

Title (en)  
Joule-Thomson cryostat

Title (de)  
Joule-Thomson Kryostat

Title (fr)  
Cryostat Joule-Thomson

Publication  
**EP 0747644 A2 19961211 (EN)**

Application  
**EP 96108475 A 19960528**

Priority  
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Abstract (en)  
A load temperature regulated, adaptive-orifice, Joule-Thomson cryostat which controls refrigeration output by servo-controlled gas flow regulation at the Joule-Thomson cryostat expansion, or throttling, orifice. The mechanism consists of a variable aperture needle valve 19 with an expansion orifice that is controlled by a miniature, electrically driven transducer 41, using closed-loop feedback control 59 which monitors 51 the temperature at or on a thermal load point and adjusts the gas throughput so as to maintain a desired cold temperature constant at the load 15. <IMAGE>

IPC 1-7  
**F25B 9/02**

IPC 8 full level  
**F16K 31/70** (2006.01); **F25B 9/02** (2006.01)

CPC (source: EP)  
**F25B 9/02** (2013.01); **F25B 2309/022** (2013.01)

Cited by  
CN110195995A; FR2930677A1; CN112730505A; WO2008047357A2; US9010134B2; WO9923426A1; WO2012049673A3; WO2009130137A1; WO2007017866A1

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