

Title (en)
A pump

Title (de)
Eine Pumpe

Title (fr)
Une pompe

Publication
EP 1536135 A2 20050601 (EN)

Application
EP 04028061 A 20041125

Priority
US 52534903 P 20031126

Abstract (en)
A closed loop rod pump is disclosed which can include a tube assembly and a reciprocating cylinder assembly disposed therein. The cylinder assembly can include a piston portion and a plunger. The piston portion can sealingly engage the tube assembly. In some embodiments, the cylinder assembly can include a second plunger to provide the pump with a dual-acting feature. The rod pump can be used in a water jetter cleaning system of a vehicle for cleaning catch basins and/or sewers.

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F04B 9/105; **F04B 9/113**; **F04B 9/117**

IPC 8 full level
F04B 9/105 (2006.01); **F04B 9/113** (2006.01); **F04B 9/117** (2006.01); **F04B 53/10** (2006.01)

CPC (source: EP US)
F04B 9/105 (2013.01 - EP US); **F04B 9/113** (2013.01 - EP US); **F04B 9/1172** (2013.01 - EP US); **F04B 53/109** (2013.01 - EP US)

Citation (applicant)
• US 3658589 A 19720425 - SHADDOCK ROLAND E
• US 3700360 A 19721024 - SHADDOCK ROLAND E

Cited by
CN102465883A; EP3250824A4; US10941762B2

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AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1536135 A2 20050601; **EP 1536135 A3 20070418**; US 2005142012 A1 20050630

DOCDB simple family (application)
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