

Title (en)
Vacuum pump.

Title (de)
Vakuumpumpe.

Title (fr)
Pompe à vide.

Publication
EP 0352688 A1 19900131 (FR)

Application
EP 89113558 A 19890724

Priority
FR 8810120 A 19880727

Abstract (en)
[origin: JPH0270994A] PURPOSE: To prevent damage, stuffed-up or out of work of a pump by arranging a heater for maintaining the temperature of a first zone above condensation threshold of a gas in a stator, and separating the first and a second zone with a thermal impedance element. CONSTITUTION: In order to keep the temperature of a zone of a stator 2, that contacts with a gas, above the condensation threshold of the admitted gas, a heating collar 12 contacts at least with the part of the stator 2 positioned upward of a suction ditch 9 in a pump. The remainder of the pump is kept at low temperature by a water flow. A thermal impedance element is located between the zone of the stator 2 being kept at low temperature and the zone being heated of the stator 2. This element serves as a heat insulator between these two zones of the stator 2, and prevents the heat supplied by the heater 12 quickly disappearing in the cooling water.

Abstract (fr)
L'invention concerne une pompe à vide. Elle a pour objet une pompe du type moléculaire ou turbomoléculaire comprenant un stator (2) et un rotor (3) entraîné en rotation par un moteur (7) le stator comprenant une première zone, située au droit du rotor où s'effectue l'aspiration des gaz et une seconde zone, au voisinage du moteur d'entraînement, refroidie par une circulation de fluide (8), caractérisée en ce que la première zone est munie d'un moyen de chauffage (12) pour maintenir la température de ladite zone au-dessus du seuil de condensation du gaz aspiré, la première et la seconde zone étant séparés par un élément d'impédance thermique (13). Application aux pompes moléculaires et turbomoléculaires.

IPC 1-7
F04D 19/04; **F04D 29/58**

IPC 8 full level
F04D 19/04 (2006.01); **F04D 29/58** (2006.01)

CPC (source: EP US)
F04D 19/044 (2013.01 - EP US); **F04D 25/06** (2013.01 - EP); **F04D 29/5806** (2013.01 - EP US); **F04D 29/584** (2013.01 - EP US); **F04D 29/5853** (2013.01 - EP US); **F05D 2260/607** (2013.01 - EP US)

Citation (search report)
• [A] FR 81075 E 19630726 - SNECMA
• [A] DE 1935603 A1 19710128 - DEMAG AG
• [A] EP 0197238 A2 19861015 - LEYBOLD HERAEUS GMBH & CO KG [DE]
• [A] SOVIET INVENTIONS ILLUSTRATED, Section M, semaine E39, 10 Novembre 1982. Derwent Publications Ltd. Londres GB.*classe Q, page 56, no M8488E/39 & SU-A-881 372 (TUZANKIN YU M) 25 Novembre 1981

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