

Title (en)

MECHANICAL TIMEPIECE WITH TIMED ANNULAR BALANCE ROTATING ANGLE CONTROL MECHANISM INCLUDING COILS

Title (de)

MECHANISCHE UHR MIT EINEM MIT SPULEN AUSGERÜSTETEN STEUERMECHANISMUS DES DREHUNGSWINKELS VON DER REGULIERTEN RINGUNRUH

Title (fr)

PIECE D'HORLOGERIE MECANIQUE DOTEÉE D'UN MECANISME DE COMMANDE DE L'ANGLE DE ROTATION DU BALANCIER ANNULAIRE REGLE ET COMPORTANT DES BOBINES

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Application

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Priority

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Abstract (en)

In a mechanical time piece of the invention, a movement 600 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. A plurality of coils 180, 180a, 180b, 180c are attached to a coil bridge 616. A circuit board 612 is attached to the coil bridge 616. The plurality of coils 180, 180a, 180b, 180c are arranged on a front side of a main plate 102 and are conducted by patterns of the circuit board 612. A balance magnet 140e is attached to a face of a balance wheel 140b on the main plate side to be opposed to a face of the main plate 102 on the front side. A clearance between the balance magnet 140e and the coil 180 is determined such that magnetic flux of the balance magnet 140e effects influence on the coil 180 when the coil 180 is conducted. Wiring portions of the plurality of coils 180, 180a, 180b, 180c are arranged on a side of the balance magnet 140e of the circuit board 712. <IMAGE>

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