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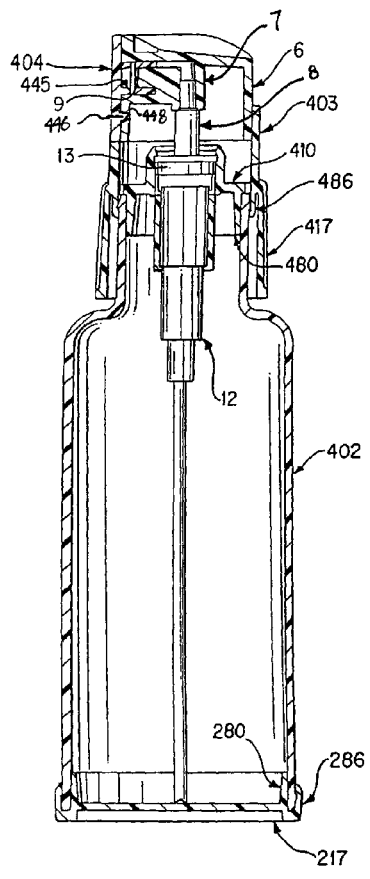
(54) Title: SPRAY DISPENSING DEVICE WITH NOZZLE CLOSURE



(57) Abstract: In accordance with embodiments of the present invention, an apparatus includes an actuator with a spray nozzle and an opening adjacent the spray nozzle. The actuator dispenses spray through the spray nozzle when the actuator is depressed to operate a pump or an aerosol valve. A wall including the spray opening at least partially surrounds the actuator and the spray nozzle is aligned with the spray opening during dispensing whereby spray exiting the spray nozzle passes through the spray opening. Also included is a nozzle closure, with a first projection and a second projection. The first projection fits into the opening adjacent the spray nozzle thereby sealing the spray nozzle. The nozzle clusure has a hinge allowing pivotal movement of the nozzle closure from a closed position, at which the first projection fits into the opening in the wall adjacent the spray nozzle, and the nozzle closure closes the spray opening, to an open position, where the spray opening is open to permit the spray to pass through the spray opening when the actuator is depressed. The second projection is placed on the closure between the hinge and the first projection and fits in a recess in the actuator, engaging the recess when the nozzle closure is in a closed position and preventing actuation of the actuator when the nozzle closure is closed. When in the closed position, a degree of opening resistance between the nozzle closure and the wall or actuator may provide a measure of child-resistance. A removable tab may be included to provide evidence of tampering with the nozzle closure. A spring may also be included to outwardly bias the actuator and provide the proper alignment between the first and second projections and the opening and recess, respectively.

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