

Title (en)

PUMP ARRANGEMENT FOR DELIVERING MEASURED QUANTITIES OF AT LEAST TWO COMPONENTS

Publication

EP 0226070 B1 19901107 (DE)

Application

EP 86116152 A 19861121

Priority

DE 3544016 A 19851213

Abstract (en)

[origin: US4806079A] Apparatus for simultaneously pumping two or more different liquids to a spraying device has a pair of discrete diaphragm pumps for each liquid. The pumps of each pair are connected in parallel and operate alternately so that one pump delivers a metered quantity of liquid while the pumping chamber of the other pump receives a metered quantity of the same liquid and vice versa. The capacities of pumps of at least one pair are adjustable in a simultaneous operation, and all pumps are operated by a common prime mover.

IPC 1-7

F04B 13/02

IPC 8 full level

B01F 15/04 (2006.01); **F04B 9/08** (2006.01); **F04B 13/00** (2006.01); **F04B 13/02** (2006.01); **F04B 43/067** (2006.01)

CPC (source: EP US)

F04B 13/02 (2013.01 - EP US)

Cited by

EP0314994A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0226070 A2 19870624; **EP 0226070 A3 19890125**; **EP 0226070 B1 19901107**; AT E58208 T1 19901115; BR 8606157 A 19870922; DE 3544016 A1 19870619; DE 3544016 C2 19880511; DE 3675509 D1 19901213; ES 2018467 B3 19910416; JP H0754118 B2 19950607; JP S62147066 A 19870701; US 4806079 A 19890221

DOCDB simple family (application)

EP 86116152 A 19861121; AT 86116152 T 19861121; BR 8606157 A 19861211; DE 3544016 A 19851213; DE 3675509 T 19861121; ES 86116152 T 19861121; JP 29745586 A 19861212; US 94062386 A 19861211