Title (en)

Internal combustion engine with oil pump on the camshaft.

Title (de)

Brennkraftmaschine mit Schmierpumpen auf der Nockenwelle.

Title (fr)

Moteur à combustion interne avec pompe à huile sur l'arbre à cames.

Publication

EP 0540977 A1 19930512 (FR)

Application

EP 92118294 A 19921026

Priority

FR 9113769 A 19911106

Abstract (en)

Internal combustion engine whose oil pressure pump (1) with an open casing is blocked off by direct fixing to the cylinder head (5), the moving members of the pump being secured to the cam shaft (20) by means of an axial stop (29). Sealing is provided on the one hand by means of an O-ring (25) between the pump (1) and the cylinder head (5) and, on the other hand, by means of a lip seal (45) and of a breather (51). The axial play (44) which is also involved in sealing, is kept at the desired value by means of the planed washer (47). <??>Application to all engines for which a reduction in weight, bulk and maintenance cost is sought. <IMAGE>

Abstract (fr)

Moteur à combustion interne dont la pompe à pression d'huile (1) à carter ouvert est obturée par fixation directe sur la culasse (5), les organes mobiles de la pompe étant assujettis à l'arbre à cames (20) au moyen d'une butée axiale (29) L'étanchéité est assurée d'une part au moyen d'un joint torique (25) entre la pompe (1) et la culasse (5), d'autre part au moyen d'un joint à lèvre (45) et d'un reniflard (51). Le jeu axial (44), intervenant aussi dans l'étanchéité, est maintenu à la valeur désirée au moyen de la rondelle planée (47). Application à tous moteurs pour lesquels est recherchée une réduction de poids, de l'encombrement, et du coût d'entretien. <IMAGE>

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- [A] PATENT ABSTRACTS OF JAPAN vol. 9, no. 111 (M-379)15 Mai 1985 & JP-A-59 231 116 (NISSAN JIDOSHA KK) 25 Décembre 1984

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