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**Hirshberg**

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(54) **MULTIFUNCTIONAL KEYPAD ON TOUCH SCREEN**

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**Related U.S. Application Data**

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(51) **Int. Cl.**<sup>7</sup> ..... **G09G 5/00**

(52) **U.S. Cl.** ..... **345/168; 345/173; 345/169; 341/22**

(58) **Field of Search** ..... **345/173, 168, 345/169; 341/22, 23, 20**

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(57) **ABSTRACT**

A multifunction keypad includes a touch-sensitive surface with a number of regions designated as keys. A processor, associated with the touch-sensitive surface, is configured to: (i) identify a contact location at which an object comes into contact with the touch-sensitive surface, (ii) determine a selected one of the keys corresponding to the one of the regions within which the contact location is located, (iii) identify a direction of motion of the object across the touch-sensitive surface relative to the contact location, and (iv) select in a manner conditional upon at least the direction of motion one of a plurality of functions associated with the selected key.

**31 Claims, 12 Drawing Sheets**

