

Title (en)  
Stirling engine with heat exchanger

Title (de)  
Stirlingmaschine mit Wärmetauscher

Title (fr)  
Moteur Stirling avec échangeur de chaleur

Publication  
**EP 0570731 B1 19960221 (DE)**

Application  
**EP 93106852 A 19930428**

Priority  
DE 4216839 A 19920521

Abstract (en)  
[origin: EP0570731A1] A Stirling engine in which a displacer plate 5 can be moved backwards and forwards between two housing plates 1, 2, the said displacer plate being without sliding friction relative to the ends 10 of the housing along the circumference, is known. It is desirable here for the Stirling engine to be designed for larger output ranges with a reduced outlay on construction by making the housing plates and the displacer plate as large as possible, taking into consideration the resistance to pressure of the housing. This is achieved by virtue of the fact that the two housing plates 1, 2 are held at a distance from one another by struts 3 arranged in a distributed manner, the struts extending at right angles to the displacer plate 5 and passing through the latter, and by virtue of the fact that the displacer plate 5 is guided along its end edges relative to the ends 10 of the housing by linear rolling diaphragms 9. The housing plates are reinforced over the surface area by the struts and the displacer plate is guided exactly parallel with regard to the struts by the rolling diaphragms. <IMAGE>

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**F02G 1/043**

IPC 8 full level  
**F02G 1/043** (2006.01); **F02G 1/055** (2006.01); **F02G 1/057** (2006.01); **F25B 9/14** (2006.01)

CPC (source: EP KR US)  
**F02G 1/04** (2013.01 - KR); **F02G 1/043** (2013.01 - EP US); **F02G 2244/00** (2013.01 - EP US); **F02G 2254/30** (2013.01 - EP US); **F02G 2257/00** (2013.01 - EP US); **F02G 2270/50** (2013.01 - EP US)

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