

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
27 November 2008 (27.11.2008)

PCT

(10) International Publication Number
WO 2008/142015 A3

(51) International Patent Classification:
A61M 15/00 (2006.01)

(21) International Application Number:
PCT/EP2008/056017

(22) International Filing Date: 16 May 2008 (16.05.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/924,511 18 May 2007 (18.05.2007) US

(71) Applicant (for all designated States except US): **BANG & OLUFSEN MEDICOM A/S** [DK/DK]; Gimsinglundvej 20, DK-7600 Struer (DK).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SØRENSEN, Søren** [DK/DK]; Gimsinghoved 18, st, DK-7600 Struer (DK). **JACOBSEN, Søren Vestergaard** [DK/DK]; Snerlevej 9, DK-7500 Holstebro (DK). **ANDERSEN, Bjørn Knud** [DK/DK]; Danmarksgade 42, DK-7600 Struer (DK). **CHRISTRUP, Søren** [DK/DK]; Kirsebærhaven 5, DK-7600 Struer (DK).

(74) Agent: **INSPICOS A/S**; Kogle Allé 2, P.O. Box 45, DK-2970 Hørsholm (DK).

(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, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

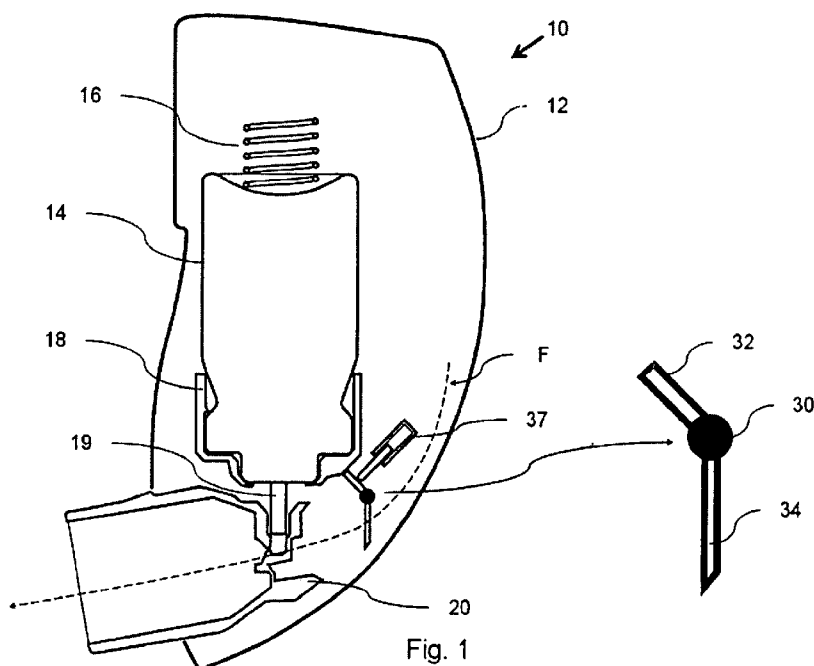
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: A DISPENSER AND A METHOD FOR OPERATING A DISPENSER



(57) Abstract: A breath actuated dispenser wherein the force derived from the flow of gas is used for allowing dispensing of a dose, and further comprising locking means adapted to prevent the force from allowing dispensing. Thus, locking may be performed using a much lower force. In addition, the dispenser has motion detecting means adapted to determine a degree of physical activity of a user.

WO 2008/142015 A3



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) **Date of publication of the international search report:**

5 March 2009

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2008/056017

A. CLASSIFICATION OF SUBJECT MATTER INV. A61M15/00		
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 2006/062449 A (ERNST HOERLINS INGENJOERSBYRA [SE]; HOERLIN ERNST [SE]) 15 June 2006 (2006-06-15) abstract page 3, line 7 - line 10 page 4, line 4 - line 15 page 9, line 3 - line 10 page 9, line 25 - line 30 page 12, line 27 - page 12, line 3 page 13, line 24 - line 29 figure 9 figures 10,11 figure 17 figure 19 ----- -/--	1-26
☒ 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 10 September 2008		Date of mailing of the international search report 19/01/2009
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016		Authorized officer Fuentes, Santiago

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2008/056017

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 2004/073776 A (CLINICAL DESIGNS LTD [GB]; BACON RAYMOND J [GB]; BOWMAN NICHOLAS JOHN) 2 September 2004 (2004-09-02) abstract page 5, line 10 - line 23 page 9, line 20 - line 29 figures 3-5 figures 14,16,17 -----	1-26
X	US 5 692 492 A (BRUNA PASCAL [FR] ET AL) 2 December 1997 (1997-12-02) abstract figures 12,14 column 7, line 30 - line 60 -----	1-26
X	US 2004/020486 A1 (HUXHAM LAURENCE STANMORE [GB] ET AL HUXHAM LAURENCE STANMORE [GB] ET A) 5 February 2004 (2004-02-05) the whole document -----	1-26
X	EP 0 414 536 A (RIKER LABORATORIES INC [US]) 27 February 1991 (1991-02-27) the whole document -----	1-26

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2008/056017

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 allsearchable 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.:

1-26

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: 1-26

Dispenser comprising:

- a flow path,
 - a container having an output,
 - biasing means for compressing the container,
 - retaining means for preventing dispensing,
 - force generating means,
 - locking means.
-

2. claims: 27-34

Dispenser comprising:

- a flow path,
 - a container having an output,
 - means for facilitating a dispensing from the container,
 - retaining means for preventing dispensing,
 - movement detecting means,
 - activity determining means.
-

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2008/056017

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2006062449 . A	15-06-2006	NONE	
WO 2004073776 A	02-09-2004	AT 386565 T AU 2004212768 A1 BR PI0407707 A CA 2516171 A1 CN 1798589 A DK 1596914 T3 EP 1596914 A1 ES 2301971 T3 HK 1076758 A1 JP 2006518238 T NZ 541495 A US 2007062522 A1 ZA 200506647 A	15-03-2008 02-09-2004 14-02-2006 02-09-2004 05-07-2006 23-06-2008 23-11-2005 01-07-2008 16-05-2008 10-08-2006 23-02-2007 22-03-2007 28-06-2006
US 5692492 A	02-12-1997	DE 69409945 D1 DE 69409945 T2 EP 0684851 A1 FR 2701399 A1 WO 9419040 A1 JP 3559864 B2 JP 8506746 T	04-06-1998 24-12-1998 06-12-1995 19-08-1994 01-09-1994 02-09-2004 23-07-1996
US 2004020486 A1	05-02-2004	NONE	
EP 0414536 A	27-02-1991	AT 99553 T CA 2023807 A1 DE 69005738 D1 DE 69005738 T2 DK 0414536 T3 JP 3170165 A NZ 235008 A US 5069204 A	15-01-1994 24-02-1991 17-02-1994 28-07-1994 16-05-1994 23-07-1991 23-12-1993 03-12-1991