Title: A DEVICE FOR DETECTING THE PRESENCE OF AT LEAST ONE HUMAN FINGER ON A SURFACE AND A METHOD OF USING THE DEVICE IN A USER INTERFACE

Abstract: A device (1) for detecting the presence of at least one human finger on a surface (10) comprises: -at least one element (22) having piezoelectric characteristics, located under a surface (10) that is visible, the element (22) arranged in the device (1) in such a manner that a force (F) when exerted on the surface (10), such as when the surface (10) is pressed by finger, is transferred to mechanical stress of the element (22), the element (22) then producing a voltage output (V) in response to the mechanical stress; -means (R2, R3, C3, IC1) for measuring the voltage output (V) on a predefined time period; and -means (IC1) for determining the degree of stability of the measured voltage output (V), configured to indicate that: i) if the degree of stability shows that the measured voltage output is highly stable, or at least sufficiently stable, a physical contact between a human finger and the surface (10) does not exist; and ii) if the degree of stability shows that the measured voltage output is not stable but contains vibrations characteristic to a human finger, a physical contact between a human finger and the surface (10) does exist. Application comprises also a method claim.
— 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))

(88) Date of publication of the international search report:
1 March 2012
INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2011/052501

A. CLASSIFICATION OF SUBJECT MATTER
INV. G01L1/16
ADD.

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
G01L 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 practical, search terms used)
EPO-Internal

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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Date of the actual completion of the international search
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