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(54) **BALANCE-SPRING PIEZOELECTRIC RESONATOR, IN PARTICULAR FOR A TIMEPIECE ROTARY MOTOR**

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(57) **ABSTRACT**

A piezoelectric resonator, in particular for a rotary piezoelectric motor, the resonator including a stationary base and an oscillating mass extending about a longitudinal axis, the oscillating mass being provided with at least one inertia-block, preferably two opposing inertia-blocks, wherein the resonator includes a flexible blade guide connecting the oscillating mass to the base, so that the oscillating mass can be oscillated about a centre of rotation in a pendulum movement, the flexible guide including at least one first flexible blade connected to the base and/or to the oscillating mass to allow the displacement of the oscillating mass relative to the base, the flexible blade guide including a spiral spring connected to the base and/or to the oscillating mass, the spiral spring including at least partially an electrically actuatable piezoelectric material to deform the spiral spring and oscillate the oscillating mass.