Sample

English to Chinese: CATHETER SHAFT AND METHOD OF MANUFACTURE

Source text – English

CLAIMS What is claimed is:
1. A method of manufacturing a catheter assembly, comprising the steps of:
providing a catheter shaft having a proximal end, a distal end, an outer layer, and an inner reinforcing layer;
removing at least a portion of said outer layer from a length of the distal end of the catheter shaft in order to expose a distal segment of the catheter shaft having an exposed exterior region;
providing an inner jacket segment having a proximal end and a distal end;
axially engaging the inner jacket segment with an interior surface of the distal segment of the catheter shaft;
providing an outer jacket segment around at least the exposed exterior region of the distal segment of the catheter shaft; and
bonding the distal segment of the catheter shaft to the inner jacket segment and the outer jacket segment.
2. The method of claim 1, wherein the outer jacket segment and the outer layer comprise different materials with different durometer hardness values.
3. The method of claim 1, wherein the catheter shaft further comprises an inner layer.
4. The method of claim 3, further comprising the step of removing at least a portion of said inner layer from a distal end of the catheter shaft to form an exposed interior region of the distal segment of the catheter shaft, wherein the exposed interior region is disposed around the inner jacket segment.
5. The method of claim 1, wherein the length of the exposed distal segment of the catheter shaft is at least as long as the length of the inner jacket segment.
6. The method of claim 1, wherein the outer layer of the catheter shaft comprises a melt processable polymer.
7. The method of claim 1, wherein the removing step comprises grinding.
8. The method of claim 1, wherein the removing step comprises removing with a laser.
9. The method of claim 1, wherein the inner jacket segment comprises a melt processable polymer.
10. The method of claim 1, wherein the outer jacket segment has varying hardness along its length.
11. The method of claim 1, wherein the inner jacket segment further comprises a pull ring operatively connected thereto.
12. The method of claim 1, further comprising the step of applying energy to the outer jacket segment, the exposed distal segment of the catheter shaft, and the inner jacket segment to form a substantially unitary catheter shaft.
13. The method of claim 12, further comprising forming a heat-shrink tube about the outer jacket segment prior to the energy applying step.
14. The method of claim 12, further comprising applying energy to the outer jacket segment, the exposed distal segment of the catheter shaft, and the inner jacket segment in a manner that does not heat the proximal end of the catheter shaft.
15. A method of forming a catheter assembly, comprising the steps of:
providing a catheter shaft having an outer layer of a first material and an inner reinforcing layer;
removing at least a portion of said outer layer from a length of the catheter shaft in order to expose a distal segment of the catheter shaft;
providing an inner jacket segment having a proximal end and a distal end;
axially engaging the exposed distal segment of the catheter shaft with the proximal end of the inner jacket segment,
providing an outer jacket segment of a second material around the exposed distal segment of the catheter

shaft; and
bonding the catheter shaft to the outer jacket segment and the inner jacket segment.
16. The method according to claim 15, wherein the inner reinforcing layer of the catheter shaft extends continuously over the entire length of the catheter shaft and the inner jacket and outer jacket segments.
17. The method according to claim 15, further comprising applying energy to the outer jacket segment, the inner reinforcing layer of the catheter shaft, and the inner jacket segment in a manner that does not heat a portion of the outer layer of the catheter shaft which is disposed away from the distal end of the catheter shaft.
18. The method according to claim 15, wherein the first material and the second material are selected from the group consisting of polyamides, polyurethanes, polyesters, functionalized polyolefins, polycarbonates, and any combinations thereof.
19. The method according to claim 15, wherein the first material and the second material are selected from the group consisting of polyamide-based thermoelastic elastomers, polyester-based thermoplastic elastomers, thermoplastic polyurethanes, styrenic thermoplastic elastomers, and any combinations thereof.
20. A catheter assembly formed according to a method comprising the steps of:
providing a catheter shaft having a proximal end, a distal end, an outer layer and an inner reinforcing layer;
removing at least a portion of said outer layer from a length of the distal end of the catheter shaft in order to expose a segment of the catheter shaft;
providing an inner jacket segment having a proximal end and a distal end;
axially engaging the exposed segment at the distal end of the catheter shaft with the inner jacket segment such that the inner jacket segment is positioned within and adjacent the exposed segment of the catheter shaft; and
forming an outer jacket segment around the exposed catheter shaft segment to operatively connect the catheter shaft to the inner jacket segment.
21. The catheter assembly according to claim 20, wherein the outer jacket segment has varying hardness along it length.
22. The catheter assembly according to claim 20, wherein the outer jacket segment has a lower durometer than the catheter shaft.
23. The catheter assembly according to claim 20, wherein the inner jacket segment further comprises a pull ring attached to an inner layer of the inner jacket segment.
24. The catheter assembly according to claim 23, wherein the pull ring is operatively connected to a plurality of pull wires which extend through the inner jacket segment and catheter shaft to a proximal end of the catheter shaft.
25. A catheter assembly comprising:
a catheter shaft having an axial length, a proximal end, a distal end, an outer layer of a first material, and an inner reinforcing layer;
an outer jacket segment of a second material having an axial length, a proximal end, and a distal end, the second material being different from the first material;
said catheter shaft operatively connected at its distal end to the proximal end of said outer jacket segment;
said inner reinforcing layer of the catheter shaft extending throughout the entire axial length of the catheter shaft and the outer jacket segment.
26. The catheter assembly of claim 25, wherein the axial length of the outer jacket segment further comprises materials of different durometer hardness.
27. The catheter assembly of claim 25, wherein the axial length of the outer jacket segment has an arcuate shape.
28. The catheter assembly of claim 27, wherein the arcuate shape of the outer jacket segment is fixed.
29. The catheter assembly of claim 27, wherein the arcuate shape of the outer jacket segment is flexible.
30. A method of manufacturing a catheter assembly, comprising:
providing a catheter shaft having a proximal end, a distal end, an outer layer of a first material, and an inner reinforcing layer;
removing at least a portion of the outer layer from a length of the distal end of the catheter shaft in order to expose a distal segment of the catheter shaft having an exposed exterior region;
providing an outer jacket segment of a second material around at least the exposed exterior region of the

distal segment of the catheter shaft, the second material being different from the first material; and
bonding the outer jacket segment to the exposed exterior region of the distal segment of the catheter shaft.
31. The method of claim 30, wherein bonding the outer jacket segment to the exposed exterior region of the distal segment of the catheter shaft comprises applying energy to the outer jacket segment and the distal segment of the catheter shaft.
32. The method of claim 31, wherein the energy is applied in a manner that does not heat the proximal end of the catheter shaft.
33. The method of claim 30, further comprising:
providing an inner jacket segment at an interior surface of the distal segment of the catheter shaft; and
bonding the inner jacket segment to the interior surface of the distal segment of the catheter shaft.
34. The method of claim 33, wherein bonding the outer jacket segment to the exposed exterior region of the distal segment of the catheter shaft and bonding the inner jacket segment to the interior surface of the distal segment of the catheter shaft comprise applying energy to the outer jacket segment, the inner jacket segment, and the distal segment of the catheter shaft.
35. A catheter assembly comprising:
a catheter shaft having an axial length, a proximal end, a distal end, an outer layer of a first material and an inner reinforcing layer, at least a portion of the outer layer having been removed from the distal end of the catheter shaft in order to expose a distal segment of the catheter shaft; and
an outer jacket segment of a second material having an axial length, a proximal end, and a distal end, the second material being different from the first material;
wherein the catheter shaft is operatively connected at its distal segment to the outer jacket segment such that the outer jacket segment substantially replaces the portion of the outer layer that has been removed from the distal end of the catheter shaft in order to form a substantially unitary catheter shaft;
wherein the inner reinforcing layer of the catheter shaft extends throughout the entire axial length of the catheter shaft and the outer jacket segment.
36. The catheter assembly of claim 35, wherein the first material and the second material have different durometer hardness values.
37. The catheter assembly of claim 35, wherein the first material is a melt processable polymer and the second material is another melt processable polymer.
38. The catheter assembly of claim 35, wherein the catheter shaft includes an inner layer of a third material, the inner reinforcing layer being sandwiched between the outer layer and the inner layer, and further comprising an inner jacket segment of a fourth material having an axial length, a proximal end, and a distal end, the inner jacket segment being bonded to the inner layer at the distal segment of the catheter shaft.
39. The catheter assembly of claim 35, wherein the catheter shaft includes an inner layer of a third material, the inner reinforcing layer being sandwiched between the outer layer and the inner layer, at least a portion of the inner layer having been removed from the distal end of the catheter shaft at the distal segment of the catheter shaft, and further comprising:
an inner jacket segment of a fourth material having an axial length, a proximal end, and a distal end;
wherein the catheter shaft is operatively connected at its distal segment to the inner jacket segment such that the inner jacket segment substantially replaces the portion of the inner layer that has been removed from the distal end of the catheter shaft in order to form a substantially unitary catheter shaft.
40. The catheter assembly of claim 39, wherein the third material and the fourth material have different durometer hardness values.

Translation – Chinese

权利要求范围
权利要求如下：
1. **一种**导管组件的制造方法，包括以下步骤：
提供一种具有一个近端端部、一个远端端部、一个外层以及一个内加强层的导管轴；

将导管轴远端端部之一段的所述外层去除至少一部分，以使具有一个露出外部区域的导管轴的一个远端段露出；
提供一个具有一个近端端部和一个远端端部的内护套段；
以导管轴远端段的内表面与内护套段轴向贴合；

提供一个外护套段至少围绕导管轴远端段的露出外部区域；以**及**
将导管轴远端段与内护套段和外护套段粘合。
2. **如**权利要求 1 **的方法，其中外**护套段和外层包含具有不同计示硬度值的不同材料。
3. **如**权利要求 1 **的方法，其中**导管轴进一步包含内层。
4. **如**权利要求 3 **的方法，**进一步包括至少将导管轴远端端部的所述内层去除至少一部分的步骤，以形成导管轴远端段的一个露出内部区域，其中露出内部区域布置在内护套段周围。
5. **如**权利要求 1 **的方法，其中**导管轴的露出远端段长度至少与内护套段长度相同。
6. **如**权利要求 1 **的方法，其中**导管轴外层**包含可熔化加工的聚合物。**
7. **如**权利要求 1 **的方法，其中去除步**骤包含打磨。
8. **如**权利要求 1 **的方法，其中去除步**骤包含以激光去除。
9. **如**权利要求 1 **的方法，其中内**护套段包含可熔化加工的聚合物。

10. **如**权利要求 1 **的方法，其中外**护套段的硬度沿其长度有变化。
11. **如**权利要求 1 **的方法，其中内**护套段进一步包含被操作地连接至其上的拉环。
12. **如**权利要求 1 **的方法，**进一步包括施加能量至外护套段、导管轴的露出远端段以及内护套段，以形成大体统一的导管轴。
13. **如**权利要求 12 **的方法，**进一步包括在能量施加步骤之前在外护套段周围形成一个热缩管。
14. **如**权利要求 12 **的方法，**进一步包括以不会加热导管轴近端端部的方式将能量施加至外护套段、导管轴的露出远端段以及内护套段。
15. **一种**导管组件的形成方法，包括以下步骤：
提供一种具有一个采用第一材料的外层和一个内加强层的导管轴；
将导管轴之一段的所述外层去除至少一部分，以使导管轴的远端段露出；
提供一个具有一个近端端部和一个远端端部的内护套段；
以内护套段的近端端部与导管轴的露出远端段轴向贴合；
提供一个采用第二材料的外护套段，围绕导管轴**的露出**远端段；以**及**
将导管轴与外护套段和内护套段粘合。
16. **根据**权利要求 15 **所述的方法，其中**导管轴的内加强层连续延伸达导管轴和内护套及外护套段的全长。
17. **根据**权利要求 15 **所述的方法，**进一步包括以不会加热布置在远离导管轴远端端部处的一部分导管轴外层的方式施加能量至外护套段、导管轴的内加强层以及内护套段上。
18. **如**权利要求 15 **的方法，其中第一材料和第二材料**选自由聚酰胺、聚氨酯、聚酯、功能化聚烯烃、聚碳酸酯以及这些材料的任意组合构成的组。

19. **根据**权利要求 15 **所述的方法，其中第一材料和第二材料**选自由聚酰胺基热弹性弹性体、聚酯基热塑性弹性体、热塑性聚氨酯、苯乙烯类热塑性弹性体、聚碳酸酯以及这些材料的任意组合构成的组。
20. **一种**导管组件依据包含下列步骤的方法形成：
提供一种具有一个近端端部、一个远端端部、一个外层以及一个内加强层的导管轴；

将导管轴远端端部之一段的所述外层去除至少一部分以露出导管轴的一段；
提供一个具有一个近端端部和一个远端端部的内护套段；
在导管轴的远端端部处以内护套段与露出段轴向贴合，以使内护套段定位于导管轴的露出段之内并与其相邻；以**及**
在导管轴的露出段周围形成一个外护套段，以操作地将导管轴与内护套段相连接。
21. **根据**权利要求 20 **中所述的**导管组件，其中外护套段的硬度沿其长度有变化。
22. **根据**权利要求 20 **所述的**导管组件，其中外护套段的硬度值低于导管轴。
23. **根据**权利要求 20 **所述的**导管组件，其中内护套段进一步包括附连在内护套段内层上的拉环。
24. **根据**权利要求 23 **所述的**导管组件，其中拉环被操作地连接至多数个拉线上，拉线延伸穿过内护套段和导管轴到达导管轴近端端部。
25. **一种**导管组件包括：
一个具有一个轴向段、一个**近端端部、一个**远端端部、一个采用第一材料的外层以及一个内加强层的导管轴；
一个采用第二材料的具有一个轴向段、一个近端端部、一个远端端部的外护套段，其中第二材料不同于第一材料；

所述导管轴在其远端端部被操作地连接至所述外护套段的近端端部；
导管轴的所述内加强层延伸贯穿导管轴和外护套段的整个轴向段。

26. 如权利要求 25 的导管组件，其中外护套段的轴向段进一步包括不同计示硬度的材料。
27. 如权利要求 25 的导管组件，其中外护套段的轴向段呈弓状。
28. 如权利要求 27 的导管组件，其中外护套段的弓状形状是固定的。
29. 如权利要求 27 的导管组件，其中外护套段的弓状形状是柔性的。
30. 一种导管组件的制造方法，包括：
提供一种具有一个近端端部、一个远端端部、一个采用第一材料的外层以及一个内加强层的导管轴；
将导管轴远端端部之一段的外层去除至少一部分，以使具有露出外部区域的导管轴的一个远端段露出；
提供一个采用第二材料的外护套段，至少围绕导管轴远端段的露出外部区域，第二材料不同于第一材料；以及
将外护套段与导管轴远端段的露出外部区域粘合。
31. 如权利要求 30 的方法，其中将外护套段与导管轴远端段的露出外部区域粘合包括施加能量至导管轴外护套段和远端段上。
32. 如权利要求 31 的方法，其中能量施加方式不会加热导管轴近端端部。
33. 如权利要求 30 的方法，进一步包括：
在导管轴远端段的内表面上提供一个内护套段；以及
将内护套段与导管轴远端段的内表面粘合。
34. 如权利要求 33 的方法，其中将外护套段与导管轴远端段的露出外部区域粘合以及将内护套段与导管轴远端段的内表面粘合包括施加能量至导管的外护套段、内护套段以及远端段上。

35. 一种导管组件包括：
一个具有一个轴向段、一个近端端部、一个远端端部、一个采用第一材料的外层以及一个内加强层的导管轴，导管轴远端端部的外层已去除了至少一部分以露出导管轴的一个远端段；以及
一个采用第二材料的具有一个轴向段、一个近端端部、一个远端端部的外护套段，其中第二材料不同于第一材料；
其中导管轴在其远端段处被操作地连接至外护套段上，以使外护套段大体取替导管轴远端端部已经去除的那一部分外层，以形成大体统一的导管轴；
其中导管轴的内加强层将延伸贯穿导管轴和外护套段的整个轴向段。
36. 如权利要求 35 的导管组件，其中第一材料和第二材料具有不同的计示硬度值。
37. 如权利要求 35 的导管组件，其中第一材料为一种可熔化加工的聚合物，并且第二材料为另一种可熔化加工的聚合物。
38. 如权利要求 35 的导管组件，其中导管轴包括一个采用第三材料的内层，内加强层夹在外层和内层之间，并进一步包括一个采用第四材料的具有一个轴向段、一个近端端部以及一个远端端部的内加强层，内加强层粘合在导管轴远端段处的内层上。
39. 如权利要求 35 的导管组件，其中导管轴包括一个采用第三材料的内层，内加强层夹在外层和内层之间，导管轴远端段处的导管轴远端端部的内层已被去除了至少一部分，以及进一步包括：
一个采用第四材料的具有一个轴向段、一个近端端部及一个远端端部的内加强层；
其中导管轴在其远端段处被操作地连接至内护套段上，以使内护套段大体取替导管轴远端端部已去除的那一部分内层，以形成大体统一的导管轴；

40. 如权利要求 39 的导管组件，其中第三材料和第四材料具有不同的计示硬度值。

English to Chinese: MEDICAL CATHETER ASSEMBLY WITH DEFLECTION PULL RING AND DISTAL TIP INTERLOCK

Source text – English

MEDICAL CATHETER ASSEMBLY WITH DEFLECTION PULL RING AND DISTAL TIP INTERLOCK
CROSS-REFERENCE TO RELATED APPLICATIONS
[0001] This application claims priority to U.S. patent application no. 11/963,441 filed on 21 December 2007 (the '441 application). The '441 application is hereby incorporated by reference as though fully set forth herein.
BACKGROUND OF INVENTION
FIELD OF INVENTION
[0002] The present invention relates to medical catheter assemblies, and in particular to medical catheter assemblies which utilize a deflection pull ring adjacent a distal tip at the distal end of the catheter shaft to bend the deflectable catheter shaft and move the distal tip in a desired direction.
THE PRIOR ART
[0003] Medical catheter assemblies used in the diagnosis or treatment of various medical abnormalities are in common use in medical facilities throughout the world. They generally include a deflectable catheter shaft that can be inserted in and extended along a suitable vein or artery of person being diagnosed or treated to a desired site; a handle actuator which supports a proximal end of the catheter shaft; a distal tip which is connected to the distal end of the catheter shaft and which includes a specialized tip element for the appropriate diagnosis or treatment; and a pull ring assembly which includes a pull ring near the distal end of the catheter shaft and pull wires which extend from the pull ring through the catheter shaft back to the handle actuator for tilting or rocking the pull ring upon manual operation of the handle actuator and consequential pulling of the pull wires, i.e., for deflecting a distal end portion of the catheter shaft with distal tip in a desired direction.
[0004] Ablation catheter assemblies are a category of medical catheter assembly used to ablate tissue, e.g., in the treatment of heart malfunctions. They can be irrigated (discharge ablation fluid in addition to ablation energy) or non-irrigated (discharge of ablation energy but not fluid). The distal tip will include a tip electrode as the specialized tip element and an energy source will be connected to their handle actuator to supply energy to the tip electrode. In irrigated catheter assemblies a fluid manifold is attached to, or is one-piece with, the tip electrode, and a fluid source is attached to their handle actuator to supply ablation fluid thereto. In either, the distal tip can include a mounting shaft which cooperates with the distal end of the adjacent deflectable catheter shaft for connection thereto.
[0005] It has been found that the operation of such medical catheter assemblies, including irrigated or non-irrigated ablation catheter assemblies, can become compromised over time with creeping of the pull ring towards the handle actuator (and away from the distal tip) due to repeated tilting or rocking thereof by the pull wires. In addition, failure of the medical catheter assemblies can occur with separation of the pull wires from the pull rings of the pull ring assemblies due to stress failure of the braze or weld joints therebetween.
[0006] It is thus an object of the present invention to provide a medical catheter assembly (including an irrigated or non-irrigated ablation catheter assembly) which is constructed such that creeping of the pull ring towards the handle actuator (and away from the distal tip) is prevented.
[0007] It is another object of the present invention to provide a medical catheter assembly (including an irrigated or non-irrigated catheter assembly) which is constructed such that stress on the connecting joints between the pull wires and pull ring is reduced, reducing failure of medical catheter assembly due to failure of the pull ring assembly.

Translation – Chinese

带有偏转拉环与远端尖部联锁的医用导管组**件**
与相关专利申请的交叉引**用**
[0001] **本**专利申请要求申请日期为 2007 **年** 12 **月** 21 **日、申**请号为 11/963,441 **的美国**专利申请（简称 '441 **申**请）的优先权。在此通过引用并入 '441 **申**请，如同在本文中将其完全阐述一般。
发明的技术背**景**
发明领**域**
[0002] **本**发明涉及医用导管组件，尤其涉及在导管轴远端部邻近远端尖部处使用一个偏转拉环使可偏转的导管轴弯曲并使远**端尖部往所需方向移**动的医用导管组件。
先前技术

[0003] **用于多种医学疾病**诊断或治疗的医用导管组件在世界各地的医疗设施中很常用。它们一般包括一根可插入待诊断或待治疗患者的一条合适静脉或动脉内并沿着静脉或动脉延伸至所需部位的可偏转导管轴；一个支撑导管轴近端部的手持开动器；一个连接导管轴远端部并包括一个专用于相应诊断或治疗的尖端元件的远端尖部；以及一个包括一个位于导管轴远端部附近的拉环和一些拉线的拉环组件，拉线从拉环上伸出穿过导管轴回到手持开动器，在手动操作手持开动器后用于倾斜或摆动拉线并因此拉动拉线，即，**使**该带有远端尖部的导管轴的一个远端部分向所需方向偏转。
[0004] **消融**导管组件是一类例如在治疗心功能不全时用于消融组织的医用导管组件。其可以是灌注型（不但排出消融能量，还排出消融液体）或非灌注型（排出消融能量但不排出消融液体）。远端尖部将包括一个尖部电极作为专用尖部元件，能源将连接至其手持开动器上，为尖部电极提供能量。在灌注型电极组件中，有一个液体歧管连接到尖部电极上或与其成一个整体，并有一个液体源连接到其手持开动器上，以向该处供应消融液体。无论是哪一种情况，远端尖部均可包括一个安装轴，其与可偏转导管轴**附近的**远端部合作以连接到该处。

[0005] 现已发现此种医学导管组件，包括灌注型或非灌注型消融导管组件，由于以拉线反复倾斜或摆动手持开动器，拉环会向手持开动器方向（离开远端尖部的方向）蠕动，因此导管组件的运行会随时间推移而受损。 **另外**，**由于拉**线与拉环之间钎焊或焊接接头的疲劳失效，导致拉线与拉环组件的拉环分离，会发生医用导管组件失效。
[0006] **因此**，**本**发明的一个目标是提供一种医用导管组件（包含灌注型或非灌注型导管组件），其构造可以防止拉环往手持开动器方向（离开远端尖部的方向）蠕动。
[0007] **本**发明的另一目标是提高一种医用导管组件（包含灌注型或非灌注型导管组件），其构造可以减少拉线与拉环之间接头上的应力，从而减少因拉环组件失效而导致医用导管组件失效。

English to Chinese: UNANIMOUS WRITTEN CONSENT OF THE BOARD OF DIRECTORS IN LIEU OF A SPECIAL MEETING

Source text – English

In lieu of a Special Meeting of the Board of Directors of ABC USA, Incorporated, a Maryland corporation (the "Corporation"), the Board of Directors of the Corporation (the "Board"), in accordance with the provisions of Section 2-408(c) of the Corporations and Associations Article of the Annotated Code of Maryland, as amended, unanimously adopt the following resolutions:

WHEREAS, in connection with the OPIC Loan, OPIC is requiring XYC, Inc., a Maryland corporation ("XYC"), the sole member of LMN Solutions LLC, a Maryland limited liability company ("LMN"), to guarantee up to $3,500,000 of the OPIC Loan (the "XYC Guaranty") pursuant to the terms and conditions set forth in that certain Project Completion Agreement (the "PCA") which shall be deemed hereby reproduced for all legal purposes, by and among ABC Global, the Corporation, Al Pacino, Charlize Theron, LMN, XYC and OPIC; and

WHEREAS, XYC has agreed to enter into the PCA and provide the XYC Guaranty on the condition that the Corporation, among others, enter into an Indemnification Agreement (the "Indemnification Agreement") which shall be deemed hereby reproduced for all legal purposes, whereby the Corporation shall agree to indemnify XYC against losses suffered by XYC under the XYC Guaranty, and as security for such indemnification XYC is requiring the Corporation to enter into (i) the previously approved Stock Issuance Agreement and (ii) a Promissory Quota Assignment Agreement by and between the Corporation and Al Pacino (the "Quota Assignment") which shall be deemed hereby reproduced for all legal purposes, whereby Al Pacino, upon the occurrence of certain trigger events under the Indemnification Agreement, agrees and promises to assign and transfer a 53.75% quota of ABC Global to the Corporation.
NOW, THEREFORE, BE IT

FURTHER RESOLVED, that Al Pacino, as president of the Corporation (the "President"), Judith Ivey, as secretary of the Corporation (the "Secretary"), and/or Keanu Reeves, as treasurer of the Corporation (the "Treasurer"; the President, the Secretary and the Treasurer shall be known collectively as the "Officers" and individually as an "Officer"), be and hereby are duly authorized and directed on behalf of the Corporation to take any action and execute and deliver any and all documents, including but not limited to the Security Agreement, as Officers of the Corporation, which would allow the Corporation and ABC Global to consummate the Security Transactions and perform under the Security Agreement and any other documents executed in connection with the Security Transactions on such terms and conditions and with such revisions and supplements thereto as each such Officer may deem necessary or advisable, and with the signature of any such Officer appearing thereon as establishing conclusively the Board's approval and confirmation of any such modifications or supplements so effected, and that all past transactions of a nature set forth above are hereby ratified and confirmed; and it is

Translation - Chinese

马里兰州公司ABC美国有限公司（简称"公司"）的董事会（简称"董事会"）不召开董事会临时会议，而依照经修订的《马里兰州注释法典公司和社团条款》第2-408(c)条的规定，一致通过下列决议：

鉴于，与OPIC贷款有关，OPIC现要求作为马里兰州有限责任公司LMN Solutions有限公司（简称"LMN"）唯一股东的马里兰州公司XYC有限公司（简称"XYC"）依照ABC Global、公司、Al Pacino、Charlize Theron、LMN、XYC和OPIC之间签订的某项目完成协议（简称"PCA"，该协议在所有法律目的上应视为在此重述）中的条款和条件，为OPIC贷款提供最高为3,500,000美元的担保（简称"XYC担保"）；以及

鉴于，XYC已同意签订PCA并提供XYC担保，担保的条件之一是公司应签订一份赔偿协议（简称"赔偿协议"），该协议在所有法律目的上应视为在此重述，依照该协议，公司同意赔偿XYC在XYC担保中遭受的损失，并且作为对该赔偿的保证，XYC要求公司(i)签订之前已批准的《股份发行协议》；以及(ii)与Al Pacino签订一份《约定配额转让协议》（简称"配额转让协议"），该协议在所有法律目的上应视为在此重述，依照该协议，在发生赔偿协议所规定的某些触发事件时，Al Pacino同意和承诺将ABC Global的53.75%的股份配额转让给公司。

为此，

兹进一步决定，特此正式授权和指示公司总裁Al Pacino（简称"总裁"）、公司秘书Judith Ivey（简称"秘书"）和/或公司财务主管Keanu Reeves（简称"财务主管"，总裁、秘书和财务主管合称为"高管们"，单独称为"高管"），代表公司、以公司高管的身份采取为使公司和ABC Global完成该担保交易、履行该担保协议以及与该担保交易有关而签署的任何其他文件而需要采取的任何行动，以及签署和交付为此所需要的任何及所有文件，包括但不限于该担保协议，以及依照该每一位高管认为必要和合理的条款和条件而签署的与担保交易有关的任何其它文件，以及对该等文件作出其认为必要或合理的修订和补充，并且任何该高管在该等文件上的签字应视为结论性地构成董事会对于所实施的任何该等修订或补充的批准和确认，并且董事会特此澄清和确认上述性质的所有过往交易；以及

English to Chinese: FAQ - IMMIGRATION TOPICS (EB-5)

Source text – English

FAQ - IMMIGRATION TOPICS
I understand that EB-5 has been the subject of litigation. Will this history affect my green card applications?
It should help our investors. In June 2006, the USCIS removed green card conditions from all pre-1998 American Life, Inc. investors. This sets a precedent for programs such as American Life, Inc., which invests

the full invested amount of $500,000 in job producing projects in our regional centers.
The history is outlined as follows: American Life, Inc., formed its regional center in 1996 and raised capital from some 40 investors between 1996 and 1998. Several other companies competed for investment capital during this period, but some of these companies didn't offer sound investments and were only in business to collect fees rather than to fund an ongoing business. Many of these other investment opportunities didn't raise the full $500,000 in investment capital or hire the required number of employees. Because some of these companies did not comply with the regulations, INS, the legacy administrator of U.S. immigration services (now USCIS), rightly set out to stop this abuse of the program. In 1998, INS revised the rules retroactively to people who already had approved petitions; however INS also wrongly attempted to revoke all EB-5 visa petitions. This led to the litigation.
In 2002, in a case commonly known as Chang vs.United States the 9th Circuit Court of Appeals ruled that the USCIS could not apply their new rules retroactively. In the same year, the U.S. Congress also passed a new law to protect the pre-1998 investors. In September 2005 and May 2006, the USCIS approved all American Life, Inc. pre-1998 removal-of-condition (I-829) petitions. As a result American Life, Inc. dropped its lawsuit against the U.S. Justice Department. American Life, Inc. was able to settle with the U.S. government because all of our investors invested $500,000 in job creating investments. It took eight years to work through the system and to prove the point that American Life, Inc. provides legitimate EB-5 investments. During the interim period, all of the investors were allowed to live in the U.S. as if they had permanent green cards. We believe that EB-5 immigration petitions based on sound investments for the full $500,000, as prescribed by the rules, with proper supporting documentation, will continue to be approved.

After the I-526 petition approval, can members of the family have their consulate interview in different countries (for example, if children are attending school in the U.S. and the parents are not in the U.S., etc.)?

Family members can interview in different countries. The country of origin or where the family has current ties is the standard interview site. Often one member of the family is located in another country, such as a student attending school in the U.S. The student does not have to return to the country of origin and can adjust his or her status in the U.S. at the district office of the USCIS.
Can I apply if I have been rejected by the USCIS for other type visa?
Rejection in the past does not disqualify an applicant for EB-5, unless the reasons are related to immigration fraud or other major problems. It is most important that the investor disclose all criminal, medical, or U.S. immigration history problems to American Life, Inc. and the immigration attorney in advance of your petition submission.

Translation – Chinese

常见问题—移民相关
我知道EB-5曾经引起过诉讼。这段历史是否会影响我的绿卡申请？
这件事对我们的投资者有帮助。2006年6月，美国公民及移民服务局（USCIS）撤销了美国生活公司（American Life, Inc.）所有1998年之前的投资者的绿卡申请限制。这就为美国生活公司这样的计划创设了先例，也就是向位于我们地区中心的就业创造项目作50万美元全额投资的计划。
其过程概述如下：美国生活公司于1996年建立了地区中心，并在1996到1998年间向大约40位投资者募集了资本。一些其他公司在此期间完成了资本投入，但其中一些公司并没有提供可靠的投资，只是在业务经营过程中收取费用，而没有为持续开展的业务提供资金支持。许多这类其他投资项目没有募集到全额的50万美元投资资本，或者未能雇佣规定人数的雇员。由于一些公司没有遵守规章，当时主管美国移民服务事务的移民归化局（INS，现由 USCIS负责管理）正确地阻止了对该等计划的滥用。1998年，INS修改了规章，追溯适用于那些申请已获批准的人；INS同时试图撤销所有EB-5签证申请，这也是错误的。这一做法引起了诉讼。
2002年，在被称为"常诉美国"（Chang vs.United States）的案件中，第九巡回区上诉法院裁定，U SCIS不得追溯性地适用其新规章。同年，美国议会也通过一项新法，旨在保护1998年之前的投资者。2 005年9月和2006年5月，USCIS批准了美国生活公司全部的1998年前限制撤销（I-829）申请。于是，美国生活公司撤销了针对美国司法部的诉讼。美国生活公司能够与美国政府达成和解，原因在于我们的全体投资者都向创造工作岗位的投资项目投入了50万美元。我们花了八年时间走完程序，并证明了美国生活公司确实提供了合法的EB-5投资。在此期间，所有投资者都被允许在美国生活，就好像他们已经

获得了永久的绿卡。我们相信，依照规章的规定，有50万美元全额投资的可靠项目作为基础的EB-5 移民申请，配合正确的支持性文件，能够继续获得批准。

I-526申请获得批准后，家庭成员可否在不同国家作领馆面谈？（比如，孩子在美国上学，而父母不在美国，等等。）

家庭成员可以在不同国家面谈。母国或者家庭当前关联所在地是标准面谈地点。经常会有一名家庭成员身处另一国家的情况，比如在美国上学的学生。该学生不需要返回母国，在当地的USCIS办事处就可以调整其身份。

如果USCIS曾经拒绝过我的其他类型签证申请，我还能提出申请吗？

曾经遭到拒签并不导致申请人丧失EB-5申请资格，除非拒签的理由涉及移民欺诈或者其他重大问题。最重要的一点是，投资人要在提交申请之前，将所有涉及刑事犯罪、医疗以及过往申请美国移民史的问题告诉美国生活公司及移民律师。