Title (en)

INTERNALLY MESHED OIL PUMP ROTOR ASSEMBLY

Title (de)

ÖLPUMPENROTOREINHEIT MIT INNENVERZAHNUNG

Title (fr)

ASSEMBLAGE DE ROTOR DE POMPE À HUILE À ENGRENAGE INTERNE

Publication

EP 1559912 B1 20151209 (EN)

Application

EP 03769987 A 20031029

Priority

- JP 0313880 W 20031029
- JP 2002314070 A 20021029

Abstract (en)

[origin: EP1559912A1] An oil pump rotor assembly includes an inner rotor (20) having "n" external teeth ("n" is a natural number), and an outer rotor (10) having (n+1) internal teeth which are engageable with the external teeth, the oil pump rotor assembly being used in an oil pump which, during rotation of the inner and outer rotors (20, 10), draws and discharges fluid by volume change of cells (R) formed between the inner and outer rotors (20, 10). The oil pump rotor assembly is configured such that a clearance, which is defined between the teeth of the inner and outer rotors (20, 10) that together form one of the cells (R) which has the minimum volume among the cells, is designated as "a", a clearance, which is defined between the teeth of the inner and outer rotors (20, 10) that together form one of the cells (R) whose volume is increasing during rotation of the inner and outer rotors (20, 10), is designated as "b", and a clearance, which is defined between the teeth of the inner and outer rotors (20, 10) that together form one of the cells (R) which has the maximum volume among the cells, is designated as "c", the following inequalities are satisfied: a ≤ b ≤ c, and a < c. <IMAGE>

IPC 8 full level

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CPC (source: EP KR US)

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