

Title (en)

Internal gear pump with sealings incorporated in the teeth

Title (de)

Sichellose Innenzahnradpumpe mit in die Zahnköpfe eingesetzten Dichtelementen

Title (fr)

Pompe à engrenages internes avec joint d'étanchéité incorporé dans les dents

Publication

EP 0607497 B1 19960612 (DE)

Application

EP 93114117 A 19930903

Priority

DE 4301104 A 19930118

Abstract (en)

[origin: EP0607497A1] The invention relates to a crescent-less internal gear pump with an internally toothed ring gear and a pinion meshing with the ring gear. Pinion and ring gear are rotatably mounted in a casing section which has a suction connection and a discharge connection; the ring gear has radial openings for the medium to be pumped; there is provided, in the tooth tips of the ring gear and in the tooth tips of the pinion, respectively, a profiled groove, into which one sealing element each is inserted which is able to slide on the opposite tooth tip of the pinion or the ring gear, respectively. The invention is characterised by the following features: the profiled groove is - as seen in a section perpendicular to the axis - free of connections; each of the individual sealing elements is provided with a duct which establishes a connection between the interior of the profiled groove and the sealing surface of the sealing element; the duct is enclosed - as seen in the direction of revolution of the pinion - by the material of the sealing element. <IMAGE>

IPC 1-7

F04C 15/00; **F04C 2/10**

IPC 8 full level

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CPC (source: EP US)

F04C 2/102 (2013.01 - EP US); **F04C 15/0019** (2013.01 - EP US)

Cited by

EP0933530A1; US6164943A; US6095782A; EP0661454A1; DE19746769C1; DE19804133A1; EP0933529A3; DE19804134A1; DE4419975A1; US5582514A; DE102020001287A1; EP0933529A2

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