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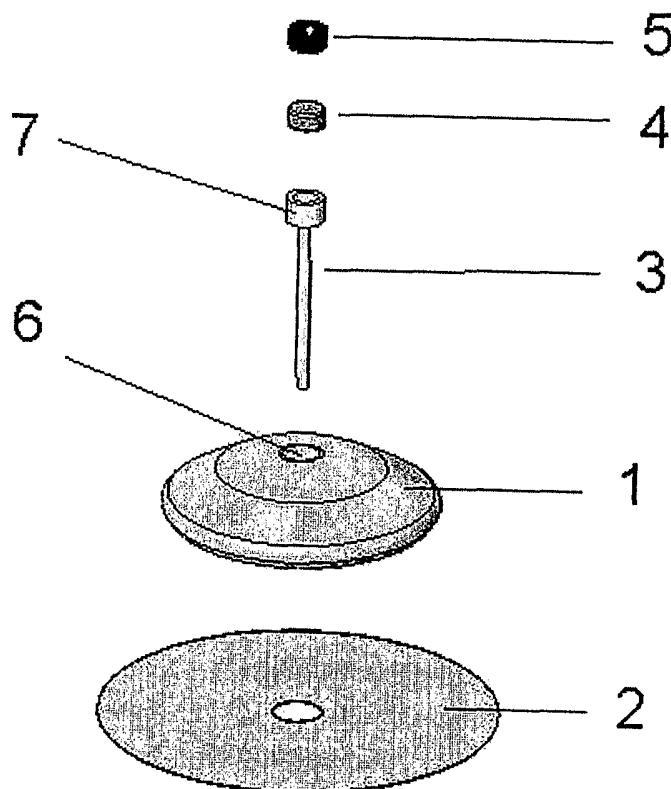
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[Continued on next page]

(54) Title: GATEWAY SYSTEM



(57) Abstract: This invention relates to an injection site or gateway or a system comprising such an injection site or gateway. In one form the invention concerns a system comprising an inserter device and a gateway for subcutaneous injection of fluid where comprises a distal surface (1a) corresponding to a proximal surface (1b) integrated with the inserter device. In another form the invention concerns a gateway for subcutaneous injection of fluid, which gateway comprises - a body (1) with at least one through-going opening (6) with an entrance and an outlet, and at least one cannula (3) and having a proximal end protruding from the lower side of the body; - and at the entrance of the through- going opening medication can be injected by a delivery device (20) which delivery device has protruding parts (22) which form an inner opening with a diameter d_i ; wherein the surface of the entrance is shaped in such a way that the cross- section of the top part of entrance, i.e. from the top of the entrance to a position $d_i/3$ below the top, do not exceed d_i .



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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No

PCT/DK2006/050005

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61M5/158 A61M25/06 A61M39/02

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)

A61M

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/199823 A1 (BOBROFF RANDA M ET AL) 23 October 2003 (2003-10-23)	1-6, 14, 15, 17
Y	figures 1-60	7-12
A	paragraph [0094] - paragraph [0102] -----	13, 16
X	WO 03/026728 A (MAERSK MEDICAL A/S; MOGENSEN, LASSE, WESSELTOFT; GOERANSSON, MAGNUS, W) 3 April 2003 (2003-04-03) cited in the application figures 1-18 page 6, line 6 - page 16, line 19 ----- -/--	1, 3, 4, 18, 19

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* 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 document 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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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2004/101071 A (MEDSOLVE TECHNOLOGIES, L.L.C; MARANO-FORD, APRIL; MCCONNELL-MONTALVO,) 25 November 2004 (2004-11-25)	1,18,19
Y	figures 1-19 page 1, line 22 - page 2, line 16 page 3, line 11 - line 13 page 7, line 10 - page 8, line 32 page 11, line 12 - line 25 page 16, line 4 - page 17, line 13 page 19, line 1 - line 20 -----	7-12
X	US 2004/158207 A1 (HUNN MARCEL ET AL) 12 August 2004 (2004-08-12) paragraph [0008]; figures 1-18 paragraph [0020] paragraph [0064] - paragraph [0067] paragraph [0080] -----	1

INTERNATIONAL SEARCH REPORT

International application No.
PCT/DK2006/050005

Box 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.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box 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

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 an additional fee, this Authority did not invite payment of any additional fee.
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.:

1-2, 3, 4, 5-19

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ 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: 1-2,3,4,5-19

These claims essentially define a system comprising:

- an inserter device
- a gateway having a body, a cannula, an opening and a restriction
- one penetrating member
- biasing unit

2. claims: 20-21

These claims essentially define a system comprising:

- a drug delivery device with an insertion needle secured to an interface
- the end of the interface is provided with at least one cover

3. claims: 22-28

These claims essentially define a gateway comprising:

- a body
- a cannula
- surface of entrance of an opening is shaped in such a way that the cross section of the top part of entrance does not exceed the inner opening of the protuding parts of the delivery device

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/DK2006/050005

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