

Search strategy

Query

(CLOT AND REMOVAL AND INTERNAL AND EXTERNAL AND (INCREASING OR LARGER OR BIGGER) AND (DIAMETER OR CROSS SECTION OR OPENING))/TI/AB/DESC/ODES AND (A61B-017/221)/IPC/CPC

6 Documents

Publication numbers	Title	Current assignees
EP2683309 A2	A clot retrieval device for removing occlusive clot from a blood vessel	NEURAVI
EP3536252 A2	A clot retrieval device for removing occlusive clot from a blood vessel	NEURAVI
US20160113664 A1	Clot retrieval device for removing clot from a blood vessel	NEURAVI
EP3551101 A1	Catheter-delivered endovascular devices	LEGACY VENTURES
EP2736425 A1	Intravascular thromboembolectomy device	THROMBX MEDICAL
EP2344052 A1	Device for reopening occluded blood vessels	PHENOX

A **clot** retrieval device for removing occlusive **clot** from a blood vessel

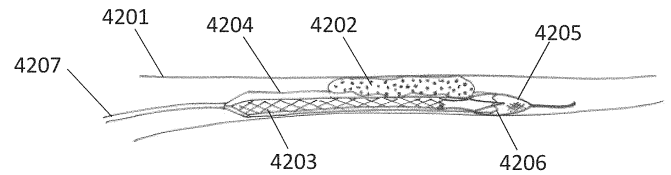
EP2683309 A2

Current assignees NEURAVI* Inventors BRADY EAMON GILVARRY MICHAEL RAZAVI MAHMOOD VALE DAVID GRIFFIN PATRICK CASEY BRENDAN MCNAMARA JASON Priority data including date 2011US-61450810 2011-03-09 2011US-61552130 2011-10-27 2012US-13823060 2012-03-09 2012WO-IE00011 2012-03-09 2013US-13823060 2013-03-13 2014US-14158390 2014-01-17 2015US-14930167 2015-11-02 2015US-14986323 2015-12-31 2015US-14986332 2015-12-31 2015US-14986357 2015-12-31 2015US-14986412 2015-12-31 2017US-15399453 2017-01-05 2018US-15997335 2018-06-04 2019US-16385718 2019-04-16	IPC - International classification A61B-017/00 A61B-017/08 A61B-017/14 A61B-017/22* A61B-017/22*1* A61B-017/3207 A61F-002/01 CPC - Cooperative classification A61B-017/22/031 A61B-017/221* A61B-017/3207/25 A61B-2017/00292 A61B-2017/00526 A61B-2017/00867 A61B-2017/22034 A61B-2017/22094 A61B-2017/2212 A61B-2017/2215 A61F-002/01/3 A61F-002/011 A61F-2002/011 A61F-2002/016 A61F-2002/018 A61F-2230/0069 A61F-2230/008 A61F-2230/0091 A61F-2230/0093 PCL - US patent classification PCLO: 606114000* 606159000* PCLX: 606159000*
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Family													
US10588649	B2	2020-03-17					US20160192955	A1	2016-07-07				
US20190239907	A1	2019-08-08					US20160192956	A1	2016-07-07				
US10299811	B2	2019-05-28					US20160120558	A1	2016-05-05				
US10292722	B2	2019-05-21					US9301769	B2	2016-04-05				
US20180344338	A1	2018-12-06					US8852205	B2	2014-10-07				
US10034680	B2	2018-07-31					US20140200608	A1	2014-07-17				
US9642639	B2	2017-05-09					EP2683309	A2	2014-01-15				
US20170112515	A1	2017-04-27					US20130345739	A1	2013-12-26				
US20160192953	A1	2016-07-07					WO2012/120490	A3	2012-12-13				
US20160192954	A1	2016-07-07					WO2012/120490	A2	2012-09-13				

(EP2683309)

A **clot** retrieval device (9501) for removing occlusive **clot** from a blood vessel comprises an inner elongate body (9503) and an outer elongate body (9504) at least partially overlying the inner elongate body (9503). The device also comprises an elongate member or shaft (9502) having a proximal end which extends exterior of a patient so that a user can retrieve the stent-basket device and captured **clot** by retracting the shaft (9502). The outer elongate body (9504) and the inner elongate body (9503) are connected to the distal end of the shaft (9502) and are expandable relative to the shaft (9502) from a collapsed delivery configuration to an expanded deployed configuration. The outer elongate body (9504) is expandable relative to the inner elongate body (9503) to a radial extent which is greater than the radial extent of the inner body (9503) in the deployed configuration. The stent-basket construction of the device creates a reception space (9507) between the inner (9503) and outer (9504) to receive the target **clot**. The outer body (9504) is configured to allow as much as possible of the **clot** to migrate through it into the **internal** reception space (9507). Housing the **clot** in this reception space rather than pinning it to the wall of the vessel means that the **clot** is under less compression and can thus be retracted at a lower force. The inner elongate body (9503) and a distal capture net (9505) protect the distal vascular bed from embolisation.



A **clot** retrieval device for removing occlusive **clot** from a blood vessel

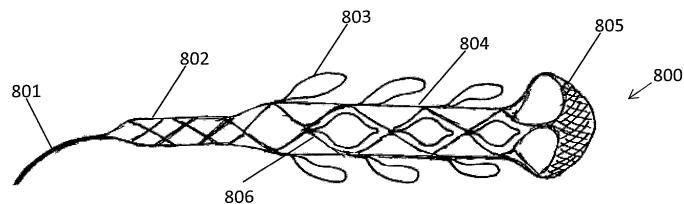
EP3536252 A2

<u>Current assignees</u>	<u>IPC - International classification</u>		
NEURAVI*	A61B-017/00	A61B-017/12	A61B-017/22
	A61B-017/221*	A61B-017/3207	A61F-002/00
	A61F-002/01	A61M-025/00	A61M-029/00
<u>Inventors</u>	<u>CPC - Cooperative classification</u>		
BRADY EAMON	A61B-017/12/109	A61B-017/221*	A61B-017/3207/25
CASEY BRENDAN	A61B-2017/00358	A61B-2017/00778	A61B-2017/22034
GILVARRY MICHAEL	A61B-2017/2212	A61B-2017/2215	A61F-002/01/3
HARDIMAN DAVID	A61M-029/00		
MCARDLE KEVIN			
RAZAVI MAHMOOD			
VALE DAVID			
<u>Priority data including date</u>	<u>PCL - US patent classification</u>		
2013US-61785213 2013-03-14	PCLO: 606200000*		
2014CN-80028407 2014-03-05			
2014EP-0708025 2014-03-05			
2014US-14206973 2014-03-12			
2014WO-EP54251 2014-03-05			
2019US-16510652 2019-07-12			

Family													
US20190336151	A1	2019-11-07					CN109157304	A	2019-01-08				
EP3536252	A3	2019-10-23					JP2018196762	A	2018-12-13				
EP3536252	A2	2019-09-11					EP2967610	B1	2018-12-05				
US10390850	B2	2019-08-27					JP2016513505	A	2016-05-16				
PL2967610	T3	2019-07-31					EP2967610	A1	2016-01-20				
SI2967610	T1	2019-07-31					CN105208950	A	2015-12-30				
ES2708786	T3	2019-04-11					US20140371779	A1	2014-12-18				
TR201820525	T4	2019-01-21					WO2014/139845	A1	2014-09-18				

(EP3536252)

A clot retrieval device 1 for removing occlusive clot from a blood vessel, the device comprises an inner elongate body 3 having a collapsed delivery configuration and an expanded deployed configuration and an outer elongate body 2 at least partially overlying the inner elongate body 2. The outer elongate body 2 is expandable to a radial extent which is greater than the radial extent of the inner body 3 in the deployed configuration to define a clot reception space 11. The outer elongate body 2 comprises a distal end portion and the inner elongate body 3 comprises a main body portion 10 and a distal portion which extends in the deployed configuration towards the outer elongate body 2 to a greater extent than the main body portion. The distal portion 10 of the inner elongate member 3 and the distal end portion of the outer elongate body 2 together define a three dimensional protective structure to substantially prevent distal egress of clot or clot fragments from the device.



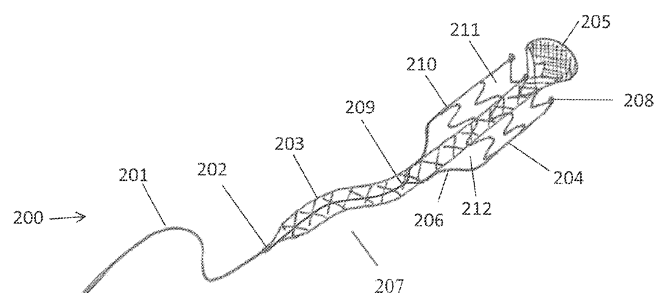
Clot retrieval device for removing **clot** from a blood vessel**US20160113664 A1**

Current assignees NEURAVI* Inventors BRADY EAMON CASEY BRENDAN GILVARRY MICHAEL HARDIMAN DAVID MCARDLE KEVIN RAZAVI MAHMOOD VALE DAVID Priority data including date 2013US-61785213 2013-03-14 2014WO-EP54251 2014-03-05 2015US-14629217 2015-02-23 2015US-14985574 2015-12-31 2015US-14985628 2015-12-31 2015US-14985729 2015-12-31 2015US-14985823 2015-12-31 2015US-14985877 2015-12-31 2018US-62730952 2018-09-13 2018US-62772006 2018-11-27 2019US-16376652 2019-04-05 2019US-16569637 2019-09-12 2019US-16659624 2019-10-22 2019US-62792741 2019-01-15 2019US-62822467 2019-03-22 2019US-62844502 2019-05-07	IPC - International classification A61B-017/00 A61B-017/12 A61B-017/22 A61B-017/221* A61B-017/3207 A61F-002/01 A61M-029/00 CPC - Cooperative classification A61B-017/12/109 A61B-017/221* A61B-017/3207/25 A61B-2017/00358 A61B-2017/00778 A61B-2017/22034 A61B-2017/2212 A61B-2017/2215 A61F-002/01/3 A61F-2002/016 A61M-029/00 PCL - US patent classification PCLO: 606200000* 606159000* 606159000* 606127000* 606127000* 606127000*
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Family									
US10675045	B2	2020-06-09	   	US9445829	B2	2016-09-20	   		
US10610246	B2	2020-04-07	   	US20160113663	A1	2016-04-28	   		
US10588648	B2	2020-03-17	   	US20160113664	A1	2016-04-28	   		
US20200046390	A1	2020-02-13	   	US20160113665	A1	2016-04-28	   		
US20200000483	A1	2020-01-02	   	US20160106448	A1	2016-04-21	   		
US20190231372	A1	2019-08-01	   	US20160106449	A1	2016-04-21	   		
US10278717	B2	2019-05-07	   	US20150164523	A1	2015-06-18	   		

(US20160113664)

A **clot** retrieval device 1 for removing occlusive **clot** from a blood vessel, the device comprises an inner elongate body 3 having a collapsed delivery configuration and an expanded deployed configuration and an outer elongate body 2 at least partially overlying the inner elongate body 2. The outer elongate body 2 is expandable to a radial extent which is greater than the radial extent of the inner body 3 in the deployed configuration to define a **clot** reception space 11. The outer elongate body 2 comprises a distal end portion 24,49 and the inner elongate body 3 comprises a main body portion 10 and a distal portion which extends in the deployed configuration towards the outer elongate body 2 to a greater extent than the main body portion. The distal portion 10 of the inner elongate member 3 and the distal end portion 24,49 of the outer elongate body 2 together define a three dimensional protective structure to substantially prevent distal egress of **clot** or **clot** fragments from the device.



Catheter-delivered endovascular devices

EP3551101 A1

<u>Current assignees</u> LEGACY VENTURES* LEGACY VENTURES* DBA VESALIO <u>Inventors</u> ULM III ARTHUR JOHN <u>Priority data including date</u> 2014US-14147491 2014-01-03 2014US-14558705 2014-12-02 2014US-14558712 2014-12-02 2014US-61994919 2014-05-18 2014US-61994934 2014-05-18 2015CA-2947201 2015-05-18 2015CN-80037755 2015-05-18 2015EP-0796711 2015-05-18 2015US-14794783 2015-07-08 2015US-15311849 2015-05-18 2015WO-US10178 2015-01-05 2015WO-US31447 2015-05-18 2015WO-US39830 2015-07-09 2016US-15158137 2016-05-18 2016US-15374307 2016-12-09 2016US-15390457 2016-12-23 2017US-15417505 2017-01-27 2017US-15449901 2017-03-03 2017US-15610209 2017-05-31 2017US-15611762 2017-06-01 2017US-15629703 2017-06-21 2017US-15710648 2017-09-20 2017US-15852285 2017-12-22 2017US-16466963 2017-12-08 2017US-62571213 2017-10-11 2017WO-US65318 2017-12-08 2018EP-0172665 2015-05-18 2018US-15947955 2018-04-09 2018US-16479985 2018-01-26 2018WO-US15406 2018-01-26 2019US-16241616 2019-01-07 2019US-16385862 2019-04-16 2019US-16519903 2019-07-23 2019US-16579427 2019-09-23	<u>IPC - International classification</u> A61B A61B-006/12 A61B-017/00 A61B-017/12 A61B-017/22 A61B-017/221* A61B-017/3207 A61B-090/00 A61D-001/00 A61F-002/00 A61F-002/01 A61L-031/02 A61L-031/04 A61M-005/00 A61M-025/00 A61M-025/01 B21D-039/03 B23K-001/00 B23K-026/38 B23K-026/40 B23K-031/02 B23K-101/06 B23P-011/00 B23P-015/00 <u>CPC - Cooperative classification</u> A61B-006/12 A61B-006/481 A61B-017/00/234 A61B-017/12/036 A61B-017/12/04 A61B-017/12/109 A61B-017/22/032 A61B-017/221* A61B-090/39 A61B-2017/00323 A61B-2017/00469 A61B-2017/00477 A61B-2017/00526 A61B-2017/00778 A61B-2017/00867 A61B-2017/00893 A61B-2017/22034 A61B-2017/22038 A61B-2017/22079 A61B-2017/22082 A61B-2017/22084 A61B-2017/2212 A61B-2017/2215 A61B-2090/064 A61B-2090/3937 A61B-2090/3966 A61B-2217/005 A61D-001/00/5 A61F-002/01/3* A61F-002/011 A61F-2002/011 A61F-2002/016 A61F-2230/0023 A61F-2230/0058 A61F-2230/0067 A61F-2230/0093 A61F-2240/001 A61F-2250/0017 A61F-2250/0023 A61F-2250/0039 A61L-031/02/2 A61L-031/04/8 A61M-005/00/7 A61M-025/00/09 A61M-025/01/08 A61M-025/01/47 A61M-2025/0042 B23K-001/00/08 B23K-026/38 B23K-026/40 B23K-031/02 B23K-2101/06 B23K-2103/14 B23K-2103/26 B23K-2201/06 B23P-011/00*
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EP3685773	A1	2020-07-29	   	IL248776	B	2018-03-29	   
WO2020/146364	A1	2020-07-16	   	US20180008295	A1	2018-01-11	   
EP3551101	A4	2020-07-08	   	US9839506	B2	2017-12-12	   
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CN111012443	A	2020-04-17	   	WO2017/201299	A1	2017-11-23	   
JP2020510462	A	2020-04-09	   	US9820764	B2	2017-11-21	   
EP3378419	B1	2020-03-25	   	US9814478	B2	2017-11-14	   
BR112019015330	A2	2020-03-10	   	US9808271	B2	2017-11-07	   
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EP3573536	A1	2019-12-04	   	US20170265877	A1	2017-09-21	   
US10492809	B2	2019-12-03	   	US20170172591	A1	2017-06-22	   
US20190336266	A1	2019-11-07	   	JP2017515611	A	2017-06-15	   
EP3551101	A1	2019-10-16	   	US20170150979	A1	2017-06-01	   
CA2947201	C	2019-09-24	   	EA201692112	A1	2017-05-31	   
US10420572	B2	2019-09-24	   	US20170143465	A1	2017-05-25	   
EA033045	B1	2019-08-30	   	CN106659513	A	2017-05-10	   
JP2019141660	A	2019-08-29	   	EP3145424	A4	2017-05-03	   
AU2018212810	A1	2019-08-15	   	US20170105744	A1	2017-04-20	   
US20190239909	A1	2019-08-08	   	MX2016014437	A	2017-04-06	   
BR112019015330	A1	2019-08-06	   	US20170086865	A1	2017-03-30	   
US10357266	B2	2019-07-23	   	EP3145424	A2	2017-03-29	   
JP6517838	B2	2019-05-22	   	IN201617041878	A	2017-03-10	   
KR10-1945845	B1	2019-04-17	   	PH12016502299	A1	2017-02-13	   
US10226268	B2	2019-03-12	   	PH12016502299	B1	2017-02-13	   
AU2015264434	B2	2019-01-31	   	KR20170007793	A	2017-01-20	   
ES2688187	T3	2018-10-31	   	AU2015264434	A1	2017-01-05	   
DK3145424	T3	2018-10-08	   	KR20170001960	A	2017-01-05	   
EP3378419	A1	2018-09-26	   	SG11201609354S	A	2016-12-29	   
CA3051584	A1	2018-08-02	   	BR112016026974	A1	2016-11-29	   
WO2018/140702	A1	2018-08-02	   	WO2015/179324	A3	2016-01-14	   
EP3145424	B1	2018-06-27	   	CA2947201	A1	2015-11-26	   
WO2018/107032	A1	2018-06-14	   	CA3050883	A1	2015-11-26	   
US20180116685	A1	2018-05-03	   	WO2015/179324	A2	2015-11-26	   
US9955987	B2	2018-05-01	   	WO2015/103547	A1	2015-07-09	   
IL257857	A	2018-04-30	   				

Intravascular thromboembolectomy device

EP2736425 A1

Current assignees

MARKS MICHAEL P
MARKS, MICHAEL P.
QUE, LIKE
THROMBX MEDICAL*

Inventors

MARKS MICHAEL P
QUE LIKE

Priority data including date

2011US-13191306 2011-07-26
2012CN-80036998 2012-07-25
2012US-13543657 2012-07-06
2012WO-US48158 2012-07-25
2016US-15190047 2016-06-22

IPC - International classification

A61B-017/22 A61B-017/221* A61F-002/01
A61M-025/00

CPC - Cooperative classification

A61B-017/22/032 A61B-017/221* A61B-017/3207/25
A61B-2017/00778 A61B-2017/22034 A61B-2017/22038
A61B-2017/22051 A61B-2017/2212 A61B-2017/2215
A61B-2019/481 A61B-2090/08021 A61F-002/01/3
A61F-2002/016 A61F-2230/0076 A61F-2230/008
A61F-2230/0093

PCL - US patent classification

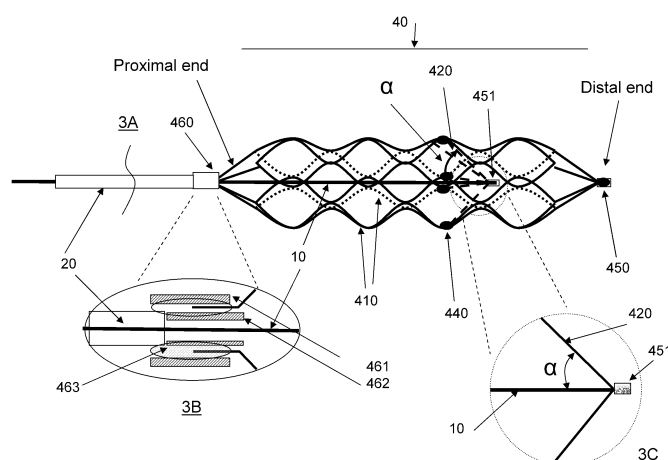
PCLO: 606200000* 606200000*

Family

ES2775193	T3	2020-07-24	   	JP2014525796	A	2014-10-02	   
EP2736425	B1	2020-02-05	   	EP2736425	A1	2014-06-04	   
CA2841980	C	2019-08-20	   	CN103764049	A	2014-04-30	   
CN108784887	A	2018-11-13	   	CA2841980	A1	2013-01-31	   
US20160361077	A1	2016-12-15	   	US20130030460	A1	2013-01-31	   
JP6025846	B2	2016-10-21	   	US20130030461	A1	2013-01-31	   
EP2736425	A4	2015-02-11	   	WO2013/016435	A1	2013-01-31	   

(EP2736425)

A device and a method for **increasing** or restoring a flow in a body lumen are provided. The device and the method may treat conditions like a stroke by removing a **clot** from a blood vessel and/or reopen the vessel. The device may have an expandable compartment comprising a reconfigurable element and a supportive element. The supportive element can adjust a radial force and a configuration of the reconfigurable element, thereby allowing efficient **removal** of a **clot** from a blood vessel and/or reopen the vessel with least or no damage to the vessel. Alternatively, the device may have an engaging compartment comprising a distal engaging element and a proximal engaging element. A **clot** in a blood vessel may be engaged in and/or between the distal and proximal engaging elements. The positions of one or both of the engaging elements and the distance therebetween can be adjusted to ensure the engagement of the **clot** or occlusion.



Device for reopening occluded blood vessels

EP2344052 A1

Current assignees

PHENOX*

Inventors

MILOSLAVSKI ELINA

MONSTADT HERMANN

HANNES RALF

Priority data including date

2008DE-10038195 2008-08-19

2009WO-EP06018 2009-08-19

IPC - International classification

A61B-017/22 A61B-017/221* A61F-002/82

A61L-033/00 A61M-025/01 A61M-025/09

CPC - Cooperative classification

A61B-017/22/031 A61B-017/221* A61B-2017/22034

A61B-2017/22042 A61B-2017/2212

PCL - US patent classification

PCLO: 606159000*

PCLX: 606200000

Family

[CN102176870](#)

B 2015-07-15

[US8945161](#)

B2 2015-02-03

[ES2453620](#)

T3 2014-04-08

[EP2344052](#)

B1 2013-12-25

[US20110224707](#)

A1 2011-09-15

[CN102176870](#)

A 2011-09-07

[EP2344052](#)

A1 2011-07-20

[DE102008038195](#)

A1 2010-02-25

[WO2010/020408](#)

A1 2010-02-25

(EP2344052)

The invention relates to a device for **opening** occluded blood vessels, comprising a mesh structure (2) on a guide wire (1). Said mesh structure (2) is fixedly and permanently connected to the guide wire (1) and consists of a plurality of filaments (4) which extend in a helix-type manner and are combined into a bundle at least at the proximal end. The mesh structure (2) takes a stretched shape having a smaller **diameter** when subjected to **external** force while defining a tubular element that has a **larger diameter** and is closed at the proximal end in the relaxed state. The device has a bracing made of fibers (9).

