Title (en)

VACUUM DEVICE AND VACUUM PUMP

Title (de)

VAKUUMVORRICHTUNG UND VAKUUMPUMPE

Title (fr)

DISPOSITIF SOUS VIDE ET POMPE SOUS VIDE

Publication

EP 1609990 A1 20051228 (EN)

Application

EP 04716009 A 20040301

Priority

- JP 2004002484 W 20040301
- JP 2003055749 A 20030303

Abstract (en)

A vacuum apparatus has a vacuum chamber provided with a gas inlet and a gas outlet, and mechanical vacuum pumps in a plurality of stages for reducing a pressure inside the vacuum chamber and maintaining the pressure-reduced state. The vacuum apparatus has an ejector pump (60) connected to a discharge port (57) of a screw pump (A) as the vacuum pump at the last stage among the vacuum pumps. The vacuum apparatus is reduced in power consumption and used in the semiconductor manufacturing field and so on. <IMAGE>

IPC 1-7

F04B 37/16; F04F 5/20; F04D 19/04; F04C 25/02

IPC 8 full level

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CPC (source: EP US)

F04B 37/14 (2013.01 - EP US); **F04C 23/005** (2013.01 - EP US); **F04D 19/046** (2013.01 - EP US); **F04F 5/20** (2013.01 - EP US); **F04F 5/54** (2013.01 - EP US); F04C 18/16 (2013.01 - EP US); F04C 2220/12 (2013.01 - EP US)

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FR2952683A1; FR3008145A1; CN102062088A; CN103900376A; CN104822943A; RU2720125C2; EP3517779A1; FR3077343A1; US10544809B2; US9175688B2; US11209024B2; WO2011061429A3; WO2014072276A1; WO2015001059A1; WO2016209725A1

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