

Title (en)
SUPERCOOLING APPARATUS

Title (de)
UNTERKÜHLUNGSVORRICHTUNG

Title (fr)
DISPOSITIF DE SURFUSION

Publication
EP 2188580 A2 20100526 (EN)

Application
EP 08723413 A 20080311

Priority
• KR 2008001376 W 20080311
• KR 20070093894 A 20070914

Abstract (en)
[origin: WO2009035195A2] The present invention relates to a supercooling apparatus which maintains an object and liquid in a supercooled state. According to the present invention, a supercooling apparatus includes a cooling chamber supplied with cool air, and a heating device for preventing freezing of water by heating air over a container storing an object or liquid and cooled in the cooling chamber. In this configuration, the air over the container where ice crystals are easily formed is heated to prevent freezing of water stored in the container and store water in a supercooled state.

IPC 8 full level
A23L 3/32 (2006.01); **A23L 3/36** (2006.01); **F25D 31/00** (2006.01)

CPC (source: EP KR US)
F25D 11/00 (2013.01 - KR); **F25D 21/00** (2013.01 - KR); **F25D 21/08** (2013.01 - KR); **F25D 23/00** (2013.01 - KR); **F25D 23/126** (2013.01 - EP US); **F25D 2323/023** (2013.01 - EP US); **F25D 2331/803** (2013.01 - EP US); **F25D 2400/02** (2013.01 - EP US)

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
WO 2009035195 A2 20090319; **WO 2009035195 A3 20090911**; CN 101970963 A 20110209; CN 101970963 B 20130508; EP 2188580 A2 20100526; EP 2188580 A4 20130313; KR 101439540 B1 20140911; KR 20090028361 A 20090318; US 2010242524 A1 20100930

DOCDB simple family (application)
KR 2008001376 W 20080311; CN 200880104510 A 20080311; EP 08723413 A 20080311; KR 20070093894 A 20070914; US 67396008 A 20080311