

Title (en)
ROTARY MACHINE WITH SWINGING PISTONS

Title (de)
DREHMASCHINE MIT SCHWINGKOLBEN

Title (fr)
MACHINE ROTATIVE À PISTONS OSCILLANTS

Publication
EP 2494208 A2 20120905 (EN)

Application
EP 10776441 A 20101015

Priority
• US 60737009 A 20091028
• PL 2010000103 W 20101015

Abstract (en)
[origin: US2010143174A1] A rotary working machine is provided. The machine includes an assembly of working chambers with periodically variable volume disposed in a central block defining a stator. The inside surfaces of the stator direct a pendulum motion of one or more blade-type working elements disposed in respective one or more cylindrical sockets of a cylindrical rotator that is disposed within an interior of the camshaft form stator. The rotator is connected to an external prime mover for providing torque thereto. An angle of contact between a front cylindrical surface of the blade-type working elements and the internal curved space of the camshaft form stator defines a working chamber of variable volume, the working chamber of variable volume is connected during rotator revolution correspondingly with an inside pipe of a camshaft and an annular slot that is configured to evacuate compressed gas disposed within the working chamber of variable volume. The outline of a cross-sectional of opening of the camshaft form stator disposed in a vertical plane to with respect to an axis of the cylindrical rotator constitutes the equidistant line to a curve that is described on an immobile plane perpendicular to the axis of the cylindrical rotators by a Radziwill curve. A defined relationship exists between the rotation angle of the cylindrical rotator and the deflection angle of an axis of the working element/

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