

Title (en)  
Spray pump for liquids

Title (de)  
Zerstäubungspumpe für Flüssigkeiten

Title (fr)  
Pompe de pulvérisation pour liquides

Publication  
**EP 0968767 A1 20000105 (EN)**

Application  
**EP 98830389 A 19980630**

Priority  
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Abstract (en)  
Manually operated spray pump for liquids, comprising a trigger (13), a piston (17) operated by the said trigger in opposition to a reaction spring (32) and movable axially within a cylindrical chamber (2) for the compression of liquid (24) sucked from a container (23) which can be grasped in one hand, a suction duct (18, 22), one of whose ends extends inside the container (23) to a point near its base and the other of whose ends (28) is connected to the said cylindrical chamber (2), a supply duct (10) communicating at one end with the said cylindrical chamber (2) and at the other end with an atomizer member (11), first valve means (4, 15, 16, 5, 6) interposed between the said supply duct (10) and the said cylindrical chamber (2), second valve means (27) interposed between the suction duct (18) and the cylindrical chamber (2), and a base element (8, 9) for mounting the pump on the mouth (35) of the said container (23), for supporting the said cylindrical chamber (2) and the said supply duct (10). The pump includes a device (46) for supplementary access of the liquid to the pump, the said device comprising a first channel (49), disposed along the suction duct (22) which extends into the container (23) to a point near its base, a second channel (48) which extends parallel to the first (49) with one end opening inside the container (23) near its mouth (35) and with the other end opening into a transverse passage (51) for connection to the said first channel (49), a first valve member (55) positioned in the said connecting passage (51) to shut off the said suction duct (22), and a second valve member (50) positioned in the said second channel (48) to open the latter towards the interior of the container (23) when the pump and the container are operated in the inverted position, and to cause it to communicate with the suction duct (22). The first said valve member enables the pump to be primed rapidly even in the case of poor sealing of the valve means (27) interposed between the supply duct (10) and the liquid compression chamber (2). <IMAGE>

IPC 1-7  
**B05B 11/00**

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

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Citation (applicant)  
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• US 4277001 A 19810707 - NOZAWA TAKAMITSU

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