

Title (en)
Joule-Thomson cooling device.

Title (de)
Joule-Thomson-Kühlvorrichtung.

Title (fr)
Refroidisseur Joule-Thomson.

Publication
EP 0388277 A2 19900919 (FR)

Application
EP 90400656 A 19900313

Priority
FR 8903383 A 19890315

Abstract (en)
The obturator (16) of this cooling device is controlled by a bulb actuator (18) which comprises an auxiliary gas capacity (24) arranged in the cold part of the cooling device and connected to a chamber (21) of much greater volume arranged in the hot part of the cooling device. <??>Application to cooling of infra-red detectors. <IMAGE>

IPC 1-7
F25B 9/02; **G05D 23/12**

IPC 8 full level
F25B 9/02 (2006.01)

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

Cited by
CN110274404A; EP0582817A1; WO2012052278A1

Designated contracting state (EPC)
BE CH DE ES FR GB IT LI SE

DOCDB simple family (publication)
EP 0388277 A2 19900919; **EP 0388277 A3 19901128**; **EP 0388277 B1 19930818**; DE 69002783 D1 19930923; DE 69002783 T2 19931209; FR 2645256 A1 19901005; FR 2645256 B1 19941223; IL 93708 A0 19901223; IL 93708 A 19921201; NO 172263 B 19930315; NO 172263 C 19930623; NO 901131 D0 19900312; NO 901131 L 19900917; US 5003783 A 19910402

DOCDB simple family (application)
EP 90400656 A 19900313; DE 69002783 T 19900313; FR 8903383 A 19890315; IL 9370890 A 19900312; NO 901131 A 19900312; US 49370690 A 19900315