Claims

1. A system ~~remote controller for a system~~ for delivering content to a display screen, the system comprising ~~a set top box coupled to the display screen, the remote controller comprising~~:

a set top box disposed within an environment, the set top box responsive to remote control functions including 6G cursor control functions and configured for presenting a graphical user interface (GUI) on the display screen, wherein the GUI is configured for selectively presenting (a) a background screen and a plurality of selection rows horizontally displayed thereacross, and (b) entertainment content, and wherein the plurality of selection rows includes (i) a main selection row in which first selection options are slidably displayed thereacross, and (ii) a second selection row within which second selection options are slidably displayed thereacross in response to user selection of one of the first selection options of the main selection row; and

a remote controller configured for generating remote control functions directed to the set top box and enabling user control over the GUI, the remote controller comprising:

a housing;

a first plurality of keys carried by a first surface of the remote controller and configured for controlling various functions to be carried out by the set top box including GUI control functions, the first plurality of keys including a set of directional buttons and a selection activation button for controlling navigation within the plurality of selection rows and selection of selection options displayed therein~~extruding from an external surface of the housing~~; ~~and~~

a second plurality of keys comprising an alpha-numeric keyboard carried by a second surface of the remote controller opposite to the first surface; and

a cursor control module including accelerometers and gyroscopes responsive to user motions and configured for generating 6G cursor control functions,

wherein the GUI is configured for displaying a cursor on the display screen in response to remote controller motions but not displaying the cursor on the display screen when the user is provided with a choice based on the first or second selection options

~~a remote controller wireless communications module provided within the housing, for communication with a corresponding box wireless communications module in the set top box;~~

~~wherein a dedicated wireless communication channel is established between the remote controller wireless communications module and the box wireless communications module for exclusive communication between the remote controller and the set top box~~.

2. The system of claim 1, wherein the first plurality of keys includes buttons for performing preprogrammed functions related to the environment, and wherein the environment comprises one of:

(a) a hospital, and wherein the preprogrammed functions comprise one or more of bringing up a meal menu on the display screen, and requesting emergency assistance; and

(b) a hotel, and wherein the preprogrammed functions comprise one or more of bringing up a room-service menu on the display, bringing up a concierge menu on the display, and dialing a hotel telephone operator.

3. The system of claim 1, wherein the remote controller further comprises:

a remote controller wireless communications module for communication with a corresponding box wireless communication module in the set top box to establish a dedicated wireless communication channel between the remote controller wireless communications module and the box wireless communications module for exclusive communication between the remote controller and the set top box; and

a channel handling module on the wireless communications module configured for monitoring the wireless communication channel and carrying out a switch and re-establishment of a wireless communication channel between the remote controller and the set top box when a possibility of communication interference is determined.

4. The system of claim 1, wherein the remote controller further comprises a feedback module coupled to an audio jack of the remote controller, the feedback module configured for providing an indication to the set top box that headphones have been connected to the audio jack, and issuing a redirect request for streaming audio to the remote controller, and wherein in response to the redirect request the set top box cuts off an audio feed corresponding to content presented on the display screen.

~~2. The remote controller according to claim 1, further comprising a channel handling module on the wireless communications module, for monitoring the wireless communication channel.~~

~~3. The remote controller according to claim 2, wherein the channel handling module carries out a switch and re-establishment of a wireless communication channel between the remote controller and the set top box when a possibility of communications interference is determined.~~

~~4. The remote controller according to claim 1, further comprising a voice over Internet Protocol (VOIP) module coupled to the remote controller wireless communications module for streaming a VOIP conversation over the dedicated wireless communications channel.~~

~~5. The remote controller according to claim 4, further comprising a microphone and speaker combination provided in the housing of the remote controller.~~

~~6. The remote controller according to claim 5, wherein the microphone and speakers are located on the remote controller such that the remote controller is provided with a communications handset function for carrying out a VOIP conversation.~~

~~7. The remote controller according to claim 1, further comprising an audio module coupled to the remote controller wireless communications module for receiving and playing audio extracted from the delivered content and streamed over the dedicated wireless communications channel to the remote controller.~~

~~8. The remote controller according to claim 7, further comprising a speaker provided in the housing of the remote controller, for playing audio from the audio module.~~

~~9. The remote controller according to claim 7, further comprising an audio jack for connecting the remote controller to headphones for playing audio from the audio module.~~

~~10. The remote controller according to claim 9, further comprising a feedback module coupled to the audio jack, for providing an indication to the set top box that headphones have been connected to the audio jack, and a redirect request for streaming audio to the audio module.~~

~~11. The remote controller according to claim 1, further comprising a screen control module coupled to the remote controller wireless communications module for receiving and playing video extracted from the delivered content and streamed over the dedicated wireless communications channel to the remote controller.~~

~~12. The remote controller according to claim 11, further comprising a display screen on the housing of the remote controller for displaying video content from the screen control module.~~

~~13. The remote controller according to claim 11, further comprising a touchscreen display on the housing of the remote controller for displaying video content from the screen control module and providing user manipulation to the screen control module.~~

~~14. The remote controller according to claim 1, further comprising a camera in the housing of the remote controller and a camera module coupled to the remote controller wireless communications module for delivering any of a captured image or a captured video from the camera over the dedicated wireless communications channel to the remote controller.~~

~~15. The remote controller according to claim 1, further comprising:~~

~~an infrared transmitter provided within the housing for carrying out infrared communication; and~~

~~an infrared receiver within the housing, for receiving an infrared transmission from a remote controller of an auxiliary device.~~

~~16. The remote controller according to claim 15, further comprising a learning module coupled to the infrared receiver.~~

~~17. The remote controller according to claim 16, wherein the learning module determines a modulated signal from a received infrared transmission of the auxiliary device remote controller, and assigns the modulated signal as a function of one of the plurality of keys on the remote controller.~~

~~18. The remote controller according to claim 1, wherein at least one of the plurality of keys comprise a secondary function, accessed through a predetermined actuation of the at least one of the plurality of keys.~~

~~19. The remote controller according to claim 18, further comprising a light emitting diode (LED) within the housing and provided beneath the plurality of keys, wherein the LED lights up when the secondary function of the at least one of the plurality of keys is accessed.~~

~~20. The remote controller according to claim 1, further comprising a gyroscope provided within the housing.~~

~~21. The remote controller according to claim 1, further comprising a micro-electromechanical accelerometer provided within the housing.~~

~~22. The remote controller according to claim 1, further comprising a gyroscope and a micro-electromechanical accelerometer.~~

~~23. The remote controller according to claim 22, further comprising a cursor control module, for receiving input from the gyroscope and a micro-electromechanical accelerometer, and translating the input into a cursor for manipulation on the display screen.~~

~~24. The remote controller according to claim 1, further comprising an alpha-numeric keyboard on the housing of the remote controller.~~

~~25. The remote controller according to claim 1, further comprising a slide-out alpha-numeric keyboard in the housing of the remote controller.~~

~~26~~5. The remote controller according to claim 1, wherein the housing comprises a polymer, and wherein the polymer is provided with ~~an~~a first antimicrobial resistance, and wherein buttons of the remote controller are provided with a second antimicrobial resistance in addition to the first antimicrobial resistance.

~~27. The remote controller according to claim 26, wherein the polymer is a synthetic polymer, comprising any one of a synthetic organic polymer, a thermoplastic, a thermoset, an elastomer and a synthetic fiber.~~

~~286~~. The remote control according to claim ~~265~~, wherein the polymer is a non-synthetic polymer, comprising any one of collagen, chitosan, metal cellulose, and cellulose-based hydrogels.

~~29. The remote controller according to claim 26, wherein the antimicrobial resistance is provided by impregnating the polymer with any one of metal ions and organic acids.~~

~~30. The remote controller according to claim 29, wherein the metal ions comprise any one of silver, gold, copper, zinc, cobalt, nickel, zirconium, molybdenum, and calcium.~~

~~31. The remote controller according to claim 26, further comprising an antimicrobial coating provided on the surface of the housing of the remote controller.~~

~~327~~. The remote controller according to claim ~~265~~, further comprising a display screen provided on the housing of the remote controller, the display screen on the housing of the remote controller provided with antimicrobial resistance.

~~338~~. The remote controller according to claim ~~327~~, wherein the antimicrobial resistance is provided by including any of metal ions and organic acids into the fabrication of the display screen on the housing of the remote controller.

~~34. The remote controller according to claim 1, further comprising buttons for performing preprogramed functions related to an environment in which the system is installed.~~

~~35. The remote controller according to claim 34, wherein the preprogramed functions comprise any one of: bringing up a room-service menu on the display, bringing up a concierge menu on the display, dialing a hotel telephone operator, bringing up a meal menu, and as for emergency assistance contact.~~

9. The system of claim 1, wherein the set top box includes a tracking module configured for tracking user choices among the selection options within the plurality of selection rows, wherein the system further comprises a content server comprising:

an analytics module configured for communication with the tracking module and analyzing user selection of tracked user selection options; and

an advertising module configured for identifying updated background screen content and updated selection options based on tracked user selection options,

wherein the GUI is configured for presenting the updated background screen content and the updated selection options on the display screen.

10. The system of claim 9, wherein the updated background screen content or the updated selection options correspond to advertisements.

11. The system of claim 10, wherein the remote controller further carries an instant buy button, and wherein in response to user selection of the instant buy button the set top box transitions the GUI to an interface corresponding to an advertiser paid service to register a purchase transaction.