

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : F01B 3/04, F02B 57/00, 75/26	A1	(11) International Publication Number: WO 98/06932 (43) International Publication Date: 19 February 1998 (19.02.98)
(21) International Application Number: ☒ PCT/AU97/00506 (22) International Filing Date: ☒ 11 August 1997 (11.08.97) (30) Priority Data: PO 1573 ☒ 9 August 1996 (09.08.96) ☒ AU (71) Applicant (for all designated States except US): ADVANCED ENGINE TECHNOLOGY PTY. LTD. [AU/AU]; Unit 1, 2 Greg Chappell Drive, Burleigh Gardens, QLD 4220 (AU). (72) Inventor; and (75) Inventor/Applicant (for US only): MANTHEY, Steven, Charles [AU/AU]; 490 Tallebudgera Connection Road, Currumbin Valley, QLD 4223 (AU). (74) Agent: AHEARNS; G.P.O. Box 1149, Brisbane, QLD 4001 (AU).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published With international search report.

(54) Title: IMPROVEMENTS IN AXIAL PISTON ROTARY ENGINES

(57) Abstract

A rotary internal combustion engine (200) of the type having a rotor assembly (216) supported in a housing (210) for rotation about a longitudinal axis (217), said housing having two spaced apart end plates (212, 213) and said axis being the axis of rotation of an output shaft (218) operatively connected at one end to said rotor assembly, the other end being free and passing through an aperture in one of said end plates, said rotor assembly including a plurality of pistons (231 to 238) mounted for reciprocating movement in respective cylinders (228) arranged in spaced relation around said longitudinal axis, and cam follower means (254) operatively connected to each piston and adapted to coact with undulating cam track means (225) supported around said axis of rotation and between said end plates, means (215) being provided for conveying combustible fuel to, and for conveying exhaust gases from the operative ends of the cylinders whereby cyclical combustion of said fuel in said cylinders imparts reciprocation to said pistons with resultant thrust against said cam track means so as to cause rotation of said rotor assembly (216) and output shaft (218); characterised in that said undulating cam track means includes an annular track mounted to a support stem or shaft (219) disposed substantially centrally thereof and extending in the direction of said longitudinal axis, said support stem or shaft being supported at one end by the other of said end plates (213) and the axis of said annular cam track means being the axis of rotation of said rotor assembly.

