Title (en)

CONTROL THROTTLE FOR A VACUUM PUMP, ESPECIALLY A CRYOGENIC PUMP

Publication

EP 0276346 B1 19911009 (DE)

Application

EP 87101153 A 19870128

Priority

EP 87101153 A 19870128

Abstract (en)

[origin: US4803845A] A throttle valve with a separate flange, usable with a vacuum pump defining an inlet opening, and a controllable throttle assembly for varying a flow passage cross section of the inlet opening. The throttle assembly is disposed in the inlet opening and has a plurality of slats rotatable about respective longitudinal axes for varying their inclination and an actuating rod for turning the slats. The flange has a throughgoing bore through which the actuating rod passes. The slats have a substantially constant width and their longitudinal axes are oriented parallel to one another. The slats form a first and a second slat group, and a linkage connects the slats with one another for turning the slats of the first slat group and the slats of the second slat group in opposite directions. A chamber is situated externally of the inlet opening and communicates with the throughgoing bore. A pivotal lever articulated to the actuating rod is situated in the chamber and projects outwardly therefrom. There is further provided a swingable bellows supported in the chamber and surrounding the pivotal lever for providing an airtight separation of at least one part of the pivotal lever from the chamber.

IPC 1-7

F04B 37/08

IPC 8 full level

F04B 37/08 (2006.01)

CPC (source: EP US)

F04B 37/08 (2013.01 - EP US); Y10S 417/901 (2013.01 - EP US); Y10T 137/8741 (2015.04 - EP US); Y10T 137/87507 (2015.04 - EP US)

Cited by

CN108105066A

Designated contracting state (EPC) CH DE GB LI NL

DOCDB simple family (publication)

EP 0276346 A1 19880803; EP 0276346 B1 19911009; DE 3773646 D1 19911114; US 4803845 A 19890214

DOCDB simple family (application)

EP 87101153 A 19870128; DE 3773646 T 19870128; US 14862988 A 19880126