

Title (en)  
Improved cryogenic freezer

Title (de)  
Tiefgefriervorrichtung

Title (fr)  
Congélateur cryogénique

Publication  
**EP 1477752 A3 20050608 (EN)**

Application  
**EP 04252790 A 20040513**

Priority  
US 43765503 A 20030514

Abstract (en)  
[origin: EP1477752A2] A rectangular double walled cryogenic freezer (10,110) has a vacuum space (16,116) filled with alternating layers of flexible insulating material (20,120) and a reflective material (18,118). A support structure (22,122) is also positioned in the vacuum space (16,116). The support structure (22,122) is open-celled and provides structural support for the freezer walls to prevent wall deformation when a vacuum is drawn. The support structure (22,122) may be open-cell rigid foam (122) or a support grid (22) sandwiched between two layers of rigid insulation material (26a,26b). <IMAGE>

IPC 1-7  
**F25D 23/06**; F25D 3/10; F16L 59/06

IPC 8 full level  
**F25D 3/10** (2006.01); **F25D 23/06** (2006.01)

CPC (source: EP US)  
**F25D 3/10** (2013.01 - EP US); **F25D 23/06** (2013.01 - EP US); **F25D 2201/124** (2013.01 - EP US); **F25D 2201/1262** (2013.01 - EP US); **F25D 2201/1282** (2013.01 - EP US); **F25D 2201/14** (2013.01 - EP US)

Citation (search report)

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