

Title (en)
A SYSTEM FOR COMPRESSING AND EJECTING OF PISTON ENGINES

Title (de)
HUBKOLBENMASCHINE MIT KOMPRESSION UND INJEKTION

Title (fr)
SYSTEME DE COMPRESSION ET D'EJECTION POUR MOTEURS A PISTONS

Publication
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Application
EP 00930892 A 20000525

Priority
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• BG 10350499 A 19990618

Abstract (en)
[origin: WO0079104A1] The system is designed for compressing and ejecting of piston engines, with a field of application in the transport, in the power engineering and in any field of engineering where engines are used. Unlike the steam, gas and gas-steam thermodynamic cycles used up to now, it is an object of the proposed invention to create a system for compressing and ejecting of piston engines which to realize an air-steam thermodynamic cycle. The invention creates a possibility to increase the thermal efficiency of the piston engine up to 80-85 % taking into consideration that the steam is used to compensate the energy loss in the cycle reversibility only (mass flow about 20-30 %) but not in the full working volume of the engine as it is in the steam engine and the steam turbine. The system for compressing and ejecting consists of a steam generator (SG), an ejector (E), a piston engine (PE), a steam-air turbine (T), an air compressor (K), a thermo exchanger (TE), a condenser (C), a piston condensate pump (PC), a sweat-reservoir (SR) and control valves (CV).

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