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(54) **Title:** MICROFABRICATED CATHETER DEVICES WITH HIGH AXIAL STRENGTH

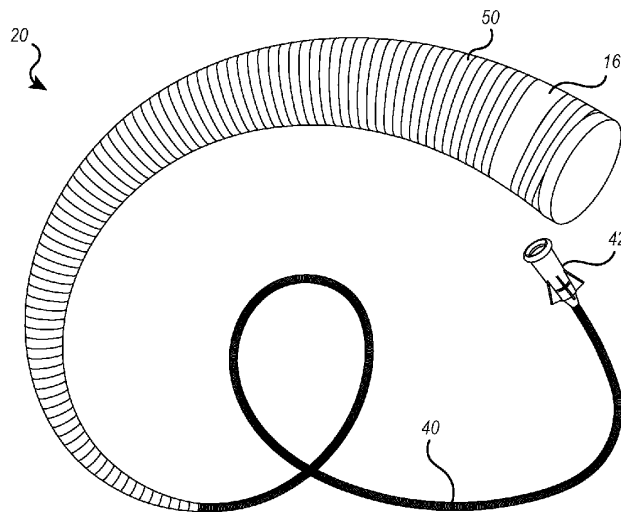


FIG. 1

(57) **Abstract:** This disclosure describes microfabricated intravascular devices that are configured for high axial strength while also maintaining effective bending flexibility. A tube member includes a series of circumferentially extending rings connected to one another by a series of axially extending beams. Transverse cuts separate and define the rings. A series of axial cuts are aligned with the beams and extend from the beams partially into the adjoining rings so that the beam length is nested partially within the axial length of the adjoining rings. This increases the functional length of the beams to provide bending flexibility while still sufficient ring structure to provide effective axial stiffness.

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WO 2022/076472 A1

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