(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 304 484 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
03.09.2003 Bulletin 2003/36

(43) Date of publication A2:
23.04.2003 Bulletin 2003/17

(21) Application number: **02023201.3**

(22) Date of filing: **16.10.2002**

(51) Int Cl.[7]: **F04C 29/10**, F04C 27/00

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **17.10.2001 JP 2001318893**

(71) Applicant: **Kabushiki Kaisha Toyota Jidoshokki**
Kariya-shi, Aichi-ken (JP)

(72) Inventors:
- **Koshizaka, Ryosuke**
  Kariya-shi, Aichi-ken (JP)
- **Kuramoto, Satoru**
  Kariya-shi, Aichi-ken (JP)
- **Ida, Masahiro**
  Kariya-shi, Aichi-ken (JP)

(74) Representative:
Leson, Thomas Johannes Alois, Dipl.-Ing.
Patentanwälte
Tiedtke-Bühling-Kinne & Partner,
Bavariaring 4
80336 München (DE)

(54) Vacuum pump

(57) A vacuum pump has an oil housing (14), which defines a pump chamber (43) and an oil zone (331) adjacent to the pump chamber (43). A rotary shaft (19, 20) extends from the pump chamber (43) through the oil housing (14) and projects to the oil zone (331). A non-contact sealing element (67, 68, 72) is attached to the rotary shaft (19, 20) to integrally rotate with the rotary shaft (19, 20). The element (67, 68, 72) prevents oil from entering the pump chamber (43). The vacuum pump draws gas by operating a gas conveying body (23) in the pump chamber (43) through rotation of the rotary shaft (19, 20). When the rotary shaft (19, 20) shifts from an operation state to a stopped state, the pressure difference occurs between the pump chamber (43) and the oil zone (331). Rotation of the rotary shaft (19, 20) is controlled such that the pressure difference becomes maximum before the rotary shaft (19, 20) completely stops.

Fig.1 (a)

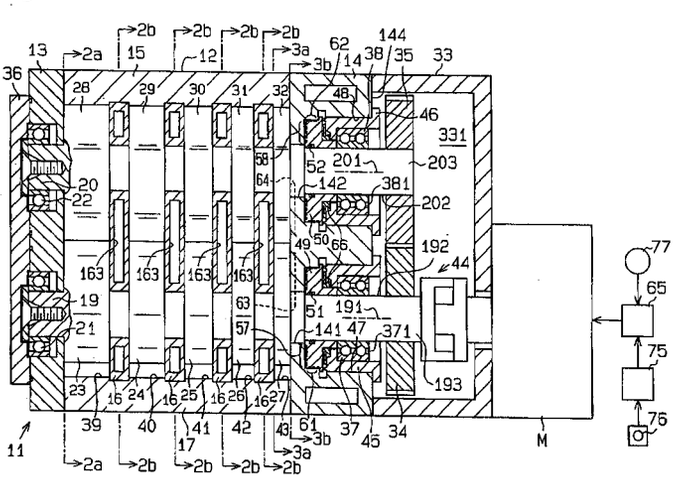

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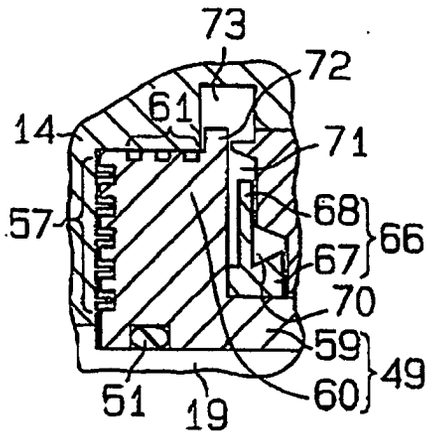
Fig.1 (b)



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EUROPEAN SEARCH REPORT

Application Number
EP 02 02 3201

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TECHNICAL FIELDS SEARCHED (Int.Cl.7)

F04C

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	16 July 2003	Dimitroulas, P

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EPO FORM 1503 03.82 (P04C01)

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