

Title (en)
Control system for vacuum pump

Title (de)
Kontrollsystem für Vakuumpumpe

Title (fr)
Système de contrôle d'une pompe à vide

Publication
EP 1314890 A3 20030820 (EN)

Application
EP 02025927 A 20021120

Priority
JP 2001356469 A 20011121

Abstract (en)
[origin: EP1314890A2] A vacuum pump has an alternating current motor, a rotary shaft and a gas transferring body. The alternating current motor runs at a certain speed based on frequency of alternating current and is sufficiently supplied with the alternating current. Gas is transferred from a certain space by the gas transferring body driven by the alternating current motor through the rotary shaft. A method for controlling a vacuum pump includes keeping a rotational speed of the alternating current motor at a second predetermined rotational speed, detecting a value of the alternating current to the alternating current motor, keeping the rotational speed at a first predetermined rotational speed that is higher than the second predetermined rotational speed when the detected alternating current value exceeds a first predetermined value, and keeping the rotational speed at the second predetermined rotational speed when the detected alternating current value becomes equal to a second predetermined value.
<IMAGE>

IPC 1-7
F04C 29/10

IPC 8 full level
F04B 49/06 (2006.01); **F04C 28/02** (2006.01); **F04C 28/08** (2006.01); **F04C 18/12** (2006.01)

CPC (source: EP US)
F04C 25/02 (2013.01 - EP US); **F04C 28/02** (2013.01 - EP US); **F04C 28/08** (2013.01 - EP US); **F04C 18/126** (2013.01 - EP US);
F04C 2240/403 (2013.01 - EP US); **F04C 2270/07** (2013.01 - EP US); **F04C 2270/075** (2013.01 - EP US)

Citation (search report)
• [A] US 4664601 A 19870512 - UCHIDA RIICHI [JP], et al
• [A] GB 986915 A 19650324 - MICAFILE AG
• [A] US 4604036 A 19860805 - SUTOU MASATSUNE [JP], et al
• [XA] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 13 30 November 1998 (1998-11-30)
• [DA] PATENT ABSTRACTS OF JAPAN vol. 017, no. 686 (M - 1529) 15 December 1993 (1993-12-15)

Cited by
DE102008062054B4; EP1906024A3; FR2883934A1; EP1710440A3; WO2021259466A1; WO2021259461A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)
EP 1314890 A2 20030528; EP 1314890 A3 20030820; JP 2003155981 A 20030530; US 2003123990 A1 20030703

DOCDB simple family (application)
EP 02025927 A 20021120; JP 2001356469 A 20011121; US 30006402 A 20021120