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(54) Title: INTERLOCKING NEEDLE HUB AND CATHETER HUB ACTUATOR TO INCREASE RIGIDITY OF IV CATHETER ASSEMBLY

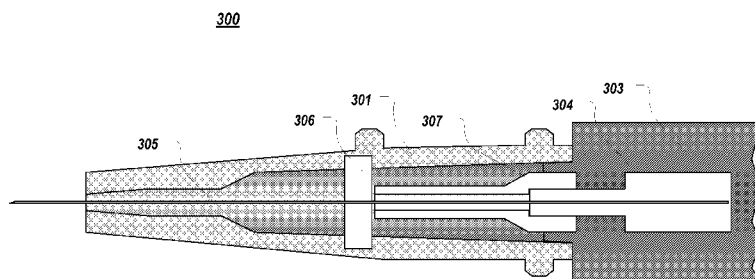


FIG. 3A

(57) Abstract: The present invention extends to a design of a needle hub and an actuator of a catheter assembly that allows the needle hub and actuator to interlock within the catheter hub. This interlocking allows the needle hub to be inserted into the catheter hub thereby increasing the rigidity of the catheter assembly. The interlocking can be accomplished by forming channels in the proximal end of the actuator and corresponding protrusions from the distal end of the needle hub. In some embodiments, the channels and protrusions can be formed at the top and bottom of the catheter hub and needle hub respectively to thereby increase the vertical rigidity of the catheter assembly. The increase in vertical rigidity can prevent flexing of the catheter hub with respect to the needle shield when a downward force is applied to the catheter assembly such as is common during insertion of the needle.



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