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(81) **Designated States** *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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Declarations under Rule 4.17:

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

— *of inventorship (Rule 4.17(iv))*

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))*

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28 October 2010

(54) **Title**: SYSTEM AND METHODS FOR MEDICAMENT INFUSION

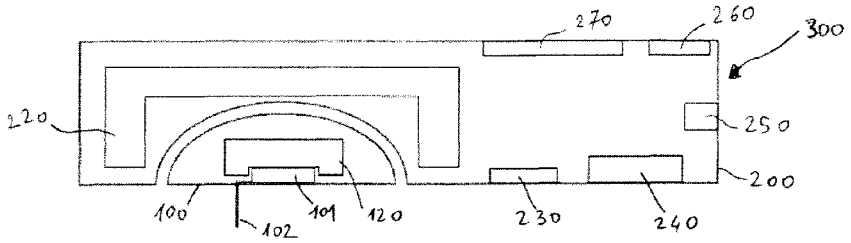


Fig. 1a

(57) **Abstract**: System (300) for trans-dermal delivery of doses of a medicament, comprising a delivery device (100) to be placed in dermal contact with a patient, the delivery device comprising a reservoir (101) for holding a medicament to be delivered, a trans-dermal injection element (102) for delivering doses of the medicament to the patient, a control unit (120) for controlling the delivery of the medicament when activated, the system further comprising a separate hand-held drive (200) device to be temporarily placed in proximity of the delivery device when a dose of medicament is required, the drive device comprising an activation unit (220) for activating the control unit of the delivery device.

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INTERNATIONAL SEARCH REPORT

International application No
PCT/CH2009/000411

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61M5/14 A61M5/142

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/068015 A2 (INSULET CORP [US]) 6 September 2002 (2002-09-06) paragraphs [0043] - [0050]; figures 2-8	1-34
X	WO 2005/018708 A2 (THERANOVA LLC [US]; BURNETT DANIEL R [US]) 3 March 2005 (2005-03-03) the whole document	1-34
X	WO 2006/114297 A1 (DISETRONIC LICENSING AG [CH]; SCHOEMAKER MICHAEL [DE]; FRANKHAUSER SYB) 2 November 2006 (2006-11-02) paragraph [0032] - paragraph [0035]; figure 2	1

☐ 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	Date of mailing of the international search report
21 May 2010	07/09/2010

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, Fax: (+31-70) 340-3016	Ceccarelli, David

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CH2009/000411

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.:
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

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 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.:

1-34

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: 1-34

System for trans-dermal delivery of doses of a medicament comprising a delivery device and a hand-held drive device with a safe-lock mechanism for controlling the delivery device.

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2. claim: 35

Safe-lock mechanism comprising a coil or a magnet or a combination of different magnets for creating a specific unocking magnetic field.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/CH2009/000411

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 02068015 A2	06-09-2002	CA 2434731 A1	06-09-2002
		CN 1556716 A	22-12-2004
		EP 1381408 A2	21-01-2004
		JP 2004532670 T	28-10-2004
WO 2005018708 A2	03-03-2005	NONE	
WO 2006114297 A1	02-11-2006	CA 2605530 A1	02-11-2006
		CN 101193671 A	04-06-2008
		DE 102005019306 A1	09-11-2006
		EP 1890743 A1	27-02-2008
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