

Title (en)

COLD-GAS SUPPLY DEVICE FOR A NMR-APPLIANCE

Title (de)

VORRICHTUNG ZUR KALTGASEINSPEISUNG EINER NMR-ANLAGE

Title (fr)

DISPOSITIF D'ALIMENTATION EN GAZ FROIDS POUR UNE INSTALLATION RMN

Publication

EP 2584294 B1 20170322 (FR)

Application

EP 12306262 A 20121012

Priority

FR 1159356 A 20111017

Abstract (en)

[origin: EP2584294A1] The device (1) has an insulated tank (4) containing liquid gas (5) at a boiling point and arranged exchangers (6, 6', 6'') through gas streams to be cooled with exchangers that are connected with transfer lines (7, 7', 7''). An additional exchanger (8) ensures the pre-cooling of cold gas designed to cool a sample that is supplied with gaseous vapor (5') produced by the boiling of the liquid gas. Additional exchangers (8', 8'') ensure the pre-cooling of the cold gases to ensure the lift and rotation of the samples supplied by the gases that are evacuated.

IPC 8 full level

F25D 3/10 (2006.01); **F17C 9/02** (2006.01)

CPC (source: EP US)

F17C 9/02 (2013.01 - US); **F25D 3/10** (2013.01 - EP US); **F17C 9/04** (2013.01 - US); **F17C 13/007** (2013.01 - US); **F17C 2227/0339** (2013.01 - US); **F17C 2227/0372** (2013.01 - US); **F17C 2227/0374** (2013.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

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DOCDB simple family (application)

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