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Parker et al.

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(54) **USER INTERFACE FOR OPERATING A COMPUTER FROM A DISTANCE**

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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,539,479 A * 7/1996 Bertram G06F 3/03548
345/158
6,028,604 A * 2/2000 Matthews, III G06F 3/0481
715/821
6,104,390 A * 8/2000 Sturgeon G09G 5/14
348/552

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(57) **ABSTRACT**

Switching between an arm's length user interface and a distance user interface is provided. A first user interface optimized to operate a computer from an arm's-length distance is presented on a display. A command is received. It is determined whether the command is from a wired device or a wirelessly-connected device. When the command is from a wired device, then the first user interface continues to be presented. When the command is from a wirelessly-connected device, then the display is toggled from the first user interface to the distance user interface. The distance user interface is optimized for operating the computer from a television-viewing distance. The television-viewing distance measured in feet is approximately half of a diagonal measure of the image displayed on the display device measured in inches.

17 Claims, 18 Drawing Sheets

