



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification ⁵ : A61M 5/32</p>	<p>A3</p>	<p>(11) International Publication Number: WO 91/09639 (43) International Publication Date: 11 July 1991 (11.07.91)</p>
<p>(21) International Application Number: PCT/GB90/01994 (22) International Filing Date: 20 December 1990 (20.12.90)</p> <p>(30) Priority data: 8928956.5 21 December 1989 (21.12.89) GB 8928957.3 21 December 1989 (21.12.89) GB 8928959.9 21 December 1989 (21.12.89) GB 9004239.1 26 February 1990 (26.02.90) GB 9006736.4 26 March 1990 (26.03.90) GB</p> <p>(71)(72) Applicant and Inventor: STEER, Andrew, William [GB/GB]; 94A Bushey Hill Road, Camberwell, London SE5 8QQ (GB).</p> <p>(74) Agent: COOK, A., J.; D. Young & Co., 10 Staple Inn, London WC1V 7RD (GB).</p>		<p>(81) Designated States: AT, AT (European patent), AU, BB, BE (European patent), BF (OAPI patent), BG, BJ (OAPI patent), BR, CA, CF (OAPI patent), CG (OAPI patent), CH, CH (European patent), CM (OAPI patent), DE, DE (European patent), DK, DK (European patent), ES, ES (European patent), FI, FR (European patent), GA (OAPI patent), GB, GB (European patent), GR (European patent), HU, IT (European patent), JP, KP, KR, LK, LU, LU (European patent), MC, MG, ML (OAPI patent), MR (OAPI patent), MW, NL, NL (European patent), NO, RO, SD, SE, SE (European patent), SN (OAPI patent), SU, TD (OAPI patent), TG (OAPI patent), US.</p> <p>Published <i>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.</i></p> <p>(88) Date of publication of the international search report: 22 August 1991 (22.08.1991)</p>
<p>(54) Title: NEEDLE PROTECTOR</p>		
<p>(57) Abstract</p> <p>A needle protector includes first and second needle-housing parts (10, 20) hinged to a central part (30). The central part (30) has a slot (31, 32) defined by a structure constructed for snug engagement with the nozzle of a syringe. The housing parts (10, 20) are complementary and are hingeable between a first closed position in which they define a container capable of receiving and holding a new steril-packed needle and a second position. The housing parts (10, 20) can be latched together in a non-return manner and when so latched define a disposable casing which substantially totally encloses and protects a used needle. An adapter (510, 516) for use with such a needle protector, so that it can be used with a luer lock type of syringe, is also disclosed.</p>		


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INTERNATIONAL SEARCH REPORT

International Application No PCT/GB 90/01994

I. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all) ⁶		
According to International Patent Classification (IPC) or to both National Classification and IPC		
IPC ⁵ : A 61 M 5/32		
II. FIELDS SEARCHED		
Minimum Documentation Searched ⁷		
Classification System	Classification Symbols	
IPC ⁵	A 61 M	
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched ⁸		
III. DOCUMENTS CONSIDERED TO BE RELEVANT ⁹		
Category ⁹	Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²	Relevant to Claim No. ¹³
X	US, A, 4820277 (NORELLI) 11 April 1989 see abstract; column 2, lines 42-62; column 5, lines 47-60; figure 6	1-4, 14
Y	cited in the application ---	10
Y	FR, A, 2620341 (PRZYGODZKI) 17 March 1989 see abstract; page 4, lines 28-36; figures 2-5	10
A	---	11-13
A	US, A, 4888001 (SCHOENBERG) 19 December 1989 see abstract; column 1, lines 43-68; column 2, line 56 - column 3, line 53; figures 1-15	5, 15, 19, 22
A	EP, A, 0344606 (HABLEY MEDICAL TECHNOLOGY CORP.) 6 December 1989 see abstract; page 5, lines 2-21; ./.	2-9, 19-22
<p>¹⁰ Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"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</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"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.</p> <p>"&" document member of the same patent family</p>		
IV. CERTIFICATION		
Date of the Actual Completion of the International Search	Date of Mailing of this International Search Report	
27th May 1991	25. 07. 91	
International Searching Authority	Signature of Authorized Officer	
EUROPEAN PATENT OFFICE	F.W. HECK 	

III. DOCUMENTS CONSIDERED TO BE RELEVANT (CONTINUED FROM THE SECOND SHEET)		
Category *	Citation of Document, " with indication, where appropriate, of the relevant passages	Relevant to Claim No.
A	<p>claims 1,3,8; figures 1,13 --- WO, A, 8800477 (QUAYLE) 28 January 1988 see abstract; page 14, lines 13-27; figures 15,24,25 ---</p>	2-9,19-22
A	<p>--- GB, A, 2198353 (BESPAK PLC) 15 June 1988 see abstract; page 6, lines 3-36; figure 4. ---</p>	2-9,19-22
A	<p>--- US, A, 2854976 (HEYDRICH) 7 October 1958 see column 1, lines 61-65; figures 1-7 -----</p>	10-13

FURTHER INFORMATION CONTINUED FROM THE SECOND SHEET

V. OBSERVATION WHERE CERTAIN CLAIMS WERE FOUND UNSEARCHABLE ¹

This International search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claim numbers
Authority, namely: _____ because they relate to subject matter not required to be searched by this
2. Claim numbers _____ 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. Claim numbers _____ because they are dependent claims and are not drafted in accordance with the second and third sentences of PCT Rule 6.4(a).

VI. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING ²

This International Searching Authority found multiple Inventions in this International application as follows:

1. claims 1,2-9,14-22; 2. claims 10-13; 3. claims 23-26
for further information see form PCT/ISA/206 dd 15-04-91

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims of the International application
2. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims of the International application for which fees were paid, specifically claims 1, 2-9, 10-13, 14-22
3. 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 claim numbers: _____
4. As all searchable claims could be searched without effort justifying an additional fee, the International Searching Authority did not invite payment of any additional fee

Remark on Protest

- The additional search fees were accompanied by applicant's protest
- No protest accompanied the payment of additional search fees

ANNEX TO THE INTERNATIONAL SEARCH REPORT
ON INTERNATIONAL PATENT APPLICATION NO.

GB 9001994
SA 43250

This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report. The members are as contained in the European Patent Office EDP file on 03/07/91. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A- 4820277	11-04-89	AU-A- 2983389	17-08-89
		DE-A- 3904559	24-08-89
		FR-A- 2627088	18-08-89
		GB-A- 2215612	27-09-89
		JP-A- 1268563	26-10-89
		US-A- 4909792	20-03-90
		US-A- 4909791	20-03-90
FR-A- 2620341	17-03-89	None	
US-A- 4888001	19-12-89	None	
EP-A- 0344606	06-12-89	US-A- 4935013	19-06-90
		JP-A- 2026563	29-01-90
WO-A- 8800477	28-01-88	AU-A- 7587587	10-02-88
GB-A- 2198353	15-06-88	None	
US-A- 2854976		None	