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VACUUM PUMP

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Application
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Abstract (en)
The invention relates to a heat insulation structure having the function of retaining a high temperature in a vacuum exhaust chamber in a rotary type vacuum pump and the function of cooling bearings at the same time, and particularly has for its object the provision of a structure for preventing bearings or shaft seals from becoming so high in temperature as to be damaged when a high temperature is to be retained in an exhaust chamber with respect to a vacuum pump for exhausting reactive gases as in a semiconductor process. As a means to achieve the object, in a vacuum pump comprising an introduction means having a vacuum exhaust chamber and adapted to introduce a process gas into the vacuum exhaust chamber, an exhaust means for exhausting the process gas out of the vacuum exhaust chamber, a housing for separating the vacuum exhaust chamber from outside, with a rotor installed for rotation in the housing through a bearing, a heat insulation means is provided between the vacuum exhaust chamber and the bearing. Further, a metal whose thermal conductivity is higher than that of the material of the housing is incorporated as a heat transmission means into the housing. <IMAGE>

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