

Title (en)  
Heat transfer device

Title (de)  
Wärmeübertragungsvorrichtung

Title (fr)  
Dispositif de transfert de chaleur

Publication  
**EP 1022523 A1 20000726 (EN)**

Application  
**EP 00300530 A 20000125**

Priority

- GB 9900255 W 19990125
- GB 9917570 A 19990728

Abstract (en)  
A self cooling can (410) has water on a pre-wetted wick (478), in a chamber (417) and an adsorbent (418) in another chamber (419) communicable upon actuation of the can with the chamber. One or both of the chambers is at low pressure. Upon actuation the pressure over the wick drops, water vapour is absorbed by the adsorbent from the internal atmosphere and more water evaporates from the wick to replace it, thereby causing a cooling effect. Heat generated in the adsorbent may be contained by heat take-up means, such as phase change material (800) or microcapsules of high heat capacity material such as water. <IMAGE>

IPC 1-7  
**F25B 17/08**; B01F 13/00

IPC 8 full level  
**F25B 17/08** (2006.01); **F25D 31/00** (2006.01)

CPC (source: EP)  
**F25B 17/08** (2013.01); **F25D 31/007** (2013.01); **F25D 2331/805** (2013.01)

Citation (applicant)

- GB 5599002 A
- US 4978495 A 19901218 - AHMED HASSAN J [US]
- US 5168708 A 19921208 - SIEGEL ISRAEL [US]
- US 736599 A 19030818 - HOOD ARTHUR M [US]
- WO 9202770 A1 19920220 - INT THERMAL PACKAGING INC [US]
- US 4771607 A 19880920 - HEIMA HARUO [JP]
- US 4752310 A 19880621 - MAIER-LAXHUBER PETER [DE], et al
- EP 0726433 A1 19960814 - ZEOLITH TECH [DE]
- US 4126016 A 19781121 - GREINER LEONARD
- US 5088302 A 19920218 - TOMIZAWA TAKESHI [JP], et al
- US 5083607 A 19920128 - LEBRUN MICHEL [FR], et al
- US 5054544 A 19911008 - MAIER-LAXHUBER PETER [DE], et al
- GB 2329461 A 19990324 - BASS PLC [GB]
- GB 2329392 A 19990324 - BASS PLC [GB]
- GB 2329459 A 19990324 - BASS PLC [GB]
- GB 2333586 A 19990728 - BASS PLC [GB]
- GB 5599002 A

Citation (search report)

- [XA] US 5048301 A 19910917 - SABIN CULLEN M [US], et al
- [XA] US 4911740 A 19900327 - SCHIEDER HANS B [US]
- [XA] US 4771607 A 19880920 - HEIMA HARUO [JP]
- [XA] US 4752310 A 19880621 - MAIER-LAXHUBER PETER [DE], et al
- [A] WO 9202770 A1 19920220 - INT THERMAL PACKAGING INC [US]
- [A] US 4736599 A 19880412 - SIEGEL ISRAEL [US]
- [A] US 5088302 A 19920218 - TOMIZAWA TAKESHI [JP], et al
- [A] US 3136532 A 19640609 - RUDNICK GEORGE A
- [A] FR 2299842 A1 19760903 - BARILARI GERARD [FR]
- [PX] WO 9937958 A1 19990729 - UNIV NOTTINGHAM [GB], et al
- [DPX] GB 2329461 A 19990324 - BASS PLC [GB]
- [DPX] GB 2333586 A 19990728 - BASS PLC [GB]

Cited by  
CN105546904A

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

DOCDB simple family (publication)  
**EP 1022523 A1 20000726**; GB 0001602 D0 20000315; GB 2347202 A 20000830; GB 2347202 B 20031029

DOCDB simple family (application)  
**EP 00300530 A 20000125**; GB 0001602 A 20000125