

Title (en)  
PISTONPUMP FOR CRYOGENIC LIQUIDS

Publication  
**EP 0253122 A3 19880810 (DE)**

Application  
**EP 87108050 A 19870604**

Priority  
DE 3621727 A 19860628

Abstract (en)  
[origin: US4792289A] In a reciprocating pump for cryogenic fluids comprising a pump cylinder in which a piston is oscillatingly displaceable in a sealed state, an inlet valve and an outlet valve, and an annular channel surrounding the pump cylinder on the outer side and forming an outlet for the cryogenic fluid delivered by the pump, in order to attain optimum sealing at the operating temperatures, without the piston motion being impeded at higher temperatures, it is proposed that the cylinder be made of a material with good sliding and self-lubricating properties and a thermal expansion coefficient which is larger than that of the piston, that the dimensions of the cylinder and the piston be so selected that the piston sealingly contacts the inside wall of the cylinder at operating temperature, and that the outlet valve be arranged at the downstream end of the annular channel.

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**F04B 15/08**; **F04B 15/06**

IPC 8 full level  
**F04B 15/08** (2006.01); **F04B 53/14** (2006.01)

CPC (source: EP US)  
**F04B 15/08** (2013.01 - EP US); **Y10S 417/01** (2013.01 - EP US); **Y10S 417/901** (2013.01 - EP US)

Citation (search report)  
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• [A] GB 751062 A 19560627 - UNION CARBIDE & CARBON CORP  
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