

various combinations with or without other features and elements. The methods, processes, or flow charts provided herein may be implemented in a computer program, software, or firmware incorporated in a computer-readable storage medium for execution by a general purpose computer or a processor. Examples of computer-readable storage mediums include a read only memory (ROM), a random access memory (RAM), a register, cache memory, semiconductor memory devices, magnetic media such as internal hard disks and removable disks, magneto-optical media, and optical media such as CD-ROM disks, digital versatile disks (DVDs), and BluRay discs.

**[0072]** Suitable processors include, by way of example, a general purpose processor, a special purpose processor, a conventional processor, a digital signal processor (DSP), a plurality of microprocessors, one or more microprocessors in association with a DSP core, a controller, a microcontroller, Application Specific Integrated Circuits (ASICs), Field Programmable Gate Arrays (FPGAs) circuits, any other type of integrated circuit (IC), and/or a state machine.

**[0073]** A processor in association with software may be used to implement hardware functions for use in a computer, wireless transmit receive unit (WTRU) or any host computer. The programmed hardware functions may be used in conjunction with modules, implemented in hardware and/or software, such as a camera, a video camera module, a videophone, a speakerphone, a vibration device, a speaker, a microphone, a television transceiver, a hands free headset, a keyboard, a Bluetooth® module, a frequency modulated (FM) radio unit, a liquid crystal display (LCD) display unit, an organic light-emitting diode (OLED) display unit, a digital music player, a media player, a video game player module, an Internet browser, and/or any wireless local area network (WLAN) or Ultra Wide Band (UWB) module.

What is claimed is:

1. An apparatus for providing ultrasound sensations to a user at a predetermined distance from the apparatus, the apparatus comprising:

a display device having a plurality of display pixels, a plurality of ultrasound transducers, and a plurality of ultrasound detectors;

a controller coupled to the plurality of ultrasound transducers and the plurality of ultrasound detectors, where the controller controls transmit of ultrasound over air to the user by the plurality of ultrasound transducers and receives feedback information from the plurality of ultrasound detectors of reflections off of the user; and wherein the controller controls transmit of ultrasound over air to provide an ultrasound pattern having a plurality of ultrasound focal points to the user and tracks the motion of the user from received feedback from the plurality of ultrasound detectors to determine user input commands, where the user input commands are related to selection of a hyperlink displayed on the display device.

2. A method for providing ultrasound sensations to a user at a predetermined distance from an apparatus, the method comprising:

controlling a plurality of ultrasound transducers to transmit ultrasound over air to the user;

controlling a plurality of ultrasound detectors to receives feedback information of reflections off of the user;

transmitting ultrasound over air to provide an ultrasound pattern having a plurality of ultrasound focal points to the user; and

tracking the motion of the user from received feedback from the plurality of ultrasound detectors to determine user input commands, where user input commands are related to selecting a hyperlink displayed on a display device.

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