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(54) Title: INFUSION DEVICE

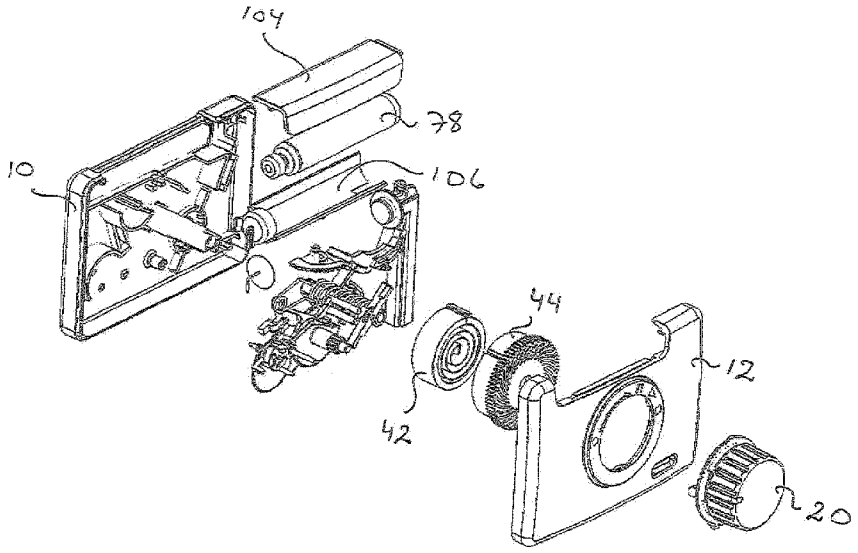


Fig. 3

(57) Abstract: The present invention relates to an infusion device comprising a housing (10, 12); a compartment inside said housing for positioning a medicament container (78), an infusion needle (124) arranged to said housing, being connectable to said medicament container for delivering a dose of medicament, a piston plunger (72) arranged in said housing capable of acting on said medicament container for delivering a dose of medicament, mechanical drive means capable of acting on said piston plunger for delivering a dose of medicament. The invention is characterised in that said piston plunger comprises a number of distinct segments (82) being inter-connectable to each other for forming an elongated piston plunger.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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ADD.

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 practicable, 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 2007/073236 A1 (MERNOE MORTEN [DK] ET AL) 29 March 2007 (2007-03-29) abstract figures 1-20	1-13
X	WO 01/19434 A1 (NOVO NORDISK AS [DK]) 22 March 2001 (2001-03-22) abstract figure 1	1-13
X	US 2002/007154 A1 (HANSEN STEFFEN [DK] ET AL) 17 January 2002 (2002-01-17) abstract figures 1-5	1-13
X	WO 98/10814 A1 (NOVO NORDISK AS [DK]) 19 March 1998 (1998-03-19) claims figures	1-13

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Name and mailing address of the ISA/	Authorized officer
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Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2007073236 A1	29-03-2007	US 2007073236 A1	29-03-2007
		US 2012123384 A1	17-05-2012
		US 2012130312 A1	24-05-2012
WO 0119434 A1	22-03-2001	AT 299728 T	15-08-2005
		AT 452669 T	15-01-2010
		AU 778714 B2	16-12-2004
		BR 0014030 A	14-05-2002
		CA 2383078 A1	22-03-2001
		CN 1374876 A	16-10-2002
		CZ 20020927 A3	14-08-2002
		DE 20023735 U1	24-11-2005
		DE 20023819 U1	20-07-2006
		DE 60021425 D1	25-08-2005
		DE 60021425 T2	27-04-2006
		DK 1250167 T3	31-10-2005
		DK 1570876 T3	19-04-2010
		EP 1250167 A1	23-10-2002
		EP 1570876 A2	07-09-2005
		ES 2245945 T3	01-02-2006
		ES 2338792 T3	12-05-2010
		HU 0202575 A2	28-12-2002
		IL 148609 A	15-05-2007
		JP 4361236 B2	11-11-2009
		JP 4490496 B2	23-06-2010
		JP 2003509133 A	11-03-2003
		JP 2009050713 A	12-03-2009
		KR 100709485 B1	20-04-2007
		NO 20021312 A	14-05-2002
		PL 354038 A1	15-12-2003
		TW 453884 B	11-09-2001
		US RE41956 E1	23-11-2010
		US 6582404 B1	24-06-2003
		WO 0119434 A1	22-03-2001
		ZA 200201997 A	28-05-2003
US 2002007154 A1	17-01-2002	NONE	
WO 9810814 A1	19-03-1998	AT 244586 T	15-07-2003
		AU 4199997 A	02-04-1998
		DE 69723452 D1	14-08-2003
		DE 69723452 T2	27-05-2004
		EP 0927058 A1	07-07-1999
		JP 4037458 B2	23-01-2008
		JP 2001502196 A	20-02-2001
		JP 2007289741 A	08-11-2007
		US 6110149 A	29-08-2000
		WO 9810814 A1	19-03-1998