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(54) Title: MEDICAL NEEDLE SAFETY APPARATUS AND METHODS

(57) Abstract

Parts which may be integrally molded with a phlebotomy barrel (10, 24) or with a Luer fitting to provide, in a single molded part, an extendable safety enclosure (140) for a medical cannula (34, 40) in phlebotomy, syringe and other general medical needle applications. Integrally molded part phlebotomy safety devices (100) are disclosed which require only the integrally-molded part (110), a medical needle (40), a label and a transport needle cover (118) to form a ready-to-use phlebotomy device (100). Upon removal of the label and needle cover (118), the device is ready for use in a medical procedure. The enclosure (140) comprises a plurality of rigid segments (150, 160, 170) serially connected by a plurality of intersegment hinges (162, 172), which are preferably living hinges. The segments (150, 160, 170) are disposed about a medical needle (40), folded upon each other during the medical procedure and extended at the end of the procedure to form a secure, substantially rigid safety shroud (140). During the procedure, the enclosure (140) is folded and conveniently disposed about a proximal portion of the needle (40). At the end of the procedure, the enclosure (140) is extended to protectively sheath and secure the needle (40) in a substantially rigid structure formed in combination by the enclosure (140) and the needle (40).

