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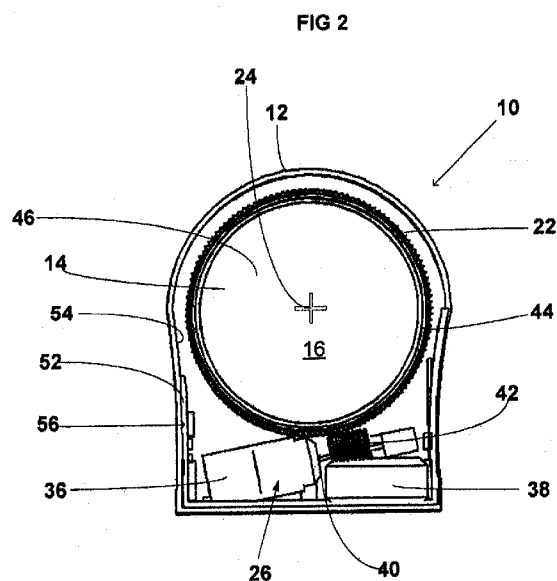
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Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

[Continued on next page]

(54) Title: COMPACT MEDICAL PUMP DEVICE



(57) Abstract: A compact medical fluid infusion pump and method for using thereof is described. The compact includes a medicament reservoir integrated with a rotary pump for providing a user thereof with a controlled quantity of fluid-medicament. The rotary pump includes at least one stationary arm and at least one rotating arm such that an operating device configured to operate the rotary pump thereby the fluid-medicament is impelled through an outlet channel of the reservoir and infusing the medicament into a user.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/IL2012/050052

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - A61M 5/14 (2012.01)
USPC - 604/151
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)
IPC(8) - A61M 1/00, 5/14, 5/142 (2012.01)
USPC - 604/131, 151

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 practicable, search terms used)
PatBase, Google Patents

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,283,949 B1 (ROORDA) 04 September 2001 (04.09.2001) entire document	1-17, 41-56, 43a-46a
Y	US 2,185,992 A (CADY) 02 January 1940 (02.01.1940) entire document	1-17, 41-56, 43a-46a
Y	US 3,936,214 A (ZUPANICK) 03 February 1976 (03.02.1976) entire document	2-5, 9, 42-45, 49-50
Y	US 4,548,607 A (HARRIS) 22 October 1985 (22.10.1985) entire document	7, 47
Y	US 2004/0226962 A1 (MAZURSKY et al) 18 November 2004 (18.11.2004) entire document	8, 48-50
A	US 6,726,678 B1 (NELSON et al) 27 April 2004 (27.04.2004) entire document	1-17, 41-56, 43a-46a

Further documents are listed in the continuation of Box C.

* Special categories of cited documents:
 "A" document defining the general state of the art which is not considered to be of particular relevance
 "E" earlier application or patent but published on or after the international filing date
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
 "O" document referring to an oral disclosure, use, exhibition or other means
 "P" document published prior to the international filing date but later than the priority date claimed
 "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
 "&" document member of the same patent family

Date of the actual completion of the international search
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL2012/050052

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:

- 1. 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.: 27
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 Continuation Sheet Attached

- 1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
- 2. As all searchable claims could be searched without effort justifying 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 report covers 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.

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/IL2012/050052

CONTINUATION OF BOX III

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees need to be paid.

Group I, claims 1-17, 41-56, 43a-46a are drawn to a compact medical fluid infusion pump.

Group II, claims 18-26 are drawn to a compact medical fluid infusion pump.

Group III, claims 28-38 are drawn to a compact medical fluid infusion pump.

Group IV, claims 39-40 are drawn to a method of infusing.

Group V, claims 57-59, 47a-49a are drawn to a method of assembling a compact fluid infusion pump.

The inventions listed in Groups I-V do not relate to a single general inventive concept under PCT Rule 13.1, because under PCT Rule 13.2 they lack the same or corresponding special technical features for the following reasons:

The special technical features of Group I, a medicament reservoir integrated with a rotary pump, wherein an operating device is configured to rotate a rotating arm such that medicament is impelled through an outlet channel, are not present in Groups II-V; the special technical features of Group II, a medicament reservoir located within a housing, at least one stationary arm extending through a central axle and partitioning said reservoir into at least two compartments, and impelling a first predetermined dosage out of a first compartment and a second predetermined dosage out of a second compartment, are not present in Groups I, III-V; the special technical features of Group III, a medicament reservoir located within a housing comprising at least two stacked reservoirs, are not present in Groups I-II, IV-V; the special technical features of Group IV, selecting a control application according to predetermined medical requirements on a remote control unit, said remote control unit in communications with a controller located in a compact pump, are not present in Groups I-III, V; and the special technical features of Group V, providing a first and a second portion of a semi-circular leakage-proof fluid reservoir having contoured outer walls and upper cutouts and lower cutouts, and bonding the first and second portions, are not present in Groups I-IV.

Since none of the special technical features of the Groups I-V inventions are found in more than one of the inventions, unity is lacking.