

Title (en)  
A PUMP FOR DISPENSING A LIQUID

Title (de)  
PUMPE ZUM AUSGEBEN EINER FLÜSSIGKEIT

Title (fr)  
POMPE DE DISTRIBUTION DE LIQUIDE.

Publication  
**EP 3269979 A1 20180117 (EN)**

Application  
**EP 17180434 A 20170710**

Priority  
IT 201600072149 A 20160711

Abstract (en)  
A pump comprises: - a plurality of pistons (5) each of which is slidable inside a cylinder so as to vary volume of a corresponding chamber (6), - a plurality of suction valves (16), each of which is associated with a chamber (6) and is operable to allow a liquid to enter the chamber (6), the suction valves (16) being arranged in a first sequence, - a plurality of delivery valves (17), each of which is associated with a chamber (6) and is operable to allow said liquid to exit from the chamber (6), the delivery valves (17) being arranged in a second sequence, - an adjusting valve (25) for adjusting pressure of the liquid exiting from the pump (1). The adjusting valve (25) is interposed between two consecutive valves of a sequence chosen from said first sequence and said second sequence.

IPC 8 full level  
**F04B 17/06** (2006.01); **F04B 49/035** (2006.01); **F04B 53/10** (2006.01); **F04B 53/16** (2006.01)

CPC (source: EP US)  
**F04B 9/045** (2013.01 - US); **F04B 17/06** (2013.01 - EP US); **F04B 49/035** (2013.01 - EP US); **F04B 49/225** (2013.01 - US);  
**F04B 53/10** (2013.01 - EP US); **F04B 53/14** (2013.01 - US); **F04B 53/16** (2013.01 - EP US)

Citation (search report)  
• [A] US 2009060764 A1 20090305 - MITZLAFF LOTHAR [PT], et al  
• [A] DE 19548497 C1 19970403 - KAERCHER GMBH & CO ALFRED [DE]  
• [A] DE 3248622 A1 19840712 - KAERCHER GMBH & CO ALFRED [DE]  
• [A] US 2012211034 A1 20120823 - NATHAN ROBERT [DE], et al

Designated contracting state (EPC)  
AL 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 RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3269979 A1 20180117**; **EP 3269979 B1 20190904**; CN 107605688 A 20180119; CN 107605688 B 20201020; IT 201600072149 A1 20180111;  
US 2018010597 A1 20180111

DOCDB simple family (application)  
**EP 17180434 A 20170710**; CN 201710559714 A 20170711; IT 201600072149 A 20160711; US 201715644244 A 20170707