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# United States Patent [19]

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## Cuppy

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### [54] CATHETER SYSTEM

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4,907,599	3/1990	Taylor	128/734
4,944,308	7/1990	Akedfeldt	128/754 X
4,994,042	2/1991	Vadher	604/165
5,129,884	7/1992	Dysarz	604/164
5,400,798	3/1995	Baran	128/754

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[51] Int. Cl.<sup>6</sup> ..... **A61M 5/00**

### [57] ABSTRACT

[52] U.S. Cl. .... **604/164**; 604/161; 604/165; 128/749

The catheter system is used to safely insert a plastic catheter into a peripheral vein of patient who needs access for fluid and/or drug therapy. The catheter has added to the normal catheter hub a secondary port Y-Port that is used to attach IV line when catheter is inserted. This Y-port also has a one-way check valve to prevent blood from backing out the Y-port before the line is attached. The terminal end of the catheter hub has a rubber stopper to prevent blood from leaking out after the needle is removed. This feature effectively closes the previously open hub of the catheter, thus allowing near-bloodless IV access and allowing the flash chamber to be located within hub. The needle also includes a vent hole that vents blood into the flash chamber. A safety tube assembly as the back half of the catheter system includes protective tube and release mechanism which functions are to spring the needle out of catheter and house the used needle safely within the telescoping tube of the needle shuttle when trigger is pressed. The push flanges on the catheter hub are for easy catheter insertion and separation of the needle from the catheter.

[58] Field of Search ..... 128/749, 753, 128/754; 604/160, 161, 164, 165, 167

### [56] References Cited

#### U.S. PATENT DOCUMENTS

3,500,828	3/1970	Podhora .	
3,670,729	6/1972	Bennett et al. ....	604/164 X
3,714,945	2/1973	Stanley .	
3,977,400	8/1976	Moorehead .	
3,994,293	11/1976	Ferro .	
3,995,619	12/1976	Glatzer .....	128/749 X
4,106,491	8/1978	Guerra .	
4,200,096	4/1980	Charvin .	
4,468,224	8/1984	Enzmann et al. ....	604/164 X
4,531,987	7/1985	Yates .....	604/164 X
4,549,554	10/1985	Markham et al. ....	128/753
4,735,215	4/1988	Goto et al. ....	128/754
4,828,548	5/1989	Walter .	
4,874,373	10/1989	Luther et al. .	
4,893,635	1/1990	DeGroot et al. ....	128/754
4,894,052	1/1990	Crawford .	

**1 Claim, 15 Drawing Sheets**

