

Title (en)

DRIVING SYSTEM FOR TWO OIL PUMPS OF AN INTERNAL COMBUSTION ENGINE WITH RECIPROCATING PISTONS

Publication

**EP 0406527 B1 19930908 (DE)**

Application

**EP 90106688 A 19900406**

Priority

DE 3921715 A 19890701

Abstract (en)

[origin: JPH0343613A] PURPOSE: To make an arrangement compact which engine-drives a main oil pump for lubrication and a second oil pump by driving the respective pumps with an interlocking motion with a crankshaft through a transmission device arranged on the same side as a cam drive. CONSTITUTION: A camshaft drive consisting of an intermediate gear 8 engaging with a crankshaft gear 6 and two chain transmission devices 15, 17 is disposed between a flywheel and an end bearing 5 fixed on the end part of a crankshaft 2 in a multi-cylinder V-type engine. An oil pump 20 having a pump gear 24 covered with a pump cover 25 and interlocking with the gear 7 of the intermediate gear 8 is fitted on the external end surface side of the intermediate gear 8 to supply its delivered oil to a hydraulic camshaft rotating device. A main oil pump 30 driven by the crankshaft 2 through a chain transmission device 31 including a sprocket 33 fixed to the crankshaft 2 near a camshaft drive is provided to supply oil in an oil pan 32 to the lubricating position of the engine.

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IPC 8 full level

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CPC (source: EP US)

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Cited by

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