

Title (en)
HOT AIR ENGINE

Title (de)
HEISSLUFTMOTOR

Title (fr)
MOTEUR À AIR CHAUD

Publication
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Application
EP 20723922 A 20200210

Priority
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• IB 2020051024 W 20200210

Abstract (en)
[origin: WO2020161684A1] Hot air engine comprising - at least one compression cylinder (1) connected to a delivery manifold and an inlet manifold for the input and output from the cylinder (1) of an operating fluid, - at least one expansion cylinder (2) connected to an expansion manifold and to an exhaust manifold for the input and output from the cylinder (2) of an operating fluid, - a transmission system of the movement of the expansion (2) and compression cylinder (1) pistons to a system for transforming the movement into electric power. Each cylinder (1, 2) is connected with each manifold through a valve (4), so as to allow or prevent the passage of the operating fluid from the cylinder (1, 2) to the manifold and vice versa. Each valve has a valve seat (40) and a closing element (41), which closing element (41) is mounted rotatably with respect to said valve seat (40), so that the closing condition of the valve corresponds to an overlapping condition of said closing element (41) with respect to said valve seat (40), while the opening condition of said valve corresponds to a non- overlapping or partially overlapping condition of said closing element (41) with respect to said valve seat (40). Furthermore, the said closing element (41) is mounted in a translatable manner with respect to said valve seat (40) in the direction of the manifold and the cylinder, so that a translation of the said closing element (41) allows the passage of the operating fluid even in the overlapping condition of the closing element (41) with the said valve seat (40).

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