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(54) Title: PISTON MACHINE

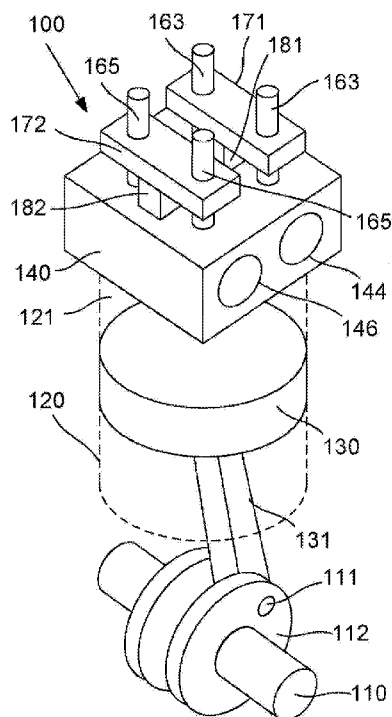


Fig. 1A

(57) Abstract: A piston machine including: a crankshaft; a cylinder defining an internal chamber; a piston positioned in the chamber, the piston being connected to the crankshaft and being configured to reciprocate inside the chamber; a head attached to the cylinder and closing the chamber at an end opposing the piston. The head includes at least one port group including ports for allowing fluid communication between the chamber and a respective manifold; and for each port group, a valve arrangement coupled to the head, each valve arrangement including, a valve for operatively controlling fluid flow through the respective port and a bridge coupled to the valves, wherein movement of the bridge relative to the head causes synchronised operation of the valves; and, an actuator for causing the bridge to move based on the reciprocation of the piston.



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