

Title (en)
AXIAL PISTON ENGINE

Title (de)
AXIALKOLBENMASCHINE

Title (fr)
MOTEUR A PISTON AXIAL

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Application
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Abstract (en)
[origin: WO0194751A1] The invention relates to an axial piston engine (1), comprising a housing (2) in whose inner compartment (4) a cylinder drum (17) and a swash plate (26) located axially adjacent thereto are situated. Several piston bores (21) which extend approximately parallel to the central axis of the cylinder drum (17) are located in the same, pistons (23) being displaceably guided in said piston bores. The ends of said pistons facing towards the swash plate (26) are supported on said swash plate (26). A driving shaft (7) is rotatably mounted in the housing (2) and is connected to an engine part in a rotationally fixed manner by a multitooth coupling (19) comprising teeth (43a, 44a) and tooth spaces (43b, 44b) which alternate regularly in a peripheral direction and which engage with each other. At least one feedthrough channel (45) which extends essentially parallel to the axis of rotation of the drive shaft (7) and from one side of the multitooth coupling (19) to the other is located in the area of said multitooth coupling (19). The aim of the invention is to obtain a flow feedthrough and/or a mechanical feedthrough from one side of the multitooth coupling to the other while ensuring that the multitooth coupling is stable and simple to produce. To this end the feedthrough channel (45) is located between at least one tooth crown surface (43d) and a tooth space bottom (44d) located opposite.

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