

ABSTRACT

METHOD FOR ADJUSTING THE OSCILLATION FREQUENCY
OF A SPRUNG BALANCE FOR A MECHANICAL TIMEPIECE

In order to adjust the oscillation frequency of a sprung balance intended for or fitted to a mechanical timepiece, in a first step a balance spring is manufactured with a greater elastic torque than a reference torque corresponding to the oscillation frequency provided for the sprung balance. Once the sprung balance is assembled,
5 the balance spring is machined by means of a laser beam to reduce its elastic torque until it substantially reaches the reference elastic torque. In particular, the laser machining consists in removing matter in order either to reduce the height of the balance spring in certain regions, or to reduce the thickness of the strip forming said balance spring. This invention allows conventional regulating means, in particular pins
10 associated with an index, to be omitted. This enables working errors of the timepiece as a function of its position, to be avoided.

Figure 3