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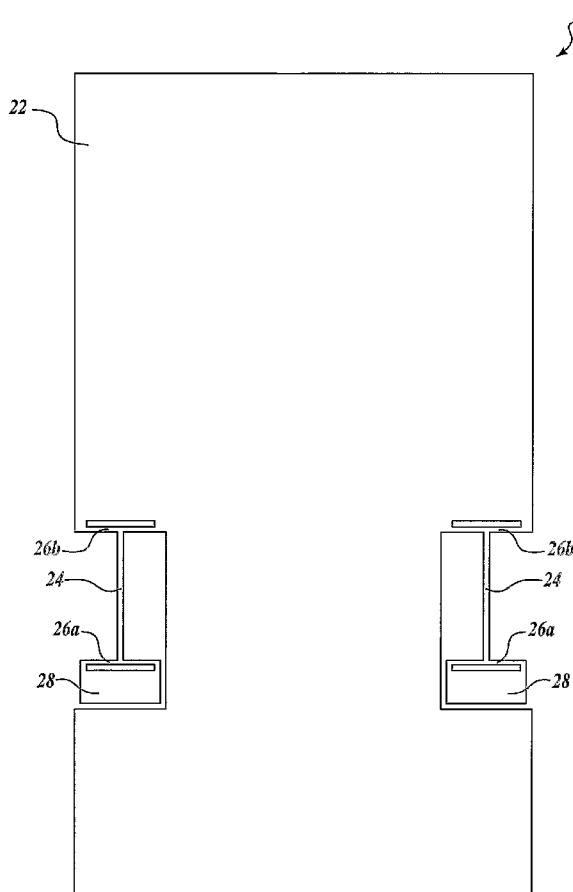
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(54) Title: BENDING BEAM ACCELEROMETER WITH DIFFERENTIAL CAPACITIVE PICKOFF



(57) Abstract: A low cost, pendulous, capacitive-sensing Micro Electro-Mechanical Systems (MEMS) accelerometer is provided. The accelerometer includes a pendulous proof mass, one or more securing pads, and one or more flexures coupled with the pendulous proof mass and the one or more securing pads. The flexures flex linearly with respect to motion of the pendulous proof mass. First and second capacitor plates are positioned relative to the pendulous proof mass for detecting motion of the proof mass according to a sensed difference in capacitance. One or more strain isolation beams are connected between the one or more flexures and the pendulous proof mass or the securing pads. The strain isolation beams protect the flexures from mechanical strain.



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