

ACCELEROMETERS AND METHODS OF FABRICATING THEREOF

ABSTRACT

The present invention is directed to an accelerometer including a pivot arm having a first end region and a second end region opposite to the first end region; a pivot coupled to the pivot arm; an annular predefined mass having a peripheral part coupled to the first end region or the second end region of the pivot arm; a first capacitive sensor located at the first end region of the pivot arm; and a second capacitive sensor located at the second end region of the pivot arm such that the pivot is arranged between the first capacitive sensor and the second capacitive sensor, wherein the predefined mass is configured to move in response to an acceleration force along a predefined direction; and wherein the first and second capacitive sensors are configured to determine a differential capacitance value relating to the acceleration force. Method of fabricating an accelerometer is also disclosed.

FIG. 5A