ABSTRACT

INHALER FOR POWDERED MEDICATIONS

A powder dispenser includes a powder housing for holding a supply of powdered material to be dispensed, the powder housing including an inhalation conduit provided displaced relation to the powdered material supply; a metering plate including a metered dose hole for holding a metered amount of the powdered material, and positioned below the powdered material supply, the metering plate and the powder housing being relatively rotatable with respect to each other about a common central axis; a counter providing a visual count of the number of doses of the powdered material that have been dispensed or remain to be dispensed in response to the relative rotation, the counter including counter rings providing the visual count, the counter rings being rotatable about the common central axis and having indicia thereon which display the visual count, and an actuating mechanism rotatable about the central axis for incrementally rotating the counter rings in response to the relative rotation; a nozzle for breaking up agglomerates of powdered material from the inhalation conduit to form micronized powdered material, the nozzle including a cavity for changing the direction of flow of the powder from the direction of the inhalation conduit to a second different direction, and a curved wall for substantially continuously changing the direction of flow of the powder in a spiral manner in the second direction in the cavity; and a closure cap covering the powder housing and priming the powder dispenser for use automatically upon removal thereof.

Figure 3

This Sheet Has Been Replaced

