

Title (en)  
Filling device

Title (de)  
Befülleinrichtung

Title (fr)  
Dispositif de remplissage

Publication  
**EP 2213613 A3 20130612 (DE)**

Application  
**EP 09177223 A 20091126**

Priority  
DE 102009006795 A 20090130

Abstract (en)  
[origin: EP2213613A2] The device has a storage container (8) for receiving beverage, and a filling valve for filling packages e.g. bottles, with the beverage from the storage container. A heat exchanger (9) is integrated into a gap (8c) between an internal wall (8a) and an external wall (8b) of the storage container. Another heat exchanger is integrated into a wall of the filling valve, and heat exchanging medium flows between the internal wall and the external wall of the storage container. The storage container is connected with a cooling and/or heating assembly (10).

IPC 8 full level  
**B67C 3/14** (2006.01); **B67C 3/02** (2006.01); **B67C 3/22** (2006.01)

CPC (source: EP US)  
**B67C 3/02** (2013.01 - EP US); **B67C 3/14** (2013.01 - EP US); **B67C 3/22** (2013.01 - EP US)

Citation (search report)

- [X] JP 2006182407 A 20060713 - MITSUBISHI HEAVY IND FOOD & PA
- [X] JP 2005014921 A 20050120 - SHIBUYA KOGYO CO LTD
- [X] US 6176277 B1 20010123 - MAYER WERNER [DE]
- [X] EP 1215166 A2 20020619 - KHS MASCH & ANLAGENBAU AG [DE]
- [X] US 2054494 A 19360915 - BRUCE JOHN A

Cited by  
EP2664578A1; IT201600113843A1

Designated contracting state (EPC)  
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)  
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DOCDB simple family (application)  
**EP 09177223 A 20091126**; CN 201010001841 A 20100118; DE 102009006795 A 20090130; US 69019010 A 20100120