

United States Patent [19]

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Hillstead et al.

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[54] **ANGULAR SHEATH INTRODUCER**

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[51] **Int. Cl.⁶** **A61M 5/00**

[52] **U.S. Cl.** **604/264; 604/164; 604/167; 604/169; 604/171; 604/284**

[58] **Field of Search** 128/772; 604/27, 604/43, 44, 45, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 169, 170, 171, 264, 280, 284; 606/108

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[57] **ABSTRACT**

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A sheath introducer for a catheterization or similar procedure comprises a body having an upper portion and a lower portion, the lower portion being angled with respect to the upper portion; a curved tapering channel extending through the upper and lower portions; a cannula with a tapered distal end extending at an angle with respect to the upper portion a hemostatic valve having an access port and a fluid tight slit opening and seated within the upper portion and maintained by a cap; and an angled sideport in fluid communication with the channel. Optionally, a wiper flange extends inward within the valve access port which provide an additional fluid tight seal when a catheter is slidingly inserted, removed or maintained within the valve. A dilator can be adapted for use with the introducer by having a bend in the tube portion of the dilator.

15 Claims, 6 Drawing Sheets

