

Title (en)  
PUMP UNIT AND CONTAINER

Title (de)  
PUMPENAGGREGAT UND BEHÄLTER

Title (fr)  
UNITE DE POMPE ET RECIPIENT

Publication  
**EP 1561512 A1 20050810 (EN)**

Application  
**EP 03811082 A 20031107**

Priority  
• JP 0314205 W 20031107  
• JP 2002330475 A 20021114

Abstract (en)  
A pump unit (10) that pumps liquid inside a container body (12) to the outside is provided with a liquid containing portion and a piston portion that is moveably inserted in the liquid containing portion. The piston portion has a shaft case (20) that is provided inside the liquid containing portion and has a female thread portion (20a) formed on an internal circumferential surface thereof, and has a piston head portion (21 and 22) that protrudes outside the liquid containing portion and has a discharge aperture (22c) formed on the protruding portion, and that has a male thread portion (21a) which screws into the female thread portion (20a) formed on an external circumferential surface, and that is inserted into the shaft case so as to be able to move inside the shaft case. An unthreaded portion (20b) that allows the male thread portion of the piston head portion to rotate freely in the circumferential direction of the shaft case is formed on the shaft case. According to this pump unit, it is possible to freely rotate the discharge aperture of the piston head portion separately from the operation to discharge the liquid inside the container body. <IMAGE>

IPC 1-7  
**B05B 11/00**; B65D 47/34

IPC 8 full level  
**B05B 11/00** (2006.01); **B65D 83/76** (2006.01); **F04B 9/14** (2006.01); **F04B 23/00** (2006.01); **F04B 23/02** (2006.01); **F04B 43/08** (2006.01)

CPC (source: EP)  
**B05B 11/0027** (2013.01); **B05B 11/0044** (2018.07); **B05B 11/1035** (2023.01); **B05B 11/106** (2023.01); **B05B 11/1054** (2023.01)

Cited by  
CN111491741A; CN110891695A; US11691168B2; WO2018215659A1; US10953421B2; US11413638B2; US12030069B2

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