

Title (en)  
Refillable foam pump

Title (de)  
Nachfüllbare Schaum-Pumpe

Title (fr)  
Pompe a mousse rechargeable

Publication  
**EP 1714707 A3 20090603 (FR)**

Application  
**EP 06290460 A 20060322**

Priority  
FR 0503972 A 20050420

Abstract (en)  
[origin: EP1714707A2] The pump has a deformable bottle (1), sealed by a nozzle (2), containing a liquid with a foaming agent. The nozzle has a distribution orifice (11) communicating with an outlet passage including sieving grids (7a, 7b). The passage communicates with a membrane (4) and with a mixer (6) having a variable flow rate. The mixer opens through a dip tube dipping in the liquid. The membrane is closed when the bottle is deformed, due to the pressure exerted by a user, to drive out the liquid through the mixer. The membrane is opened to allow air to enter into the bottle when it takes its initial shape.

IPC 8 full level  
**B05B 11/04** (2006.01); **B05B 7/00** (2006.01)

CPC (source: EP)  
**B05B 7/0031** (2013.01); **B05B 7/0037** (2013.01); **B05B 11/043** (2013.01)

Citation (search report)

- [XY] US 4147306 A 19790403 - BENNETT ROBERT S
- [X] US 4156505 A 19790529 - BENNETT ROBERT S [US]
- [X] US 3973701 A 19760810 - GARDNER JACK C
- [XA] US 2004060945 A1 20040401 - CATER MIRO [US], et al
- [A] US 5071379 A 19911210 - POIZOT FRANCIS [FR]
- [Y] US 4162749 A 19790731 - BENNETT ROBERT A [US]
- [A] US 4640440 A 19870203 - FORD JR GEORGE W [US], et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 02 30 January 1998 (1998-01-30)

Cited by  
CN105750159A; NL2009219C2; WO2014017904A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK YU

DOCDB simple family (publication)  
**EP 1714707 A2 20061025; EP 1714707 A3 20090603; EP 1714707 B1 20120516**; FR 2884737 A1 20061027; FR 2884737 B1 20070803

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**EP 06290460 A 20060322**; FR 0503972 A 20050420