

Title (en)

MECHANICAL VACUUM PUMP WITH A SPRING LOADED RETURN VALVE

Publication

EP 0373229 B1 19920916 (DE)

Application

EP 88120714 A 19881212

Priority

DE 3721611 A 19870630

Abstract (en)

[origin: US4921406A] The invention relates to a mechanical vacuum pump having a displacement member (2) and a casing (1) which is provided with an inlet channel (3) on the suction side and an outlet channel (4) on the discharge side. A spring-loaded non-return flap valve (5) is incorporated into the outlet channel (4). Upstream of this flap (5), a gas jet pump (7, 8) is installed in the outlet channel (4), the jet direction being parallel to the sealing surface of the non-return flap valve (5). This gas jet pump allows to significantly increase the final vacuum of the mechanical vacuum pump and to improve the cooling of the pump.

IPC 1-7

F04C 29/08

IPC 8 full level

F04C 29/12 (2006.01); **F04F 5/54** (2006.01)

CPC (source: EP US)

F04C 29/12 (2013.01 - EP US); **F04F 5/54** (2013.01 - EP US)

Designated contracting state (EPC)

CH FR GB IT LI NL

DOCDB simple family (publication)

DE 3721611 A1 19890119; DE 3721611 C2 19890420; EP 0373229 A1 19900620; EP 0373229 B1 19920916; US 4921406 A 19900501

DOCDB simple family (application)

DE 3721611 A 19870630; EP 88120714 A 19881212; US 29377589 A 19890104