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(54) **THREE-AXIS INTEGRATED MEMS ACCELEROMETER**

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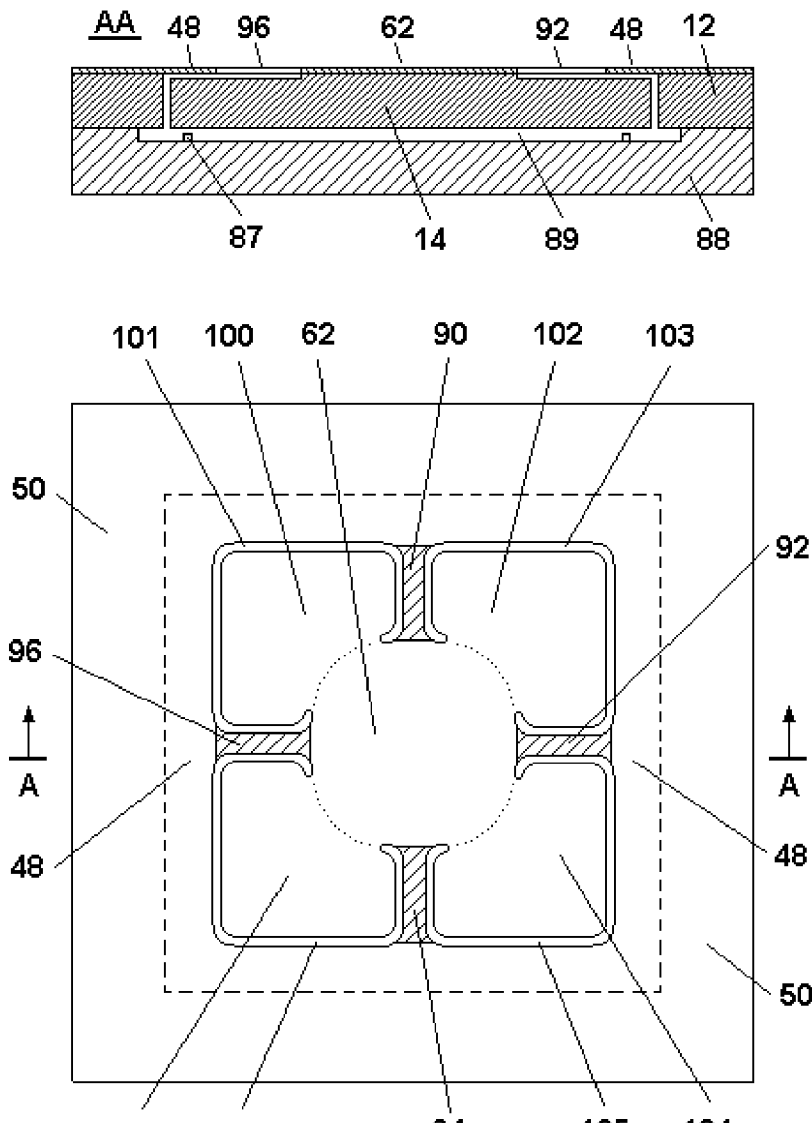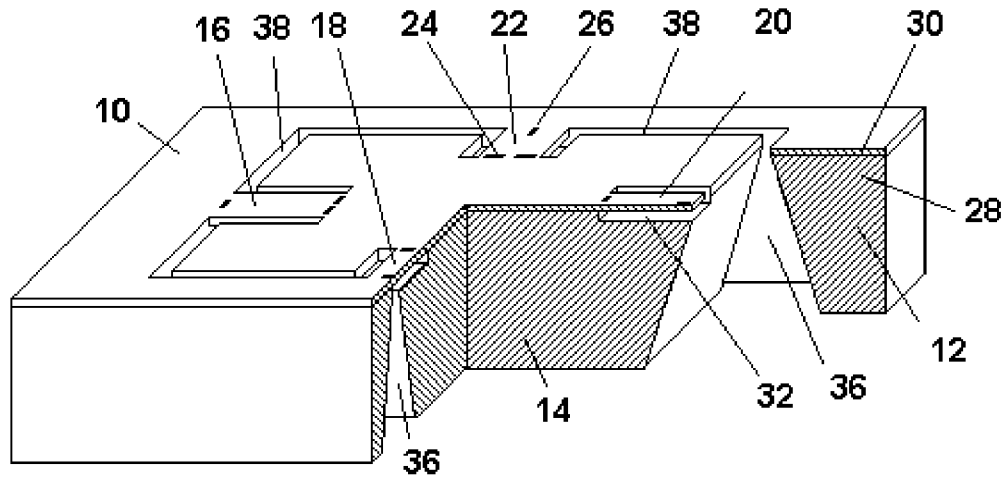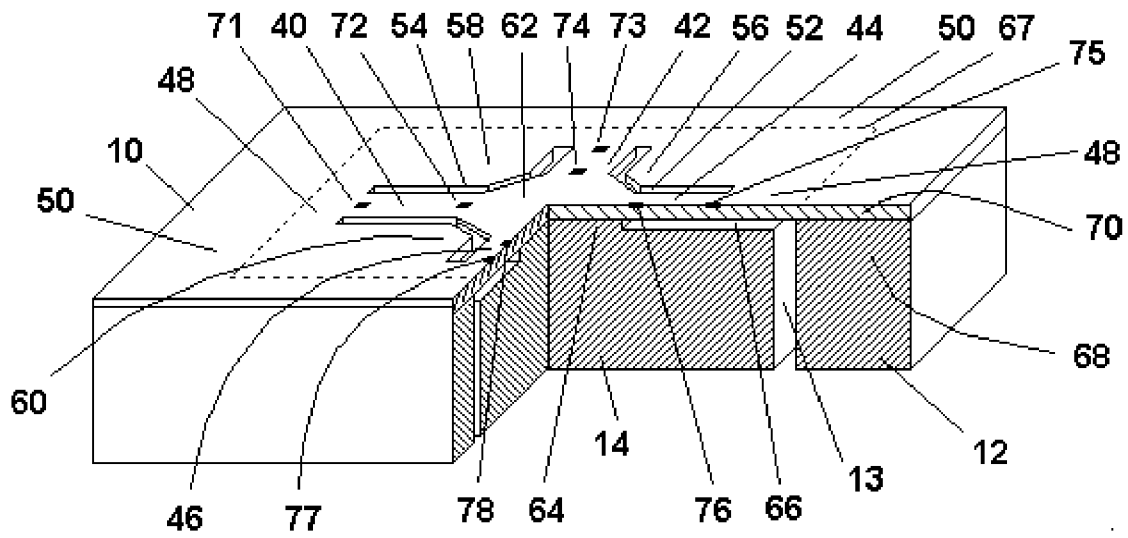
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(57) **ABSTRACT**

3D accelerometer for measuring three components of inertial force (or acceleration) vector with respect to an orthogonal coordinate system, which has high sensitivity due to a big proof mass located within a cavity beneath the surface of the sensor die. The size of the cavity and the size of the proof mass exceed the corresponding overall dimensions of the elastic element. The sensor structure occupies a very small area at the surface of the die increasing the area for ICs need to be integrated on the same chip.

FIG. 1

FIG. 2

FIG. 3

FIG. 4

FIG. 5

FIG. 6

DOCKET ALARM
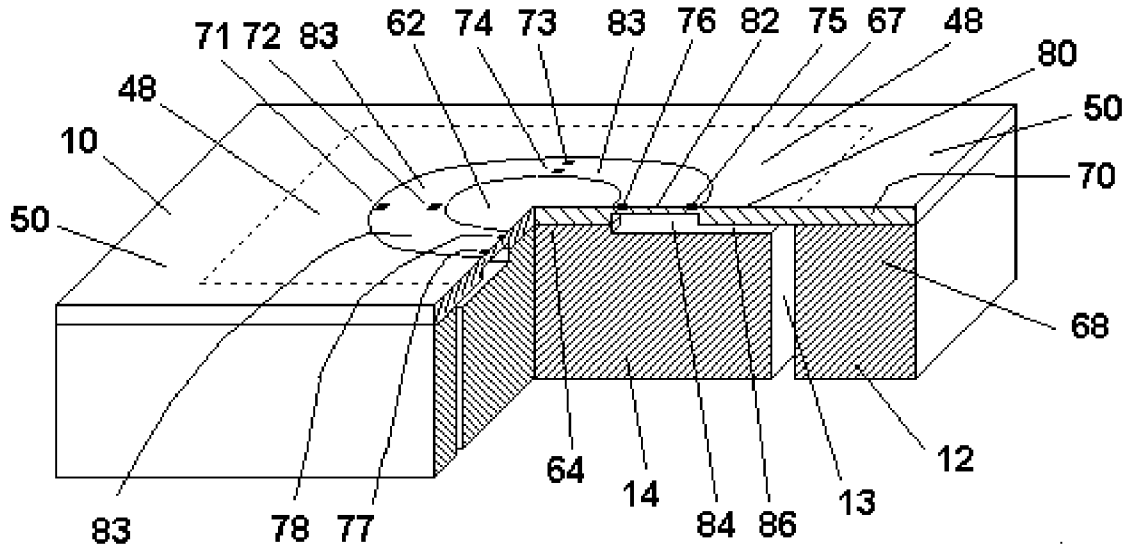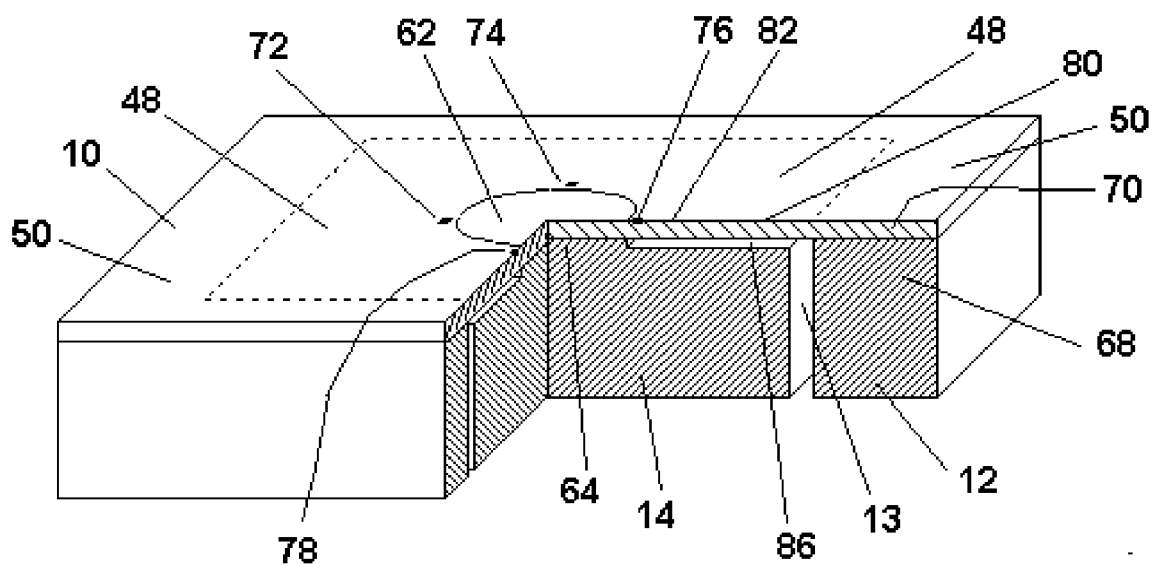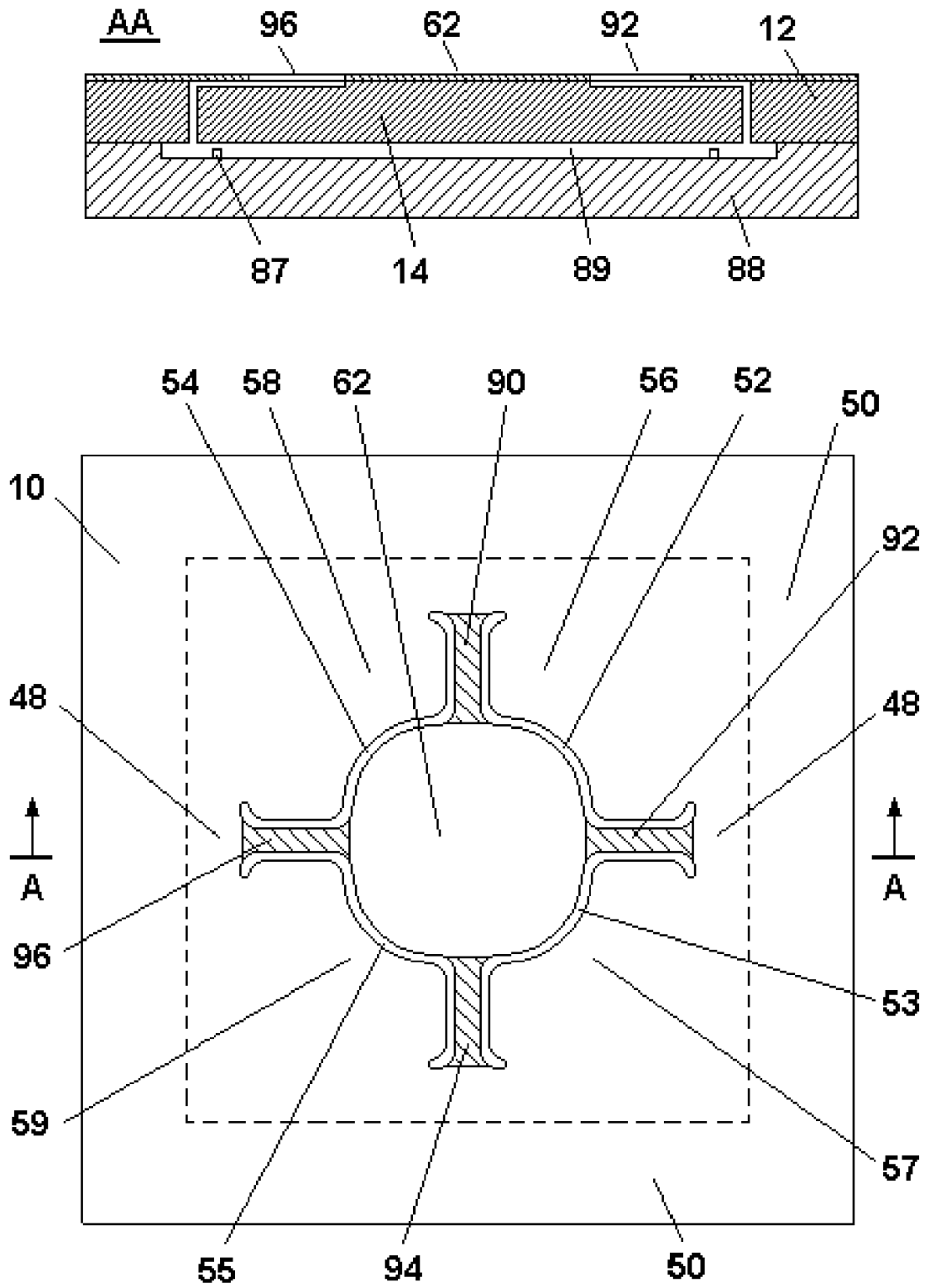
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