

Title (en)
Vacuum pump

Title (de)
Vakuumpumpe

Title (fr)
Pompe à vide

Publication
EP 1199476 A2 20020424 (EN)

Application
EP 01124519 A 20011012

Priority
JP 2000314966 A 20001016

Abstract (en)
Passage structure for a vacuum pump has a rotary shaft, a gas transferring assembly and a backflow preventing means. The gas transferring assembly is driven based on rotation of the rotary shaft. Vacuum action is generated by transferring gas due to motion of the gas transferring assembly. The backflow preventing means is constituted of a guide pipe, a valve hole forming portion, a valve body and a return spring, and is interposed in a gas passage. The guide pipe accommodates the valve body and the return spring, and forms a tapered valve hole. The valve body is constituted of a shutter closing the valve hole, a cylindrical circumferential wall, a plurality of slide contact portions disposed on an outer circumferential surface of the circumferential wall so as to be distributed around the inner circumferential surface of the guide pipe, and a seal ring fitted to a periphery of the shutter. The valve body opens and closes the valve hole. The return spring urges the valve body in a direction to close the valve hole. A plurality of the slide contact portions keeps in slide contact with one of the guide pipe and the valve body, and is interposed between an inner circumferential surface of the guide pipe and the valve body. <IMAGE>

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Citation (applicant)
• JP H02157490 A 19900618 - CIT ALCATEL
• JP H0814172 A 19960116 - ANLET KK

Cited by
CN102168761A; EP1548270A1; US11111920B2

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