US 20080300061A1

(19) United States

(12) Patent Application Publication

(10) Pub. No.: US 2008/0300061 A1

(43) Pub. Date: Dec. 4, 2008

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(54) **ONLINE INTERACTIVE GAME SYSTEM AND METHODS**

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(21) Appl. No.: **12/124,876**

(22) Filed: **May 21, 2008**

Related U.S. Application Data

(63) Continuation-in-part of application No. 11/957,001, filed on Dec. 14, 2007, which is a continuation-in-part of application No. 11/828,124, filed on Jul. 25, 2007, which is a continuation-in-part of application No. 11/726,454, filed on Mar. 22, 2007, which is a continuation-in-part of application No. 11/540,369, filed on Sep. 29, 2006, which is a continuation-in-part of application No. 11/368,300, filed on Mar. 3, 2006, which is a continuation-in-part of application No. 11/255,852, filed on Oct. 21, 2005.

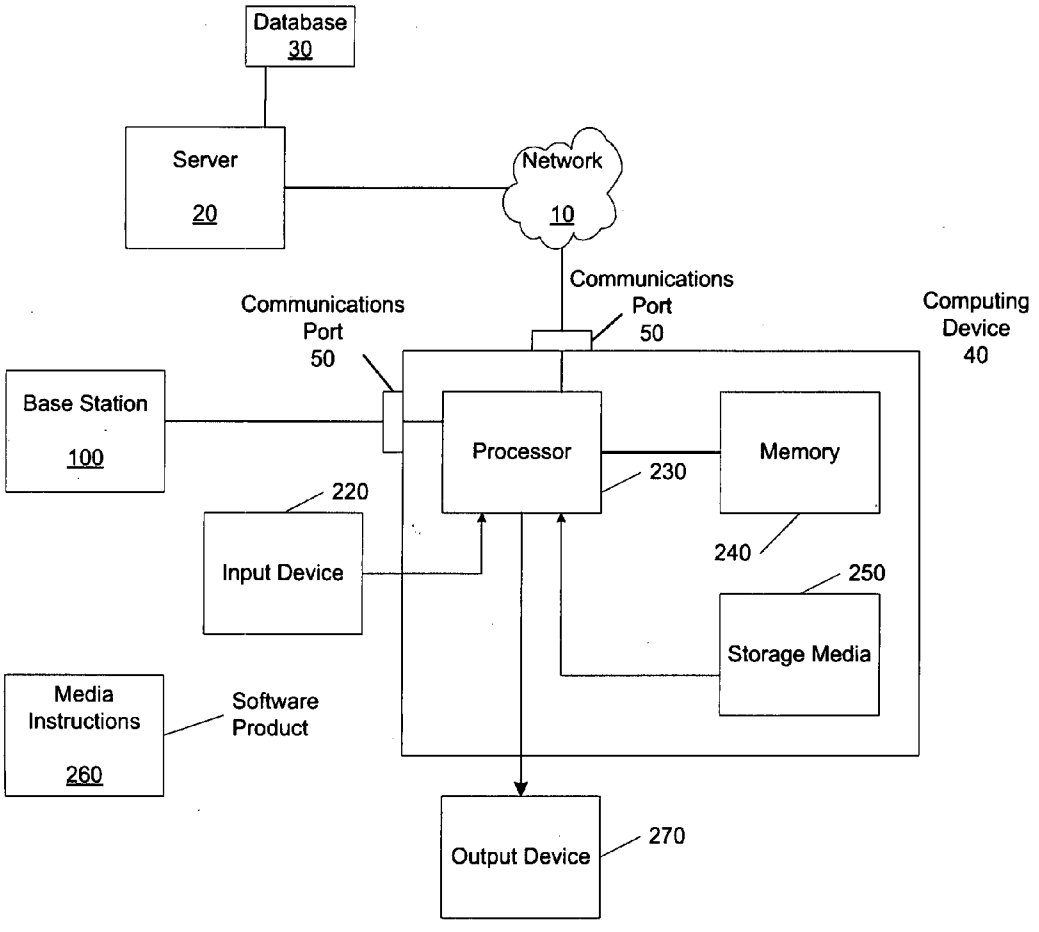
Publication Classification

(51) **Int. Cl.**
A63F 9/24 (2006.01)

(52) **U.S. Cl.** **463/42**

(57) **ABSTRACT**

An apparatus, system, and methods, for an online entertainment system are provided. In one embodiment, an apparatus is provided that allows for universal control of games. In some embodiments, the games are hosted at an online portal, which contains a software module allowing a game programmer to specify a controller mapping. When a particular game is selected by a user, the mapping is sent to the local computer. Once installed, the mapping file maps commands received from a controller to specific actions within the game. This Abstract is provided for the sole purpose of complying with the Abstract requirement rules that allow a reader to quickly ascertain the subject matter of the disclosure contained herein. This Abstract is submitted with the explicit understanding that it will not be used to interpret or to limit the scope or the meaning of the claims.



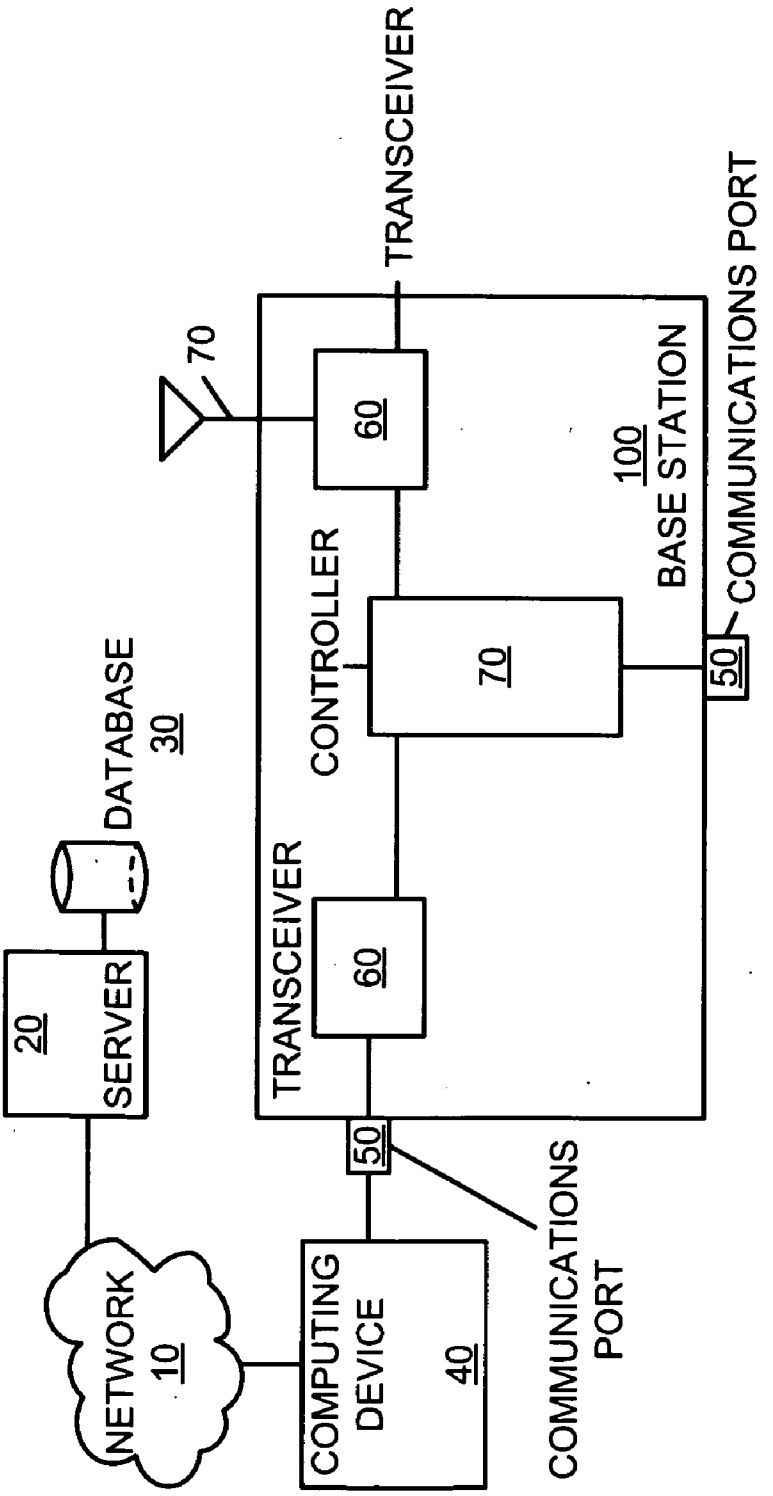

NETWORK
10
COMPUTING
DEVICE
40
COMMUNICATIONS
PORT
50
TRANSCEIVER
60
CONTROLLER
70
BASE STATION
100
COMMUNICATIONS PORT
50
TRANSCEIVER
60
70
20
SERVER
DATABASE
30

FIG. 1

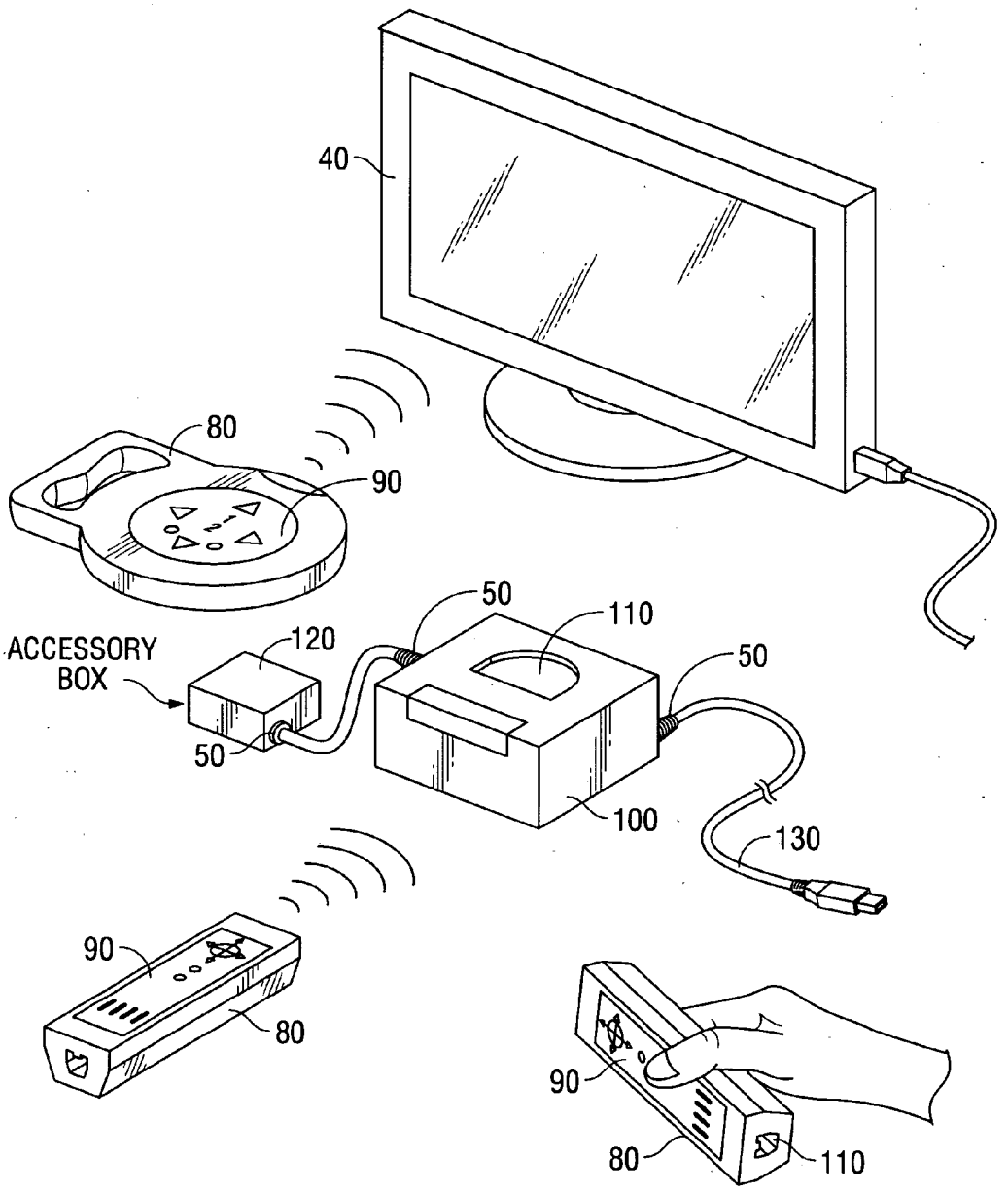


FIG. 2

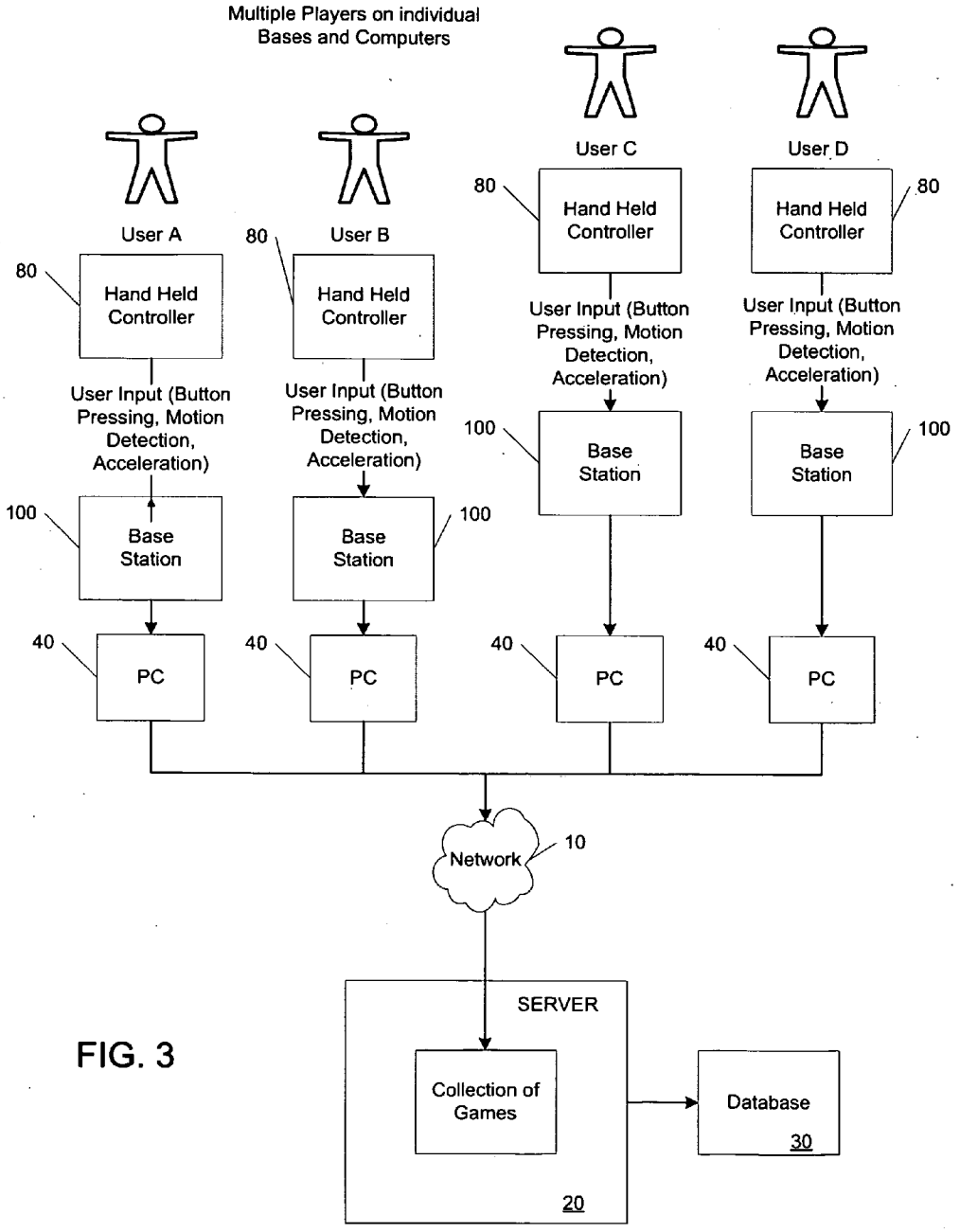

Multiple Players on individual Bases and Computers
User A
User B
User C
User D
80
Hand Held Controller
User Input (Button Pressing, Motion Detection, Acceleration)
100
Base Station
40
PC
Network
10
SERVER
Collection of Games
Database
30
20

FIG. 3

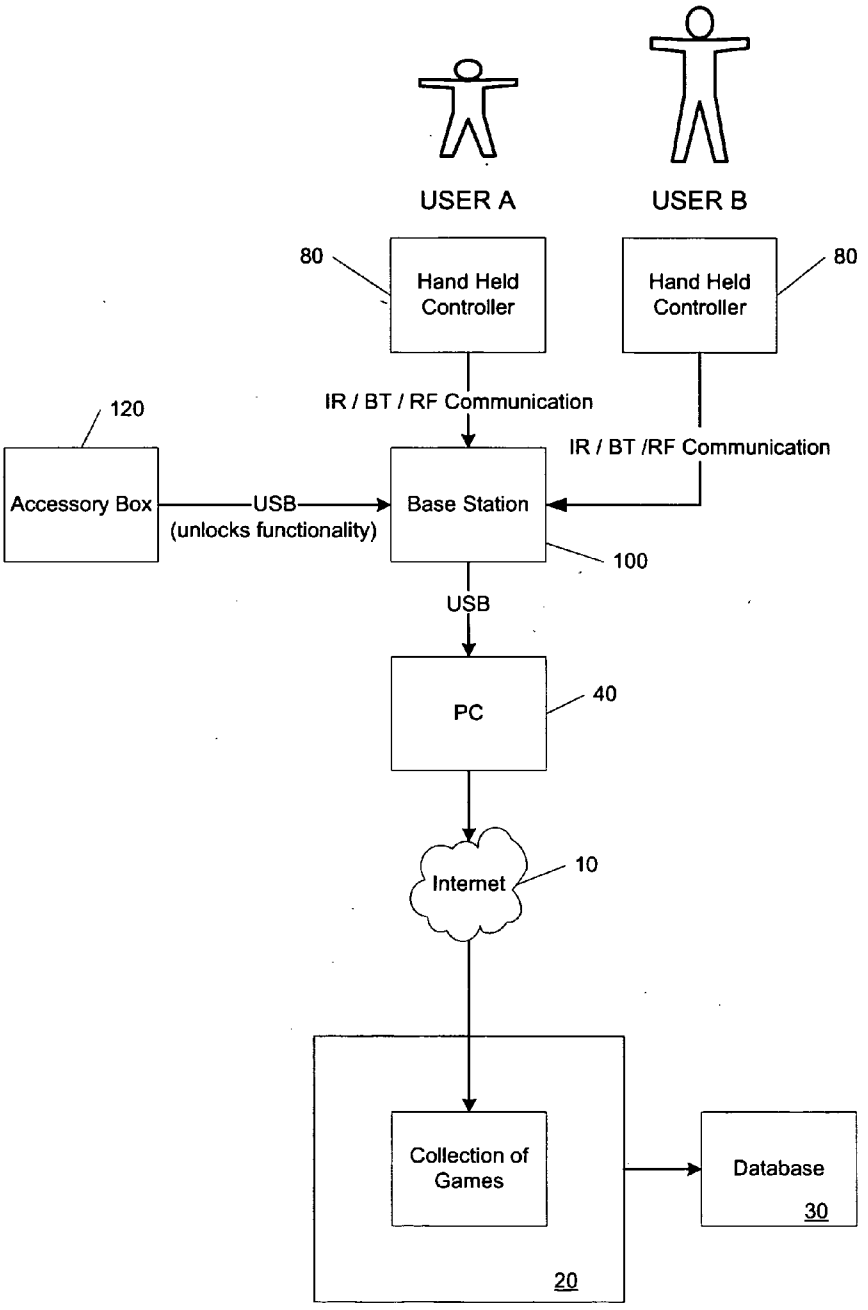

USER A
USER B
80
Hand Held Controller
Hand Held Controller
80
IR / BT / RF Communication
IR / BT /RF Communication
120
Accessory Box
USB
(unlocks functionality)
Base Station
100
USB
PC
40
Internet
10
Collection of Games
Database
30
20

FIG. 4

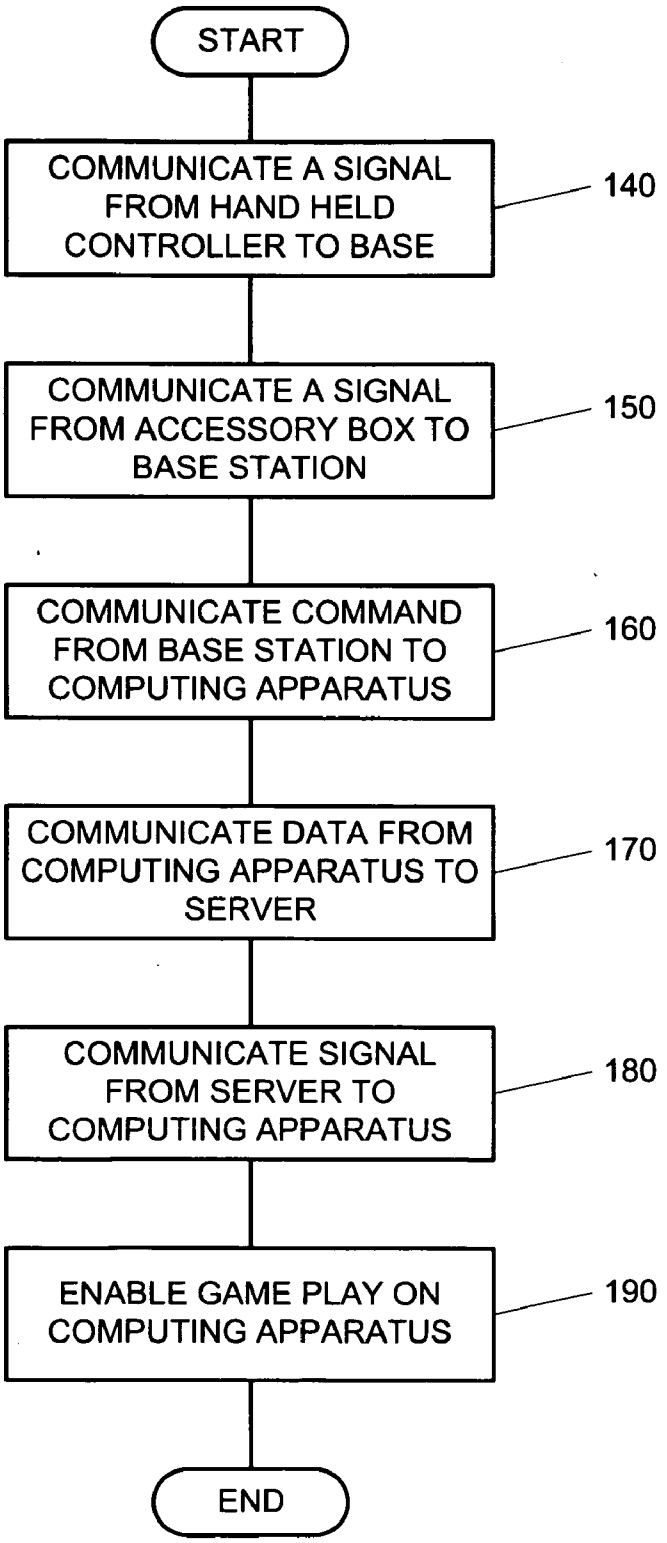

START
COMMUNICATE A SIGNAL FROM HAND HELD CONTROLLER TO BASE
140
COMMUNICATE A SIGNAL FROM ACCESSORY BOX TO BASE STATION
150
COMMUNICATE COMMAND FROM BASE STATION TO COMPUTING APPARATUS
160
COMMUNICATE DATA FROM COMPUTING APPARATUS TO SERVER
170
COMMUNICATE SIGNAL FROM SERVER TO COMPUTING APPARATUS
180
ENABLE GAME PLAY ON COMPUTING APPARATUS
190
END

FIG. 5

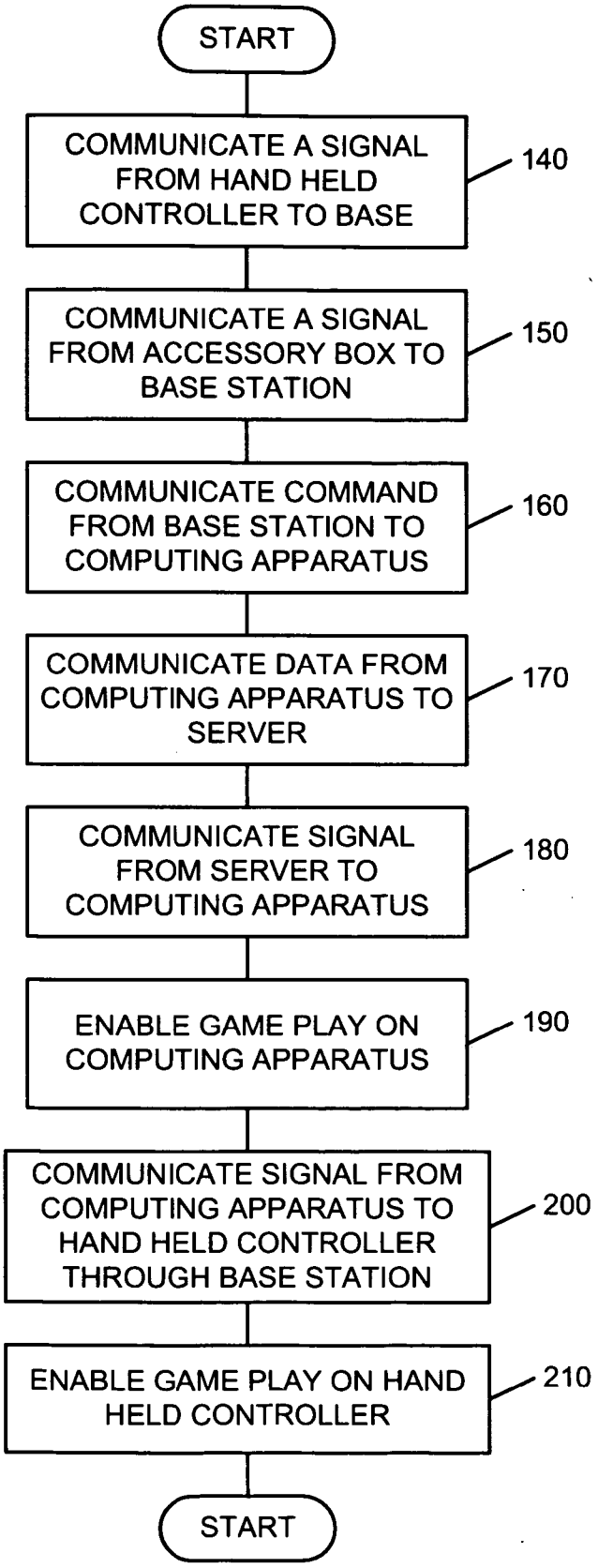

START
COMMUNICATE A SIGNAL FROM HAND HELD CONTROLLER TO BASE
140
COMMUNICATE A SIGNAL FROM ACCESSORY BOX TO BASE STATION
150
COMMUNICATE COMMAND FROM BASE STATION TO COMPUTING APPARATUS
160
COMMUNICATE DATA FROM COMPUTING APPARATUS TO SERVER
170
COMMUNICATE SIGNAL FROM SERVER TO COMPUTING APPARATUS
180
ENABLE GAME PLAY ON COMPUTING APPARATUS
190
COMMUNICATE SIGNAL FROM COMPUTING APPARATUS TO HAND HELD CONTROLLER THROUGH BASE STATION
200
ENABLE GAME PLAY ON HAND HELD CONTROLLER
210
START

FIG. 6

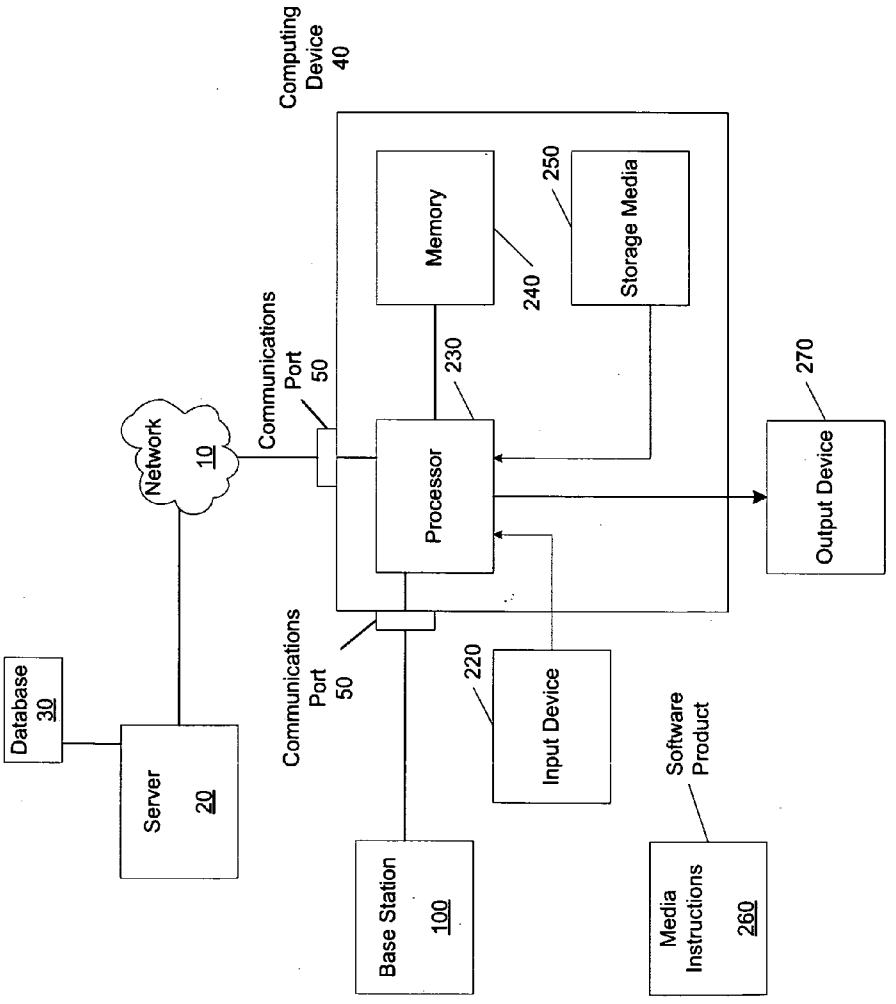

Computing Device 40
Memory
240
Storage Media
250
Communications Port 50
230
Network 10
Processor
270
Output Device
Database 30
Server 20
Communications Port 50
220
Input Device
Software Product
Base Station 100
Media Instructions 260

FIG. 7

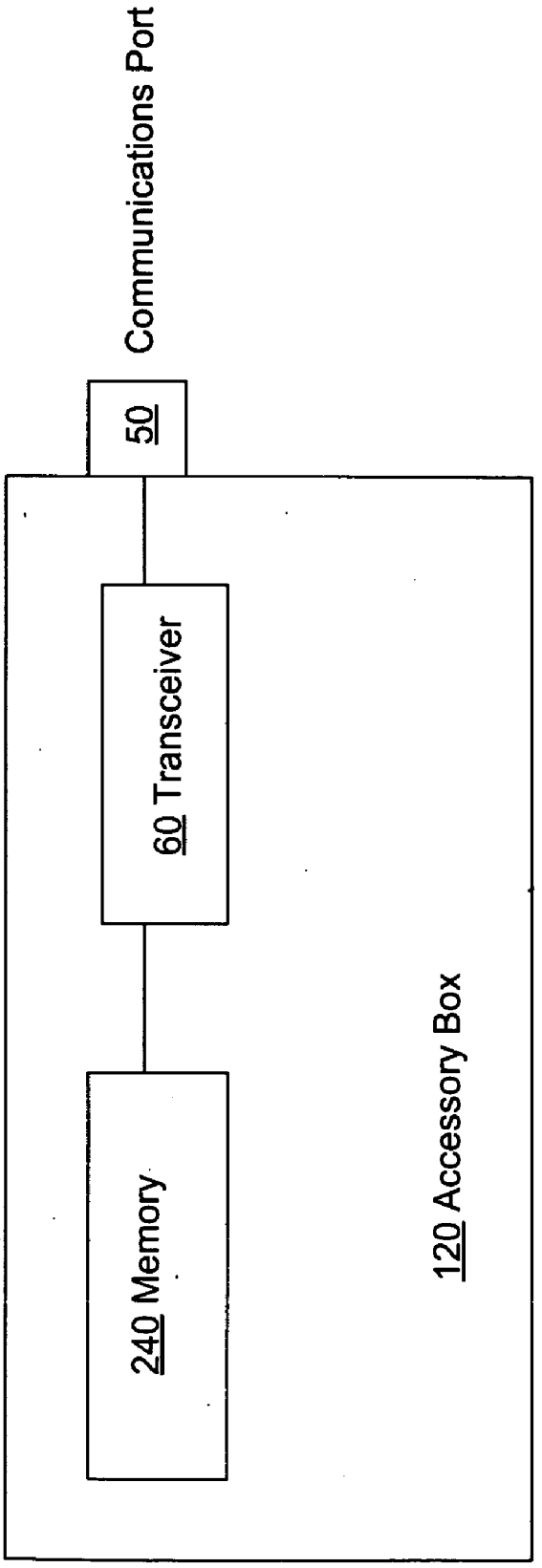

Communications Port
50
60 Transceiver
240 Memory
120 Accessory Box

FIG. 8

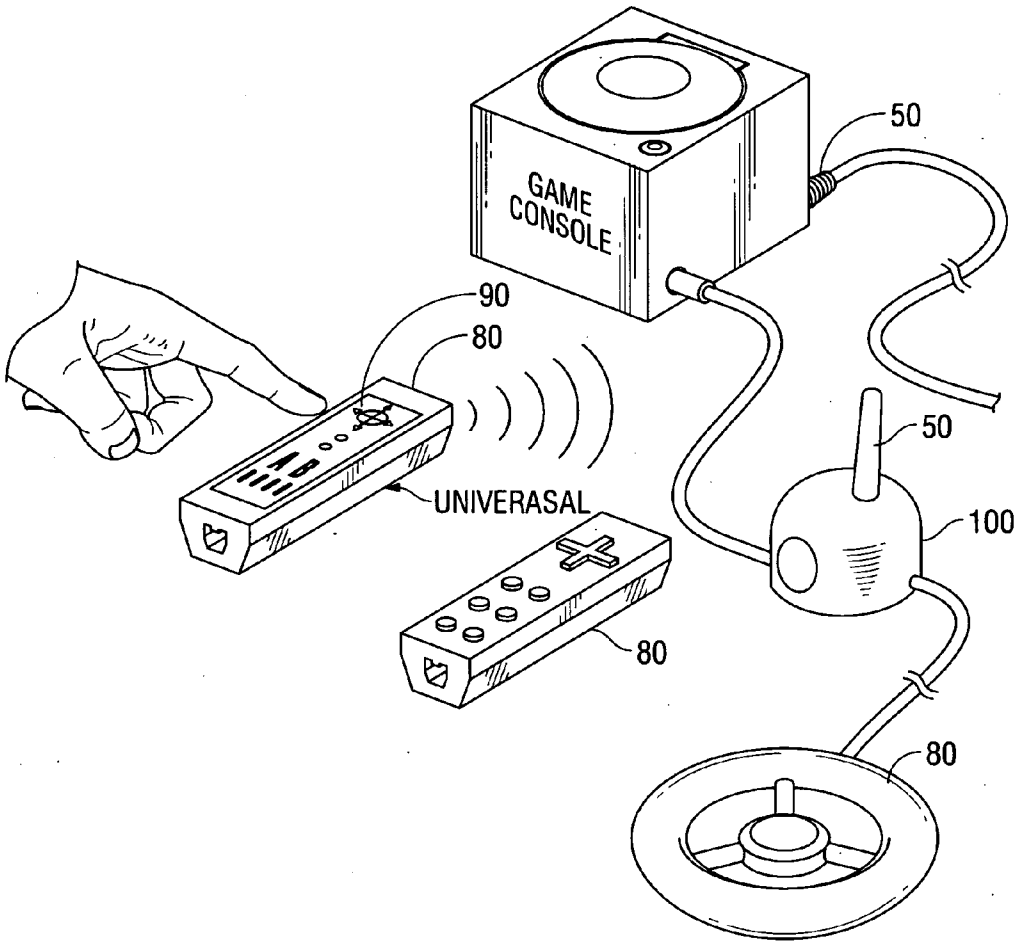


FIG. 9

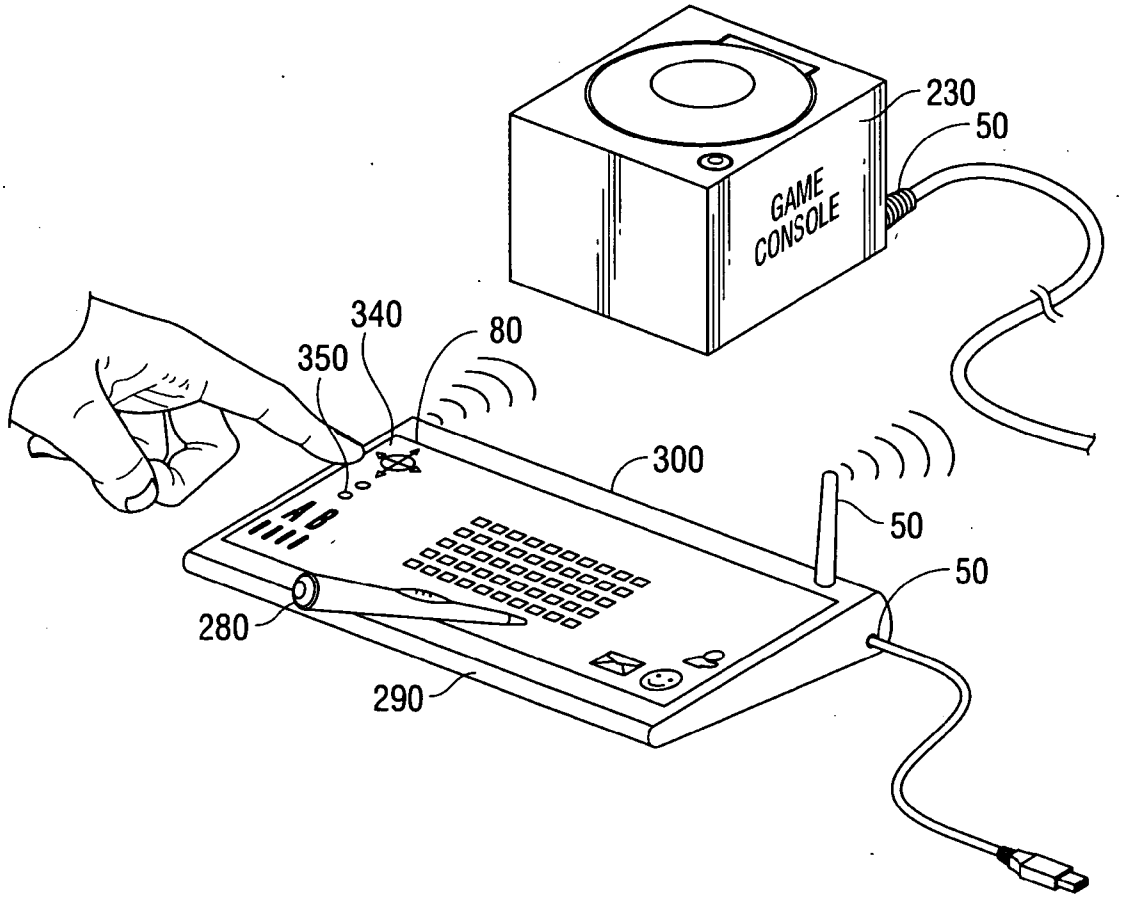


FIG. 10

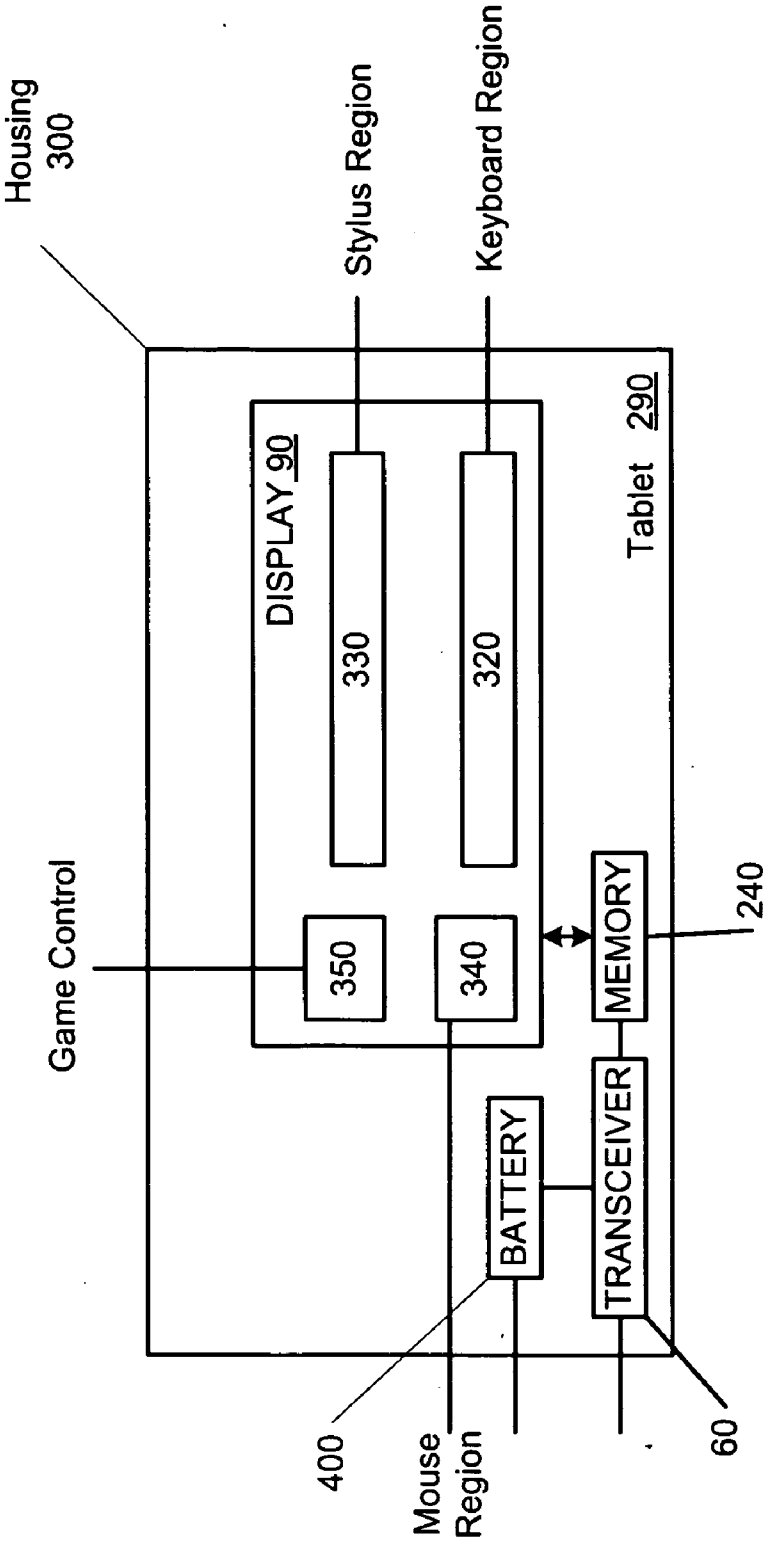

Housing
300
Stylus Region
Keyboard Region
DISPLAY 90
330
320
Tablet 290
Game Control
350
340
MEMORY
240
BATTERY
TRANSCEIVER
400
Mouse
Region
60

FIG. 11

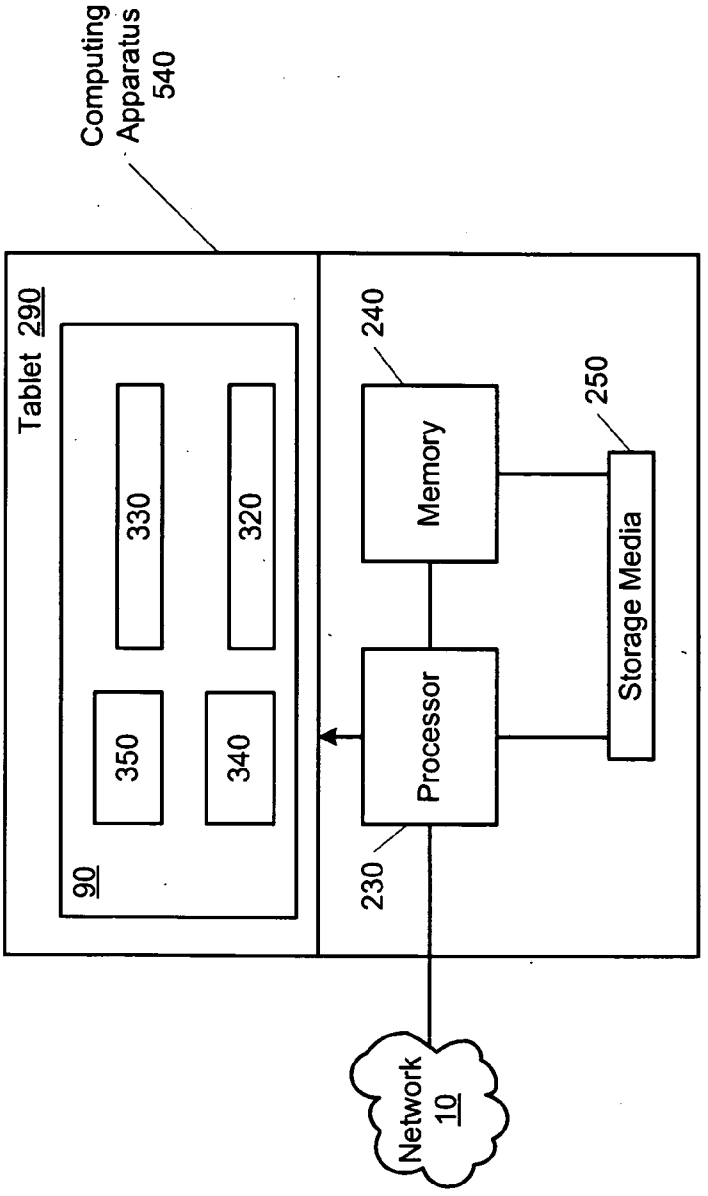

Computing Apparatus 540
Tablet 290
330
320
350
340
90
240
Memory
250
Storage Media
Processor
230
Network 10

FIG. 12

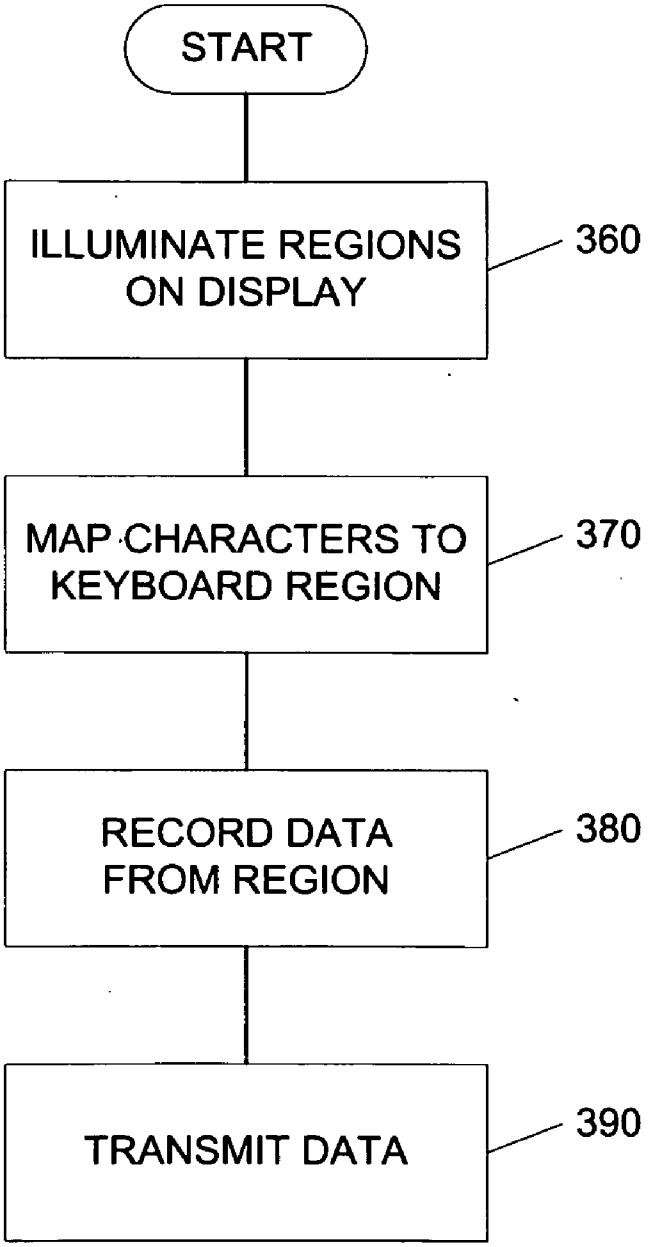

START
ILLUMINATE REGIONS ON DISPLAY
360
MAP CHARACTERS TO KEYBOARD REGION
370
RECORD DATA FROM REGION
380
TRANSMIT DATA
390

FIG. 13

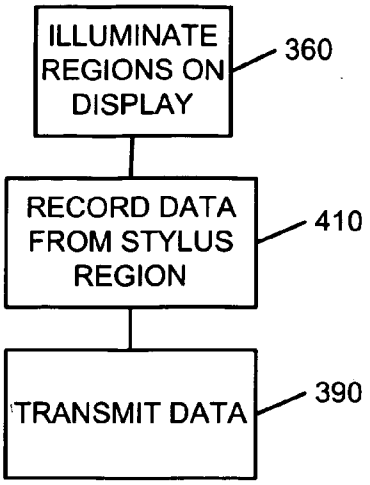


FIG. 14

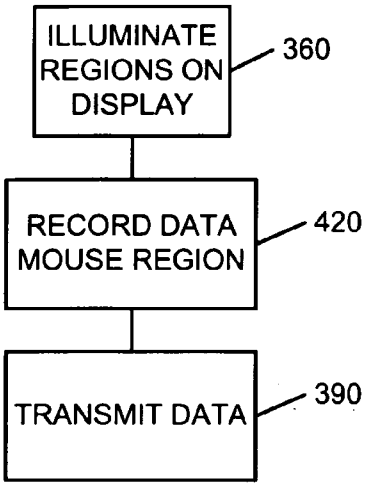


FIG. 15

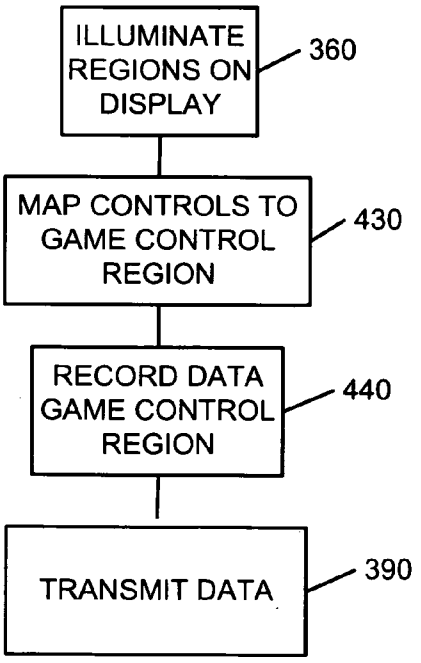


FIG. 16

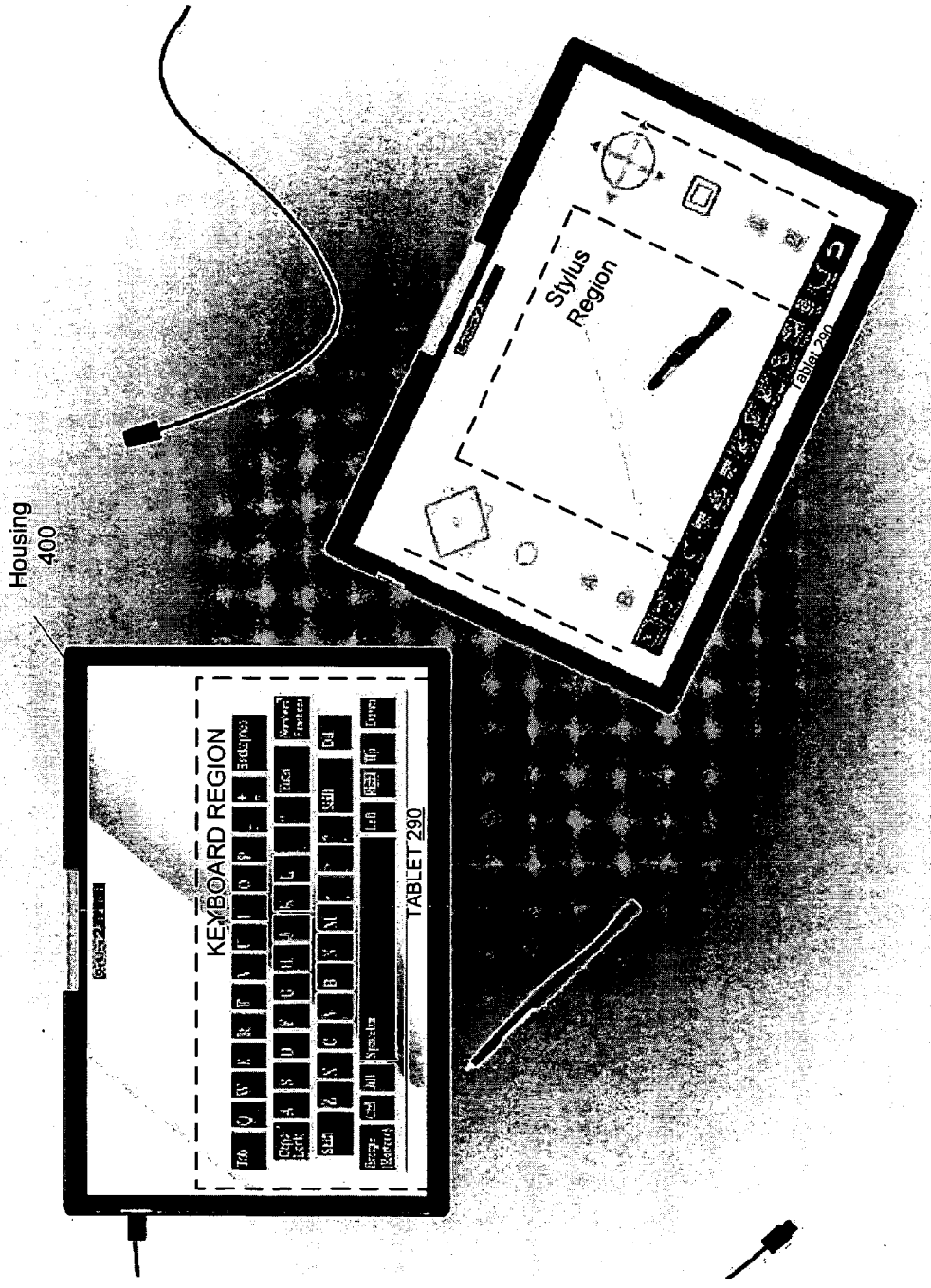

Housing
400
KEYBOARD REGION
TABLET 290
Stylus
Region
Tablet 290

FIG. 17

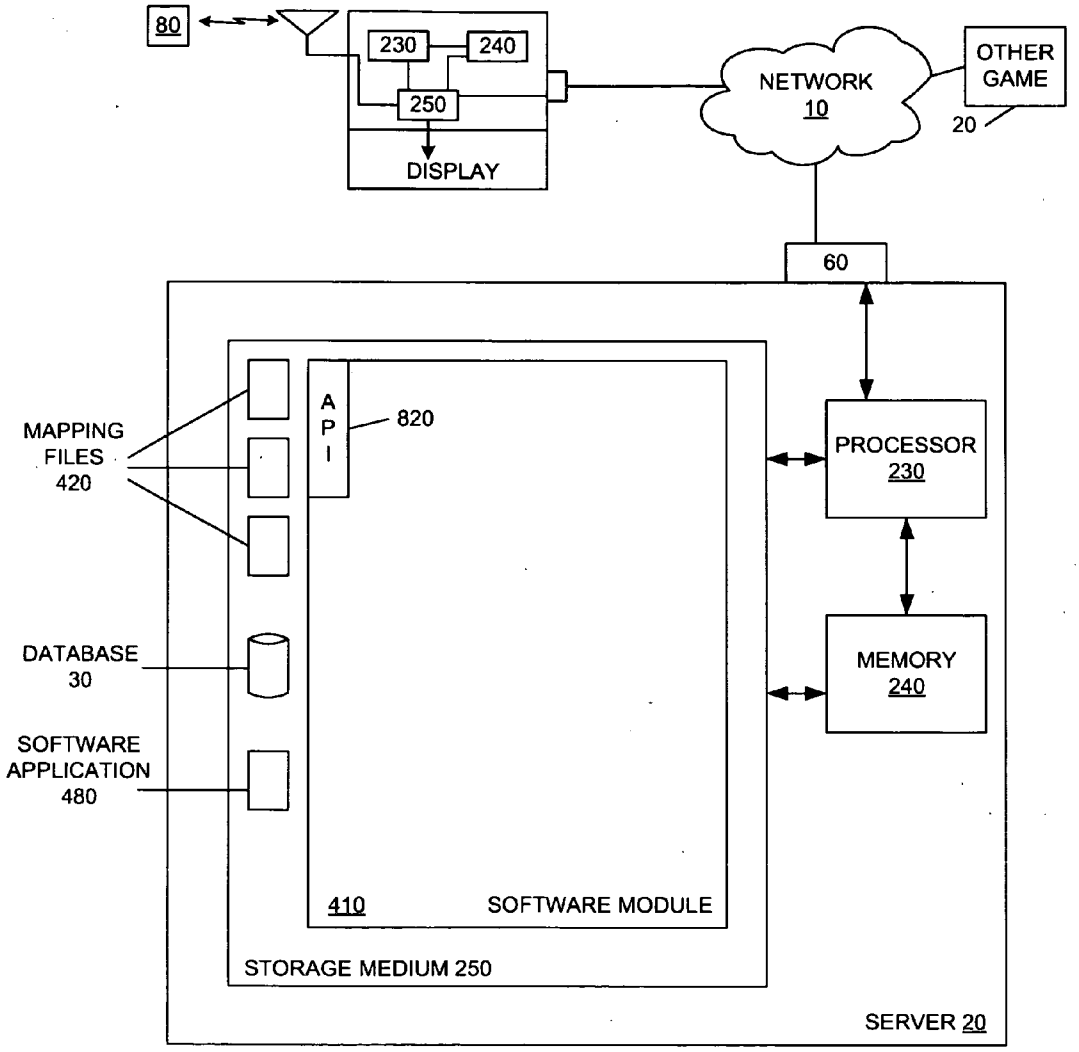

80
230
240
250
DISPLAY
NETWORK
10
OTHER
GAME
20
60
MAPPING
FILES
420
A
P
I
820
PROCESSOR
230
DATABASE
30
MEMORY
240
SOFTWARE
APPLICATION
480
410
SOFTWARE MODULE
STORAGE MEDIUM 250
SERVER 20

FIG. 18

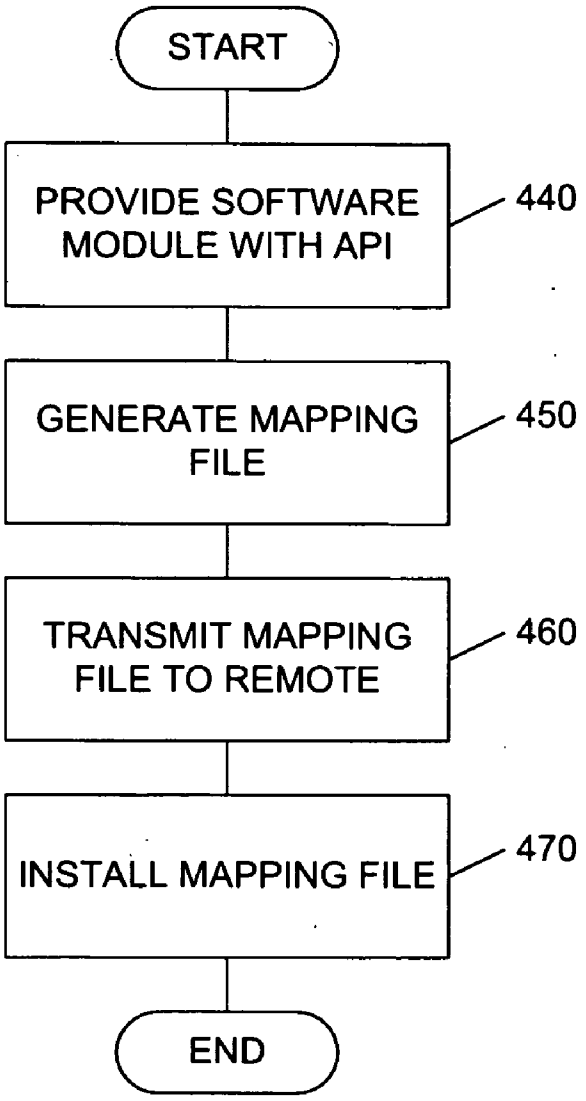

START
PROVIDE SOFTWARE MODULE WITH API
440
GENERATE MAPPING FILE
450
TRANSMIT MAPPING FILE TO REMOTE
460
INSTALL MAPPING FILE
470
END

FIG. 19

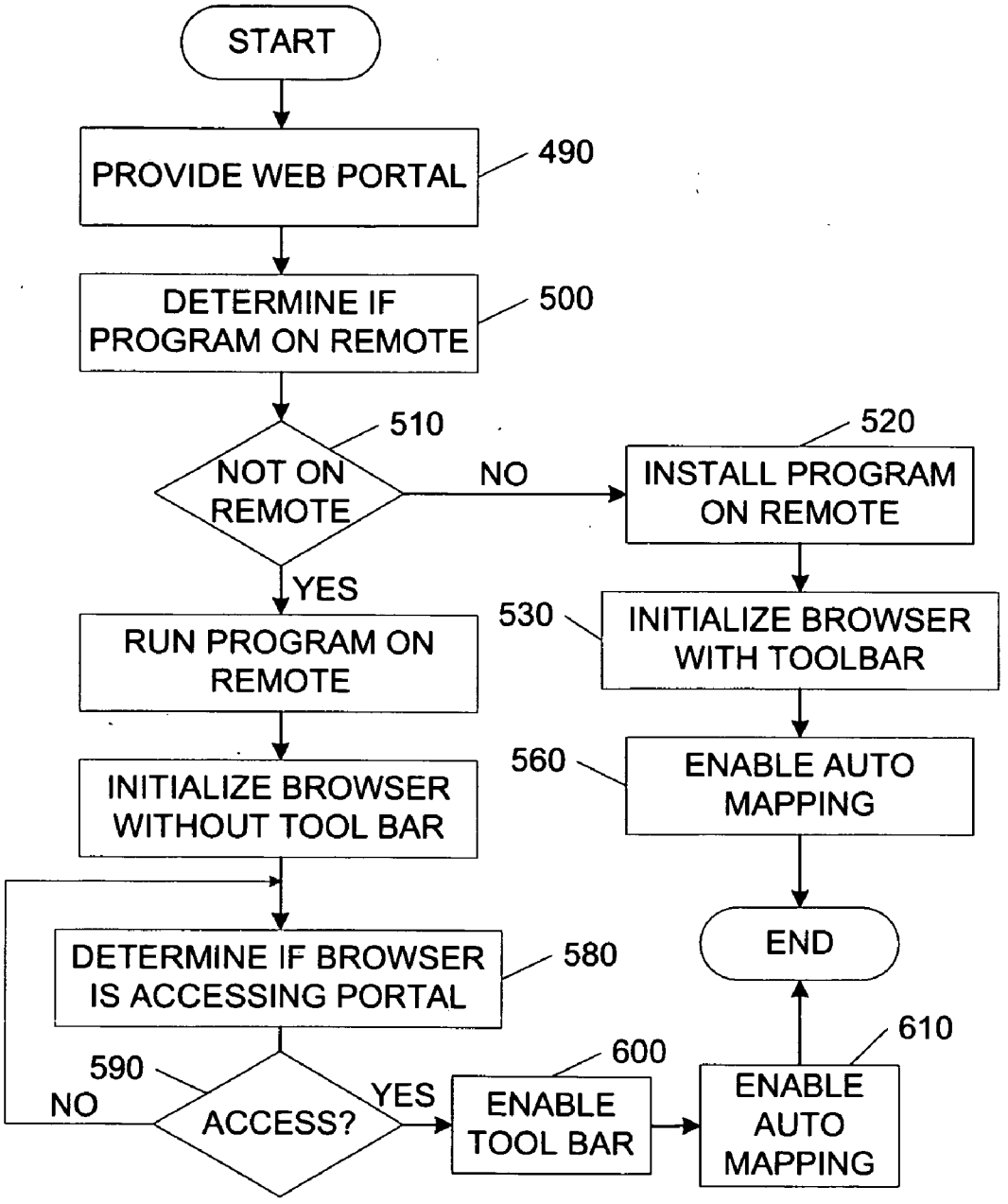

START
PROVIDE WEB PORTAL
490
DETERMINE IF PROGRAM ON REMOTE
500
510
NOT ON REMOTE
NO
520
INSTALL PROGRAM ON REMOTE
YES
RUN PROGRAM ON REMOTE
530
INITIALIZE BROWSER WITH TOOLBAR
560
ENABLE AUTO MAPPING
INITIALIZE BROWSER WITHOUT TOOL BAR
END
DETERMINE IF BROWSER IS ACCESSING PORTAL
580
590
NO
ACCESS?
YES
600
ENABLE TOOL BAR
610
ENABLE AUTO MAPPING

FIG. 20

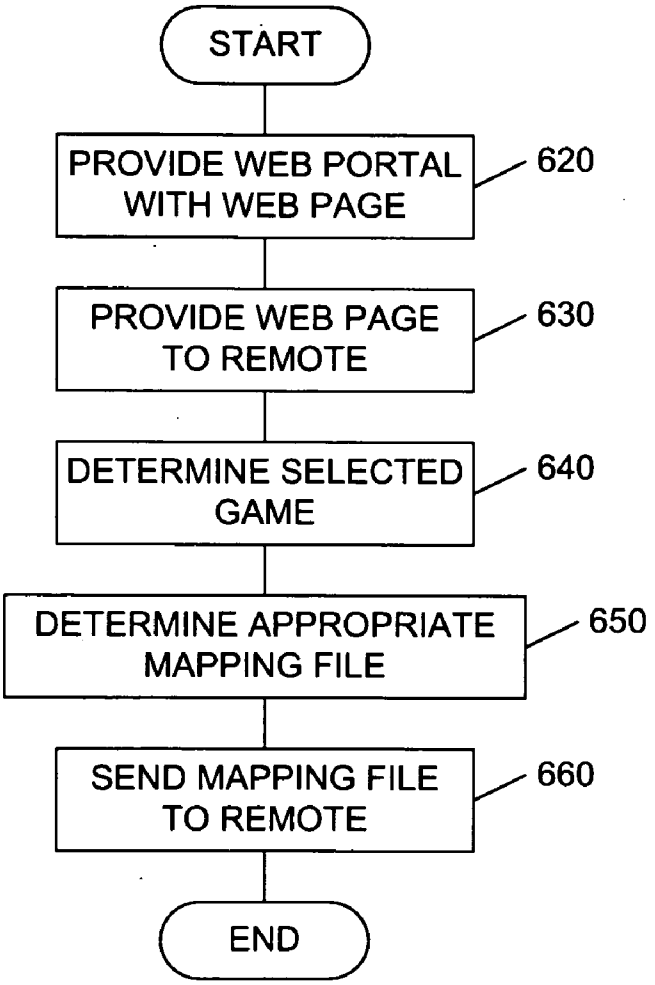

START
PROVIDE WEB PORTAL WITH WEB PAGE
620
PROVIDE WEB PAGE TO REMOTE
630
DETERMINE SELECTED GAME
640
DETERMINE APPROPRIATE MAPPING FILE
650
SEND MAPPING FILE TO REMOTE
660
END

FIG. 21

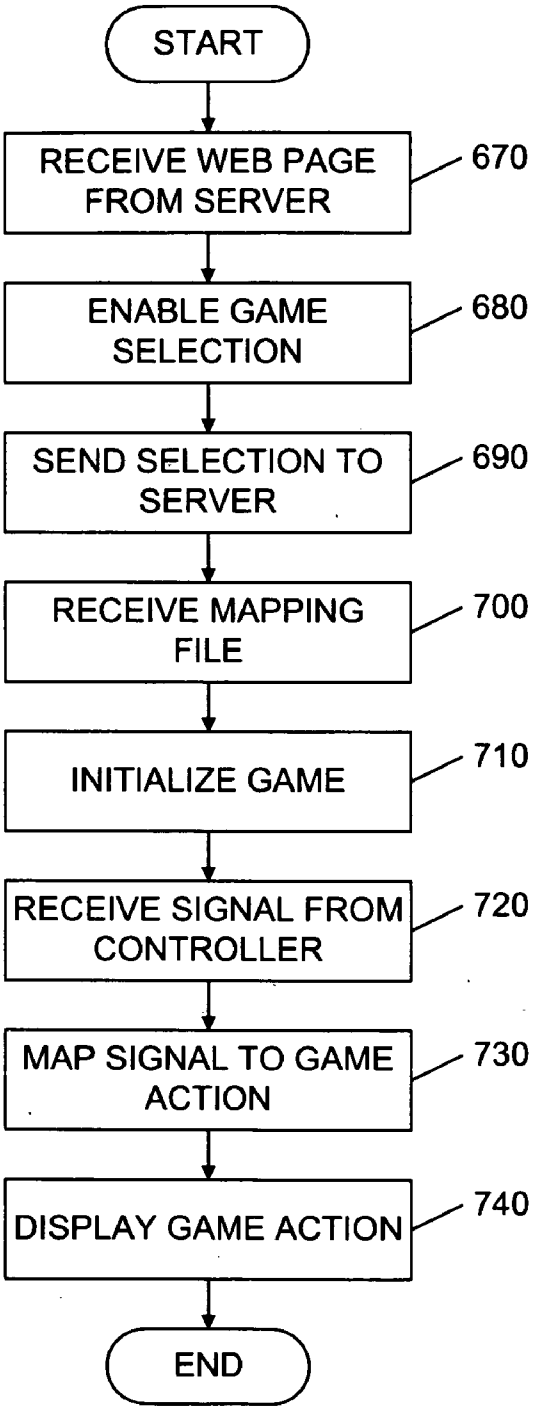

START
RECEIVE WEB PAGE FROM SERVER
670
ENABLE GAME SELECTION
680
SEND SELECTION TO SERVER
690
RECEIVE MAPPING FILE
700
INITIALIZE GAME
710
RECEIVE SIGNAL FROM CONTROLLER
720
MAP SIGNAL TO GAME ACTION
730
DISPLAY GAME ACTION
740
END

FIG. 22

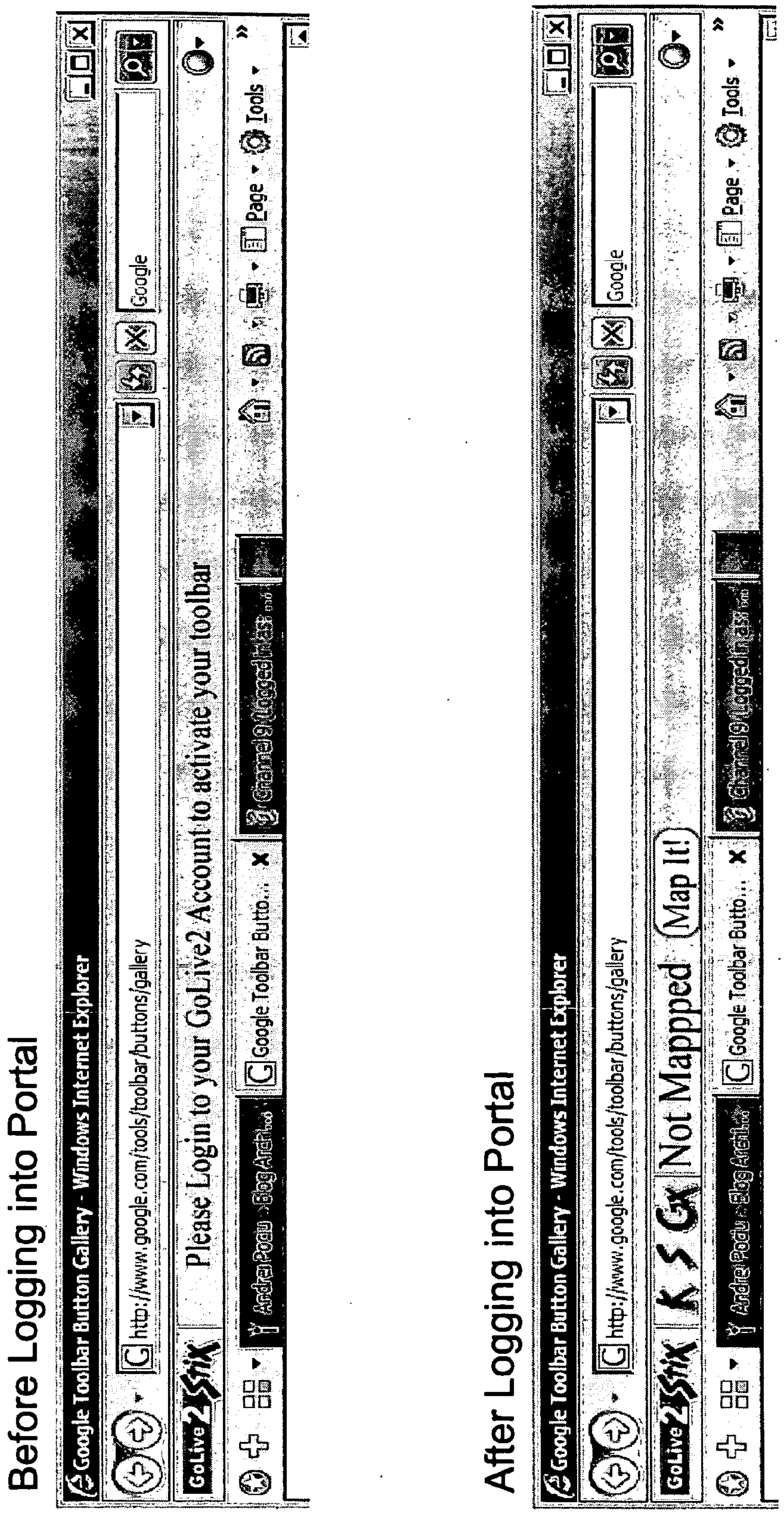
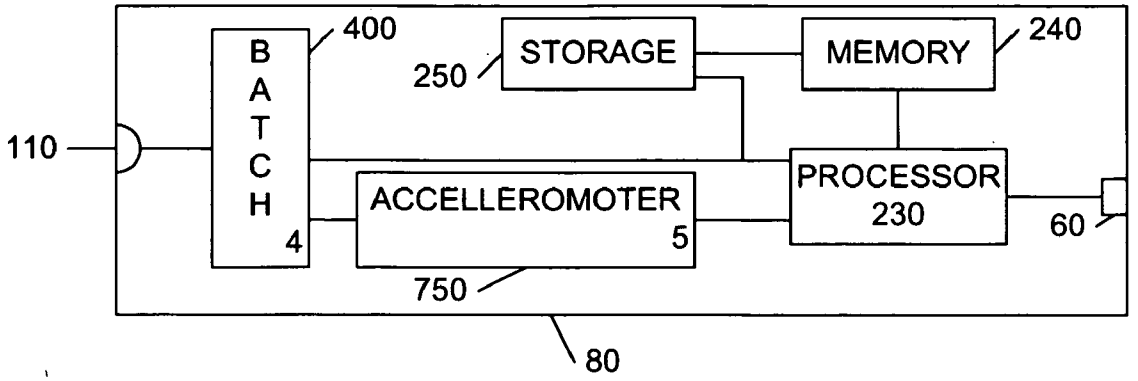

Before Logging into Portal
Google Toolbar Button Gallery - Windows Internet Explorer
http://www.google.com/tools/toolbar/buttons/gallery
Google
Please Login to your GoLive2 Account to activate your toolbar
Google Toolbar Butto...
Page
Tools
After Logging into Portal
Google Toolbar Button Gallery - Windows Internet Explorer
http://www.google.com/tools/toolbar/buttons/gallery
Google
Not Mapped
Map It!
Google Toolbar Butto...
Page
Tools

FIG. 23


110
BATCH
4
400
250
STORAGE
MEMORY
240
ACCELLEROMOTER
5
750
PROCESSOR
230
60
80

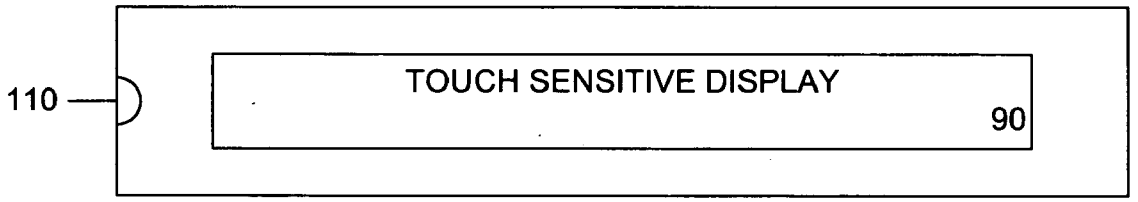

110
TOUCH SENSITIVE DISPLAY
90

FIG. 24

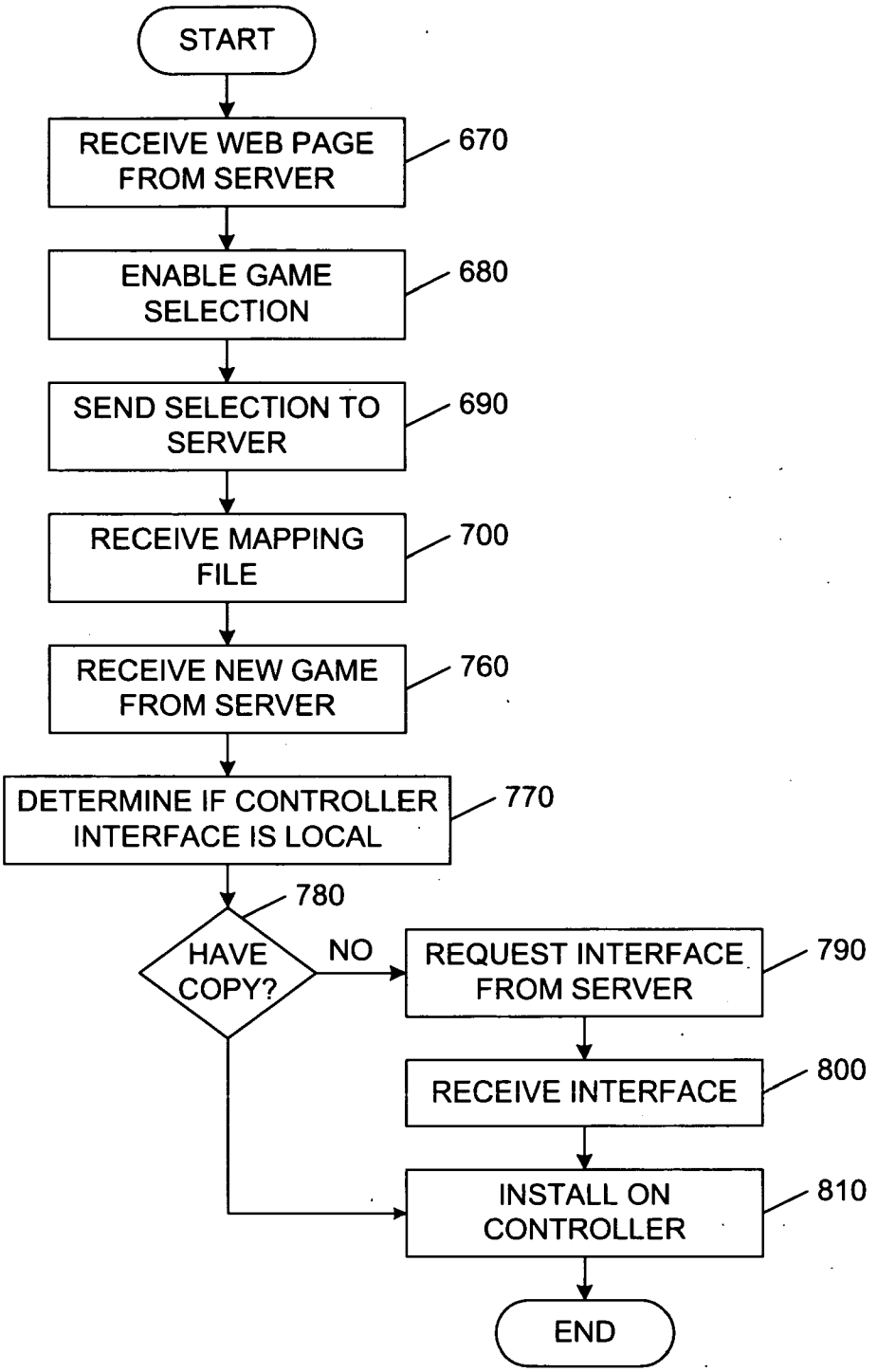

START
RECEIVE WEB PAGE FROM SERVER
670
ENABLE GAME SELECTION
680
SEND SELECTION TO SERVER
690
RECEIVE MAPPING FILE
700
RECEIVE NEW GAME FROM SERVER
760
DETERMINE IF CONTROLLER INTERFACE IS LOCAL
770
780
HAVE COPY?
NO
REQUEST INTERFACE FROM SERVER
790
RECEIVE INTERFACE
800
INSTALL ON CONTROLLER
810
END

FIG. 25

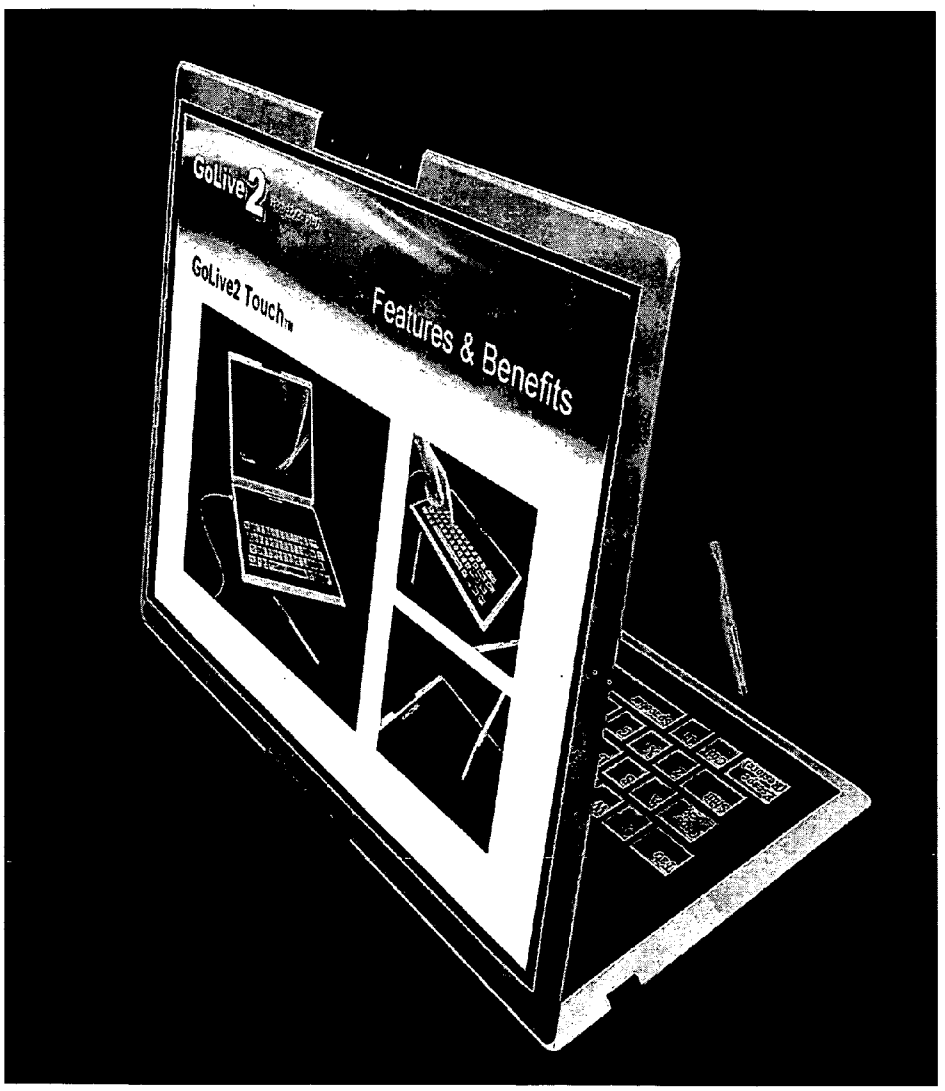


FIG. 26A

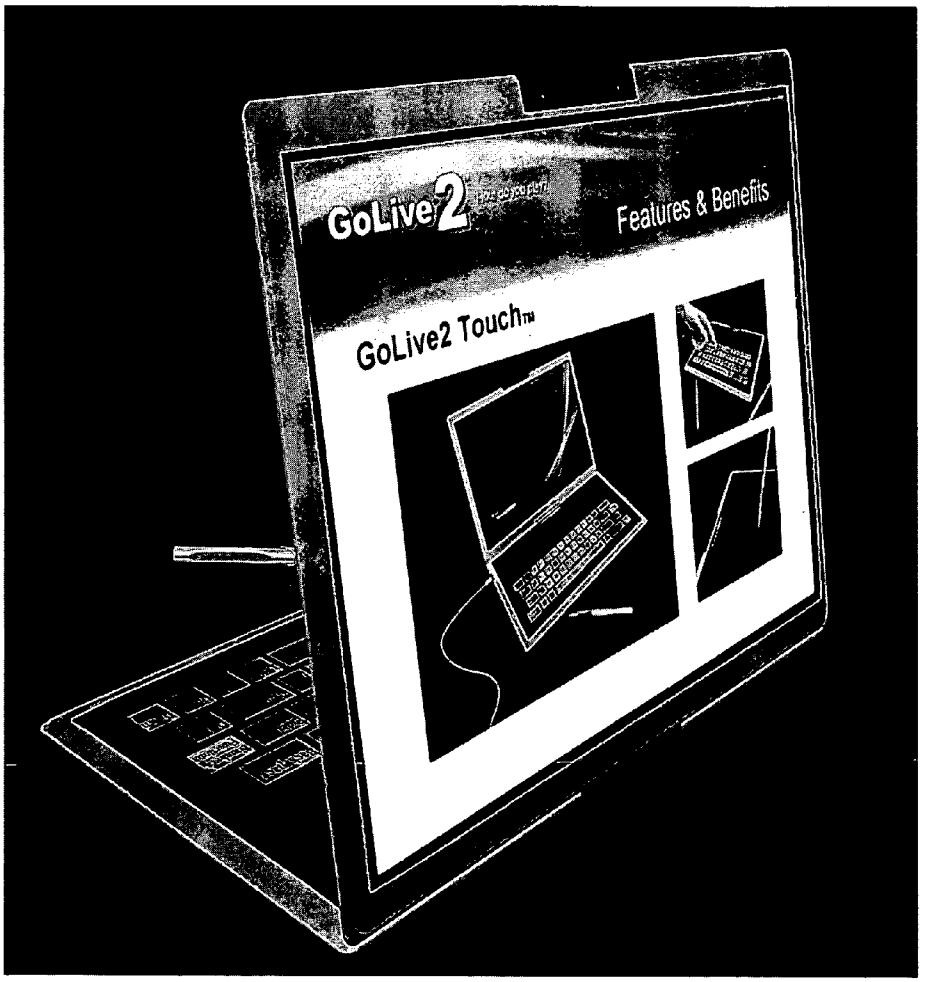


FIG. 26B

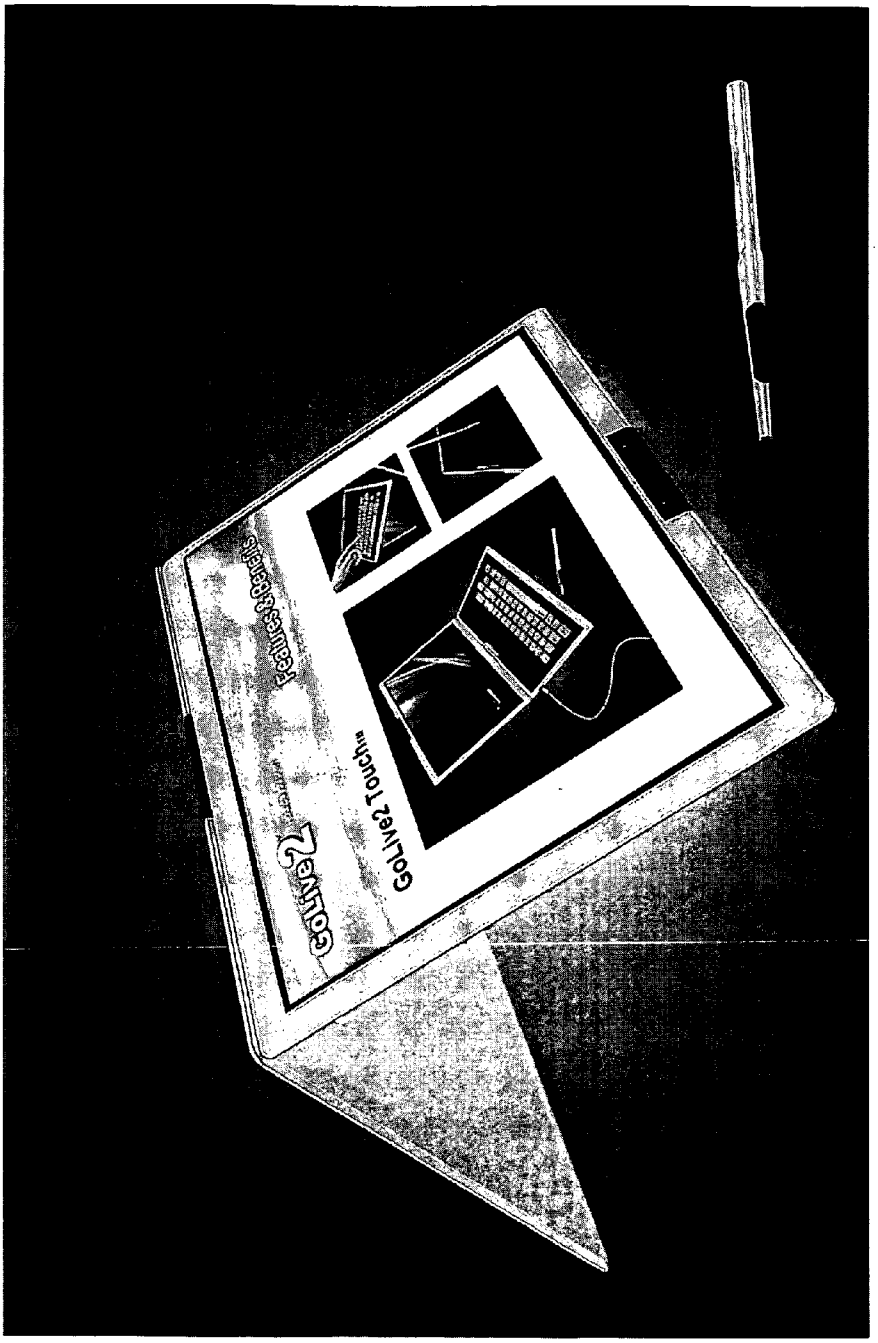


FIG. 26C

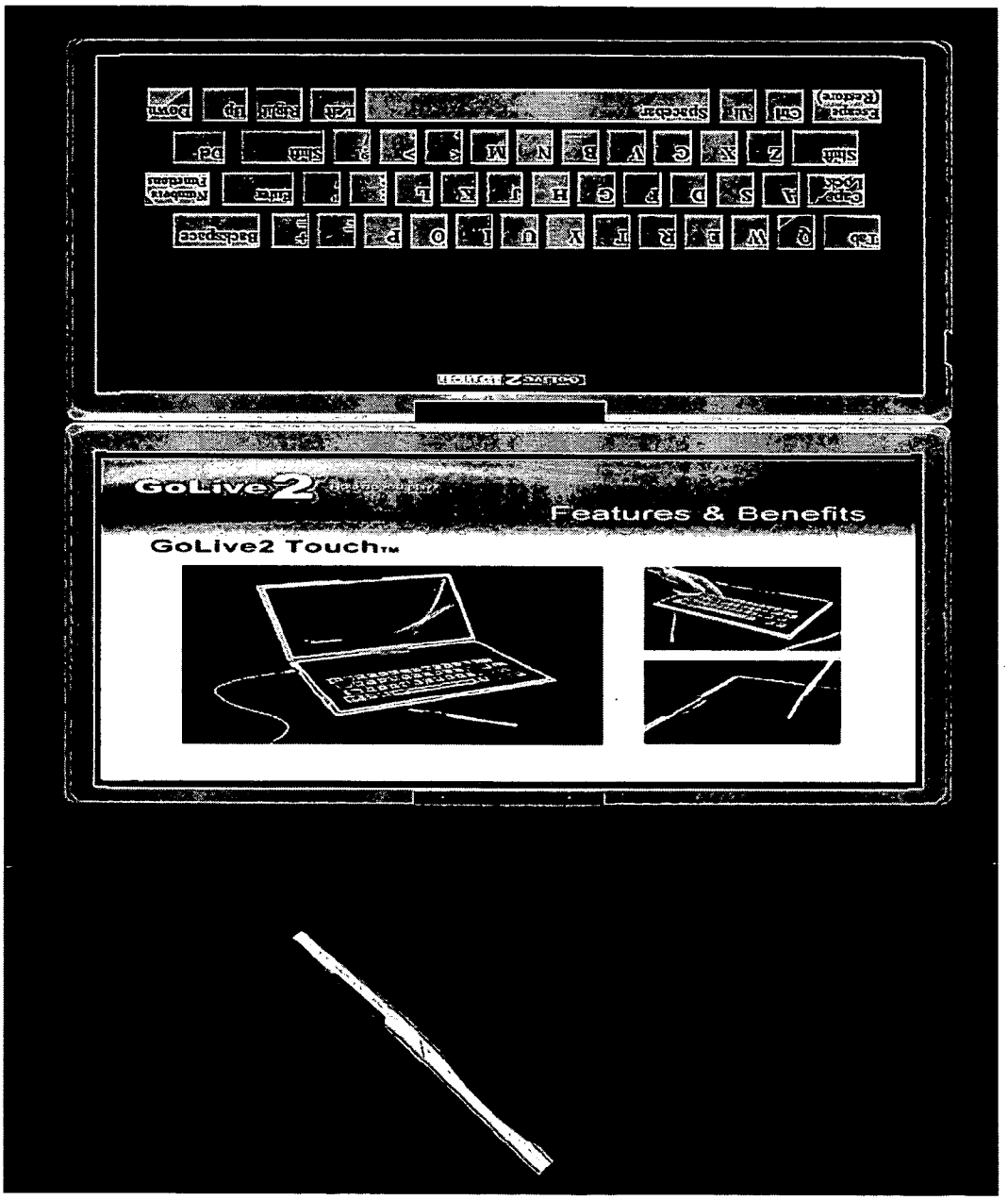


FIG. 26D

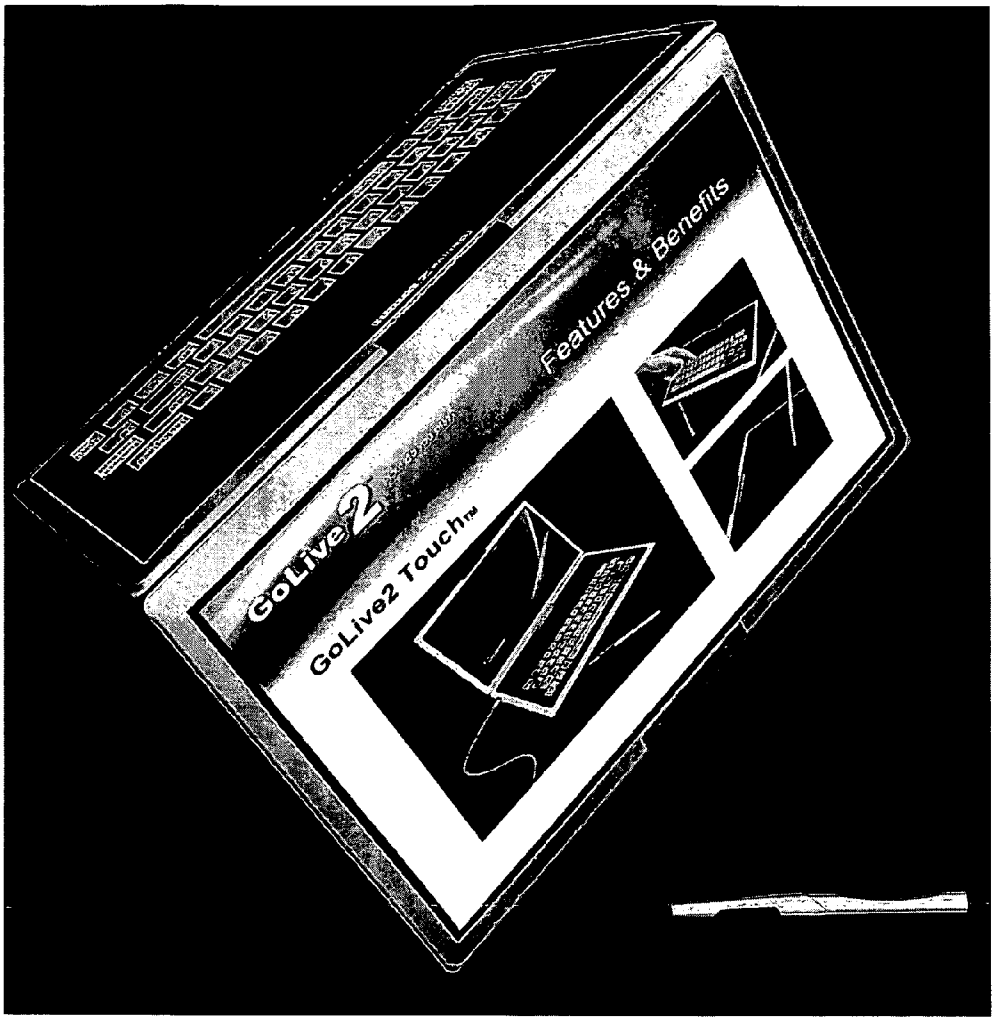


FIG. 26E

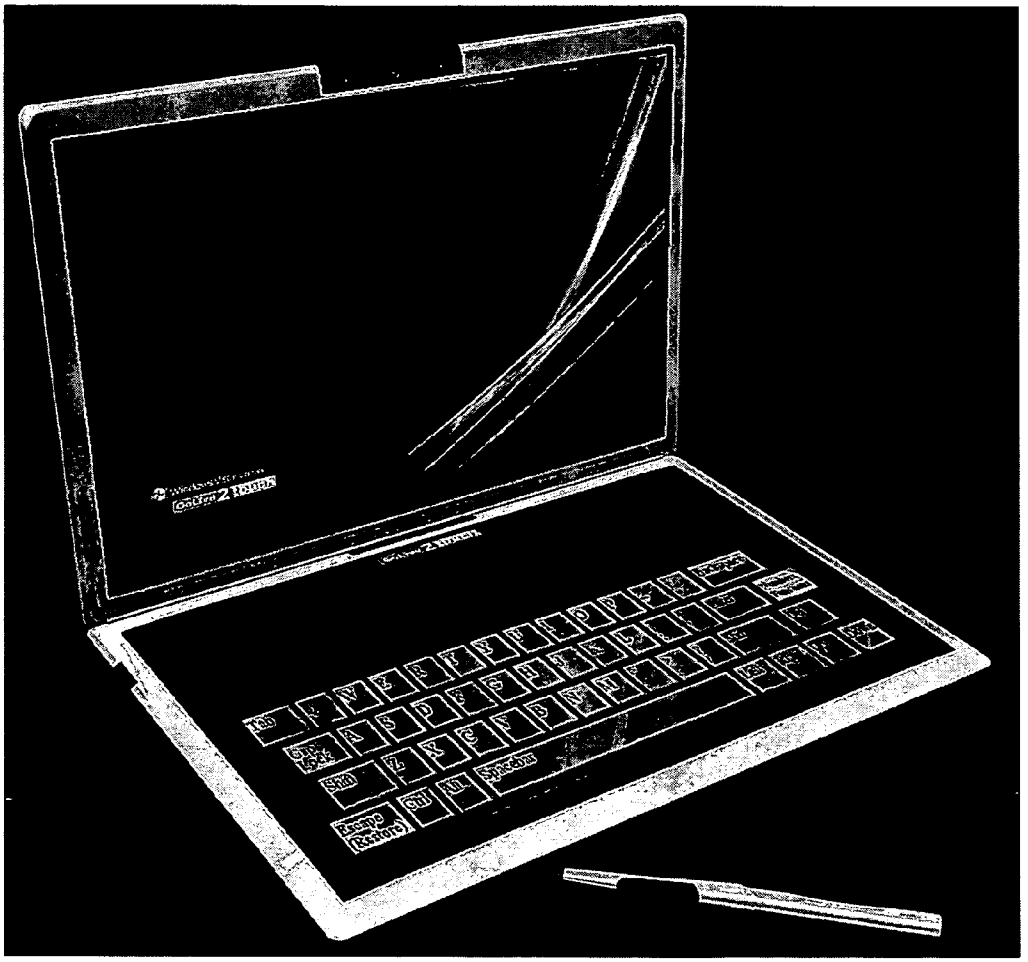


FIG. 26F

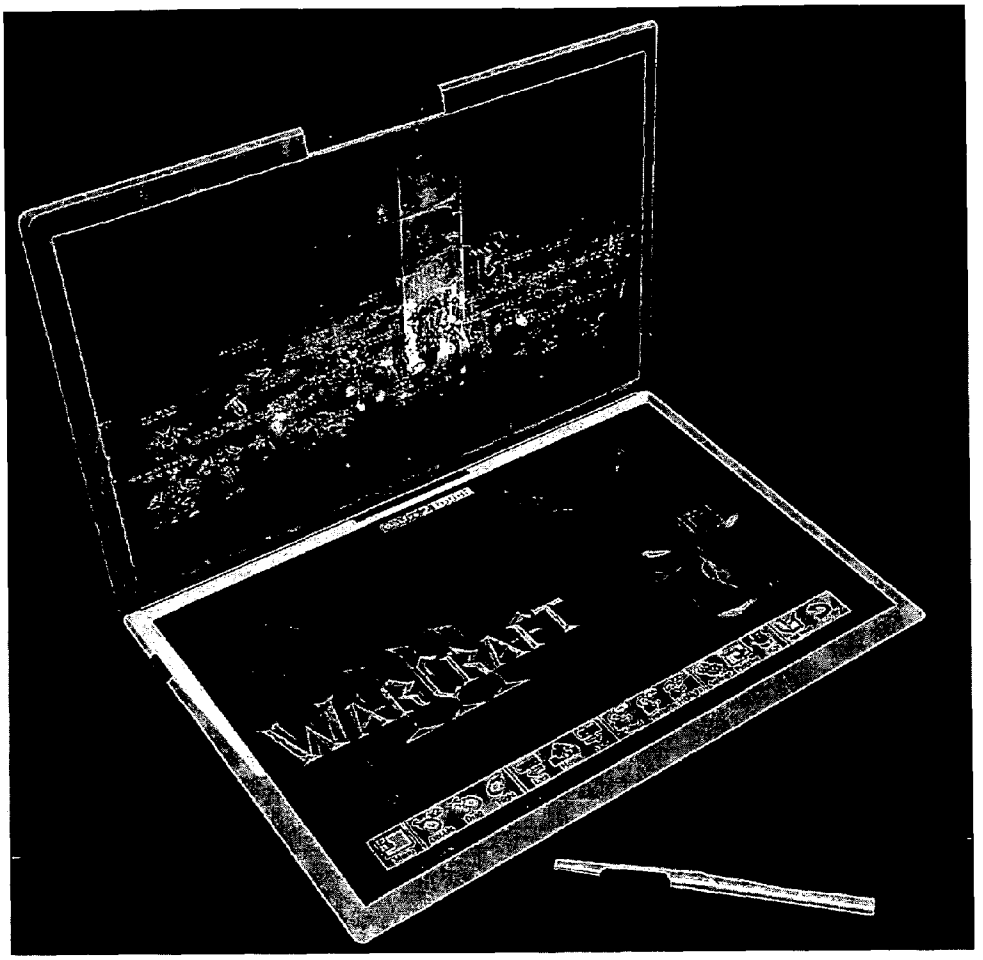


FIG. 26G

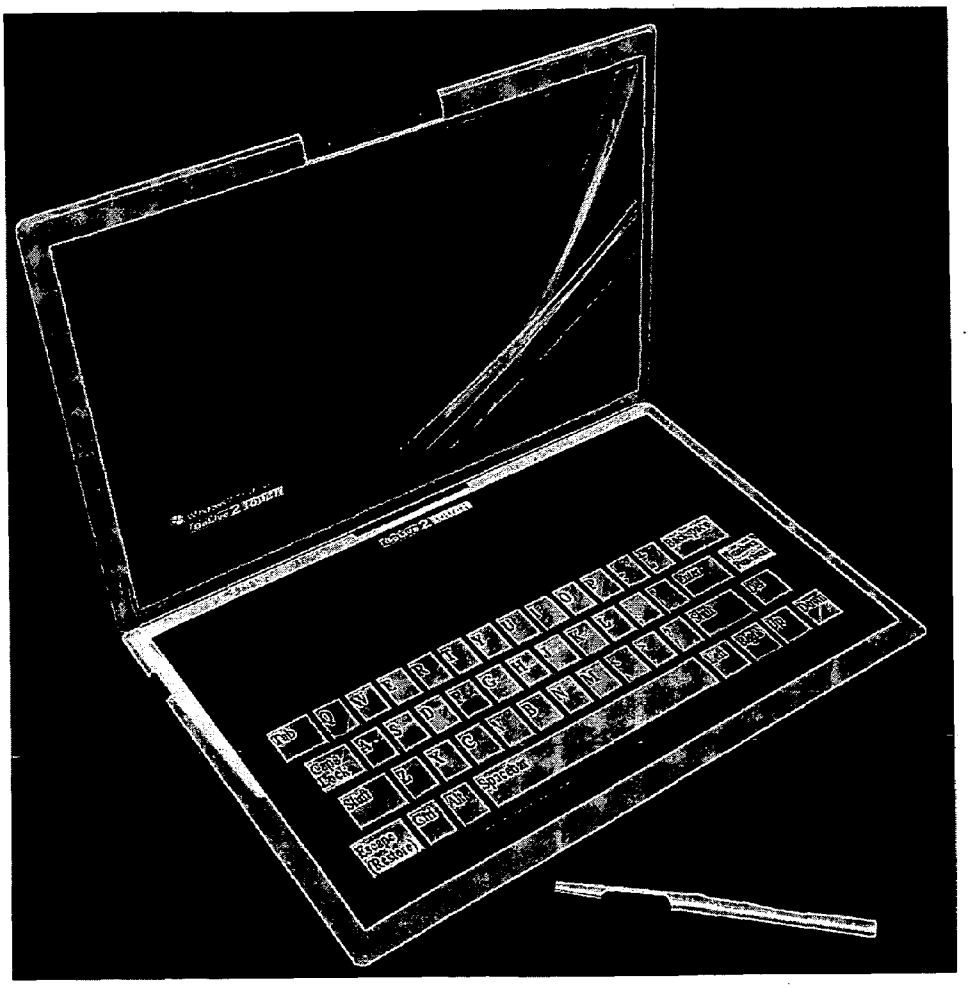


FIG. 26H

ONLINE INTERACTIVE GAME SYSTEM AND METHODS

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation-in-part of co-pending U.S. patent application Ser. No. 11/957,001 filed Dec. 14, 2007, which is a continuation in part of U.S. patent application Ser. No. 11/828,124, filed Jul. 25, 2007, which is a continuation-in-part of U.S. patent application Ser. No. 11/726,454, filed Mar. 22, 2007, which is a continuation-in-part of co-pending U.S. patent application Ser. No. 11/540,369, filed Sep. 29, 2006, which is a continuation-in-part of co-pending U.S. patent application Ser. No. 11/368,300, filed Mar. 3, 2006, which is a continuation-in-part of co-pending U.S. patent application Ser. No. 11/255,852, filed Oct. 21, 2005. Priority is claimed to these applications and they are incorporated by reference in their entirety.

[0002] This application is additionally related to U.S. patent application Ser. No. _____, entitled "Touch Screen Computing Apparatus and Methods", Attorney Docket Nr. 44435-0012; and U.S. patent application Ser. No. _____, entitled "Universal Toy Controller System and Methods", attorney docket nr. 44435-0011 both of this are filed contemporaneously herewith.

FIELD OF THE INVENTION

[0003] The present invention generally relates to computing and entertainment system controllers. More particularly, the invention concerns universal control methods, and apparatus for computing and entertainment systems.

BACKGROUND OF THE INVENTION

[0004] Users are increasing demanding more sophistication in computing and entertainment devices. With this demand ever increasing the electronics industry has responded with a wide range of offerings. Entertainment systems typically include online games, played on a personal computer, or in some instances, can comprise stand alone game consoles. One limitation that users experience moving between environments is that most game controllers are not interchangeable between gaming systems. Additionally, a user comfortable with one type of game controller may not enjoy the same experience when changing to another system may not have the same experience they would on a system with a different controller. Further, many game consoles are like personal computers in that the game controllers use an industry standard interface.

[0005] Another limitation inherent in the industry is that after a user is familiar with a specific game, the game becomes rather routine. Unless a mechanism is provided that allows the user experience to change over time, a user may loose interest and not receive the same entertainment experience. Further, touch screen technologies are advancing to the point where controllers could become more functional.

[0006] Since a number of games are played online it is additionally important to be able to interface with a computer using a common apparatus. Currently computing apparatus input devices, such as keyboards, mice, and stylus sensitive pads can take up a significant amount of space in a users office and serve essentially one function. This is a limitation of the current technologies employed. It would therefore be advantageous to provide a universal controller for gaming systems and for computing apparatus with enhanced capabilities.

SUMMARY OF THE INVENTION

[0007] Embodiments of the present invention provide a computing and entertainment controllers, methods and computer software products. An exemplary embodiment of a provided entertainment system includes at least one hand held game controller with a touch screen and a number of accelerometers. The accelerometers indicating the movement of the hand held game controller. The controllers are configured with wireless communications transceivers allowing them to communicate to a base station. The system further includes a base station that communicates with the hand held controllers. The base station is further configured with a connector suitable for connection to an accessory box and a second connector suitable for connection to a computing device. The entertainment system optionally includes an accessory box with a connecter sufficient for connecting the accessory box to the base station.

[0008] In some embodiments, the accessory box is configured to allow additional functionality to be imparted to game play. The entertainment system further includes an online game portal hosted on a server on the network. One embodiment provides a method of interactive play. In this embodiment a signal is communicated from at least one hand held game controller to a base station. Like the above embodiment, the hand held controllers contain touch screens and accelerometers. In this embodiment, the base station additionally receives a communications signal from an accessory box. The base station communicates a command to a computing device that is connected to a server over a network. The computing device sends commands, and other information to the server. The server communicates signals back to the computing device which enable game play on the computing device.

[0009] Another exemplary embodiment of the present invention provides a computer software product. The software product is in the form of a computer readable medium. The medium contains processor executable instructions that, when executed by a processor configure a computing apparatus to receive a first communications signal from a base station. This first communications signal includes information received from at least one hand held game controller. The game controller, like the above controllers include a touch screen interface and a number of accelerometers. The configuration additionally includes a configuration to send a second communications signal to a server on a network, the server hosting an online game portal and to receive a third communications signal from the server on the network which enables game play on the computing device, the game play related to a game on the online game portal.

[0010] A still further provided embodiment is a computing device accessory that includes a housing, a touch sensitive display that is mounted on the housing, a communications transceiver, and a memory contained within the housing and communicating with the touch sensitive display, the memory containing instructions that, when executed by a processor configure the accessory to illuminate discrete regions on the display, the regions comprising: a keyboard region, a stylus sensitive region, and a mouse region.

[0011] Another embodiment provides a computing apparatus that includes a processor, a memory, a touch sensitive display and a storage media the storage media containing a set of processor executable instructions sufficient that, when

executed by the processor, configure the computing apparatus to illuminate discrete regions on the display, the regions comprising: a keyboard region, a stylus sensitive region, and a mouse region.

[0012] Another exemplary embodiment provides a method of providing interaction with a computing apparatus. In this method the computing apparatus is configured to illuminate discrete regions on a touch sensitive display. The touch sensitive display is mounted on a housing and the housing contains a memory. Some of the discrete regions include a keyboard region, a stylus sensitive region, and a mouse region.

[0013] A further provided embodiment includes a computer implemented method that includes providing a computing apparatus, the computing apparatus contains a processor, a memory; and a touch sensitive display. The computing apparatus is configured to illuminate discrete regions on the display, the regions including a keyboard region, a stylus sensitive region, and a mouse region. An additional provided embodiment includes a computer software product. The computer software product including a machine readable media. In this embodiment, the machine readable media contains instructions that when executed by a processor illuminate discrete regions on a touch sensitive display. The discrete regions include a keyboard region, a stylus sensitive region, and a mouse region.

[0014] One provided embodiment is a universal game controller system for use with a variety of game consoles. This system includes a game controller which includes a touch screen interface and a first communications transceiver. The system additionally includes a base station; having a second communications transceiver that is configured to communicate with the first transceiver, and a communications port. The communications port is operable to connect the base station to a game console. A further provided embodiment includes a method of enabling game play on a game controller. This method includes communicating a signal from a universal game controller. In this embodiment the universal game controller is configured for use with a variety of game consoles. The game controller includes a touch screen interface and a first communications transceiver. The method further includes receiving the signal at a base station. The base station includes a second communications transceiver which is configured to communicate with the first transceiver, and a communications port operable to connect the base station to a game console. The method further includes communicating a signal from the base station to the game console.

[0015] Further provided embodiments include an online entertainment system and methods. In an exemplary method, a software module is provided on a server. The software module includes an application program interface that allows a game programmer to specify a controller mapping. The software module then generates a mapping file which is stored on the server and associated with the game. Once a user selects a game to be played on a remote computer, the server transmits the mapping file to the user's computer. The mapping file, when installed on the user's computer, maps signals received from a universal controller to actions within the selected game.

[0016] A still further embodiment provides an entertainment system for providing an interactive experience to a user. The entertainment system includes a server containing a software module. The software module contains an application program interface which allows a game programmer specify a mapping of controller actions to game actions. Based on the mapping, the software module creates a mapping file that is stored on the server and associated with the game. When a user selects a game the associated mapping file is sent to the local computer and installed. When signals are received from a universal controller the information is mapped to actions within the selected game.

[0017] An even further embodiment provides a computing apparatus that contains a processor, a memory, and a storage medium. The storage medium includes a set of processor executable instructions that, when executed by the processor configure the computing apparatus to act as a server in an entertainment system. The instructions further configure the server to provide a software module with an application program interface that allows a game programmer to specify a controller mapping. The server is further configured to generate a mapping file for each game and store the mapping file on the server. When a particular game is selected by a user, the appropriate mapping file is transmitted to the user's computer across a network. The mapping file is then installed on the user's computer and when a signal is received from a universal controller, the information contained within the signal is mapped to the game.

BRIEF DESCRIPTION OF THE DRAWINGS

[0018] Various embodiments of the present invention taught herein are illustrated by way of example, and not by way of limitation, in the figures of the accompanying drawings, in which:

[0019] FIG. **1** illustrates a base station device consistent with various provided embodiments;

[0020] FIG. **2** illustrates an embodiment of a provided entertainment system;

[0021] FIG. **3** illustrates a feature of various provided embodiments;

[0022] FIG. **4** illustrates a feature of various provided embodiments;

[0023] FIG. **5** is an illustration of the flow of a provided method;

[0024] FIG. **6** is an illustration of a still further provided method;

[0025] FIG. **7** is an illustration of a computing apparatus and computer software product consistent with various provided embodiments;

[0026] FIG. **8** is an illustration of an accessory box consistent with various provided embodiments; and

[0027] FIG. **9** illustrates an entertainment system consistent with various provided embodiments;

[0028] FIG. **10** illustrates another entertainment system consistent with various provided embodiments;

[0029] FIG. **11** illustrates a universal controller consistent with various provided embodiments;

[0030] FIG. **12** illustrates a computing apparatus consistent with various provided embodiments;

[0031] FIG. **13** illustrates the flow of a provided embodiment;

[0032] FIG. **14** illustrates the flow of a provided embodiment;

[0033] FIG. **15** illustrates the flow of a provided embodiment;

[0034] FIG. **16** illustrates the flow of a provided embodiment;

[0035] FIG. **17** illustrates a universal tablet controller consistent with various provided embodiments;

[0036] FIG. **18** illustrates another embodiment of a provided entertainment system;

[0037] FIG. **19** illustrates the flow of a provided method;

[0038] FIG. **20** illustrates the flow of another provided method;

[0039] FIG. **21** illustrates the flow of a further provided method;

[0040] FIG. **22** illustrates the flow of yet another provided method;

[0041] FIG. **23** illustrates an embodiment of a user interface;

[0042] FIG. **24** illustrates an embodiment of a exemplary universal controller;

[0043] FIG. **25** illustrates the flow of another provided method; and

[0044] FIGS. **26**(*a*) -(*h*) illustrate various provided embodiments of a computing apparatus.

[0045] It will be recognized that some or all of the Figures are schematic representations for purposes of illustration and do not necessarily depict the actual relative sizes or locations of the elements shown. The Figures are provided for the purpose of illustrating one or more embodiments of the invention with the explicit understanding that they will not be used to limit the scope or the meaning of the claims.

DETAILED DESCRIPTION OF THE INVENTION

[0046] In the following paragraphs, the present invention will be described in detail by way of example with reference to the attached drawings. While this invention is capable of embodiment in many different forms, there is shown in the drawings and will herein be described in detail specific embodiments, with the understanding that the present disclosure is to be considered as an example of the principles of the invention and not intended to limit the invention to the specific embodiments shown and described. That is, throughout this description, the embodiments and examples shown should be considered as exemplars, rather than as limitations on the present invention. Descriptions of well known components, methods and/or processing techniques are omitted so as to not unnecessarily obscure the invention. As used herein, the "present invention" refers to any one of the embodiments of the invention described herein, and any equivalents. Furthermore, reference to various feature(s) of the "present invention" throughout this document does not mean that all claimed embodiments or methods must include the referenced feature(s).

[0047] Embodiments of the present invention provide systems, methods and apparatus for universal control of entertainment or computing systems. As is know in the art there are a number of manufacturers of gaming consoles each with different hand held controllers. In some instances a user may be confused by the differences in controllers and may not have the same experience when moving from one console type to another. Some embodiments of the present invention are directed at overcoming that difficulty by providing a had-held controller and system that may interoperate across platforms. Additionally, in some embodiments, the games may reside on a server on a network and the user may play the games on a computing apparatus like a personal computer. Further, some provided embodiments include a computing apparatus accessory which integrates a multiplicity of input devices into a novel, and in some instances reconfigurable device.

[0048] One embodiment of a base station **100** is illustrated in FIG. **1**. In this embodiment, base station **100** comprises a first communications port **50** for connecting base station **100** to a computing device **40**. As illustrated, computing device **40**, is connected to a network **10**, like the Internet, and further connected to server **20** containing database **30**. As illustrated, communications port **50** is a wired port such as a Universal Serial Bus or Ethernet port, but as in known in the art may be a wireless communications port. In some embodiments, base station **100** additionally includes a second communications port **50** suitable for communications with an accessory box (not shown). Base station **100** additionally includes controller **70**, a plurality of communications transceivers **60** and in some instances an antenna **70**. As is known in the art all communications can be through either wired or wireless media and the illustrated depictions in FIG. **1** are exemplars.

[0049] FIG. **2** illustrates an entertainment system consistent with various provided embodiments. The system includes at least one hand held game controller **80** containing a plurality of accelerometers (not shown). Each of the hand held game controller **80** includes a touch screen interface **90**. In some embodiments, tough screen interface contains a number of controls sufficient to control game play. In one embodiment, touch screen **90** includes a plurality of lights which "back light" the controls indicating a control a user should take. In other embodiments, touch screen interface **80** contains depressions or "dimples" indicating the controls. In other embodiments, touch screen interface **80** contains raised portions or "buttons" indicating the controls. In still further embodiments, touch screen **80** contains regions of "textured" material indicating controls. In an exemplary embodiment, the "textured" material is "plexi-glass", glass, or plastic that has been manufactured to provide a textured feel. Other materials that provide a distinct tactile feel are additionally known in the art and may be used to practice the invention.

[0050] Hand held controllers **80** further include a communications transceiver allowing for communication with base station **100** in a wireless format. Exemplary communications transceivers that may be used to practice embodiments of the present invention include but are not limited to optical transceivers, radio frequency transceivers, infrared transceivers, BLUETOOTH transceivers (BLUETOOTH is a trademark of the Bluetooth Special Interest Group), RFID transceivers, frequency hopping radio frequency transceivers, and ultra wideband transceiver. Hand held controllers **80** additionally include a plurality of accelerometers, such as orientation accelerometers, motion accelerometers, and acceleration accelerometers which provide data related to the position and movement of hand held controllers **80**.

[0051] As discussed above, base station **10** includes a like communications transceiver to enable communications with hand held controllers **80**. Base station **100** additionally includes a first connector or communications port **50** sufficient to connect base station **100** to computing apparatus **40** (shown here as a monitor). In some embodiments, base station **100** additionally includes a second connector, or port **50** sufficient to connect base station **100** to accessory box **120**. Accessory box **120** likewise includes connector **50**, and associated electronics enabling communications with base station **100**. Exemplary connectors include but are not limited to Universal Serial Bus connectors, FireWire connectors, twisted pair connectors, phone line connectors, and wired medium connectors.

[0052] In some embodiments (not shown), connectors **50** are connected to additional communications components such as antennas, optical emitters, and optical detectors. In these embodiments, base station **100** includes an additional communications transceiver such as an optical transceiver, a radio frequency transceiver, an infrared transceiver, a Bluetooth transceiver, a RFID transceiver, a frequency hopping radio frequency transceiver, and an ultra wideband transceiver enabling wireless communications between accessory box **120**, base station **100** and computing apparatus **40**.

[0053] In an exemplary embodiment, base station **100** is configured to route data and commands from and between computing device **40**, hand held controllers **80**, and accessory box **120**. As mere exemplars, this routing may take the form of receiving communications signals from the hand held devices **80** and forwarding the data contained within these signals to computing device **40**. In other embodiments, the routing may provide for receiving data from accessory box **120** and sending data to computing device **40**. The routed data may include but is not limited to data from at least one of the plurality of accelerometers, and data from the touch screen interface and data from accessory box enabling additional functionality to the entertainment system. In another embodiment, hand held controllers **80** contain a battery recharging port **110**. A similar recharging port **110** is provided on base station **100** allowing for the recharge of the hand held controllers' batteries when not in use.

[0054] One feature of this embodiment is that the computing device **40** is in communication with **20** server on the network **10**. The server hosts a game portal which stores information related to the games, information related to users, and in some embodiments, access information. When a user desires to play a specific game, the computing device may determine from accessory box **120** if the user is allowed to access the specific game. Once the computing device retrieves information on which games a user can access it sends this data to the online game portal. On the server the access data is verified and access is granted to the particular game the user desires to play.

[0055] Another feature of various embodiments is illustrated in FIG. **3** which shows a configuration allowing multiple players to participate in a common game. As this illustration depicts, users A-D can use independent entertainment systems to play a common game. Each user A-D interfaces with a hand held controller **80**. The hand held controllers send user input information to base stations **100**, which route this information to computing apparatuses **40** (shown here as Personal Computers "PCs"). Computing apparatuses **40** are in communication with server **20** across network **10**. As illustrated, server **20** is in further communication with database **30**. In some embodiments, database **30** may be located on server **20**, in other embodiments, database **30** is located on another computing device **40** on network **10**. In this environment, game play is served to each of the computing devices **40** from server **20** allowing users A-D to interact with the game through the use of their entertainment system.

[0056] FIG. **4** illustrates another feature of various embodiments. In this illustration a configuration is shown where two users (A and B) are supported on a single entertainment system. In this illustration, User A and User B each interact with the entertainment system through the use of hand held controllers **80**. The controllers communicate user interactions to base station **100**. Base station **100** routs this interaction information to computing device **40** which uses the information for game play. Computing device **40** further communicates the information to server **20** across network **10**. As in the previously described system, server **20** is in communication with database **30**.

[0057] One further feature is illustrated in FIG. **4**. The addition of accessory box **120** allows for additional functionality, such as new games, to be unlocked on the system. In this embodiment, requests for new functionality cause computing apparatus to communicate with accessory box **120** and retrieve access information. The access information is then verified on database **30**. If access to the new functionality is grated, server **20** sends the additional functionality to computing device **40**.

[0058] FIGS. **5** and **6** illustrate embodiments of provided methods. In FIG. **5** flow begins in block **140** where a communications signal is communicated from a hand held controller **80** to a base station **100**. As described above, this signal may contain information from a plurality of accelerometers and inputs from a user through a touch screen. Further, this signal is typically communicated wirelessly through the use of wireless transceivers (optical or radio frequency). Flow continues to block **150** where a communication signal is sent from accessory box **120** to the base station **100**. As described above, this signal may contain data or other information, such as commands, to unlock functionality on the system. In some embodiments, this signal is sent through wired media connectors, in other embodiments, this signal is sent wirelessly. Flow continues to block **160** where a command is sent from the base station to a computing apparatus **40**. In block **170** computing apparatus **40** communicates data to server **20** on network **10**. Flow continues to block **180** where server **20** sends a communication to computing apparatus **40** across network **10**. In block **190**, game play is enabled on computing apparatus **40**.

[0059] FIG. **6** illustrates a further embodiment where the flow is the same for blocks **140-190**. In block **200** a signal is communicated from computing apparatus **40** to hand held controllers **80** through base station **100** and in block **210** game play is enabled on hand held controllers **80**. In some embodiments, the enablement of game play on hand held controllers **80** comprises the illumination of lights corresponding to controls on the hand held controllers **80**.

[0060] FIG. **7** illustrates a computing device **40** and computer software product **260** consistent with various provided embodiments. Computing device **40** comprises processor **230**, memory. **240**, storage media **250**, input device **220**, a plurality of communications ports **50** and output device **270**. As is known in the art, a number of other components are typically found within a computing device that have been omitted for convenience. As described above, one communications port **50** provides a path for communication with base station **100** and another provides a path for communication with server **20** across network **10**. Exemplary input devices **220** that are suitable to receive computer software product **260** include but are not limited to CD ROM drives, DVD Rom drives, optical drives magnetic drives, and the like. Computer software product **260** comprises a computing apparatus readable medium containing a set of processor **230** executable instructions that, when executed by processor **230** configure computing device **40** to execute the methods described above. In one embodiment, computer readable media comprises a hard drive located on server **20** and executable instructions sufficient to configure computing device **40** are downloaded from network **10**. In some embodiments, executable instruc-

tions are located on database **30** across network **10**. As described above, database **30** may be located on server **20** or alternatively, on another computing device **40** on network **10**.

[0061] An exemplary embodiment of an accessory box **120** is illustrated in FIG. **8**. In this embodiment, accessory box **120** comprises a memory **240**, a communications transceiver **60** and a communications port **50**. As discussed above, accessory box **120**, in some embodiments imparts additional functionality to games being played. This functionality may be revealing "secret" rooms, additional weapons, or other features within a game. In some embodiments, additional games are "unlocked" with the use of accessory box **120**. Memory **240** may include volatile or non-volatile memory elements. In one embodiment, codes stored on memory **240** may be sent to base station **100** unlocking the additional functionality. In some embodiments accomplishments during game play cause server **20** to send additional codes for storage in memory **240** on accessory box **120**. These embodiments allow a user to experience different gaming as their level of accomplishment increases. In other embodiments purchases made online cause server **20** to send additional codes to accessory box **120**.

[0062] FIG. **9** illustrates embodiments where universal controllers interact with game consoles instead of a computing device **40**. As is known in the art there are many manufacturers of game consoles and each manufacturer may provide different controllers for interaction. Many of these consoles provide for controller connection through a Universal Serial Bus (USB) or like connection. In the illustrated embodiment hand held controller **80**, as described above, contains touch sensitive display **90**. In this embodiment, hand held controller **80** communicates with base station **100** through either a wireless or wired connection. Base station **100** communicates with a game console. Stated differently, base station **100** receives control signals from handheld controller **80** and communicates them the control data to the game console through its communications port.

[0063] Another provided embodiment of a universal controller is illustrated in FIG. **10**. In this embodiment, the controller is tablet **290**. In this embodiment touch screen **90** is contained within housing **300**. As illustrated it contains a plurality of discrete regions that are mapped with different functionality and in some embodiments, may be illuminated with various features and controls. Various embodiments of tablet **290** include regions for illumination of a keyboard, a section for interaction with stylus **280**, a mouse control region **340** and in some instances a specific game control region **350**. As illustrated, tablet **290** may communicate with the game console through a wireless media or in some embodiments through communications port **50**. FIG. **11** illustrates some exemplary functional contents of tablet **290**. In this embodiment, tablet **290** contains touch sensitive display **90** with an exemplary number of discrete regions that could include a game control region **350**, a mouse control region **340** a keyboard region **320** a stylus sensitive region **330**. In this embodiment, tablet **290** additionally includes memory **240** and a communications transceiver **60**. In some embodiments, tablet **290** is battery powered and include battery **400**. In a number of these embodiments, power is received from communications port **50**, such as a USB port, (not shown) and can be used to power tablet **290** and recharge battery **400**. In other embodiment table **290** may be powered by a plug-in power cable (not shown). In other embodiments, tablet **290** includes a processor configured to map various functionality to the regions of tablet **290**. In other embodiments, mapping is accomplished by an external computing apparatus connected to and communicating with transceiver **60**.

[0064] An embodiment of a provided computing apparatus **540** is illustrated in FIG. **12**. This embodiment includes tablet **290** touch sensitive display **90** processor **230**, memory **240**, and storage media **250**. In some embodiments computing apparatus **540** is configured to communicate with network **10**. As illustrated, touch sensitive screen **90** includes discrete sections which are mapped with functionality. As in other embodiments, these regions include a keyboard region **320**, a stylus sensitive region **330**, a mouse control region **340**, and in some embodiments game control section **350**.

[0065] Mapping, in one embodiment includes designating a set of pixels on touch sensitive display **90** and associating them with a specific character. In one embodiment, the mapping of a keyboard to keyboard region includes storing a character in memory **240** with a range of pixel locations associated with that character. In an exemplary embodiment, the character is from the American Standard Code for Information Interchange (ASCII). Other character code sets are known in the art and may be used to practice the current invention. Once mapped, a user striking a "character" on keyboard section causes a lookup in memory **240** for the associated character, the character is then read from memory **240** and transmitted by transceiver **60** (FIG. **11**) or in an embodiment where tablet **240** is embedded in computing apparatus **540** the character is utilized in the manner consistent with normal usage.

[0066] In like manner, user interaction with stylus sensitive region **330**, mouse control region **340**, and in some embodiments game control region **350** generate data that may be captured, or recorded, and in embodiments similar to the one illustrated in FIG. **11**, the data is then transmitted by transceiver **60**. In embodiments where tablet **290** is embedded into computing apparatus **540**, illustrated in FIG. **12**, data captured from these regions is used in the manner consistent with normal usage.

[0067] FIG. **13** illustrates an exemplary embodiment of a provided method. In this embodiment, flow begins in block **360** where discrete regions of touch sensitive display are illuminated. As discussed above these regions can include a keyboard region, a stylus sensitive region, a mouse control region and in some embodiments, a game control region. Other regions may be utilized and illuminated as well. Flow continues to block **370** where a character set is mapped to the keyboard region. Flow then continues to block **380** where data is recorded from a user interaction with the keyboard region and in embodiments like those described in FIG. **11**, in block **380** the data is transmitted from tablet **290**. FIG. **14** illustrates the flow of another exemplary method. In this embodiment, flow begins in block **360** where discrete regions of a touch sensitive display are illuminated. In block **410** data from the stylus region is recorded and in embodiments like those described in FIG. **11**, in block **380** the data is transmitted from tablet **290**. FIG. **15** illustrates a further embodiment of a provided method. In this method, flow begins in block **360** where regions are illuminated on the display. Flow continues to block **420** where data associated with the mouse control region is captured or recorded and in embodiments like those described in FIG. **11**, in block **380** the data is transmitted from tablet **290**. In similar manner the embodiment illustrated in FIG. **16** begins with block **360** where regions of the display are illuminated. In block **430** game

controls are mapped to a game control region. In block **440** data is recorded or otherwise captured from the game control region and in embodiments like those described in FIG. **11**, in block **380** the data is transmitted from tablet **290**.

[0068] A further illustration of an integrated universal controller in the form of a tablet **290** is provided in FIG. **17**. This illustrates a dynamic reconfiguration of tablet **290**. In this embodiment, regions of tablet **290** can me remapped from one function to another. For example, as illustrated, at one period of time, a region of tablet **290** may be illuminated and mapped as a keyboard region and at another time the same region may be illuminated as a stylus region.

[0069] Turning now to FIG. **18**, an exemplary entertainment system is illustrated. Components of the entertainment system include server **20**, communicating with computing apparatus **540** across network **10**. Computing apparatus is additionally communicating with universal controller **80**. Universal controller **80**, illustrated in some embodiments takes to form of a tablet, or stick controller, but some embodiments of the present invention are not limited to those particular configurations. As illustrated, server **20** contains processor **230**, memory **240** and storage media **250** and network interface **60**. Additionally, computing apparatus and server **20** may be communicating with an additional server **20** where other games may be stored. Contained within storage medium **250** is software module **410**, database **30**, software application **480** and in some embodiments, mapping files **420**. As illustrated software module **410** contains Application Program Interface (API) **820**. As is known in the art, software module **410** may be written in a number of programming languages, such as C, C++, or JAVA™. Additionally, it may be a compiled module, compiled with any number of compilers, or it could comprise a scripts, such as a JAVA™ script or pearl script, or an applet written in JAVA.

[0070] In an exemplary embodiment, server **20** hosts a web portal and additionally contains a number of web pages that can be sent to a remote computing apparatus **540**. In one embodiment, a user computer communicates with server **20** through the web portal. Server **20** sends software application **480** to remote computing apparatus **540** for initialization of game play. As illustrated, some embodiments include games stored on database **30** while others additionally include remote 3rd party games hosted on remote server **20**. Computing apparatus **540** additionally includes display **430** where game play is graphically depicted.

[0071] API **820** allows game programmers to write games and custom interfaces for universal controller **80**. Through the use of API **820** a programmer may specify which actions of universal controller **80** will map to which game play actions. In this manner, a new game programmer only need to interact with API **820** to ensure that a gamer using a universal controller **80** with computing apparatus **540** is able to play the new game. In some embodiments this is independent of where the game is actually stored. Interacting with API **820** a game programmer specifies which physical actions with universal controller **80** will map to which actions within the new game. Once complete software module **410** generates a mapping file **420**. In some embodiments, mapping files **420** are text files that can be read by computing apparatus **540**, in other embodiments, mapping files are scripts, such as a JAVA™ script, in other embodiments, mapping file **420** may be compiled into a Dynamic Linked Library (dll) file and loaded into memory when software application **480** executes on remote computing apparatus **430**.

[0072] An exemplary method is illustrated in FIG, **19**. In this embodiment, flow begins in block **440** where the server **20** provides a software module with an API. As described above, the software module allows a game programmer to specify a controller mapping. Flow continues to block **450** where a mapping file is generated for a particular game. Flow then continues to block **460** where the mapping file is sent to a remote computing apparatus. In block **470** the mapping filed is installed on the remote computing apparatus. When game play is initialized on remote computing apparatus **540**, signals received from universal controller **80** are mapped to the appropriate actions within the game.

[0073] One feature of this embodiment is that it provides a method that includes providing a software module **410** on a server **20**, the software module having an application program interface **820**, the software module **410** configured to allow a game programmer to specify a controller mapping. Software module **410** then generates a mapping file **420**, from the software module, the mapping file **420** specifying a mapping of actions on a universal controller **80**, to a game developed by the game programmer. As described above, server **20** then transmits the mapping file **420** to a remote computing apparatus **540** across a network **10**, the remote computing apparatus **540** configured to operate with a universal controller **80**. The mapping file **420** is then installed on the remote apparatus **430**. The mapping file **420** configures the computing apparatus **540** to map signals received from the universal controller **80** to actions within a game displayed on a display on the display **430** computing apparatus **540**. This allows a game programmer to release new games to the public without the need for new controllers. By utilizing the provided software module, universal controller can be remapped to the requirements of the new game.

[0074] A further provided method is illustrated in FIG. **20**. In this embodiment, flow begins with block **490** where a web portal is provided on a server **20**. The web portal is configured to provide a web page to remote computing apparatus **540** across network **10**. Flow continues to block **500** where server **20** determines if software application **480** has been installed on remote computing apparatus **500**. Flow continues to conditional block **510**. If software application **480** is not installed on remote computing apparatus **540**, flow continues to block **520** where software application **540** is downloaded and installed on remote computing apparatus **540**. When software program **480** is executed on remote computing apparatus **530** a web browser is initialized in block **530**. in one embodiment in the first instance of browser initialization by software application **480** the browser is initialized with a toolbar enabled. In this embodiment, the enabled tool bar contains a plurality of game selections. Flow continues to block **560** where auto mapping of mapping files **420** is enabled.

[0075] Returning to decision block **510** if it is determined that software application **480** has been installed on remote computing apparatus **540**, flow continues to block **550**. When software program **480** is initializes it is executed in block **550**. Flow continues to block **570** where software program **570** initializes a web browser with a tool bar disabled Flow then continues to block **580** where server **20** determines if the web browser is accessing the web portal. If, in decision block **590** it is determined that the web browser is not accessing the web portal flow continues back to block **580** and waits until the web browser is accessing the web portal. If in decision block **590** it is determined that web browser is accessing the portal, flow continues to block **600** where the tool bar is enabled.

Flow then continues to block **610** where auto mapping of mapping files **420** is enabled. an exemplary web browser with a tool bar is illustrated in FIG. **23**.

[0076] Methods of providing a web portal are known in the art. An exemplary method includes running web server software, such as Apache web server on a computing apparatus. Various embodiments of software application were developed in JAVA™ programming language, but the present invention is not limited to JAVA™. Those of ordinary skill in the art know that any computer programming language can be used to develop software application **480**. For example, C or C++. There are a number of Integrated Development Environments (IDEs) that are advantageous for the development. An exemplary IDE is Visual C++ which allows a programmer to utilize web browser objects within the program. Further, when installing a software program, methods known in the art allow for a program to write a flag to a registry file and to communicate the presence of this flag to a remote server. Thus allowing the server to detect whether a particular software program has been installed on the remote computing apparatus. Other known methods of detection may include the installer asking a user to register the software during installation. This registration communicated to the server. Other installers can be created that do not prompt the user for permission to register, merely inform the server that the software program has been installed. Further, methods of determining if a web server is communicating with a particular computing apparatus are known. Exemplary methods include identification by the server of the remote computing apparatus' Internet Protocol (IP) address.

[0077] Turning now to FIG. **21** which illustrates the flow of an alternate embodiment of a provided method. In this method, flow begins in block **620** where a server **20** provides a web portal containing at least one web page. As is known in the art, web pages may be created in, for example the Hyper Text Mark-up Lamguage (HTML) or any other similar web based language known to skilled artisans. Further, web portals typically communicate using the Hyper Text Transfer Protocol (HTTP), other protocols for computer communication are known in the art and some embodiments are not therefore limited to either HTML or HTTP. Flow continues to block **630** where the web portal provides a web page to the remote computing apparatus **540**. In this embodiment, the webpage comprises a document written in a standard web format, such as html, that includes a number of links. Each of the links indicating a different game to be played. When a link is selected, flow continues to block **640** where server **20** determines which game has been selected. Flow then continues to block **650** where the appropriate mapping file **420** is selected. Flow then continues to block **660** where the mapping file **420** is sent to remote computing apparatus **540**.

[0078] Another embodiment of a provided method is illustrated in FIG. **22**. In this method, flow begins in block **670** where a remote computing apparatus **540** receives a web page from server **20**. Flow then continues to block **680** where game selection is enabled by the received webpage. Flow then continues to block **690** where, once selected, a game selection is sent to server **20**. In block **700** a mapping file is received from server **20**. Once the mapping file has been installed, flow continues to block **710** where the selected game is initialized. Flow then continues to block **720** where a signal is received from a universal controller **80**. In block **730** the received signal is mapped to a game action. Flow continues to block **740** where the mapped action is displayed on display **430**.

[0079] An alternate embodiment of universal controller **80** is illustrated in FIG. **24**. In this embodiment, universal controller **80** contains a communications transceiver **60** enabled to send signals to a computing apparatus **540** and, in some embodiments, receive signals from remote computing apparatus **540**. As illustrated, this embodiment additionally contains processor **230**, memory **240**, storage media **250**, a plurality of accelerometers **750**, battery **400**, and battery charging port **110**. On the front view controller **80** contains a touch sensitive display **90**. In this embodiment, touch sensitive display contains no deformations or tactile areas. Contained within storage media are a set of processor executable instructions, that, when executed by processor **230** cause a bitmap stored in storage media **250** to be mapped and illuminated on touch sensitive display **90**. In this manner, universal controller can be updated with additional bitmaps and take on completely different appearance depending on which game is selected fro play.

[0080] A method for interaction between computing apparatus **540** and universal controller **80** is depicted in FIG. **25**. In this embodiment, flow begins in block **670** and continues through block **700** in the manner described above. Flow then continues to block **760** where a new game is received from server **760**. In this embodiment, server **20** additionally stores controller interface files (bitmaps) that relate to each game. Flow then continued to block **770** where computing apparatus **540** determines if the appropriate controller interface is on its storage media **250**. If, in decision block **780** it is determined that the file is not present locally, flow continues to block **790** where the appropriate interface is requested from server **20**. Flow then continues to block **800** where the interface file is received from server **20**. Flow then continues to block **810** where the interface file is sent to universal controller **80** and installed. Returning to decision block **780**, it is determined that the correct interface file is on computing apparatus' storage media flow continues to block **810** where it is sent to universal controller **80** and installed. In an alternate embodiment (not shown) when a new game is received from server **20** a message is sent to universal controller **80** indicating the game to be played and the version of the interface file. If the appropriate file is stored within universal controller's storage medium **250** the file is not sent from computing apparatus **540**. If the file is not on universal controller **80**, the file is transmitted from computing apparatus **540** and installed on universal controller **80**.

Various embodiments of a provided computing apparatus are illustrated in FIGS. **26**(*a*)-(*h*). In these embodiments, at least one, and in some instances two touch screen displays are used. As illustrated, some embodiments of the computing apparatus are connected in a manner to allow a wide range of movement between the displays. A central feature of these embodiments, is that the computing apparatus is configured with a set of instructions that when executed by a processor contained within the apparatus, different regions of the display(s) are mapped to different functions. For example, as seen in FIG. **26**(H), a region of the display is configured as a keyboard, and that region is mapped to the functionality of a keyboard. In other situations, illustrated in FIG. **26**(G) the same region is illuminated as a game control region and is mapped to receive inputs from a stylus.

[0081] Embodiments of the software present on the computing apparatus have been reduced to practice using JAVA™ programming language. Other languages, such as C or C++ are known in the art and some embodiments are not limited to

the particular programming language used to implement the functionality described. Further, one of ordinary skill, given this disclosure, will know how to make and use the invention, because graphics rendering, region mapping, and interaction with computer input peripherals are all within the knowledge of a skilled artisan.

[0082] Thus, it is seen that an online entertainment system, universal controller system, methods and computer software product are provided. One skilled in the art will appreciate that the present invention can be practiced by other than the above-described embodiments, which are presented in this description for purposes of illustration and not of limitation. The specification and drawings are not intended to limit the exclusionary scope of this patent document. It is noted that various equivalents for the particular embodiments discussed in this description may practice the invention as well. That is, while the present invention has been described in conjunction with specific embodiments, it is evident that many alternatives, modifications, permutations and variations will become apparent to those of ordinary skill in the art in light of the foregoing description. Accordingly, it is intended that the present invention embrace all such alternatives, modifications and variations as fall within the scope of the appended claims. The fact that a product, process or method exhibits differences from one or more of the above-described exemplary embodiments does not mean that the product or process is outside the scope (literal scope and/or other legally-recognized scope) of the following claims.

What is claimed is:

1. A method of providing an interactive experience to a user comprising:

providing a software module on a server, the software module having an application program interface, the software module configured to allow a game programmer to specify a controller mapping;

generating a mapping file, from the software module, the mapping file specifying a mapping of actions on a universal controller, to a game developed by the game programmer;

transmitting the mapping file to a remote computing apparatus across a network, the remote computing apparatus configured to operate with a universal controller; and

installing the mapping file on the remote apparatus, wherein the mapping file configures the computing apparatus to map signals received from the universal controller to actions within a game displayed on a display on the computing apparatus.

2. The method of claim **1**, wherein the server contains a web portal, the web portal serving a web page to the remote computing apparatus.

3. The method of claim **2**, further comprising determining, by the server, the presence of an application program on the remote computing apparatus.

4. The method of claim **3**, further comprising installing the application program on the computing apparatus.

5. The method of claim **3**, further comprising initializing a web browser interface, on the remote computing apparatus, in response to a user executing the application program.

6. The method of claim **5**, further comprising disabling a toolbar when the web browser is initialized.

7. The method of claim **6**, further comprising determining if the web browser interface is accessing the web portal.

8. The method of claim **7**, further comprising enabling the toolbar if it is determined that the web browser interface is accessing the web portal, the tool bar enabling the selection of a plurality of games to be played on the remote computing apparatus.

9. The method of claim **8**, further comprising determining, in response to a game selection from the plurality of games, an appropriate mapping file and transmitting the appropriate mapping file to the remote computing apparatus.

10. The method of claim **9**, further comprising transmitting a signal from the universal controller to the remote computing apparatus, the transmitted signal comprising at least one of a set of signals responsive to actions by a user.

11. The method of claim **10**, further comprising,

receiving the signal on the remote computing apparatus;

determining which action is represented in the signal;

determining, from the mapping file, an interaction with the game; and

displaying the determined interaction on the remote computing apparatus.

12. The method of claim **2**, wherein the server contains a database of games, the webpage comprising a plurality of links to games stored within the database.

13. The method of claim **12**, wherein the server is configured determine an appropriate mapping file in response to a user selecting a link from the plurality of links and transmit the appropriate mapping file to the remote computing apparatus.

14. The method of claim **12**, further comprising transmitting a signal from the universal controller to the remote computing apparatus, the transmitted signal comprising at least one of a set of signals responsive to actions by a user.

15. The method of claim **14**, further comprising,

receiving the signal on the remote computing apparatus;

determining which action is represented in the signal;

determining, from the mapping file, an interaction with the game; and

displaying the determined interaction on the remote computing apparatus.

16. The method of claim **2**, wherein the server is a first server, and wherein the game is stored on a second server remote to the first server, the mapping file residing on the first server.

17. The method of claim **16**, wherein the server is configured determine an appropriate mapping file in response to a user selecting a link from the plurality of links and transmit the appropriate mapping file to the remote computing apparatus.

18. The method of claim **1**, further comprising transmitting a signal from the universal controller to the remote computing apparatus, the transmitted signal comprising at least one of a set of signals responsive to actions by a user.

19. The method of claim **18**, further comprising,

receiving the signal on the remote computing apparatus;

determining which action is represented in the signal;

determining, from the mapping file, an interaction with the game; and

displaying the determined interaction on the remote computing apparatus.

20. An entertainment system for providing an interactive experience to a user comprising:

a software module on a server, the software module having an application program interface, the software module configured to allow a game programmer to specify a controller mapping;

a mapping file, derived from the software module, the mapping file specifying a mapping of actions on a universal controller, to a game developed by the game programmer;

a remote computing apparatus configured to receive the mapping file across a network, operate with a universal controller; and install the mapping file on the remote apparatus, wherein the mapping file configures the computing apparatus to map signals received from the universal controller to actions within a game displayed on a display on the computing apparatus.

21. The entertainment system of claim **20**, wherein the server contains a web portal, the web portal serving a web page to the remote computing apparatus.

22. The entertainment system of claim **21**, wherein the server is configured to determine the presence of an application program on the remote computing apparatus.

23. The entertainment system of claim **22**, wherein the configuration on the remote computing apparatus further comprises a configuration to install the application program on the remote computing apparatus.

24. The entertainment system of claim **23**, wherein the application program, when executed, configures the remote computing apparatus to initialize a web browser interface.

25. The entertainment system of claim **24**, wherein the configuration further comprises a configuration to disable a toolbar when the web browser is initialized.

26. The entertainment system of claim **25**, wherein the server is further configured to determine if the web browser interface is accessing the web portal.

27. The entertainment system of claim **26**, wherein the configuration further comprises a configuration to enable the toolbar if it is determined that the web browser interface is accessing the web portal, the tool bar enabling the selection of a plurality of games to be played on the remote computing apparatus.

28. The entertainment system of claim **27**, wherein the server is further configured to determine, in response to a game selection from the plurality of games, an appropriate mapping file and transmit the appropriate mapping file to the remote computing apparatus.

29. The entertainment system of claim **28**, wherein the universal controller is configured to transmit a signal to the remote computing apparatus, the transmitted signal comprising at least one of a set of signals responsive to actions by a user.

30. The entertainment system of claim **30**, wherein the remote computing apparatus is further configured to

receive the signal on the remote computing apparatus;

determine which action is represented in the signal;

determine, from the mapping file, an interaction with the game; and

display the determined interaction on the remote computing apparatus.

31. The entertainment system of claim **21**, wherein the server contains a database of games, the webpage comprising a plurality of links to games stored within the database.

32. The entertainment system of claim **31**, wherein the server is configured determine an appropriate mapping file in response to a user selecting a link from the plurality of links and transmit the appropriate mapping file to the remote computing apparatus.

33. The entertainment system of claim **31**, wherein the universal controller is configured to transmit a signal to the remote computing apparatus, the transmitted signal comprising at least one of a set of signals responsive to actions by a user.

34. The entertainment system of claim **33**, wherein the remote computing apparatus configuration further comprises a configuration to,

receive the signal on the remote computing apparatus;

determine which action is represented in the signal;

determine, from the mapping file, an interaction with the game; and

display the determined interaction on the remote computing apparatus.

35. The entertainment system of claim **21**, wherein the server is a first server, and wherein the game is stored on a second server remote to the first server, the mapping file residing on the first server.

36. The entertainment system of claim **35**, wherein the configuration of the server further comprises a configuration to determine an appropriate mapping file in response to a user selecting a link from the plurality of links and transmit the appropriate mapping file to the remote computing apparatus.

37. The entertainment system of claim **20**, wherein the universal controller is configured to transmit a signal to the remote computing apparatus, the transmitted signal comprising at least one of a set of signals responsive to actions by a user.

38. The entertainment system of claim **38**, wherein the remote computing apparatus is further configured to

receive the signal on the remote computing apparatus;

determine which action is represented in the signal;

determine, from the mapping file, an interaction with the game; and

display the determined interaction on the remote computing apparatus.

39. A computing apparatus comprising

a processor;

a memory;

a storage medium, the storage medium comprising a set of instructions that, when executed by the processor configure the computing apparatus to act as a server in an entertainment system the configuration comprising a configuration to:

provide a software module on the server, the software module having an application program interface, the software module configured to allow a game programmer to specify a controller mapping;

generate a mapping file, from the software module, the mapping file specifying a mapping of actions on a universal controller, to a game developed by the game programmer;

transmit the mapping file to a remote computing apparatus across a network, the remote computing apparatus configured to operate with a universal controller; and

install the mapping file on the remote apparatus, wherein the mapping file configures the computing apparatus to map signals received from the universal controller to actions within a game displayed on a display on the computing apparatus.

40. The computing apparatus of claim **39**, wherein the server contains a web portal, the web portal serving a web page to the remote computing apparatus.

41. The computing apparatus of claim **39**, wherein the configuration further comprises a configuration to determine, the presence of an application program on the remote computing apparatus.

42. The method of claim **40**, wherein the server configuration further comprises a configuration to initiate the installation of the application program on the computing apparatus.

43. The computing apparatus of claim **40**, wherein the application program lo configures the remote computing apparatus to initialize a web browser interface, on the remote computing apparatus.

44. The computing apparatus of claim **43**, wherein a toolbar is initially disabled when the web browser is initialized.

45. The computing apparatus of claim **44**, wherein the server configuration further comprises a configuration to determine if the web browser interface is accessing the web portal.

46. The computing apparatus of claim **45**, wherein the server configuration further comprises a configuration to enable the toolbar if it is determined that the web browser interface is accessing the web portal, the tool bar enabling the selection of a plurality of games to be played on the remote computing apparatus.

47. The computing apparatus of claim **46**, wherein the server configuration further comprises a configuration to determine, in response to a game selection from the plurality of games, an appropriate mapping file and transmit the appropriate mapping file to the remote computing apparatus.

48. The computing apparatus of claim **47**, wherein the universal controller is configured to transmit a signal to the remote computing apparatus, the transmitted signal comprising at least one of a set of signals responsive to actions by a user.

49. The computing apparatus of claim **48**, wherein the application program further configures the remote computing apparatus to:

receive the signal on the remote computing apparatus;

determine which action is represented in the signal;

determine, from the mapping file, an interaction with the game; and

display the determined interaction on the remote computing apparatus.

50. The computing apparatus of claim **40**, wherein the server contains a database of games, the webpage comprising a plurality of links to games stored within the database.

51. The computing apparatus of claim **50**, wherein the server configuration further comprises a configuration to determine an appropriate mapping file in response to a user selecting a link from the plurality of links and transmit the appropriate mapping file to the remote computing apparatus.

52. The computing apparatus of claim **50**, wherein the universal controller is configured to transmit a signal from to the remote computing apparatus, the transmitted signal comprising at least one of a set of signals responsive to actions by a user.

53. The computing apparatus of claim **52**, wherein the application program further configures the remote computing apparatus to

receive the signal on the remote computing apparatus;

determine which action is represented in the signal;

determine, from the mapping file, an interaction with the game; and

display the determined interaction on the remote computing apparatus.

54. The computing apparatus of claim **40**, wherein the server is a first server, and wherein the game is stored on a second server remote to the first server, the mapping file residing on the first server.

55. The computing apparatus of claim **54**, wherein the server configuration further comprises a configuration to determine an appropriate mapping file in response to a user selecting a link from the plurality of links and transmit the appropriate mapping file to the remote computing apparatus.

56. The computing apparatus of claim **39**, wherein the universal controller is configured to transmit a signal to the remote computing apparatus, the transmitted signal comprising at least one of a set of signals responsive to actions by a user.

57. The computing apparatus of claim **56**, wherein the application program further configures the remote computing apparatus to

receive the signal on the remote computing apparatus;

determine which action is represented in the signal;

determine, from the mapping file, an interaction with the game; and

display the determined interaction on the remote computing apparatus.

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