

3. The apparatus of claim 1, wherein each acceleration-responsive mechanism comprises a lever pivotally coupled to the module.

4. The apparatus of claim 3, wherein the lever is an L-shaped lever.

5. The apparatus of claim 3, wherein each acceleration-responsive mechanism further comprises a biasing member disposed to bias the lever toward the touch screen.

6. The apparatus of claim 1, wherein the touch screen is a capacitive touch screen.

7. The apparatus of claim 1, wherein each acceleration-responsive mechanism includes a mass mounted to deform the deformable member only in response to acceleration along a single axis.

8. A method of sensing acceleration, comprising:
disposing a deformable member adjacent a touch sensor surface;

directing an acceleration to push the deformable member against the touch sensor surface to cause a change in the degree of elastic deformation of the deformable member; and

sensing a change in the contact area between the deformable member and the touch sensor as a result of the change in the degree of elastic deformation.

9. The method of claim 8, further comprising:
applying a substantially constant biasing force to push the deformable member against the touch screen surface to cause a first extent of elastic deformation of the deformable member; and

directing an acceleration to oppose the substantially constant biasing force and result in a second extent of elastic deformation of the deformable member that is less than the first extent of elastic deformation.

10. The method of claim 9, further comprising:
physically limiting the acceleration that is directed to push the deformable member against the touch screen to be an acceleration along a defined axis; and

identifying the direction of the acceleration along the defined axis by determining whether the contact area increased or decreased.

11. The method of claim 10, further comprising:
identifying the relative magnitude of the acceleration by determining the extent of the change in the contact area.

12. The method of claim 11, wherein the step of identifying the relative magnitude of the acceleration by determining the extent of the change in the contact area, includes using a correlation between contact area and acceleration.

13. The method of claim 12, further comprising:
combining the direction and relative magnitude of the acceleration along each of three coordinate axis in order to determine the direction and relative magnitude of an overall acceleration.

14. A computer program product embodied on a computer readable medium and providing computer usable instructions for sensing acceleration, comprising:

instructions for detecting a change in the contact area of a first touch sensor region associated with acceleration along a first coordinate axis;

instructions for detecting a change in the contact area of a second touch sensor region associated with acceleration along a second coordinate axis;

instructions for detecting a change in the contact area of a third touch sensor region associated with acceleration along a third coordinate axis; and

instructions for determining an overall acceleration as the combination of the acceleration along the first coordinate axis, acceleration along a second coordinate axis, and acceleration along a third coordinate axis.

15. The computer program product of claim 14, wherein the instructions for determining an overall acceleration include instructions for combining the acceleration along the first coordinate axis, acceleration along a second coordinate axis, and acceleration along a third coordinate axis as vectors having both a direction and a magnitude.

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