

Title (en)  
THERMO-KINETIC COMPRESSOR

Title (de)  
THERMOKINETISCHER VERDICHTER

Title (fr)  
COMPRESSEUR THERMOCINETIQUE

Publication  
**EP 1269025 A1 20030102 (FR)**

Application  
**EP 01907689 A 20010125**

Priority  
• FR 0100230 W 20010125  
• FR 0001881 A 20000216

Abstract (en)  
[origin: US6935096B2] A device for compressing gas using thermal energy. In a subsonic embodiment the heat gas passes through a convergent pipe C 1 where it is provided with operating velocity, a convergent pipe C 2 where it is simultaneously maintained at high speed and cooled by evaporation of liquid sprayed by nozzles R with adjustable position distributed in C 2. In a supersonic embodiment, the gas reaches sonic velocity at the throat of C 2 and supersonic velocity in a divergent DG, then compressed in a convergent CG 1 and simultaneously cooled by evaporation of sprayed liquid. In both embodiments, the gas is finally compressed in a subsonic divergent DG 1. Pipes with variable geometry enable to modify the cross-sections of the throats of the device. The device is essentially designed for thermoelectric power stations.

IPC 1-7  
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IPC 8 full level  
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Cited by  
FR2981981A1; US5834093A

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**WO 0161196 A1 20010823**; AT E389811 T1 20080415; AU 3559801 A 20010827; CA 2399580 A1 20010823; CA 2399580 C 20080422; DE 60133268 D1 20080430; DE 60133268 T2 20090423; DK 1269025 T3 20080630; EP 1269025 A1 20030102; EP 1269025 B1 20080319; ES 2303524 T3 20080816; FR 2805008 A1 20010817; FR 2805008 B1 20020531; PT 1269025 E 20080710; RU 2286483 C2 20061027; US 2003012658 A1 20030116; US 6935096 B2 20050830

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