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(71) Applicant (for all designated States except US): ENGINEAIR PTY LTD [AU/AU]; 5 Export Drive, Brooklyn, VIC 3012 (AU).

(72) Inventor; and

(75) Inventor/Applicant (for US only): DI PIETRO, Angelo

[AU/AU]; 3/99 Sayers Road, Hoppers Crossing, VIC 3029 (AU).

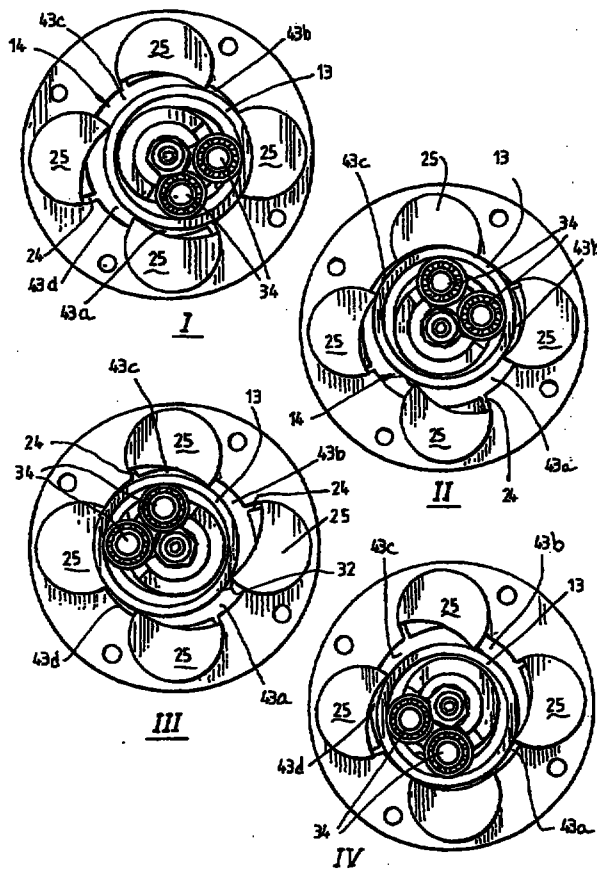
(74) Agent: FREEHILLS CARTER SMITH BEADLE; 101 Collins Street, Melbourne, VIC 3000 (AU).

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(57) Abstract: A non-reciprocating engine comprising a hollow cylindrical shaft driver (13) located in a cylindrical stator cavity (14) of a stator. A number of expansion chambers (43) form between the outer wall of the shaft driver, the stator wall and movable dividers (25) which extend from the stator to bear on the shaft driver. The expansion chambers expand and contract during operation of the engine. An output shaft passes centrally through the stator cavity and shaft driver and has offset bearings (34) which bear on the inside surface of the shaft driver. Inlet ports in a removable inlet end plate of the stator allow pressurised air or air/fuel mixture, for example, to be introduced into the expansion chambers. Sequential expansion and contraction of the chambers around the circumference of the shaft driver causes a combination of orbital and rotational movement of the shaft driver and consequential rotation of the output shaft. The shaft driver rotates at only a fraction of the speed of rotation of the output shaft (in the order of $1/10^{\text{th}}$ - $1/20^{\text{th}}$ the speed of rotation of the output shaft). One orbit of the shaft driver is equivalent to one rotation of the output shaft.