

Title (en)

MECHANICAL TIMEPIECE WITH OPTICAL DETECTING PART AND BRAKING PART

Title (de)

MECHANISCHE UHR MIT EINEM OPTISCHEN DETEKTIONSELEMENT UND EINEM BREMSELEMENT

Title (fr)

PIECE D'HORLOGERIE MECANIQUE A ELEMENT DE DETECTION OPTIQUE ET ELEMENT DE FREINAGE

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Application

EP 00905401 A 20000229

Priority

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Abstract (en)

According to a mechanical timepiece of the invention, a movement 100 includes a barrel complete 120, a center wheel & pinion 124, a third wheel & pinion 126, a fourth wheel & pinion 128, a balance with hairspring 140, an escape wheel & pinion 130 and a pallet fork 142. Coils 180a, 180b are attached to a face of a main plate 102 on a front side to be opposed to a face of a balance wheel 140b on a side of the main plate. A balance magnet 140e is attached to a face of the balance wheel 140b on the side of the main plate to be opposed to the face of the main plate 102 on the front side. The mechanical timepiece of the invention includes a detecting unit 176 provided for detecting a swing angle of the balance with hairspring by detecting an operational state of the balance with hairspring 140 by using light and a braking unit 146 constituted to exert force for restraining rotation of the balance with hairspring 140 to the balance with hairspring 140 when the swing angle of the balance with hairspring 140 detected by the detecting unit 176 is equal to or larger than a previously set angle. <IMAGE>

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