Title (en)

MULTIPLE CYLINDER INTERNAL-COMBUSTION ENGINE

Publication

EP 0187930 B1 19890719 (DE)

Application

EP 85115114 A 19851128

Priority

DE 3447663 A 19841228

Abstract (en)

[origin: EP0187930A2] 1. Four-cylinder internal-combustion engine having two cylinders (1/2, 11/12) at a time arranged in pairs and coaxially opposite, the longitudinal axes (L1/L2, L11/L12) of the two cylinder pairs (1/2, 11/12) being arranged at an angle of 90 degrees to each other, having a transmission device to convert the translatory movement of the pistons (3/4, 13/14) which slide in the cylinders (1/2, 11/12) and their piston rods (5/6, 15/16) connected rigidly to them into a rotatory movement of an output shaft (21), comprising two frame parts (7, 17) arranged consecutively in the direction of the longitudinal axis (23) of the output shafty (21) and each associated with a cylinder pair (1/2, 11/12), to each of which two piston rods (5/6, 15/16) of a cylinder pair (1/2, 11/12) are fastened immovably by their ends remote from the pistons (3/4, 13/14) and which each exhibit a straight sliding block (8, 18) extending at right angles to the longitudinal axis (L1/L2, L11/l12) of the respective associated cylinder pair (1/2, 11/12), and an eccentric part of the output shaft (21) having a longitudinal axis (24) parallel to its longitudinal axis (24) parallel to its longitudinal axis (23), which slides in the sliding blocks (8, 18) of both frame parts (7, 17), and having at least one balance weight (22), characterized in that the output shaft (21) is constructed as a crankshaft (21) and the eccentric part (10) as a crank pin (10), that the two cylinder pairs (1/2, 11/12) are arranged consecutively in the direction of the longitudinal axis (23) of the crankshaft (21) and that balance weights (22) diametrically opposite the crank pin (10) are provided at both ends of the latter for a virtually total compensation of the reciprocating masses, the balance weights (22) corresponding to an effective radius of the mass, corresponding to the crank radius of one the two masses of one of the two cylinder pairs (1/2, 11/12) in translatory motion.

IPC 1-7

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IPC 8 full level

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CPC (source: EP)

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