

# Bird & Bird ATMD

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Your ref: 10201509705R  
Our ref: BBSGP.0020/AKC/THTL

Date: 2 June 2017

Intellectual Property Office of Singapore  
51 Bras Basah Road  
#01-01 Manulife Centre  
Singapore 189554

Attention: The Patents Registrar

Dear Sirs

**SINGAPORE PATENT APPLICATION / PATENT NO. 10201509705R  
(DIVISIONAL OF SINGAPORE PATENT APPLICATION NO. 11201506838X)  
ENTITLED: CATHETER ASSEMBLY  
PROPRIETOR: B. BRAUN MELSUNGEN AG**

**RE: POST-GRANT AMENDMENTS TO THE CLAIMS**

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We refer to the subject patent.

In view of the prior art which have come up during the prosecution of the proprietor's corresponding United States and Japanese applications, the proprietor now wishes to submit post-grant amendments to the claims of the subject Singapore patent, with a view to further distinguishing the granted claims from the prior art. For the Registrar's information, the same amendments are also being submitted in respect of the proprietor's granted GB Patent No. 250870, based on which the request for supplementary examination was filed for the subject patent.

In particular, the proprietor wishes to amend granted claim 1 to recite the needle guard assembly as now part of a catheter assembly and the amended claims effectively correspond to claim 14 as granted. Additional features of a catheter hub, a hollow tubular catheter, a needle, a valve assembly and a valve opener have also been added to claim 1 to further distinguish the claimed catheter assembly from the prior art. The proprietor submits that the additional features have been disclosed throughout the original specification as part of a catheter assembly. The preamble of the remaining dependent claims has also been amended to recite a catheter assembly to correspond to the amendments made to claim 1. Claim 14 has been deleted.

In the amended claim set, claim 1 has been amended in the following manner:

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- "1. A catheter assembly comprising:  
a catheter hub having a distal end, a proximal end and a chamber therein;  
a hollow tubular catheter having a proximal end and a distal end, the catheter being connected at its proximal end to the distal end of the catheter hub, the interior of the catheter opening into the chamber within the catheter hub;  
a needle having a shaft and a sharpened needle tip;  
a valve assembly disposed within the chamber of the catheter hub and comprising a generally tubular first valve portion and a second valve portion, wherein the second valve portion is in the form of a disc, and wherein the valve disc comprises one or a plurality of slits therein;  
a valve opener moveable between a closed position, in which the second valve portion is closed, and an open position, in which the second valve portion is open, the valve opener having a passage extending longitudinally therethrough and/or around for passage of fluid;  
a needle guard assembly for a catheter assembly, the needle guard assembly comprising:  
a housing for ~~receiving a~~ having the needle extending therethrough and having a distal end and a proximal end, the housing being connected~~able~~ at its distal end to the proximal end of the catheter hub;  
a needle guard disposed within the housing, the needle guard comprising:  
a needle trap moveable between a ready position, in which the needle trap is held to one side of the shaft of the needle extending through the housing; and a protected position, in which the needle trap blocks the sharpened needle tip of the needle within the housing;  
a resilient arm biasing the needle trap into the protected position, the resilient arm bearing against the inner wall of the housing to urge the needle trap into the protected position;  
a coupling arm, in the ready position the coupling arm coupling the housing to the proximal end of the catheter hub, movement of the needle trap from the ready position to the protected position causing the coupling arm to release the housing from the catheter hub."

As indicated above, support for amended claim 1 may be found in claims 1 and 14 as granted, and throughout the patent specification as originally filed and as granted. In particular, support may be found, for example and at least in:

the drawings - figures 4, 5, 7a and 7b; and

the general description, in particular the following passages of the specification:

page 5, lines 18-22;  
page 6, lines 19-23;  
page 8, lines 14-15;  
page 9, lines 4, 17 and 22-25;  
page 10, lines 24-25;  
page 10, line 30 to page 11, line 2;  
page 11, lines 25-30;  
page 12, lines 15-17 and 24-28; and  
page 14, lines 13-28.

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The proprietor submits that the post-grant amendments now being sought do not result in the introduction of new matter and they are supported by the originally filed patent specification. In addition, the amendments narrow the scope of the claims and do not extend the protection of the patent as granted.

In connection with the above, we submit the following:

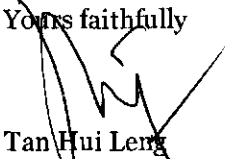
1. Patents Form 17 duly completed;
2. Marked and unmarked replacement sheets, pages 32-34 of the claims; and
3. Copies of the Office Actions and their English translations (where applicable) issued in respect of the corresponding United States and Japanese applications, for the Registrar's reference.

We trust that the application is in order and we look forward to receiving the Registrar's favourably reply that the post-grant amendments to the claims have been approved.

If any clarification and/or additional information are required, please do not hesitate to contact the undersigned.

Thank you.

Yours faithfully



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Enc.