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(54) **Title:** SPRING STRUCTURE, RESONATOR, RESONATOR ARRAY AND SENSOR

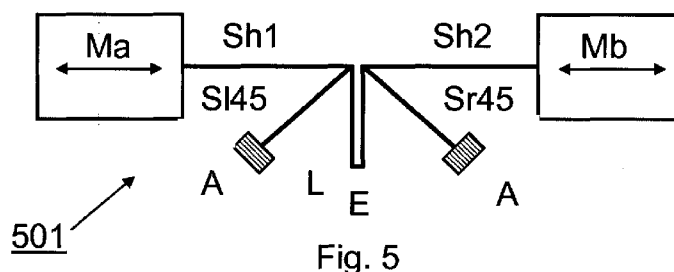


Fig. 5

(57) **Abstract:** The invention presents a spring structure (501), which has at least two masses (Ma, Mb) coupled in a first direction as opposite phase oscillators by means of springs (Sh1, Sh2) connected to them (Ma, Mb), via a loop (L, E) between said springs (Sh1, Sh2) connected to their coupling points, wherein oblique springs (Sl45, Sr45) are connected from said coupling points of the loop (L) to the anchors (A) of the base such that the longitudinal motion of the loop (L) is arranged to occur perpendicularly or substantially perpendicularly to said first direction, to thus attenuate opposite phase oscillation other than that of the masses (Ma, Mb). The invention also presents the use of a spring structure in a resonator and/or in a resonator array as well as in a sensor or a sensor comprising system.

