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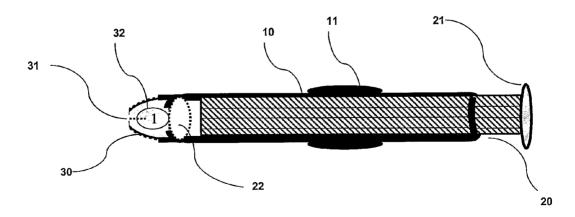
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Published:

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- (88) Date of publication of the international search report: 22 March 2007

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.

(54) Title: DEVICE CAPABLE OF DELIVERY OF HIGHLY SOLUBLE PHARMACEUTICAL DOSE FORMS INTO BODY SPACES



(57) Abstract: A medicinal applicator that includes a flexible tube with a bore hole or lumen traversing the entire length of the flexible tube from a proximal end of the flexible tube to a distal end of the flexible tube; a plunger traversing the bore hole or lumen of the flexible tube; an elastic membrane having a self-sealing and relatively watertight opening and covering the bore hole or lumen forming a delivery end of the flexible tube; and a removable finger retaining loop is detailed. In a preferred embodiment, the delivery end of the flexible tube and the plunger form a therapeutic holding chamber that remains watertight under the physiological conditions of a body cavity until the plunger is depressed at the proximal end mechanically propelling the medicament through the watertight opening of the elastic membrane into the body cavity.





INTERNATIONAL SEARCH REPORT

International application No PCT/US2006/017150

A. CLASSIFICATION OF SUBJECT MATTER INV. A61M31/00 A61D7/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{array}{ll} \mbox{Minimum documentation searched (classification system followed by classification symbols)} \\ \mbox{A61M} & \mbox{A61J} & \mbox{A61D} & \mbox{A61F} & \mbox{A61C} & \mbox{A61B} & \mbox{A61K} \\ \end{array}$

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

Category*	Citation of document, with indication, where appropriate, of	Relevant to claim No.	
K	US 4 578 061 A (LEMELSON JERO 25 March 1986 (1986-03-25) column 3, line 53 - column 4, figures 2,3 column 7, line 34 - column 7, figures 2,3	9	
A	FR 2 794 372 A (LABORATOIRES 8 December 2000 (2000-12-08) page 1, line 5 - page 1, line page 2, line 6 - page 3, line page 5, line 7 - page 5, line 1-3	1-8,10	
		- / - -	
<u> </u>	ther documents are listed in the continuation of Box C.	X See patent family annex.	
* Special "A" docum consi "E" earlier filing "L" docum which citatic "O" docum other	categories of cited documents: nent defining the general state of the art which is not idered to be of particular relevance document but published on or after the international date lent which may throw doubts on priority claim(s) or n is cited to establish the publication date of another on or other special reason (as specified) nent referring to an oral disclosure, use, exhibition or means ent published prior to the international filing date but	"T" later document published after or priority date and not in conficited to understand the princip invention "X" document of particular relevant cannot be considered novel or involve an inventive step where "Y" document of particular relevant cannot be considered novel or involve an inventive step where "Y" document of particular relevant can inventive step where "Y" document of particular relevant can inventive step where "Y" document of particular relevant can be seen that the can be	lict with the application but ole or theory underlying the ce; the claimed invention or cannot be considered to the document is taken alone se; the claimed invention over an inventive step when the ne or more other such docuge obvious to a person skilled
* Special "A" docum consi "E" earlier filling "L" docum which citatic "O" docum other "P" docum later	categories of cited documents: nent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or n is cited to establish the publication date of another on or other special reason (as specified) nent referring to an oral disclosure, use, exhibition or means ent published prior to the international filing date but than the priority date claimed	"T" later document published after or priority date and not in conficited to understand the princip invention "X" document of particular relevant cannot be considered novel or involve an inventive step where "Y" document of particular relevant cannot be considered to involve document is combined with or ments, such combination bein in the art. "&" document member of the same	lict with the application but ole or theory underlying the ce; the claimed invention or cannot be considered to not the document is taken alone ce; the claimed invention we an inventive step when the e or more other such docuge obvious to a person skilled e patent family
* Special "A" docum consi "E" earlier filing "L" docum which citatic "O" docum other "P" docum later	categories of cited documents: nent defining the general state of the art which is not idered to be of particular relevance document but published on or after the international date lent which may throw doubts on priority claim(s) or n is cited to establish the publication date of another on or other special reason (as specified) nent referring to an oral disclosure, use, exhibition or means ent published prior to the international filing date but	"T" later document published after or priority date and not in conficited to understand the princip invention "X" document of particular relevant cannot be considered novel or involve an inventive step when "Y" document of particular relevant cannot be considered to involve document is combined with or ments, such combination bein in the art.	lict with the application but ole or theory underlying the ce; the claimed invention or cannot be considered to not the document is taken alone ce; the claimed invention we an inventive step when the e or more other such docuge obvious to a person skilled e patent family
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* Special "A" docum consi "E" earlier filing "L" docum which cotatic "O" docum other "P" docum later Date of the	categories of cited documents: nent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date nent which may throw doubts on priority claim(s) or n is cited to establish the publication date of another on or other special reason (as specified) nent referring to an oral disclosure, use, exhibition or means nent published prior to the international filling date but than the priority date claimed	"T" later document published after or priority date and not in conficited to understand the princip invention "X" document of particular relevant cannot be considered novel or involve an inventive step where "Y" document of particular relevant cannot be considered to involve an inventive step where it is combined with or ments, such combination being in the art. "&" document member of the same invention being in the art.	lict with the application but only on theory underlying the ce; the claimed invention reannot be considered to not the document is taken alone be; the claimed invention we an inventive step when the e or more other such docung obvious to a person skilled a patent family

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2006/017150

		PC1/US2006/01/150
C(Continua	tion). DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 788 664 A (SCALISE ET AL) 4 August 1998 (1998-08-04) column 1, line 6 - column 1, line 21 column 2, line 45 - column 3, line 56; claim 1; figures 1-4	1-8,10
А	US 2003/158510 A1 (HUANG DEBORAH) 21 August 2003 (2003-08-21) page 1, paragraph 10 page 1, paragraph 20 - page 2, paragraph 24; figures 2-8	1-8,10
A	FR 2 524 309 A (LISS IRENE) 7 October 1983 (1983-10-07) page 1, line 33 - page 2, line 17 page 3, line 1 - page 4, line 14; figures 1-3	1-8,10

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.1

Claims Nos.: 11-17

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery

Continuation of Box II.2

Claims Nos.: 17

The subject-matter of Claim 17 relates to drawings, which is not allowable under Rule 6.2 (a) PCT, and lacks clarity (Art. 6 PCT), as it is unclear which are the tchnical features necessary to achieve the result desired.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

International application No. PCT/US2006/017150

INTERNATIONAL SEARCH REPORT

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. X Claims Nos.: 11-17 because they relate to subject matter not required to be searched by this Authority, namely: Rule 39.1(iv) PCT - Method for treatment of the human or animal body by
2. X Claims Nos.: 17 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: see FURTHER INFORMATION sheet PCT/ISA/210
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. X 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.:
Remark on Protest The additional search fees were accompanied by the applicant's protest. X 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: 1-8,10

directed to a medicinal applicator with a manual guiding system $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

2. claim: 9

directed to a medicinal applicator with a video guiding system

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2006/017150

Patent document cited in search report		Publication date	Patent family member(s)		Publication date	
US 4578061	Α	25-03-1986	NONE	-		
FR 2794372	Α	08-12-2000	NONE			
US 5788664	Α	04-08-1998	NONE			
US 2003158510	A1	21-08-2003	GB	2385273 A	20-08-2003	
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