

Abstract

Accelerometer device

The invention proposes an accelerometer device for determining the acceleration of an object to which the accelerometer device is mechanically connected, along
5 three axes X, Y and Z of a main orthonormal reference system (X, Y, Z) comprising three axes X, Y, Z, said object being subject to a surrounding pressure. The device comprises a number N of accelerometer sensors of MEMS type (11, 12), said number N of accelerometer sensors being at least equal to two, each sensor (11, 12) being defined by construction in an auxiliary reference system comprising
10 three orthonormal axes (X_i , Y_i , Z_i), said set of accelerometer sensors comprising at least one pair of sensors mounted so that they face in opposite directions and are substantially parallel to one another, and:

- for each of the pairs of accelerometer sensors, the sensors have, in twos, components of opposite sign along two axes of the main reference system; and
- 15 - the axes of the reference system along which the components of the accelerometer sensors oppose the set of pairs of sensors in twos comprise at least two of the three axes X, Y and Z of the reference system, thereby making it possible to compensate for the effect of the pressure on at least two axes of the reference system.

20 (Figure 2)