

Title (en)
VACUUM PUMP

Title (de)
VAKUUMPUMPE

Title (fr)
POMPE À VIDE

Publication
EP 2853748 A4 20160615 (EN)

Application
EP 13793663 A 20130516

Priority
• JP 2012116489 A 20120522
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Abstract (en)
[origin: EP2853748A1] A vacuum pump 1 includes a pump means 2 for compressing gas inhaled from an intake port 11b and discharging the compressed gas from an exhaust port 12b and a motor 3 for driving the pump means. A housing 4 which houses a stator core 22 and serves as a motor casing of the motor is provided to form a cooling passage Sc between the outer surface of the stator core and the inner surface of the housing and the gas discharged from the exhaust port of the pump means is circulated into the cooling passage to cool the motor. Cooling the motor allows maintaining not only the performance of the motor but also the suction performance of the pump means.

IPC 8 full level
F04C 29/04 (2006.01); **F04C 25/02** (2006.01)

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Citation (search report)
• [X] EP 1770243 A2 20070404 - ANEST IWATA CORP [JP]
• [X] US 2006255667 A1 20061116 - ZHONG JIANPING [US]
• [I] JP 2004156446 A 20040603 - TOKICO LTD
• [A] JP 2007023958 A 20070201 - MATSUSHITA ELECTRIC IND CO LTD
• [A] US 5215452 A 19930601 - YAMAMURA MICHIO [JP], et al
• [A] EP 1936198 A2 20080625 - PFEIFFER VACUUM GMBH [DE]
• [A] EP 1967736 A1 20080910 - DAIKIN IND LTD [JP]
• See references of WO 2013176028A1

Cited by
US2019323506A1; WO2017220141A1; US10995757B2; US11261869B2

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