

a main rotor having a central hub mounting a plurality of fixed vanes and a containment ring being concentrically affixed to said fixed vane extremities, rotatably mounted between opposed working fluid confinement plates which provides a segments rotor bearing rotatably supporting a segments rotor comprising overlapping arcuate segments penetrated by said fixed vanes, said segments rotor forming a circular, normally eccentrically disposed working fluid barrier lying substantially within the major diameter of said main rotor and dividing the internal volume of said main rotor into work cycles, said work cycles being further divided into chambers by said fixed vanes; said chambers provided with access to working fluid inlet and outlet ports by rotation of said main rotor; wherein the improvement comprises; said confinement plates can be repositioned as a tandem assembly relative the axis of said main rotor by a lateral adjustment means comprising a plurality of threaded boltlike members and said main rotor is rotatably supported by a mounting means essentially independent of said confinement plates.

- 2. The device of claim 1, wherein said lateral adjustment means is provided with an adjustable tension means.
- 3. The device of claim 2, wherein a segment penetration seal can be located between radially adjacent segments penetrated by the same rotor vane.
- 4. The device of claim 1, wherein internal coolant passages are provided within said main rotor, inducting coolant at the hub of said main rotor and centrifugally discharging said coolant via openings provided in said containment ring.
- 5. The device of claim 1, wherein one of said work cycles is provided with combustion air and a fuel admixing and ignition means; said combustion air being provided by the second of said work cycles.
- 6. The device of claim 5, wherein fuel mixing is substantially performed by the flow of combustion air through the venturi like pinchpoint gap between sub-chambers of said work cycle used as the power cycle.
- 7. The device of claim 6, wherein the effective compression ratio of said power cycle is regulated by said lateral adjustment means.
- 8. The device of claim 7, wherein said ignition means is provided by the heat of compression of said combustion air.

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