

Title (en)

Thermoacoustic refrigerator for cryogenic freezing

Title (de)

Thermoakustischer Kühlschrank zum kryogenen Einfrieren

Title (fr)

Réfrigérateur thermo-acoustique pour congélation cryogénique

Publication

EP 2226595 A2 20100908 (EN)

Application

EP 10002243 A 20100304

Priority

US 39969709 A 20090306

Abstract (en)

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)

Cited by

CN105650923A; EP3141846A1; EP2269474A3

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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