

Title (en)

Cryopump with rapid cooldown and increased pressure stability.

Title (de)

Kryopumpe mit Schnellkühlung und erhöhter Druckstabilität.

Title (fr)

Pompe cryostatique avec réfrigération rapide et stabilité de pression améliorée.

Publication

**EP 0126909 A2 19841205 (EN)**

Application

**EP 84103732 A 19840404**

Priority

US 48178383 A 19830404

Abstract (en)

In a cryopump, condensation of gases such as argon, oxygen and nitrogen on surfaces other than the second stage array 38, 40 is avoided to prevent cross over hang up and pressure instability. To prevent condensation of argon, oxygen and nitrogen on the frontal cryopumping array 46, that array is held to a temperature of at least 50 K. A heat load to the first stage increases as the temperature of the first stage drops. That heat load is provided by a high emissivity radiation shield 44 or by a thermal switch 56, 58. Condensation of argon and other gases on the second stage refrigerator cylinder 32 is avoided by a close fitting sleeve 52 positioned over the refrigerator cylinder 32 in thermal contact with the second stage heat sink 30 but out of thermal contact with the cylinder 32.

IPC 1-7

**F04B 37/08**

IPC 8 full level

**F04B 37/08** (2006.01)

CPC (source: EP)

**F04B 37/08** (2013.01)

Cited by

GB2191247A; GB2191247B; EP0338113A1; US4953359A; US4718241A; CN117489563A; US11274857B2; WO8505410A1; WO8702743A1

Designated contracting state (EPC)

CH DE FR GB IT LI NL

DOCDB simple family (publication)

**EP 0126909 A2 19841205; EP 0126909 A3 19850123; EP 0126909 B1 19870722**; CA 1220948 A 19870428; DE 3464948 D1 19870827; IL 71403 A0 19840629; IL 71403 A 19910131; JP H0549826 B2 19930727; JP S59218372 A 19841208

DOCDB simple family (application)

**EP 84103732 A 19840404**; CA 451154 A 19840403; DE 3464948 T 19840404; IL 7140384 A 19840329; JP 6730384 A 19840404