

ABSTRACT

A mechanical oscillator including: at least two deformable linking beams connected to a stationary substrate at a plurality of anchoring points which are distributed along the deformable linking beams, the deformable linking beams facing each other; and a plurality of vibrating cells each connected to and disposed between the at least two deformable linking beams, the plurality of vibrating cells being distributed along the deformable linking beams and a length between two of the plurality of anchoring points being greater or equal to a length of a number of cells greater or equal to 1, wherein each of the plurality of vibrating cells includes a deformable beam having a closed contour, the deformable beam being connected to the at least two deformable linking beams at a first pair of parts which are opposite to each other in the deformable beam.