

Title (en)  
HOT-FLUID MACHINE

Title (de)  
HEISSFLUIDMASCHINE

Title (fr)  
MACHINE À FLUIDE CHAUD

Publication  
**EP 4314531 A1 20240207 (DE)**

Application  
**EP 22717338 A 20220325**

Priority  
• AT 662021 A 20210326  
• AT 2022000002 W 20220325

Abstract (en)  
[origin: WO2022198246A1] The invention relates to a hot-fluid machine consisting of two displacement cylinder assemblies (1, 2) with an interposed expander (3) comprising a coupled generator, said assemblies cooperating in opposite directions. The expansion side is heated, and the compression side is cooled. The recuperators (18, 19) of the displacement pistons (4, 5) are also heated on the expansion side and are cooled on the compression side. The fluid is injected into the expansion chamber (12) of the first cylinder (1) and is evaporated, the steam flows through the expander (3) and the regenerator (17) of the second cylinder (2) and into the compression chamber (15) thereof and is condensed, and the fluid is collected in a fluid pan (7). The displacement pistons (4, 5) are pivoted by a pivoting lever (8), fluid is injected into the expansion chamber (13) of the second cylinder (2) and is evaporated, the steam flows through the expander (3) and the regenerator (16) and into the compression chamber (14) of the first cylinder (1) and is condensed, and the fluid is collected in a fluid pan (6). The displacement pistons are pivoted back and the process is repeated.

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