

Title (en)  
Self-chilling container

Title (de)  
Selbstkühlender Behälter

Title (fr)  
Récipient autoréfrigérant

Publication  
**EP 2453189 A1 20120516 (EN)**

Application  
**EP 10190930 A 20101111**

Priority  
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Abstract (en)  
The present invention consists of a self-chilling container comprising a receptacle capable of containing a liquid; a flexible sorption cooling element wrapping the receptacle and a casing surrounding both the receptacle and the flexible sorption cooling element. The sorption cooling element comprises an evaporation region defined by a first external multilayer film wrapping the peripheral walls of the receptacle, and a sorption region configured to evacuate heat from the evaporation region. The invention provides a highly efficient device capable of achieving cooling powers higher than 80 W for receptacles of 4 liters of carbonated drinks, ensuring the integrity of the user by isolating the sorption components which, during the cooling process, can acquire high temperatures. Additionally, the invention is able to provide a container which can be easily produced and stacked with a competitive cost for its components.

IPC 8 full level  
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**F25B 17/08** (2013.01); **F25D 31/006** (2013.01); **F25D 2331/803** (2013.01); **F25D 2331/805** (2013.01); **F25D 2331/806** (2013.01)

Citation (applicant)  
• US 2008314070 A1 20081225 - MAIER-LAXHUBER PETER [DE], et al  
• US 2006191287 A1 20060831 - MAIER-LAXHUBER PETER [DE]

Citation (search report)  
• [XAY] US 6474100 B1 20021105 - SMITH DOUGLAS [US], et al  
• [ID] US 2008314070 A1 20081225 - MAIER-LAXHUBER PETER [DE], et al  
• [ID] US 2006191287 A1 20060831 - MAIER-LAXHUBER PETER [DE]  
• [A] EP 1143210 A1 20011010 - ZEO TECH BR ZEOLITH TECHNOLOGI [DE]  
• [YA] WO 2008015608 A2 20080207 - KONINKL PHILIPS ELECTRONICS NV [NL], et al  
• [A] US 1862330 A 19320607 - CHAPIN PHILIP P, et al  
• [A] DE 447542 C 19280726 - SIEMENS SCHUCKERTWERKE GMBH  
• [A] WO 2008026091 A1 20080306 - KIMBERLY CLARK CO [US], et al

Cited by  
EP3362757A4; US11867464B2

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