Abstract

A hypodermic needle of the present invention includes an elongate hollow tube with a proximal end, a distal end and has a bore therethrough. The proximal end of the needle of the invention has a hub fixedly attached thereto to connect the needle releasably to a fluid handling device with the distal end having a point for facilitating penetration of the needle into a patient's tissue. The outside surface of the tube has a proximal portion with a lower coefficient of sliding friction with the patient's tissue than the coefficient of sliding friction with the patient's tissue than a distal portion of the outside surface of the tube. The higher coefficient of friction of the distal portion enables a practitioner to substantially discriminate the needle's penetration of structures in the patient's tissue while the lower coefficient of friction proximal portion substantially reduces drag force for passage of the proximal portion through the structures already penetrated by the distal portion.

This Sheet Has Been Replaced

