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(54) Title: ANNULAR VALVE SECUREMENT WITHIN A CATHETER ASSEMBLY

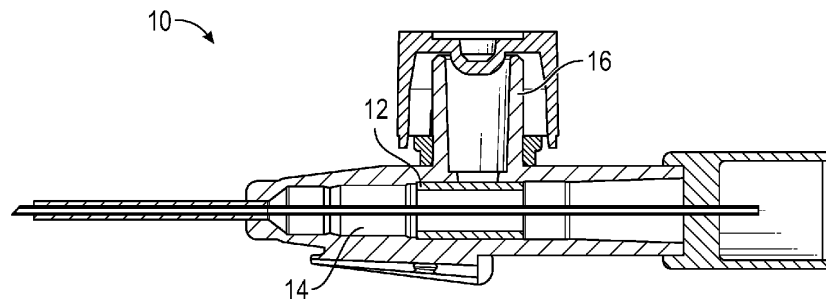


FIG. 1

(57) Abstract: A catheter system (18) may include a catheter assembly (20, 68, 100, 103). The catheter assembly may include the catheter adapter (22), which may include a distal end (24), a proximal end (26), an inner surface (28) forming a lumen (30), the lumen extending through the distal end and the proximal end, and a side port (32) disposed between the distal end and the proximal end. The catheter assembly may include an annular valve (34), which may be disposed within the lumen and aligned with the side port. The annular valve may seal a fluid pathway from the side port to the lumen. The catheter assembly may include a retainer ring (36) or a bump (102) disposed proximal and/or proximate the annular valve within the lumen. The catheter assembly may include a catheter (12) extending distally from the distal end of the catheter adapter.

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