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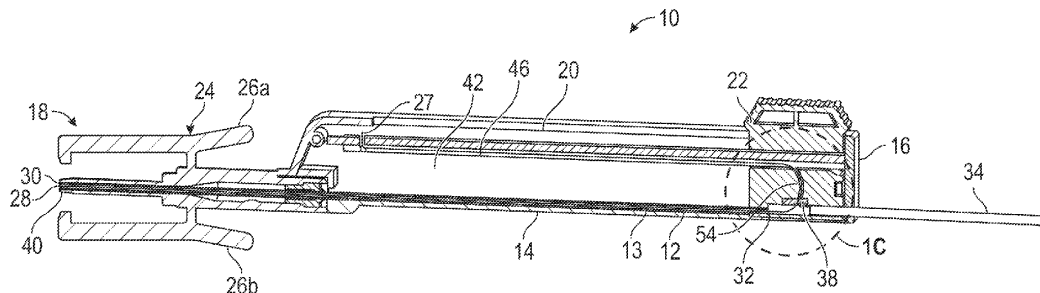


FIG. 1B

(57) Abstract: A catheter assembly may include an adapter having a distal end, a proximal end, a side port, and an adapter lumen. The catheter assembly may include a catheter hub, which may include a distal end, a proximal end, a catheter hub lumen, and another side port. The catheter assembly may include an extension tube. A distal end of the extension tube may be coupled to the other side port, and the distal end of the adapter may be coupled to a proximal end of the extension tube. A fluidic seal may be formed around a tube of an instrument advancement device when the tube is advanced into the adapter. As an example, a portion of the adapter lumen between the distal end of the adapter and the side port may include an annular protrusion configured to form the fluidic seal.

[Continued on next page]

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