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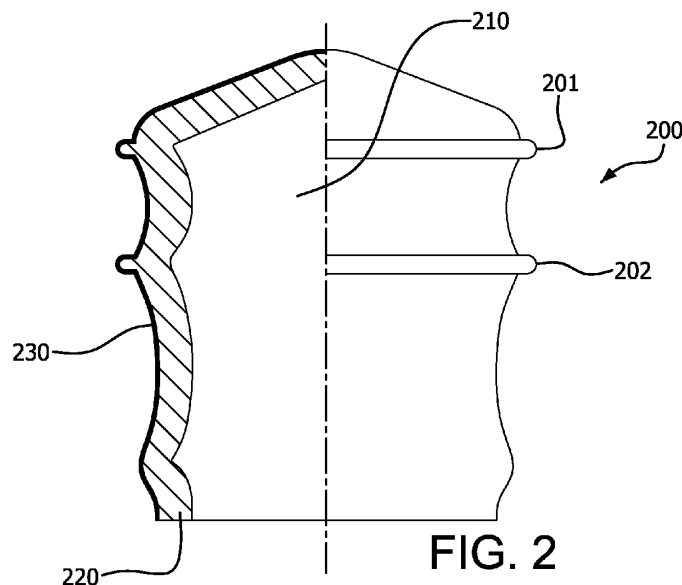
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(54) Title: DRUG INJECTION STOPPER WITH THIN FILM LUBRICANT



(57) Abstract: A syringe stopper containing a low level (i.e., from about 0.3 μg to about 100 μg) of a thin film lubricant is provided. The stopper may be positioned within a barrel of a syringe or an autoinjector. The stopper includes an elastomeric body, a solid lubricant, and a thin film lubricant. The amount of thin film lubricant present on a stopper is below a level that will induce particulation in a silicone free barrel. Additionally, the low level of thin film lubricant allows for a lower breakaway force (both wet and dry), average slide force, and a reduction in glide force compared to stoppers with no thin film lubricant. The low amount of the thin film lubricant present on the stopper also lowers the average insertion force within a syringe or vent tube compared to stoppers with no thin film lubricant, thereby allowing improved machinability inclusive of insertion.

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