

Retriever Medical Secures U.S. Patent for Revolutionary Expandable Catheter Technology

Patented catheter tech with adjustable lumens promises to revolutionize minimally invasive procedures. #MedicalInnovation #CatheterDesign

LAS VEGAS, NV, UNITED STATES, August 13, 2025 /EINPresswire.com/ -- Retriever Medical, a

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This patented catheter technology could redefine minimally invasive procedures, offering unmatched adaptability for complex treatments."

Ben Bobo

pioneer in medical device innovation, proudly announces the issuance of <u>U.S. Patent No. 12,377,244</u>, granted on August 5, 2025, for its novel catheter technology featuring expandable and collapsible lumens. This patented concept introduces a transformative approach to catheter design, poised to redefine minimally invasive medical procedures by offering unparalleled adaptability and precision.

The patented technology outlines a catheter capable of dynamically adjusting its lumen size, transitioning from a

compact, collapsed state for navigating complex vascular pathways to an expanded state for delivering critical medical tools or therapies. By incorporating electrical conduits within the catheter's outer wall, the design leverages controlled electrical currents to modulate lumen size, enabling seamless transitions between states to meet clinical demands.

"This patent is a testament to Retriever Medical's commitment to innovation and addressing unmet needs in interventional medicine," said Ben Bobo, CEO of Retriever Medical. "The concept of a catheter that can adapt its size during a procedure has the potential to revolutionize how physicians approach challenging anatomies, paving the way for safer, more effective treatments."

Highlights of the patented technology include:

>Adaptive Lumen Design: The catheter can shift from a collapsed state (as small as 2 French) to an expanded state (up to 22 French), facilitating access to intricate anatomical sites while accommodating a wide range of procedural tools.

>Electromagnetic Control: Embedded electrical conduits enable precise lumen expansion or

collapse through magnetic forces, offering real-time adaptability for diverse clinical scenarios.

>Potential for Enhanced Outcomes: The low-profile collapsed state minimizes trauma during insertion, while the expanded state supports the delivery of therapies such as stents, balloons, or thrombectomy devices.

This patented technology promises to advance applications in vascular interventions, thrombectomy procedures, and therapeutic delivery, offering a versatile solution for navigating and treating complex anatomical structures. While not yet a commercialized device, this patent lays the foundation for future development of catheters that could streamline procedures and improve patient outcomes.

"We are thrilled to secure this patent, which positions Retriever Medical at the forefront of next-generation medical device innovation," added Bobo. "This milestone fuels our momentum as we explore the development of this technology to transform patient care."

Retriever Medical is committed to advancing this patented concept toward practical application, with plans to pursue further research and development to bring this innovation to the medical community. For more information about Retriever Medical and its pioneering work, please visit the <u>Retriever Medical website</u> or contact info@rtvmed.com.

About Retriever Medical

Retriever Medical is dedicated to advancing medical device innovation, focusing on solutions that enhance precision and efficiency in minimally invasive procedures. With a vision to improve patient outcomes, Retriever Medical is shaping the future of healthcare through cutting-edge technologies.

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