

Title (en)  
A single cylinder reciprocating pump.

Title (de)  
Einzyylinder-Pumpe.

Title (fr)  
Pompe alternative monocylindre.

Publication  
**EP 0388374 A1 19900919 (EN)**

Application  
**EP 90830101 A 19900313**

Priority  
IT 4004489 A 19890315

Abstract (en)

In a single cylinder high pressure reciprocating force pump of the type used in packaging, batching and homogenizing processes, the barrel (1) of the cylinder is divided into suction and delivery chambers by a piston (13) of which the rod (14) occupies half the cross-sectional area of the delivery chamber (11); the pumped fluid passes through two valves, the first a conventional foot valve (7) in the suction chamber (5), the second incorporated into a cavity (17) formed internally of the piston (13) which lies open to the suction chamber (5) on the one hand and to the delivery chamber (11) on the other.

IPC 1-7  
**F04B 11/00; F04B 21/04**

IPC 8 full level  
**F04B 11/00** (2006.01); **F04B 53/12** (2006.01)

CPC (source: EP)  
**F04B 11/0083** (2013.01); **F04B 53/129** (2013.01)

Citation (search report)

- [X] DE 2307818 A1 19730830 - INOUYE SHOKAI INOUYE & CO LTD
- [X] US 2837898 A 19580610 - AHLSTRAND PHILLIP M
- [X] EP 0254450 A2 19880127 - GEBERTH JOHN DANIEL JUN

Designated contracting state (EPC)  
DE ES FR GB SE

DOCDB simple family (publication)  
**EP 0388374 A1 19900919**; IT 1233982 B 19920422; IT 8940044 A0 19890315

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