

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO	
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DEP: 2020 DIRECCION DE NUEVAS CREACIONES	EVE: 379 FASE NACIONAL INCLUIDO CAPITULO II
TRA: 11 PCT-PATENTE DE INVENCION CAPITULOS I Y II	FOLIOS: 13
ACT: 519 TRASLADOINFORME	

DIRECCIÓN DE NUEVAS CREACIONES

2020
Bogotá, D.C.,

Abogado(a)/Señor(a)
SILVANA MARÍA LÓPEZ DÍAZ

Asunto: Radicación: 14-122620- -10
Trámite: 11
Evento: 379
Actuación: 519
Oficio: 4164
Folios: 13

Patente de Invención	X			Patente de Modelo de Utilidad	
Vía Nacional					
Vía PCT (Fase Nacional)	X	Capítulo I		Capítulo II	X
No. Solicitud Internacional	PCT/EP2012/004990				
Fecha de Presentación Internacional	04/12/2012				

Como resultado del examen de fondo realizado, con fundamento en el Artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se comunica:

1. Documentos estudiados

Descripción:	Rad. N° 14-122620-00000-0000	06/junio/2014
Reivindicaciones:	Rad. N° 14-122620-00009-0000	22/marzo/2016
Prioridad:	DE 10 2011 120 604.7	09/diciembre/2011
	DE 10 2012 006 416.0	30/marzo/2012

2. Análisis de la Prioridad

Se acepta la reivindicación de prioridad porque ésta solicitud fue presentada dentro del plazo establecido (Art. 9 D 486) y su contenido técnico corresponde con el de la prioridad reivindicada.

3. Objeto de la invención

De acuerdo con lo establecido en el numeral 1.2.2.2 del Capítulo Primero del Título X de la Circular Única para efectos del examen de patentabilidad, se tendrá en cuenta la tasa pagada por el solicitante al momento de comenzar el examen para las reivindicaciones adicionales; esto es que cuando la solicitud contenga más de diez (10) reivindicaciones y

no se haya pagado la tasa complementaria, sólo se estudiarán las cubiertas por la tasa pagada. Por lo tanto, se estudiarán las reivindicaciones 1 a 22 (Páginas 6 a 10, radicado N° 14-122620-00009-0000).

Título de la solicitud: Película de capas múltiples libre de capa metálica teniendo bajo peso por superficie” (Pág. 1, radicado N° 14-122620-0000-0000).

El problema planteado en esta solicitud, consiste en la necesidad de obtener una película de capas múltiples que tengan bajo peso, resistencia a la perforación, un alto efecto de barrera al gas y alta dilatabilidad.

Para resolver este problema técnico, la solicitud en estudio propone ofrecer una película de capas múltiples (de al menos seis capas, preferentemente de al menos nueve capas), sin capa metálica, teniendo un peso por superficie de <33 g/m², para la producción de cuerpos ascensionales, sin ninguna fuente de riesgo.

El objeto de la presente solicitud se relaciona con la Clasificación Internacional de Patentes (CIP): A61K9/20; A63H27/10; B32B27/08; B32B27/12; B32B27/32; B32B27/34, B64B1/58.

4. De la solicitud de patente

Reivindicaciones (Art 30 D 486)

El capítulo reivindicatorio no es claro porque:

- La estructura de la reivindicación 1 tiene más de un enlace gramatical al mencionar, “comprendiendo”, “caracterizada porque”, por lo cual no permite distinguir claramente el objeto que se desea proteger, se sugiere realizar las correcciones del caso.
- Los términos de las reivindicaciones 1, 3, 4, 6, 7, 10, 11, 12, 13, 14 y 19 “al menos”, “capas adicionales”, “como máximo”, son imprecisos, por lo cual no permite distinguir la invención del estado de la técnica. Se sugiere sustituirlo por un término preciso o un rango concreto.
- En las reivindicaciones 1, 6, 10, 11, 12, 13 y 15 las expresiones: “homo o copolímero de olefina termoplástico”, “agente de adherencia”, “capa de barrera a los gases”, “capa simple”, “una mezcla”, “homopolímero de etileno de baja densidad (LDPE)”, “polietileno lineal de baja densidad (LLDPE)”, “homo o copolímero de etileno”, “homo o copolímero de propileno”, “es sellable”, son generales y no definen con claridad las cantidades o productos a los cuales se refieren, por lo tanto, incluyen todas las posibles alternativas presentes o futuras, se sugiere remplazarlo por las características esenciales para definir con precisión lo que se desea proteger.
- La reivindicación 1 presenta características funcionales del método como lo es: “que no es desprendible”, es importante recordar que aunque estas características funcionales pueden ir dentro de las reivindicaciones, su función es dar claridad a las mismas, por lo que no le pueden dar novedad o nivel inventivo ya que no se consideran características técnicas esenciales.
- En las reivindicaciones 1 y 5 el término: “el encogimiento de la película de capas múltiples es de 5-10% a 90°C tanto en la dirección de máquina como transversal a la dirección de máquina”, “en donde la película de capas múltiples comprende ninguna película metálica o ninguna capa por deposición de vapor de un metal ni de un compuesto metálico”, “el encogimiento de la película de capas múltiples es de 5-7% a 90°C, tanto en la dirección de máquina como transversal a la dirección de máquina”, esta representado como una ventaja y/o resultado a obtener, se sugiere remplazarlo por las características esenciales o eliminarlo para dar concisión a la reivindicación.

- La reivindicación 1 se refiere a un producto al mencionar *Una película de capas múltiples libre de capa metálica*, sin embargo en el cuerpo de la reivindicación hace referencia a un método al mencionar *“tanto en la dirección de máquina como transversal a la dirección de máquina”*. Al respecto no debe olvidarse que las reivindicaciones de producto y de método son diferentes y, por ello, deben redactarse de manera independiente en el pliego reivindicatorio. Sobre las mismas, el Tribunal Andino de Justicia ha dicho lo siguiente:

“El objeto de la invención de producto esta constituido por un cuerpo cierto destinado a llenar una necesidad industrial que el estado de la técnica aun no ha satisfecho. En cambio, el objeto de la invención de procedimiento se encuentra conformado por “una serie o sucesión de operaciones que inciden sobre una materia (sólida, líquida o gaseosa) que se encamina a la obtención de una cosa o un resultado”. (Otero Lastres, José Manuel. Ob. Cit)¹

- Las reivindicaciones 17 a 22 presenta falsa dependencia con la reivindicación 1, puesto que, las reivindicaciones 17 a 22 hacen referencia a un producto al mencionar *“Un globo hecho de la película de capas múltiples como se reclama en las reivindicaciones 1 a 16”*, mientras que la reivindicación 1 se refiere a otro producto diferente al mencionar *“Una película de capas múltiples libre de capa metálica”*. Se sugiere realizar aclaraciones al caso.
- No hay concisión en la reivindicación 18, puesto que, la materia reivindicada se encuentra contenida dentro de la reivindicación 17, debido a que, globo es sinónimo de cuerpo ascensional [2].

5. Determinación del Estado de la Técnica

El estado de la técnica se determinó con base en la fecha de prioridad de la solicitud: diciembre 12 de 2011, y se encontraron los siguientes documentos que anticipan el objeto de esta solicitud:

Ítem	Documento	Título	Fecha de Publicación
D2	ES 2,348,250	“Cubierta para productos alimenticios compuestas de múltiples capas, provista de dos capas barrera contra el oxígeno”	02/12/2010
D3	US 2009/022919	“Lighter than air balloon made from a biaxially oriented polyester film”	22/01/2009
D4	CN 172,425,4	“High resistively nine-layer co-extrusion-blown moulding film and its preparation process”	25/01/2006
D5	US 643,593,5	“Balloon composed of two multilayered superimposed sheets”	20/08/2002
D6	JPH 072,906,50	“Film for balloon”	07/11/1995

El documento D2³ divulga una envoltura para alimentos tubular de múltiples capas (al menos 6 capas), teniendo dos capas internas del copolímero EVOH mutuamente aisladas;

¹ Proceso 129-IP-2007

² Globo: Receptáculo de materia flexible llenado de gas, que sirve de juguete para los niños, como decoración en fiestas, etc. <http://dle.rae.es/?id=JFGiw0z>

³ http://worldwide.espacenet.com/publicationDetails/biblio?CC=ES&NR=2348250T3&KC=T3&FT=D&ND=1&date=20101202&DB=&locale=en_EP

dicha envoltura tiene particularmente buenas propiedades de barrera contra el oxígeno (Resumen).

El documento D3⁴ divulga un globo de larga duración formado a partir de un laminado, la laminación incluye una película de poliéster, una capa de sellador y una capa de barrera de gas en un lado opuesto de la película de poliéster de la capa sellante, la tasa de transmisión de oxígeno del balón es menor que 0,1cc /100 sqin/día, una resistencia a la unión de la capa de barrera de gas a la superficie de la película de poliéster es de más de 300 g / in en condiciones secas, una resistencia de sellado del globo es más de 3,5 kg / in, y un tiempo de flotación de la globo es más de 20 días (Resumen).

El documento D4⁵ divulga una película de plástico de nueve capas con un espesor entre 25-300 micras (Resumen).

El documento D5⁶ divulga un globo que tiene una primera y una segunda lámina de varias capas superpuestas entre sí y unidas por fusión en una parte periférica de la misma; en la superficie exterior de la primera hoja de capas múltiples (Resumen).

El documento D6⁷ divulga una película para un globo que se obtiene sucesivamente por laminación de una capa de resina de poliamida, una capa de copolímero de acetato saponificado de etileno / vinilo, una capa de resina de poliamida, una capa de resina adhesiva y una capa de resina de poliolefina y se caracteriza por que el espesor total es 30 micras o menos, la fuerza de sellado térmico es 1 kg/cm o más y una propiedad de barrera de gas de helio es de 1000 cm³/m².24hr.23C.atm o menos. Mediante la formación de un globo mediante el uso de esta película (Resumen).

6. Examen de Patentabilidad (Art 14 D486)

Novedad (Art16 D486)

La reivindicación 17 consiste en: *“Un cuerpo ascensional que comprende una película de capas múltiples como se reclama en las reivindicaciones 1 a 16”,* (Ver Pág. 9 Rad. N° 14-122620-00009-0000).

Comparación de las características técnicas esenciales, con las del estado de la técnica:

Características Esenciales	D3	D5	D6
Un cuerpo ascensional que comprende una película de capas múltiples	Un globo formado a partir de un laminado, que comprende la laminación; una película de poliéster con un espesor total de 4 micras a 12 micras, que comprende una capa de núcleo de poliéster orientada biaxialmente y al menos una capa de piel copoliéster amorfo; una capa adyacente a la capa de piel copoliéster amorfo sellador; y una capa de barrera de gas en un lado opuesto de la película de poliéster de la capa sellante (Reivindicación	Un globo que tiene una primera y segunda láminas de varias capas superpuestas entre sí y unidas por fusión en una porción periférica del mismo que comprende una película que es capaz de absorber agua que está siendo proporcionado al menos en una parte de una superficie exterior de la primera hoja de capas múltiples del globo , en el que dicha primera hoja de varias capas está dispuesto para tener un	La presente invención por se puede dividir en al menos dos capas de una capa de resina de poliamida, así como mejorar el inconveniente decir inferior a la flexibilidad de EVOH, su objetivo mejorar la vida de servicio de globo (Párr. 0004).

4 http://worldwide.espacenet.com/publicationDetails/biblio?CC=US&NR=2009022919A1&KC=A1&FT=D&ND=&date=20090122&DB=&locale=en_EP

5 http://worldwide.espacenet.com/publicationDetails/biblio?CC=CN&NR=1724254A&KC=A&FT=D&ND=3&date=20060125&DB=EPODOC&locale=en_EP

6 <http://worldwide.espacenet.com/publicationDetails/biblio?CC=US&NR=6435935B1&KC=B1&FT=D>

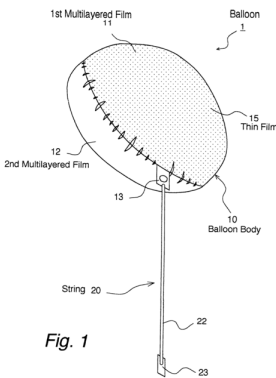
7 http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=19951107&CC=JP&NR=H07290650A&KC=A

	1).	peso menor que dicha segunda lámina de capas múltiples por una diferencia de peso equivalente a la de dicha película proporcionado en la primera hoja de capas múltiples (Reivindicación 1)	
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De acuerdo con la tabla anterior, las características esenciales que se muestran en la reivindicación 17 ya habían sido divulgadas previamente en los documentos D3, D5 y D6, en los cuales se muestra un globo (cuerpo ascensional) que contiene una película de múltiples capas entre las que se encuentran una capa de poliéster, una capa con sellador, una capa de barrera de gas y una capa de poliamida, según lo divulgado en los documentos D3, D5 y D6. En consecuencia, la reivindicación 17 carece de novedad, según lo divulgado en los documentos D3, D5 y D6.

Asimismo, el documento D5 divulga las características de las reivindicaciones dependientes así:

- La reivindicación 19 y 20. El cuerpo del balón (10) comprende una primera hoja de capas múltiples (11) y una segunda lámina de capas múltiples (12) que se superponen entre sí y están unidas por fusión en una porción periférica del mismo. Un miembro para la inyección de gas al globo (13) se lleva a cabo entre las hojas (11) y (12) en la porción unida por fusión, a través del elemento (13), se inyecta el gas helio en el cuerpo del balón (10) para inflarlo y mantenerle en el aire (Pág. 0010, Col. 4, líneas 23 a 31).



- La reivindicación 21. En la figura 1 se muestra una forma elíptica (Pág. 0010, Col. 4, líneas 23 a 31).
- La reivindicación 22. El globo según la invención pueden mantener su equilibrio muy bien incluso en un caso que se proporciona una película especial al respecto para la impresión de un diseño, un dibujo, o un patrón, etc., con la ayuda de una impresora utilizada en la casa, tal como una tinta de la impresora del tipo de inyección. (Pág. 0013, Líneas 9 a 13).

Nivel inventivo (Art18 D486)

La reivindicación 1, consisten en: *“Una película de capas múltiples libre de capa metálica, apropiada para la producción de cuerpos ascensionales teniendo un peso por superficie de 20-33 q/m2 y una construcción de capas de al menos nueve capas, comprendiendo”* (Ver Pág. 6 del Radicado N° 14-122620-00009-0000).

Comparación de las características técnicas esenciales, con las del estado de la técnica:

Características esenciales	D4	D2
Una película de capas múltiples libre de capa metálica, apropiada para la producción de cuerpos ascensionales teniendo un peso por superficie de 20-33 g/m ² y una construcción de capas de al menos nueve capas, comprendiendo:	Una película coextruida soplada de alta barrera de nueve capas, caracterizada porque tiene un espesor entre 25 a 300 micras donde la película se caracteriza porque: la capa superior (I) es una superficie exterior de la capa de película delgada, la segunda capa (H), una tercera capa (la g), la cuarta capa (F), la quinta capa (E), la sexta capa (D), la séptima capa (C), la octava capa (B), la capa más baja (a) es una capa de sellado por calor (Reivindicación 1).	Una cubierta para productos alimenticios de forma tubular, de múltiples capas, caracterizada porque, por lo menos tiene seis capas y porque contiene dos capas de copolímero de EVOH internas, separadas entre sí. La cubierta de forma tubular, es de preferencia, sin costura (Pág. 0003, líneas 45 a47).
(a) una capa (a) construida de al menos un homo o copolímero de olefina termoplástico como una de las capas exteriores,	La capa más inferior (A), que consta de resina de PE o EVA o similar o iónico (Reivindicación 2).	Las capas pueden estar compuestas también de manera diferente. La secuencia de las capas de la cubierta de múltiples capas es de preferencia como sigue (izquierda=cara externa dela cubierta) (Pág. 0003, líneas 67 y 68; Pág. 0004, líneas 1 y 2). 3b) PO//HV//EVOH//PA//EVOH//PA//HV//PA (6 capas) (Pág. 0004, línea 31). PO=capa preferentemente de un (co)polímero olefínico, por ejemplo polietileno (HDPE ó LDPE) copolímeros de etileno-a-olefina, polipropileno, copolímeros etilenopropileno, terpolímeros de diferentes definas. Pueden estar también contenidos, una proporción de copolímeros de olefinas heterofuncionales, por ejemplo copolímeros de etileno y acetato de vinilo, etileno y ácido (met) acrílico, ionómeros conteniendo los correspondientes iones Na ó respectivamente Zn, copolímeros de etileno y ásteres alquílicos del ácido (met) acrílico, así como los correspondientes terpolímeros funcionales (Pág. 0005, líneas 7 a 12).
(b) una capa de agente de adherencia (b) que no es desprendible, que consiste de una capa simple o capas adicionales.	La octava capa (B), que consta de un material adhesivo (Reivindicación 2).	3b) PO//HV//EVOH//PA//EVOH//PA//HV//PA (8 capas) (Pág. 0004, línea 31). HV=capa preferentemente de un polímero conteniendo olefinas, el cual está modificado con grupos funcionales y por ello puede generar una adhesividad con las capas vecinas de poliamida o de EVOH (Pág. 0005, líneas 14 a 19).
(c) una capa (c) construida de al menos una homo y/o copoliamida,	la séptima capa (C), que consta de material PA6-66 (Reivindicación 2).	3b) PO//HV//EVOH//PA//EVOH//PA//HV//PA (8 capas) (Pág. 0004, línea 31). PA=capa preferentemente de una (co)poliamida alifática (por ejemplo, PA 6, PA 66, PA 6/66, PA 6/69, PA 6/12, PA 12), de mezclas de estas poliamidas, eventualmente también de mezclas con poliamidas parcialmente aromáticas (por ejemplo Nylon-MXD6, PA6-I/6/T) y/o de polímeros de otro tipo (por ejemplo, copolímero EMAA) (Pág. 0005, líneas 3 a 5).
(d) al menos una capa de barrera a los gases (d) interior, adyacente a la capa (c) que se	La sexta capa (D), que consiste principalmente en el material de barrera de EVOH (Reivindicación	3b) PO//HV//EVOH//PA//EVOH//PA//HV//PA (8 capas) (Pág. 0004, línea 31).

distingue al menos en la composición del/de los componente(s) de polímero de las capas (c) y (e);	2).	EVOH=capa a base de un copolímero etileno/alcohol vinílico (Pág. 0005, líneas 21 y 22).
(e) una capa (e) adyacente a la capa de barrera de gas (d) construida de al menos una homo y/o copoliamida,	La quinta capa (E) y la séptima capa (C), que consta de material PA6-66 (Reivindicación 2).	3b) PO//HV//EVOH//PA//EVOH//PA//HV//PA (8 capas) (Pág. 0004, línea 31). PA=capa preferentemente de una (co)poliamida alifática (por ejemplo, PA 6, PA 66, PA 6/66, PA 6/69, PA 6/12, PA 12), de mezclas de estas poliamidas, eventualmente también de mezclas con poliamidas parcialmente aromáticas (por ejemplo Nylon-MXD6, PA6-I/6/T) y/o de polímeros de otro tipo (por ejemplo, copolímero EMAA) (Pág. 0005, líneas 3 a 5).
(f) una capa de agente de adherencia (f) que no es desprendible, que consiste de una capa simple o capas adicionales,	Dicha cuarta capa (F), que consta de un material adhesivo (Reivindicación 2).	3b) PO//HV//EVOH//PA//EVOH//PA//HV//PA (8 capas) (Pág. 0004, línea 31). HV=capa preferentemente de un polímero conteniendo olefinas, el cual está modificado con grupos funcionales y por ello puede generar una adhesividad con las capas vecinas de poliamida o de EVOH (Pág. 0005, líneas 14 a 19).
(g) al menos una capa (g) interior, construida de al menos un homo o copolímero de olefina termoplástico,	Dicha tercera capa (G), que consta de uno o más materiales de PE (Reivindicación 2).	No menciona
(h) una capa de agente de adherencia (h) que no es desprendible, que consiste de una capa simple o capas adicionales,	Dicha segunda capa (H), que consta de un material adhesivo (Reivindicación 2)	No menciona
(i) una capa (i), construida de al menos una homo v/o copoliamida como una de las capas exteriores,	La capa superior (I), que consiste en material de PA (Reivindicación 2).	3b) PO//HV//EVOH//PA//EVOH//PA//HV//PA (8 capas) (Pág. 0004, línea 31). PA=capa preferentemente de una (co)poliamida alifática (por ejemplo, PA 6, PA 66, PA 6/66, PA 6/69, PA 6/12, PA 12), de mezclas de estas poliamidas, eventualmente también de mezclas con poliamidas parcialmente aromáticas (por ejemplo Nylon-MXD6, PA6-I/6/T) y/o de polímeros de otro tipo (por ejemplo, copolímero EMAA) (Pág. 0005, líneas 3 a 5).
caracterizada porque el encogimiento de la película de capas múltiples es de 5-10% a 90°C	No menciona	En este último proceso la película fundida se solidifica mediante un rápido enfriamiento en un tubo flexible previo, amorfo en una gran parte, y éste se estira biaxialmente mediante un nuevo calentamiento a continuación (típicamente desde aproximadamente 60 a 90°C), con ayuda de un colchón de aire encerrado entre dos pares de cilindros trituradores. La posterior termofijación, puede tener lugar conduciendo el tubo estirado a través de una extensa zona de calentamiento, eventualmente estabilizado mediante otro colchón de aire. Para ello se puede disminuir la tendencia a la contracción térmica a valores prácticos, que por regla general se encuentran en el intervalo desde el 5 al 20% en dirección longitudinal y en dirección transversal (medidos a 80°C) (Pág. 0005, líneas 1 a 8).
y en donde la película de capas múltiples comprende ninguna película metálica o ninguna	No menciona que tenga una capa metálica, por lo cual, se entiende que la película no contiene	No menciona que tenga una capa metálica, por lo cual, se entiende que la película no contiene ninguna capa

capa por deposición de vapor de un metal ni de un compuesto metálico,	ninguna capa metálica.	metálica.
en donde las capas (a) - (i) están presentes en la secuencia indicada.	Se observa que las nueve capas (I) a (A) se encuentran en orden.	No menciona

El documento D4 se considera el estado de la técnica más cercano a la invención definida en la reivindicación 1, porque divulga una película coextruida soplada de alta barrera de nueve capas, caracterizada porque tiene un espesor entre 25 a 300 micras donde la película se caracteriza porque: la capa superior (I) es una superficie exterior de la capa de película delgada, la segunda capa (H), una tercera capa (Ia g), la cuarta capa (F), la quinta capa (E), la sexta capa (D), la séptima capa (C), la octava capa (B), la capa más baja (a) es una capa de sellado por calor (Reivindicación 1).

La diferencia entre la invención definida en la reivindicación 1 y la lámina divulgada en D4, consiste en que este último no menciona que el encogimiento de la película de capas múltiples sea de 5-10% a 90°C.

El efecto que logra que el encogimiento de la película de capas múltiples sea de 5-10% a 90°C, es permitir que varios segmentos de la película de capas múltiples estén unidos por medio de una costura de sello, sin que halla encogimiento por el proceso de sellado en caliente de la película de capas múltiples.

Por lo tanto, el problema técnico objetivo que pretende resolver esta invención se puede formular así: “¿Como modificar la película de D4 con el fin de permitir que varios segmentos de la película de capas múltiples estén unidos por medio de una costura de sello, sin que halla encogimiento por el proceso de sellado en caliente de la película de capas múltiples?”.

Sin embargo, ya era conocido en el estado de la técnica, películas de múltiples capas que tienen una contracción o encogimiento menor al 10%, puesto que, en el documento D2 menciona una cubierta que se obtiene en general por coextrusión con ayuda de toberas anulares de varias capas y de preferencia mediante burbujas tubulares en conexión, o mediante extensión biaxial del tubo, este último procedimiento es particularmente preferido, puesto que, a causa de la orientación del tubo éste gana una sobresaliente estabilidad a la deformación con mejores propiedades de resiliencia, así como una capacidad de contracción térmica (Pág. 0005, líneas 60 a 64), la película se solidifica mediante un rápido enfriamiento en un tubo flexible previo, amorfo en una gran parte, y éste se estira biaxialmente mediante un nuevo calentamiento a continuación (típicamente desde aproximadamente 60 a 90°C), con ayuda de un colchón de aire encerrado entre dos pares de cilindros trituradores. La posterior termofijación, puede tener lugar conduciendo el tubo estirado a través de una extensa zona de calentamiento, eventualmente estabilizado mediante otro colchón de aire. Para ello se puede disminuir la tendencia a la contracción térmica a valores prácticos, que por regla general se encuentran en el intervalo desde el 5 al 20% en dirección longitudinal y en dirección transversal (medidos a 80°C) (Pág. 0005, líneas 1 a 8).

En consecuencia, la persona del oficio normalmente versada en la materia enfrentada al problema técnico modificar la película de D4 con el fin que el proceso de sellado en caliente no sea obstaculizado por el encogimiento de la película de capas múltiples, estaría motivada a incluir una cubierta de múltiples capas con contracción o encogimiento en el intervalo desde el 5 al 20% en dirección longitudinal y en dirección transversal como se divulga en D2, llegando así al objeto de la reivindicación 1, por lo cual se considera obvia.

Asimismo, el documento D4 divulga las características de las reivindicaciones dependientes así:

- La reivindicación 3. Una película coextruida soplada de alta barrera de nueve capas,

caracterizada porque tiene un espesor entre 25 a 300 micras (Reivindicación 1).

- La reivindicación 10 y 11. La capa más inferior (A), que consta de resina de PE o EVA o similar o iónico (Reivindicación 2); PE-- polietileno, polietileno de baja densidad polietileno de baja densidad tiene, polietileno de alta densidad HDPE, LLDPE MPE polietileno lineal de baja densidad y polietileno de metaloceno (Pág. 0023, líneas 5 y 6).
- La reivindicación 12. Dicha tercera capa (G), que consta de uno o más materiales de PE (Reivindicación 2).
- La reivindicación 13 y 14. En comparación con la misma película de siete capas con respecto a la película de nueve capas por soplado de coextrusión de la presente invención, a partir de la estructura se evidencia que al aumentar las dos capas funcionales, la película puede mejorar sus propiedades en relación con las dos capas. Además de tener un "excedente en calidad", lo que ahorra el costo de las materias primas (Pág. 0014, líneas 19 a 21), En vista de lo anterior, el técnico medianamente versado en la materia estaría motivado a realizar pruebas de rutina para colocar capas de polímeros de amida, de barrera gas y adhesivos hasta llegar a diez capas o más, cabe aclarar que la solución al anterior problema técnico objetivo se encuentra dentro de un proceso de optimización [8], lo cual se encuentra dentro de la práctica habitual de la persona versada en la materia que trabaje en el campo técnico específico.

Asimismo, el documento D2 divulga las características de las reivindicaciones dependientes así:

- La reivindicación 5. En este último proceso la película fundida se solidifica mediante un rápido enfriamiento en un tubo flexible previo, amorfo en una gran parte, y éste se estira biaxialmente mediante un nuevo calentamiento a continuación (típicamente desde aproximadamente 60 a 90°C), con ayuda de un colchón de aire encerrado entre dos pares de cilindros trituradores. La posterior termofijación, puede tener lugar conduciendo el tubo estirado a través de una extensa zona de calentamiento, eventualmente estabilizado mediante otro colchón de aire. Para ello se puede disminuir la tendencia a la contracción térmica a valores prácticos, que por regla general se encuentran en el intervalo desde el 5 al 20% en dirección longitudinal y en dirección transversal (medidos a 80°C) (Pág. 0005, líneas 1 a 8).
- La reivindicación 6. La capa de barrera contiene de preferencia el copolímero etileno/alcohol vinílico (EVOH), alternativamente también poliamidas alifáticas o parcialmente aromáticas. Se describen además láminas que presentan juntamente una capa barrera colocada interiormente o también exteriormente, en donde las dos capas barrera están separadas entre sí (Pág. 0002, líneas 47 a 50).
- La reivindicación 7. Se muestran tensiones de rotura entre 95 a 120 N (Pág. 0011, Tabla 4).
- Reivindicación 9. Se muestran la permeabilidad al oxígeno mostrándose resultados entre 2.6 a 38 cm³/m² día bar (2. 63 a 3.85 cm³/m² día atm). Teniendo en cuenta lo anterior se observa que entre mas capas específicamente de poliamida y poliolefina la permeabilidad disminuye, por lo cual acoge los valores reivindicados de 8 cm³/ (m²-24h-bar) como máximo, preferentemente de 5 cm³/ (m²-24h-bar) como máximo, de particular preferencia de 2 cm³/ (m² -24h-bar) (Pág. 0011, Tabla 4).
- La reivindicación 15 y 16. Todas las capas, en particular las capas del tipo PA y PO pueden todavía contener aditivos habituales, por ejemplo agentes de carga minerales y/o orgánicos (también partículas a escala nanométrico), pigmentos

8 PerryManualdelIngenieroQuímico.Tomo I.Sección2.Sexta edición.1992

colorantes y antibloqueo, agentes de matizado, pigmentos de grano basto, para lograr una estructura superficial áspera, absorbedores de UV, plastificantes y estabilizantes. (Pág. 0005, líneas 28 a 31).

En la reivindicación 2, en cuanto al valor peso por superficie de 2 0 - 3 1 g/m², se entiende que al anticipar el estado de la técnica cada una de las características de la película, con toda probabilidad tendrían el mismo valor de dicho parámetro, en caso que se midiera.

En la reivindicación 4, en cuanto al valor de densidad media de la película de capas múltiples es de 1.1 g/cm³, se entiende que al anticipar el estado de la técnica cada una de las características de la película, con toda probabilidad tendrían el mismo valor de dicho parámetro, en caso que se midiera

En la reivindicación 8, en cuanto al valor de la permeabilidad al helio, se entiende que al anticipar el estado de la técnica cada una de las características de la película, con toda probabilidad tendrían el mismo valor de dicho parámetro, en caso que se midiera

7. Conclusión

Los requisitos de Patentabilidad de la presente solicitud están afectados así:

Ítem	Documento	Reivindicaciones afectadas	Requisito que afecta
D2	ES 2,348,250	1, 2, 5, 6, 7, 9, 15, 16	Novedad y nivel inventivo
D3	US 2009/022919	17, 18	Novedad y nivel inventivo
D4	CN 172,425,4	1, 2, 3, 4, 8, 10, 11, 12, 13, 14	Novedad y nivel inventivo
D5	US 643,593,5	17, 18, 19, 20, 21, 22	Novedad y nivel inventivo
D6	JPH07290650	17, 18	Novedad y nivel inventivo

8. Respuesta a los argumentos del señor solicitante

Con respecto al argumento de la solicitante: *“Respecto a los términos generales incluidos en el Oficio que se contesta, la solicitante desea manifestar respetuosamente que dichos término son ampliamente conocidos por una persona versada en la materia y se encuentra definidos en el capítulo descriptivo. Por lo cual, se solicita amablemente se mantengan dentro del capítulo reivindicatorio y sea retirada la objeción realizada”*, esta Oficina considera que si bien son términos empleados, son generales y por tanto no especifican claramente la invención, puesto que, dichos términos son generales y sugieren de forma imprecisa que la protección se extiende a otras posibles variaciones o modificaciones, por lo cual, no son patentables. Se sugiere especificar la invención con términos precisos.

Asimismo al respecto del argumento de la solicitante, en el cual el término *“al menos”*, significa *“como mínimo”* o *“uno o más”* y su eliminación del capítulo reivindicatorio restringiría la presente invención de una forma muy estricta, la cual estaría en contra de lo descrito en el capítulo descriptivo, en donde en muchos casos se divulga más de un compuesto o mezcla de algunos de ellos; esta oficina considera que dichas expresiones no limitan la invención, por cuanto no presentan claramente un rango superior y uno inferior [9], por tanto, dichos términos no permiten definir el alcance de la invención.

Ahora bien, frente a que las reivindicaciones brindan información suficiente puesto que están soportadas en la descripción, es pertinente mencionar lo que el Tribunal de Justicia de la Comunidad Andina ha dicho sobre este tema, lo siguiente:

⁹ **Rango:** m. Estad. Amplitud de una variación de un fenómeno entre un límite menor y uno mayor claramente especificados; en línea: <http://dle.rae.es/?id=V7xwLhM>

"[...] las reivindicaciones constituyen parte esencial de la respectiva solicitud, debido a que delimitan el campo de la patente y especifican la regla técnica que se desea patentar, razones por las cuales éstas deben ser suficientemente claras y concisas. Agrega la jurisprudencia del Tribunal que 'Su fundamento radica pues en la descripción respectiva, de forma tal que el alcance de la reivindicación corresponda y se justifique con el contenido de aquella'. (Proceso 106-IP-2002, patente: BATERIA CON CONTROLADOR INCORPORADO, publicado en la Gaceta Oficial N° 892, de 31 de enero de 2003)".[1]

"[...] las reivindicaciones presentadas deben ser totalmente claras y precisas lo que significa que, en principio, las reivindicaciones deben especificar el invento por sí solas, sin necesidad de recurrir a otros elementos técnicos, sólo si la situación lo exige podrá contener elementos que sirvan para aclararla".[2] – subrayado fuera de texto-

Complementado lo anterior, es de resaltar que las palabras elegidas para redactar las reivindicaciones son muy importantes, ya que la patente es un documento con contenido técnico, pero también es un documento jurídico, teniendo claro que las reivindicaciones, tal y como están redactadas, son las que definen el objeto de la protección, por lo que se reitera que los términos generales e imprecisos no son claros, ni concisos ya que no especifican un rango específico sobre el cual deba desarrollarse la invención, por lo tanto, para dar mayor claridad al capítulo reivindicatorio, es necesario que se tenga un término preciso o un rango concreto y aunque la solicitante menciona que dichos términos son conocidos en el campo técnico, no dan un rango apropiado, por el contrario, presenta una amplia gama de posibilidades y variaciones, por tanto no son aceptados.

En relación con los argumentos de la solicitante en relación a la novedad en donde menciona que *"para que las razones que aduce ese despacho para desvirtuar la novedad fuesen ciertas, sería forzoso que se demostrara que la invención de mi mandante esté comprendida en el estado de la técnica de forma **TOTAL**, lo cual no sucede con la materia reclamada en las nuevas reivindicaciones"* y *"D3 destruye la novedad de las antiguas reivindicaciones 24 y 25, y afirma que el párrafo [0060] muestra que esa película contiene una capa de poliamida. Sin embargo, la frase que cita sólo dice que puede haber un grupo amida en el monómero y todos y cada monómero listados como ejemplos son monómeros de resina acrílica. Esto se debe a que todo el párrafo [0060] sólo describe los diversos componentes de la capa de resina acrílica"*, con respecto a lo anterior, esta Oficina le recuerda a la solicitante que el estudio de patentabilidad se realiza sobre la materia contenida en la parte caracterizante de las reivindicaciones, por tanto, dichas reivindicaciones deben contener toda la información a proteger, dado que las reivindicaciones presentan términos generales pueden ser afectadas con el documento D3 (US 2009/022919), ahora bien, para afirmar mas dicha objeción se han citado dos nuevos documentos D5 (US 643,593,5) y D6 (JPH 072,906,50), donde muestran un globo con una película de múltiples capas.

Por otro lado, contrario a lo afirmado por el solicitante en relación al nivel inventivo en donde menciona que *"el señor examinador cita a D1 como estado de la técnica anterior más cercana. Sin embargo, la presente invención se trata de una película apropiada cuerpos ascensionales y un cuerpo ascensional, preferiblemente un globo, que comprende una película de este tipo"*, al respecto no se debe olvidar que el objeto a proteger es una película multicapa que contiene una serie de materiales de forma ordenada, por lo tanto, la aplicación no es tenida en cuenta al momento de realizar el estudio.

Asimismo, con respecto a los argumentos donde mencionan que *"Además, la solución presentada por D2 consiste en una capa doble de barrera a los gases de EVOH y preferiblemente la envoltura está hecha sin una costura de sellado: 'Este problema se resuelve mediante una cubierta para productos alimenticios de forma tubular, de*

múltiples capas, caracterizada porque, por lo menos tiene seis capas y porque contiene dos capas de copolímero de EVOH internas, separadas entre sí. La cubierta de forma tubular; es de preferencia, sin costura.’ (D2, Página 3, líneas 45-47)”; es de resaltar que el documento D1 se considera el más cercano, puesto que, divulga las principales características de la invención, sin embargo, en dicho documento no menciona que “*el encogimiento de la película de capas múltiples es de 5-10% a 90°C tanto en la dirección dé máquina como transversal a la dirección de máquina*”, donde esta característica tiene como efecto permitir que varios segmentos de la película de capas múltiples estén unidos por medio de una costura de sello, sin que haya encogimiento por el proceso de sellado en caliente de la película de capas múltiples, por lo tanto el problema técnico es “¿Como modificar la película de D4 con el fin de permitir que varios segmentos de la película de capas múltiples estén unidos por medio de una costura de sello, sin que haya encogimiento por el proceso de sellado en caliente de la película de capas múltiples?”, para lo cual D2 menciona “la película fundida se solidifica mediante un rápido enfriamiento en un tubo flexible previo, amorfo en una gran parte, y éste se estira biaxialmente mediante un nuevo calentamiento a continuación (típicamente desde aproximadamente 60 a 90°C), con ayuda de un colchón de aire encerrado entre dos pares de cilindros trituradores. La posterior termofijación, puede tener lugar conduciendo el tubo estirado a través de una extensa zona de calentamiento, eventualmente estabilizado mediante otro colchón de aire. Para ello se puede disminuir la tendencia a la contracción térmica a valores prácticos, que por regla general se encuentran en el intervalo desde el 5 al 20% en dirección longitudinal y en dirección transversal (medidos a 80°C) (Pág. 0005, líneas 1 a 8)”, solucionando el problema técnico objetivo, por lo cual el análisis de nivel inventivo no fue realizado en forma retrospectiva, tal como se ha evidenciado, toda vez que el examen de patentabilidad se desarrolló con base en los conocimientos que tenía el técnico de nivel medio en la materia para la fecha de prioridad de la solicitud, así como con el conocimiento divulgado en los documentos previamente publicados. Por lo tanto, a partir de estos conocimientos era perfectamente posible lograr el objeto reivindicado en la presente invención

Por otra parte es oportuno aclarar que, contrario a lo afirmado por la solicitante en el cual menciona que los documentos D1 y D2 no pueden ser considerados como arte previo para la presente invención, al respecto este Despacho aclara que los documentos D1 (ES 2,262,921) y D2 (ES 234,825,0) se encuentra dentro del campo técnico, puesto que, pertenece al campo técnico de “*Productos estratificados compuestos esencialmente de resina sintética: teniendo poliamidas*” teniendo en cuenta la clasificación internacional B32B 27/34 [10], por lo cual, está dentro del campo técnico y puede ser considerado arte previo.

10 <http://cip.oepm.es/ipcpub/#lang=es&menulang=ES&refresh=page¬ion=scheme&version=20160101&symbol=B32B0027340000>

En cumplimiento del artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le indica que debe dar respuesta dentro del término de sesenta (60) días contados a partir de la fecha de notificación de la presente comunicación. En caso de no dar respuesta al presente requerimiento, o si a pesar de la respuesta subsistieran los impedimentos para la concesión, se denegará la patente.

Si como respuesta a este requerimiento el solicitante llegara a modificar: i) el capítulo reivindicatorio, ii) la descripción de la invención a proteger, iii) o presente un nuevo capítulo reivindicatorio, y desee que se realice un nuevo examen de patentabilidad a esta modificación, no deberá pagar la tasa de modificación voluntaria pero sí la correspondiente a la tasa de examen de patentabilidad. En todo caso, el número de requerimientos por no patentabilidad estará supeditado a que el término del estudio de patentabilidad no sea superior a 18 meses, contados desde la publicación de la solicitud de patente de invención. Adicionalmente, se le recuerda al solicitante que si como respuesta a este requerimiento llegara a modificar el capítulo reivindicatorio y éste contenga más de diez (10) reivindicaciones deberá pagar la tasa por reivindicación adicional.

Notifíquese el presente oficio conforme a lo dispuesto en el numeral 5.2, literal e), del capítulo quinto del título primero de la Circular Única No. 10 de 2001.



JOSÉ LUIS SALAZAR LÓPEZ
Director de Nuevas Creaciones (c)

El anterior requerimiento fue notificado por fijación en lista, de fecha 2016-04-19

Elaboró: Lady Paola Cortes

Revisó: Olga Ximena Benavides Salazar

INFORME DE BÚSQUEDA DE PATENTES PARA EL No de Radicación: 14-122620							
CRITERIOS PARA LA BÚSQUEDA (anexar pantallazo o reporte en PDF, junto con los boleanos utilizados)							
Palabras clave utilizadas		Multilayer film, película, ballon, film, multi-layers, gas supply, hot air balloon, inlet valve, gas discharge, poliamide, helium.					
CLASIFICACIONES INTERNACIONALES UTILIZADAS PARA LA BÚSQUEDA		B32B27/08; B32B27/12; B32B27/28; B32B27/32; B32B27/34; A63H27/10; B64B1/58.					
BASES DE DATOS CONSULTADAS.							
ESPACENET		Patent scope		PatBase		USPTO	
Espatentes		JPO					
INFORMES DE EXÁMENES REALIZADOS EN OTRAS OFICINAS (documentos patentes, literatura no patente etc...)							
Oficina	Fecha del examen o de reporte de búsqueda de documentos	Anterioridades encontradas para el examen o reportados en el examen de búsqueda(relacionarlos todos)	Reiv. afectadas	RELEVANCIA (requisito que afecta)	FUERON TENIDOS EN CUENTA PARA EL EXAMEN EN LA OFICINA COLOMBIANA		
					SI	NO	
WIPO	26/04/2013	Multilayer foodstuff wrapping provided with two oxygen-barrier layers WO2006/094733 / Familia ES 2,348,250	1-19	Novedad	X		
		Non-latex laminated balloons containing pigment and related methods US2011/123785	1-27	A		X	
DOCUMENTOS ADICIONALES ENCONTRADOS POR EL EXAMINADOR DE ACUERDO A LOS CRITERIOS DE BÚSQUEDA.							
Coextruded, retortable multilayer film US2003017352							
Lighter than air balloon made from a biaxially oriented polyester film US 20090022919							
Película termorretráctil multicapa que actúa como barrera ante el oxígeno y el vapor de agua y que muestra una baja tendencia a la ondulación. ES 2 262 921							
Metal layer-free multi-layer film with low surface weight CA 2857068							
Film for balloon JPH07290650							
High resistively nine-layer co-extrusion-blown moulding film and its preparation process CN1724254							
Mehrschichtige Nahrungsmittelhülle mit zwei Sauerstoff-Barriereschichten ES2348250							
Balloon composed of two multilayered superimposed sheets US 6435935							
Scented ink and method of use on novelty items US 5577947							
Ballon made of synthetic resin and a method for manufacturing the ballon US 6613417							
Low conductivity balloons and methods for producing same EP 2361181							
Observaciones							
Fecha del reporte de búsqueda:		22/03/2016					

The screenshot shows a Windows taskbar with the following elements from left to right:

- Start button (Windows logo)
- Taskbar icons: Internet Explorer, Google Chrome, Microsoft Word, Adobe Reader, and a folder icon.
- Open tabs:
 - Common Citation Docu...
 - modulo de young - Bus...
 - Psicofonia - Wikipedia, la...
 - www.patentes.com/cp/...
 - Traductor de Google
 - Patent US2009022919 -
- System tray:
 - Network status icon
 - Voice icon
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ABSTRACT

An opposite side of the polyester film from the sealant layer. The gas transmission rate of the balloon is less than 0.1 cc/100 sqm/day, a bonding strength of the gas barrier layer to the surface of the polyester film is more than 300 g/in at dry conditions, a sealing strength of the balloon is more than 3.5

DESCRIPTION	CLAIMS (36)
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Common Citation Disc... mibola de young - Bu... W Palestine - Wikipedia... www.espatentes.com/pol... Traductor de Google... Patent US2009022019...

OFICINA ESPAÑOLA DE

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 ③ Fecha de publicación de la solicitud: 21.04.2004

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2242921_13.pdf DE 20201109161U...pdf DE 20201109161U...pdf [Mostrar todas las descargas...](#)

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Balloon composed of two multilayered superimposed sheets

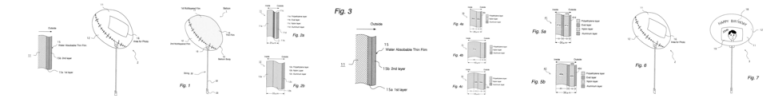
US 6435935 B1

RESUMEN

A balloon which has first and second multilayered sheets superimposed together and melt-bonded at a peripheral portion thereof, on the outer surface of the first multilayered sheet, is formed a film being acceptable for ink supplied from a printer, so that a design can be arbitrarily printed with the aid of a printer used at home, i.e. ink jet type printer. A balloon is arranged such that the first multilayered sheet is lighter than the second multilayered sheet by a weight equivalent to that of the film formed on the first multilayered sheet, so that the balloon can keep its posture when Helium gas is injected therein.

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INPADOC patent family

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Bibliographic data: WO2010075034 (A1) — 2010-07-01

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LOW CONDUCTIVITY BALLOONS AND METHODS FOR PRODUCING SAME

Page bookmark WO2010075034 (A1) - LOW CONDUCTIVITY BALLOONS AND METHODS FOR PRODUCING SAME

Inventor(s): SARNSTROM TODD [US]; ANSOLABEHERE PAUL [US]; BORCHARDT DEAN [US]; SWANSON ANDREW [US]; CERNOHOUS JEFFREY J [US]; FATICA MICHAEL [US]; CHICARELLA GIANFRANCO [US] ±
Applicant(s): ANAGRAM INT INC [US]; SARNSTROM TODD [US]; ANSOLABEHERE PAUL [US]; BORCHARDT DEAN [US]; SWANSON ANDREW [US]; CERNOHOUS JEFFREY J [US]; FATICA MICHAEL [US]; CHICARELLA GIANFRANCO [US] ±

Classification: - international: A63H27/10; B32B1/00; B32B27/06; B64B1/40
- cooperative: A63H27/10; B32B15/08; B32B27/08; B32B27/32; B32B27/34; B32B27/36; B32B27/02; B64B1/14; B64B1/40; A63H2027/1025; B32B25/005; B32B25/10; B32B25/205; B32B2307/00; B32B2307/02; B32B2307/72; Y10T156/1062

Application number: WO2009US67882 20091214

Priority number(s): US20080317595 20081222

Also published as: US2010159795 (A1); US7972193 (B2); JP2012513317 (A); EP2361181 (A1); EP2471651 (A1); more

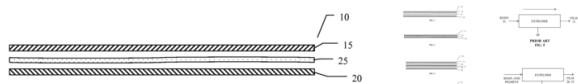
Abstract of WO2010075034 (A1)

RESUMEN

A laminated balloon and methods of making same. The laminated balloons can be two-ply or three-ply. The laminated balloons have a color imbedded in them through the use of pigments in the plies and the adhesives used to create the laminated balloons. Other materials, such as glitter and crushed mica, can be added to the plies and the adhesive to add visual effects to the balloons.

Número de publicación	US20110123785 A1
Título de publicación	Solicitud
Número de solicitud	US 12/950,705
Fecha de publicación	26 May 2011
Fecha de presentación	19 Nov 2010
Fecha de prioridad 	20 Nov 2009
Inventores	Arturo Verdúzco García, Andres Avelino Guzman Orozco
Cesionario original	Arturo Verdúzco García, Andres Avelino Guzman Orozco
Exportar cita	BiBTeX, EndNote, RefMan
Citas de patentes (3)	Citada por (2), Clasificadas (37), Eventos legales (1)
Enlaces externos:	USPTO, Cesión de USPTO, Espacenet

IMÁGENES (3)



RECLAMACIONES (20)

[illegible]

Balloon composed of two multilayered superimposed sheets

US 6343935 B1

RESUMEN

A balloon which has first and second multilayered sheets superimposed together and melt-bonded at a peripheral portion thereof on the outer surface of the first multilayered sheet, is formed a film being acceptable for ink supplied from a printer, so that it always can be actuatedly printed with the aid of a printer used at home. i.e. ink jet type printer. A balloon is arranged such that the first multilayered sheet is lighter than the second multi-layered sheet by a weight equivalent to that of the film formed on the first multilayered sheet, so that the balloon can keep its posture when inflation gas is injected thereto.

IMAGENES (8)

DESCRIPCION

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a balloon, and particularly, relates to a balloon constituted of two multilayered sheets, which are superimposed together with the

RECLAMACIONES (11)

What is claimed is:

1. A balloon which has first and second multi-layered sheets superimposed together and melt-bonded at a peripheral portion thereof comprising a film which is able to absorb water being provided on at least one part of an outer surface of

PatBase - Search results 22 March 2016
Search query (7): TAC=(1 and 2 and 6)
Results: 64

Lady Cortes

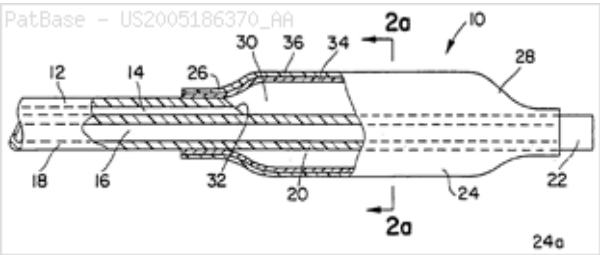
Search history

Search 1: TAC=(balloon) (Results 44776)
Search 2: TAC=(multilayer) (Results 100000)
Search 3: TAC=(ascend) (Results 18831)
Search 4: TAC=(1 and 2 and 3) (Results 0)
Search 5: TAC=(1 and 2) (Results 334)
Search 6: TAC=(polyamide) (Results 100000)
Search 7: TAC=(1 and 2 and 6) (Results 64)

Title: MEDICAL DEVICE **BALLOONS** CONTAINING THERMOPLASTIC ELASTOMERS

Abstract:

Source: US2005186370A A dilatation **balloon** and catheter for insertion into a bodily conduit. The catheter (10) includes shaft (12) and a dilatation **balloon** (24) at the distal end of the shaft. The **balloon** is inflated via a central lumen (14) in the shaft for delivery of a fluid inflation media. The **balloon** is fabricated from a combination of a thermoplastic elastomer (TPE), preferably an engineering thermoplastic elastomer (ETE), with a non-compliant structural polymeric material. The combination may be a blend of the non-compliant structural polymer and the TPE. Alternatively, the combination may be a layered **balloon** having, for example, a non-compliant structural polymer inner layer and a soft, abrasion resistant, elastomeric outer layer. Methods for fabricating the **balloon** from the combination of a TPE and a non-compliant structural polymer are also disclosed.



Classifications:

International (IPC 8-9): A61F2/958 A61L29/00 A61L29/04 A61M25/00 A61M25/10 A61M29/00 A61M29/02 B29C47/00 B29C47/06 (Advanced/Invention)

International (IPC 1-7): A61L29/00 A61M25/00 A61M25/10 A61M29/00 B29D23/00 B65D1/00

CPC: A61M25/1038 Y10T428/1334 Y10T428/1352 Y10T428/139 Y10T428/1393 A61M25/1029 A61L29/049 A61M25/0045 A61M25/1002 A61M2025/1075

European: A61L29/04M A61M25/00S1 A61M25/10A A61M25/10G1 K61M25/10G4 K61M25/10Z14

US: 264/209.1 264/209.100S 264/515 264/573 428/35.2 428/35.200P 428/35.7 428/35.700S 428/36.9 428/36.91 604/264 604/523 604/96 604/96.01 606/191 606/191S 606/192 606/192P 606/194 606/194P

Family:

Publication number	Publication date	Application number	Application date
CA2173139 AA	19960329	CA19942173139	19940928
CA2173139 C	20070410	CA19942173139	19940928
DE69433506 D1	20040226	DE19946033506	19940928
DE69433506 T2	20040624	DE19946033506T	19940928
EP0738168 A1	19961023	EP19940929912	19940928
EP0738168 A4	19990804	EP19940929912	19940928
EP0738168 B1	20040121	EP19940929912	19940928
JP3577082 B2	20041013	JP19950510880T	19940928
JP9506008 T2	19970617	JP19950510880T	19940928
US2005186370 AA	20050825	US20040855816	20040527
US2010318113 AA	20101216	US20100861633	20100823
US2012016405 AA	20120119	US20110243730	20110923
US5797877 A	19980825	US19960653117	19960524
US6086556 A	20000711	US19980129029	19980804
US6896842 BA	20050524	US20000557258	20000424
US7781038 BB	20100824	US20040855816	20040527
US8025943 BB	20110927	US20100861633	20100823
WO9509667 A1	19950413	WO1994US10961	19940928

Priority:

US19930130283 19931001	WO1994US10961 19940928	US19980129029 19980804
US19960653117 19960524	US19950530825 19950920	US19940364431 19941227
US20100861633 20100823	US20040855816 20040527	US20000557258 20000424
US20110243730 20110923		

Probable Assignee: BOSTON SCIENTIFIC CORP

Assignee(s): (std): BOSTON SCIENT CORP ; BOSTON SCIENT CORP A MASSACHUS ; BOSTON SCIENT SCIMED INC ; HAMILTON BRUCE ; SAHATJIAN RONALD A

Assignee(s): BOSTON SCIENTIFIC A MASSACHUSETTS CORP ; BOSTON SCIENTIFIC A MASSACHUSETTS CORP CORP ; BOSTON SCIENTIFIC CORP ; SCIMED LIFE SYSTEMS INC ; BOSTON SCIENTIFIC SCIMED INC ; BOSTON SCIENTIFIC TECHNOLOGY INC ; BOSTON SCIENTIFIC CORP NATICK

Inventor(s): (std): HAMILTON BRUCE ; SAHATJIAN RONALD A ; SAHATJIAN A

Inventor(s): SAHATJIAN RONALD

Agent(s): SMART AND BIGGAR; FISH AND RICHARDSON PC; VIDAS ARRETT AND STEINKRAUS PA

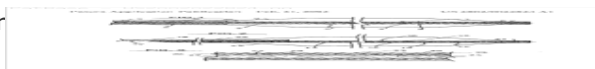
Designated states: AT BE CA CH DE DK ES FR GB GR IE IT JP LU MC NL PT SE

Title: **Multilayer** interventional catheter

Abstract: Source: US2002022824A The catheter

comprises a catheter tube formed of two superposed tubular layers of materials which

differ from one another. A tubular mediator layer is arranged between the layers to provide an adhesive anchorage for the layers.



Classifications:

International (IPC 8-9): A61F2/958 A61L29/00 A61M25/00 A61M25/09 A61M25/10 A61M25/16

A61M29/00 A61M29/02 B29C47/06 (Advanced/Invention);

A61F2/958 A61M25/16 (Advanced/Non-invention)

International (IPC 1-7): A61L29/00 A61M25/00 A61M25/09 A61M25/10 A61M29/00 A61M29/02 B29C47/06

CPC: A61M25/00 A61M25/104 A61M29/02 A61M2025/0183 A61M25/1036 B29C47/0026

Y10T428/1393 A61M25/1034 A61M25/0009 A61M25/0045 A61M25/0054 A61M25/10 A61M25/1027

A61M25/1029 A61M2025/0047 B29C47/0023 B29C47/06 B29L2009/00 B29L2031/7542

European: A61M25/00 A61M25/00S1 A61M25/00S3 A61M25/10 A61M25/10G A61M25/10G2

A61M25/10P B29C47/06 K61M25/00G K61M25/00S1C1 K61M25/01M K61M25/10 K61M25/10G

K61M25/10G1 K61M25/10G2 K61M25/10G3 K61M25/10P K61M29/02 L29L31/7542 L29L9/00

US: 156/242 156/244.13 156/294 428/36.91 604/103 604/103.06 604/103.09 604/103.090S 604/103P 604/264 604/52.3 604/523 604/524 604/524P 604/524S 604/525 604/525S 604/528 604/528S 604/96 604/96.01 604/96.010P 604/96.010S 606/194 606/194P

Family:

Publication number	Publication date	Application number	Application date
AT184799 E	19991015	AT19930117403T	19931027
AT229356 E	20021215	AT19960106578T	19960426
AT327797 E	20060615	AT19960026992T	19960426
AU199477457 A1	19950601	AU19940077457	19941025
AU199716454 A1	19971030	AU19970016454	19970321
AU678293 B2	19970522	AU19940077457	19941025
AU705840 B2	19990603	AU19970016454	19970321
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CA2199333 AA	19971026	CA19972199333	19970306
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US2003088265 AA	20030508	US20020280879	20021025
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US2009137954 AA	20090528	US20090361321	20090128
US2010094210 AA	20100415	US20090639763	20091216
US5843032 A	19981201	US19970937110	19970924
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Priority:

EP19930117403	19931027	US19940309234	19940920	CA19942133698	19941005
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US20050229301	20050916	US20020280879	20021025	US19990317293	19990524
US19970936352	19970924				

Probable Assignee: SCHNEIDER GMBH

Assignee(s): (std): KASTENHOFER GERHARD ; SCHNEIDER EUROP AG ; SCHNEIDER EUROP GMBH ; SCHNEIDER EUROP GMBH BUELACH ; SCHNEIDER GMBH ; SCHNEIDER EUROPE GMBH ; SCHNEIDER EUROPE AG

Assignee(s): SCHNEIDER EUROPE GMBH BUELACH ; BOSTON SCIENTIFIC CORP ; EUROPE AG ; VIDGOP NELYA ; SHUNAIIDAA OIROOPE AG ; SCHNEIDER EUROPE A G ; SCHNEIDER (EUROPE) AG ; SCHNEIDER ACKERSTRASSE AG ; SCHNEIDER AG

Inventor(s): (std): GERHARD KASTENHOFER ; GERUHARUTO KASUTENHOFUAA ; KASTENHOFER GERHARD

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; SMART AND BIGGAR; PETERREINS FRANK; CROMPTON SEAGER AND TUFTE LLC; SEAGER TUFTE AND WICKHEM LLC

Designated states: AT BE CH DE DK ES FR GB IE IT LI NL SE

Title: Non-coextrusion method of making multi-layer angioplasty balloons

Abstract:

Source: US5587125A A non-coextrusion process for making multi-layer angioplasty balloons involves pre-forming separate parisons and then concentrically disposing the plural parisons to form a composite parison which is then subjected to a blow-molding process. The resulting balloon can have its properties tailored by appropriate selection of the particular plastics to be used for the multiple parisons.



Classifications:

International (IPC 8-9): A61F2/958 A61L29/00 A61M25/00 A61M25/10 A61M25/16 A61M29/02 B29C49/04 B29C49/22 (Advanced/Invention);

A61F2/958 A61L29/00 A61M25/16 B29C49/04 B29C49/22 (Advanced/Non-invention)

International (IPC 1-7): A61L29/00 A61M25/00 A61M25/00 A61M25/10 A61M29/02 B29C49/04 B29C49/22

CPC: A61M25/1029 A61M2025/1075 A61M2025/1084

European: A61M25/00G1B A61M25/10G1 K61M25/10R1 K61M25/10Z14 K61M25/10Z18

US: 264/512 264/515 604/103.06 606/194

Family:

Publication number	Publication date	Application number	Application date
AT173940 E	19981215	AT19950925094T	19950731
AU199529353 A1	19960307	AU19950029353	19950731
AU683574 B2	19971113	AU19950029353	19950731
CA2196312 AA	19970129	CA19952196312	19950731
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JP9508558 T2	19970902	JP19960507155T	19950731
MX9701194 A1	19970531	MX19970001194	19950731
US5587125 A	19961224	US19940290075	19940815
WO9604951 A1	19960222	WO1995IB00597	19950731

Priority:

US19940290075 19940815 WO1995IB00597 19950731

Probable Assignee: BOSTON SCIENTIFIC SCIMED INC

Assignee(s): (std): SCHNEIDER USA INC

Assignee(s): SCHNEIDER USA INC PLYMOUTH MINN US ; SHUNDAIDAA YUU ESU EE INC ; SCIMED LIFE SYSTEMS INC ; BOSTON SCIENTIFIC SCIMED INC ; ROYCHOWDHURY SURANJAN ; SCHNEIDER (USA) INC ; SCHNEIDER INC

Inventor(s): (std): ROYCHOWDHURY SURANJAN ; SURANJAN ROYCHOWDHURY

Inventor(s): ROYCHOWDHURY SURANJAN MINNETONKA MN 55305 US ; ROICHODOORI SURANJAN

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; SMART AND BIGGAR

Designated states: AT AU BE CA CH DE DK ES FR GB GR IE IT JP LI LU MC MX NL PT SE

Title: Double tube, **balloon** catheter produced by using double tube, and process for producing **balloon** catheter

Abstract:

Source: US5833672A PCT No. PCT/JP95/02534 Sec.

371 Date Jun. 10, 1997 Sec. 102(e) Date Jun. 10, 1997

PCT Filed Nov. 11, 1995 PCT Pub. No. WO96/18430 PCT Pub. Date Jun. 20, 1996A

double tube from which a **balloon** catheter having a high rigidity and a low fluid resistance can be easily produced by means of an extruder or the like, an apparatus for producing the double tube, a **balloon** catheter produced by using the double tube, and a process for producing the **balloon** catheter are provided. The double tube comprises an outer tube having a lumen extending from the distal end to the proximal end, and an inner tube which is provided within the outer tube and has a lumen extending from the distal end to the proximal end, wherein a longitudinal member in the strip form is provided as a connecting member which continuously connects the inner surface of the outer tube to the outer surface of the inner tube in the axial direction. A **balloon** catheter can be easily produced by using this double tube. An apparatus for producing a double tube is also provided which comprises a first extruding means for extruding a resin for forming an outer tube portion, a second extruding means for extruding a resin for forming an inner tube portion, and a die for forming into tubes respectively from the resins extruded from the first extruding means and the second extruding means.



Classifications:

International (IPC 8-9): A61M25/00 A61M25/14 (Advanced/Invention);

A61F2/958 (Advanced/Non-invention)

International (IPC 1-7): A61M25/00 A61M25/10 A61M25/14

CPC: A61M25/0029 A61M25/0053 A61M25/10 A61M25/1027 A61M25/1036 A61M2025/0034 A61M2025/1061

European: A61M25/10G A61M25/10G3 K61M25/00R1M10 K61M25/00R1M4 K61M25/00S2C K61M25/10 K61M25/10Z8

US: 604/280 604/523 604/96.01

Family:

Publication number	Publication date	Application number	Application date
DE69530790 D1	20030618	DE19956030790	19951211
DE69530790 T2	20040311	DE19956030790T	19951211
EP0798010 A1	19971001	EP19950939413	19951211
EP0798010 A4	19980930	EP19950939413	19951211
EP0798010 B1	20030514	EP19950939413	19951211
JP3775439 B2	20060517	JP19950127335	19950427
JP3846508 B2	20061115	JP19950203949	19950718
JP8215314 A2	19960827	JP19950127335	19950427
JP9028808 A2	19970204	JP19950203949	19950718
US5833672 A	19981110	US19970849316	19970610
WO9618430 A1	19960620	WO1995JP02534	19951211

Priority:

JP19940332005 19941212

JP19950127335 19950427

JP19950203949 19950718

WO1995JP02534 19951211

Probable Assignee: NIPPON ZEON CO LTD

Assignee(s): (std): SAKAI KOUICHI ; TOYOKAWA TETSUO ; UCHIYAMA MASARU ; URATA HIDENOBU ; KAWATA KEIICHI ; NIPPON ZEON CO

Assignee(s): NIPPON ZEON CO LTD

Inventor(s): (std): KAWADA KEIICHI ; KAWATA KEIICHI ; SAKAI KOICHI ; SAKAI KOUICHI ; TOYOKAWA TETSUO ; UCHIYAMA MASARU ; URATA HIDENOBU

Designated states: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE US

Title: DRUG COATING WITH TOPCOAT

Abstract: Source: US2002004101A A coating and method for a coating an implantable device or prostheses are disclosed. The coating includes

an undercoat of polymeric material containing an amount of biologically active material, particularly heparin, dispersed therein. The coating further includes a topcoat which covers less than the entire surface of the undercoat and wherein the topcoat comprises a polymeric material substantially free of pores and porosigens. The polymeric material of the topcoat can be a biostable, biocompatible material which provides long term non-thrombogenicity to the device portion during and after release of the biologically active material.

**Classifications:**

International (IPC 8-9): A61F2/00 A61F2/04 A61F2/06 A61F2/82 A61F2/84 A61F2/86 A61F2/90 A61K47/32 A61K47/34 A61K9/00 A61L27/00 A61L27/22 A61L27/34 A61L27/44 A61L27/50 A61L27/54 A61L31/00 A61L31/08 A61L31/10 A61L31/14 A61L31/16 A61L33/00 A61L33/10 A61M29/00 A61M37/00 C08J3/24 C08J5/00 C08J7/04 (Advanced/Invention); A61F2/00 A61F2/06 A61F2/82 A61F2/90 A61K9/00 A61L27/00 A61L31/00 (Advanced/Non-invention); A61F2/06 A61F2/82 A61K9/00 A61L27/00 A61L31/00 A61L31/08 A61L31/14 A61L33/00 C08J3/24 C08J5/00 C08J7/00 (Core/Invention); A61F2/00 A61F2/06 (Core/Non-invention); A61F A61L (Subclass/Invention)

International (IPC 1-7): A61B17/56 A61B17/58 A61B19/00 A61F2/00 A61F2/02 A61F2/04 A61F2/06 A61F2/30 A61K47/32 A61K47/34 A61K9/00 A61L13/00 A61L2/00 A61L27/00 A61L27/14 A61L27/34 A61L27/44 A61L27/50 A61L27/54 A61L31/00 A61L31/10 A61L31/16 A61L33/00 A61L33/10 A61L9/18 A61M29/00 A61M29/02 A61M37/00 B05D3/00 B05D3/04 B05D3/06 C08J5/00 C09D129/00 C09D183/04

CP: A61L2300/222 A61L2420/02 A61L2300/43 A61L31/141 A61L2300/406 A61L2300/416 A61L2300/608 A61L2420/08 A61L33/0011 A61F2210/0014 A61F2250/0067 A61L27/227 A61L31/08 A61L31/10 A61L31/16 A61L2300/236 A61L2300/42 A61L2300/602 A61L2300/606 A61L2300/622 A61F2/82 A61F2/86 A61F2/90

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US: 128/898 128/898S 424/423 424/423P 424/424 424/78.03 424/78.030S 427/2.1 427/2.100S 427/2.21 427/2.210P 427/2.24 427/2.240P 427/2.240S 427/2.25 427/2.250P 427/2.250S 427/2.28 427/2.3 427/2.31 427/21 427/225 427/23 427/261 427/261P 427/407.1 427/409 427/496 427/535 427/551 606/7 606/70 606/70S 623/1.15 623/1.150P 623/1.18 623/1.2 623/1.200P 623/1.42 623/1.420P 623/1.420S 623/1.43 623/1.46 623/1.460S 623/12 623/142 623/16.11 623/16.110S 623/23.7 623/23.700S

Family:

Publication number	Publication date	Application number	Application date
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EP0832655 A2	19980401	EP19970109380	19970610
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EP0923953 A2	19990623	EP19980202050	19980619
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EP1980278 A2	20081015	EP20080012589	19980619
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EP2082753 A2	20090729	EP20090159551	19960905
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ES2295995 T3	20080416	ES20050006630T	19960905
IL117869 A0	19960804	IL19960117869	19960411
IL123622 A0	19981030	IL19960123622	19960905
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JP10052502 A2	19980224	JP19970156882	19970613
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US2005187611 AA	20050825	US20050116256	20050427
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US5837313 A	19981117	US19960663490	19960613
US6099562 A	20000808	US19970996410	19971222
US6120536 A	20000919	US19960663518	19960613
US6284305 BA	20010904	US20000573506	20000518
US6358556 BA	20020319	US19980012443	19980123
US6620194 BB	20030916	US20010942716	20010830
WO9632907 A1	19961024	WO1996IB00272	19960401
WO9710011 A1	19970320	WO1996US14195	19960905
ZA9603075 A	19971020	ZA19960003075	19960418
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US19950424884	19950419	US19950526273	19950911	WO1996IB00272	19960401
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Probable Assignee: BOSTON SCIENTIFIC SCIMED INC

Assignee(s): (std): BOSTON SCIENT CORP ; BOSTON SCIENT LTD ; BOSTON SCIENT SCIMED INC ; BOSTON SCIENTIFIC LIMITED ; SCHNEIDER USA INC ; BOSTON SCIENTIFIC SCIMED INC ; SCHNEIDER INC

Assignee(s): SCHNEIDER (USA) INC ; DING NI ; HELMUS MICHAEL N ; HELMUS MICHAEL ; SCIMED LIFE SYSTEMS INC ; SCHNEIDER USA INC PLYMOUTH ; BOSTON SCIENTIFIC LTD ; BOSTON SCIENTIFIC LTD ST MICHAEL ; BOSTON SCIENTIFIC CORP

Inventor(s): (std): DING NI ; HELMUS MICHAEL ; HELMUS MICHAEL N ; MAIKERU ENU HERUMUSU ; MICHAEL N HELMUS ; NI DEIN ; NI DING ; HELMUS N

Inventor(s): THE DESIGNATION OF THE INVENTOR HAS NOT YET...

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; SMART AND BIGGAR; HORNER MARTIN GRENVILLE ET AL; PETERREINS FRANK; CHAPMAN PAUL GILMOUR ET AL; WEBER MARTIN; BUBLAK WOLFGANG; SANFORD TCOLB AND CO; LUZZATTO AND LUZZATTO; IMAMURA KENICHI; JONES DAY

Designated states: AT AU BE BR CA CH CY DE DK ES FI FR GB GR IE IL IT JP KR LI LU MC MX NL NO PT SE

6) Family number: 8740779 (US5833657A)

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Title: Single-walled **balloon** catheter with non-linear compliance characteristic**Abstract:**

Source: US5833657A A **balloon** element for use in a catheter has a multi-layered single-walled structure and a compliance characteristic exhibiting a first, non-compliant region at low operating pressures and a secondary compliant region at higher operating pressures. The properties of the **balloon** element permit it to serve for both dilatation of bodily vessels and stent delivery and implantation. A method of manufacturing the **balloon** element involves extrusion of a tube of material, such as PEEK, which serves as an inner wall layer of the finished **balloon** element and provides the desired strength and compliance characteristics of the **balloon** element, and a post-extrusion over the first tube, which provides an outer wall layer in the finished **balloon** element imparting abrasion resistance and other desirable mechanical properties.

**Classifications:****International (IPC 8-9):** A61F2/82 A61L29/06 A61L29/08 A61M25/00

A61M25/10 (Advanced/Invention);

A61F2/82 A61F2/958 A61M25/10 B29C49/04 B29C49/22 (Advanced/Non-invention);

A61F2/82 A61L29/00 A61M25/00 (Core/Invention);

A61M25/10 B29C49/04 B29C49/22 (Core/Non-invention)

International (IPC 1-7): A61L29/00 A61M25/00 A61M25/10 A61M29/00 A61M29/02**CPC:** A61L29/06 A61L29/085 A61M25/1029 A61M25/1038 A61M2025/1059 A61M2025/1075

A61M2025/1084 B29C49/04 B29C49/22 B29L2022/022 B29L2031/7542

European: A61L29/06 A61L29/08B A61M25/10G1 K61M25/10G4 K61M25/10Z14 K61M25/10Z18

K61M25/10Z7 L29C49/04 L29C49/22 L29L22/02B L29L31/7542

US: 604/101.02 604/96 606/192 606/198**Family:**

Publication number	Publication date	Application number	Application date
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US19960642365 19960503

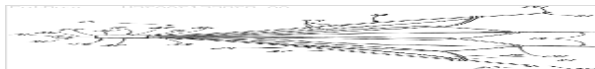
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Probable Assignee: ETHICON INC**Assignee(s):** (std): ETHICON INC**Assignee(s):** GREEN NICHOLAS A ; REINHARDT ROBERT W**Inventor(s):** (std): NIKORASU GURIIN ; REINHARDT ROBERT ; REINHARDT ROBERT W ; ROBAATO REINHAADO ; GREEN NICHOLAS ; GREEN NICHOLAS A**Inventor(s):** NICHOLAS A GREEN ; ROBERT W REINHARDT**Agent(s):** FREEHILLS PATENT ATTORNEYS; OGILVY RENAULT LLP SENCRL SRL**Designated states:** AT BE CH DE ES FI FR GB GR IE IT LI LU MC NL PT SE

Title: ENDOVASCULAR FILTER

Abstract: Source: US2002193828A

Endovascular filter (10) including a plurality of struts (14) with distal ends (18) adapted to



anchor the filter to the vessel wall after deployment, such as by having barbs (20), the filter being adapted to be retrieved if desired. Strut distal ends (18) are coated with an antiproliferative agent (40) that inhibits the ingrowth of tissue around the filter, thereby permitting the filter to be retrieved and removed atraumatically after a prolonged period of time, thus extending the useful life of the retrievable filter. Optionally, the proximal end (22) of the filter may also be so coated, or the entire filter.

Classifications:

International (IPC 8-9): A61B17/00 A61F2/00 A61F2/01 A61F2/02 A61F2/04 A61F2/06 A61F2/24 A61F2/82 A61F2/84 A61F2/86 A61F2/91 A61K31/135 A61K31/4738 A61K31/4985 A61K38/13 A61K49/04 A61K51/00 A61K51/12 A61K9/00 A61L27/00 A61L27/30 A61L27/54 A61L29/00 A61L29/08 A61L29/10 A61L29/16 A61L31/00 A61L31/08 A61L31/10 A61L31/16 A61L33/00 A61L33/02 A61L33/10 A61M25/00 A61M25/10 A61M29/00 A61M31/00 A61M37/00 A61N5/10 A61P37/06 B05D1/00 B05D7/00 (Advanced/Invention); A61F2/00 A61F2/06 A61F2/24 A61F2/82 A61F2/88 A61K31/135 A61L29/00 A61N5/10 (Advanced/Non-invention); A61B17/00 A61F2/82 A61K51/12 A61K9/00 A61L27/00 A61L29/00 A61L31/00 A61L31/08 A61L31/14 A61L33/00 A61M29/00 A61M37/00 (Core/Invention); A61F2/00 A61N5/10 (Core/Non-invention)

International (IPC 1-7): A61B17/00 A61F2/01 A61F2/02 A61F2/04 A61F2/06 A61K31/135 A61K31/337 A61K31/4738 A61K31/4985 A61K49/04 A61K51/00 A61K9/00 A61K9/24 A61L27/00 A61L29/00 A61L31/00 A61L31/08 A61L31/16 A61L33/00 A61M29/00 A61M37/00 B05D3/00

CPC: A61L31/148 A61L2300/102 A61L2300/104 A61L2300/404 A61L2300/61 A61L2300/42 A61L31/146 A61L2420/08 A61F2230/005 A61F2230/0067 A61F2230/0086 A61F2/01 A61F2002/016 A61F2/0077 A61F2/02 A61F2/06 A61F2250/0067 A61F2210/0076 C08L65/04 A61K51/1282 A61F2/24 A61F2/82 A61F2/885 A61F2/91 A61F2250/0068 A61L27/306 A61L27/54 A61L29/085 A61L29/106 A61L29/16 A61L31/088 A61L31/10 A61L31/16 A61L33/022 A61L2300/256 A61L2300/416 A61L2300/602 A61L2300/606 A61L2300/608 A61N5/1002 A61L2420/06

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US: 424/423 424/423P 424/423S 424/424 424/424S 424/471 424/471P 427/2.1 427/2.24 427/2.25 427/2.250P 427/2.250S 514/1.9 514/1.900S 514/11 514/16.4 514/16.400S 514/20.5 514/20.500S 514/449 514/449S 604/103.02 604/264 604/265 604/500 604/507 604/508 604/509 604/514 604/522 604/523 604/53 604/891.1 606/192 606/194 606/198 606/200 606/200P 623/1 623/1.1 623/1.11 623/1.110P 623/1.13 623/1.130P 623/1.15 623/1.150P 623/1.2 623/1.200P 623/1.39 623/1.42 623/1.420P 623/1.420S 623/1.43 623/1.44 623/1.45 623/1.46 623/1.460S 623/1.49 623/11 623/12 623/23.71

Family:

Publication number	Publication date	Application number	Application date
AU199655888 A1	19961219	AU19960055888	19960607
AU199749959 A1	19980515	AU19970049959	19971023
AU199866632 A1	19980909	AU19980066632	19980220
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US2015150696 AA	20150604	US20150622294	20150213
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Priority:

US19950484532	19950607	US19960645646	19960516	JP19960168218	19960607
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Probable Assignee: COOK MEDICAL TECHNOLOGIES LLC

Assignee(s): (std): COOK MEDICAL TECHNOLOGIES LLC ; FEARNOT NEAL E ; FEARNOT NEIL E ; BATES BRIAN L ; COOK INC ; GRIFFIN DENNIS ; KOZMA THOMAS G ; MED INST INC ; LEONARD RAYMOND B II ; RAGHEB ANTHONY O ; OSBORNE THOMAS A ; MOLGAARD NIELSEN ARNE ; VOORHEES WILLIAM D III ; VOORHEES III WILLIAM D ; VOORHEES WILLIAM D ; MED INST ; RUANE PATRICK H ; PEREZ SEGARRA WALESKA ; REYES PRISCILLA T

Assignee(s): OF LEICESTER UNIV ; LEICESTER UNIV ; LEICESTER UNIV OF ; WILLIAM COOK EUROPE APS ; KOSMA THOMAS G ; COOK INC BLOOMINGTON ; GERSHLICK ANTHONY H

Inventor(s): (std): VOORHEES III WILLIAM D ; VOORHEES D ; UIRIAMU DEI BUAHHISU ; TOOMASU JII KOZUMA ; VOORHEES WILLIAM D III ; VOORHEES WILLIAM D ; SUN JICHAO ; SCHAEFFER DARIN G ; RUANE PATRICK H ; ROBERTS JOSEPH W ; REYES PRISCILLA T ; REYES PRISCILLA ; RAGHEB O ; RAGHEB ANTHONY O ; PEREZ SEGARRA WALESKA ; OSBORNE THOMAS A ; NIIRU II FUIANOTSUTO ; MOLGAARD NIELSEN ARNE ; LEONARD RAYMOND B II ; LEONARD RAYMOND B ; LEONARD II RAYMOND B ; KOZMA THOMAS G ; KOZMA G ; KOSMA THOMAS G ; GERSHLICK H ; GERSHLICK ANTHONY H ; FEARNOT NEIL E ; FEARNOT NEAL E ; GRIFFIN DENNIS ; GREWE DAVID D ; FEARNOT E ; FEAMOT NEAL E ; BATES L ; BATES BRIAN L ; BATES BRAIN L ; ANSONII OO RAGUHEBU

Inventor(s): ANTHONY O RAGHEB ; ANTHONY H GERSHLICK ; BATES BRIAN ; BRIAN L BATES ; GREWE DAVID ; FEARNOT NEAL ; JOSEPH W ROBERTS ; KOZMA THOMAS ; LEONARD RAYMOND ; LEONARD RAYMOND BII ; NEAL E FEARNOT ; OSBORNE THOMAS ; RAGHEB ANTHONY ; SCHAEFFER DARIN ; VOORHEES WILLIAM ; THOMAS G KOZMA ; THOMAS A OSBORNE ; FEARNOT NEIL ; RUANE PATRICK ; WILLIAM D VOORHEES III ; WILLIAM D VOORHEES ; VOORHEES WILLIAM DIII

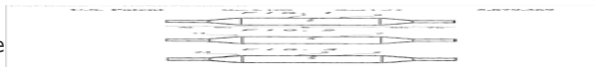
Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; MADDERN; DAVIES COLLISON CAVE; KIRBY EADES GALE BAKER; MACRAE AND CO; RICHARD J GODLEWSKI PATENT ATTORNEY; COOK GROUP PATENT OFFICE; BRINKS HOFER GILSON AND LIONE/CHICAGO/COOK; BRINKS HOFER GILSON AND LIONE CHICAGO COOK; BRINKS HOFER GILSON AND LIONE/INDY/COOK; BRINKS HOFER GILSON AND LIONE INDY COOK; WOODARD EMHARDT MORIARTY MCNETT AND HENRY LLP; GODLEWSKI RICHARD J; RICHARD J; BRINKS HOFER GILSON AND LIONE; WOODWARD EMHARDT MORIARTY MCNETT AND HENRY LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: Catheter **balloon** and **balloon** catheter

Abstract:

Source: US5879369A A catheter **balloon** having a base layer formed of a high-strength polymer and one or more covering layers formed over at least one surface of said base layer of the same flexible polymer or different flexible polymers having an elongation at break close to that of said high-strength polymer and being more flexible than said high-strength polymer, and has a wall thickness of 25 μ m or thinner. A **balloon** having a base layer formed of a high-strength polymer and one or more covering layers formed over at least one surface of said base layer of the same flexible polymer or different flexible polymers more flexible than said high-strength polymer, and has a wall thickness of 25 μ m or thinner, said covering layer or covering layers together bearing 10 percent or more part of the bursting stress of the **balloon**. A **balloon** catheter, especially blood vessel dilating catheter, equipped with any of the above **balloons**.



Classifications:

International (IPC 8-9): A61F2/82 A61F2/958 A61L29/00 A61M25/00 A61M25/10 A61M25/16

A61M29/00 A61M29/02 (Advanced/Invention);

A61F2/82 A61L29/00 A61M25/00 A61M29/00 (Core/Invention)

International (IPC 1-7): A61L29/00 A61M25/00 A61M25/10 A61M29/00 A61M29/02

CPC: A61M25/10 A61M25/1029 A61M25/104 A61M2025/1031 A61M2025/1075 A61M2025/1084

B29C35/0805 B29C49/14 B29C49/4823 B29C55/26 B29C2049/0089 B29C2049/4825

B29C2049/4838 B29K2105/258 B29L2031/7542 B32B27/00

European: A61M25/10 A61M25/10G1 A61M25/10P B29C49/48D B29C55/26 B32B27/00

K61M25/10G1A K61M25/10Z14 K61M25/10Z18 L29C35/08B L29C49/00G8 L29C49/14 L29C49/48D2

L29C49/48D4 L29K105/25C6 L29L31/7542

US: 604/96.01 606/192 606/194

Family:

Publication number	Publication date	Application number	Application date
DE69636829 D1	20070222	DE19966036829	19961009
DE69636829 T2	20071031	DE19966036829T	19961009
EP0768097 A2	19970416	EP19960116149	19961009
EP0768097 A3	19970716	EP19960116149	19961009
EP0768097 B1	20070110	EP19960116149	19961009
EP0768097 B2	20160217	EP19960116149	19961009
EP1611917 A1	20060104	EP20050021061	19961009
JP2005230578 A2	20050902	JP20050147323	20050519
JP2005230579 A2	20050902	JP20050147325	20050519
JP2005246095 A2	20050915	JP20050147321	20050519
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JP2005246097 A2	20050915	JP20050147324	20050519
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JP4149460 B2	20080910	JP20050147321	19961009
JP4149461 B2	20080910	JP20050147322	19961009
JP4190513 B2	20081203	JP20050147324	20050519
JP9164191 A2	19970624	JP19960287546	19961009
US5879369 A	19990309	US19960728611	19961010

Priority:

JP19950290377 19951011	EP19960116149 19961009	JP20050147324 20050519
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JP20050147321 20050519	JP20050147322 20050519	

Probable Assignee: TERUMO KK

Assignee(s): (std): TERUMO CORP

Assignee(s): TERUMO K K ; TERUMO KABUSHIKI KAISHA ; TERUMO KK

Inventor(s): (std): ISHIDA HISANOBU ; ISHIDA TOSHINOBU

Inventor(s): ISHIDA TOSHINOBU C O TERUMO KK

Agent(s): CASALONGA AXEL

Designated states: BE DE FR GB IT NL SE

Title: Catheter for emboli containment

Abstract:

Source: US6270477B Disclosed herein is a catheter for use in an emboli containment system. In one embodiment, the catheter has a tubular body with a metallic braid construction. Two lumen extend through the tubular body, the lumen being in a side-by-side configuration. One of the lumen functions as an inflation lumen, and is in fluid communication with an inflatable balloon mounted on the distal end of the catheter. The second lumen is adapted to receive other therapeutic catheters which comprise the emboli containment system.



Classifications:

International (IPC 8-9): A61B17/22 A61F2/958 A61M25/00 A61M25/09 A61M29/02

B29C55/04 (Advanced/Invention);

A61M1/00 (Advanced/Non-invention);

A61M25/09 (Core/Invention)

International (IPC 1-7): A61M25/00 A61M29/00

CPC: A61B17/12045 A61B17/12109 A61B17/12136 A61B17/12172 A61B17/22 A61B2017/12127 A61B2017/22055 A61B2017/22067 A61B2017/22084 A61B2017/320716 A61B2217/005 A61M25/0009 A61M25/0012 A61M25/0026 A61M25/0029 A61M25/0032 A61M25/0053 A61M25/0054 A61M25/0068 A61M25/007 A61M25/0075 A61M25/10 A61M25/1011 A61M25/1018 A61M25/1027 A61M25/104 A61M2025/0018 A61M2025/0034 A61M2025/0036 A61M2025/0037 A61M2025/0081 A61M2025/0183 A61M2025/0681 A61M2025/1015 A61M2025/1031 A61M2025/1045 A61M2025/1052 A61M2025/1079 A61M2025/109 A61M2025/1093 B29C55/04

European: A61B17/12P1T2 A61B17/12P5B A61B17/12P7B A61B17/12P7W1 A61B17/22 A61M25/00G A61M25/00S2C A61M25/00S3 A61M25/00T2 A61M25/00T20A A61M25/10D A61M25/10E A61M25/10P B29C55/04 K61B17/12P6 K61B17/22H3 K61B17/22H7B K61B17/22S2 K61B17/3207D K61B217/00Q16 K61M25/00G1 K61M25/00G3 K61M25/00J K61M25/00R1M K61M25/00R1M10 K61M25/00R1M14 K61M25/00R1M16 K61M25/00R1M4 K61M25/00R1M8 K61M25/00T10 K61M25/00T10C K61M25/00T30S K61M25/01M K61M25/06H2 K61M25/10 K61M25/10D2 K61M25/10G K61M25/10G1A K61M25/10Z1 K61M25/10Z16 K61M25/10Z21 K61M25/10Z22 K61M25/10Z4

US: 604/102.01 604/527 604/96.01 604/97.01 606/192

Family:

Publication number	Publication date	Application number	Application date
US6270477 BA	20010807	US19970813023	19970306
WO9744082 A2	19971127	WO1997US08467	19970519
WO9744082 A3	19980430	WO1997US08467	19970519

Priority:

US19960650464 19960520

US19970813023 19970306

US19970813023 19970306

Probable Assignee: MEDTRONIC VASCULAR INC

Assignee(s): (std): BAGAOISAN CELSO J ; HA HUNG V ; PERCUSURGE INC ; PATEL MUKUND R ; ZADNO AZIZI GHOLAM REZA

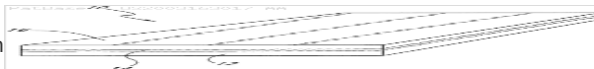
Assignee(s): MEDTRONIC VASCULAR INC ; MEDTRONIC AVE INC ; COMDISCO INC

Inventor(s): (std): BAGAOISAN CELSO J ; HA HUNG V ; PATEL MUKUND R ; ZADNO AZIZI GHOLAM REZA

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CZ DE DK EE ES FI FR GA GB GE GH GN GR HU IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU

Title: MULTI LAYER RADIATION DELIVERY **BALLOON****Abstract:**

Source: US2003163017A Disclosed is a sealed radiation source, which may be used to deliver a radioactive dose to a site in a body lumen. The source comprises a thin flexible substrate, and a layer of radioisotope attached thereto. The source may further comprise additional layers such as one or more tie layers disposed between the substrate and the radioisotope layer and one or more outer coating layers. In one embodiment, the source is wrapped around an inflatable **balloon**. Inflation of the **balloon** at a treatment site positions the source directly adjacent to the vessel wall, and allows irradiation of the site following or simultaneously with a **balloon** angioplasty, stent implantation, or stent sizing procedure.

**Classifications:**

International (IPC 8-9): A61F2/06 A61F2/84 A61F2/958 A61K51/12 A61K9/16 A61M25/00 A61M25/10 A61M29/02 A61M36/04 A61M36/12 A61N5/00 A61N5/10 C04B28/02 G03C5/02 G21G4/06 H01L21/04 H01L21/265 H01L21/266 H01L21/316 (Advanced/Invention); A61F2/06 A61F2/82 A61F2/958 A61K9/16 A61M25/00 A61M25/10 (Advanced/Non-invention); A61M36/00 A61N5/10 C04B28/00 H01L21/02 (Core/Invention)

International (IPC 1-7): A61M25/00 A61M29/02 A61M36/00 A61M36/12 A61N5/00 A61N5/10 B23K103/14 H01L21/265 H01L21/266 H01L21/31 H01L21/316 H01L29/24 H01L29/36

CPC: C04B35/565 H01L21/0465 Y10S977/949 A61M25/10 A61M25/1002 G21G4/06 A61F2/82 A61K9/1641 A61K51/1279 A61K51/1282 A61M2025/1075 A61N5/1002 A61N2005/1004 A61N2005/1005 G03C5/02

European: A61K51/12S A61K51/12T A61K9/16H6D A61N5/10B1 C04B35/565 G03C5/02 G21G4/06 H01L21/04H4A10 K61F2/06S K61F2/82 K61M25/10 K61M25/10A K61M25/10Z14 K61N5/10B1C K61N5/10B1E

US: 257/E21.058 257/E21.058S 438/518 438/931 600/3 600/3P 977/949 977/949S

Family:

Publication number	Publication date	Application number	Application date
AU199862567 A1	19980825	AU19980062567	19980130
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US20020314894	20021209				

Probable Assignee: ENDOLOGIX INC

Assignee(s): (std): ENDOLOGIX INC ; ENDOLOGY INC ; RADIANCE MEDICAL SYSTEMS INC ; PHILIPS SVENSKA AB ; KONINKL PHILIPS ELECTRONICS NV ; PHILIPS ELECTRONICS NA ; CARDIOVASCULAR DYNAMICS INC

Assignee(s): CROCKER MICHAEL ; BUCHBINDER MAURICE ; STRATHERN GARY ; SMITH EDWARD F ; MCCORMICK PAUL ; SIMINUK MARK ; KICK GEORGE F ; PHILIPS KONINKLL NV ; TAM LISA ; TRAUTHERN BRETT ; TAM LISA A ; TRAUTHERN BRETT A ; PHILIPS ELECTRONICS NORTH AMERICA CORP ; RADIANCE MEDICAL SYSTEMS ; PHILIPS AB ; PHILIPS ELECTRONICS N V KONINKLL ; FAZIO ROBERT ; HENSON MICHAEL

Inventor(s): (std): LISA TAM ; MCCORMICK PAUL ; TRAUTHERN BRETT ; TRAUTHERN BRETT A ; TASKAR NIKHIL ; TAM LISA A ; TAM LISA ; STRATHERN GARY ; SMITH EDWARD F ; SIMINUK MARK ; BRETT A TRAUTHERN ; BUCHBINDER MAURICE ; HENSON MICHAEL ; LETAVIC THEODORE ; FAZIO ROBERT ; ALOK DEV ; SIMINUK MARK A ; KICK GEORGE F ; CROCKER MICHAEL

Inventor(s): BRETT TRAUTHERN ; GEORGE F KICK ; LISA A TAM ; PAUL MCCORMICK ; MICHAEL HENSON ; MICHAEL CROCKER ; MAURICE BUCHBINDER ; MARK SIMINUK

Agent(s): FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; MARKS AND CLERK; FETHERSTONHAUGH AND CO

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Title: POLYETHER BLOCK AMIDE CATHETER **BALLOONS****Abstract:**

Source: US2002018866A An inflatable member such as a **balloon** which is formed at least in part of a

polyamide/polyether block copolymer thermoplastic elastomer, commonly referred to as polyether block amide (PEBA). The presently preferred PEBA copolymer is **polyamide**/polyether polyester copolymer, such as PEBAX(R). The **balloon** of the invention exhibits high tensile strength, high elongation, and low flexural moduli. The **balloon** may be formed as a single layer of PEBA, or as a **multilayer** coextrudate having at least one PEBA layer. The **balloon** may be 100 percent PEBA or a blend of PEBA with another polymer, such as nylon.

**Classifications:****International (IPC 8-9):** A61L29/00 A61L29/06 (Advanced/Invention);

A61L29/00 (Core/Invention)

International (IPC 1-7): A61L29/00 B65D1/00**CPC:** Y10T428/1386 A61L29/06**European:** A61L29/06**US:** 428/36.8 428/36.800P 604/96.01 604/96.010S**Family:**

Publication number	Publication date	Application number	Application date
CA2303159 AA	20000309	CA19982303159	19980917
EP1011744 A2	20000628	EP19980948371	19980917
JP2001516621 T2	20011002	JP20000511536T	19980917
US2002018866 AA	20020214	US20010899828	20010705
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Priority:

US19970932908 19970917

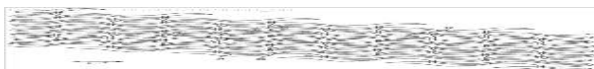
WO1998US19627 19980917

US20010899828 20010705

Probable Assignee: ADVANCED CARDIOVASCULAR SYSTEM**Assignee(s):** (std): ADVANCED CARDIOVASCULAR SYSTEM**Assignee(s):** ADVANCED CARDIOVASCULAR SYSTEMS INC ; DUTTA DEBASHISH ; LEE JEONG S ; ABBOTT CARDIOVASCULAR SYSTEMS INC**Inventor(s):** (std): LEE JEONG S ; DUTTA DEBASHISH**Agent(s):** DENNISON ASSOCIATES**Designated states:** AT BE CA CH CY DE DK ES FI FR GB GR IE IT JP LI LU MC NL PT SE

Title: METHODS AND APPARATUS FOR A CURVED STENT

Abstract: Source: US2002019660A The present invention provides a stent comprising a tubular flexible body having a wall with a web structure that is expandable from a contracted delivery configuration to deployed configuration. The web structure comprises a plurality of neighboring, interconnected, web patterns, each web pattern composed of adjoining webs. Each adjoining web comprises a central section interposed between two lateral sections, forming concave or convex configurations. Embodiments of the present invention comprising curvature for tracking tortuous anatomy and reducing localized restoring forces are provided. Methods of using stents in accordance with the present invention are also provided.



Classifications:

International (IPC 8-9): A61F2/00 A61F2/01 A61F2/06 A61F2/82 A61F2/84 A61F2/856 A61F2/90 A61F2/91 A61F2/915 A61K35/12 A61K45/00 A61L27/28 A61L29/00 A61L31/00 A61L31/14 A61M37/00 A61P7/02 A61P9/10 B29C47/00 B29C53/66 B29C67/00 B32B3/10 B32B37/00 B32B37/15 B32B5/04 (Advanced/Invention);

A61F2/02 A61F2/04 A61F2/90 A61F2/915 A61M29/00 (Advanced/Non-invention);

A61F2/00 A61F2/06 A61F2/82 A61L27/00 A61L29/00 (Core/Invention)

International (IPC 1-7): A61F2/00 A61F2/06 A61K35/12 A61K45/00 A61L29/00 A61L31/00 A61M29/02 A61M37/00 A61P7/02 A61P9/10

CP: A61L31/146 B29C53/66 B29K2995/0056 B29L2031/7534 A61F2/06 A61F2240/001 A61F2250/0023 A61F2002/0086 A61F2002/072 A61F2002/075 B29C47/0023 B29C47/0052 B29C47/1045 B29K2995/006 B29L2023/007 A61L31/08 A61L31/16 A61F2230/0054 A61F2220/0008 A61F2220/0016 A61F2220/005 A61F2210/0076 A61F2/856 A61F2/82 A61F2/07 Y10T428/24273 Y10T428/24298 Y10T428/24306 B29C47/021 A61F2/01 A61F2/90 A61F2/91 A61F2/915 A61F2002/91508 A61F2002/91533 A61F2002/91558 B29C47/0021 B29C47/0042 B29C47/92 B29C2947/92571 B29C2947/9258 B29C2947/9259 B29C2947/926 B29C2947/92609 B29C2947/92628 B29C2947/92695 B29C2947/92904 B29K2023/06 B29K2023/12 B29K2027/18 B29K2067/00 B29K2071/00 B29K2075/00 B29K2077/00 B29K2105/04 B29K2105/108 B29L2031/7532 B29L2031/755 D04H3/07

European: A61F2/06S6N2 A61F2/07 A61F2/91 A61F2/915 A61L31/14H B29C47/02B B29C47/92 B29C53/66 D04H3/07 K61F2/00L10 K61F2/01 K61F2/90 K61F2/91 K61F2/915 K61F2/915B K61F2/915F K61F2/915G2 L29C47/00J5 L29C47/00L5 L29C47/92 L29C947/92E14 L29C947/92E16 L29C947/92E16B L29C947/92E16C L29C947/92E18 L29C947/92E18C L29C947/92E24 L29C947/92F8D L29K105/04 L29K105/10B8 L29K23/06 L29K23/12 L29K27/18 L29K67/00 L29K71/00 L29K75/00 L29K77/00 L29K995/00F12 L29L31/7532 L29L31/7534 L29L31/755

US: 156/167 156/244.24 156/350 156/77 264/172.19 264/172.190P 428/131 428/131S 428/134 428/134S 428/135 428/135S 606/108 606/195 606/198 606/200 606/200S 623/1.11 623/1.110P 623/1.13 623/1.130P 623/1.15 623/1.150P 623/1.150S 623/1.16 623/1.160P 623/1.160S 623/1.17 623/1.2 623/1.200P 623/1.200S 623/1.21 623/1.210S 623/1.35 623/1.39 623/1.390P 623/1.4 623/1.400S 623/1.42 623/1.420P 623/1.44 623/1.440P 623/1.46 623/1.460S 623/1.5 623/1.51 623/1.54 623/12 623/14 623/23.76

Family:

Publication number	Publication date	Application number	Application date
AT474523 E	20100815	AT20010270098T	20011219
AT489120 E	20101215	AT20050821580T	20051220
AU2002253407 AA	20020828	AU20020253407	20011219
AU2002253409 AA	20020828	AU20020253409	20011219
AU2005318382 AA	20060629	AU20050318382	20051220
AU2005318382 BB	20120119	AU20050318382	20051220
CA2309079 AA	20000501	CA19992309079	19990902
CA2309079 C	20041116	CA19992309079	19990902
CA2401878 AA	20020830	CA20012401878	20011219
CA2401878 C	20091201	CA20012401878	20011219

DE19840645 A1	20000309	DE19981040645	19980905
DE29924228 U1	20020718	DE19992024228U	19990802
DE60142642 D1	20100902	DE20016042642	20011219
DE602005025017 D1	20110105	DE200560025017T	20051220
EP0983753 A1	20000308	EP19990115265	19990802
EP0983753 B1	20141203	EP19990115265	19990802
EP1279382 A1	20030129	EP20010128529	20011129
EP1372529 A2	20040102	EP20010270098	20011219
EP1372529 B1	20100721	EP20010270098	20011219
EP1827523 A2	20070905	EP20050821580	20051220
EP1827523 B1	20101124	EP20050821580	20051220
EP2236106 A1	20101006	EP20100007504	20011219
EP2236106 B1	20150128	EP20100007504	20011219
EP2263606 A2	20101222	EP20100011732	19990802
EP2263606 A3	20140507	EP20100011732	19990802
EP2266502 A1	20101229	EP20100010581	20011219
EP2272543 A2	20110112	EP20100011801	20051220
EP2272543 A3	20111214	EP20100011801	20051220
EP2277475 A2	20110126	EP20100011733	19990802
EP2277475 A3	20140507	EP20100011733	19990802
ES2356750 T3	20110412	ES20050821580T	20051220
JP2002524135 T2	20020806	JP20000568422T	19990902
JP2004518486 T2	20040624	JP20020563865T	20011219
JP2009254908 A2	20091105	JP20090186176	20090810
JP3463042 B2	20031105	JP20000568422T	19990902
US2002019660 AA	20020214	US20010916394	20010726
US2002035394 AA	20020321	US20010967789	20010928
US2002161428 AA	20021031	US20000742144	20001219
US2004193250 AA	20040930	US20030743857	20031222
US2004236407 AA	20041125	US20040859636	20040603
US2004243220 AA	20041202	US20040884613	20040701
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US2006175727 AA	20060810	US20050313110	20051219
US2006184232 AA	20060817	US20060404450	20060414
US2007135891 AA	20070614	US20060601475	20061116
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US2011004289 AA	20110106	US20100875971	20100903
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US6602285 BA	20030805	US20000582318	20000623
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US6755856 BB	20040629	US20010967789	20010928
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US7846196 BB	20101207	US20040909117	20040730
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US8088157 BB	20120103	US20070731882	20070330
US8303645 BB	20121106	US20100875971	20100903
US8343208 BB	20130101	US20100949481	20101118
US8814926 BB	20140826	US20110089039	20110418
WO0013611 A1	20000316	WO1999EP06456	19990902
WO02064061 A2	20020822	WO2001IB02875	20011219
WO02064061 A3	20030918	WO2001IB02875	20011219
WO02064065 A2	20020822	WO2001IB02878	20011219
WO02064065 A3	20031016	WO2001IB02878	20011219
WO06066886 A2	20060629	WO2005EP13740	20051220
WO06066886 A3	20061012	WO2005EP13740	20051220

Priority:

DE19981040645	19980905	EP19990115265	19990802	DE19992024228U	19990802
US19990582318	19990902	WO2001IB02875	20011219	US19990582318	19990902
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ABBOTT LABORATORIES VASCULAR ENTERPRISES LTD ; ABBOTT LABORTORIES VASCULAR ENTERPRISES LTD

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Inventor(s): PHILIPPE NICAISE ; OEPEN RANDOLF ; ARIK ZUCKER ; MICHLITSCH KENNETH ; ERHARD HUESLER ; ERIC MARCOUX ; JOOST J FIERENS

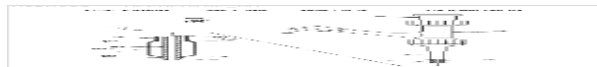
Agent(s): GRIFFITH HACK; MARKS AND CLERK; SMART AND BIGGAR; HAGER THOMAS JOHANNES; PETERS HAJO; SCHMITZ HANS WERNER; LUCE FORWARD HAMILTON AND SCRIPPS LLP; WORKMAN NYDEGGER; WORKMAN; JONATHAN D; JONATHAN

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: **BALLOON** CATHETER

Abstract:

Source: US6960186B The present invention is a **balloon** catheter used primarily in treatment and surgery for the purpose of dilating lesion sites such as strictures or blockages in passages in the human body. The **balloon** catheter of the present invention has a structure wherein a guide wire passing tubular member is deployed passing through the interior of the expansion body, and the outer surface of the tubular member and the expansion body are concentrically fused near the distal end of the catheter. This is a **balloon** catheter that is characterized by the fact that the Shore hardness of the material configuring the outermost surface of the tubular member is smaller than the Shore hardness of the material configuring the expansion body. It is therefore possible to flexibly adjust the tip portion formed by securing the expansion body and the guide wire passing tubular member.



Classifications:

International (IPC 8-9): A61L29/00 A61L29/06 A61M25/00 A61M25/09 A61M25/10 A61M25/16 A61M29/02 A61M39/00 C08L21/00 C08L67/02 C08L77/00 (Advanced/Invention);

A61F2/958 A61M25/09 (Advanced/Non-invention);

A61L29/00 A61M25/00 A61M39/00 C08L21/00 C08L67/00 C08L77/00 (Core/Invention)

International (IPC 1-7): A61L29/00 A61M25/00 A61M25/10 A61M31/00 A61M37/00 C08L21/00 C08L67/02 C08L77/00

CPC: A61M25/0045 A61M25/0068 A61M25/1002 A61M25/1027 A61M25/1038 A61M25/104

A61M2025/0004 A61M2025/0183 A61M2025/1056 A61M2025/1093

European: A61M25/10G A61M25/10P K61M25/00C K61M25/00S1 K61M25/00T10 K61M25/01M

K61M25/10A K61M25/10G4 K61M25/10Z22 K61M25/10Z6

US: 604/102.02 604/103.06 606/194

Family:

Publication number	Publication date	Application number	Application date
CA2369307 AA	20011109	CA20002369307	20000511
CA2369307 C	20090407	CA20002369307	20000511
CN100368033 C	20080213	CN200410038467	20000511
CN100368034 C	20080213	CN200410038468	20000511
CN1206003 C	20050615	CN20008007347	20000511
CN1350471 A	20020522	CN20008007347	20000511
CN1539521 A	20041027	CN200410038467	20000511
CN1539522 A	20041027	CN200410038468	20000511
EP1192970 A1	20020403	EP20000925609	20000511
EP1192970 A4	20090812	EP20000925609	20000511
EP1192970 B1	20110720	EP20000925609	20000511
HK1046870 A1	20051021	HK20020108412	20011120
HK1070600 A3	20050624	HK20050103345	20050419
HK1070843 A3	20050630	HK20050103544	20050426
JP2000316976 A2	20001121	JP19990129682	19990511
JP2001029450 A2	20010206	JP20000145968	20000518
JP2001029476 A2	20010206	JP19990207231	19990722
JP2001079093 A2	20010327	JP19990262928	19990917
JP4141595 B2	20080827	JP19990207231	19990722
JP4435903 B2	20100324	JP19990129682	19990511
JP4489219 B2	20100623	JP19990262928	19990917
JP4815657 B2	20111116	JP20000145968	20000518
KR101112717 B1	20120315	KR20107017603	20000511
KR20020010645 A	20020204	KR20017014282	20011109
KR20070037518 A	20070404	KR20077006301	20070319

KR20100092531 A	20100820	KR20107017603	20000511
US6960186 BA	20051101	US20020980979	20020305
WO0067831 A1	20001116	WO2000JP03005	20000511

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JP19990129682 19990511	JP19990136636 19990518	WO2000JP03005 20000511
JP19990207231 19990722	JP19990262928 19990917	JP20000145968 20000518

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Title: MEDICAL DEVICE WITH COATING THAT PROMOTES ENDOTHELIAL CELL ADHERENCE

Abstract: Source: US2002049495A This invention provides compositions and methods for producing a medical device coated with a matrix



and an antibody which reacts with an endothelial cell antigen. The matrix coating the medical device may be composed of synthetic material, such as polyurethane, poly-L-lactic acid, cellulose ester or polyethylene glycol. In another embodiment, the matrix is composed of naturally occurring materials, such as collagen, fibrin, elastin, amorphous carbon. In a third embodiment, the matrix may be composed of fullerenes. The fullerenes range from about C60 to about C100. The medical device may be a stent or a synthetic graft. The antibodies promote adherence of endothelial cells on the medical device. The antibodies may be mixed with the matrix or covalently tethered through a linker molecule to the matrix. Following adherence to the medical device, the endothelial cells differentiate and proliferate on the medical device. The antibodies may be different types of monoclonal antibodies. Methods of preparing such composition and methods of treating a mammal with atherosclerosis or other types of vessel obstruction are disclosed. By facilitating adherence of endothelial cells to the surface of the medical device, the methods and compositions of this invention will decrease the incidence of restenosis as well as other thromboembolic complications resulting from implantation of medical devices.

Classifications:

International (IPC 8-9): A01N43/00 A01N63/00 A01N65/00 A61B17/00 A61F2/00 A61F2/02 A61F2/04 A61F2/06 A61F2/07 A61F2/24 A61F2/82 A61F2/84 A61F2/852 A61F2/86 A61F2/91 A61F2/915 A61K31/70 A61K31/721 A61K35/12 A61K35/44 A61K38/36 A61K38/39 A61K39/395 A61K47/48 A61K48/00 A61K9/00 A61L17/00 A61L17/06 A61L27/00 A61L27/08 A61L27/14 A61L27/22 A61L27/28 A61L27/30 A61L27/34 A61L27/38 A61L27/44 A61L27/54 A61L27/56 A61L27/58 A61L29/00 A61L29/04 A61L29/08 A61L29/10 A61L29/12 A61L29/14 A61L29/16 A61L31/00 A61L31/02 A61L31/04 A61L31/08 A61L31/10 A61L31/12 A61L31/14 A61L31/16 A61M1/14 A61M25/00 A61M29/00 A61M29/02 A61M31/00 A61M37/00 A61M39/00 A61N1/36 A61P13/08 A61P19/00 A61P35/00 A61P9/10 C07K16/28 C12N15/00 C12N15/85 C12N15/87 C12N5/00 C12N5/02 C12N5/071 C12N5/074 C12N5/08 C12N5/10 (Advanced/Invention); A61F2/00 A61F2/02 A61F2/04 A61F2/06 A61F2/82 A61F2/852 A61F2/86 A61K35/12 A61K39/39 A61K39/395 A61K39/44 A61K48/00 A61L29/04 A61M31/00 B82Y30/00 C07K16/28 C12N15/09 C12N5/10 (Advanced/Non-invention); A01N43/00 A01N63/00 A61B17/00 A61F2/00 A61F2/04 A61F2/06 A61F2/24 A61F2/82 A61K31/70 A61K31/716 A61K39/395 A61K47/48 A61K48/00 A61K9/00 A61L17/00 A61L27/00 A61L29/00 A61L31/00 A61L31/02 A61L31/04 A61L31/08 A61L31/14 A61M1/14 A61M25/00 A61M29/02 A61M37/00 A61N1/36 A61P13/00 A61P19/00 C12N15/00 C12N15/85 C12N5/00 C12N5/02 C12N5/074 C12N5/08 (Core/Invention); A61K35/12 A61K39/39 A61K39/395 C12N15/09 C12N5/10 (Core/Non-invention); A61B A61F A61K A61L (Subclass/Invention)

International (IPC 1-7): A61B17/00 A61F2/00 A61F2/06 A61K31/00 A61K38/00 A61K39/395 A61K39/44 A61K48/00 A61K9/00 A61L17/00 A61L27/00 A61L27/08 A61L27/44 A61L27/54 A61L29/00 A61L29/10 A61L29/12 A61L29/16 A61L31/00 A61L31/08 A61L31/12 A61L31/16 A61M1/14 A61M25/00 A61M29/02 A61P35/00 A61P9/10 C07K16/28 C07K16/28 C12N15/11 C12N15/85 C12N5/08

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European: A61F2/06S A61F2/06S6 A61F2/82 A61F2/86 A61F2/91 A61F2/915 A61K31/721

A61K38/18C A61K38/18G A61K38/44 A61K47/48W26 A61K48/00D A61L27/08 A61L27/22R
 A61L27/30 A61L27/30A A61L27/30R A61L27/34 A61L27/38B2 A61L27/44 A61L27/54 A61L27/56
 A61L27/58 A61L29/08B A61L29/10 A61L29/10A A61L29/10R A61L29/12D A61L29/14H A61L29/14K
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 K61F2/852 K61F2/86 K61F2/91 K61F2/915 K61F2/915B K61F2/915E K61F2/915F K61F210/00A
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 K61L300/450 K61L300/606 K61L300/640 K61L400/12 M12N510/00
US: 424/130.1 424/130.100S 424/172.1 424/422 424/423 424/423P 424/423S 424/426 424/426P
 424/426S 424/520 424/520S 424/93.21 424/93.210P 424/94.64 424/94.67 427/2.1 427/2.100S
 427/2.24 427/2.240S 427/2.25 427/2.3 427/21 435/366 435/366S 435/402 435/402P 435/402S
 435/455 435/455S 435/7.21 435/7.210S 514/1.1 514/44A 514/469 514/59 514/59P 514/7.7
 523/113 523/113S 600/36 604/265 604/265S 623/1.1 623/1.100S 623/1.11 623/1.110P
 623/1.110S 623/1.15 623/1.150P 623/1.150S 623/1.38 623/1.380P 623/1.41 623/1.410P
 623/1.410S 623/1.42 623/1.420P 623/1.420S 623/1.44 623/1.440S 623/1.46 623/1.460P
 623/1.460S 623/1.47 623/1.470P 623/1.48 623/1.480S 623/11.11 623/11.110S 623/14.6 623/14.8
 623/142 623/146 623/23.72 623/23.75 623/23.76 977/931 977/931S

Family:

Publication number	Publication date	Application number	Application date
AT362382 E	20070615	AT20010918685T	20010315
AU2001245734 AA	20010924	AU20010245734	20010315
AU200145734 A5	20010924	AU20010045734	20010315
AU2003219718 AA	20030902	AU20030219718	20030206
AU2003219718 AH	20030902	AU20030219718	20030206
AU2003241515 AA	20031212	AU20030241515	20030520
CA2400319 AA	20020822	CA20012400319	20010315
CA2400319 C	20080916	CA20012400319	20010315
CA2472031 AA	20040629	CA20032472031	20030206
CA2472031 C	20080916	CA20032472031	20030206
CA2555364 AA	20060802	CA20052555364	20050310
CA2555364 C	20121016	CA20052555364	20050310
CA2563329 AA	20061005	CA20052563329	20050429
CA2563329 C	20160126	CA20052563329	20050429
CA2626805 AA	20080422	CA20062626805	20061115
CN100455275 C	20090128	CN20038003370	20030206
CN100506293 C	20090701	CN20018006680	20010315
CN101132694 A	20080227	CN200580012581	20050429
CN101132694 B	20111005	CN200580012581	20050429
CN101141933 A	20080312	CN200580004068	20050310
CN101141933 B	20150729	CN200580004068	20050310
CN101309653 A	20081119	CN200680042717	20061115
CN101309653 B	20140409	CN200680042717	20061115
CN101502674 A	20090812	CN200810184315	20030206
CN102363051 A	20120229	CN201110246552	20050429
CN102363051 B	20140702	CN201110246552	20050429
CN104013996 A	20140903	CN201410090179	20061115
CN105078631 A	20151125	CN201510391194	20050310
CN1418115 A	20030514	CN20018006680	20010315
CN1627924 A	20050615	CN20038003370	20030206
CN1655738 A	20050817	CN20038011531	20030520
DE60128451 D1	20070628	DE20016028451	20010315
DE60128451 T2	20070830	DE20016028451T	20010315
EP1263484 A1	20021211	EP20010918685	20010315

EP1263484 B1	20070516	EP20010918685	20010315
EP1471853 A2	20041103	EP20030715988	20030206
EP1471853 A4	20100324	EP20030715988	20030206
EP1505931 A1	20050216	EP20030731253	20030520
EP1740219 A2	20070110	EP20050745773	20050429
EP1740219 A4	20090128	EP20050745773	20050429
EP1740219 B1	20150304	EP20050745773	20050429
EP1753476 A2	20070221	EP20050747612	20050310
EP1753476 A4	20110309	EP20050747612	20050310
EP1753476 B1	20150729	EP20050747612	20050310
EP1948069 A2	20080730	EP20060827839	20061115
EP1948069 A4	20111019	EP20060827839	20061115
EP2671540 A2	20131211	EP20130180123	20050310
EP2671540 A3	20140604	EP20130180123	20050310
EP2946666 A1	20151125	EP20150157258	20050429
ES2283398 T3	20071101	ES20010918685T	20010315
HK1098968 A3	20070803	HK20070106612	20070620
IL151501 A0	20030410	IL20010151501	20010315
IL151501 A1	20080106	IL20020151501	20020827
IL162803 A0	20051120	IL20030162803	20030206
IL162803 A1	20101230	IL20040162803	20040701
IL176784 A0	20061031	IL20060176784	20060711
IL176853 A0	20061031	IL20060176853	20060713
IL190985 A0	20081229	IL20080190985	20080417
IN03255DN2008 A	20080725	IN2008DN03255	20080421
IN04153DN2006 A	20070713	IN2006DN04153	20060719
IN04154DN2006 A	20070803	IN2006DN04154	20060719
JP2003526477 T2	20030909	JP20010566720T	20010315
JP2005523050 T2	20050804	JP20030565314T	20030206
JP2005525911 T2	20050902	JP20040506697T	20030520
JP2007528275 T2	20071011	JP20070502937T	20050310
JP2007535389 T2	20071206	JP20070511100T	20050429
JP2009515659 T2	20090416	JP20080541328T	20061115
JP2013046771 A2	20130307	JP20120222595	20121005
JP2015128597 A2	20150716	JP20150016094	20150129
JP2015128598 A2	20150716	JP20150016115	20150129
JP5675744 B2	20150225	JP20120222595	20121005
JP5755395 B2	20150729	JP20070502937T	20050310
JP5859179 B2	20160210	JP20010566720T	20010315
JP5876173 B2	20160302	JP20150016094	20150129
KR20040105704 A	20041216	KR20047011431	20030206
KR20050010827 A	20050128	KR20047018720	20030520
KR20060131882 A	20061220	KR20067018528	20060911
KR20070008714 A	20070117	KR20067025168	20061129
KR20080072912 A	20080807	KR20087014211	20080613
RU2008120126 A	20091227	RU20080120126	20061115
RU2400256 C2	20100927	RU20080120126	20061115
SG192440 A1	20130830	SG20130049721	20061115
TW200539841 A	20051216	TW20050107281	20050310
TW200605910 A	20060216	TW20050113839	20050429
US2002049495 AA	20020425	US20010808867	20010315
US2003229393 AA	20031211	US20030360567	20030206
US2004039441 AA	20040226	US20030442669	20030520

US2005025752 AA	20050203	US20040835767	20040430
US2005043787 AA	20050224	US20040832106	20040426
US2005271701 AA	20051208	US20050076731	20050310
US2006121012 AA	20060608	US20050119291	20050429
US2006135476 AA	20060622	US20050297105	20051208
US2007042017 AA	20070222	US20060482329	20060707
US2007055367 AA	20070308	US20060450426	20060609
US2007123977 AA	20070531	US20060560353	20061115
US2007128723 AA	20070607	US20060560352	20061115
US2007129789 AA	20070607	US20060561730	20061120
US2007134290 AA	20070614	US20060494801	20060726
US2007141107 AA	20070621	US20060560356	20061115
US2007156232 AA	20070705	US20060562931	20061122
US2007191932 AA	20070816	US20070622985	20070112
US2007196422 AA	20070823	US20060588480	20061027
US2007213801 AA	20070913	US20060482375	20060707
US2012172970 AA	20120705	US20110340338	20111229
US2013035755 AA	20130207	US20120589907	20120820
US2013172988 AA	20130704	US20120632611	20121001
US2013295156 AA	20131107	US20130868938	20130423
US2015352261 AA	20151210	US20150732489	20150605
US2015352263 AA	20151210	US20150831956	20150821
US7037332 BB	20060502	US20010808867	20010315
US7803183 BB	20100928	US20040832106	20040426
US8088060 BB	20120103	US20060560353	20061115
US8460367 BB	20130611	US20060560352	20061115
US9072723 BB	20150707	US20120589907	20120820
WO0168158 A1	20010920	WO2001US08244	20010315
WO03065881 A2	20030814	WO2003US03645	20030206
WO03065881 A3	20031030	WO2003US03645	20030206
WO03099169 A1	20031204	WO2003US15811	20030520
WO05086831 A2	20050922	WO2005US07654	20050310
WO05086831 A3	20070412	WO2005US07654	20050310
WO05107817 A2	20051117	WO2005US15555	20050429
WO05107817 A3	20070823	WO2005US15555	20050429
WO07059253 A2	20070524	WO2006US44423	20061115
WO07059253 A3	20071018	WO2006US44423	20061115

Priority:

US20000189674P	20000315	US20000201789P	20000504	WO2001US08244	20010315
WO2003US03645	20030206	US20020354680P	20020206	US20020382095P	20020520
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WO2005US07654	20050310	US20040551978	20040310	US20040566829	20040430
US20040551978P	20040310	US20030442669	20030520	US20040566829P	20040430
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Probable Assignee: ORBUSNEICH MEDICAL INC

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: MEDICAL **BALLOON** CATHETER**Abstract:**

Source: US2004116957A The medical **balloon** catheter of the present invention comprises a catheter shaft composed of a distal end shaft and a proximal end shaft and a **balloon** on the distal end of the distal end shaft, wherein the proximal end shaft is composed of a single member and the distal end portion of the proximal end shaft is lower in rigidity than the other parts thereof. The present invention also provides a medical **balloon** catheter having a structure in which a tube for passing a guidewire inside thereof is arranged so as to pass inside the **balloon** and the **balloon** and tube are fused together in the vicinity of the distal end of the catheter, wherein the ratio of the outer diameter of the small-diameter portion on the distal end side of the tube to the outer diameter of the proximal end portion is no less than 0.85.

**Classifications:**

International (IPC 8-9): A61L29/00 A61M25/00 A61M29/00 A61M29/02 (Advanced/Invention); A61L29/00 A61M25/00 A61M29/02 (Core/Invention)

International (IPC 1-7): A61L29/00 A61M25/00 A61M25/01 A61M29/00

CPC: A61M25/0045 A61M25/0054 A61M25/104

European: A61M25/00S3 A61M25/10P K61M25/00S1

US: 604/102.01 604/102.010S 604/103 604/103.04 604/103.1 604/103S 604/528 604/528S 604/915 606/194 606/194P

Family:

Publication number	Publication date	Application number	Application date
AU200212728 A5	20020521	AU20020012728	20011108
AU2002212728 AA	20020521	AU20020212728	20011108
CA2428211 AA	20030507	CA20012428211	20011108
CN1473057 A	20040204	CN20018018614	20011108
EP1340516 A1	20030903	EP20010981024	20011108
EP1340516 A4	20080611	EP20010981024	20011108
HK1062654 A3	20041119	HK20040105582	20040728
JP2002143314 A2	20020521	JP20000342399	20001109
JP2002253678 A2	20020910	JP20010059326	20010302
US2004116957 AA	20040617	US20040415997	20040112
US7247147 BB	20070724	US20040415997	20040112
WO0238211 A1	20020516	WO2001JP09773	20011108

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JP20000342399 20001109

JP20010059326 20010302

WO2001JP09773 20011108

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Inventor(s): (std): FUKAYA KOHEI ; HASHIBA MASATO ; KOHEI FUKAYA ; MASATO HASHIBA ; NISHIDE TAKUJI ; TAKUJI NISHIDE

Agent(s): BORDEN LADNER GERVAIS LLP; HOGAN AND HARTSON LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Title: **MULTILAYER** MEDICAL DEVICE

Abstract:

A medical device such as a tube or a **balloon** including wall structure with multiple layers. The wall structure can distribute stress, resulting in reduced defect propagation and failure.



Classifications:

International (IPC 8-9): A61F2/958 A61L29/00 A61L29/04 A61L29/12 A61L29/14 A61M25/00 A61M25/10 B29C47/06 B29C47/52 B32B1/08 B32B27/34 B32B27/36 B32B7/02 (Advanced/Invention)

International (IPC 1-7): A61L29/00 A61L29/12 A61M25/10 B29C47/52 B32B1/08 B32B7/02

CPC: B32B2250/42 B32B2307/50 B32B2307/581 B32B2307/582 B32B2535/00 B32B1/08 A61L29/04 A61L29/126 A61L29/14 A61M25/10 A61M25/1027 A61M25/1029 A61M25/1036 A61M2025/1075 B29C47/0023 B29C47/0026 B29C47/065 B29C47/26 B29C47/263 B29C47/28 B32B7/02 B32B27/34 B32B27/36

European: A61L29/04 A61L29/12D A61L29/14 A61M25/10 A61M25/10G1 B29C47/00J6 B29C47/06P B29C47/26D2 B29C47/28 B32B1/08 B32B27/34 B32B27/36 B32B7/02 K61M25/10G K61M25/10G3 K61M25/10Z14 L29C47/00J7 L29C47/26 L29C47/28

Family:

Publication number	Publication date	Application number	Application date
AT396040 E	20080615	AT20010994058T	20010302
AU2002246491 AA	20020730	AU20020246491	20010302
CA2402062 AA	20020903	CA20012402062	20010302
CA2402062 C	20101019	CA20012402062	20010302
DE60134169 D1	20080703	DE20016034169	20010302
EP1337396 A2	20030827	EP20010994058	20010302
EP1337396 B1	20080521	EP20010994058	20010302
EP1944157 A2	20080716	EP20080004914	20010302
EP1944157 A3	20110706	EP20080004914	20010302
EP1944157 B1	20150107	EP20080004914	20010302
EP2253463 A2	20101124	EP20100176572	20010302
EP2253463 A3	20120307	EP20100176572	20010302
ES2307670 T3	20081201	ES20010994058T	20010302
JP2004517676 T2	20040617	JP20020557437T	20010302
WO02056930 A2	20020725	WO2001US40220	20010302
WO02056930 A3	20030522	WO2001US40220	20010302
WO02056930 C2	20031120	WO2001US40220	20010302

Priority:

US20000517870 20000302 WO2001US40220 20010302 EP20010994058 20010302
EP20080004914 20010302

Probable Assignee: BOSTON SCIENTIFIC LIMITED

Assignee(s): (std): BOSTON SCIENT LTD ; SCIMED LIFE SYSTEMS INC

Assignee(s): WANG YIQUN ; GULLER ISMAIL ; LODIN DAVID W ; WANG LIXIAO ; SAHATJIAN RONALD A ; BOSTON SCIENTIFIC LIMITED ; BOSTON SCIENTIFIC LTD ; BURGMEIER ROBERT ; CHEN JOHN JIANHUA ; CHIN ALBERT C C

Inventor(s): (std): BURGMEIER ROBERT ; CHEN JOHN ; CHEN JOHN JIANHUA ; CHIN ALBERT ; CHIN ALBERT C ; CHIN ALBERT C C ; GULLER ISMAIL ; GULLER ISMAIL ; LODIN DAVID ; LODIN DAVID W ; SAHATJIAN RONALD ; SAHATJIAN RONALD A ; WANG LIXIAO ; WANG YIQUN

Inventor(s): YIQUN WANG ; ROBERT BURGMEIER ; RONALD A SAHATJIAN ; ISMAIL GULLER

; JOHN JIANHUA CHEN ; LIXIAO WANG ; DAVID W LODIN ; ALBERT C C CHIN

Agent(s):

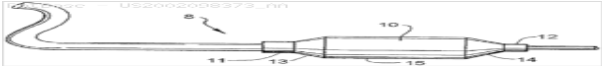
SMART AND BIGGAR; ARENDS WILLIAM GERRIT; PETERREINS FRANK;
ASMUSSEN ARNOLD

Designated states:

AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN
CO CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR
HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG
MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ
TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Title: WET PROCESSING METHOD FOR CATHETER **BALLOONS**

Abstract:
Source: US2002098373A A process for blowing a **balloon** from a tubular parison of a thermoplastic polymer material by radially expanding the parison at an elevated temperature and pressure, the process characterized in that: a) the polymer material includes a "H-bonding" polymer which undergoes interchain hydrogen bonding between at least some segments thereof, b) the parison is conditioned in a high moisture environment prior to blowing, and c) the **balloon** is blown after moisture conditioning of the parison and without an intervening drying thereof. H-bonding polymers may be **polyamides**, polyurethanes or block copolymers containing a **polyamide** or polyurethane block. The process reduces occurrence of fish eye defects in the formed **balloons**.



Classifications:
International (IPC 8-9): A61M25/00 B29B13/02 B29C49/00 (Advanced/Invention); B29C35/04 (Advanced/Non-invention); A61M25/00 B29B13/00 B29C49/00 (Core/Invention); B29C35/04 (Core/Non-invention)
International (IPC 1-7): A61M25/00 B29B13/00 B29C49/00 B29C49/04 B29C49/08 B29C49/18 B29D23/00 B29K77/00
CPC: A61M25/1029 B29B13/023 B29C35/049 B29C49/0005 B29K2075/00 B29K2077/00 B29L2031/7542
European: A61M25/10G1 B29B13/02D B29C49/00B L29C35/04D L29K75/00 L29K77/00 L29L31/7542
US: 264/211.12 264/512 264/512S 264/523 264/523S 264/527 264/532 428/542.8 428/542.800P

Family:

Publication number	Publication date	Application number	Application date
AU2002239990 AA	20020806	AU20020239990	20020118
US2002098373 AA	20020725	US20010768490	20010124
US6673302 BB	20040106	US20010768490	20010124
WO02058913 A1	20020801	WO2002US01598	20020118

Priority:
US20010768490 20010124 WO2002US01598 20020118

Probable Assignee: BOSTON SCIENTIFIC SCIMED INC

Assignee(s): (std): SCIMED LIFE SYSTEMS INC ; WANG LIXIAO

Assignee(s): BOSTON SCIENTIFIC SCIMED INC ; DAHDAH MONA ; DRAKE RON ; HORN DANIEL

Inventor(s): (std): DAHDAH MONA ; DRAKE RON ; HORN DANIEL ; WANG LIXIAO

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

Title: THROUGH-TRANSMISSION WELDING OF CATHETER COMPONENTS**Abstract:**

Source: US2002115963A A process for forming a heat weld between a catheter shaft and a surrounding

balloon comprises selecting an elongate catheter shaft formed of thermoplastic polymeric material that is opaque to red and near-infrared light, and selecting a **balloon** formed of thermoplastic polymeric material that is transparent or translucent to red and near-infrared light. While a neck of the **balloon** is fitted in close contact around a distal portion of the catheter shaft, a laser beam of red and near-infrared light is applied through the **balloon** neck to impinge on the underlying opaque distal shaft, which is heated thereby. Heat from the shaft is conducted into the surrounding **balloon** neck so that adjacent annular portions of both components melt and mix. The molten materials are allowed to cool, forming a secure weld joint between the neck and the shaft. The process yields strong, flexible bonds between **balloons** and catheter shafts that may be selected from a wide variety of materials.

Classifications:

International (IPC 8-9): A61M25/00 B29C59/02 B29C65/00 B29C65/14 B29C65/16

B29C65/68 (Advanced/Invention);

B29C35/08 B29C59/02 B29C61/00 (Advanced/Non-invention);

A61M25/00 B29C59/02 B29C65/00 B29C65/14 (Core/Invention);

B29C35/08 B29C59/02 B29C61/00 (Core/Non-invention)

International (IPC 1-7): A61M25/00 A61M29/00 B29C59/02 B29C65/00 B29C65/14 B29C65/16 B32B31/24

CPC: B29C65/1654 B29C65/1687 B29C65/1635 A61M25/1034 B29C59/021 B29C61/006 B29C65/1616 B29C65/1674 B29C65/68 B29C66/1122 B29C66/65 B29C66/83413 B29C2035/0822 B29K2995/0049 B29C66/53241 B29C66/5344 B29C66/63 B29C66/83411 B29L2031/7543 B29C66/73921 B29C66/73361 B29C66/73365 B29K2995/0025 B29K2995/0027

European: A61M25/10G2 B29C65/16 B29C65/16A6B B29C65/68 B29C66/1122 B29C66/5221 B29C66/65 L29C35/08B3 L29C59/02B L29C61/00C L29C65/14A6B L29C65/14D4 L29C65/16 L29C65/16A6B L29C65/16D12 L29C65/16D4 L29C66/83413 L29K995/00F9 L29L22/02B L29L31/7542

US: 156/244.13 156/244.130S 156/272.8 156/293 156/308.2 156/8C 604/103 604/103P 606/192 606/192S

Family:

Publication number	Publication date	Application number	Application date
AT374056 E	20071015	AT20020394015T	20020129
DE60222602 D1	20071108	DE20026022602	20020129
DE60222602 T2	20080717	DE20026022602T	20020129
EP1234595 A2	20020828	EP20020394015	20020129
EP1234595 A3	20030409	EP20020394015	20020129
EP1234595 B1	20070926	EP20020394015	20020129
JP2002301160 A2	20021015	JP20020046588	20020222
US2002115963 AA	20020822	US20010791887	20010222
US2004215141 AA	20041028	US20040851077	20040524
US6740191 BB	20040525	US20010791887	20010222

Priority:

US20010791887 20010222 US20040851077 20040524

Probable Assignee: MEDTRONIC AVE INC

Assignee(s): (std): MEDTRONIC AVE INC ; MEDTRONIC VASCULAR INC ; SHERLOCK RICHARD

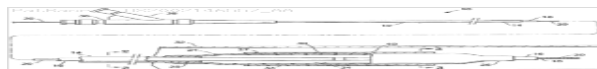
Assignee(s): O DRISCOLL ALAN ; O CONNOR GERARD M ; CLARKE GERRY ; MCDONAGH HUBERT ; MCNAMARA CATHAL

Inventor(s): (std): SHERLOCK RICHARD ; O CONNOR GERARD M ; MCNAMARA CATHAL ; MCDONAGH HUBERT ; CLARKE GERRY ; O DRISCOLL ALAN

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

Title: MEDICAL DEVICE CHEMICALLY MODIFIED BY PLASMA POLYMERIZATION

Abstract: Source: US2002146557A Medical devices, and particularly intracorporeal devices for therapeutic or diagnostic uses, having a



component chemically modified by plasma polymerization. The medical device comprises a substrate with a plasma polymerized functionality bonded to a surface of at least a section thereof. The plasma polymerized film on a first component of the medical device allows for bonding an agent or a second component to the first component. In one embodiment, the plasma polymerized film facilitates fusion or adhesive bonding of a first component to a second component formed of a material which is dissimilar to, incompatible with, or otherwise not readily bondable to the substrate material of the first component. In another embodiment, a bioactive agent is bonded to the plasma polymerized film on the component, for presenting or delivering the bioactive agent within a body lumen of the patient.

Classifications:

International (IPC 8-9): A61L29/08 A61L31/10 A61L33/06 A61M25/00 A61M29/00 A61M5/32 B05D3/04 B05D7/24 B32B27/00 B32B27/32 B32B37/02 C07D225/04 C07D225/08 C08F2/46 C08J7/18 (Advanced/Invention)

International (IPC 1-7): A61L29/14 A61L31/16 A61L33/00 A61M25/00 B05D3/00 B05D3/04 B05D3/10 B05D7/24 B32B27/06 B32B9/04 C08F2/46 C08J7/18 G01N27/333

CPC: Y10S623/926 C08J7/123 A61L29/085 A61L31/10 A61M25/0009 A61M25/0014 A61M25/1027 A61M25/1029 A61M25/1034 B05D1/62 Y10T428/26 Y10T428/263 Y10T428/265 Y10T428/31504 Y10T428/3154 Y10T428/31544 Y10T428/31551 Y10T428/31663 Y10T428/31721 Y10T428/31855

European: A61L29/08B A61L31/10 A61M25/10G1 A61M25/10G2 B05D1/62 C08J7/12A K61M25/00G K61M25/00G5 K61M25/10G

US: 156/273.3 156/273.300P 424/422 424/423 424/424 427/2.1 427/2.24 427/2.28 427/2.3 427/2.300S 427/2.31 427/22.4 427/22.8 427/487 427/488 427/490 427/491 427/532 427/533 427/535 427/536 428/220 428/332 428/334 428/336 428/336P 428/411.1 428/411.100P 428/421 428/421S 428/422 428/422S 428/423.1 428/447 428/473.5 428/473.500S 428/500 540/450 540/465 540/466 540/467 540/468 540/469 540/470 540/471 540/474 604/103 604/103.06 604/96.01 606/194 623/1.44 623/1.46 623/1.49 623/14.4 623/14.6 623/14.9 623/926

Family:

Publication number	Publication date	Application number	Application date
US2002146557 AA	20021010	US20010827887	20010406
US2005031874 AA	20050210	US20040944319	20040917
US2008245474 AA	20081009	US20080139263	20080613
US6793960 BA	20040921	US20010005251	20011203
US7311970 BB	20071225	US20040944319	20040917
US7396582 BB	20080708	US20010827887	20010406
US7470469 BA	20081230	US20070773881	20070705
WO02081018 A1	20021017	WO2002US10014	20020401

Priority:

US20010827887 20010406 US20010005251 20011203 US20040944319 20040917
US20080139263 20080613 US20070773881 20070705

Probable Assignee: ADVANCED CARDIOVASCULAR SYSTEM

Assignee(s): (std): ABBOTT CARDIOVASCULAR SYSTEMS ; ADVANCED CARDIOVASCULAR SYSTEM ; SIMHAMBHATLA MURTHY

Assignee(s): MICHAL EUGENE T ; ADVANCED CARDIOVASCULAR SYSTEMS INC ; CLAUDE CHARLES D ; ABBOTT CARDIOVASCULAR SYSTEMS INC ; ADVANCE CARDIOVASCULAR SYSTEMS INC

Inventor(s): (std): CLAUDE CHARLES D ; LEE JEONG S ; MICHAL EUGENE T ; SIMHAMBHATLA

MURTHY

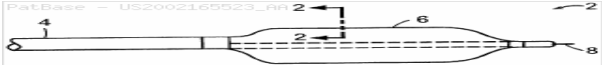
Inventor(s): MICHAL EUGENE ; CLAUDE CHARLES

Agent(s): BLAKELY SOKOLOFF TAYLOR AND ZAFMAN; FULWIDER PATTON LLP ABBOTT;
BLAKELY SOKOLOFF TAYLOR AND ZAFMAN LLP; FULWIDER PATTON LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN
CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR
GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC
MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG
SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

Title: **MULTILAYER** MEDICAL DEVICE

Abstract:
Source: US2002165523A A medical device such as a tube or a **balloon** including wall structure with multiple layers. The wall structure can distribute stress, resulting in reduced defect propagation and failure.



Classifications:
International (IPC 8-9): A61F2/958 A61L29/00 A61L29/12 A61M25/00 A61M25/10 B29C47/06 B29C47/28 (Advanced/Invention)
International (IPC 1-7): A61M25/00 B29C47/26
CPC: A61M25/0009 A61M25/0045 B29K2055/02 B29K2067/00 B29K2067/006 B29K2075/00 B29K2077/00 B29K2105/0079 B29L2022/022 B29L2031/7542 B32B1/08 A61L29/04 A61L29/126 A61L29/14 A61M25/10 A61M25/1027 A61M25/1029 A61M25/1036 A61M2025/1075 B29C47/0023 B29C47/0026 B29C47/065 B29C47/26 B29C47/263 B29C47/28 B32B7/02 B32B27/34 B32B27/36 B32B2250/42 B32B2307/50 B32B2307/581 B32B2307/582 B32B2535/00
European: A61L29/04 A61L29/12D A61L29/14 A61M25/00S1 A61M25/10 A61M25/10G1 B29C47/00J6 B29C47/06P B29C47/26D2 B29C47/28 B32B1/08 B32B27/34 B32B27/36 B32B7/02 K61M25/00G K61M25/10G K61M25/10G3 K61M25/10Z14 L29C47/00J7 L29C47/26 L29C47/28 L29K105/00J L29K55/02 L29K67/00 L29K67/00C L29K75/00 L29K77/00 L29L22/02B L29L31/7542
US: 425/133.1 425/133.100S 604/103.06 604/523 604/523P 606/192 606/192S

Family:

Publication number	Publication date	Application number	Application date
JP4889912 B2	20120307	JP20020557437T	20010302
US2002165523 AA	20021107	US20010798749	20010302
US7947059 BB	20110524	US20010798749	20010302

Priority:
US20000517870 20000302 US20010798749 20010302 WO2001US40220 20010302

Probable Assignee: BOSTON SCIENTIFIC SCIMED INC

Assignee(s): (std): BOSTON SCIENT SCIMED INC ; BOSTON SCIENTIFIC LIMITED ; SAHATJIAN RONALD A ; WANG LIXIAO ; WANG YIQUN

Assignee(s): SCIMED LIFE SYSTEMS INC ; BOSTON SCIENTIFIC SCIMED INC ; BURGMEIER ROBERT ; CHEN JOHN JIANHUA ; CHIN ALBERT C C ; GULER ISMAIL ; LODIN DAVID W

Inventor(s): (std): BURGMEIER ROBERT ; CHEN JOHN JIANHUA ; CHIN ALBERT C C ; GULER ISMAIL ; LODIN DAVID W ; SAHATJIAN RONALD A ; WANG LIXIAO ; WANG YIQUN

Agent(s): VIDAS ARRETT AND STEINKRAUS

Title: BALLOON CATHETER AND PROCESS FOR PRODUCING BALLOON FOR BALLOON CATHETERS

Abstract:

Source: US2004232589A The present invention provides a balloon catheter in which the balloon is a thin film and can be compactly folded up when the balloon is deflated, while the thin film has high strength so that the balloon has excellent pressure resistance when inflated, and which is safe and easy to manipulate, and also provides a method for manufacturing a balloon for use in the balloon catheter. A method for manufacturing a balloon for use in a balloon catheter, wherein a thin film of a high-strength resin is formed by deposition polymerization or coating over a balloon mold formed from a water-soluble polymer resin, after which the balloon mold is removed.

Classifications:

International (IPC 8-9): A61M25/00 B29C33/52 B29C41/00 (Advanced/Invention);

A61F2/958 B29C33/40 (Advanced/Non-invention)

International (IPC 1-7): A61M25/00 B29C41/02

CPC: A61M25/1029 A61M25/1038 A61M2025/1004 B29C33/40 B29C33/52 B29C41/003 B29L2031/7542

European: A61M25/10G1 B29C33/52 B29C41/00B K61M25/10A1 K61M25/10G4 L29C33/40 L29L31/7542

US: 264/239 264/239P 264/299 264/299S

Family:

Publication number	Publication date	Application number	Application date
EP1393769 A1	20040303	EP20020730895	20020604
EP1393769 A4	20060621	EP20020730895	20020604
JP2002360700 A2	20021217	JP20010168823	20010604
US2004232589 AA	20041125	US20040479421	20040625
WO02098498 A1	20021212	WO2002JP05477	20020604

Priority:

JP20010168823 20010604 WO2002JP05477 20020604

Probable Assignee: JAPAN LIFELINE CO LTD

Assignee(s): (std): JAPAN LIFELINE CO LTD ; KAWABATA TAKASHI ; MAKINO MORIHIDE ; SHIRAKI KANETO

Assignee(s): JAPAN LIFELINE CO

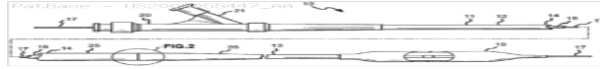
Inventor(s): (std): KAWABATA TAKASHI ; MAKINO MORIHIDE ; SHIRAKI KANEHITO ; SHIRAKI KANETO

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR US

Title: CATHETER WITH A **MULTILAYERED** SHAFT SECTION HAVING A POLYIMIDE LAYER

Abstract:

Source: US2003055447A A catheter having an **multilayered** shaft section with a first layer formed of a polyimide first material and a second layer formed of a second material. In a presently preferred embodiment, the polyimide material is a thermoset polyimide. However, in alternative embodiments, a thermoplastic polyimide is used. The thermoset polyimide has a very high glass transition temperature (T_g) of approximately 400 degrees centigrade (as measured by differential scanning calorimetry), and excellent dimensional stability at the processing temperature of **polyamides** commonly used in catheter components. As a result, during formation and assembly of the catheter, production of a thin polyimide layer with controlled dimensions is facilitated. The polyimide has a high modulus and provides a thin walled yet highly pushable shaft section, while the second layer provides kink resistance. In one embodiment, the second material is selected from the group consisting of a **polyamide** material and a polyurethane material.



Classifications:

International (IPC 8-9): A61F2/958 A61L29/08 A61M25/00 A61M25/10

A61M29/00 (Advanced/Invention);

A61M29/02 (Advanced/Non-invention)

International (IPC 1-7): A61L29/08 A61M25/00 A61M29/00

CP: A61L29/085 A61M25/0009 A61M25/0045 A61M25/104

European: A61L29/08B A61M25/00S1 K61M25/00G K61M25/10P

US: 604/103 604/103.09 604/103P 604/103S 604/523 604/523S 604/96.01 606/191 606/191P

606/192 606/194 606/194P

Family:

Publication number	Publication date	Application number	Application date
AU2002331862 AA	20030401	AU20020331862	20020917
US2003055447 AA	20030320	US20010957526	20010919
US2005240213 AA	20051027	US20050038971	20050118
US2009247946 AA	20091001	US20090477695	20090603
US6863678 BB	20050308	US20010957526	20010919
US7556634 BB	20090707	US20050038971	20050118
WO03024498 A1	20030327	WO2002US29410	20020917

Priority:

US20010957526 20010919 WO2002US29410 20020917 US20090477695 20090603
US20050038971 20050118

Probable Assignee: ADVANCED CARDIOVASCULAR SYSTEM

Assignee(s): (std): ADVANCED CARDIOVASCULAR SYSTEM ; LEE JEONG S ; WANG EDWIN ; WHITE ROSEMINDA J

Assignee(s): ADVANCED CARDIOVASCULAR SYSTEMS INC ; ABBOTT CARDIOVASCULAR SYSTEMS INC

Inventor(s): (std): LEE JEONG S ; WANG EDWIN ; WHITE ROSEMINDA J

Inventor(s): LEE JEONG ; WHITE ROSEMINDA

Agent(s): FULWIDER PATTON LEE AND UTECHT LLP, HOWARD HUGHES CENTER;
FULWIDER PATTON LEE AND UTECHT LLP HOWARD HUGHES CENTER;
FULWIDER PATTON LLP ABBOTT; FULWIDER PATTON LEE AND UTECHT LLP;
FULWIDER PATTON LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN
CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR
GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC
MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG
SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

Title: MEDICAL DEVICES COMPRISING NONOMATERIALS AND THERAPEUTIC METHODS UTILIZING THE SAME

Abstract: Source: US2003065355A The present invention provides medical devices comprising nanomaterials. By utilizing nanomaterials in the production thereof, the inventive medical devices can be provided with various advantageous properties and/or capabilities. Methods of producing the inventive medical devices are also provided. Inasmuch as the inventive devices are expected to provide certain advantages in their use, there is also provide a method of medical care, including methods of treatment or diagnosis, wherein the inventive devices are brought into therapeutic contact with a body to be treated or diagnosed thereby.



Classifications:

International (IPC 8-9): A61B17/00 A61F2/01 A61F2/02 A61F2/06 A61F2/84 A61F2/95 A61F2/958 A61L29/00 A61L29/12 A61L31/00 A61L31/12 A61L33/00 A61M25/00 A61M25/10 A61M29/00 (Advanced/Invention);

A61F2/01 A61F2/82 (Advanced/Non-invention)

International (IPC 1-7): A61B17/00 A61F2/00 A61F2/01 A61F2/02 A61F2/06 A61L29/00 A61L31/00 A61L33/00 A61M25/00 A61M29/00 A61M29/02

CPC: Y10S623/90 Y10S977/905 A61F2002/018 A61F2230/0006 A61F2230/005 A61F2230/0067 A61F2/95 A61F2/01 A61F2/02 A61F2/958 A61L29/126 A61L31/125

European: A61F2/01 A61F2/02 A61F2/06S2 A61F2/95 A61F2/958 A61L29/12D A61L31/12D

US: 523/113 524/262 524/267 524/268 524/269 524/445 524/496 524/590 604/103.06 604/103.060P 604/508 604/509 604/96.01 604/96.010P 604/96.010S 606/108 606/194 606/194P 606/200 606/200P 623/1.11 623/1.44 623/1.49 623/900 977/773 977/773S 977/905

Family:

Publication number	Publication date	Application number	Application date
AU2002356530 AA	20030407	AU20020356530	20020927
AU2002360251 AA	20030623	AU20020360251	20020927
AU2002360251 AH	20030623	AU20020360251	20020927
CA2456918 AA	20030619	CA20022456918	20020927
CA2456918 C	20110222	CA20022456918	20020927
CA2457189 AA	20030403	CA20022457189	20020927
CA2457189 C	20110809	CA20022457189	20020927
EP1429683 A2	20040623	EP20020799654	20020927
EP1429683 B1	20141224	EP20020799654	20020927
EP1429833 A2	20040623	EP20020795495	20020927
EP2266501 A2	20101229	EP20100182694	20020927
EP2266501 A3	20110427	EP20100182694	20020927
EP2319453 A1	20110511	EP20110152527	20020927
HK1068796 A3	20050506	HK20050101267	20050216
JP2005503865 T2	20050210	JP20030530173T	20020927
JP2005511212 T2	20050428	JP20030550844T	20020927
JP4460296 B2	20100512	JP20030550844T	20020927
US2003065355 AA	20030403	US20020256388	20020927
US2003093107 AA	20030515	US20020259545	20020927
US2009227944 AA	20090910	US20090418849	20090406
US2010010440 AA	20100114	US20090563780	20090921
US2012150109 AA	20120614	US20120402141	20120222
US7517353 BB	20090414	US20020256388	20020927
US7591831 BB	20090922	US20020259545	20020927

US8133250 BB	20120313	US20090563780	20090921
US8137373 BB	20120320	US20090418849	20090406
WO03026532 A2	20030403	WO2002US30726	20020927
WO03026532 A3	20040108	WO2002US30726	20020927
WO03049795 A2	20030619	WO2002US30725	20020927
WO03049795 A3	20031231	WO2002US30725	20020927

Priority:

US20010331332P 20010928	US20010327629P 20011005	US20020256388 20020927
WO2002US30725 20020927	WO2002US30726 20020927	US20010331322P 20011114
US20090418849 20090406	US20090563780 20090921	EP20020795495 20020927
EP20020799654 20020927	US20020259545 20020927	US20020259454 20020930
US20120402141 20120222		

Probable Assignee: BOSTON SCIENTIFIC LIMITED

Assignee(s): (std): BOSTON SCIENT LTD ; BOSTON SCIENT LTD A CORP OF TH ; BOSTON SCIENT LTD AN IRISH CO ; BOSTON SCIENT SCIMED INC ; BOSTON SCIENTIFIC A OF REP CORP LTD ; CHEN JOHN J ; HORN DANIEL J ; PARSONAGE EDWARD ; MILLER PAUL J ; SCIMED LIFE SYSTEMS INC ; BOSTON SCIENTIFIC LIMITED ; DEVENS JR DOUGLAS A ; WEBER JAN

Assignee(s): DEVENS DOUGLAS A JR ; BOSTON SCIENTIFIC A OF REPUBLIC OF IRELAND CORP LTD ; BOSTON SCIENTIFIC LTD ; DEVENS DOUGLAS A ; BOSTON SCIENTIFIC A OF REPUBLIC OF IRELAND CORP LT ; BOSTON SCIENTIFIC SCIMED INC

Inventor(s): (std): DEVENS DOUGLAS A ; DEVENS DOUGLAS A JR ; CHEN JOHN J ; HORN DANIEL J ; MILLER PAUL J ; PARSONAGE EDWARD ; WEBER JAN ; DEVENS JR DOUGLAS A

Inventor(s): THE DESIGNATION OF THE INVENTOR HAS NOT YET BEEN FILED ; PAUL J MILLER ; JAN WEBER ; JOHN J CHEN ; DANIEL J HORN ; DOUGLAS A ; DOUGLAS A JR DEVENS ; EDWARD PARSONAGE

Agent(s): SMART AND BIGGAR; VOSSIUS AND PARTNER; CROMPTON SEAGER AND TUFTE LLC; SEAGER TUFTE AND WICKHEM LLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

Title: CATHETER HAVING AN IMPROVED **BALLOON**-TO-CATHETER BOND

Abstract:

Source: US2003120207A A tie layer insert is disclosed to aid in bond formation between an expandable

balloon and a distal portion of a catheter shaft. The tie layer insert can be a single layer applied directly to the structural surfaces, or alternatively, the tie layer may be incorporated into a preformed polymeric insert. In the latter embodiment, the polymeric insert may include several layers of polymeric material. During the manufacturing process, the preformed polymeric insert is positioned between the distal portion of the expandable **balloon** and the catheter shaft. The entire distal region is then processed to form a sealably bonded expandable **balloon** to the distal end of the catheter shaft.



Classifications:

International (IPC 8-9): A61F2/958 A61L24/04 A61L29/00 A61L29/04 A61M25/00 A61M25/10 A61M29/00 B32B37/02 B32B37/12 B32B37/14 (Advanced/Invention); A61M29/00 (Core/Invention)

International (IPC 1-7): A61B1/267 A61B17/58 A61B6/00 A61L24/04 A61L29/00 A61L29/04 A61M25/00 A61M25/10 A61M29/00 A61M31/00

CPC: A61L29/04 A61L29/06 A61M25/10 A61M25/1034 A61M25/0014

European: A61L29/04 A61L29/06 A61M25/00G5 A61M25/10 A61M25/10G2

US: 156/145 156/145S 156/293 156/293S 600/194 600/435 604/103 604/103.06 604/103.09 604/103P 604/264 604/915 604/96.01 606/96 606/96P

Family:

Publication number	Publication date	Application number	Application date
AT460189 E	20100315	AT20050705037T	20050105
AT491494 E	20110115	AT20020763721T	20020925
AU2002327718 AA	20030709	AU20020327718	20020925
CA2469101 AA	20040602	CA20022469101	20020925
CA2469101 C	20110913	CA20022469101	20020925
CA2553941 AA	20060718	CA20052553941	20050105
CA2553941 C	20130305	CA20052553941	20050105
DE602005019867 D1	20100422	DE200560019867T	20050105
DE60238638 D1	20110127	DE20026038638	20020925
EP1461110 A1	20040929	EP20020763721	20020925
EP1461110 B1	20101215	EP20020763721	20020925
EP1737507 A1	20070103	EP20050705037	20050105
EP1737507 B1	20100310	EP20050705037	20050105
EP2314341 A1	20110427	EP20100185632	20020925
EP2314341 B1	20140702	EP20100185632	20020925
ES2339034 T3	20100514	ES20050705037T	20050105
JP2005512694 T2	20050512	JP20030554264T	20020925
JP2007518519 T2	20070712	JP20060551107T	20050105
JP4767867 B2	20110907	JP20060551107T	20050105
JP4808379 B2	20111102	JP20030554264T	20020925
US2003120207 AA	20030626	US20010027417	20011220
US2004158256 AA	20040812	US20040764405	20040123
US2005070846 AA	20050331	US20040990570	20041117
US2011172599 AA	20110714	US20110073334	20110328
US6923787 BB	20050802	US20010027417	20011220
US7048713 BB	20060523	US20040990570	20041117
US7914486 BB	20110329	US20040764405	20040123
US8449497 BB	20130528	US20110073334	20110328
WO03053508 A1	20030703	WO2002US30404	20020925

Priority:

US20010027417 20011220 EP20020763721 20020925 US20040990570 20041117
WO2005US00228 20050105 US20040764405 20040123 WO2002US30404 20020925
US20110073334 20110328

Probable Assignee: BOSTON SCIENTIFIC LIMITED

Assignee(s): (std): SCIMED LIFE SYSTEMS INC ; CHEN JOHN J ; TANG NIE ; PARSONAGE ED ;
MILLER PAUL ; WANG LIXIAO ; BOSTON SCIENT LTD ; BOSTON SCIENT LTD
THE CORPORATE CT ; BOSTON SCIENT SCIMED INC ; CHEN JOHN

Assignee(s): BOSTON SCIENTIFIC LIMITED ; BOSTON SCIENTIFIC LTD ; BOSTON
SCIENTIFIC SCIMED INC ; BOSTON SCIENTIFIC LTD THE CORPORATE CENTER

Inventor(s): (std): CHEN JOHN ; CHEN JOHN J ; MILLER PAUL ; PARSONAGE ED ; TANG NIE ;
WANG LIXIAO

Inventor(s): LIXIAO WANG

Agent(s): CASSAN MACLEAN; VOSSIUS AND PARTNER; CROMPTON SEAGER AND TUFTE
LLC; SEAGER TUFTE AND WICKHEM LLC; SEAGRE TUFTE AND WICKHEM LLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM
CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN
GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV
MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT
RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ
VC VN YU ZA ZM ZW

Title: RADIATION STERILIZED MEDICAL DEVICES COMPRISING RADIATION SENSITIVE POLYMERS

Abstract:

Source: US2004048016A A medical device, for instance a device inserted into the body such as catheter or a **balloon**, at least a portion of which is made of a thermoplastic polymeric material. The thermoplastic polymeric material comprises a blend or laminate of an aromatic protectant polymer and a radiation sensitive polymer, and/or the polymeric material includes a stabilizer against radiation oxidative degradation. The device is sterilized by exposure to high energy radiation.

Classifications:

International (IPC 8-9): A61L29/04 A61L29/08 A61L29/14 B32B23/00 (Advanced/Invention);
B32B1/02 (Advanced/Non-invention);
A61L29/00 (Core/Invention)

International (IPC 1-7): A61L29/04 A61L29/08 A61L29/14 B32B1/02

CPC: Y10T428/13 Y10T428/1334 Y10T428/1352 Y10T428/1359 Y10T428/139 A61L29/14
A61L29/041 A61L29/049 A61L29/085

European: A61L29/04B A61L29/04M A61L29/08B A61L29/14

US: 428/34.1 428/35.2 428/35.200S 428/35.7 428/35.700P 428/35.9 428/36.9

Family:

Publication number	Publication date	Application number	Application date
AT457750 E	20100315	AT20030795556T	20030606
AU2003243412 AA	20040430	AU20030243412	20030606
DE60331320 D1	20100401	DE20036031320	20030606
EP1536847 A1	20050608	EP20030795556	20030606
EP1536847 B1	20100217	EP20030795556	20030606
US2004048016 AA	20040311	US20020241278	20020911
US8337968 BB	20121225	US20020241278	20020911
WO04024204 A1	20040325	WO2003US17794	20030606

Priority:

US20020241278 20020911 WO2003US17794 20030606

Probable Assignee: BOSTON SCIENTIFIC SCIMED INC

Assignee(s): (std): BOSTON SCIENT LTD ; BOSTON SCIENT SCIMED INC ; CHEN JOHN JIANHUA ; SCIMED LIFE SYSTEMS INC ; WANG LIXIAO

Assignee(s): BOSTON SCIENTIFIC LIMITED ; BOSTON SCIENTIFIC LTD ; BOSTON SCIENTIFIC SCIMED INC

Inventor(s): (std): CHEN JOHN ; CHEN JOHN JIANHUA ; JOHN CHEN ; LIXIAO WANG ; WANG LIXIAO

Agent(s): HAUCK PATENT UND RECHTSANWAELTE; VIDAS ARRETT AND STEINKRAUS PA

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

Title: **MULTILAYER** MEDICAL DEVICE

Abstract:
Source: US2004078052A **Multilayer** medical devices, apparatuses for making such devices, and methods of making such devices are disclosed.



Classifications:
International (IPC 8-9): A61L29/08 A61L29/12 A61L31/12 A61M25/00 A61M29/00 B29C47/06 B29C47/56 B32B7/10 (Advanced/Invention); A61M25/00 B29C35/16 B29C47/28 B29C47/88 (Advanced/Non-invention); A61L29/00 A61M25/00 A61M29/00 B29C47/06 B29C47/36 B32B7/10 (Core/Invention); A61M25/00 B29C35/00 B29C47/20 B29C47/88 (Core/Non-invention)
International (IPC 1-7): A61L29/12 A61L31/12 A61M29/00 B32B7/10
CPC: B29C47/263 A61M25/1029 A61L29/085 A61L29/126 A61M2025/1075 B29C47/0023 B29C47/0026 B29C47/065 B29C47/26 B29C47/261 B29C47/28 B29C47/56 B29C47/8815 B29C2035/1616 B29C2793/009 B29K2067/00 B29K2077/00 B29K2105/0085 B29L2031/7542 B32B7/10
European: A61L29/08B A61L29/12D A61M25/10G1 B29C47/00J6 B29C47/06P B29C47/26D B29C47/56 B32B7/10 K61M25/10Z14 L29C35/16B L29C47/00J6 L29C47/00J7 L29C47/06P L29C47/26 L29C47/28 L29C47/88C L29C793/00J L29K105/00L L29K67/00 L29K77/00 L29L31/7542
US: 604/103 606/194 606/194P

Family:

Publication number	Publication date	Application number	Application date
AT512678 E	20110715	AT20030742399T	20030701
AU2003301657 AA	20040513	AU20030301657	20030701
CA2502778 AA	20050419	CA20032502778	20030701
EP1556096 A1	20050727	EP20030742399	20030701
EP1556096 B1	20110615	EP20030742399	20030701
JP2006503642 T2	20060202	JP20040546685T	20030701
US2004078052 AA	20040422	US20020274633	20021021
US7488339 BB	20090210	US20020274633	20021021
WO04037309 A1	20040506	WO2003US20861	20030701

Priority:
US20020274633 20021021 WO2003US20861 20030701

Probable Assignee: BOSTON SCIENTIFIC SCIMED INC
Assignee(s): (std): BOSTON SCIENT LTD ; BOSTON SCIENT SCIMED INC ; SCIMED LIFE SYSTEMS INC
Assignee(s): VAFIADES DAVID ; ST PIERRE ERNEST J ; BOSTON SCIENTIFIC LIMITED ; BOSTON SCIENTIFIC LTD ; BOSTON SCIENTIFIC SCIMED INC ; DAYTON PETER L ; SAHATJIAN RONALD A
Inventor(s): (std): DAYTON PETER ; DAYTON PETER L ; SAHATJIAN RONALD ; SAHATJIAN RONALD A ; ST PIERRE ERNEST ; ST PIERRE ERNEST J ; VAFIADES DAVID ; PIERRE ERNEST J ST
Inventor(s): RONALD A SAHATJIAN ; DAVID VAFIADES ; ERNEST J ST PIERRE ; PETER L DAYTON
Agent(s): SMART AND BIGGAR; PETERREINS FRANK; CROMPTON SEAGER AND TUFTE LLC
Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN

MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ
TM TR TT TZ UA UG UZ VN YU ZA ZM ZW

Title: WIRE BRAID-REINFORCED MICROCATHETER

Abstract:
Source: US2004153049A This invention is directed to a multi-layer catheter for navigation to remote locations within the body, comprising a liner layer, a braid layer and an outer jacket. The catheter provides a high degree of flexibility needed to traverse the vasculature and a high degree of strength needed to withstand the high pressures associated with catheter-delivery of viscous embolizing compositions.

Classifications:
International (IPC 8-9): A61M25/00 A61M25/14 (Advanced/Invention)
International (IPC 1-7): A61M25/00
CPC: A61M25/0012 A61M25/0045 A61M25/0053 A61M25/0054 A61M2025/0042 A61M2025/0046
European: A61M25/00G3 A61M25/00S2C A61M25/00S3 K61M25/00R3 K61M25/00S1 K61M25/00S1C K61M25/00S3
US: 264/248 264/248S 604/525 604/527 604/527P

Family:

Publication number	Publication date	Application number	Application date
AT451135 E	20091215	AT20030808218T	20031010
AU2003277361 AA	20040504	AU20030277361	20031010
CA2501147 AA	20050404	CA20032501147	20031010
DE60330478 D1	20100121	DE20036030478	20031010
EP1551489 A1	20050713	EP20030808218	20031010
EP1551489 B1	20091209	EP20030808218	20031010
ES2338001 T3	20100503	ES20030808218T	20031010
JP2006501969 T2	20060119	JP20040543740T	20031010
JP2011019983 A2	20110203	JP20100245823	20101102
JP5318073 B2	20131016	JP20100245823	20101102
US2004153049 AA	20040805	US20030683877	20031010
US7507229 BB	20090324	US20030683877	20031010
WO04033015 A1	20040422	WO2003US32357	20031010

Priority:
US20020417182P 20021010 JP20040543740 20031010 US20030683877 20031010
WO2003US32357 20031010

Probable Assignee: MICRO THERAPEUTICS INC

Assignee(s): (std): DAVIS PETE ; HEWITT TODD J ; MARTEL MICHAEL D ; MICRO THERAPEUTICS INC

Inventor(s): (std): DAVIS PETE ; DAVIS PETER ; HEWITT TODD ; HEWITT TODD J ; MARTEL MICHAEL ; MARTEL MICHAEL D

Inventor(s): MICHAEL D MARTEL ; PETE DAVIS ; TODD J HEWITT

Agent(s): TORYS LLP; VON HELLFELD AXEL; FOLEY AND LARDNER LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: MEDICAL DEVICES FOR DELIVERY OF THERAPEUTIC AGENTS

Abstract: Source: US2004106987A The present invention is generally directed to medical devices, and more specifically to medical devices

that are at least partially insertable or implantable into the body of a patient. The medical devices generally comprise (a) a therapeutic agent, more typically, a high-molecular-weight therapeutic agent, and (b) at least one polymeric layer, which typically acts to control the release of the therapeutic agent from the medical device. Also disclosed herein are methods of making such medical devices.

Classifications:

International (IPC 8-9): A61B17/03 A61F2/06 A61F2/82 A61F2/84 A61F2/90 A61F2/91 A61F2/915 A61K31/713 A61K48/00 A61L27/34 A61L27/54 A61L27/58 A61L29/00 A61L31/00 A61L31/12 A61M25/00 A61M25/10 A61M37/00 (Advanced/Invention); A61F2/00 (Advanced/Non-invention); A61B17/03 A61F2/06 A61F2/82 A61K31/713 A61K48/00 A61L27/00 A61L29/00 A61M25/00 A61M25/10 A61M37/00 (Core/Invention); A61F2/00 (Core/Non-invention)

International (IPC 1-7): A61F2/06 A61L31/00 A61L31/12 A61M

CPC: A61L27/34 A61L27/54 A61F2/915 A61F2002/91541 A61F2210/0076 A61F2250/0067 A61F2/91

European: A61F2/06S6N2 A61F2/91 A61F2/915 K61F2/915F2 K61F250/00W5

US: 424/400 424/423 424/423S 424/426 424/426S 514/44 514/44.00RS 514/44R 604/103.02 604/103.020S 604/264 604/523 604/523S 606/151 606/151S 623/1.42 623/1.420P 623/142

Family:

Publication number	Publication date	Application number	Application date
AU2003297621 AA	20040623	AU20030297621	20031203
AU2003297621 AH	20040623	AU20030297621	20031203
CA2508459 AA	20050602	CA20032508459	20031203
EP1567204 A2	20050831	EP20030812490	20031203
JP2006512945 T2	20060420	JP20040557503T	20031203
JP4757494 B2	20110824	JP20040557503T	20031203
US2004106987 AA	20040603	US20020308587	20021203
US2009138076 AA	20090528	US20090349563	20090107
US2013164348 AA	20130627	US20130751368	20130128
US7491234 BB	20090217	US20020308587	20021203
US8361143 BB	20130129	US20090349563	20090107
US9248216 BB	20160202	US20130751368	20130128
WO04050140 A2	20040617	WO2003US38317	20031203
WO04050140 A3	20040819	WO2003US38317	20031203

Priority:

US20020308587 20021203 WO2003US38317 20031203 US20090349563 20090107
US20130751368 20130128

Probable Assignee: BOSTON SCIENTIFIC LIMITED

Assignee(s): (std): BOSTON SCIENT SCIMED INC ; NAIMARK WENDY ; PALASIS MARIA ; RICHARD ROBERT E ; SCIMED LIFE SYSTEMS INC

Assignee(s): BOSTON SCIENTIFIC LIMITED ; BOSTON SCIENTIFIC LTD ; BOSTON SCIENTIFIC SCIMED INC

Inventor(s): (std): NAIMARK WENDY ; PALASIS MARIA ; RICHARD ROBERT E

Inventor(s): ROBERT E RICHARD ; WENDY NAIMARK ; MARIA PALASIS

Agent(s): SMART AND BIGGAR; MAYER AND WILLIAMS PC; BONHAM ESQ DAVID B; PARK ESQ KEUM J; KEUM J; DAVID B; SEAGER TUFTE AND WICKHEM LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

Title: **MULTILAYER BALLOON** CATHETER

Abstract:

Source: US2004146670A **Multilayer** medical devices, apparatuses for making such devices, and methods of making such devices are disclosed.

Classifications:

International (IPC 8-9): A61F2/958 A61M25/00 A61M25/10 B29C47/00 B29C47/06 B29C47/20 B29C47/28 (Advanced/Invention)

International (IPC 1-7): A61M25/00 A61M29/02 B29C47/06 B29C47/28 B32B1/02 B32B1/08

CPC: Y10T428/1334 Y10T428/1352 Y10T428/1359 Y10T428/1393 A61M25/1029 A61M25/10 A61M2025/1075 B29C47/0023 B29C47/065 B29C47/263 B29K2067/00 B29K2067/006 B29K2077/00 B29L2022/022 B29L2031/7542 Y10T428/31736 Y10T428/31786

European: A61M25/10 A61M25/10G1 B29C47/00J6 B29C47/06P B29C47/26D2 K61M25/10Z14 L29K67/00 L29K67/00C L29K77/00 L29L22/02B L29L31/7542

US: 264/173.12 264/173.120S 264/173.15 264/173.150S 425/133.1 425/133.100P 425/133.100S 425/133.5 425/133.500P 425/192.00R 425/192R 425/224 425/224P 425/380 425/462 425/467 428/35.2 428/35.200P 428/35.7 428/35.700S 428/35.9 428/35.900S 428/357 428/36.91 428/36.910S 428/475.2 428/480 606/192 606/192S



Family:

Publication number	Publication date	Application number	Application date
CA2514487 AA	20050725	CA20042514487	20040122
CA2514487 C	20111220	CA20042514487	20040122
EP1587569 A1	20051026	EP20040704397	20040122
JP2006515792 T2	20060608	JP20060502925T	20040122
JP4642745 B2	20110302	JP20060502925T	20040122
US2004146670 AA	20040729	US20030351695	20030127
US2005266109 AA	20051201	US20050184494	20050719
US2008145469 AA	20080619	US20080032054	20080215
US2010203181 AA	20100812	US20100770333	20100429
US6951675 BB	20051004	US20030351695	20030127
US7713047 BB	20100511	US20080032054	20080215
US8231374 BB	20120731	US20100770333	20100429
WO04069320 A1	20040819	WO2004US01672	20040122

Priority:

US20030351695 20030127 WO2004US01672 20040122 US20050184494 20050719
US20080032054 20080215 US20100770333 20100429

Probable Assignee: BOSTON SCIENTIFIC LIMITED

Assignee(s): (std): BOSTON SCIENT LTD ; BOSTON SCIENT SCIMED INC ; BOSTON SCIENTIFIC LIMITED ; CHIN ALBERT K ; SCIMED LIFE SYSTEMS INC ; SCIMED LIFE SYSTEMS INC A DELA ; CHEN JOHN JIANHUA ; SAHATJIAN RONALD A ; SVATEK THOMAS A

Assignee(s): CHIN ALBERT ; SCIMED LIFE SYSTEMS INC A DELAWARE CORP ; BOSTON SCIENTIFIC LTD ; BOSTON SCIENTIFIC SCIMED INC

Inventor(s): (std): CHEN JOHN J ; CHEN JOHN JIANHUA ; CHIN ALBERT ; SAHATJIAN RONALD A ; SVATEK THOMAS A ; CHIN ALBERT K

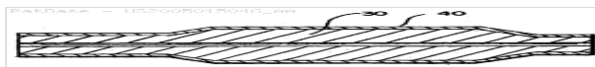
Inventor(s): CHEN JOHN ; SVATEK THOMAS ; SAHATJIAN RONALD

Agent(s): SMART AND BIGGAR; FISH AND RICHARDSON PC; CROMPTON SEAGER AND TUFTE LLC; SEAGER TUFTE AND WICKHEM LLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM
CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN
GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV
MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT
RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ
VC VN YU ZA ZM ZW

Title: MEDICAL DEVICES AND PROCESSES FOR PREPARING SAME**Abstract:**

Source: US2005015046A A medical device such as a catheter, stent or **balloon**, is formed by depositing a radiation curable composition on a form made of ice or wax. The deposited composition may be cured by irradiation, suitably with UV light. Complex structures can be built up if the deposition or curing is achieved imagewise. Compositions which photocure to polyester, **polyamide** or polyimide may be employed. A particular structure is a **balloon** for a rapid exchange catheter which has a guide wire lumen passing through the **balloon** cone walls.

**Classifications:**

International (IPC 8-9): A61B18/14 A61F2/82 A61F2/84 A61L29/00 A61L31/00 A61M25/00 A61M25/10 A61M25/16 A61M31/00 A61M37/00 B29C33/38 B29C33/52 B29C41/08 B29C41/10 B29C41/38 B29C41/42 B32B1/08 B32B3/02 C08G61/12 C08G73/10 (Advanced/Invention); B29C33/38 B29C35/08 B29C41/14 B29C67/00 (Advanced/Non-invention); A61B18/14 A61F2/82 A61L29/00 A61L31/00 A61M25/00 A61M25/10 A61M25/16 B29C33/38 B29C33/52 B29C41/08 B29C41/34 B32B1/00 B32B3/02 C08G61/00 C08G73/00 (Core/Invention); B29C33/38 B29C35/08 B29C41/14 B29C67/00 (Core/Non-invention)

International (IPC 1-7): A61M25/00 A61M25/10 B29C33/00 B29C33/40 B29C33/52 B29C33/76 B29C35/08 B29C41/08 B29C41/10 B29C41/22 B29C41/42 B29C41/46 B32B1/08 B32B3/02 C08G73/10

CPC: A61M25/1027 A61M25/1029 A61M25/1038 B29C33/3842 B29C33/52 B29C35/08 B29C41/10 B29C41/14 B29C67/0051 B29C2033/525 B29C2035/0827 B29L2031/7542 C08G73/10

European: A61M25/10G1 B29C33/52 B29C41/10 C08G73/10 K61M25/10G K61M25/10G4 L29C33/38M L29C33/52A L29C35/08 L29C35/08B4 L29C41/14 L29C67/00R L29L31/7542

US: 264/219 264/219S 264/236 264/236S 264/255 264/255S 264/308 264/308S 264/309 264/309S 264/317 264/317P 264/317S 264/331.12 264/331.120S 264/334 264/334S 264/496 264/496S 425/116 425/116S 604/103.06 604/103.09 604/96.01 604/96.010P 606/41 606/41P

Family:

Publication number	Publication date	Application number	Application date
AT546267 E	20120315	AT20040757091T	20040716
CA2532107 AA	20060110	CA20042532107	20040716
CA2532107 C	20120103	CA20042532107	20040716
EP1646486 A2	20060419	EP20040757091	20040716
EP1646486 B1	20120222	EP20040757091	20040716
JP2007535418 T2	20071206	JP20060520383T	20040716
JP4602332 B2	20101222	JP20060520383T	20040716
US2005015046 AA	20050120	US20030622621	20030718
US2006111707 AA	20060525	US20050323057	20051230
US2012013043 AA	20120119	US20110243645	20110923
US8025637 BB	20110927	US20030622621	20030718
WO05007375 A2	20050127	WO2004US22999	20040716
WO05007375 A3	20050602	WO2004US22999	20040716

Priority:

US20030622621 20030718 WO2004US22999 20040716 US20050323057 20051230
US20110243645 20110923

Probable Assignee: BOSTON SCIENTIFIC SCIMED INC

Assignee(s): (std): BOSTON SCIENT LTD ; BOSTON SCIENT LTD A CORP OF TH ; BOSTON SCIENT LTD AN IRISH CO ; BOSTON SCIENT SCIMED INC ; O SULLIVAN MARTIN ; LEE JAMES K ; HILL IRMA ; SCIMED LIFE SYSTEMS INC ; SCHEWE SCOTT ; BOSTON SCIENTIFIC LIMITED ; BURGMEIER ROBERT E ; WEBER JAN

Assignee(s): BURGMEIER ROBERT ; BOSTON SCIENTIFIC A OF REPUBLIC OF IRELAND CORP

LTD ; BOSTON SCIENTIFIC LTD ; BOSTON SCIENTIFIC SCIMED INC ; BOSTON SCIENTIFIC A OF REP CORP LTD ; BOSTON SCIENTIFIC A OF REPUBLIC OF IRELAND CORP LT

Inventor(s): (std): BURGMEIER ROBERT ; BURGMEIER ROBERT E ; HILL IRMA ; LEE JAMES K ; O SULLIVAN MARTIN ; SCHEWE SCOTT ; WEBER JAN

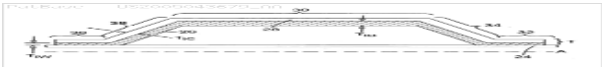
Inventor(s): LEE JAMES

Agent(s): PIASETZKI AND NENNIGER LLP; PIASETZKI NENNIGER KVAS LLP; HAUCK PATENT UND RECHTSANWAELTE; VIDAS ARRETT AND STEINKRAUS PA; CHRISTIE PARKER AND HALE LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: MEDICAL **BALLOONS**

Abstract:
Source: US2005043679A Medical devices, such as medical **balloons**, and methods of making the devices, are disclosed. In some embodiments, the **balloons** include a portion, e.g., a layer, that varies in thickness.



Classifications:
International (IPC 8-9): A61F2/958 A61M25/00 A61M25/10 A61M25/16 A61M29/02 B29C47/00 B29C47/06 B29C47/26 B29C47/28 B29C49/04 B29C49/22 (Advanced/Invention); B29C47/06 B29C49/04 B29K21/00 B29K23/00 B29K27/06 B29K55/02 B29K67/00 B29K71/00 B29K75/00 B29L31/00 (Advanced/Non-invention)
International (IPC 1-7): A61M25/00 A61M29/00 A61M29/02 B29C47/06 B29C49/04
CPC: B29C49/22 A61M25/1002 A61M25/1029 B29C47/0023 B29C47/0026 B29C47/06 B29C47/065 B29C47/26 B29C47/28 B29C49/04 B29C2049/228 B29K2021/00 B29K2023/083 B29K2027/06 B29K2055/02 B29K2067/00 B29K2067/006 B29K2071/00 B29K2075/00 B29L2031/7542 A61M25/104 A61M2025/1079
European: A61M25/10A A61M25/10G1 B29C47/00J6 B29C47/06P B29C47/26 B29C47/28 B29C49/22 L29C47/00J6 L29C47/00J7 L29C47/06 L29C49/04 L29C49/22H L29K21/00 L29K23/08B L29K27/06 L29K55/02 L29K67/00 L29K67/00C L29K71/00 L29K75/00 L29L31/7542
US: 604/103.06 604/103.060P

Family:

Publication number	Publication date	Application number	Application date
AT510578 E	20110615	AT20040780538T	20040809
CA2536618 AA	20060215	CA20042536618	20040809
EP1656177 A1	20060517	EP20040780538	20040809
EP1656177 B1	20110525	EP20040780538	20040809
JP2007502660 T2	20070215	JP20060523904T	20040809
JP4815347 B2	20111116	JP20060523904T	20040809
US2005043679 AA	20050224	US20030645055	20030821
US9180620 BB	20151110	US20030645055	20030821
WO05021083 A1	20050310	WO2004US25716	20040809

Priority:
US20030645055 20030821 WO2004US25716 20040809

Probable Assignee: SCIMED LIFE SYSTEMS INC

Assignee(s): (std): BOSTON SCIENT LTD ; BOSTON SCIENT SCIMED INC ; SCIMED LIFE SYSTEMS INC ; DEVENS DOUGLAS A JR ; HORN DANIEL J ; HORN DANIEL JAMES ; DEVENS JR DOUGLAS A

Assignee(s): DEVENS DOUGLAS A ; BOSTON SCIENTIFIC LIMITED ; BOSTON SCIENTIFIC LTD ; BOSTON SCIENTIFIC SCIMED INC

Inventor(s): (std): DEVENS DOUGLAS ; DEVENS DOUGLAS A ; DEVENS DOUGLAS A JR ; DEVENS JR DOUGLAS A ; HORN DANIEL ; HORN DANIEL J ; HORN DANIEL JAMES

Agent(s): SMART AND BIGGAR; PETERREINS FRANK; FISH AND RICHARDSON PC; SEAGER TUFTE AND WICKHEM LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: MOLDS AND RELATED METHODS AND ARTICLES

Abstract:

Source: US2005137619A Low polymer stress balloons are made by expanding a tube radially while allowing the ends of the tube to move axially in response to the radial expansion.



Classifications:

International (IPC 8-9): A61M25/00 B29C33/30 B29C33/38 B29C33/42 B29C33/56 B29C41/42

B29C49/00 B29C49/48 (Advanced/Invention);

B29C49/14 B29C49/22 (Advanced/Non-invention);

A61M25/00 B29C33/30 B29C33/42 B29C33/56 B29C41/34 B29C49/00 B29C49/48 (Core/Invention);

B29C49/08 B29C49/22 (Core/Non-invention)

International (IPC 1-7): A61M25/00 A61M29/00 B29C33/30 B29C33/42 B29C33/56 B29C49/48

CPC: A61M25/1029 B29B2911/14653 B29B2911/14713 B29C33/306 B29C33/42 B29C33/56

B29C49/00 B29C49/0005 B29C49/14 B29C49/22 B29C2049/0089 B29C2049/4655 B29K2067/00

B29K2077/00 B29K2105/258 B29L2022/022 B29L2023/22 B29L2031/7542

European: A61M25/10G1 B29C33/30E B29C33/42 B29C33/56 B29C49/00 L29B911/14F4

L29B911/14F6 L29C49/00B L29C49/00G8 L29C49/14 L29C49/22 L29C49/46B21C L29K105/25C6

L29K67/00 L29K77/00 L29L22/02B L29L23/22 L29L31/7542

US: 249/112 249/114.1 249/117 264/299 264/299P 264/300 264/300S 264/338 264/338S 425/403

425/470 606/192 606/192P

Family:

Publication number	Publication date	Application number	Application date
US2005137619 AA	20050623	US20030742278	20031219
US2007267780 AA	20071122	US20070832878	20070802
US7985063 BB	20110726	US20070832878	20070802
WO05068149 A1	20050728	WO2004US34579	20041019

Priority:

US20030742278 20031219

US20070832878 20070802

Probable Assignee: BOSTON SCIENTIFIC SCIMED INC

Assignee(s): (std): LINDQUIST JEFFREY S ; SCHEWE SCOTT ; SCHEWE SCOTT R ; SCIMED LIFE SYSTEMS INC ; BOSTON SCIENT SCIMED INC

Assignee(s): BOSTON SCIENTIFIC SCIMED INC

Inventor(s): (std): LINDQUIST JEFFREY S ; SCHEWE SCOTT ; SCHEWE SCOTT R

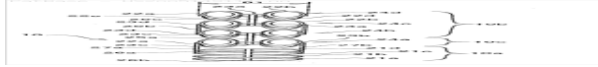
Inventor(s): LINDQUIST JEFFREY

Agent(s): FISH AND RICHARDSON PC; SEAGER TUFTE AND WICKHEM LLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: EMBOLUS MEMBER CAPTURING DEVICE AND EMBOLUS MEMBER CAPTURING DEVICE LEAVING IMPLEMENT

Abstract: Source: US2005149111A An embolus member capturing device is a tubular body having one end portion and the other end portion and having a substantially constant first outside diameter, and is expandable when a radially dilating force is exerted from the inside of the tubular body. The other end portion of the embolus member capturing device is expandable to a second outside diameter greater than the first outside diameter when a radially dilating force is exerted from the inside of the tubular body, whereas the one end portion is slightly expanded from the first outside diameter or substantially maintains the first outside diameter, and either the one end portion or an intermediate portion between the one end portion and the other end portion forms an embolus member capturing portion.



Classifications:

International (IPC 8-9): A61B17/00 A61B17/12 A61F2/01 A61F2/06 A61F2/82 A61F2/84 A61F2/90 A61M29/00 (Advanced/Invention);

A61B17/22 A61B17/32 A61F2/00 A61F2/06 (Advanced/Non-invention);

A61B17/00 A61B17/12 A61F2/01 A61F2/06 A61F2/82 (Core/Invention);

A61B17/22 A61B17/32 A61F2/00 A61F2/06 (Core/Non-invention)

International (IPC 1-7): A61B17/00 A61B17/12 A61F2/01 A61F2/06 A61M29/00

CPC: A61F2002/018 A61F2230/0006 A61F2230/0069 A61F2/01 A61B17/12022 A61B17/12109

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A61F2002/91533 A61F2002/9155 A61F2002/91566 A61F2002/91575 A61F2250/0039

A61B2017/12054 A61B2017/12081 A61F2220/005 A61F2230/0013

European: A61B17/12P A61B17/12P5B A61B17/12P7W1 A61B17/12P7W3 A61F2/01 A61F2/06S6N2

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K61F2/915F K61F2/915G K61F2/915G4 K61F2/915G6 K61F250/00N19

US: 606/200 606/200P 623/1.15 623/1.150S

Family:

Publication number	Publication date	Application number	Application date
AT432669 E	20090615	AT20040030598T	20041223
DE602004021340 D1	20090716	DE200460021340T	20041223
EP1547545 A1	20050629	EP20040030598	20041223
EP1547545 B1	20090603	EP20040030598	20041223
JP2005185759 A2	20050714	JP20030434583	20031226
JP4301935 B2	20090722	JP20030434583	20031226
US2005149111 AA	20050707	US20040019732	20041223

Priority:

JP20030434583 20031226

Probable Assignee: TERUMO KK

Assignee(s): (std): TERUMO CORP

Assignee(s): TERUMO K K ; TERUMO KABUSHIKI KAISHA ; TERUMO KK

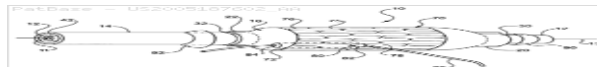
Inventor(s): (std): KANAZAWA MIGI ; KANAZAWA SUSUMU ; MURATA YUKIHIKO ; MURATA YUKUHIKO ; NUMATA MIHO ; SUGIO KENJI ; SUGIU KENJI

Agent(s): CASALONGA AXEL; BURNS DOANE SWECKER AND MATHIS L L P

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Title: ROTATABLE CATHETER ASSEMBLY**Abstract:**

Source: US2005187602A A catheter assembly comprises a catheter shaft, a **balloon** and a pair of collars. The collars may be fixed or rotatable about a catheter shaft prior to exposure to an electric current. Where the collars are fixed to the shaft, the **balloon** is rotatable about the collars. When exposed to the electric current the collars expand to engage the waists of the **balloon** thereby sealing the **balloon**. Where the collars are rotatable about the shaft, the each waist of the **balloon** is engaged to a respective collars. When the rotatable collars are exposed to the electric current the collars expand to engage the shaft of the catheter thereby sealing the **balloon**.

**Classifications:**

International (IPC 8-9): A61F2/06 A61F2/82 A61F2/84 A61L29/00 A61L31/00 A61M25/00

A61M25/01 A61M25/10 A61M29/00 (Advanced/Invention);

A61F2/00 A61F2/02 (Advanced/Non-invention);

A61F2/06 A61F2/82 A61M25/00 A61M25/10 (Core/Invention);

A61F2/00 A61F2/02 (Core/Non-invention)

International (IPC 1-7): A61F2/06 A61M25/10

CPC: A61F2/856 A61F2/954 A61F2/958 A61F2210/008 A61F2250/0003 A61M25/10 A61M25/1006

A61M2025/0058 A61M2025/1015 A61M2025/1056

European: A61F2/06S2B A61F2/856 A61F2/954 A61F2/958 A61M25/10 K61F2/856 K61F210/00N K61F250/00F K61M25/00S6 K61M25/10B K61M25/10D2 K61M25/10Z6

US: 604/103 604/103S 604/509 604/509P 604/96.01 604/96.010S 606/194 623/1.11 623/1.110P

Family:

Publication number	Publication date	Application number	Application date
AT463214 E	20100415	AT20040811333T	20041117
AT489054 E	20101215	AT20050778439T	20050802
CA2556627 AA	20060824	CA20042556627	20041117
CA2576447 AA	20070207	CA20052576447	20050802
DE602004026486 D1	20100520	DE200460026486T	20041117
DE602005024992 D1	20110105	DE200560024992T	20050802
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EP1727493 B1	20100407	EP20040811333	20041117
EP1796585 A1	20070620	EP20050778439	20050802
EP1796585 B1	20101124	EP20050778439	20050802
EP2165677 A1	20100324	EP20090177505	20041117
JP2007522907 T2	20070816	JP20070500748T	20041117
JP2008509733 T2	20080403	JP20070525659T	20050802
JP4672719 B2	20110420	JP20070500748T	20041117
JP4750116 B2	20110817	JP20070525659T	20050802
US2005187602 AA	20050825	US20040785449	20040224
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US7744619 BB	20100629	US20040785449	20040224
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WO05082280 A1	20050909	WO2004US38596	20041117
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Priority:

US20040785449 20040224
US20100758561 20100412

US20040915209 20040810
WO2004US38596 20041117

EP20040811333 20041117
WO2005US27423 20050802

Probable Assignee: BOSTON SCIENT SCIMED INC

Assignee(s): (std): BOSTON SCIENT LTD ; BOSTON SCIENT SCIMED INC ; EIDENSCHINK TRACEE ; SCIMED LIFE SYSTEMS INC

Assignee(s): WEBER JAN ; BOSTON SCIENTIFIC LIMITED ; BOSTON SCIENTIFIC LTD ; BOSTON SCIENTIFIC SCIMED INC

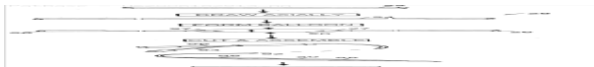
Inventor(s): (std): EIDENSCHINK TRACEE ; WEBER JAN

Agent(s): SIM AND MCBURNEY; VOSSIUS AND PARTNER; HERMANN GERHARD; VIDAS ARRETT AND STEINKRAUS PA; CROMPTON SEAGER AND TUFTE LLC; SEAGER TUFTE AND WICKHEM LLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: MEDICAL **BALLOON****Abstract:**

Source: US2006182913A Low polymer stress **balloons** are made by expanding a tube radially while allowing the ends of the tube to move axially in response to the radial expansion.

**Classifications:**

International (IPC 8-9): B29D22/02 B32B15/08 (Advanced/Invention);
B29D22/00 B32B15/08 (Core/Invention)

International (IPC 1-7): B29D22/02

CPC: Y10T428/1359 A61M25/1029 A61M25/104 A61M2025/1075 B29C47/0023 B29C47/0026
B29C47/06 B29C49/14 B29C49/22 B29C49/4823 B29C55/22 B29C2049/4825 B29K2021/00
B29K2067/00 B29K2077/00 B29K2079/08 B29L2009/00 B29L2022/022 B29L2031/7542

European: A61M25/10G1 A61M25/10P B29C49/14 B29C55/22 K61M25/10Z14 L29C47/06
L29C49/22 L29C49/48D L29C49/48D2 L29K21/00 L29K67/00 L29K77/00 L29K79/08 L29L22/02B
L29L31/7542 L29L9/00

US: 264/512 264/515 264/532 264/535 264/540 264/570 264/573 428/35.9 428/35.900P

Family:

Publication number	Publication date	Application number	Application date
US2006182913 AA	20060817	US20050203318	20050812
US6946092 BA	20050920	US20020263225	20021002

Priority:

US20010950195 20010910 US20020263225 20021002 US20050203318 20050812

Probable Assignee: BOSTON SCIENTIFIC SCIMED INC

Assignee(s): (std): ANDONIAN SHAHEN ; BARRY RALPH JR ; BERTOLINO WILLIAM ; CAMPBELL ANDREW J ; CARRION GERALDO ; SCIMED LIFE SYSTEMS INC ; CHAY NIL

Assignee(s): BOSTON SCIENTIFIC SCIMED INC

Inventor(s): (std): ANDONIAN SHAHEN ; BARRY JR RALPH ; BARRY RALPH JR ; BERTOLINO WILLIAM ; CAMPBELL ANDREW J ; CARRION GERALDO ; CHAY NIL

Inventor(s): CAMPBELL ANDREW ; BARRY RALPH

Agent(s): FISH AND RICHARDSON PC

Title: EXTRUSION LAMINATE POLYMERIC FILM ARTICLE AND GASTRIC OCCLUSIVE DEVICE COMPRISING SAME

Abstract:

Source: US2005222329A A **multilayer** film including a layer of sealing film, having main top and bottom surfaces, and a layer of thermoplastic polymer film, laminated to the layer of sealing film, on at least one of the main top and bottom surfaces. The sealing film has a composition and thickness imparting gas barrier character to the **multilayer** film, of which the layer(s) of thermoplastic polymer film by themselves lack such gas barrier character. Such **multilayer** film is usefully employed to form biologically compatible therapeutic articles such as medical **balloons** that are constructed to be inflated in vivo.



Classifications:

International (IPC 8-9): A61B1/00 A61B8/12 A61F2/958 A61F5/00 A61M29/00 A61M29/02 B32B27/08 B32B27/32 B32B27/34 B32B27/36 B32B27/40 B32B9/04 B65D1/00 (Advanced/Invention); A61B1/00 A61B8/12 A61M25/10 A61M29/00 A61M29/02 B32B27/32 B32B27/34 B32B27/36 B32B27/40 B32B9/04 (Core/Invention)

International (IPC 1-7): B65D1/00

CPC: Y10T428/31551 Y10T428/31721 Y10T428/31909 A61F5/0036 A61F5/0003 B32B27/08

European: A61F5/00B A61F5/00B6F B32B27/08

US: 156/182 156/182S 428/423.1 428/423.100 428/423.100S 428/473.5 428/473.500 428/473.500P 428/515 428/515S 525/73 525/73P 600/116 604/509 604/509S 604/916 604/920 604/96.01 604/96.010 604/96.010S 604/99.01 606/191 606/191S 606/192 606/192P

Family:

Publication number	Publication date	Application number	Application date
EP1744960 A2	20070124	EP20050729578	20050321
EP1744960 A4	20080813	EP20050729578	20050321
US2005222329 AA	20051006	US20040815282	20040401
US2007212559 AA	20070913	US20070743984	20070503
US2007299463 AA	20071227	US20060554550	20061030
US7682306 BB	20100323	US20060554550	20061030
US7883491 BB	20110208	US20040815282	20040401
WO05100169 A2	20051027	WO2005US09584	20050321
WO05100169 A3	20070607	WO2005US09584	20050321

Priority:

US20040815282 20040401 WO2005US09584 20050321 US20060554550 20061030
US20070743984 20070503

Probable Assignee: POLYZEN INC

Assignee(s): (std): POLYZEN INC ; SHAH TILAK M

Inventor(s): (std): SHAH TILAK M

Inventor(s): SHAH TILAK

Agent(s): INTELLECTUAL PROPERTY / TECHNOLOGY LAW; INTELLECTUAL PROPERTY TECHNOLOGY LAW; VINCENT K

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: CATHETER HAVING FIRST AND SECOND GUIDEWIRE TUBES AND OVERLAPPING STIFFENING MEMBERS

Abstract: Source: US2005267408A The invention includes a catheter having an elongate main body having a proximal section and a distal section. The elongate main body further includes a first guidewire lumen and a second guidewire lumen. Each guide wire lumen including a proximal port and a distal port in communication with an external environment. The proximal port of the first guidewire lumen spaced by a gap from the distal port of the second guidewire lumen. In accordance with a further aspect of the invention, the catheter includes a plurality of overlapping stiffening members defined along at least a portion of a length between the distal end and the proximal end of the elongate main body.



Classifications:

International (IPC 8-9): A61F2/958 A61M25/00 A61M29/00 A61M31/00 B29C65/14 B29C65/16

B29C65/68 B32B37/00 (Advanced/Invention);

A61M29/02 (Advanced/Non-invention);

A61M25/00 A61M29/00 B29C65/00 B32B37/00 (Core/Invention)

International (IPC 1-7): A61M25/00 A61M31/00

CPC: A61M25/0051 A61M25/1029 A61M25/0052 B29C66/53241 B29C65/18 B29C65/245 B29C65/7855 B29C66/1122 B29C66/612 B29C2791/009 B23K26/009 A61M25/0043 A61M25/0009 B23K26/18 B23K26/24 B23K2201/06 A61F2/958 A61M25/0021 A61M25/0023 A61M25/0029 A61M25/0032 A61M25/0045 A61M25/005 A61M25/0053 A61M25/0054 A61M25/008 A61M25/10 A61M2025/0063 A61M2025/0183 A61M2025/1056 B29C65/14 B29C65/1441 B29C65/1445 B29C65/16 B29C65/1635 B29C65/68 B29C66/5344 B29C66/63 B29L2031/7543 A61M2025/0034

European: A61M25/00G A61M25/00R A61M25/00R1M4 A61M25/00R1M8 A61M25/00S A61M25/00S2 A61M25/00S2B A61M25/00S2C A61M25/00S3 A61M25/10 A61M25/10G1 B23K26/18 B23K26/24 B29C65/18 B29C65/24D B29C65/78H B29C66/1122 B29C66/5221 B29C66/612 K61F2/958 K61M25/00R1 K61M25/00R1M8 K61M25/00S K61M25/00S1 K61M25/00S10 K61M25/00S2 K61M25/00S2A K61M25/00S2C K61M25/00T30 K61M25/01M K61M25/10 K61M25/10Z6 L23K201/06 L29C791/00E10 L29L31/7542

US: 156/272.2 156/272.200S 156/272.8 156/272.800P 156/273.5 156/293 264/512 264/512P 264/567 264/567S 264/632 264/632S 604/103.04 604/103.040P 604/103.040S 604/103.09 604/509 604/509P 604/523 604/523P 604/524 604/524P 604/525 604/525P 604/528 604/528S 604/96.01 604/96.010P 606/194 606/194P

Family:

Publication number	Publication date	Application number	Application date
AT442879 E	20091015	AT20050755339T	20050523
DE602005016668 D1	20091029	DE200560016668T	20050523
EP1748814 A1	20070207	EP20050754138	20050523
EP1748815 A1	20070207	EP20050755339	20050523
EP1748815 B1	20090916	EP20050755339	20050523
EP1907039 A2	20080409	EP20060771213	20060523
EP1909877 A2	20080416	EP20060771210	20060523
US2005267408 AA	20051201	US20050136640	20050523
US2005267442 AA	20051201	US20050136251	20050523
US2006071371 AA	20060406	US20040952543	20040929
US2007016132 AA	20070118	US20060439591	20060523
US2007016165 AA	20070118	US20060439810	20060523
US2007021771 AA	20070125	US20060439592	20060523
US2007060910 AA	20070315	US20060439596	20060523
US2007078439 AA	20070405	US20060439809	20060523
US2007083188 AA	20070412	US20060357775	20060217
US2010319848 AA	20101223	US20100871440	20100830

US7527606 BB	20090505	US20050136251	20050523
US7625353 BB	20091201	US20050136640	20050523
US7628769 BB	20091208	US20060357775	20060217
US7658723 BB	20100209	US20060439592	20060523
US7785318 BB	20100831	US20060439810	20060523
US7785439 BB	20100831	US20040952543	20040929
US7794448 BB	20100914	US20060439596	20060523
US7815627 BB	20101019	US20060439591	20060523
US8092634 BB	20120110	US20100871440	20100830
WO05118044 A1	20051215	WO2005US18194	20050523
WO05118045 A1	20051215	WO2005US18195	20050523
WO06104591 A1	20061005	WO2006US05617	20060217
WO06104591 C2	20061123	WO2006US05617	20060217
WO06127929 A2	20061130	WO2006US20299	20060523
WO06127929 A3	20070315	WO2006US20299	20060523
WO06127931 A2	20061130	WO2006US20302	20060523
WO06127931 A3	20070322	WO2006US20302	20060523

Priority:

US20040575643P 20040527	US20040952543 20040929	US20050654022P 20050217
US20050684135P 20050523	US20050684143P 20050523	US20050136640 20050523
WO2005US18194 20050523	US20050136251 20050523	WO2005US18195 20050523
WO2006US20299 20060523	US20060439596 20060523	US20060439809 20060523
US20100871440 20100830	US20060439592 20060523	US20060439810 20060523
US20060357775 20060217	US20060439591 20060523	WO2006US20302 20060523
US20050742059P 20051201		

Probable Assignee: ABBOTT LAB VASCULAR ENTPR LTD

Assignee(s): (std): BALFE LOUISE ; GRANDT AXEL ; OEPEN RANDOLF V ; JOERGENSEN IBERUNG ; JEFFREY ANDY ; QUINT BODO ; COFFEY LOVCCAN ; LORENZ GUNTER ; LORENZ GUENTER ; JEFFREY ANDREW ; JOERGENSEN IB ; COFFEY LORCAN ; NIELSEN STEVAN ; GRATHWOHL HARTMUT ; ABBOTT LAB ; ABBOTT LAB VASCULAR ENTPR LTD ; ABBOTT LABORATORIES ; RIETH THOMAS ; VON OEPEN RANDOLF

Assignee(s): ABBOTT LABORATORIES VASCULAR ENTERPRISES ; ABBOTT LABORATORIES VASCULAR ENTERPRISES LIMITED ; ABBOTT LABORATORIES VASCULAR ENTERPRISES LTD ; PACTIV CORP

Inventor(s): (std): GRANDT AXEL ; GRATHWOHL HARTMUT ; JEFFREY ANDREW ; JEFFREY ANDY ; JOERGENSEN ERLING ; JOERGENSEN IB ; JOERGENSEN IBERUNG ; LORENZ GUENTER ; LORENZ GUNTER ; NIELSEN STEVAN ; BALFE LOUISE ; COFFEY LORCAN ; COFFEY LOVCCAN ; CORCORAN BALFE LOUISE ; OEPEN RANDOLF V ; OEPEN RANDOLF VON ; QUINT BODO ; RIETH THOMAS ; VON OEPEN RANDOLF

Inventor(s): CORCORAN LOUISE ; OEPEN RANDOLF

Agent(s): BERESFORD KEITH DENIS LEWIS; LJUNGBERG ROBERT; WINSTON AND STRAWN LLP; SHINJYU GLOBAL IP COUNSELORS LLP; BAKER BOTTS LLP; WORKMAN NYDEGGER

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: FUGITIVE PLASTICIZER **BALLOON** SURFACE TREATMENT FOR ENHANCED STENT SECUREMENT**Abstract:**

Source: US2006142834A In an assembly of a

balloon mounted on a catheter and a stent mounted over the deflated **balloon**, the **balloon** is provided with a fugitive plasticizer before the stent is crimped over the **balloon**. The fugitive plasticizer can soften the **balloon** surface so that molding of the **balloon** surface to conform to the crimped stent occurs. The fugitive plasticizer is removed before the assembly is used.

**Classifications:****International (IPC 8-9):** A61F2/06 (Advanced/Invention);

A61F2/06 (Core/Invention)

CPC: A61F2/958 A61F2002/9583 A61M25/1027 A61M2025/1088**European:** A61F2/958 A61M25/10G K61F2/958B K61M25/10Z20**US:** 623/1.11 623/1.110P**Family:**

Publication number	Publication date	Application number	Application date
US2006142834 AA	20060629	US20040022585	20041223

Priority:

US20040022585 20041223

Probable Assignee: BOSTON SCIENTIFIC SCIMED INC**Assignee(s):** (std): SCIMED LIFE SYSTEMS INC**Assignee(s):** BOSTON SCIENTIFIC SCIMED INC**Inventor(s):** (std): CHEN JOHN J ; NORDIN STANLEY ; RIZQ RAED**Inventor(s):** CHEN JOHN**Agent(s):** VIDAS ARRETT AND STEINKRAUS PA

Title: NOVEL MICROFIBRILLAR REINFORCED POLYMER-POLYMER COMPOSITES FOR USE IN MEDICAL DEVICES

Abstract: Source: US2006182907A A medical device formed at least in part from a microfibrillar polymer-polymer composite, the microfibrillar polymer-polymer composite comprising a polymer matrix and oriented polymer microfibrils, and method of making the same.



Classifications:

International (IPC 8-9): A61L29/00 A61L29/12 A61M25/00 A61M25/10

B31B45/00 (Advanced/Invention);

A61L29/00 A61M25/00 (Core/Invention)

CPC: B29C65/16 B29C65/68 B29C66/1122 B29C66/5344 B29C66/63 B29L2031/7543 A61M25/1029 A61M25/0045 A61M25/005 A61M25/0052 A61M25/0053 A61M25/10 A61M25/1034 A61M2025/0047 A61M2025/1084 Y10T428/13 Y10T428/1372

European: A61M25/00S1 A61M25/00S2 A61M25/10 A61M25/10G1 A61M25/10G2 K61M25/00S1C1 K61M25/00S2B K61M25/00S2C K61M25/10Z18

US: 428/34.1 428/34.100P 428/36.4 428/36.400S

Family:

Publication number	Publication date	Application number	Application date
CA2588070 AA	20070516	CA20052588070	20051207
EP1846074 A2	20071024	EP20050853125	20051207
EP1846074 B1	20140122	EP20050853125	20051207
JP2008529656 T2	20080807	JP20070555084T	20051207
US2006182907 AA	20060817	US20050055837	20050211
WO06088537 A2	20060824	WO2005US44115	20051207
WO06088537 A3	20061012	WO2005US44115	20051207

Priority:

US20050055837 20050211 WO2005US44115 20051207

Probable Assignee: BOSTON SCIENTIFIC SCIMED INC

Assignee(s): (std): BOSTON SCIENT LTD ; BOSTON SCIENT SCIMED INC

Assignee(s): BOSTON SCIENTIFIC LIMITED ; BOSTON SCIENTIFIC LTD ; BOSTON SCIENTIFIC SCIMED INC ; SCHEWE SCOTT ; SCHOENLE VICTOR B ; WARNER ROBERT W ; HOLMAN THOMAS J ; ATANASOSKA LILIANA

Inventor(s): (std): ATANASOSKA LILIANA ; HOLMAN THOMAS J ; SCHEWE SCOTT ; SCHOENLE VICTOR B ; WARNER ROBERT W

Inventor(s): WARNER ROBERT ; SCHOENLE VICTOR ; HOLMAN THOMAS

Agent(s): PIASETZKI AND NENNIGER LLP; LANG JOHANNES; VIDAS ARRETT AND STEINKRAUS PA

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

Title: MATERIAL STORAGE AND DISPENSING PACKAGES AND METHODS

Abstract: Source: US2009212071A Packages and methods for storage and dispensing of materials, e.g., high purity liquid reagents and



chemical mechanical polishing compositions used in the manufacture of microelectronic device products, including containment structures and methods adapted for pressure-dispensing of high-purity liquids. Liner packaging of liquid or liquid-containing media is described, in which zero or near-zero head space conformations are employed to minimize adverse effects of particle generation, formation of bubbles and degradation of contained material.

Classifications:

International (IPC 8-9): B01J4/00 B32B27/32 B32B27/34 B32B3/26 B65B3/00 B65B31/00 B65D33/00 B65D35/28 B65D37/00 B65D65/40 B65D77/04 B65D81/00 B65D81/18 B65D81/20 B65D83/00 B67D5/00 B67D99/00 (Advanced/Invention); B65B3/00 H01L21/205 H01L21/306 (Advanced/Non-invention); B65B3/00 B65D65/40 B65D77/04 B65D83/00 (Core/Invention); H01L21/02 (Core/Non-invention)

CPC: B65D33/00 B65B31/003 B65D83/0061 Y10T428/31757 B65D83/62 B01J2219/00065 B01J2219/00067 B01J2219/00069 B01J2219/00164 B01J4/02 G01F23/18 Y10T428/249981

European: B65B31/00A B65D83/00B1

US: 222/1 222/105 222/105S 222/1S 222/95 222/95P 383/109 428/220 428/220S 428/316.6 428/316.600S 428/476.9 428/476.900S

Family:

Publication number	Publication date	Application number	Application date
CN101208255 A	20080625	CN200680022738	20060425
CN101208255 B	20130306	CN200680022738	20060425
CN103010595 A	20130403	CN201210477720	20060425
CN103010595 B	20150114	CN201210477720	20060425
EP1877310 A2	20080116	EP20060758572	20060425
JP2008539145 T2	20081113	JP20080509038T	20060425
JP2015157286 A2	20150903	JP20150084211	20150416
JP2015163401 A2	20150910	JP20150084212	20150416
JP4920678 B2	20120418	JP20080509038T	20060425
KR101211458 B1	20121213	KR20077027310	20060425
KR20080005290 A	20080110	KR20077027310	20060425
MY146226 A	20120731	MY20060001903	20060425
TW200710000 A	20070316	TW20060114665	20060425
TW201326001 A	20130701	TW20130100563	20060425
TWI391301 B	20130401	TW20060114665	20060425
TWI486292 B	20150601	TW20130100563	20060425
US2009212071 AA	20090827	US20060912629	20060425
US2013301959 AA	20131114	US20130854882	20130401
US2015078685 AA	20150319	US20140550401	20141121
WO06116389 A2	20061102	WO2006US15605	20060425
WO06116389 A3	20071122	WO2006US15605	20060425

Priority:

US20050674578P 20050425	US20050674579P 20050425	US20060912629 20060425
US20060761608P 20060124	WO2006US15605 20060425	US20050674577P 20050425
US20130854882 20130401	US20080912629 20081223	CN200680022738 20060425
US20140550401 20141121	JP20120048521 20060425	JP20150084211 20150416

JP20150084212 20150416

Probable Assignee: ADVANCED TECHNOLOGY MATERIALS INC

Assignee(s): (std): ADVANCED TECH MATERIALS ; ALBERG MICHELE ; O DOUGHERTY KEVIN T ; MIKKELSEN KIRK ; TOM GLENN M ; YAN HONGWEI ; KINGERY JOHN R ; MENNING JOSEPH ; TOKYO ELECTRON LTD

Assignee(s): GOLDMAN SACHS BANK USA COLLATERAL AGENT AS ; ADVANCED TECHNOLOGY MATERIALS INC

Inventor(s): (std): ALBERG MICHELE J ; GLENN M TOM ; HONGWEI YAN ; HOVINEN MINNA ; HOYT TIM ; HOYT TIMOTHY ; JOE MENNING ; JOHN R KINGERY ; JOSEPH MENNING ; MIKKELSEN KIRK ; O DOUGHERTY KEVIN T ; OLSON PATRICK M ; PETER C VAN BUSKIRK ; TOM GLENN M ; WARE DONALD D ; YAN HONG WEI ; YAN HONGWEI ; KEVIN T O DOUGHERTY ; KINGERY JOHN R ; KIRK MIKKELSEN ; MENNING JOSEPH ; MENNING JOSEPH P ; MICHELE ALBERG ; ALBERG MICHELE

Inventor(s): ALBERG MICHELE AND ; MICHELE J ALBERG ; O'DOUGHERTY KEVIN T ; JOSEPH P MENNING

Agent(s): ABG PATENTES SL; INABA YOSHIYUKI; INTELLECTUAL PROPERTY / TECHNOLOGY LAW; INTELLECTUAL PROPERTY TECHNOLOGY LAW

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: FILME TUBULAR, EMBALAGEM E PROCESSO DE OBTENCAO DE UM FILME TUBULAR TUBULAR
FILM, PACKAGING AND PROCEDURE FOR OBTAINING A FILM TUBULAR (Machine translation)

Abstract:

Source: BRPI0502738A A presente invencao refere-se a um filme tubular, particularmente para a embalagem de produtos alimenticios duros e/ou de massa elevada (200), dotado de pelo menos cinco camadas paralelamente associadas entre si, compreendendo uma primeira camada (1) e uma segunda camada (2) superficial oposta constituídas por pelo menos uma poliamida e pelo menos uma terceira camada intermediaria (3) constituída por pelo menos uma mistura de poliamida e copolimero de etileno e alcool vinilico. Descreve-se ainda uma embalagem (100) constituída pelo filme tubular (10) ora definido e um processo para a obtencao do filme tubular (10) ora descrito.



Machine translation: The present invention relates to a tubular film, particularly for packaging food products stiff and / or high mass (200) having at least five layers associated in parallel among themselves, comprising a first layer (1) and a second layer (2) opposite surface constituted by at least one **polyamide** and at least a third intermediate layer (3) comprising at least one copolymer blend of **polyamide** and ethylene vinyl alcohol. It also describes a container (100) constituted by tubular film (10) herein defined and a process for the obtention of the tubular film (10) described herein.

Classifications:

International (IPC 8-9): B32B27/32 B32B27/34 (Advanced/Invention);
B32B27/32 B32B27/34 (Core/Invention)

International (IPC 1-7): B32B27/32 B32B27/34

Family:

Publication number	Publication date	Application number	Application date
BRPI0502738 A	20070227	BR2005PI02738	20050705

Priority:

BR2005PI02738 20050705

Probable Assignee: UNIPAC EMBALAGENS LTDA

Assignee(s): (std): UNIPAC EMBALAGENS LTDA

Inventor(s): (std): JORGE TAIMA ; ODILON FRANCISCO SILVA ; ROLF WERNER THIELE ; SILVA ODILON FRANCISCO ; TAIMA JORGE ; THIELE ROLF WERNER

Title: NON-COMPLIANT **MULTILAYERED BALLOON** FOR A CATHETER

Abstract:

Source: US2007142771A A **balloon** catheter having a multi-layered **balloon** which has a first layer and at least a second layer, and which has noncompliant limited radial expansion beyond the nominal diameter of the **balloon**. By selecting the polymeric materials forming the **balloon** layers, and arranging and radially expanding the multiple layers of the **balloon** in accordance with the invention, a **balloon** is provided having an improved low compliance, preferably in combination with high flexibility and softness.



Classifications:

International (IPC 8-9): A61F2/84 A61F2/958 A61L29/00 A61L29/06 A61M25/00 A61M25/10 A61M29/00 A61M29/02 A61M31/00 A61M37/00 B29C47/06 B29C49/22

B29C65/70 (Advanced/Invention);

A61F2/82 A61L29/00 A61M25/00 A61M29/00 A61M29/02 A61M31/00 A61M37/00 (Core/Invention)

CPC: A61M25/10 C08L77/00 A61F2/958 A61F2250/0018 A61F2250/0063 A61L29/06 A61M25/1029 A61M25/104 A61M2025/1075 A61M2025/1084

European: A61F2/958 A61L29/06 A61M25/10G1 A61M25/10P K61F250/00N2 K61F250/00W2N K61M25/10Z14 K61M25/10Z18

US: 156/294 264/512 264/512S 264/515 264/515S 264/523 604/103.06 604/103.060P 604/103.060S 606/192 606/192S 623/1.11 623/1.110P

Family:

Publication number	Publication date	Application number	Application date
EP1962939 A1	20080903	EP20060844661	20061130
EP2394690 A1	20111214	EP20110180595	20061130
EP2397183 A1	20111221	EP20110180596	20061130
JP2009519810 T2	20090521	JP20080547253T	20061130
JP4972651 B2	20120711	JP20080547253T	20061130
US2007142771 AA	20070621	US20050313041	20051220
US2011022150 AA	20110127	US20100897202	20101004
US2012145317 AA	20120614	US20120397140	20120215
US2012203324 AA	20120809	US20120447635	20120416
US2013172816 AA	20130704	US20130775724	20130225
US2013172817 AA	20130704	US20130775752	20130225
US2015290435 AA	20151015	US20150748376	20150624
US2016058981 AA	20160303	US20150937110	20151110
US7828766 BB	20101109	US20050313041	20051220
US8388575 BB	20130305	US20120447635	20120416
US8394055 BB	20130312	US20100897202	20101004
US8535596 BB	20130917	US20120397140	20120215
US9095689 BB	20150804	US20130775724	20130225
US9211392 BB	20151215	US20130775752	20130225
WO07075256 A1	20070705	WO2006US45826	20061130

Priority:

US20050313041 20051220	WO2006US45826 20061130	US20100897202 20101004
EP20060844661 20061130	US20120397140 20120215	US20120447635 20120416
US20130775724 20130225	US20130775752 20130225	US20150748376 20150624
US20150937110 20151110		

Probable Assignee: ABBOTT CARDIOVASCULAR SYSTEMS INC

Assignee(s): (std): ABBOTT CARDIOVASCULAR SYSTEMS ; ADVANCED CARDIOVASCULAR SYSTEM ; DURCAN JONATHAN P

Assignee(s): ADVANCED CARDIOVASCULAR SYSTEMS INC ; ABBOTT CARDIOVASCULAR
SYSTEMS INC

Inventor(s): (std): DURCAN JONATHAN P

Agent(s): MCLEISH NICHOLAS ALISTAIR MAXWELL; JACKSON MARTIN PETER; NAGAI
HIROSHI; FULWIDER PATTON LLP; BAKER BOTTS LLP; BAKER BOTTS L L P

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM
CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN
GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI
LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI
NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ
TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: NEW METHOD TO MAKE TUBE-IN-TUBE **BALLOON**

Abstract:

Source: US2007208365A A tube-in-tube assembled parison for preparation of an elongated medical device. The parison is formed by assembling in tube-in-tube fashion a first tube of orientable polymer material and a second tube formed of orientable polymer material disposed around the first tube, with an adhesive tie layer disposed between the first and second tubes. The tubes are brought into contact to form a unitary parison. The adhesive may allow movement between the polymer layers during **balloon** blowing. The first tube, or the second tube, or both, may have been longitudinally pre-stretched after formation thereof but before assembly of the parison.

Classifications:

International (IPC 8-9): A61F2/958 A61L29/04 A61L29/12 A61L29/14 A61M25/10 A61M29/00 A61M29/02 B29C49/20 B32B1/08 (Advanced/Invention)

CPC: Y10T428/1352 A61M25/0009 A61L29/04 A61L29/14 B29C47/0023 B29C49/04 B29C49/22 B29C65/1403 B29C65/1406 B29C65/48 B29C65/4815 B29C65/482 B29C65/4825 B29C65/4835 B29C65/484 B29C65/4845 B29C66/52271 B29C66/712 B29C2035/0827 B29C2035/0872 B29K2023/00 B29K2033/20 B29K2055/02 B29K2067/00 B29K2067/006 B29K2071/00 B29K2075/00 B29K2077/00 B29K2096/005 B29K2105/0079 B29K2105/0085 B29L2009/00 B29L2009/001 B29L2022/022 B29L2031/605 B29L2031/753 B29L2031/7542

European: A61L29/04 A61L29/14 A61M25/00G B29C66/712 L29C35/08B4 L29C35/08C2 L29C49/04 L29C49/22 L29C65/14A L29C65/14A2 L29C65/48 L29C65/48B2F L29C65/48B4D L29C65/48B4F L29C66/50 L29K105/00J L29K105/00L L29K23/00 L29K33/20 L29K55/02 L29K67/00 L29K67/00C L29K71/00 L29K75/00 L29K77/00 L29K96/00B L29L22/02B L29L31/60B2B2 L29L31/753 L29L31/7542 L29L9/00 L29L9/00B

US: 264/523 264/523S 428/35.7 604/96.01 604/96.010P 606/192 606/192P

Family:

Publication number	Publication date	Application number	Application date
AT529142 E	20111115	AT20060837856T	20061217
CA2644778 AA	20080903	CA20062644778	20061117
EP1993629 A2	20081126	EP20060837856	20061117
EP1993629 B1	20111019	EP20060837856	20061117
EP1993629 B8	20120425	EP20060837856	20061117
US2007208365 AA	20070906	US20060366257	20060302
US2012041467 AA	20120216	US20110279913	20111024
US2012215165 AA	20120823	US20120459793	20120430
US8043673 BB	20111025	US20060366257	20060302
US8168275 BB	20120501	US20110279913	20111024
WO07106153 A2	20070920	WO2006US44602	20061117
WO07106153 A3	20080529	WO2006US44602	20061117

Priority:

US20060366257 20060302 WO2006US44602 20061117 WO2006US44602 20061217
US20110279913 20111024 US20120459793 20120430

Probable Assignee: BOSTON SCIENTIFIC LIMITED

Assignee(s): (std): BOSTON SCIENT LTD ; BOSTON SCIENT LTD INC ; BOSTON SCIENT SCIMED INC ; KHAMMOUNGKHOUNE JOE ; LEE NAO ; XIONG YING ; CHEN JOHN J

Assignee(s): CHEN JOHN ; BOSTON SCIENTIFIC INC LTD ; BOSTON SCIENTIFIC LIMITED ; BOSTON SCIENTIFIC SCIMED INC ; BOSTON SCIENTIFIC LTD ; BOSTON SCIENTIFIC LIMITED INC

Inventor(s): (std): CHEN JOHN ; CHEN JOHN J ; KHAMMOUNGKHOUNE JOE ; LEE NAO ; XIONG YING

Agent(s): PIASETZKI AND NENNIGER LLP; HAUCK PATENT- UND RECHTSANWAELTE; HAUCK PATENT UND RECHTSANWAELTE; VIDAS ARRETT AND STEINKRAUS PA

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM
CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN
GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI
LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI
NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ
TD TG TJ TM TN TR TT TZ UA UG UZ VC VN ZA ZM ZW

Title: ANGIOPLASTY MEDICAL DEVICES MADE OF ELASTOMERIC MATERIAL

Abstract:

Source: US2009187145A The present invention relates

to a medical device for angioplasty or parts thereof, which is made of elastomeric material, wherein the elastomeric material comprises a **polyamide**-based polymer obtained from the polymerization of a compound forming **polyamide** blocks that is selected from the group consisting of an aminocarboxylic acid of Formula (1) and a lactam of Formula (2): with a polyether diamine triblock compound of Formula (3): and a dicarboxylic acid of Formula (4): $\text{HOOC}-(\text{R}3)_m\text{-COOH}$ (4) wherein the groups R1, R2 and R3 are each binding groups comprising a hydrocarbon chain therein that may be interrupted by one or more amide groups; x is an integer from 1 to 20; y is an integer from 4 to 50, z is an integer from 1 to 20; m is 0 or 1.

Classifications:

International (IPC 8-9): A61F2/958 A61L29/00 A61L29/04 A61M25/00 A61M25/10

A61M29/00 (Advanced/Invention);

A61L29/04 A61M25/10 (Advanced/Non-invention);

A61M (Subclass/Invention)

International (IPC 1-7): A61L29/04 A61L29/06

CPC: A61L29/049 A61L29/06

European: A61L29/04M A61L29/06

US: 264/209.3 264/331.19 528/310 528/323 528/323S 604/103.06 604/103.060P 604/96.01

Family:

Publication number	Publication date	Application number	Application date
AR061595 AA	20080910	AR2007P102056	20070511
AU2006343743 AA	20071122	AU20060343743	20060512
BRPI0621669 A2	20111220	BR2006PI21669	20060512
CA2651984 AA	20081104	CA20062651984	20060512
CN101437553 A	20090520	CN200680054567	20060512
EP2018195 A1	20090128	EP20060766290	20060512
EP2018195 B1	20120613	EP20060766290	20060512
IL195083 A0	20090803	IL20080195083	20081103
IN06142CN2008 A	20090327	IN2008CN06142	20081111
JP2009536864 T2	20091022	JP20090510621T	20060512
JP5152531 B2	20130227	JP20090510621T	20060512
KR20090017519 A	20090218	KR20087027719	20081112
MX2008014458 A1	20090211	MX20080014458	20060512
NZ572463 A	20110331	NZ20060572463	20060512
US2009187145 AA	20090723	US20060300475	20060512
US8512281 BB	20130820	US20060300475	20060512
WO07132485 A1	20071122	WO2006IT00355	20060512
WO07132485 C1	20080214	WO2006IT00355	20060512

Priority:

WO2006IT00355 20060512 NZ20060572463 20060512 KR20087027719 20081112

Probable Assignee: INVATEC SRL

Assignee(s): (std): INVATEC S R L ; INVATEC SRL ; PELLEGRINI PAOLO ; MEDTRONIC INC ; BOTTICINI CESARE

Inventor(s): (std): BOTTICINI CESARE ; PELLEGRINI PAOLO

Inventor(s): CESARE BOTTICINI ; PAOLO PELLEGRINI

Agent(s): PHILLIPS ORMONDE FITZPATRICK; OYEN WIGGS GREEN AND MUTALA LLP; LONG GIORGIO ET AL; ZIMMERMANN AND PARTNER; SHOEMAKER AND

MATTARE LTD

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM
CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN
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PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT
TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: MONORAIL CATHETER

Abstract:
The present invention relates to a monorail catheter (10, 10', 10'', 10''') with an integrally formed catheter tip (12) or an attached catheter tip, the monorail catheter (10, 10', 10'', 10''') being designed as a single-layer or multi-layer **balloon** catheter. The monorail catheter (10, 10', 10'', 10''') comprises at least one free lumen (18) for introduction of a liquid and/or gaseous medium. The invention further relates to a method for operating the monorail catheter.



Classifications:
International (IPC 8-9): A61F2/958 (Advanced/Invention)
CPC: A61M25/10 A61M2025/0183 A61M2025/1093
European: A61M25/10 K61M25/01M K61M25/10Z22

Family:

Publication number	Publication date	Application number	Application date
EP2029215 A2	20090304	EP20070720156	20070522
WO07140634 A2	20071213	WO2007CH00259	20070522
WO07140634 A3	20080207	WO2007CH00259	20070522

Priority:

CH20060092206 20060607 CH20060000922 20060607 WO2007CH00259 20070522

Probable Assignee: SCHWAGER MEDICA

Assignee(s): (std): SCHWAGER MEDICA ; SCHWAGER MICHAEL

Inventor(s): (std): SCHWAGER MICHAEL

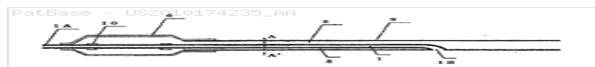
Agent(s): ROSHARDT WERNER ALFRED ET AL

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI
CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM
GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC
LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MT MW MX MY MZ NA NE
NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV
SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: **BALLOON** CATHETER

Abstract:

Source: US2010174235A A **balloon** catheter having multiple tubular members, an adaptor member connected thereto and a **balloon** for dilation of constricted blood vessel, wherein the peeling strength of the **balloon** surfaces when adheres to each other is 0.06 N or more and the modulus of the **balloon** in the axial direction is 100 N/mm² or more, and wherein the coated resin composition contains a hydrophilic resin that is lubricating when wet. Furthermore, the outer surface of the **balloon** is made of a **polyamide** elastomer resin composition having a durometer hardness of 55 D or less. Thus, there can be provided a **balloon** catheter excelling in handling property, for which keeping the **balloon** highly penetrable through the stricture site as the accordion phenomenon of the **balloon** is prevented, and simultaneously preserving the other properties of the **balloon** (flexibility of **balloon**, wrapping dimension, and dilation/shrinkage response etc.).



Classifications:

International (IPC 8-9): A61F2/958 A61L29/00 A61M25/00 A61M25/10

A61M29/02 (Advanced/Invention)

CPC: A61L29/085 A61M25/1029 A61M25/104 A61M2025/018 A61M2025/0183 A61M2025/1031

A61M2025/1075 A61M2025/1088 A61M2205/32

European: A61L29/08B A61M25/10G1 A61M25/10P K61M205/32 K61M25/01L K61M25/01M

K61M25/10G1A K61M25/10Z14 K61M25/10Z20

US: 604/103.08 604/103.080P

Family:

Publication number	Publication date	Application number	Application date
EP2055342 A1	20090506	EP20070805953	20070821
EP2055342 A4	20100428	EP20070805953	20070821
JP2008023696 A1	20100114	JP20080530916T	20070821
JP5184360 B1	20130417	JP20080530916T	20070821
JP5184360 B2	20130417	JP20080530916T	20070821
KR101482671 B1	20150114	KR20097001011	20070821
KR20090060260 A	20090611	KR20097001011	20070821
US2010174235 AA	20100708	US20070438118	20070821
WO08023696 A1	20080228	WO2007JP66179	20070821

Priority:

JP20060224457 20060821 WO2007JP66179 20070821 JP20080530916 20070821

Probable Assignee: KANEKA CORP

Assignee(s): (std): KANEKA CORP ; YAMAGUCHI YOUICHI

Inventor(s): (std): YAMAGUCHI YOUICHI

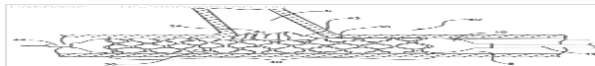
Agent(s): GILLE HRABAL STRUCK NEIDLEIN PROP ROOS; KRATZ QUINTOS AND HANSON LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: **MULTILAYER BALLOON** FOR BIFURCATED STENT DELIVERY AND METHODS OF MAKING AND USING THE SAME

Abstract:

Source: US2008065188A An expandable medical **balloon** useful for treatment at a vessel bifurcation, the **balloon** having at least one expanded state, the **balloon** having at least one inner layer and at least one outer layer, the outer layer having at least one cavity therein through which the inner layer protrudes when the **balloon** is in its at least one expanded state, and methods of making and using the same.



Classifications:

International (IPC 8-9): A61F2/06 A61F2/84 A61F2/954 A61F2/958 A61L31/00 A61M25/10

A61M25/16 A61M29/00 (Advanced/Invention);

A61F2/82 (Advanced/Non-invention)

CPC: A61F2/954 A61F2/856 A61F2/958 A61F2002/821

European: A61F2/954 A61F2/958 K61F2/82E K61F2/856

US: 427/2.3 604/101.02 606/191 606/192 606/194 606/194S 623/1.11 623/1.110P 623/1.35 623/11.1

Family:

Publication number	Publication date	Application number	Application date
CA2658437 AA	20090109	CA20072658437	20070814
EP2061403 A1	20090527	EP20070836752	20070814
EP2061403 B1	20150121	EP20070836752	20070814
JP2010503426 T2	20100204	JP20090527351T	20070814
JP5486307 B2	20140507	JP20090527351T	20070814
US2008065188 AA	20080313	US20060519420	20060912
US2012265284 AA	20121018	US20120495247	20120613
US8216267 BB	20120710	US20060519420	20060912
WO08033196 A1	20080320	WO2007US17883	20070814

Priority:

US20060519420 20060912 WO2007US17883 20070814 US20120495247 20120613

Probable Assignee: BOSTON SCIENTIFIC SCIMED INC

Assignee(s): (std): BOSTON SCIENT LTD ; BOSTON SCIENT LTD INC ; BOSTON SCIENT SCIMED INC ; PALLAZZA STEFAN M

Assignee(s): BOSTON SCIENTIFIC LIMITED ; BOSTON SCIENTIFIC LIMITED INC ; BOSTON SCIENTIFIC SCIMED INC ; BOSTON SCIENTIFIC LTD

Inventor(s): (std): PALLAZZA STEFAN M

Agent(s): PIASETZKI AND NENNIGER LLP; HAUCK PATENT- UND RECHTSANWAELTE; VOSSIUS AND PARTNER; VIDAS ARRETT AND STEINKRAUS PA; RYAN LINDQUIST LISA

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN ZA ZM ZW

Title: SILICONE BASED TUBE FOR TRANSPORTING MALODORIFEROUS MATTER FROM THE

Abstract: Source: US2008103463A A tube assembly for carrying malodoriferous matter from the human body comprises a silicone based

tube having a central bore for the malodoriferous matter, and a tubular sleeve member comprising an odor barrier material, the silicone based tube and the tubular sleeve member being arranged one within the other such that the tubular sleeve member provides an odor barrier to obstruct leakage of odors from malodoriferous matter in the bore of the silicone based tube. The tube assembly is especially suitable for use in fecal or bowel management apparatus.



Classifications:

International (IPC 8-9): A61F2/00 A61F5/00 A61F5/44 A61F5/441 A61F5/445 A61F5/451 A61M1/00 A61M25/00 A61M25/14 A61M39/10 B29C71/02 B32B37/00 (Advanced/Invention); A61F5/445 A61M1/00 A61M25/00 B29C71/02 B32B37/00 (Core/Invention)

CPC: B29C63/42 A61F5/445 A61F2005/4455 B29L2031/753 B32B1/08 B32B7/12 B32B27/08 B32B2307/7248 B32B2319/00 A61F5/44

European: A61F5/445 B29C63/42 B32B1/08 B32B27/08 B32B7/12 K61F5/44 K61F5/445A L29L31/753 L32B307/724B6 L32B319/00

US: 264/342.00RS 264/342R 264/512 264/512S 604/317 604/317P 604/93.01

Family:

Publication number	Publication date	Application number	Application date
AU2007308971 AA	20080502	AU20070308971	20071024
AU2007308971 BB	20130718	AU20070308971	20071024
BRPI0717337 A2	20131210	BR2007PI17337	20071024
CA2667822 AA	20090423	CA20072667822	20071024
CA2667822 C	20150203	CA20072667822	20071024
CN101557780 A	20091014	CN200780039882	20071024
CN101557780 B	20121114	CN200780039882	20071024
EP2104478 A2	20090930	EP20070863463	20071024
EP2104478 A4	20120125	EP20070863463	20071024
EP2104478 B1	20131120	EP20070863463	20071024
JP2010508085 T2	20100318	JP20090534830T	20071024
JP5624321 B2	20141112	JP20090534830T	20071024
MX2009004184 A1	20090907	MX20090004184	20071024
NZ577154 A	20120629	NZ20070577154	20071024
RU2009119733 A	20101210	RU20090119733	20071024
RU2454976 C2	20120710	RU20090119733	20071024
US2008103463 AA	20080501	US20070877691	20071024
US8323254 BB	20121204	US20070877691	20071024
WO08052018 A2	20080502	WO2007US82312	20071024
WO08052018 A3	20080828	WO2007US82312	20071024

Priority:

US20060863053P 20061026

US20070877691 20071024

WO2007US82312 20071024

Probable Assignee: CONVATEC TECHNOLOGIES INC

Assignee(s): (std): CONVATEC TECHNOLOGIES INC ; GREGORY CHRISTOPHER ; SQUIBB BRISTOL MYERS CO ; TSAI MINGLIANG LAWRENCE ; KONVATEK TEKNOLODZHIZ INK

Assignee(s): JPMORGAN CHASE BANK NA COLLATERAL AGENT AS ; JP MORGAN EUROPE LTD ; BRISTOL MYERS SQUIBB CO ; BRISTOL MYERS SQUIBB COMPANY ; CONVATEC INC

Inventor(s): (std): CHRISTOPHER GREGORY ; GREGORI KRISTOFER ; GREGORY CHRISTOPHER ;
LAWRENCE TSAI MINGLIANG ; TSAI MINGLIANG LAWRENCE ; TSAJ MINLIAN
LORENS

Inventor(s): MINGLIANG LAWRENCE TSAI

Agent(s): PHILLIPS ORMONDE FITZPATRICK; OSLER HOSKIN AND HARCOURT LLP;
HOLMES MILES KEETON; MAYS JULIE; BRISTOL-MYERS SQUIBB COMPANY;
BRISTOL MYERS SQUIBB CO; STUART E; KRIEGER STUART ET AL

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI
CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH
GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA
LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ
NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM
SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: METHODS AND APPARATUS FOR TREATMENT OF VENOUS INSUFFICIENCY

Abstract: Source: US2008243068A Methods and apparatus for the treatment of venous insufficiency, such as varicose veins, are

described herein utilizing endovenous treatments. Such treatments may include systems to create an initial endovascular injury to the vessel wall utilizing any number of mechanisms, such as chemical, mechanical, electrical, etc. modalities. An implantable device, optionally having a sclerosing agent infused therein, may additionally be implanted along the injured tissue to promote, maintain, and otherwise enhance the tissue inflammation and scarring, thereby remodeling the diseased vessel wall.

Classifications:

International (IPC 8-9): A61M25/098 A61M29/02 A61M31/00 (Advanced/Invention); A61M25/095 A61M29/02 A61M31/00 (Core/Invention)

CPC: A61M25/10 A61B17/12022 A61B17/12109 A61B17/12131 A61B17/1214 A61B17/12163 A61B17/12168 A61B17/320725 A61B2017/00004 A61B2017/00893 A61B2017/1205 A61B2017/22061 A61B2090/3925 A61M31/002 A61M2025/0057 A61M2025/105

European: A61B17/12P A61B17/12P5B A61B17/12P7 A61B17/12P7C A61B17/12P7S A61B17/12P7W A61M25/10 A61M31/00D K61B17/00A K61B17/00S21 K61B17/12P2 K61B17/22H5 K61B17/3207E K61B19/54F K61M25/00S5 K61M25/10Z3

US: 604/103.01 604/103.010P 604/103.05 604/103.050S 604/103.1 604/103.100S

Family:

Publication number	Publication date	Application number	Application date
US2008243068 AA	20081002	US20060461764	20060801

Priority:

US20050754579P 20051229 US20060816468P 20060627 US20060816833P 20060628
US20060461764 20060801

Probable Assignee: CERNOMORSKY ARY

Assignee(s): (std): CERNOMORSKY ARY ; RAMZIPOOR KAMAL

Assignee(s): SMART SURFACE THERAPEUTICS INC ; DIETCH LAURA N

Inventor(s): (std): CERNOMORSKY ARY ; RAMZIPOOR KAMAL

Agent(s): LEVINE BAGADE HAN LLP

Title: FLUORINATED POLYMERS IN MEDICAL DEVICES

Abstract:

Source: US2011022030A The present invention refers to medical devices comprising fluorinated polymers, especially to tubings, used for constructing catheters like **balloon** catheters, delivery catheters or guide catheters.

Classifications:

International (IPC 8-9): A61F2/00 A61F2/82 A61L27/50 A61L29/14 A61L31/14 A61M25/00 B05D3/06 C08G69/48 C08J7/12 C08J9/00 (Advanced/Invention); A61F2/00 A61L27/00 A61L29/00 A61L31/14 A61M25/00 B05D3/06 C08J7/00 C08J9/00 (Core/Invention)

CPC: A61L29/06 A61L31/06 A61M25/0009 A61M25/10 A61M25/1027 A61M2025/0046 A61M2025/0056 A61M2025/1088 B05D3/0433 B05D3/101 B05D5/083 B05D7/22 C08J7/126 C08J2377/00

European: A61L29/06 A61L31/06 A61M25/10G B05D3/04E B05D5/08C C08J7/12F K61M25/00G K61M25/00S1C K61M25/00S4 K61M25/10 K61M25/10Z20 L05D3/10C L05D7/22 M08J377/00

US: 525/420 525/420S 604/264 604/264S 604/528 604/528P 623/1.13 623/1.130S 623/1.15 623/1.150S

Family:

Publication number	Publication date	Application number	Application date
EP2072069 A1	20090624	EP20070025024	20071221
EP2219699 A1	20100825	EP20080865727	20081219
US2011022030 AA	20110127	US20080809064	20081219
WO09080325 A1	20090702	WO2008EP10951	20081219

Priority:

EP20070025024 20071221 WO2008EP10951 20081219 EP20080865727 20081219

Probable Assignee: ABBOTT LABORATORIES VASCULAR ENTERPRISES LTD

Assignee(s): (std): ABBOTT LAB VASCULAR ENTPR LTD ; MARX VOLKER

Assignee(s): ABBOTT LABORATORIES VASCULAR ENTERPRISES LIMITED ; ABBOTT LABORATORIES VASCULAR ENTERPRISES LTD

Inventor(s): (std): MARX VOLKER

Agent(s): PETERS HAJO; WORKMAN NYDEGGER; PETERS HAJO ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: ELASTOMERIC MATERIALS

Abstract: Source: US2009258210A Some embodiments of the present invention include elastomeric films with a basis weight of about 40

gsm or less or about 25 gsm or less. Other embodiments include elastomeric laminates comprising the elastomeric film bonded to one or more substrates (such as nonwoven fabrics). Methods of the making the elastomeric films and elastomeric laminates are also provided.



Classifications:

International (IPC 8-9): A61F13/15 A61F13/20 A61F13/49 A61F13/511 A61F13/514 A61F13/66 A61L15/24 B29C47/00 B29C47/02 B29C47/04 B29C47/06 B29C65/00 B32B25/04 B32B25/08 B32B25/10 B32B25/12 B32B25/14 B32B25/16 B32B25/18 B32B25/24 B32B27/08 B32B27/12 B32B27/20 B32B27/22 B32B27/28 B32B27/30 B32B27/32 B32B27/34 B32B27/36 B32B37/02 B32B37/15 B32B5/02 B32B5/06 B32B5/08 B32B5/22 B32B5/26 B32B7/12 C08J5/18 C08L23/00 C08L23/08 C08L23/14 C08L23/16 C08L53/00 C08L53/02 (Advanced/Invention); A61F13/15 B29K21/00 B29K23/00 B29L7/00 B29L9/00 B32B27/08 B32B27/32 C08J5/18 C08L23/06 C08L23/12 (Advanced/Non-invention); A61F13/15 A61F13/20 B29C47/04 B32B25/00 B32B25/08 B32B27/12 B32B27/32 B32B37/02 B32B5/02 C08J5/18 C08L23/00 C08L23/08 (Core/Invention); B29C47/06 B29C65/00 B32B27/08 B32B5/22 C08J5/18 (Core/Non-invention); A61F B32B C08J C08L (Subclass/Invention)

International (IPC 1-7): A61F13/15 B32B25/08 B32B25/10 B32B25/14 B32B27/32 C08J5/18 C08L23/08

CPC: A61F13/51478 A61F13/51464 A61F13/5148 B32B27/322 C08L51/06 B32B2555/00 B32B27/32 Y10T428/24942 Y10T428/273 Y10T428/24124 B32B5/022 B32B5/06 B32B5/08 B32B5/26 B32B7/12 B32B25/042 B32B25/12 B32B25/18 B32B27/08 B32B27/20 B32B27/22 B32B27/285 B32B27/302 B32B27/34 B32B27/36 B32B2262/0253 B32B2262/0261 B32B2262/0276 B32B2262/0292 B32B2262/04 B32B2262/062 B32B2262/12 B32B2274/00 B32B2307/51 B32B2307/54 B32B2307/718 B32B2307/726 B32B25/00 C08L2666/06 C08L23/00 C08L2666/02 C08L2666/04 Y10T442/659 Y10T442/674 Y10T442/678 A61F13/15593 A61F13/4902 B32B25/08 B32B25/10 B32B25/16 B32B27/12 B32B27/30 B32B2270/00 B32B2555/02 C08L23/06 C08L23/0815 C08L23/12 C08L23/142 C08L23/16 C08L53/00 C08L53/025 C08L2205/02 A61F13/51121 A61F2013/51026 A61F2013/51023 A61F2013/51147 A61F2013/51165 A61F2013/51322 C08L53/02

European: A61F13/15M2B A61F13/49D2H A61F13/514B2 A61F13/514C2A B32B25/08 B32B25/10 B32B25/16 B32B27/02 B32B27/08 B32B27/12 B32B27/30 B32B27/32 B32B27/32A B32B5/26 B32B7/12 C08L23/08A1 C08L23/14A C08L23/16 C08L51/06 C08L53/00 C08L53/02 C08L53/02B M08L205/02 M08L23/06 M08L23/08A1 M08L23/12 M08L23/14A

US: 156/244.11 156/244.110S 156/73.1 156/73.100S 264/165 264/165S 428/113 428/113P 428/212 428/219 428/220 428/220P 428/341 442/381 442/381P 442/394 442/394S 442/398 604/365 604/365P 604/367 604/367S 604/385.23 604/385.230S

Family:

Publication number	Publication date	Application number	Application date
AR070247 AA	20100325	AR2009P100219	20090123
AU2009206346 AA	20090730	AU20090206346	20090123
AU2009206346 BB	20150226	AU20090206346	20090123
AU2009206370 AA	20090730	AU20090206370	20090123
AU2009206370 BB	20121004	AU20090206370	20090123
AU2009338132 AA	20100729	AU20090338132	20090722
AU2009338132 BB	20130808	AU20090338132	20090722
BRPI0906420 A2	20150714	BR2009PI06420	20090123
BRPI0906757 A2	20150818	BR2009PI06757	20090123
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CA2712781 AA	20100721	CA20092712781	20090123

CA2712781 C	20130702	CA20092712781	20090123
CA2750360 AA	20100729	CA20092750360	20090722
CA2813544 AA	20090730	CA20092813544	20090123
CN101951863 A	20110119	CN200980103098	20090123
CN101951863 B	20140528	CN200980103098	20090123
CN101977577 A	20110216	CN200980109541	20090123
CN101977577 B	20140917	CN200980109541	20090123
CN102292056 A	20111221	CN200980155237	20090722
CN102292056 B	20140416	CN200980155237	20090722
CO6290613 A2	20110620	CO20100104125	20100824
CR11586 A	20110128	CR20100011586	20100723
EA021791 B1	20150930	EA20100070879	20090123
EA201070879 A1	20110228	EA20100070879	20090123
EP2234571 A1	20101006	EP20090704574	20090123
EP2242465 A1	20101027	EP20090703318	20090123
EP2242465 B1	20141001	EP20090703318	20090123
EP2381908 A1	20111102	EP20090790719	20090722
EP2612638 A1	20130710	EP20130155905	20090123
EP2612638 B1	20150415	EP20130155905	20090123
ES2535926 T3	20150519	ES20130155905T	20090123
HK1149890 A1	20150703	HK20110104174	20110427
IL207101 A0	20101230	IL20100207101	20100720
IN04481DN2010 A	20101126	IN2010DN04481	20100621
IN05325DN2010 A	20110225	IN2010DN05325	20100723
JP2011514178 T2	20110506	JP20100544437T	20090123
JP2011514391 T2	20110506	JP20100544430T	20090123
JP2012515610 T2	20120712	JP20110547915T	20090722
JP2013230696 A2	20131114	JP20130162188	20130805
JP5101708 B2	20121219	JP20100544437T	20090123
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JP5674475 B2	20150225	JP20100544430T	20090123
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KR20100112178 A	20101018	KR20107018507	20090123
MA32077 B1	20110201	MA20100033083	20100813
MX2010007861 A1	20101112	MX20100007861	20090123
MX2010008067 A1	20100810	MX20100008067	20090123
MX2011007575 A1	20110928	MX20110007575	20090722
NZ586914 A	20120727	NZ20090586914	20090123
RU2010125313 A	20120320	RU20100125313	20090123
RU2011123105 A	20121220	RU20110123105	20090722
RU2474406 C2	20130210	RU20100125313	20090123
RU2492840 C2	20130920	RU20110123105	20090722
SG173084 A1	20110829	SG20110052727	20090722
SG187481 A1	20130228	SG20130003405	20090123
SV2010003633 A	20110728	SV20100003633	20100722
TH111749 A	20120130	TH20091000272	20090123
TN2010000347 A1	20111229	TN20100000347	20100723
TW200940332 A	20091001	TW20090103103	20090123
TWI476102 B	20150311	TW20090103103	20090123
US2009258210 AA	20091015	US20090358533	20090123
US2009264844 AA	20091022	US20090358962	20090123
US2010040826 AA	20100218	US20090507434	20090722
US2012184169 AA	20120719	US20120431026	20120327

US2013237938 AA	20130912	US20130868163	20130423
US2014242360 AA	20140828	US20140255374	20140417
US2016015576 AA	20160121	US20150867046	20150928
US8168853 BB	20120501	US20090358962	20090123
US8445744 BB	20130521	US20090507434	20090722
US9169384 BB	20151027	US20120431026	20120327
WO09094506 A1	20090730	WO2009US31779	20090123
WO09094530 A1	20090730	WO2009US31822	20090123
WO10085280 A1	20100729	WO2009US51382	20090722

Priority:

US20080023107P 20080124	US20080023107 20080124	US20090358533 20090123
US20090358962 20090123	WO2009US31822 20090123	WO2009US31779 20090123
US20090507434 20090722	WO2009US51382 20090722	US20120431026 20120327
CA20092813544 20090123	CA20092712781 20090123	EP20090703318 20090123
US20130868163 20130423	JP20100544430 20090123	CA20132712781 20130507
US20140255374 20140417	US20150867046 20150928	

Probable Assignee: PROCTER AND GAMBLE

Assignee(s): (std): AUTRAN JEAN PHILIPPE ; AUTRAN JEAN PHILIPPE MARIE ; BLAND DAVID G ; CANCIO LEOPOLDO V ; CLOPAY PLASTIC PROD CO ; MUSLET IYAD ; MUSLAT IYAD ; CLOPAY PLASTICS PRODUCTS CO INC ; CLOPAY PLASTICS PRODUCTS COMPA ; NETON JANET ; MANSFIELD TODD LEON ; MUSLET LYAD ; PROCTER AND GAMBLE

Assignee(s): PROCTER AND GAMBLE CO ; PROCTOR AND GAMBLE CO ; THE PROCTOR AND GAMBLE COMPANY ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; DZE PROKTER EHND GEHMBL KOMPANI ; CLOPAY PLASTIC PRODUCTS CO LLC ; THE PROCTER AND GAMBLE COMPANY ; CLOPAY PLASTICS PRODUCTS COMPANY INC ; CLOPAY PLASTIC PRODUCTS CO INC ; CLOPAY PLASTIC PRODUCTS COMPANY INC

Inventor(s): (std): AUTRAN JEAN PHILIPPE ; AUTRAN JEAN PHILIPPE MAIRE ; AUTRAN JEAN PHILIPPE MARIE ; AUTRAN JR JEAN PHILIPPE MARIE ; AUTRAN ZHAN FILIPP MARI ; AUTRAN ZHAN FILIPPE MARI ; BLAND DAVID ; BLAND DAVID G ; BLEHND DEHVID DZH ; BLEHND DEHVID G ; CANCIO LEOPOLDO V ; DAVID G BLAND ; IYAD MUSLAT ; IYAD MUSLET ; JANET NETON ; KEHNSIO LEOPOL DO V ; LEON MANSFIELD TODD ; LEOPOLDO V CANCIO ; LYAD MUSLET ; MANSFIELD TODD LEON ; MARIE AUTRAN JEAN PHILIPPE ; MEHNSFILD TODD LEON ; MUSLAT IYAD ; MUSLAT JJAD ; MUSLET IYAD ; MUSLET LUEHD ; MUSLET LYAD ; JEAN PHILLIPPE MARIE AUTRAN ; KANCHIO LEOPOLDO V ; NETON DZHANET ; NETON JANET

Inventor(s): TODD LEON MANSFIELD ; MUSLET, Iyad ; JEAN PHILIPPE AUTRAN ; JEAN PHILIPPE MARIE AUTRAN ; CANCIO LEOPOLDO ; AUTRAN ZHAN-FILIPPE MARI

Agent(s): SPRUSON AND FERGUSON; WATERMARK PATENT AND TRADE MARKS ATTORNEYS; MACRAE AND CO; DIMOCK STRATTON LLP; LUZ CLEMENCIA DE PAEZ; KREMER VERONIQUE MARIE JOSEPHINE; FINDLAY ALICE ROSEMARY; PONTI ADELAIDA; MARKS AND CLERK SINGAPORE LLP; WOOD HERRON AND EVANS LLP; THE PROCTER AND GAMBLE COMPANY,GLOBAL LEGAL DEPARTMENT - IP; PROCTER AND GAMBLE CO GLOBAL LEGAL DEPARTMENT IP; RICHARD L; KATHLEEN Y; LUNN GREGORY J; THE PROCTER AND GAMBLE COMPANY

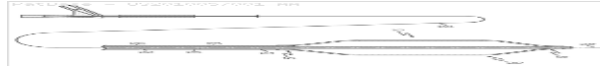
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: MULTILAYER MEDICAL BALLOON

Abstract:

Source: US2010057001A An expandable medical

balloon including an inner layer formed of a poly(ether-block-amide) copolymer and an outer layer formed of a polyamide, the expandable medical balloon having a burst strength of greater than 50,000 psi, and to methods of making and using the same.



Classifications:

International (IPC 8-9): A61L29/00 A61L29/06 A61L29/08 A61L29/14 A61M25/00 A61M25/10

A61M29/00 (Advanced/Invention);

A61L29/06 A61L29/08 A61L29/14 (Advanced/Non-invention);

A61L29/00 A61M29/00 (Core/Invention)

CPC: A61M25/1011 A61M25/10 A61L29/06 A61L29/08 A61L29/14 C08L77/00

European: A61L29/06 A61L29/08 A61L29/14

US: 604/103.05 604/103.050P

Family:

Publication number	Publication date	Application number	Application date
CA2735840 AA	20100311	CA20092735840	20090803
CN102186509 A	20110914	CN200980140600	20090803
CN102186509 B	20140716	CN200980140600	20090803
EP2334347 A2	20110622	EP20090791091	20090803
JP2012501730 T2	20120126	JP20110526079T	20090803
JP5736312 B2	20150617	JP20110526079T	20090803
US2010057001 AA	20100304	US20080203473	20080903
US9265918 BB	20160223	US20080203473	20080903
WO10027588 A2	20100311	WO2009US52547	20090803
WO10027588 A3	20101014	WO2009US52547	20090803

Priority:

US20080203473 20080903 WO2009US52547 20090803

Probable Assignee: BOSTON SCIENT SCIMED INC

Assignee(s): (std): BOSTON SCIENT SCIMED INC ; CHEN JOHN J ; HORN DANIEL J

Assignee(s): BOSTON SCIENTIFIC SCIMED INC

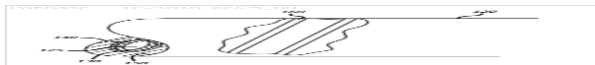
Inventor(s): (std): CHEN JOHN J ; HORN DANIEL J

Agent(s): PIASETZKI NENNIGER KVAS LLP; HAUCK PATENT UND RECHTSANWAELTE; VIDAS ARRETT AND STEINKRAUS PA; SEAGER TUFTE AND WICKHEM LLP; RYAN LINDQUIST LISA

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN ZA ZM ZW

Title: ROBUST CATHETER TUBING**Abstract:**

Source: US2010130925A A **balloon** catheter having a **multilayer** catheter shaft is formed to have an inner layer and an outer layer, where the inner layer and outer layer are selected from materials that enhance the pushability of the catheter while preserving the flexibility. Using a combination of a high Shore D durometer value material and a lower Shore D durometer value material, various combinations of **multilayer** catheter shafts are disclosed utilizing different glass transition temperatures and block copolyamides to obtain the desired characteristics.

**Classifications:**

International (IPC 8-9): A61F2/84 A61F2/958 A61L29/04 A61L29/06 A61L29/08 A61L29/14 A61M25/00 A61M25/10 A61M29/00 A61M29/02 A61M31/00 A61M37/00 A61M5/00 B29C47/00 B29C49/00 B29C49/22 B29C70/00 B32B27/34 C08L77/00 (Advanced/Invention); A61M29/02 (Advanced/Non-invention); A61M25/10 B32B27/34 (Core/Invention)

CPC: B29C49/0005 B29C49/22 A61L29/049 B29C2049/0089 B29K2077/00 B29L2031/7542 A61M25/0045 A61F2/958 A61M25/1027 A61M25/1029 A61M2025/1075 B32B1/08 B32B7/02 B32B27/08 B32B27/34 A61M29/00 A61M25/10 B32B2270/00 B32B2307/412 B32B2307/514 B32B2307/581 B32B2307/702 B32B2307/704 B32B2535/00 A61L29/041 A61L29/06 A61L29/085 A61M25/0009 A61M25/005 A61M25/1006 A61M25/104 A61M2025/1061

European: A61F2/958 A61L29/04B A61L29/04M A61L29/06 A61L29/08B A61M25/00S1 A61M25/00S2 A61M25/10 A61M25/10B A61M25/10G1 A61M25/10P B32B1/08 B32B27/08 B32B27/34 B32B7/02 K61M25/00G K61M25/10G K61M25/10P K61M25/10Z14 K61M25/10Z8

US: 264/171.26 264/171.28 264/171.280S 264/250 264/250S 604/103.06 604/103.060P 604/103.09 604/103.090P 604/103.13 604/264 604/523 604/524 604/93.01 604/96.01 604/96.010P 604/96.010S 606/194

Family:

Publication number	Publication date	Application number	Application date
CR20110697 A	20120308	CR20110000697	20111221
EP2361103 A2	20110831	EP20090752645	20091109
EP2437800 A2	20120411	EP20100721616	20100603
EP2437840 A1	20120411	EP20100722279	20100604
US2010130925 AA	20100527	US20090478929	20090605
US2010130926 AA	20100527	US20090479700	20090605
US2010130927 AA	20100527	US20080324425	20081126
US2012065586 AA	20120315	US20110240453	20110922
US2013253425 AA	20130926	US20130898027	20130520
US2014081310 AA	20140320	US20130083821	20131119
US8052638 BB	20111108	US20090479700	20090605
US8070719 BB	20111206	US20080324425	20081126
US8444608 BB	20130521	US20090478929	20090605
US8613722 BB	20131224	US20110240453	20110922
WO10062793 A2	20100603	WO2009US63722	20091109
WO10062793 A3	20101216	WO2009US63722	20091109
WO10141765 A2	20101209	WO2010US37313	20100603
WO10141765 A3	20110616	WO2010US37313	20100603
WO10141887 A1	20101209	WO2010US37501	20100604

Priority:

US20080324425	20081126	US20090478929	20090605	US20090479700	20090605
WO2009US63722	20091109	WO2010US37313	20100603	WO2010US37501	20100604
US20110240453	20110922	US20130898027	20130520	US20130083821	20131119

Probable Assignee: ABBOTT CARDIOVASCULAR SYSTEMS

Assignee(s): (std): ABBOTT CARDIVASCULAR SYSTEMS INC ; FERNANDEZ NEFTALI ; LEE JEONG S ; HASLINGER THOMAS ; SIMPSON JOHN ; VASQUES FLORES PORTINO ; FLORES FORTINO VASQUEZ ; VASQUEZ FLORES FORTINO ; ABBOTT CARDIOVASCULAR SYSTEMS

Assignee(s): ABBOTT CARDIOVASCULAR SYSTEMS INC

Inventor(s): (std): FERNANDEZ NEFTALI ; FLORES FORTINO VASQUEZ ; HASLINGER THOMAS ; LEE JEONG S ; SIMPSON JOHN ; SIMPSON JOHN A ; VASQUES FLORES PORTINO ; VASQUEZ FLORES FORTINO

Agent(s): JACKSON MARTIN PETER; FULWIDER PATTON LLP ABBOTT; BAKER BOTTS LLP; BAKER BOTTS L L P; HANKE GUNTHER O; GUNTHER O HANKE

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: INTRALUMINAL POLYMERIC DEVICES FOR THE TREATMENT OF ANEURYSMS

Abstract: Source: US2012179193A Novel medical devices and uses thereof for lining a blood vessel and/or treating an aneurysm are disclosed herein. The device comprises a non-metallic expandable tubular structure, implantable in a body vessel and being made, at least in part, from a polymeric system characterized by a stiffness which changes upon stimulation under physiological conditions. Novel polymeric systems are further disclosed herein, which are configured to produce a polymeric material upon stimulation under physiological conditions, such that a stiffness of said polymeric material is higher than a stiffness of said system. Uses of polymer systems in the manufacture of a device are further disclosed.



The device comprises a non-metallic expandable tubular structure, implantable in a body vessel and being made, at least in part, from a polymeric system characterized by a stiffness which changes upon stimulation under physiological conditions. Novel polymeric systems are further disclosed herein, which are configured to produce a polymeric material upon stimulation under physiological conditions, such that a stiffness of said polymeric material is higher than a stiffness of said system. Uses of polymer systems in the manufacture of a device are further disclosed.

Classifications:

International (IPC 8-9): A61L A61L31/04 A61L31/14 A61M29/04 (Advanced/Invention);

A61L (Subclass/Invention)

CPC: A61L31/06

European: A61L31/06

US: 606/198 606/198P

Family:

Publication number	Publication date	Application number	Application date
EP2453940 A2	20120523	EP20100752433	20100713
IL217529 A0	20120229	IL20120217529	20120112
US2012179193 AA	20120712	US20100383588	20100713
WO11007352 A2	20110120	WO2010IL00562	20100713
WO11007352 A3	20110331	WO2010IL00562	20100713

Priority:

US20090225063P 20090713 WO2010IL00562 20100713 IL20120217529 20120112
US20100383588 20100713

Probable Assignee: YISSUM RESEARCH DEVELOPMENT CO OF HEBREW UNIV OF JERUSALEM LTD

Assignee(s): (std): ABBAS RANDA ; COHN DANIEL ; DANIEL COHN ; ITAI PELLED ; MALAL RAM ; PELLED ITAI ; YISSUM RES DEV CO ; RANDA ABBAS ; RAM MALAL

Assignee(s): YISSUM RESEARCH DEVELOPMENT CO OF HEBREW UNIV OF J ; YISSUM RESEARCH DEVELOPMENT COMPANY OF THE HEBREW UNIVERSITY OF JERUSALEM ; YISSUM RESEARCH DEVELOPMENT CO OF HEBREW UNIV OF JERUSALEM LTD ; YISSUM RESEARCH DEVELOPMENT COMPANY OF THE HEBREW UNIVERSITY OF JERUSALEM LTD ; YISSUM RESEARCH DEVELOPMENT CO OF HEBREWUNIVERSITY OF JERUSALEM LTD ; YISSUM RESEARCH DEVELOPMENT CO OF HEBREWUNIVERSITY OF JERUSALEM ; YISSUM RESEARCH DEVELOPMENT COMPANY OF THE HEBREWUNIVERSITY OF JERUSALEM ; YISSUM RESEARCH DEVELOPMENT COMPANY OF THE HEBREWUNIVERSITY OF JERUSALEM LTD

Inventor(s): (std): ABBAS RANDA ; COHN DANIEL ; MALAL RAM ; PELLED ITAI

Inventor(s): RAM MALAL ; RANDA ABBAS ; DANIEL COHN ; ITAI PELLED

Agent(s): FICHTER ROBERT ARNO; G E EHRLICH 1995 LTD ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: SYSTEM AND METHOD FOR ENHANCED ELECTROSTATIC DEPOSITION AND SURFACE COATINGS

Abstract: Source: US2011238161A This disclosure describes the application of a supplemental corona source to provide surface charge on submicrometer particles to enhance collection efficiency and micro-structural density during electrostatic collection.



Classifications:

International (IPC 8-9): A61F2/06 A61F2/82 B05B5/03 B05D1/02 B05D1/04 B05D1/06 B05D1/36 B05D7/14 B32B27/00 B32B27/28 B32B27/30 B32B27/32 B32B27/34 B32B27/36 B32B27/38 B32B27/40 B32B3/00 B32B5/16 B32B9/04 (Advanced/Invention); B05D3/04 (Advanced/Non-invention)

CPC: B05B5/032 Y10T428/24372 Y10T428/25 Y10T428/31504 Y10T428/31507 Y10T428/31511 Y10T428/31544 Y10T428/31551 Y10T428/31663 Y10T428/31725 Y10T428/31786 Y10T428/31855 Y10T428/31931 Y10T428/31935 Y10T428/31938 B05D1/025 B05D1/04 B05D3/0486

European: B05D1/02C B05D1/04 L05D3/04T

US: 118/627 118/627S 118/628 118/629 427/2.1 427/2.24 427/2.25 427/2.250S 427/2.31 427/2.310S 427/458 427/470 427/470S 427/475 427/475S 427/486 428/143 428/143S 428/323 428/323S 428/411.1 428/411.100S 428/412 428/412S 428/413 428/413S 428/422 428/422S 428/423.1 428/423.100S 428/447 428/447S 428/474.4 428/474.400S 428/480 428/480S 428/500 428/500S 428/521 428/521S 428/522 428/522S 428/523 428/523S 623/1.46 623/1.460P

Family:

Publication number	Publication date	Application number	Application date
US2011238161 AA	20110929	US20100748134	20100326
US2015040827 AA	20150212	US20140310960	20140620
US8795762 BB	20140805	US20100748134	20100326
WO11119762 A1	20110929	WO2011US29667	20110323

Priority:

US20100748134 20100326 US20140310960 20140620

Probable Assignee: BATTELLE MEMORIAL INST

Assignee(s): (std): BATTELLE MEMORIAL INST ; BATTELLE MEMORIAL INSTITUTE ; CROWLEY JOSEPH M ; DEVERMAN GEORGE S ; FULTON JOHN L ; MICELL TECHNOLOGIES ; MATSON DEAN W ; TAYLOR C DOUGLAS ; MCCLAIN JAMES B ; YONKER CLEMENT R ; MICELL TECHNOLOGIES INC

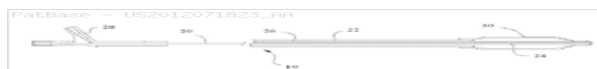
Inventor(s): (std): CROWLEY JOSEPH M ; DEVERMAN GEORGE S ; FULTON JOHN L ; MATSON DEAN W ; MCCLAIN JAMES B ; TAYLOR C DOUGLAS ; YONKER CLEMENT R

Agent(s): WILSON SONSINI GOODRICH AND ROSATI; MATHESON JAMES D

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: MEDICAL **BALLOON** HAVING IMPROVED STABILITY AND STRENGTH

Abstract: Source: US2012071823A A medical device, the medical device formed at least in part from a melt blend of at least one polymer comprising hydrolysable groups and a carbodiimide.



Classifications:

International (IPC 8-9): A61L31/04 A61M25/10 B29C47/20 C08K5/29 (Advanced/Invention)

CPC: A61L29/049 C08K5/29 B29L2023/007 B29L2031/7542 A61M25/1029 A61M25/104 B29C47/0023

European: B29C47/00J6 L29L23/00H4 L29L31/7542

US: 264/209.3 264/209.300S 264/540 524/195 524/195S 604/96.01 604/96.010P 606/194

Family:

Publication number	Publication date	Application number	Application date
US2012071823 AA	20120322	US20110238082	20110921
US2014243875 AA	20140828	US20140271640	20140507

Priority:

US20100385196P 20100922 US20110238082 20110921 US20140271640 20140507

Probable Assignee: BOSTON SCIENT SCIMED INC

Assignee(s): (std): BOSTON SCIENT SCIMED INC ; CHEN JOHN J

Assignee(s): BOSTON SCIENTIFIC SCIMED INC

Inventor(s): (std): CHEN JOHN J ; CHEN JOHN JIANHUA

Title: MEDICAL PRODUCT COMPRISING AN ACTIVE COATING

Abstract: Source: US2012239140A An embodiment of the present invention relates to a medical product coated with a polymer layer, which comprises an inhibitor of the TRPC-3 ion channel underneath, in, and/or on the biostable or biodegradable polymer layer.



Classifications:

International (IPC 8-9): A61F2/82 A61L29/08 A61L29/16 A61L31/02 A61L31/10 A61L31/16

B05D7/00 (Advanced/Invention)

CPC: A61L29/085 A61L29/16 A61L31/022 A61L31/10 A61L31/16 A61L2300/432

European: A61L29/08B A61L29/16 A61L31/02B A61L31/10 A61L31/16 K61L300/432

US: 427/2.1 623/1.46

Family:

Publication number	Publication date	Application number	Application date
EP2500043 A1	20120919	EP20120157486	20120229
US2012239140 AA	20120920	US20120421343	20120315

Priority:

US20110453146P 20110316 US20120421343 20120315

Probable Assignee: BIOTRONIK AG

Assignee(s): (std): BIOTRONIK AG ; BRAUNE MARLEN ; GROSCHNER KLAUS ; WITTCHOW ERIC

Inventor(s): (std): BRAUNE MARLEN ; GROSCHNER KLAUS ; WITTCHOW ERIC

Agent(s): LINDNER VOGT KARIN L

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Title: CATHETER WITH STEPPED SKIVED HYPOTUBE

Abstract:
Source: US2012303054A Catheter having a hypotube with a skive defined by a first angled cut, an axial cut, and a second angled cut. A midshaft member includes a guidewire lumen and an inflation lumen in fluid communication with an inflation lumen of the hypotube, the inflation lumen of the midshaft member configured to receive at least a portion of the hypotube. A distal tubular shaft member extends distally from the midshaft member. The distal tubular shaft member has a guidewire lumen and an inflation lumen defined therein, the guidewire lumen of the distal tubular shaft member in fluid communication with the guidewire lumen of the midshaft member. The inflation lumen of the distal tubular shaft member is in fluid communication with the inflation lumen of the midshaft member and a balloon is coupled to the distal tubular shaft member and in fluid communication with the inflation lumen.

Classifications:
International (IPC 8-9): A61M25/00 A61M25/10 A61M29/00 A61M29/02 B32B37/14 B32B38/00 (Advanced/Invention); A61M25/01 (Advanced/Non-invention)
CPC: A61M25/0009 A61M2025/0183 A61M25/10 A61M25/0026 A61M2025/006 A61M25/0054 A61M25/0052
US: 156/293 156/294 604/96.01 606/194

Family:

Publication number	Publication date	Application number	Application date
CN103796707 A	20140514	CN201280025220	20120525
EP2714180 A1	20140409	EP20120789349	20120525
EP2714180 A4	20141210	EP20120789349	20120525
US2012303054 AA	20121129	US20120481441	20120525
US2014358074 AA	20141204	US20140458327	20140813
US8834510 BB	20140916	US20120481441	20120525
WO12162651 A1	20121129	WO2012US39678	20120525

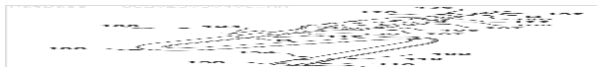
Priority:
US20110490547P 20110526 US20120481441 20120525 WO2012US39678 20120525
US20140458327 20140813

Probable Assignee: ABBOTT CARDIOVASCULAR SYSTEMS
Assignee(s): (std): ABBOTT CARDIOVASCULAR SYSTEMS ; WILLIAMS KERRY J ; WILSON BRUCE M
Assignee(s): ABBOTT CARDIOVASCULAR SYSTEMS INC
Inventor(s): (std): WILLIAMS KERRY J ; WILSON BRUCE M
Agent(s): JACKSON MARTIN PETER; BAKER BOTTS LLP; HULSEBERG DANIEL J ET AL
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: TEXTURED DILATATION **BALLOON** AND METHODS

Abstract:

Source: US2013030406A The present disclosure provides a textured dilatation **balloon** that includes a **balloon** body having a proximal end, a distal end, and at least one indentation in the **balloon** body in an uninflated state, wherein the **balloon** body comprises a continuous polymer tube with an external surface having at least one therapeutic agent disposed within the at least one indentation.



Classifications:

International (IPC 8-9): A61K31/165 A61K31/337 A61K31/366 A61K31/436 A61K31/4365 A61K31/519 A61K31/7088 A61K31/727 A61K38/22 A61K38/43 A61K39/395 A61K45/00 A61K48/00 A61L29/00 A61L31/16 A61M25/10 A61M29/02 A61P29/00 A61P3/00 A61P31/04 A61P35/00 A61P39/06 A61P43/00 A61P7/02 A61P9/10 B05D3/10 B29C49/00 (Advanced/Invention)
CPC: A61M25/104 B29C49/10 B29C2049/0089 B29C2791/001 B29L2031/7542 A61L29/16 A61L2300/60 A61L2300/606 A61L29/085 A61M25/1029 A61M2025/1031 A61M2025/105 A61M2025/1086
US: 427/2.14 604/103.02 604/500

Family:

Publication number	Publication date	Application number	Application date
CN103764218 A	20140430	CN201280036850	20120628
EP2736578 A1	20140604	EP20120740245	20120628
JP2014523790 T2	20140918	JP20140522838T	20120628
US2013030406 AA	20130131	US20110190667	20110726
WO13015941 A1	20130131	WO2012US44722	20120628

Priority:

US20110190667 20110726 WO2012US44722 20120628

Probable Assignee: MEDTRONIC VASCULAR INC

Assignee(s): (std): DESHMUKH SUSHEEL ; MEDTRONIC VASCULAR INC ; UDIPI KISHORE ; WILCOX JOSIAH ; WILCOX JOSIAH CY

Inventor(s): (std): DESHMUKH SUSHEEL ; UDIPI KISHORE ; WILCOX JOSIAH ; WILCOX JOSIAH CY

Agent(s): ZIMMERMANN AND PARTNER; INO SARI; KURASAWA ICHIRO; MATSUSHITA MITSURU; DESHIMARU TAKESHI; KUMAKURA YOSHIO; LOPEZ THEODORE P ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: SOFT TIP **BALLOON** CATHETER

Abstract:

Source: US2014074020A Method for fabricating a **balloon** catheter including providing an inner tubular member having a distal section and a distal end with a lumen extending therein and forming a **balloon** having a distal leg with a first segment having a first diameter and a first wall thickness and a second segment having a second wall thickness. The second diameter is greater than the first diameter and the first wall thickness is greater than the second wall thickness. The distal end section of the inner tubular member can be positioned in the **balloon** and bonded to the first segment while reducing the diameter of the second segment. Method also provided for fabricating a **multilayer balloon** catheter including removing at least a portion of an outer layer from the distal leg of the **balloon**.



Classifications:

International (IPC 8-9): A61M25/00 A61M25/10 B29C65/02 B32B37/12 (Advanced/Invention); A61M31/00 (Advanced/Non-invention)

CPC: A61M25/001 A61M2025/0047 A61M2025/0081 A61M2025/1075 B29C65/02 A61M25/10 A61M2025/1093 B29L2031/7543 A61M25/1034 B29K2677/00 B29K2995/0049 B29L2009/00 B29L2022/022 B29L2023/005 Y10T156/1005 Y10T156/1015

US: 156/198 156/204 156/272.8 156/294 156/86 604/103.06 604/103.08 604/96.01 606/192

Family:

Publication number	Publication date	Application number	Application date
EP2895226 A1	20150722	EP20130750827	20130812
US2014074020 AA	20140313	US20120609968	20120911
US2014358176 AA	20141204	US20140463088	20140819
US8840743 BB	20140923	US20120609968	20120911
WO14042801 A1	20140320	WO2013US54564	20130812

Priority:

US20120609968 20120911 WO2013US54564 20130812 US20140463088 20140819

Probable Assignee: ABBOTT CARDIOVASCULAR SYSTEMS INC

Assignee(s): (std): ABBOTT CARDIOVASCULAR SYSTEMS ; LEE JEONG S ; MANN JUSTIN K ; WANTINK KENNETH L

Assignee(s): ABBOTT CARDIOVASCULAR SYSTEMS INC

Inventor(s): (std): LEE JEONG S ; MANN JUSTIN K ; WANTINK KENNETH L

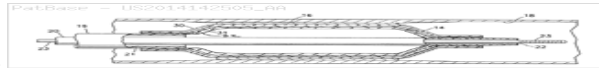
Agent(s): JACKSON MARTIN PETER; BAKER BOTTS LLP; HULSEBERG DANIEL J ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: **MULTILAYER BALLOON** FOR A CATHETER

Abstract:

Source: US2014142505A **Multilayer balloon** for a catheter comprises a first layer made of a first polymer material having a first Shore durometer hardness, a second layer made of a second polymer material having a second Shore durometer hardness greater than the first Shore durometer hardness, wherein the second layer is an inner layer relative to the first layer, and a third layer made of a third polymer material having a third Shore durometer hardness less than the first Shore durometer hardness, wherein the third layer is an inner layer relative to the second layer. Method of making a **multilayer balloon** for a catheter and a **balloon** catheter are also provided.



Classifications:

International (IPC 8-9): A61F2/95 A61L29/00 A61L29/04 A61L29/06 A61L29/08 A61L29/12

A61L29/14 A61M25/00 A61M25/10 A61M29/00 B29C49/22 (Advanced/Invention);

A61F2/958 (Advanced/Non-invention)

CPC: A61M25/0045 A61M25/0009 A61L29/041 A61L29/06 A61L29/085 A61L29/14 A61F2/958 A61L29/126 A61M25/1029 A61M25/104 A61M2025/1075 A61M2025/1084 B29C49/22 B29K2077/00 A61L29/04 B29K2995/007 B29L2031/7543 A61M25/10

US: 156/244.13 604/103.06 604/523 604/96.01

Family:

Publication number	Publication date	Application number	Application date
CN104955515 A	20150930	CN201380060128	20131118
CN105007956 A	20151028	CN201480015149	20140314
EP2919847 A2	20150923	EP20130798867	20131118
EP2968681 A1	20160120	EP20140716193	20140314
JP2016502436 T2	20160128	JP20150542871T	20131118
US2014142505 AA	20140522	US20120680299	20121119
US2014276401 AA	20140918	US20140212966	20140314
US2015290434 AA	20151015	US20130443805	20131118
US2015343180 AA	20151203	US20150820664	20150807
US9132259 BB	20150915	US20120680299	20121119
WO14078780 A2	20140522	WO2013US70540	20131118
WO14078780 A3	20140918	WO2013US70540	20131118
WO14144431 A1	20140918	WO2014US28841	20140314

Priority:

US20120680299 20121119	US20130787415P 20130315	US20140212966 20140314
WO2013US70540 20131118	US20130443805 20131118	WO2014US28841 20140314
US20150820664 20150807		

Probable Assignee: ABBOTT CARDIOVASCULAR SYSTEMS

Assignee(s): (std): ABBOTT CARDIOVASCULAR SYSTEM INC ; ABBOTT CARDIOVASCULAR SYSTEMS

Assignee(s): ABBOTT CARDIOVASCULAR SYSTEMS INC

Inventor(s): (std): LEE JEONG S ; LIN TUNG LIANG ; WANTINK KENNETH L ; WHITE ROSEMINDA ; WHITE ROSEMINDA J

Agent(s): JACKSON MARTIN PETER; BAKER BOTTS LLP; HULSEBERG DANIEL J ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU

RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ
UA UG US UZ VC VN ZA ZM ZW

Title: REDUCED MATERIAL TIP FOR CATHETER AND METHOD OF FORMING SAME

Abstract:

Source: US2014276400A Method for fabricating a catheter including providing an inner tubular member formed from a first polymeric material, the inner tubular member having a distal section, a distal end, and a lumen defined therein by a first inner diameter; necking down at least a portion of the distal section of the inner tubular member to form a necked tip having a second inner diameter; and removing a portion of polymeric material from an inner surface along the necked tip to define a third inner diameter for the necked tip. The method can include positioning the distal section of the inner tubular member in a **balloon** having a working length, a distal neck, and a distal leg, with the distal end of the inner tubular member extending distally beyond a distal end of the distal leg, and coupling the distal leg of the **balloon** to at least a portion of the distal section of the inner tubular member.



Classifications:

International (IPC 8-9): A61M25/00 A61M25/10 B23K26/36 B29C57/00 (Advanced/Invention)

CPC: A61M25/0068 B23K26/36 A61M25/001 B29C57/00 B29L2031/7542 B29L2031/7543 B29C2793/00 A61M25/1006 A61M25/1029 A61M25/1036 A61M2025/1093

US: 219/121.69 264/400 604/523 604/96.01

Family:

Publication number	Publication date	Application number	Application date
CN105188823 A	20151223	CN201480014922	20140314
EP2968840 A1	20160120	EP20140719587	20140314
US2014276400 AA	20140918	US20140212919	20140314
WO14144467 A1	20140918	WO2014US28891	20140314

Priority:

US20130800533P 20130315 US20140212919 20140314 WO2014US28891 20140314

Probable Assignee: ABBOTT CARDIOVASCULAR SYSTEMS INC

Assignee(s): (std): ABBOTT CARDIOVASCULAR SYSTEMS

Assignee(s): ABBOTT CARDIOVASCULAR SYSTEMS INC

Inventor(s): (std): LE TRAM U

Agent(s): JACKSON MARTIN PETER; HULSEBERG DANIEL J ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: LENGTH ADJUSTABLE **BALLOON** CATHETER

Abstract:
Adjustable **balloon** catheter (100) having an inner tubular member (110) having a distal tubular element (201) is coupled to an exterior surface of the inner tubular member at the distal end portion thereof to define an inflation passage. An expandable member (140) has a proximal section coupled to the distal tubular element and defines an inner chamber in fluid communication with the inflation passage. A seal structure (301) is disposed proximate the proximal section of the expandable member. An outer tubular member (120) has an inflation lumen (130) with the inner tubular member disposed therein. The outer tubular member is moveable relative to the inner tubular member between an extended position and a retracted position proximal to the extended position to define an exposed length of the working length of the expandable member. The outer tubular member has an interior surface in scaling engagement with the seal structure.



Classifications:
International (IPC 8-9): A61M25/10 A61M39/06 (Advanced/Invention)
CPC: A61M25/1002 A61M25/104 A61M2025/105 A61M2025/1068 A61M2025/1075 A61M2025/1079 A61M39/0606

Family:

Publication number	Publication date	Application number	Application date
WO15065491 A1	20150507	WO2013US68310	20131104

Priority:
WO2013US68310 20131104

Probable Assignee: ABBOT CARDIOVASCULAR SYSTEMS INC

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Title: A multi-layer leather bag of paraffin phase change energy storage microcapsule production method
(Machine translation)

Abstract:

Source: CN105233770A Discloses a **multilayer** This invention leather bag paraffin phase change energy storage microcapsule production method comprises the following steps: A, will trimesoyl chloride monomer with active phase change paraffin mixed and heated to form an oil phase liquid, then was added to the same temperature, an aqueous solution of the emulsifier, stirring while adding phenylenediamine between cross-linker solution, oil in water emulsions formed; B, said microcapsule emulsion of paraffin and stirring was continued at the insulating state, adjusted in the mixing process Paraffin microcapsule emulsion to a pH greater than 8.0, after the completion of stirring, separation washing; C, said inner **balloon** sheath is a **polyamide** containing paraffin microcapsules was added 4- (2-aminoethyl) -1,2-bis Tris buffer solution of phenol -HCl immersed in the case of constant stirring at room temperature, after separation washing, drying, ie. Energy storage paraffin microcapsules of the invention can prevent bladder leakage during core paraffin phase change microcapsules good affinity with water, it is conducive to heat.

Classifications:

International (IPC 8-9): B01J13/16 B01J13/18 C09K5/06 (Advanced/Invention)

Family:

Publication number	Publication date	Application number	Application date
CN105233770 A	20160113	CN201510598879	20150916

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Probable Assignee: GUANGXI RESEARCH INST OF CHEMICAL

Assignee(s): GUANGXI RESEARCH INST OF CHEMICAL