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(71) Applicant (for all designated States except US): MEDTRONIC MINIMED, INC. [US/US]; 18000 Devonshire Street, Northridge, California 91325 (US).

(72) Inventors; and

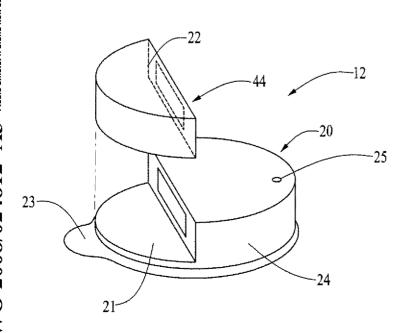
(75) Inventors/Applicants (for US only): MOUNCE, R., Paul [US/US]; 211 N. Beachwood Drive, Burbank, California 91506 (US). HANSON, Ian, B. [US/US]; 11480 Ghiberti Way, Northridge, California 91326 (US). BENTE, Paul, F., IV [US/US]; 646 S. Barrington Avenue Apt. 207, Los Angeles, California 90049 (US). MOBERG, Sheldon, B. [US/US]; 1030 Chalet Circle, Thousand Oaks, California 91362 (US). GUEZURAGA, Robert, M. [US/US]; 518 Lakeview Canyon Road, Westlake Village, California 91362 (US). ENEGREN, Bradley, J. [US/US]; 11253 Bentcreek Road, Moorpark, California 93021 (US). KAVAZOV, Julian, D. [US/US]; 919 N. Santa Anita

Avenue, Arcadia, California 91006 (US). **GRIFFIN, Christopher** [US/US]; 14124 El Casco, Sylmar, California 91342 (US). **MAULE, Susie, E.** [US/US]; 832 Magnolia Avenue #9, Pasadena, California 91106 (US). **HOLT, Mark, D.** [US/US]; 11607 Blossomwood Court, Moorpark, California 93021 (US). **STUTZ, William, H., Jr.** [US/US]; 5261 College View Avenue, Eagle Rock, California 90041 (US).

- (74) Agent: RITTMASTER, Ted, R.; Foley & Lardner LLP., 2029 Century Park East - Suite 3500, Los Angeles, CA 90067-3021 (US).
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[Continued on next page]

(54) Title: INFUSION MEDIUM DELIVERY DEVICE AND METHOD WITH COMPRESSIBLE OR CURVED RESERVOIR OR CONDUIT



(57) Abstract: A delivery device includes a durable housing portion (22) and a separable disposable portion (26) that selectively engage and disengage from each other. The disposable housing portion secures to the patient-user and may be disposed of after it has been in use for a prescribed period. Components that normally come into contact with a patient-user or with infusion media are supported by the disposable housing portion for disposal after the prescribed use, while the durable housing portion supports other components such as electronics for controlling delivery of infusion media from the reservoir and a drive device and drive linkage.

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CLASSIFICATION, OF SUBJECT MATTER INV. A61M5/142 A61M5/145A61M5/148 F04B43/02 F04B43/12 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) B65D F04B A61M G01F Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. WO 2005/072795 A (M 2 MEDICAL AS [DK]; X 1,15 MERNOEE MORTEN [DK]) 11 August 2005 (2005-08-11) page 16, lines 9-33; figures 1-27 2 - 14. Υ 16 - 28page 18, lines 20-28 pages 22-24 WO 2005/002649 A (NOVO NORDISK AS [DK]; 1,15 RADMER JIM [DK]; KLINT HENRIK SOENDERSKOV [DK]) 13 January 2005 (2005-01-13). page 19, line 16 - page 20, line 13; 2-14. figures 1,7A-7C 16-28 page 15, lines 7-20 Further documents are listed in the continuation of Box C See patent family annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but "A" document defining the general state of the art which is not considered to be of particular relevance cited to understand the principle or theory underlying the invention earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another involve an inventive step when the document is taken alone document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the document is combined with one or more other such docudocument referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled document published prior to the international filing date but later than the priority date claimed in the art. "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 27 May 2008 05/06/2008 Name and mailing address of the ISA/ Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 Björklund, Andreas

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International application No. PCT/US2007/076471

INTERNATIONAL SEARCH REPORT

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
As all required additional search fees were timely paid by the applicant, this international search report covers all searchable
LA claims. □
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. As only some of the required additional search fees were timely paid by the applicant, this international search reportcovers
only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on Protest The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-28

The claims essentially define a delivery device comprising first and second housing portions, a reservoir defining an interior volume located in the first housing portion and a volume varying mechanism defining a border of the interior volume supported for motion in a curved path and methods of making such devices.

2. claims: 29-63

The claims essentially define delivery devices comprising first and second housing portions, a rotatable rotor, a conduit with a flexible portion supported by the first housing portion, a reservoir, and a drive device for the rotor supported by the second housing portion and methods of making such devices.

3. claims: 64-68

The claims essentially define delivery devices comprising a rotatable rotor supporting cam followers, a camming surface to move the cam followers, a fluid chamber having a volume associated with each cam follower, a flexible membrane arranged between each cam follower and its associated fluid chamber, inlet and outlet channels.

4. claims: 69-88

The claims essentially define delivery devices comprising first and second housing portions, a compressible reservoir located in the first housing portion, a compression mechanism operable on the reservoir and a drive device supported by the second housing and connectable to the reservoir to selectively cause relative movement between the reservoir and the compression mechanism and methods of making such devices.

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