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Thibault et al.

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(54) **PLASTIC CLOSURE FOR VIALS AND OTHER MEDICAL CONTAINERS**

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(57) **ABSTRACT**

The plastic closure of this invention is particularly, but not exclusively adapted for sealing medicament vials and other medical containers or as a collar for retaining a fluid transferset on a medical container. The plastic closure of this invention includes a generally tubular portion which surrounds the rim of the container and a free end portion which is permanently radially deformed or crimped into the neck of the container. The plastic closure of this invention is formed of a polymer, preferably a polymeric alloy or melt blend, which is sufficiently malleable to permit radial deformation, yet sufficiently rigid to retain its shape following deformation and sufficiently resistant to creep to maintain the seal between the plastic closure and the container following deformation. A preferred polymer for the plastic closure of this invention is an alloy or melt blend comprising a relatively rigid polymer such as polycarbonate and a soft malleable co-polymer such as a polyester. Where the plastic closure of this invention is used to seal a vial, for example, the closure includes a radial portion overlying the rim portion of the stopper having a central opening and a cup-shaped cap is received over the collar having retainer portions received within the central opening of the cap which may be removed by finger pressure. When the collar of this invention is used to secure a fluid transferset on a vial, the collar includes a proximate tubular portion integral with the radial portion which surrounds at least a portion of the transferset. In one embodiment, the second tubular portion surrounds the entire transferset and the open end is sealed with a peel-off seal and in another embodiment a separate cap surrounds the distal end of the transferset.

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B65D 41/28

(52) **U.S. Cl.** **215/249**; 215/247; 215/251;
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604/411; 604/415

(58) **Field of Search** 215/247, 249,
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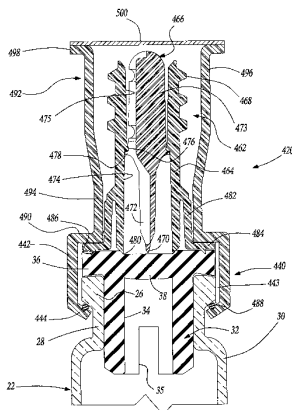
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21 Claims, 5 Drawing Sheets



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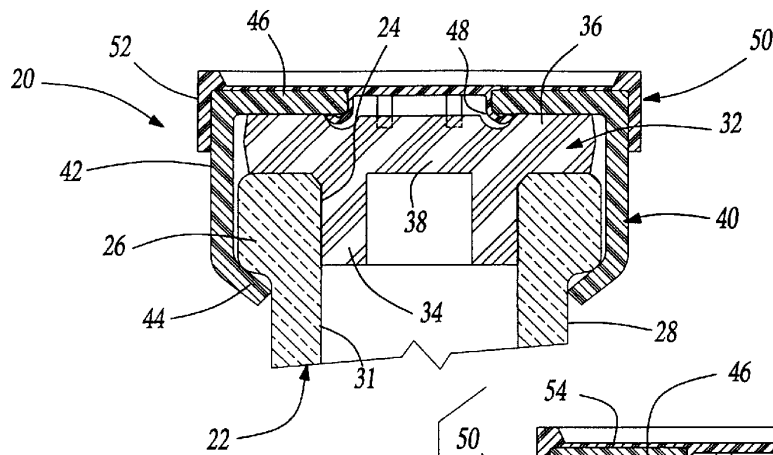


Fig-1

Fig-2

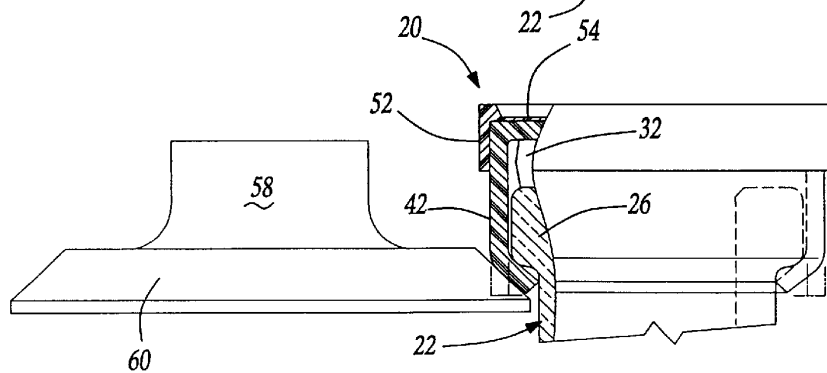
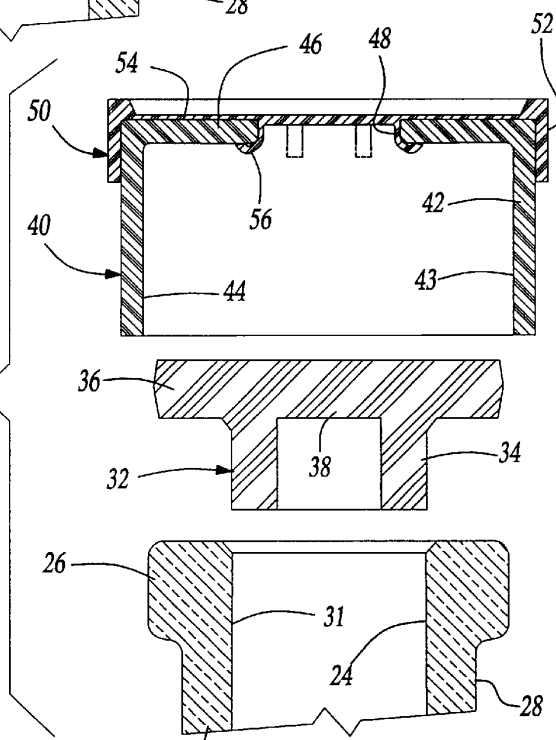


Fig-3

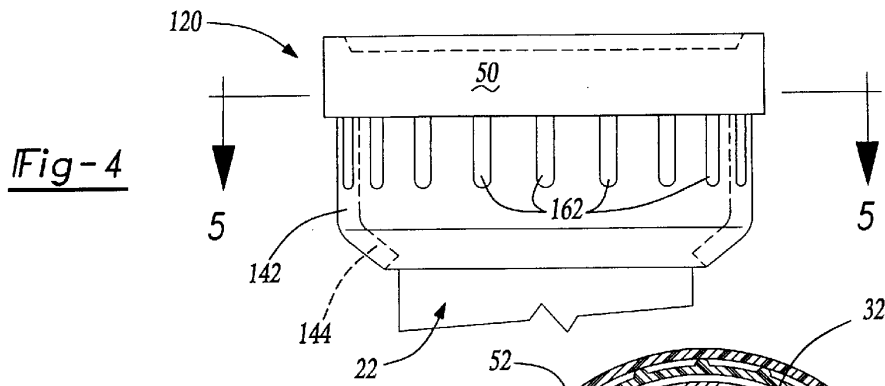


Fig-4

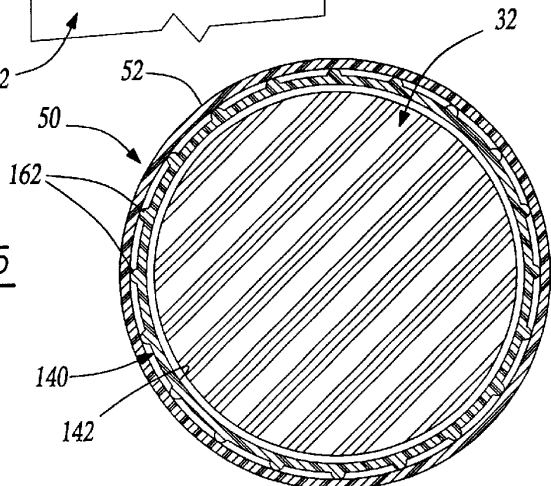


Fig-5

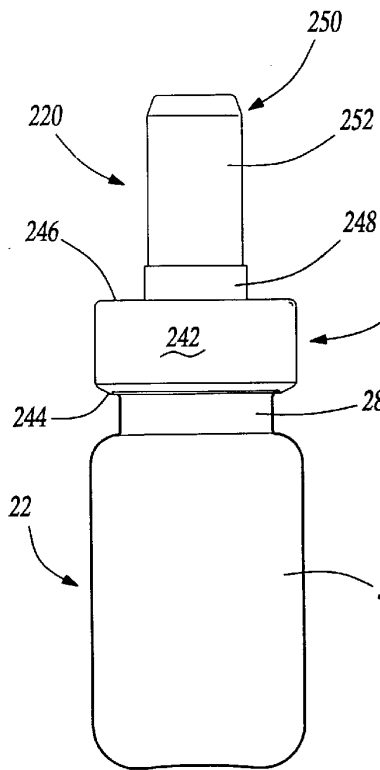


Fig-6

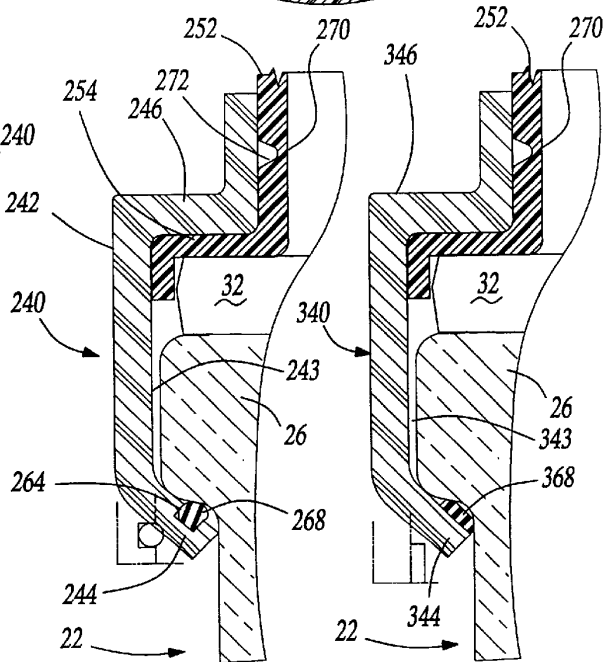


Fig-7

Fig-8

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