

Title (en)
TIMEPIECE COMPRISING A MECHANICAL MOVEMENT OF WHICH THE OSCILLATION PRECISION IS REGULATED BY AN ELECTRONIC DEVICE

Title (de)
UHR, DIE EIN MECHANISCHES UHRWERK UMFASST, DESSEN GANGGENAUIGKEIT DURCH EINE ELEKTRONISCHE VORRICHTUNG REGULIERT WIRD

Title (fr)
PIÈCE D'HORLOGERIE COMPRENANT UN MOUVEMENT MÉCANIQUE DONT LA MARCHE EST RÉGULÉE PAR UN DISPOSITIF ÉLECTRONIQUE

Publication
EP 3629103 B1 20210512 (FR)

Application
EP 18197529 A 20180928

Priority
EP 18197529 A 20180928

Abstract (en)
[origin: US2020103826A1] A timepiece includes a mechanical oscillator, formed by a balance and a piezoelectric balance spring, and a control device for controlling the frequency of the mechanical oscillator. This control device is arranged to be capable of generating time-separated control pulses, each including a momentary decrease in an electrical resistance applied by the control device between two electrodes of the piezoelectric balance spring relative to a nominal electrical resistance. The control device is arranged to be capable of applying a plurality of control pulses during each time of a series of distinct correction times or without interruption in a continuous time window, in order to respectively synchronize the mechanical oscillator at a correction frequency whose value depends on a detected positive or negative temporal drift or at a desired frequency for the mechanical oscillator.

IPC 8 full level
G04C 3/04 (2006.01)

CPC (source: CN EP US)
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Cited by
EP4099100A1; EP4130890A1; CN113411135A; CN115437231A; EP4194960A1

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