

Title (en)

Thermoacoustic refrigerator for cryogenic freezing

Title (de)

Thermoakustischer K hlschrank zum kryogenen Einfrieren

Title (fr)

R frig rateur thermo-acoustique pour cong lation cryog nique

Publication

**EP 2226595 A3 20141224 (EN)**

Application

**EP 10002243 A 20100304**

Priority

US 39969709 A 20090306

Abstract (en)

[origin: EP2226595A2] A refrigeration system includes a cooler or freezer enclosure; a heat exchanger within the enclosure; a bulk storage tank (12) in fluid communication with the heat exchanger (16); a sound generator (18) in fluid communication with the heat exchanger (16); a thermoacoustic refrigerator (20) in acoustic communication with the sound generator (18); and an indirect heat exchange loop (68) in heat transfer contact with the thermoacoustic refrigerator. The heat exchanger (16) is adapted to receive pressurized fluid from the bulk storage tank (12), and to provide pressurized gas to the sound generator (18).

IPC 8 full level

**F25B 9/14** (2006.01)

CPC (source: EP US)

**F25B 9/145** (2013.01 - EP US); **F25D 3/10** (2013.01 - EP US); **F25B 2309/1402** (2013.01 - EP US)

Citation (search report)

- [A] GB 2263538 A 19930728 - LEWIS MICHAEL HILARY CHRISTOPH [GB]
- [A] US 5319948 A 19940614 - BLUM ARNOLD [DE], et al
- [A] US 3314244 A 19670418 - GREEN FREDERICK H
- [A] US 3653225 A 19720404 - MARCHAL PHILIPPE ALBERT HIPPOL, et al

Cited by

EP2269474A3; CN105650923A; EP3141846A1

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA ME RS

DOCDB simple family (publication)

**EP 2226595 A2 20100908; EP 2226595 A3 20141224; EP 2226595 B1 20150923**; DK 2226595 T3 20151214; US 2010223934 A1 20100909

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