Single Ended Draw Lines For Medical Device Application

Tech ID: 28765 / UC Case 2017-591-0

BRIEF DESCRIPTION

Minimizing the movement of deployed transcatheter heart valves and stents during detachment using single ended draw lines.

FULL DESCRIPTION

Transcatheter heart valves and stents require significant precision to properly position and deploy the implanted device to achieve desirable medical outcomes. A plurality of draw lines is often used as a means of controlling the placement of heart valve and stent's during the implantation procedure. After proper positioning and deployment of the implant, the implant is detached from the delivery system. During the detachment process, the implant is subjected to stresses induced by the draw lines as they are pulled through the stent or heart valve. The motion induced by the detachment process could alter the position of the deployed implant and compromise the implanted heart valve or stent's effectiveness.

Researchers at the University of California, Irvine, have developed a method to minimize stent or heart valve motion induced during the detachment process by utilizing single ended draw lines. The single ended draw line design eliminates the need for several knots in the draw lines that would otherwise get caught in the implanted device as the draw lines are retracted. This improved draw line design will reduce the risk of transcatheter stent or heart valve procedure complications during device detachment.

SUGGESTED USES

Minimizing transcatheter heart valve and stent movement post deployment when the catheter is retracted

ADVANTAGES

Reduced surgical complications for transcatheter heart valve and stent implantation

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	10,952,880	03/23/2021	2017-591

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OTHER INFORMATION

CATEGORIZED AS

- **Medical**
  - Delivery Systems
  - Devices
  - Disease: Cardiovascular and Circulatory System
- **Sensors & Instrumentation**
  - Medical

RELATED CASES

2017-591-0

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