

Title (en)
MECHANICAL CLOCK MOVEMENT

Title (de)
MECHANISCHES UHRWERK

Title (fr)
MOUVEMENT D'HORLOGERIE MECANIQUE

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Application
EP 17733911 A 20170621

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Abstract (en)
[origin: WO2018002778A1] The invention proposes a clock movement comprising a rotary oscillator (4), a rotary impulse arm (12) for imparting pulses of mechanical energy to the oscillator (4), an energy source (1) and a transmission device (1 – 3) connecting the energy source (1) to the impulse arm (12), the transmission device (1 – 3) comprising a constant-force device (10) for periodically storing a quantity of energy to be supplied to the impulse arm (12). The said amount of energy, the geometry of the impulse arm (12) and the moments of inertia of the impulse arm (12) and of the oscillator (4) are chosen so that each time the impulse arm (12) imparts an impulse to the oscillator (4), the following relationship (I) is more or less satisfied, where I_1 is the moment of inertia of the impulse arm (12), I_2 is the moment of inertia of the oscillator (4), ω_{1i} is the angular velocity of the impulse arm (12) just prior to the impulse it imparts to the oscillator (4), ω_{2i} is the angular velocity of the oscillator (4) just prior to the said impulse, d_1 is the lever arm of the impulse arm (12) and d_2 is the lever arm of the oscillator (4). The invention also proposes a clock movement of the same type with an impulse arm that moves linearly and methods for achieving these movements.

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• EP 2863272 A1 20150422 - MONTRES BREQUET SA [CH]
• EP 2487546 A1 20120815 - MONTRES JOURNE S A [CH]

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