Title (en)
ROTARY INTERNAL COMBUSTION ENGINES

Title (de)
ROTIERENDE BRENNKRAFTMASCHINE

Title (fr)
MOTEURS A COMBUSTION INTERNE ROTATIFS

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Abstract (en)

[origin: WO9711258A1] A toroidal engine (20) is provided having opposed rotor assemblies (45) supporting pistons (47) arranged on each rotor assembly (45). Part toroidal working chambers are formed between the pistons (47) in which a combustible mixture of air and fuel is compressed and then ignited at minimum working chamber volume forcing the then active pistons (47) and rotor assemblies (45) to accelerate. The rotor assemblies drive a planetary member (50) for rotation about its axis through a sliding pin connection (56). The or each planetary member (50) is supported on a crankpin (51) of a crankshaft (40) and is integral with a planet gear meshed with a sun/annulus gear (53) centered on the crankshaft axis. The crankshaft (40) may be arranged to counter-rotate relative to the rotor assemblies (45) by meshing the planetary member gear (52) with an annulus gear (53) or in the same direction by meshing with a sun gear.

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