

Title (en)

Method of controlling the stopping operation of vacuum pump

Title (de)

Verfahren zur Steuerung des Stoppbetriebs einer Vakuumpumpe

Title (fr)

Procédé de contrôle d'arrêt d'opération d'une pompe sous vide

Publication

EP 1900943 A1 20080319 (EN)

Application

EP 07116083 A 20070911

Priority

JP 2006247196 A 20060912

Abstract (en)

A method for controlling the operation of a vacuum pump when stopping the gas transferring operation thereof, the vacuum pump having a housing in which a pump chamber is formed and a gas transferring body which is rotatably disposed in the pump chamber for transferring gas, the method comprises the steps of reducing rotational speed of the gas transferring body to a first preset speed below a second preset speed that is lower than a normal speed of the gas transferring body during normal gas transferring operation of the vacuum pump, maintaining the speed of the gas transferring body below the second preset speed, and stopping the rotation of the gas transferring body when the temperature of the housing reaches a predetermined temperature which is lower than that of the housing during the normal gas transferring operation of the vacuum pump.

IPC 8 full level

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F05C 2201/0442 (2013.01 - EP US)

Citation (search report)

- [X] EP 1201927 A2 20020502 - TOYOTA JIDOSHOKKI KK [JP]
- [XA] WO 2005038255 A2 20050428 - EBARA CORP [JP], et al
- [X] JP 2003120529 A 20030423 - TOYOTA IND CORP
- [A] US 2006193728 A1 20060831 - LINDSEY JAMES R [US], et al
- [A] JP 2006009587 A 20060112 - SHIMADZU CORP
- [DA] WO 2004018879 A1 20040304 - EBARA CORP [JP], et al
- [DA] EP 1398506 A2 20040317 - TOYOTA JIDOSHOKKI KK [JP]

Cited by

WO2022129009A1; EP4067658A3; CN107084135A; CN106762650A; FR3076582A1; CN111527309A; US11396875B2; EP3578825A3;
GB2602625A; GB2602625B; US11396876B2; WO2019137700A1; WO2021259463A1

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JP 4702236 B2 20110615; KR 100872503 B1 20081208; KR 20080024058 A 20080317; TW 200823369 A 20080601; TW I341368 B 20110501;
US 2008063536 A1 20080313

DOCDB simple family (application)

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