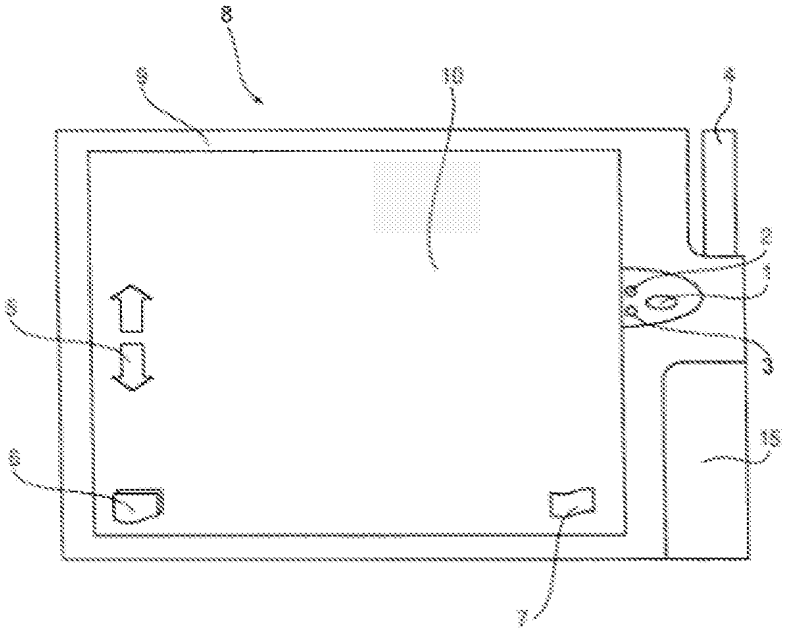
[Column 11, Lines 8-34] "**The security circuit 522 may be incorporated with a unique e-book terminal security identification code that is used in conjunction with the individual owner or user identification code to identify a particular e-book terminal 50 to the e-book server 30, to code each updatable ROM 518 to a particular e-book terminal 50 so that the data stored in memory storage can only be accessed by the e-book terminal 50 that downloaded the information or product from the e-book server 30 and to discourage theft of the e-book terminal 50.** The e-book server 30 may terminate communications with an e-book terminal 50 if the user identification code or the security identification code is invalid."

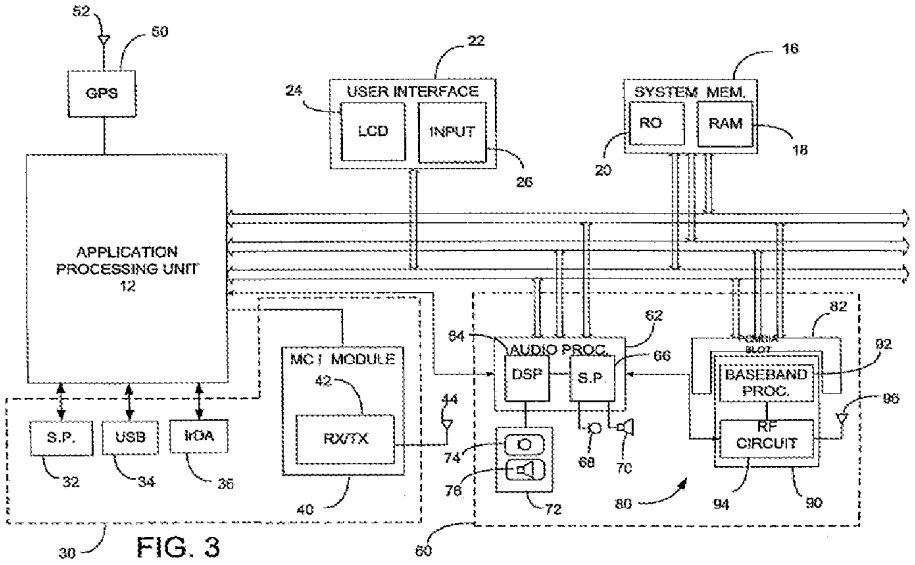
[Column 11, Lines 59-67; Column 12, Lines 1-10] "As described with reference to FIGS. 5A-5B and 6, the user may use the e-book terminal 50 in the same fashion as the printed book. An e-book server icon is provided to automatically initiate and establish communications with a designated e-book server 30, via a public network 40. **When the user touches this icon or presses a corresponding function switch 62 (*See* FIG. 6), the e-book terminal 50 requests the user to enter a user identification code and/or a password that will uniquely identify the user to the e-book server 30 and then the e-book terminal 50 uses the build-in communications means to automatically dial out over a telephone link, for example, to access the remote e-book server 30 via the public network 40. This user identification code and/or password can be the same code or password used to initially active the e-book functions when said code or password is enabled. An alternative embodiment uses a user identification code encoded into a particular e-book terminal 50 when the unit is procured and then only request the user's password for access**."

[Column 14, Lines 34-53] "Preferred embodiments of the electronic book system which comprises the desktop PC 10, the corporate server

	12 with database 14, the e-book server 20 and the e-book terminal 50 as described with reference to FIGS. 1-9, incorporate **zone or more internetwork security tools to protect the content of information during transmission across a network, to assure the authenticity of network interactions, and to thwart attempts to subvert system by means of network access capabilities. This way only an intended e-book terminal 50 has the right to access and read the electronic document stored in the designated e-book server 30, via the public network 40. Examples of such internetwork security tools may include conventional encryption (also referred to as symmetric encryption or single-key encryption) based on the data encryption standard (DES), and public-key encryption such as the use of PGP (Pretty Good Privacy) scheme and PEM (Privacy Enhanced Mail) for providing authentication and confidentiality services as part of an electronic book system. If PGP encryption scheme is used, for example, a combination of private and public keys may be utilized to allow the desktop PC 10 to encrypt the selected electronic document from the corporate server 12 and send the encrypted data reflecting to the electronic document to the e-book server 30, via a private network 20, for subsequently downloading to a remote e-book terminal 50.** The remote e-book terminal 50 may then decrypt the encrypted data reflecting the electronic document. PGP encryption scheme may be a software algorithm, hardware device, or combination of the two as is known in the network and internetwork security technology." **[Column 14, Lines 64-67; Column 15, Lines 1-14]** "FIG. 10 illustrates an example data packet with encryption for use in an improved electronic book system according to the principles of the present invention. The data packet transmission may comply with the Internet-standard suite of protocols used throughout the Internet and private intranets such as Transmission Control Protocol/Internet Protocol (TCP/IP). As shown in FIG. 10, the data packet 1000 may include sender information 1100 followed by encryption data 1200, information data 1300, and receiver information 1400. The sender information 1100 contains, for example, IP addresses fields (32-bit global Internet address, generally consisting of a network identifier and a host identifier), a version field used to specify which version of the IP is represented in the data packet (for example, IP Version 4 and IP Version 6), a type of service field used to specify how the data packet is to be handled in a network which offer various service qualities, and a header checksum field used to verify transmission error." FIG. 10 

Claim 6	Santamäki and Holshouser and Heutschi
[6.0] The electronic wireless hand held multimedia device of claim 1, further comprising a video camera enabling the capture, storage, processing and transmission of video and pictures.	As discussed, claim 1 is obvious over the combination of Santamäki and Holshouser. Further, Heutschi discloses, or at least renders obvious, the new limitations of claim 6. Heutschi discloses *a video camera enabling the capture, storage, processing and transmission of video and pictures* (a video camera 3 and an evaluation unit 31 which facilitate a visualization of the user for video conferencing conversations or the like). For the reasons provided in further detail in the Request, a POSITA would have been motivated to combine, and would have had a reasonable expectation of success in combining, Santamäki's e-book terminal and Heutschi's teachings of a video camera to facilitate video conferencing. *See* Section II.B.3; Ex. 1005, ¶ 110. Thus, Santamäki in combination with Holshouser and Heutschi teaches *an electronic wireless hand held multimedia device* with *a video camera enabling the capture, storage, processing and transmission of video and pictures*. *Id.* **E.g., Heutschi**: **[Column 2, Lines 36-42.]** "**In a very advantageous form, the electronic device is equipped with a loudspeaker, a microphone and furthermore with a video camera. This makes it possible to hold video conferences with one or more participants by way of a telephone, television or radio connection**. At the same time, the users can navigate on the internet and access and download data or information of any type." **[Column 5, lines 37-40]** "In order that conference conversations may be possible, in addition an indicated loudspeaker 2 and **a video camera 3** are integrated in the frame-like housing 9." **[Column 6, lines 12-18]** "In addition, a telephone device with a loudspeaker 2 and a microphone 29 with an associated processor 30 or an interface for the connection to headphones are integrated, which allows telephoning by way of the radio network. **A video camera 3 and an evaluation unit 31 are furthermore integrated, which facilitate a visualization of the user for video conferencing conversations or the like**." **[FIG. 10]**

	FIG. 10 
Claim 7	**Santamäki and Holshouser**
[7.0] The electronic wireless hand held multimedia device of claim 1, further comprising a wireless infrared transceiver supporting bi-directional line-of-site data communications of the electronic wireless hand held multimedia device over an Infrared wireless connection with electronic devices located within line of sight from the electronic wireless hand held multimedia device.	As discussed, claim 1 is obvious over the combination of Santamäki and Holshouser. Further, Holshouser discloses, or at least renders obvious, the new limitations of claim 7. Holshouser discloses or at least renders obvious *a wireless infrared transceiver* (infrared module) *supporting bi-directional line-of-site data communications of the electronic wireless hand held multimedia device over an Infrared wireless connection with electronic devices located within line of sight from the electronic wireless hand held multimedia device* (an infrared module that allows communications with a computer or other nearby device via an infrared link) For the reasons provided in further detail in the Request, a POSITA would have been motivated to combine, and would have had a reasonable expectation of success in combining, Santamäki's and e-book terminal 50 and Holshouser's teachings of an infrared module 36 that allows communications with a computer or other nearby device via an infrared link. *See* Section II.B.3; Ex. 1005, ¶ 89. **E.g., Holshouser**: **[Column 1, Lines 24-25]** "One drawback to **infrared communications** is that it **requires direct line of sight between the connected devices**."

	[Column 2, Lines 65-67; Column 3, Lines 1-6] "The system interface 30 provides means to connect the PCT 10 [personal communications terminal] to external devices. **The system interface 30 includes a** serial port 32, USB-port 34, **infrared module 36**, and RF module 40. The serial port 32 enables serial communications with a connected device. The USB-port 34 enables the PCT 10 to communicate with connected devices via a standard USB interface. **The infrared module 36 allows communications with a computer or other nearby device via an infrared link.**"  FIG. 3
Claim 8	**Santamäki and Holshouser**
[8.0] An electronic wireless hand held multimedia device, comprising:	*See* [1.0] above – "An electronic wireless hand held multimedia device, comprising:"
[8.1] at least one of a wireless unit and a tuner unit supporting bi-directional data communications of data including video and text for the electronic wireless hand held multimedia device with remote data resources	*See* [1.1] above – "at least one of a wireless unit and a tuner unit supporting bi-directional data communications of data including video and text for the electronic wireless hand held multimedia device with remote data resources"
[8.2] over cellular telecommunications networks,	*See* [1.2] above – "over cellular telecommunications networks,"

[8.3] over wireless local area networks and	*See* [1.3] above – "over wireless local area networks and"
[8.4] over a direct wireless connection with electronic devices located within short range using Bluetooth communications	*See* [1.54 above – "over a direct wireless connection with electronic devices located within short range using Bluetooth communications"
[8.5] after accepting a passcode from a user of the electronic wireless hand held multimedia device during the communications;	*See* [1.5] above – "after accepting a passcode from a user of the electronic wireless hand held multimedia device during the communications"
[8.6] a touch sensitive display screen configured to display the data including video and text received by the electronic wireless hand held multimedia device by selecting a particular data represented by a soft button on the touch sensitive display screen of the electronic wireless hand held multimedia device; and	*See* [1.6] above – "a touch sensitive display screen configured to display the data including video and text received by the electronic wireless hand held multimedia device by selecting a particular data represented by a soft button on the touch sensitive display screen of the electronic wireless hand held multimedia device; and"
[8.7] a microprocessor configured to facilitate operation of and communications by the electronic wireless hand held multimedia device.	*See* [1.7] above – "a microprocessor configured to facilitate operation of and communications by the electronic wireless hand held multimedia device."
Claim 9	**Santamäki and Holshouser**
[9.0] The electronic wireless hand held multimedia device of claim 8, further comprising a global positioning module	*See* [2.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a global positioning module configured to provide location information for the electronic wireless hand held multimedia device."

configured to provide location information for the electronic wireless hand held multimedia device.	
Claim 10	**Santamäki and Holshouser**
[10.0] The electronic wireless hand held multimedia device of claim 8, further comprising a cartridge reader configured to transfer data with an electronic cartridge.	*See* [3.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a cartridge reader configured to transfer data with an electronic cartridge."
Claim 11	**Santamäki and Holshouser**
[11.0] *The electronic wireless hand held multimedia device of claim 8, further comprising a wireless infrared transceiver supporting bi-directional line-of-sight data communications of the electronic wireless hand held multimedia device over an Infrared wireless connection with electronic devices located within line of sight from the electronic wireless hand held multimedia device.*	*See* [7.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a wireless infrared transceiver supporting bi-directional line-of-site data communications of the electronic wireless hand held multimedia device over an Infrared wireless connection with electronic devices located within line of sight from the electronic wireless hand held multimedia device."
Claim 12	**Santamäki and Holshouser and Heutschi**
[12.0] The electronic wireless hand held multimedia device of claim 8, further comprising a mobile payment module enabling mobile payments via a variety of billing arrangements.	*See* [4.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a mobile payment module enabling mobile payments via a variety of billing arrangements."
Claim 13	**Santamäki and Holshouser**

[13.] The electronic wireless hand held multimedia device of claim 8, further comprising a security module enabling protected data management and communications security.	*See* [5.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a security module enabling protected data management and communications security."
Claim 14	**Santamäki and Holshouser and Heutschi**
[14.] The electronic wireless hand held multimedia device comprising a video camera enabling the capture, storage, processing and transmission of video and pictures.	*See* [6.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a video camera enabling the capture, storage, processing and transmission of video and pictures."
Claim 15	**Santamäki and Holshouser**
[15.0] An electronic wireless hand held multimedia device, comprising:	*See* [1.0] above – "An electronic wireless hand held multimedia device, comprising:"
[15.1] at least one of a wireless unit and a tuner unit supporting bi-directional data communications of data including video and text for the electronic wireless hand held multimedia device with remote data resources	*See* [1.1] above – "at least one of a wireless unit and a tuner unit supporting bi-directional data communications of data including video and text for the electronic wireless hand held multimedia device with remote data resources"
[15.2] over cellular telecommunications networks	*See* [1.2] above – "over cellular telecommunications networks,"
[15.3] over wireless local area networks and	*See* [1.3] above – "over wireless local area networks and"
[15.4] over a direct wireless connection with electronic devices located within short range using Bluetooth communications	*See* [1.4] above – "over a direct wireless connection with electronic devices located within short range using Bluetooth communications"

[15.5] after accepting a passcode from a user of the electronic wireless hand held multimedia device during the communications;	*See* [1.5] above – "after accepting a passcode from a user of the electronic wireless hand held multimedia device during the communications;"
[15.6] a touch sensitive display screen configured to display the data including video and text received by the electronic wireless hand held multimedia device by selecting a particular data represented by a soft button on the touch sensitive display screen of the electronic wireless hand held multimedia device; and	*See* [1.6] above – "a touch sensitive display screen configured to display the data including video and text received by the electronic wireless hand held multimedia device by selecting a particular data represented by a soft button on the touch sensitive display screen of the electronic wireless hand held multimedia device; and"
[15.7] a global positioning module configured to provide device location information; and	*See* [2.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a global positioning module configured to provide location information for the electronic wireless hand held multimedia device."
[15.8] a microprocessor configured to facilitate operation of and communications by the electronic wireless hand held multimedia device.	*See* [1.8] above – "a microprocessor configured to facilitate operation of and communications by the electronic wireless hand held multimedia device."
Claim 16	**Santamäki and Holshouser**
[16.0] The electronic wireless hand held multimedia device of claim 15, further comprising a cartridge reader configured to transfer data with an electronic cartridge.	*See* [3.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a cartridge reader configured to transfer data with an electronic cartridge."
Claim 17	**Santamäki and Holshouser**

[17.0] The electronic wireless hand held multimedia device of claim 15, further comprising a wireless infrared transceiver supporting bi-directional line-of-sight data communications of the electronic wireless hand held multimedia device over an Infrared wireless connection with electronic devices located within line of sight from the electronic wireless hand held multimedia device.	*See* [7.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a wireless infrared transceiver supporting bi-directional line-of-site data communications of the electronic wireless hand held multimedia device over an Infrared wireless connection with electronic devices located within line of sight from the electronic wireless hand held multimedia device."
Claim 18	**Santamäki and Holshouser and Heutschi**
[18.0] The electronic wireless hand held multimedia device of claim 15, further comprising a mobile payment module enabling mobile payments via a variety of billing arrangements.	*See* [4.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a mobile payment module enabling mobile payments via a variety of billing arrangements."
Claim 19	**Santamäki and Holshouser**
[19.0] The electronic wireless hand held multimedia device of claim 15, further comprising a security module enabling protected data management and communications security.	*See* [5.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a security module enabling protected data management and communications security."
Claim 20	**Santamäki and Holshouser and Heutschi**
[20.0] The electronic wireless hand held multimedia device of claim 15, further comprising a video	*See* [6.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a video camera enabling the capture, storage, processing and transmission of video and pictures."

camera enabling the capture, storage, processing and transmission of video and pictures.	
Claim 21	**Santamäki and Holshouser**
[21.0] An electronic wireless hand held multimedia device, comprising:	*See* [1.0] above – "An electronic wireless hand held multimedia device, comprising:"
[21.1] at least one of a wireless unit and a tuner unit supporting bi-directional data communications of data including video and text for the electronic wireless hand held multimedia device with remote data resources	*See* [1.1] above – "at least one of a wireless unit and a tuner unit supporting bi-directional data communications of data including video and text for the electronic wireless hand held multimedia device with remote data resources"
[21.2] over cellular telecommunications networks,	*See* [1.2] above – "over cellular telecommunications networks,"
[21.3] over wireless local area networks and	*See* [1.3] above – "over wireless local area networks and"
[21.4] over a direct wireless connection with electronic devices located within short range using Bluetooth communications	*See* [1.4] above – "over a direct wireless connection with electronic devices located within short range using Bluetooth communications;"
[21.5] after accepting a passcode from a user of the electronic wireless hand held multimedia device during the communications;	*See* [1.5] above – "after accepting a passcode from a user of the electronic wireless hand held multimedia device during the communications;"
[21.6] a touch sensitive display screen configured to display the data including video and text received by the electronic wireless hand held	*See* [1.6] above – "a touch sensitive display screen configured to display the data including video and text received by the electronic wireless hand held multimedia device by selecting a particular data represented by a soft button on the touch sensitive display screen of the electronic wireless hand held multimedia device; and"

multimedia device by selecting a particular data represented by a soft button on the touch sensitive display screen of the electronic wireless hand held multimedia device; and	
[21.7] a cartridge reader configured to transfer data with an electronic cartridge; and	*See* [3.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a cartridge reader configured to transfer data with an electronic cartridge."
[21.8] a microprocessor configured to facilitate operation of and communications by the electronic wireless hand held multimedia device.	*See* [1.7] above – "a microprocessor configured to facilitate operation of and communications by the electronic wireless hand held multimedia device."
Claim 22	**Santamäki and Holshouser**
[22.0] *The electronic wireless hand held multimedia device of claim 21, further comprising a global positioning module configured to provide device location information.*	*See* [2.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a global positioning module configured to provide location information for the electronic wireless hand held multimedia device."
Claim 23	**Santamäki and Holshouser**
[23.0] The electronic wireless hand held multimedia device of claim 21, further comprising a wireless infrared transceiver supporting bi-directional line-of-sight data communications of the electronic wireless hand held multimedia device over an Infrared wireless connection	*See* [7.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a wireless infrared transceiver supporting bi-directional line-of-site data communications of the electronic wireless hand held multimedia device over an Infrared wireless connection with electronic devices located within line of sight from the electronic wireless hand held multimedia device."

with electronic devices located within line of sight from the electronic wireless hand held multimedia device.	
Claim 24	**Santamäki and Holshouser and Heutschi**
[24.0] The electronic wireless hand held multimedia device of claim 21, further comprising a mobile payment module enabling mobile payments via a variety of billing arrangements.	*See* [4.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a mobile payment module enabling mobile payments via a variety of billing arrangements."
Claim 25	**Santamäki and Holshouser**
[25.0] The electronic wireless hand held multimedia device of claim 21, further comprising a security module enabling protected data management and communications security.	*See* [5.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a security module enabling protected data management and communications security."
Claim 26	**Santamäki and Holshouser and Heutschi**
[26.0] The electronic wireless hand held multimedia device of claim 21, further comprising a video camera enabling the capture, storage, processing and transmission of video and pictures.	*See* [6.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a video camera enabling the capture, storage, processing and transmission of video and pictures."
Claim 27	**Santamäki and Holshouser**
[27.0] An electronic wireless hand held multimedia device, comprising:	*See* [1.0] above - An electronic wireless hand held multimedia device, comprising:"
[27.1] at least one of a wireless unit and a tuner unit supporting bi- directional data communications of data including video	*See* [1.1] above – "at least one of a wireless unit and a tuner unit supporting bi- directional data communications of data including video and text for the electronic wireless hand held multimedia device with remote data resources"

and text for the electronic wireless hand held multimedia device with remote data resources	
[27.2] over cellular telecommunications networks,	*See* [1.2] above – "over cellular telecommunications networks,"
[27.3] over wireless local area networks and	*See* [1.3] above – "over wireless local area networks and"
[27.4] over a direct wireless connection with electronic devices located within short range using Bluetooth communications	*See* [1.4] above – "over a direct wireless connection with electronic devices located within short range using Bluetooth communications"
[27.5] after accepting a passcode from a user of the electronic wireless hand held multimedia device during the communications;"	*See* [1.5] above – "after accepting a passcode from a user of the electronic wireless hand held multimedia device during the communications;"
[27.6] a touch sensitive display screen configured to display the data including video and text received by the electronic wireless hand held multimedia device by selecting a particular data represented by a soft button on the touch sensitive display screen of the electronic wireless hand held multimedia device; and	*See* [1.6] above - "a touch sensitive display screen configured to display the data including video and text received by the electronic wireless hand held multimedia device by selecting a particular data represented by a soft button on the touch sensitive display screen of the electronic wireless hand held multimedia device; and"
[27.7] a global positioning module configured to provide device location information;	*See* [2.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a global positioning module configured to provide location information for the electronic wireless hand held multimedia device."

[27.8] a cartridge reader configured to receive and communicate with an electronic cartridge; and	*See* [3.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a cartridge reader configured to transfer data with an electronic cartridge."
[27.9] a microprocessor configured to facilitate operation of and communications by the electronic wireless hand held multimedia device.	*See* [1.7] above – "a microprocessor configured to facilitate operation of and communications by the electronic wireless hand held multimedia device."
Claim 28	**Santamäki and Holshouser and Heutschi**
[28.0] The electronic wireless hand held multimedia device of claim 27, further comprising a mobile payment module enabling mobile payments via a variety of billing arrangements.	*See* [4.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a mobile payment module enabling mobile payments via a variety of billing arrangements."
Claim 29	**Santamäki and Holshouser**
[29.0] The electronic wireless hand held multimedia device of claim 27, further comprising a security module enabling protected data management and communications security.	*See* [5.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a security module enabling protected data management and communications security."
Claim 30	**Santamäki and Holshouser and Heutschi**
[30.0] The electronic wireless hand held multimedia device of claim 27, further comprising a video camera enabling the capture, storage, processing and transmission of video and pictures.	*See* [6.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a video camera enabling the capture, storage, processing and transmission of video and pictures."
Claim 31	**Santamäki and Holshouser**
[31.0] The electronic wireless hand held	*See* [7.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a wireless infrared transceiver

multimedia device of claim 27, further comprising a wireless infrared transceiver supporting bi-directional line-of-sight data communications of the electronic wireless hand held multimedia device over an Infrared wireless connection with electronic devices located within line of sight from the electronic wireless hand held multimedia device.	supporting bi-directional line-of-site data communications of the electronic wireless hand held multimedia device over an Infrared wireless connection with electronic devices located within line of sight from the electronic wireless hand held multimedia device."
Claim 32	**Santamäki and Holshouser**
[32.0] An electronic wireless hand held multimedia device, comprising:	*See* [1.0] above – "An electronic wireless hand held multimedia device, comprising:"
[32.1] at least one of a wireless unit and a tuner unit supporting bi-directional data communications of data including video and text for the electronic wireless hand held multimedia device with remote data resources	*See* [1.1] above – "at least one of a wireless unit and a tuner unit supporting bi-directional data communications of data including video and text for the electronic wireless hand held multimedia device with remote data resources"
[32.2] over cellular telecommunications networks,	*See* [1.2] above – "over cellular telecommunications networks,"
[32.3] over wireless local area networks and	*See* [1.3] above – "over wireless local area networks and"
[32.4] over a direct wireless connection with electronic devices located within short range using Bluetooth communications	*See* [1.4] above – "over a direct wireless connection with electronic devices located within short range using Bluetooth communications"

[32.5] after accepting a passcode from a user of the electronic wireless hand held multimedia device during the communications;	*See* [1.5] above – "after accepting a passcode from a user of the electronic wireless hand held multimedia device during the communications;"
[32.6] a wireless infrared transceiver supporting bi-directional line-of-sight data communications of the electronic wireless hand held multimedia device over an Infrared wireless connection with electronic devices located within line of sight from the electronic wireless hand held multimedia device;	*See* [7.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a wireless infrared transceiver supporting bi-directional line-of-site data communications of the electronic wireless hand held multimedia device over an Infrared wireless connection with electronic devices located within line of sight from the electronic wireless hand held multimedia device."
[32.7] a touch sensitive display screen configured to display the data including video and text received by the electronic wireless hand held multimedia device by selecting a particular data represented by a soft button on the touch sensitive display screen of the electronic wireless hand held multimedia device; and	*See* [1.6] above – "a touch sensitive display screen configured to display the data including video and text received by the electronic wireless hand held multimedia device by selecting a particular data represented by a soft button on the touch sensitive display screen of the electronic wireless hand held multimedia device; and"
[32.8] a cartridge reader configured to receive and communicate with an electronic cartridge; and	*See* [3.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a cartridge reader configured to transfer data with an electronic cartridge."

[32.9] a microprocessor configured to facilitate operation of and communications by the electronic wireless hand held multimedia device.	*See* [1.7] above – "a microprocessor configured to facilitate operation of and communications by the electronic wireless hand held multimedia device."
Claim 33	**Santamäki and Holshouser**
[33.0] The electronic wireless hand held multimedia device of claim 32, further comprising a global positioning module configured to provide location information for the electronic wireless hand held multimedia device.	*See* [2.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a global positioning module configured to provide location information for the electronic wireless hand held multimedia device."
Claim 34	**Santamäki and Holshouser**
[34.0] An electronic wireless hand held multimedia device, comprising:	*See* [1.0] above – "An electronic wireless hand held multimedia device, comprising:"
[34.1] at least one of a wireless unit and a tuner unit supporting bi-directional data communications of data including video and text for the electronic wireless hand held multimedia device with remote data resources	*See* [1.1] above – "at least one of a wireless unit and a tuner unit supporting bi-directional data communications of data including video and text for the electronic wireless hand held multimedia device with remote data resources"
[34.2] over cellular telecommunications networks,	*See* [1.2] above – "over cellular telecommunications networks,"
[34.3] over wireless local area networks and	*See* [1.3] above – "over cellular telecommunications networks,"
[34.4] over a direct wireless connection with electronic devices located within short range using Bluetooth communications	*See* [1.4] above – "over a direct wireless connection with electronic devices located within short range using Bluetooth communications"

[34.5] after accepting a passcode from a user of the electronic wireless hand held multimedia device during the communications;	*See* [1.5] above – "after accepting a passcode from a user of the electronic wireless hand held multimedia device during the communications;"
[34.6] a wireless infrared transceiver supporting bi-directional line-of-sight data communications of the electronic wireless hand held multimedia device over an Infrared wireless connection with electronic devices located within line of sight from the electronic wireless hand held multimedia device;	*See* [7.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a wireless infrared transceiver supporting bi-directional line-of-site data communications of the electronic wireless hand held multimedia device over an Infrared wireless connection with electronic devices located within line of sight from the electronic wireless hand held multimedia device."
[34.7] a touch sensitive display screen configured to display the data including video and text received by the electronic wireless hand held multimedia device by selecting a particular data represented by a soft button on the touch sensitive display screen of the electronic wireless hand held multimedia device; and	*See* [1.6] above – "a touch sensitive display screen configured to display the data including video and text received by the electronic wireless hand held multimedia device by selecting a particular data represented by a soft button on the touch sensitive display screen of the electronic wireless hand held multimedia device; and"
[34.8] a global positioning module configured to provide location information for the electronic wireless hand held multimedia device;	*See* [2.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a global positioning module configured to provide location information for the electronic wireless hand held multimedia device."

[34.9] a cartridge reader configured to receive and communicate with an electronic cartridge; and	*See* [3.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a cartridge reader configured to transfer data with an electronic cartridge."
[34.10] a microprocessor configured to facilitate operation of and communications by the electronic wireless hand held multimedia device.	*See* [1.7] above – "a microprocessor configured to facilitate operation of and communications by the electronic wireless hand held multimedia device."
Claim 35	**Santamäki and Holshouser and Heutschi**
[35.0] The electronic wireless hand held multimedia device of claim 34, further comprising a mobile payment module enabling mobile payments via a variety of billing arrangements.	*See* [4.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a mobile payment module enabling mobile payments via a variety of billing arrangements."
Claim 36	**Santamäki and Holshouser**
[36.0] The electronic wireless hand held multimedia device of claim 34, further comprising a security module enabling protected data management and communications security.	*See* [5.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a security module enabling protected data management and communications security."
Claim 37	**Santamäki and Holshouser and Heutschi**
[37.0] The electronic wireless hand held multimedia device of claim 34, further comprising a video camera enabling the capture, storage, processing and transmission of video and pictures.	*See* [6.0] above – "The electronic wireless hand held multimedia device of claim 1, further comprising a video camera enabling the capture, storage, processing and transmission of video and pictures."