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(54) **TOUCH SCREEN SYSTEM WITH HOVER AND CLICK INPUT METHODS**

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(57) **ABSTRACT**

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A touch screen system that can approximate tracking and dragging states regardless of the user's orientation and without reliance on direct sensing of touch pressure or area. A first detector generates a signal representing a first image of an object interacting with the touch screen. A second detector generates a signal representing a second image of the object. A signal processor processes the first signal to determine approximated coordinates of a first pair of outer edges of the object and processes the second signal to determine approximated coordinates of a second pair of outer edges of the object. The signal processor then calculates an approximated touch area based on the approximated coordinates of the first pair of outer edges and the approximated coordinates of the second pair of outer edges of the object. If the approximated touch area is less than or equal to a threshold touch area, the signal processor determines that the object interacting with the touch screen indicates a tracking state. If the approximated touch area is greater than the threshold touch area, the signal processor determines that the object interacting with the touch screen indicates a selection state. The threshold touch area may be established by calibrating the touch screen system when the object interacting with the touch screen is known to indicate the tracking state.

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