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#### Published

With international search report.

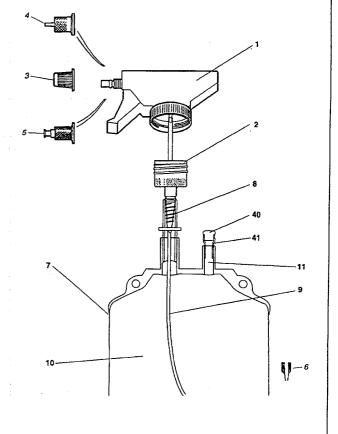
Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

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15 June 1995 (15.06.95)

(54) Title: SECURE ADAPTOR FOR STERILE FLUID PACKS WHICH ALLOWS THEIR USE IN WOUND AND MEDICAL LAVAGE

### (57) Abstract

This invention relates to a secure adaptor for sterile fluid packs to allow a variety of uses in the field of wound and medical lavage. A tight and secure fit is made possible by a coarse thread that is screwed in and grips the inside wall of the giving set port. Further design features prevent leakage of the sterile fluids. A trigger sprayer can be joined to the secure adaptor. Conveniently the joining screw thread can also fit the screw thread tops of free standing plastic bottles containing sterile saline. A sterile surgical spray unit is thus produced. A sterility security device can be incorporated into the design of the spray unit and secure adaptor which enables them to be "screwed in" but not easily removed from the plastic bottles or fluid bags. The secure adaptor can be joined to a variety of medical catheters. A wound lavage teaching aid has been designed to demonstrate the use of this sterile surgical spray unit.



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CLASSIFICATION OF SUBJECT MATTER PC 6 A61M3/02 B05B11/00 IPC 6 A61M11/00 G09B23/28 A61M39/10 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) IPC 6 A61M B05B 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) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X EP,A,O 336 415 (INDAG GMBH) 11 October 1-4 Y see column 4, line 16 - column 5, line 41; 5,6 figures Y WO, A, 92 19528 (DU PONT INC.) 12 November 5,6 see abstract; figures US, A, 4 217 897 (SNEIDER) 19 August 1980 1 see column 6, line 51 - line 66; claim 1; figures A WO, A, 91 14630 (PROCTER & GAMBLE COMP.) 3 1 October 1991 see abstract; figures 3,6A,6B -/--Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: '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 "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 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date 1. 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) 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 docudocument referring to an oral disclosure, use, exhibition or other means ments, such combination being obvious to a person skilled document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 0 4, 05, 95 9 February 1995 Name and mailing address of the ISA Authorized officer Furopean Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, VILLENEUVE, J Fax: (+31-70) 340-3016

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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.
A	US,A,5 257 724 (STEIJNS) 2 November 1993 see abstract; figures 1,2	7
A	US,A,4 776 840 (FREITAS ET AL.) 11 October 1988 see figure 1	8
A	US,A,3 057 352 (MCKENNA) 9 October 1962	
A	US,A,4 892 526 (REESE) 9 January 1989	

	International	application	No.
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PCT/GB94/02436

Box 1	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This is	nternational 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 II	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
1.	ternational Searching Authority found multiple inventions in this international application, as follows:  Claims 1-10: Lavage device with spray pump  Claims 11-15: Adaptor for sterile fluid pack
1.	As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
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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.:
	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.:  1-10
emark o	The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.

Information on patent family members

International Application No
PCT/GB 94/02436

Patent document cited in search report	Publication date	Patent family member(s)		Publication date	
EP-A-0336415	11-10-89	DE-U- JP-A- US-A- US-A-	8804685 1299660 5031798 5056685	19-05-88 04-12-89 16-07-91 15-10-91	
WO-A-9219528	12-11-92	AU-A- CA-A- EP-A- JP-T- PT-A-	1588492 2109430 0583261 6506650 100430	21-12-92 30-10-92 23-02-94 28-07-94 31-05-94	
US-A-4217897	19-08-80	US-A- US-A-	3993070 4133313	23-11-76 09-01-79	
WO-A-9114630	03-10-91	EP-A- AT-T- CA-A- DE-D- DE-T- US-A-	0447687 110301 2076863 69011845 69011845 5156299	25-09-91 15-09-94 20-09-91 29-09-94 09-03-95 20-10-92	
US-A-5257724	02-11-93	NONE			
US-A-4776840	11-10-88	NONE			
US-A-3057352	09-10-62	NONE			
US-A-4892526	09-01-89	NONE			