

Title (en)
Cryogenic refrigerator coupling structure

Title (de)
Kryogenkühlschrankskopplungsstruktur

Title (fr)
Structure de couplage de réfrigérateur cryogène

Publication
EP 2426442 A3 20150422 (EN)

Application
EP 11176360 A 20110802

Priority
JP 2010174082 A 20100803

Abstract (en)
[origin: EP2426442A2] For providing a refrigerator coupling structure for enabling attaching/detaching and re-cooling of the refrigerator in a short time-period, by suppressing a heat movement from the refrigerator at the room temperature to an object to be cooled, which is cooled down to cryogenic temperature when attaching a cryogenic refrigerator thereon, while suppressing a volume of heat invasion into the object to be cooled, it has a heat contact portion (12,72) having a flexible portion (11) at least in a part thereof, which is coupled with a cold stage of the cryogenic refrigerator (1), wherein on an outer peripheral portion of this heat contact portion is provided a heat contracting ring (5), which has a heat contraction rate larger than that of the heat contact portion.

IPC 8 full level
F25D 19/00 (2006.01); **F25B 9/10** (2006.01)

CPC (source: EP US)
F25D 19/006 (2013.01 - EP US); **F25B 9/10** (2013.01 - EP US)

Citation (search report)
• [XY] US 5853198 A 19981229 - RICHIED DONALD E [US], et al
• [YA] US 2009272127 A1 20091105 - RADOVINSKY ALEXEY L [US], et al

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2426442 A2 20120307; **EP 2426442 A3 20150422**; CN 102425875 A 20120425; CN 102425875 B 20150204; JP 2012032125 A 20120216; JP 5520740 B2 20140611; US 2012031110 A1 20120209

DOCDB simple family (application)
EP 11176360 A 20110802; CN 201110225351 A 20110803; JP 2010174082 A 20100803; US 201113195891 A 20110802