

PATENT COOPERATION TREATY

From the:
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

BERGER, Dan
Level 7, 1 Market Street
Sydney, New South Wales 2000
Australia

PCT

NOTIFICATION OF TRANSMITTAL OF
INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Rule 71.1)

Date of mailing
(day/month/year) 11 June 2021

Applicant's or agent's file reference
P5797PC00

IMPORTANT NOTIFICATION

International application No.
PCT/AU2020/050545

International filing date (day/month/year)
29 May 2020

Priority date (day/month/year)
31 May 2019

Applicant
METIER MEDICAL LIMITED

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translations to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the *PCT Applicant's Guide*.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed invention is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the IPEA/AU

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PATENT COOPERATION TREATY
PCT
INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P5797PC00	FOR FURTHER ACTION See Form PCT/IPEA/416																	
International application No. PCT/AU2020/050545	International filing date (<i>day/month/year</i>) 29 May 2020	Priority date (<i>day/month/year</i>) 31 May 2019																
International Patent Classification (IPC) or national classification and IPC A61M 5/32 (2006.01)																		
Applicant METIER MEDICAL LIMITED																		
1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of 4 sheets, including this cover sheet. 3. This report is also accompanied by ANNEXES, comprising: a. ☒ (<i>sent to the applicant and to the International Bureau</i>) a total of 11 sheets, as follows: ☒ sheets of the description, claims and/or drawings which have been amended and/or sheets containing rectifications authorized by this Authority, unless those sheets were superseded or cancelled, and any accompanying letters (see Rules 46.5, 66.8, 70.16, 91.2, and Section 607 of the Administrative Instructions). ☐ sheets containing rectifications not taken into account by this Authority because they were not available at the time when this Authority began to draw up this report, and any accompanying letters (Rules 66.4bis, 70.2(e), 70.16 and 91.2). ☐ Superseded sheets and any accompanying letters, where this Authority either considers that the superseding sheets contain an amendment that goes beyond the disclosure in the international application as filed, or the superseding sheets were not accompanied by a letter indicating the basis for the amendments in the application filed, as indicated in item 4 of Box No. I and the Supplemental Box (see Rule 70.16(b)). b. ☐ (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing, in the form of an Annex C/ST.25 text file, as indicated in the Supplemental Box Relating to Sequence Listing (see paragraph 3ter of Annex C of the Administrative Instructions). 4. This report contains indications relating to the following items: <table style="margin-left: 20px; border: none;"> <tr><td>☒ Box No. I</td><td>Basis of the report</td></tr> <tr><td>☐ Box No. II</td><td>Priority</td></tr> <tr><td>☐ Box No. III</td><td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td></tr> <tr><td>☐ Box No. IV</td><td>Lack of unity of invention</td></tr> <tr><td>☒ Box No. V</td><td>Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement</td></tr> <tr><td>☐ Box No. VI</td><td>Certain documents cited</td></tr> <tr><td>☐ Box No. VII</td><td>Certain defects in the international application</td></tr> <tr><td>☐ Box No. VIII</td><td>Certain observations on the international application</td></tr> </table>			☒ Box No. I	Basis of the report	☐ Box No. II	Priority	☐ Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	☐ Box No. IV	Lack of unity of invention	☒ Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement	☐ Box No. VI	Certain documents cited	☐ Box No. VII	Certain defects in the international application	☐ Box No. VIII	Certain observations on the international application
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Date of submission of the demand 31 March 2021	Date of completion of this report 11 June 2021																	
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA Email address: pct@ipaaustralia.gov.au		Authorised officer Karen Violante AUSTRALIAN PATENT OFFICE (ISO 9001 Quality Certified Service) Telephone No. +61262837933																

Box No. I

Basis of the report

1. With regard to the **language**, this report has been established on the basis of:
- ☒ The international application in the language in which it was filed:
- ☐ A translation of the international application into , which is the language of a translation furnished for the purposes of :
- ☐ international search (under Rules 12.3(a) and 23.1 (b)).
- ☐ publication of the international application (under Rule 12.4(a)).
- ☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a) and (b)).
2. With regard to the **elements** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
- ☐ the international application as originally filed/furnished, or
- ☒ the description: pages **1 to 14** , as originally filed/furnished
pages , received by this Authority on with the letter of
- ☒ the claims: Nos. , as originally filed/furnished
Nos. , as amended (together with any statement) under Article 19,
Nos. **1 to 13** , received by this Authority on **10 May 2021** with the letter of **10 May 2021**
- ☒ the drawings: pages **1/7 to 7/7** , as originally filed/furnished
pages , received by this Authority on with the letter of
- ☐ a sequence listing - see Supplemental Box Relating to Sequence Listing.
3. ☒ The amendments have resulted in the cancellation of:
- ☐ the description, pages
- ☒ the claims, Nos. **14 to 21**
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (specify):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since either they are considered to go beyond the disclosure as filed, or they were not accompanied by a letter indicating the basis for the amendments in the application as filed, as indicated in the Supplemental Box (Rules 70.2(c) and (*c-bis*)):
- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (specify):
5. ☐ This report has been established:
- ☐ taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rules 66.1(d-*bis*) and 70.2(e)).
- ☐ without taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rules 66.4*bis* and 70.2(e)).
6. With regard to top-up searches (Rules 66.1*ter* and 70.2(f)):
- ☒ A top-up search was carried out by this Authority on 18 May 2021.
- ☐ Additional relevant documents have been discovered during the top-up search.
- ☐ No top-up search was carried out by this Authority because it would serve no useful purpose.
7. ☐ Supplementary international search report(s) from Authority(ies)
has/have been received and taken into account in establishing this report (Rule 45*bis*.8(b) and (c)).

* If item 4 applies, some or all of those sheets may be marked "superseded."

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims 1 to 13	YES
	Claims NONE	NO
Inventive step (IS)	Claims 1 to 13	YES
	Claims NONE	NO
Industrial applicability (IA)	Claims 1 to 13	YES
	Claims NONE	NO

2. CITATIONS AND EXPLANATIONS:**CITATIONS**

D1: WO 2018/109470 A2 (STAR SYRINGE LIMITED) 21 June 2018
 D2: WO 2017/129968 A2 (STAR SYRINGE LIMITED) 03 August 2017
 D3: EP 0832660 A2 (BECTON, DICKINSON AND COMPANY) 01 April 1998
 D4: US 2017/0258990 A1 (WEI) 14 September 2017
 D5: US 2002/0161336 A1 (CRAWFORD et al.) 31 October 2002
 D6: EP 2397181 A1 (F. HOFFMANN-LA ROCHE AG et al.) 21 December 2011
 D7: WO 2010/059415 A2 (B. BRAUN MELSUNGEN AG) 27 May 2010
 D8: WO 2008/076459 A1 (MELSUNGEN AG, B., BRAUN) 26 June 2008
 D9: GB 2532979 A (OWEN MUMFORD LIMITED) 08 June 2016
 D10: US 5643219 A (BURNS) 01 July 1997
 D11: WO 2009/007718 A1 (STAR SYRINGE LIMITED) 15 January 2009
 D12: EP 0724890 A1 (BECTON, DICKINSON AND COMPANY) 07 August 1996
 D13: US 2012/0323216 A1 (KOH) 20 December 2012
 D14: WO 2010/059345 A2 (B. BRAUN MELSUNGEN AG) 27 May 2010
 D15: US 5490841 A (LANDIS) 13 February 1996

NOVELTY (N)

Claims 1 to 13: These claims meet the criteria set forth in PCT Article 33(2) for novelty. The prior art (documents D1 to D15) published before the priority date does not disclose these claims. None of these documents (D1 to D15) disclose these claims; namely: a needle cover including: a mounting portion for mounting a needle having a tip; and a lid portion hingedly connected to the mounting portion such that the lid and mounting portions can adopt a plurality of positions relative to one another including an open position in which the needle tip, when the needle is mounted to the mounting portion, is exposed for use, and first and second cover positions in which the needle tip, when the needle is mounted to the mounting portion, is covered by the lid portion, wherein: in the first cover position the lid and mounting portions are releasably docked together; in the second cover position the lid and mounting portions are irreversibly docked together so that relative movement therebetween is prevented; the lid and mounting portions each include a closure flange with a substantially flat face, wherein the faces of the closure flanges are in face-to-face contact in the second cover position and are inclined at an angle with respect to one another in the first cover position; the lid and mounting portions include cooperating docking elements to dock the lid and mounting portions together in either the first or second cover positions; the cooperating docking elements include at least one docking projection on the closure flange of one of the lid or mounting portion, the projection extending from the face of the closure flange at a substantially right angle thereto, the projection comprising a distal hook portion and a proximal hook portion; the cooperating docking elements also include an aperture for each docking projection in the closure flange of the other of the lid or mounting portion, wherein at least one resiliently deformable element extends inwardly from an internal wall of the aperture, the resiliently deformable element being configured to deform to allow entry therebeyond of either the distal or proximal hook portion into the aperture; the distal hook portion is sized and configured so that it can be inserted into the aperture beyond the at least one resiliently deformable element and subsequently withdrawn therefrom, insertion of only the distal hook portion into the aperture thereby providing the first cover position; and the proximal hook portion is sized and configured so that it can be inserted into the aperture beyond the at least one resiliently deformable element but so that it cannot be withdrawn therefrom, insertion of the proximal hook portion into the aperture thereby providing the second cover position. Appended claims 2 to 13 add further features to those defined in claim 1 and are therefore also novel. Therefore, the subject matter of claims 1 to 13 is new and meets the requirements of Article 33(2) of the PCT with regard to novelty.

INVENTIVE STEP (IS)

Claims 1 to 13: These claims meet the criteria set forth in PCT Article 33(3) for inventive step. The prior art (documents D1 to D15) published before the priority date does not disclose these claims. None of these documents (D1 to D15) disclose: a needle cover including: a mounting portion for mounting a needle having a tip; and a lid portion hingedly connected to the mounting portion such that the lid and mounting portions can adopt a plurality of positions relative to one another including an open position in which the needle tip, when the needle is mounted to the mounting portion, is exposed for use, and first and second cover positions in which the needle tip, when the needle is mounted to the mounting portion, is covered by the lid portion, wherein: in the first cover position the lid and mounting portions are releasably docked together; in the second cover position the lid and mounting portions are irreversibly docked together so that relative movement therebetween is prevented; the lid and mounting portions each include a closure flange with a substantially flat face, wherein the faces of the closure flanges are in face-to-face contact in the second cover position and are inclined at an angle with respect to one another in the first cover position; the lid and mounting portions include cooperating docking elements to dock the lid and mounting portions together in either the first or second cover positions; the cooperating docking elements include at least one docking projection on the closure flange of one of the lid or mounting portion, the projection extending from the face of the closure flange at a substantially right angle thereto, the projection comprising a distal hook portion and a proximal hook portion; the cooperating docking elements also include an aperture for each docking projection in the closure flange of the other of the lid or mounting portion, wherein at least one resiliently deformable element extends inwardly from an internal wall of the aperture, the resiliently deformable element being configured to deform to allow entry therebeyond of either the distal or proximal hook portion into the aperture; the distal hook portion is sized and configured so that it can be inserted into the aperture beyond the at least one resiliently deformable element and subsequently withdrawn therefrom, insertion of only the distal hook portion into the aperture thereby providing the first cover position; and the proximal hook portion is sized and configured so that it can be inserted into the aperture beyond the at least one resiliently deformable element but so that it cannot be withdrawn therefrom, insertion of the proximal hook portion into the aperture thereby providing the second cover position. Therefore, the subject matter of claim 1 is not obvious and meets the requirements of Article 33(3) of the PCT with regard to inventive step. Dependent claims 2 to 13 are not obvious in the light of any of the cited documents nor are they disclosed in any obvious combination of them. It is also considered that they would not be obvious to a person skilled in the art in the light of common general knowledge either by itself or in combination with any of these documents.

INDUSTRIAL APPLICABILITY (IA)

The invention defined in the claims is considered to meet the requirements of Industrial Applicability under Article 33(4) of the PCT because it can be made by, or used in, industry.



HALFORDS IP
Patent and Trade Mark Attorneys

10 May 2021

Attention: PCT Administration Officer

International PCT Application No. PCT/AU2020/050545
Metier Medical Limited
NEEDLE COVER AND SAFETY NEEDLE ASSEMBLY INCLUDING SAME
Our Ref: P5797PC00 DB:SS

Dear Authorised Officer,

We refer to the Written Opinion of the International Searching Authority dated 31 July 2020 issued in relation to the above referenced application.

Attached please find:

1. Statement of Proposed Amendments under Article 34; and
2. Amended Claims pages, in clean and marked up copies.

In respect of the comments raised in relation to Novelty/Inventive step under Box No. V of the Written Opinion, Applicant submits the following comments.

Applicant has amended the claims to more clearly define the invention. In particular, claim 1 has been amended to specify the following:

- (i) the lid and mounting portions each include a closure flange with a substantially flat face, wherein the faces of the closure flanges are in face-to-face contact in the second cover position and are inclined at an angle with respect to one another in the first cover position (*support found, for example, at previous claims 11 and 12, and para [0039]*)
- (ii) the lid and mounting portions include cooperating docking elements to dock the lid and mounting portions together in either the first or second cover positions;
- (iii) the cooperating docking elements include at least one docking projection on the closure flange of one of the lid or mounting portion, the projection extending from the face of the closure flange at a substantially right angle thereto, the projection comprising a distal hook portion and a proximal hook portion; (*support found, for example, at previous claims 2, 3 10 paras [0014], [0039]*)
- (iv) the cooperating docking elements also include an aperture for each docking projection in the closure flange of the other of the lid or mounting portion, wherein at least one resiliently deformable element extends inwardly from an internal wall of the aperture, the resiliently deformable element being configured to deform to allow entry therebeyond of either the distal or proximal hook portion into the aperture; (*support found, for example, at previous claims 6 ,7 paras [0014], [0052]*)

The Examiner suggested that previously submitted claim 1 was not novel in light of D2, D4 or D8. Applicant submits that none of D2, D4, or D8, include all of the above-mentioned features (i)-(iv) as claimed.

For example, as already conceded by the Examiner, feature (iv) which incorporates subject matter from previously submitted claim 6, has already been indicated as novelty conferring over D2 and D4. In fact, D4 does not even appear to include a first cover position as claimed, wherein the needle tip is covered in a non-permanent way.

Furthermore, in respect of all of D2, D4, or D8, there are no cooperating docking elements located on 'closure flanges' that come into face-to-face contact in the second or fully closed cover position as per feature (i). This aspect provides several advantages. As noted in the specification, this ensures that the lid portion is not over-rotated, which assists to avoid inadvertent penetration of the lid by the needle tip (see paragraph [0057]). This aspect also provides a user is not confused as to when the device is in the permanently closed position. A user can be sure that, when the flanges come into contact, the device is permanently locked and the needle tip safely enclosed. In contrast, in D2 for example, although the lid may appear safely closed (due to linear alignment of the lid with the syringe body), the lid only moves to the locked position after there is over-rotation of the lid. A user may therefore mistakenly assume the cover is safely locked when it is not (by observing the linear alignment with the syringe body).

The presently claimed invention also specifies the docking projection extends at a substantially right angle to the closure flange as per feature (iii). This aspect, in combination with the closure flanges, provides that in the first cover position, which provides the releasably locked state, the closure flanges are angled with respect to one another. This provides advantages in that a user can easily distinguish between the temporarily covered state and the permanently closed state.

Accordingly, Applicant submits the present claims are novel in light of the Examiner's citations.

In respect of inventive step, a skilled person would not be motivated to modify the devices in D2, D4, or D8, to include the features of the presently claimed invention, at least because the devices described in D2, D4 and D8 are specifically designed to operate in a particular way with specific tolerances. A skilled person would not be motivated to make any changes to the structure of the devices in D2, D4, and D8 in fear the devices may no longer operate correctly. In respect of the Examiner's other citations, Applicant submits these do not cure the deficiencies of D2, D4, or D8.

For at least the above reasons, Applicant submits the present claims also involve an inventive step in light of the Examiner's citations.

On the basis of the amendments and comments above, Applicant respectfully requests issuance of further notification that indicates the claims are novel and involve an inventive step.

Yours sincerely
Halfords IP

Dan Berger

P252-AU



HALFORDS IP
Patent and Trade Mark Attorneys

10 May 2021

International PCT Application No. PCT/AU2020/050545

Metier Medical Limited

NEEDLE COVER AND SAFETY NEEDLE ASSEMBLY INCLUDING SAME

HIP Ref: P5797PC00

STATEMENT OF AMENDMENTS UNDER ARTICLE 34

In the claims on file:

1. Cancel claims pages currently on file and replace with new claims pages supplied herewith, with a marked-up copy showing the amendments.

THE CLAIMS

1. A needle cover including:

a mounting portion for mounting a needle having a tip; and

a lid portion hingedly connected to the mounting portion such that the lid and mounting portions can adopt a plurality of positions relative to one another including an open position in which the needle tip, when the needle is mounted to the mounting portion, is exposed for use, and first and second cover positions in which the needle tip, when the needle is mounted to the mounting portion, is covered by the lid portion, wherein:

in the first cover position the lid and mounting portions are releasably docked together;

in the second cover position the lid and mounting portions are irreversibly docked together so that relative movement therebetween is prevented;

the lid and mounting portions each include a closure flange with a substantially flat face, wherein the faces of the closure flanges are in face-to-face contact in the second cover position and are inclined at an angle with respect to one another in the first cover position;

the lid and mounting portions include cooperating docking elements to dock the lid and mounting portions together in either the first or second cover positions;

the cooperating docking elements include at least one docking projection on the closure flange of one of the lid or mounting portion, the projection extending from the face of the closure flange at a substantially right angle thereto, the projection comprising a distal hook portion and a proximal hook portion;

the cooperating docking elements also include an aperture for each docking projection in the closure flange of the other of the lid or mounting portion, wherein at least one resiliently deformable element extends inwardly from an internal wall of the aperture, the resiliently deformable element being configured to deform to allow entry therebeyond of either the distal or proximal hook portion into the aperture;

the distal hook portion is sized and configured so that it can be inserted into the aperture beyond the at least one resiliently deformable element and subsequently withdrawn therefrom, insertion of only the the distal hook portion into the aperture thereby providing the first cover position; and

the proximal hook portion is sized and configured so that it can be inserted into the aperture beyond the at least one resiliently deformable element but so that it cannot be withdrawn therefrom, insertion of the proximal hook portion into the aperture thereby providing the second cover position.

2. A needle cover as claimed in claim 1, wherein the proximal and distal hook portions each include lateral expansions thereon, and wherein the lateral expansion of the proximal hook portion includes a cross-sectional dimension which is greater than any cross-sectional dimension of the lateral expansion of the distal hook portion.
3. A needle cover as claimed in claim 2, wherein the lateral expansion of the proximal hook portion is of a substantially conical profile and the lateral expansion of the distal hook position has a curved profile.
4. A needle cover as claimed in any one of claims 1 to 3, wherein the closure flanges include a hinge therebetween to provide the hinged connection between the mounting portion and the lid portion of the needle cover.
5. A needle cover as claimed in claim 4, wherein the corresponding docking elements are located adjacent a side edge of the closure flanges that is distal or opposite to the hinge.
6. A needle cover as claimed in any one of the preceding claims, wherein the hinged connection is configured to resist movement from a fully open positional range, wherein the opening angle between the mounting and lid portions is greater than about 180 degrees, to a partly open positional range, wherein the opening angle mounting and lid portions is less than about 180 degrees.
7. A needle cover as claimed in claim 6, wherein, in the partly open positional range, the hinge connection is configured such that the lid portion is biased towards the first cover position.

8. A needle cover as claimed in any one of the claims 1 to 7, wherein there is provided a plurality of said resiliently deformable elements arranged around the internal wall of the aperture.
9. A needle cover as claimed in any one of the preceding claims, wherein the lid portion includes an elongate groove for covering any mounted needle.
10. A needle cover as claimed in claim 9, wherein the elongate groove includes at least one retaining element therein to irreversibly secure the needle within the groove.
11. A needle cover as claimed in claim 10, wherein the elongate groove includes three retaining elements spaced along its length.
12. A needle cover as claimed in any one of the preceding claims, wherein the lid portion includes a beveled tip.
13. A safety needle assembly for mounting to a syringe barrel, the safety needle assembly including:
 - a needle cover as claimed in any one of the preceding claims; and
 - a needle mounted to the mounting portion.

THE CLAIMS

1. A needle cover including:

a mounting portion for mounting a needle having a tip; and

a lid portion hingedly connected to the mounting portion such that, the lid and mounting portions can adopt a plurality of positions relative to one another including portion movable to:

_____an open position in which the needle tip, when the needle is mounted to the mounting portion, is exposed for use, and first and second cover positions in which the needle tip, when the needle is mounted to the mounting portion, is covered by the lid portion,

wherein: ;

in the a first cover position the lid and mounting portions are, wherein the lid portion is releasably docked with the mounting portion together; and

in the a second cover position, wherein the lid and mounting portions are irreversibly docked together so that relative movement therebetween is prevented; with the mounting portion,

the lid and mounting portions each include a closure flange with a substantially flat face, wherein the faces of the closure flanges are in face-to-face contact in the second cover position and are inclined at an angle with respect to one another in the first cover position;

wherein the lid and mounting portion and the lid portions include cooperating docking elements to dock the lid and mounting portions together in either corresponding docking elements that engage to provide the first and/or second cover positions;

the cooperating docking elements include at least one docking projection on the closure flange of one of the lid or mounting portion, the projection extending from the face of the closure flange at a substantially right angle thereto, the projection comprising a distal hook portion and a proximal hook portion;

the cooperating docking elements also include an aperture for each docking projection in the closure flange of the other of the lid or mounting portion, wherein at least one resiliently deformable element extends inwardly from an internal wall of the

aperture, the resiliently deformable element being configured to deform to allow entry therebeyond of either the distal or proximal hook portion into the aperture;

the distal hook portion is sized and configured so that it can be inserted into the aperture beyond the at least one resiliently deformable element and subsequently withdrawn therefrom, insertion of only the the distal hook portion into the aperture thereby providing the first cover position; and

the proximal hook portion is sized and configured so that it can be inserted into the aperture beyond the at least one resiliently deformable element but so that it cannot be withdrawn therefrom, insertion of the proximal hook portion into the aperture thereby providing the second cover position.

2. A needle cover as claimed in claim 1, wherein the proximal and distal hook portions each include lateral expansions thereon, and wherein the lateral expansion of the proximal hook portion includes a cross-sectional dimension which is greater than any cross-sectional dimension of the lateral expansion of the distal hook portion.
- ~~2. A needle cover as claimed in claim 1, wherein the corresponding docking elements include at least one docking projection and docking port pair, the docking projection configured for engagement with the docking port.~~
3. A needle cover as claimed in claim 2, wherein the lateral expansion of the proximal hook portion is of a substantially conical profile and the lateral expansion of the distal hook position has a curved profile.
- ~~3. A needle cover as claimed in claim 2, wherein the docking projection includes a distal hook portion and a proximal hook portion, the distal hook portion for engagement with the docking port to provide the first cover position, and the proximal hook portion for engagement with the docking port to provide the second cover position.~~
- ~~4. A needle cover as claimed in claimed in claim 3, wherein the hook portions are provided by lateral expansions on the docking projection.~~
- ~~5. A needle cover as claimed in clam 4, wherein the largest lateral radius of the proximal hook portion is larger than the largest lateral radius of the distal hook portion.~~

- ~~6. A needle cover as claimed in any one of claims 3 to 5, wherein the docking port includes one or more resiliently deformable elements that deform to allow entry of the hook portions, and engage with the hook portions to provide the first and second cover positions.~~
- ~~7. A needle cover as claim in claim 6, wherein the docking port includes an aperture with resiliently deformable elements in the form of internally projecting tabs.~~
- ~~8. A needle cover as claimed in claim 7, wherein, in the first cover position, the docking projection is engaged with the docking port such that the distal hook portion thereof is inserted beyond the tabs and the proximal hook portion is not, and, the tabs are configured to resist withdrawal of the distal hook portion.~~
- ~~9. A needle cover portion as claimed in claim 7 or 8, wherein, in the second cover position, the docking projection is engaged with the docking port such that the distal hook portion and the proximal hook portion are both inserted beyond the tabs, and, the tabs are configured to prohibit withdrawal of the proximal hook portion.~~
- ~~10. A needle cover as claimed in any one of the preceding claims, wherein corresponding docking elements are respectively located on substantially flat closure flanges of the mounting portion and the lid portion.~~
- ~~11. A needle cover as claimed in claim 10, wherein, in the second cover position, the closure flanges of the mounting portion and the lid portion come into face-to-face contact.~~
- ~~12. A needle cover as claimed in claim 10 or 11, wherein, in the first cover position, the closure flanges are at an angle with respect to one another.~~

13.4. A needle cover as claimed in any one of claims ~~-1 to 310 to 12~~, wherein the closure flanges include a hinge therebetween to provide the hinged connection between the mounting portion and the lid portion of the needle cover.

14.5. A needle cover as claimed in claim 413, wherein the corresponding docking elements are located adjacent a side edge of the closure flanges that is distal or opposite to the hinge.

15.6. A needle cover as claimed in any one of the preceding claims, wherein the hinged connection is configured to resist movement from a fully open positional range, wherein the opening angle between the mounting and lid portions is greater than about 180 degrees, to a partly open positional range, wherein the opening angle mounting and lid portions is less than about 180 degrees.

7. A needle cover as claimed in claim 615, wherein, in the partly open positional range, the hinge connection is configured such that the lid portion is biased towards the first cover position.

16.8. A needle cover as claimed in any one of the claims 1 to 7, wherein there is provided a plurality of said resiliently deformable elements arranged around the internal wall of the aperture.

17.9. A needle cover as claimed in any one of the preceding claims, wherein the lid portion includes an elongate groove for covering any mounted needle.

18.10. A needle cover as claimed in claim 917, wherein the elongate groove includes at least one retaining element therein to irreversibly secure the needle within the groove.

19.11. A needle cover as claimed in claim 108, wherein the elongate groove includes three retaining elements spaced along its length.

~~20.12.~~ A needle cover as claimed in any one of the preceding claims, wherein the lid portion includes a beveled tip.

~~21.13.~~ A safety needle assembly for mounting to a syringe barrel, the safety needle assembly including:

a needle cover as claimed in any one of the preceding claims; and

a needle mounted to the mounting portion.