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

(11) **EP 2 940 284 A8**

(12) **CORRECTED EUROPEAN PATENT APPLICATION**
published in accordance with Art. 153(4) EPC

(15) Correction information:
Corrected version no 1 (W1 A1)
Corrections, see
Bibliography INID code(s) 72

(48) Corrigendum issued on:
23.12.2015 Bulletin 2015/52

(43) Date of publication:
04.11.2015 Bulletin 2015/45

(21) Application number: **13856114.7**

(22) Date of filing: **11.11.2013**

(51) Int Cl.:
F02M 21/02 *(2006.01)* ***F02B 43/00*** *(2006.01)*
G01F 23/22 *(2006.01)*

(86) International application number:
PCT/JP2013/080441

(87) International publication number:
WO 2014/080790 (30.05.2014 Gazette 2014/22)

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME

(30) Priority: **26.11.2012 JP 2012257688**

(71) Applicants:
- **Aisan Kogyo Kabushiki Kaisha**
  Obu-shi, Aichi 474-8588 (JP)
- **TOYOTA JIDOSHA KABUSHIKI KAISHA**
  Toyota-shi, Aichi-ken, 471-8571 (JP)

(72) Inventors:
- **SUGIURA, Masanori**
  Obu-shi
  Aichi 474-8588 (JP)
- **ODA, Hiroshi**
  Obu-shi
  Aichi 474-8588 (JP)
- **TAKASAKI, Jun**
  Obu-shi
  Aichi 474-8588 (JP)
- **SHIRASAWA, Hirotaka**
  Obu-shi
  Aichi 474-8588 (JP)
- **KOMODA, Takao**
  Aichi-ken 471-8571 (JP)
- **OONISHI, Akito**
  Aichi-ken 471-8571 (JP)

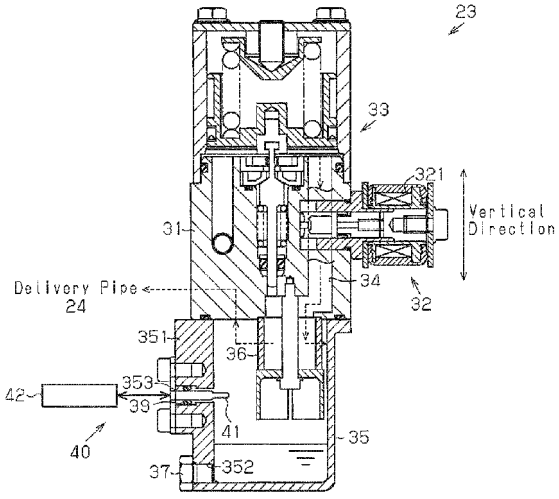
(74) Representative: **Westphal, Mussgnug & Partner Patentanwälte mbB**
Am Riettor 5
78048 Villingen-Schwenningen (DE)

(54) OIL STORAGE AMOUNT DETERMINATION DEVICE

(57) An oil storage amount determination device that determines the amount of oil stored in a tank (35), wherein the tank (35) is constructed such that a gaseous fuel that has been decompressed by a decompression valve (33) flow into the tank, a separation unit (36) that separates oil from the gaseous fuel is provided in the tank (35), and a temperature sensor (41) is supported in a side wall of the tank. This oil storage amount determination device is equipped with a determination unit (50) constructed so as to determine whether the temperature sensor (41) is immersed in the oil separated from the gaseous fuel by the separation unit (36). The determination unit (50) is constructed such that when the flow speed of the gaseous fuel flowing into the tank (35) changes, the determination unit determines whether the temperature sensor (41) is immersed in oil on the basis of the state of the change in the flow speed and the state of the change in the temperature detected by the temperature sensor (41).

EP 2 940 284 A8

Fig.2


23
33
321
Vertical Direction
31
Delivery Pipe 24
34
32
351
36
353
42
39
41
35
40
37
352