Retriever Medical Secures EU Patent for Clot Removal Device

Patented device with adjustable spheres that surround clots for safer, more effective removal

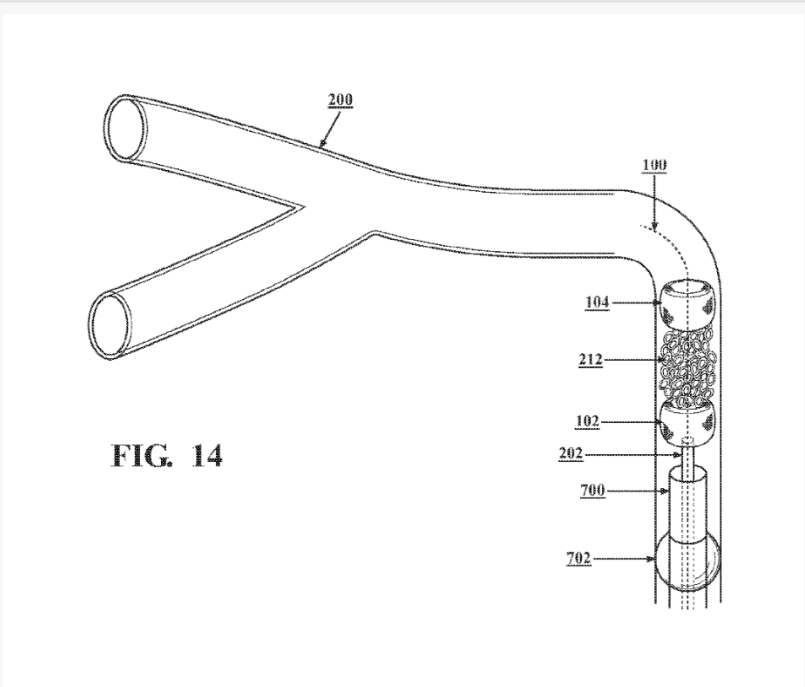


FIG. 14

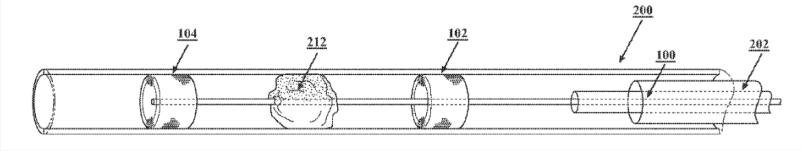
ClotHound device deployed in vasculature: distal and proximal spheres encase the clot, ensuring precise and safe removal through the aspiration catheter.

LAS VEGAS, NV, UNITED STATES, April 2, 2025 /EINPresswire.com/ -- Retriever Medical, Inc., a leader in advanced medical device solutions, is proud to announce that the European Patent Office has granted patent number 3697325 for its groundbreaking invention titled "Catheter-Based Retrieval Device with Proximal Body Having Axial Freedom of Movement." This patent marks a significant advancement in the field of occlusion removal, offering a versatile and effective solution for capturing and removing thrombi, biological matter, and foreign objects from various anatomical systems, including the vascular system, ducts, ureters, and urethra.

The patented device addresses critical limitations in existing occlusion removal technologies by introducing a novel design featuring a first proximal body and a second distal body mounted to a delivery wire. The first body is releasably engaged to the delivery wire, remaining fixed while engaged but capable of axial movement along the wire up to 5cm upon release. This unique mechanism, facilitated by a mechanically breakable or electrolytically/heat-disconnectable connection, allows the device to dynamically adapt to the size and location of the target occlusion within a vessel or cavity. Both the proximal and distal bodies, which may be constructed from nitinol mesh, expand upon exiting the delivery catheter, enabling them to surround and

> Retriever Medical's patented device surrounds clots from both sides, adapting dynamically to improve precision and safety in occlusion removal."
>
> *Ben Bobo*

contain occlusions effectively.



Retriever Medical's ClotHound device in action: dual spheres dynamically surround a clot, showcasing precision and safety in occlusion removal.

"Current occlusion removal devices often lack the flexibility and precision needed to effectively manage sub-acute, chronic, and impacted clots," said Ben Bobo, CEO of Retriever Medical, Inc. "Our patented technology overcomes these challenges by providing clinicians with a dynamic solution that surrounds the clot from both sides, reducing the risk of distal embolization and improving patient outcomes."

Key features of the device include:

- Dynamic Containment: The distal and proximal spheres expand to surround the clot from both sides, adapting to its size and shape without the need for pre-selected fixed dimensions.
- Axial Adjustability: The proximal body's 5cm range of axial movement along the delivery wire ensures precise positioning to encase the clot effectively.
- Simplified Design: Streamlines deployment and operation compared to traditional multi-catheter systems, reducing complexity and cost.
- Enhanced Safety: Surrounding the clot with both spheres minimizes the risk of secondary emboli, providing superior distal protection during extraction.

The invention also encompasses innovative methods and systems for occlusion removal. One such method involves advancing a delivery catheter through a guide catheter, deploying the distal sphere beyond the occlusion, and expanding the proximal sphere on the near side. The proximal sphere is then released to move along the delivery wire up to 5cm, surrounding the clot in tandem with the distal sphere before retraction from the patient. This approach ensures comprehensive capture and removal, even in challenging anatomical environments.

Retriever Medical, Inc. believes this technology will revolutionize interventional procedures across multiple medical disciplines. The company is committed to advancing patient care through continued innovation and is exploring opportunities to bring this device to market in Europe and beyond.

Ben Bobo
Retriever Medical, Inc.
+1 714-654-2367
email us here
Visit us on social media:
X
LinkedIn