

Title (en)

Autonomous energy supply device for a gas driven apparatus and its use in a freezing plant

Title (de)

Vorrichtung zur autonomen Energiespeisung eines gasgetriebenen Geräts und seine Anwendung in einer Gefrieranlage

Title (fr)

Dispositif autonome d'alimentation en énergie d'un appareil animé par un gaz sous pression et application à une installation de congélation

Publication

EP 0625630 B1 19970709 (FR)

Application

EP 94400685 A 19940330

Priority

FR 9304501 A 19930416

Abstract (en)

[origin: JPH06307599A] PURPOSE: To provide a self-contained device superior in strength and reliability and adapted to foods refrigeration equipment in particular by connecting two meandering tubes to a cryogenic liquid reservoir, connecting them to a pump respectively and arranging check valves, carburetors, and control valves therein. CONSTITUTION: A cryogenic liquid reservoir 1 is formed of double walls 11 , 22 and connected to two meandering tubes 21 , 22 for taking out the cryogenic liquid stored therein. The both meandering tubes 21 , 22 have both check valves 41 , 42 , both carburetors 51 , 52 and both control valves 61 , 62 arranged therein. A pump 7 is connected to the both meandering tubes 21 , 22 to pump the taken- out cryogenic liquid to using facilities, for example, foods refrigeration equipment. The both control valves 61 , 62 are controlled by a converter 9 and an electronic controller 12 based on the both pressure of the respective meandering tubes 21 , 22 . On the other hand, both portable grips 181 , 182 are attached to the upper part of the cryogenic liquid reservoir 1.

IPC 1-7

F01K 25/10; **F17C 9/02**; **F17C 9/00**

IPC 8 full level

F17C 3/08 (2006.01); **F01K 25/08** (2006.01); **F17C 9/02** (2006.01)

CPC (source: EP US)

F01K 25/08 (2013.01 - EP US); **F17C 9/02** (2013.01 - EP US); **F17C 2201/0119** (2013.01 - EP US); **F17C 2203/013** (2013.01 - EP US); **F17C 2203/0629** (2013.01 - EP US); **F17C 2205/0323** (2013.01 - EP US); **F17C 2221/014** (2013.01 - EP US); **F17C 2223/0161** (2013.01 - EP US); **F17C 2227/0135** (2013.01 - EP US); **F17C 2227/0393** (2013.01 - EP US)

Cited by

GB2338034A

Designated contracting state (EPC)

BE DE DK ES IT NL SE

DOCDB simple family (publication)

FR 2704026 A1 19941021; **FR 2704026 B1 19950519**; BR 9401492 A 19941025; DE 69404085 D1 19970814; DE 69404085 T2 19980122; DK 0625630 T3 19971208; EP 0625630 A1 19941123; EP 0625630 B1 19970709; ES 2104298 T3 19971001; JP H06307599 A 19941101; US 5442927 A 19950822

DOCDB simple family (application)

FR 9304501 A 19930416; BR 9401492 A 19940415; DE 69404085 T 19940330; DK 94400685 T 19940330; EP 94400685 A 19940330; ES 94400685 T 19940330; JP 6581394 A 19940404; US 21934894 A 19940329