

Title (en)  
TEMPERATURE CONTROLLED CARGO CONTAINERS

Title (de)  
TEMPERATURGESTEUERTE GEPÄCKBEHÄLTER

Title (fr)  
CONTENEURS À TEMPÉRATURE RÉGULÉE

Publication  
**EP 2480844 A4 20180124 (EN)**

Application  
**EP 10817879 A 20100917**

Priority  
• US 24423209 P 20090921  
• US 70580310 A 20100215  
• US 2010049246 W 20100917

Abstract (en)  
[origin: US2011067852A1] Temperature controlled cargo containers may include thermal masses conditioned to temperatures above and/or below a target temperature. Example thermal masses may include plates including phase change materials, such as eutectic materials. One or more fans may be selectively operated to circulate air in the cargo container across one or more of the thermal masses to maintain the temperature within the cargo container within a prescribed temperature band. Some example temperature controlled cargo containers may include refrigeration units and/or heaters for regenerating the thermal masses when receiving power from an external power source and/or may include one or more rechargeable batteries for providing power during transport or storage independent of external power sources.

IPC 8 full level  
**F25D 3/08** (2006.01); **B65D 88/74** (2006.01); **F25D 11/00** (2006.01); **F25D 17/02** (2006.01); **F25D 17/06** (2006.01); **F25D 23/12** (2006.01)

CPC (source: EP US)  
**B65B 63/08** (2013.01 - US); **B65D 88/74** (2013.01 - US); **B65D 88/745** (2013.01 - EP US); **F25D 11/003** (2013.01 - EP US); **F25D 11/006** (2013.01 - EP US); **F25D 17/02** (2013.01 - EP US); **F25D 17/06** (2013.01 - EP US); **F25D 23/12** (2013.01 - EP US); **F25B 2400/06** (2013.01 - EP US); **F25D 2400/02** (2013.01 - EP US)

Citation (search report)  
• [X] US 4037650 A 19770726 - RANDALL JOHN EDWARD  
• [X] DE 3843287 A1 19900628 - REHAHN KLAUS [DE]  
• [A] US 5159973 A 19921103 - PENNINGTON JAMES Q [US], et al  
• See references of WO 2011035102A1

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 SE SI SK SM TR

DOCDB simple family (publication)  
**US 2011067852 A1 20110324**; EP 2480844 A1 20120801; EP 2480844 A4 20180124; US 2015158667 A1 20150611;  
US 2015166262 A1 20150618; US 2017131014 A1 20170511; US 2017131015 A1 20170511; WO 2011035102 A1 20110324

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**US 70580310 A 20100215**; EP 10817879 A 20100917; US 2010049246 W 20100917; US 201514626285 A 20150219;  
US 201514626375 A 20150219; US 201715415350 A 20170125; US 201715416010 A 20170126