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(54) Title: CONCURRENT SIGNAL DETECTION FOR TOUCH AND HOVER SENSING

(57) Abstract: Detecting a signal from a touch and hover sensing device, in which the signal can be indicative of concurrent touch events and/or hover events, is disclosed. A touch event can indicate an object touching the device. A hover event can indicate an object hovering over the device. The touch and hover sensing device can ensure that a desired hover event is not masked by an incidental touch event, e.g., a hand holding the device, by compensating for the touch event in the detected signal that represents both events. Conversely, when both a hover event and a touch event are desired, the touch and hover sensing device can ensure that both events are detected by adjusting the device sensors and/or the detected signal. The touch and hover sensing device can also detect concurrent hover events by identifying multiple peaks in the detected signal, each peak corresponding to a position of a hovering object.

FIG. 2

TOUCH AND HOVER SENSING DEVICE
before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))
### INTERNATIONAL SEARCH REPORT

**International application No:**

PCT/US2011/046825

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**A. CLASSIFICATION OF SUBJECT MATTER**

INV. G06F3/041  G06F3/044

ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

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**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal

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**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
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See patent family annex.
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