

(12) EUROPEAN PATENT APPLICATION

(21) Application number: 81103522.9

(51) Int. Cl.³: E 03 D 9/03
F 04 B 11/00, G 01 F 11/02

(22) Date of filing: 08.05.81

(30) Priority: 09.05.80 AU 3483/80

(71) Applicant: WELLCOME AUSTRALIA LIMITED
53 Phillips Street
Concord New South Wales 2137(AU)

(43) Date of publication of application:
18.11.81 Bulletin 81/46

(72) Inventor: Chappell, Anthony Gresham
56 Moruben Road
Mosman New South Wales 2088(AU)

(88) Date of deferred publication of search report: 05.05.82

(74) Representative: Berg, Wilhelm, Dr. et al,
Dr. Berg, Dipl.-Ing. Stafp, Dipl.-Ing. Schwabe, Dr. Dr.
Sandmair Mauerkircherstrasse 45
D-8000 München 80(DE)

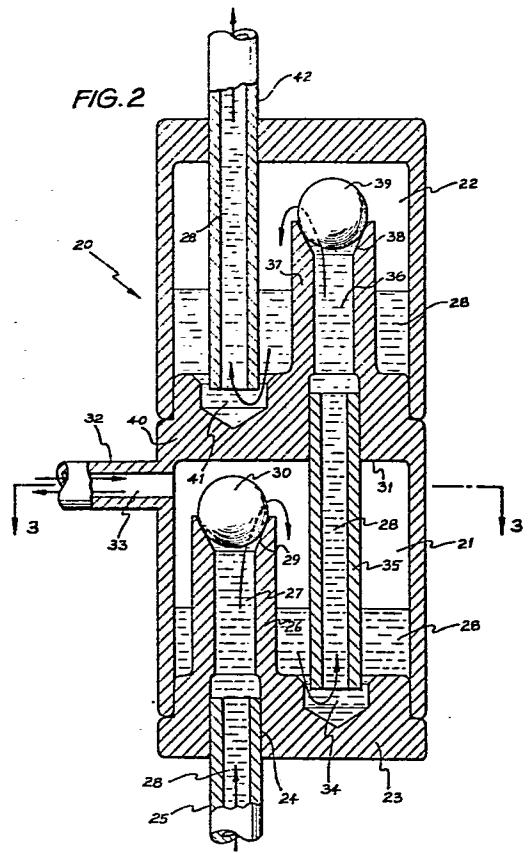
(84) Designated Contracting States:
BE DE FR GB IT NL

(54) Fluid flow control device.

(57) A fluid flow control device (10) which is employed in conjunction with a fluid pump (12) and which functions to restrict reverse flow of liquid which is induced by the fluid pump to flow in a forward direction through the device from a source (11) of the liquid. The device comprises a housing (20 or 50) which contains first and second chambers (21 and 22 or 51 and 52), and a tube (26 and 37 or 54 and 60) is located in each of the chambers. The tubes (26, 37, 54 and 60) define fluid passageways (27, 36, 55 and 61) through which the liquid is induced to flow in passing into the respective chambers (21, 22, 51 and 52), and the tubes extend upwardly through the respective chambers to a level above the level of liquid which is contained in the chambers. Valve members (30, 39, 59 and 63) are located at the upper end of the respective tubes (26, 37, 54 and 60), the valve members providing for forward flow of liquid into the chambers from the respective tubes and serving to prevent the liquid from leaking in a reverse direction along the fluid passageways (27, 36, 55 and 61). A control port (32 or 64) enters the housing (20 or 50) and is connectable to the fluid pump (12) for the purpose of applying alternating negative and positive pressurisation to the chambers whereby the liquid is induced to flow into and through the chambers.

.../...

FIG. 2





EUROPEAN SEARCH REPORT

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | CLASSIFICATION OF THE APPLICATION (Int. Cl. 3) |
|-------------------------------------|---|-------------------|--|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | |
| A | DE - A - 2 439 821 (ROST) * Pages 3,4; figures * -- | 1 | E 03 D 9/03 F 04 B 11/00 G 01 F 11/02 |
| A | US - A - 3 999 226 (WOLF) * Column 2, lines 48-68; column 3, lines 1-27; figure 4 -- | 1 | |
| PD | EP - A - 0 018 648 (CHAPPELL) * Whole document * ---- | 1 | TECHNICAL FIELDS SEARCHED (Int.Cl. 3) E 03 D F 04 B G 01 F D 06 F |
| | | | CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, corresponding document |
| / | The present search report has been drawn up for all claims | | |
| Place of search | Date of completion of the search | Examiner | |
| The Hague | 09-02-1982 | HANNAART | |