

Title (en)

HYDRAULIC PUMP WITH ENGINE MOUNTED DRIVE BEARING

Title (de)

HYDRAULISCHE PUMPE MIT ANTRIEBSLAGERUNG IN DER BRENNKRAFTMASCHINE EINGEBAUT

Title (fr)

POMPE HYDRAULIQUE A PALIER D'ENTRAINEMENT MONTE SUR UN MOTEUR

Publication

EP 0966597 A1 19991229 (EN)

Application

EP 98902520 A 19980115

Priority

US 9800641 W 19980115

Abstract (en)

[origin: WO9936686A1] In a vehicle having a drive train including an internal combustion engine with at least one shaft supported for rotation by internal bearings, the improvement comprises a high pressure hydraulic pump assembly rigidly connected to the drive train such that the drive member for the pump includes a cantilevered extension of the shaft from a bearing of the engine. In the preferred context of a rotary fuel injection pump for a diesel engine, the pump can be mounted on the engine at the cantilevered end of the cam shaft, and the timing of the loads generated by the pumping action, can be coordinated with the loads imposed on the cam shaft during engine valve operation, such that the maximum pump load is imposed on the bearings while the bearings are free from any load imposed by valve actuation.

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