

Title (en)
Container and cooling method

Title (de)
Behälter und Verfahren zum Kühlen

Title (fr)
Conteneur et procédé de réfrigération

Publication
EP 0915309 A3 19990818 (DE)

Application
EP 98120468 A 19981029

Priority
DE 19749055 A 19971106

Abstract (en)
[origin: EP0915309A2] The container has an outlet for carbon dioxide. Means are arranged in the outlet to lead gaseous carbon dioxide from the container. The container is thermally insulated and is divided internally into two compartments, one for the items to be cooled and one to contain the refrigerant. The wall separating the two compartments is porous. The refrigerant is carbon dioxide snow and the porosity is required to allow cold gas to penetrate the items. The refrigerant section is at the top layer of the container so that cold gas, which is denser than air, can gravitate downwards. Surplus gas is withdrawn at the top by a fan, through a hood, from an opening in the lid. This opening is normally covered by an insulated flap which forms part of the external insulation of the box and is held in place by well-known fasteners. Liquid carbon dioxide, from a container at a pressure up to 72 bar, is injected by a probe and forms snow immediately on release.

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F25D 3/12; C01B 31/20

IPC 8 full level
F25D 3/12 (2006.01)

CPC (source: EP)
F25D 3/125 (2013.01)

Citation (search report)
• [XY] US 5511379 A 19960430 - GIBOT CLAUDE [FR], et al
• [YA] US 5657642 A 19970819 - REZNIKOV LEV [US], et al
• [Y] US 4741167 A 19880503 - WIGLEY FREDDIE J [US]
• [X] US 1876915 A 19320913 - SAMUEL GORDON
• [A] US 4907423 A 19900313 - HASE GARY [US]

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

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EP 0915309 A2 19990512; EP 0915309 A3 19990818; DE 19749055 A1 19990527; DE 19749055 C2 20030508; EG 22228 A 20021130;
ZA 9810062 B 19990504

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EP 98120468 A 19981029; DE 19749055 A 19971106; EG 136898 A 19981105; ZA 9810062 A 19981103