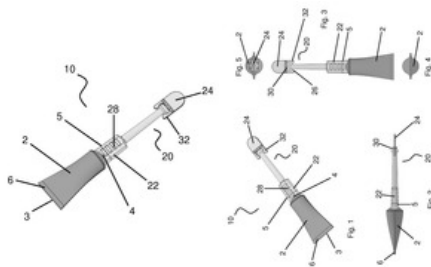
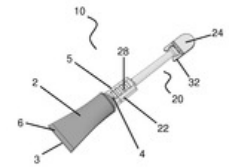
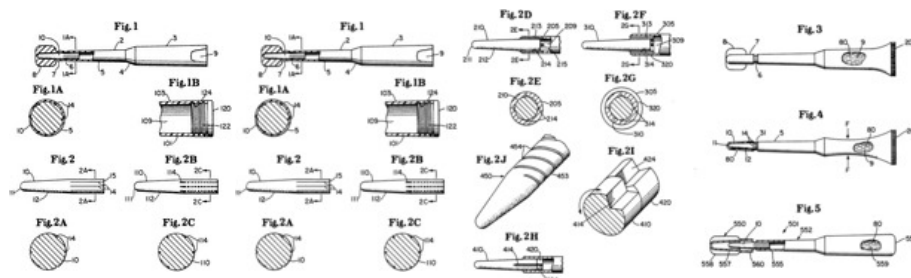
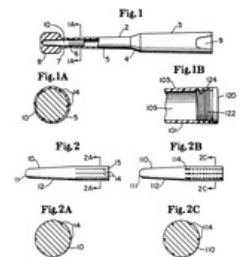


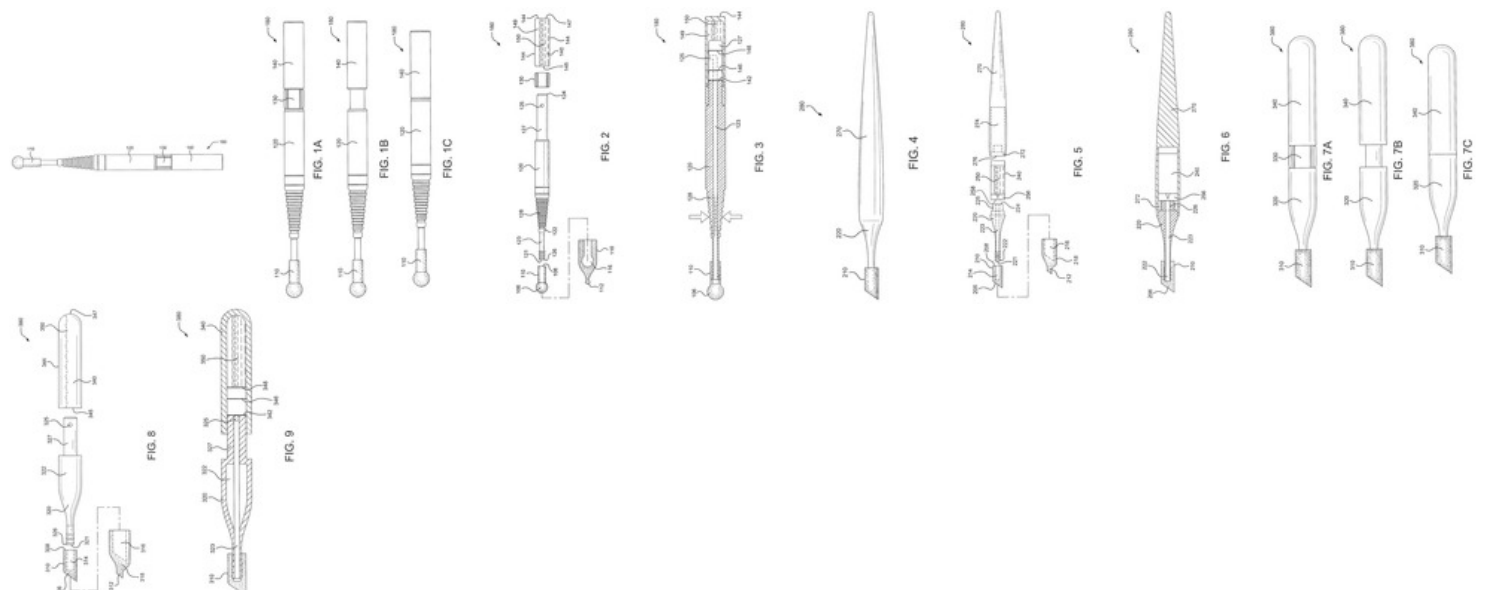
The invention relates to a tube with an application tip (10) for a liquid or pasty medium, in particular medicinal product. The tube has a tube body (2) with an end (3) which can be closed or which is already closed and with an outlet end. The outlet end of the tube has a tube neck (5) with an outlet opening. The tube furthermore has an application tip (20) which is elongate in the longitudinal direction of the tube and which is connected to the outlet end of the tube and which has an inner duct which connects an inlet opening and an application opening. On the application opening of the application tip there is integrally formed a closure (24) which closes off the application opening. The application tip has a grip means (22).

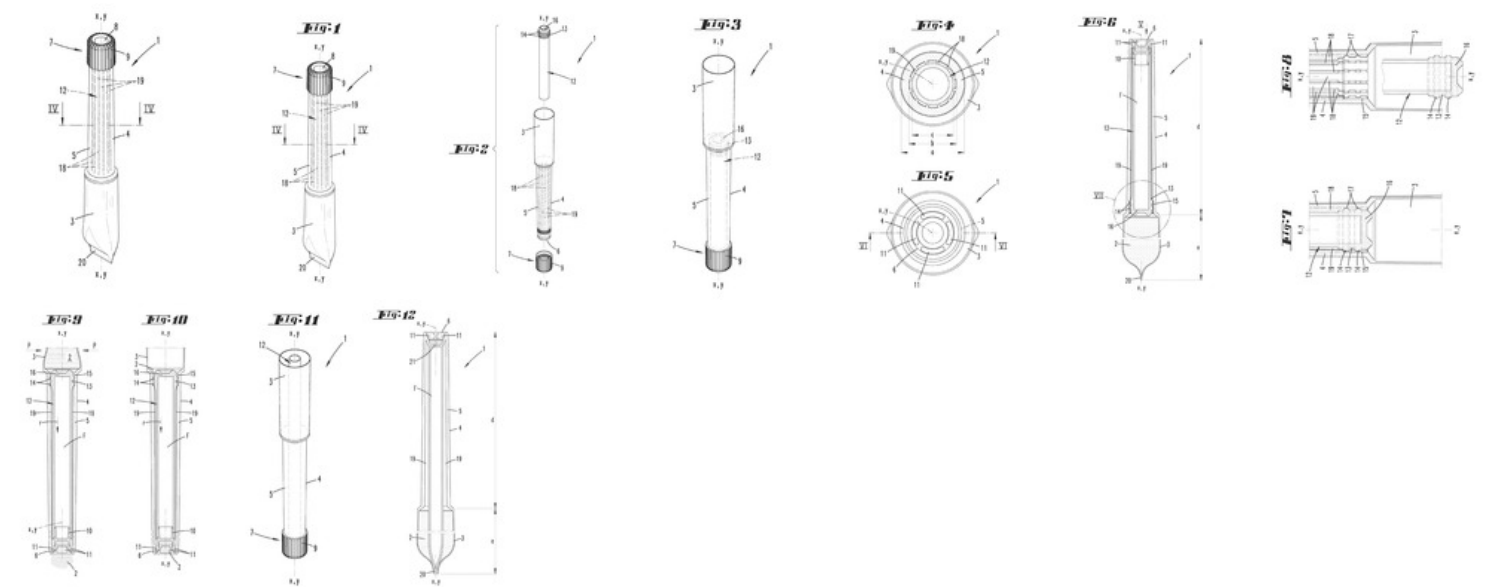


A dispenser for the topical application of a liquid product. In a preferred embodiment of the present invention, the dispenser comprises a compressible reservoir (3), a feed tube (2), a smooth, substantially non-porous applicator tip (10), and a tip cover (8). Compression of the reservoir causes liquid product to flow onto the exposed surface of the applicator tip (10) and form an encapsulating sheet of the liquid product. The liquid product may then be transferred from the applicator tip to the surface to be treated by contacting the surface with the liquid product coated applicator tip (10).



Applicators for storing, sterilizing, and dispensing adhesives are provided. The applicators comprise a porous tip, a body, and a container containing a polymerizable cyanoacrylate monomer adhesive. The applicators are sterilized by radiation, and following sterilization, the adhesive remains substantially unpolymerized for about twenty four months.



4.	Plastic tube designed for pressing out a liquid to pasty mass	WO2016045720	2014-09-24	RPC BRAMLAGE*	2016-03-31	2016-03-31
The invention relates to a plastic tube (1) designed for pressing out a liquid to pasty mass (2), comprising a discharge opening (6), a supply space (3) designed to be compressed, and a tube neck (4), which connects the supply space (3) to the discharge opening (6), wherein a mass line (19) having a line cross-section through which mass (2) can flow extends through the tube neck (4), which cannot be used to press out the mass (2) by means of a manual force of a user. In order to design a plastic tube (1) of the type in question in an improved manner in such a way that a residual amount of mass (2) remaining in the tube neck (4) is minimized after the mass has been pressed out of the supply space (3), the tube neck (4) according to the invention is designed, with regard to a free space that can be filled with mass as mass (2) is pressed out, in such a way that a volume of the mass (2) located in the tube neck (4) during the pressing out corresponds to a third or less of a volume that is given by the dimensions of the tube neck (4).						
						

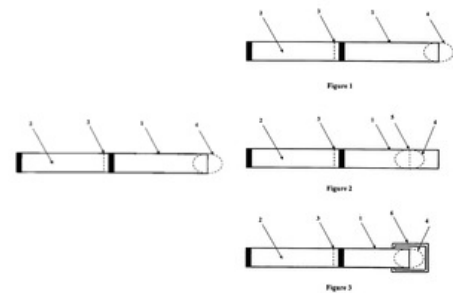
5.	Application device for use in tube for distribution of pasty or liquid medium, particularly medical effective ointment, on human or animal skin, has fixing shoulder for fixing on container, particularly tube, which is filled with medium	DE102011009504	2011-01-26	BOEHRINGER INGELHEIM INTERNATIONAL*	2011-08-04	2011-08-04
The application device has a fixing shoulder (5) for fixing on a container, particularly a tube, which is filled with a medium. An application surface is provided as a component of an elastic application head (1), at which a flexible neck piece (4) is attached. The application surface is mobile and detachably connected with the fixing shoulder. An independent claim is also included for a tube with a pasty medium, particularly pharmaceutical drug formulation.						
6.	Two-part plastic blank set	EP3248646	2016-05-25	MATTERN CLAUDIA	2017-11-29	2017-11-29
The invention relates to a two-part plastic blank set for producing an active substance applicator for storing a unit dose of an active substance preparation and for dispensing said unit dose into the human nose, wherein the plastic blank set comprises a lower part and a top part separated from the lower part, wherein the lower part has a receiving space molding enclosed by a sealing edge and a one-part molded-on application tube extends from the receiving space molding, which application tube at the free end thereof is closed by a closure integrally molded in one piece over an attachment element, wherein the attachment element has a wall thickness of 0.1 – 0.5 mm, preferably 0.2 – 0.3 mm, and wherein the top part has a size in order, when laid on the lower part, to completely cover the holding space molding of the same, and has a sealing edge which can be connected in a sealing manner to the sealing edge of the lower part, wherein an attachment platelet extending from the respective sealing edge, preferably in the same plane as the sealing edge, is integrally molded on the top part or on the lower part. The invention further relates to an active substance applicator that can be produced therefrom. (From WO2017202529 A1)						

7.	Distributor head for tubes and the like containers	DE29621250	1996-12-06	WERNER & MERTZ*	1997-01-23	1997-01-23
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No abstract available

8.	Container with applicator	US6779938	2003-04-22	BAYBRIDGE IP HOLDING* SWABPLUS*	2004-08-24	2004-08-24
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A small slender sealed container (1) with a built-in applicator (4) comprises of a small slender container with a first end and a second end with a sealed compartment near the first end with an opening means (3) for access to the contents in the sealed compartment. When the sealed compartment near the first end is opened through the opening means, it is separated from the applicator at the second end. The applicator may then be used to retrieve the contents of the sealed compartment and apply the contents to the desired location.



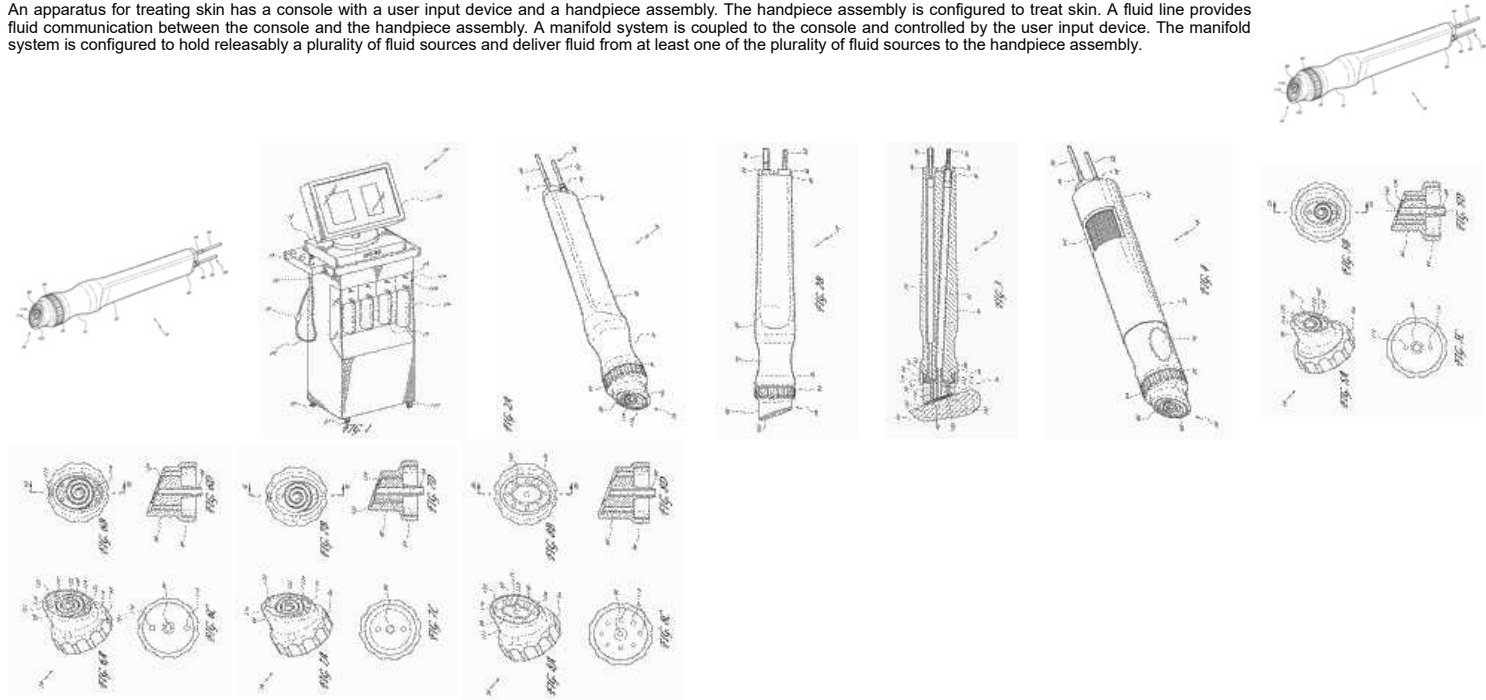
9.	Application device	DE202008001427	2007-08-20	DENTACO DENTALINDUSTRIE & MARKETING SULZER* SULZER MIX PACK	2008-04-03 2008-04-03
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An application device for applying a flowable substance is proposed, comprising: an outer sleeve (12) which has an outer peripheral wall (14) and an outer bottom (16), an inner sleeve (18) which has an inner peripheral wall (20) and an inner bottom (22), is guided in the outer sleeve (12) in a sealed manner and can be displaced between a closed position and an open position, an applicator (30) that engages at least partially in the inner sleeve (18), wherein the inner bottom (22) of the inner sleeve (18) has at least one opening (32), which in the closed position of the inner sleeve (18) is closed by a closing device (34) and in the open position of the inner sleeve (18) allows the flowable substance to pass through at least partially, wherein the applicator (30) during the movement of the inner sleeve (18) out of the closed position into the open position due to displacement is subjected to the flowable substance received in the receiving chamber (38) between the outer sleeve (12) and the inner sleeve (18) in the closed position.

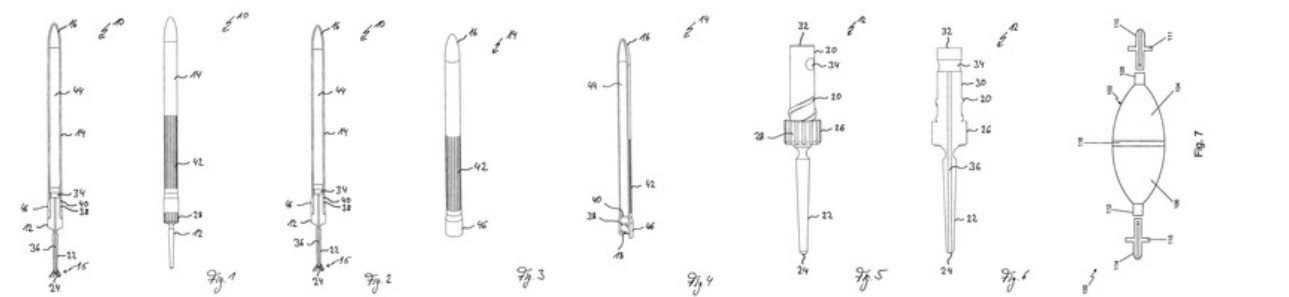
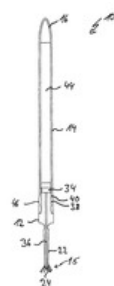


10.	Tip with embedded materials for skin treatment	US20070156124	2006-03-29	EDGE SYSTEMS* EDGE SYSTEMS INTERMEDIATE*	2007-07-05 2007-07-05
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An apparatus for treating skin has a console with a user input device and a handpiece assembly. The handpiece assembly is configured to treat skin. A fluid line provides fluid communication between the console and the handpiece assembly. A manifold system is coupled to the console and controlled by the user input device. The manifold system is configured to hold releasably a plurality of fluid sources and deliver fluid from at least one of the plurality of fluid sources to the handpiece assembly.



The invention relates to an apparatus for discharging a pourable substance, comprising an external jacket (14) that forms a receptacle for the pourable substance and at least one insert (12) which is cylindrical in some sections, is associated with an application tip (22), is open at one end and closed at the other end, and has at least one opening (34) on the circumference thereof, said opening (34) being connected to the open end.



12. Oral dosage form, useful to administer active agent to human/animal and treat organism or its (patho)physiological conditions, comprises a base body with an opening, where the body contains an active agent formulation and blowing agent

DE102009027938 2009-07-22 UNIVERSITY GREIFSWALD* 2011-01-27 2011-01-27

Oral dosage form comprises a base body with an opening (104), where the base body contains at least an active agent formulation and blowing agent.

13. Application device for distribution of paste or liquid medium i.e. medical effective ointment, on human or animal skin for package unit, has handle piece and resilient connected application head comprising resilient application surfaces

DE102011009505 2011-01-26 BOEHRINGER INGELHEIM INTERNATIONAL* 2011-08-04 2011-08-04

The device has an elongated handle piece (1) and a disk-like resilient connected application head (2) comprising primary and secondary resilient application surfaces (4, 5) on opposite sides. Circular elevations (6) are provided with different dimensions and run concentric to each other and an outer circumference of the application head. Elastic knobs are provided in different sizes. The primary application surface runs in an over-obtuse angle to a longitudinal axis of the handle piece and exhibits a larger surface than the secondary application surface. An independent claim is also included for a package unit comprising an application device.

14. Ointment delivery instrument into body opening - accommodates smaller application tip of larger sphincter dilating tip

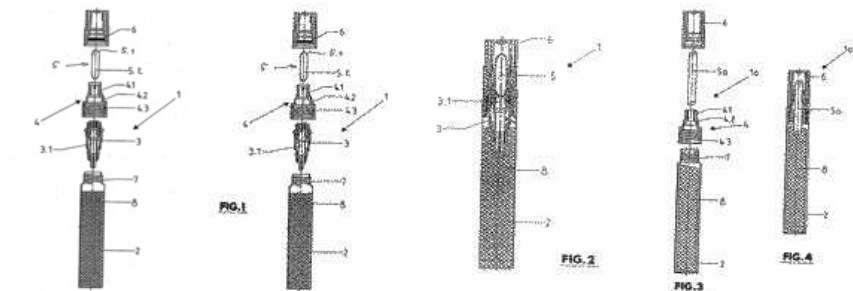
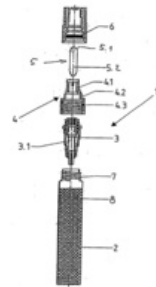
DE4107772 1991-03-11 RAUPACH UDO DR MEDICAL* 1992-09-17 1992-09-17

The instrument delivers ointment into a body opening controlled by a sphincter muscle, having an injecting portion accommodating a dose of the ointment. This is manually operated so as to deliver via a detachably-secured hollow tip inserted in the opening and having one or more lateral outlets in its wall. The injecting portion can be fitted with a smaller-diameter application tip (44), or a larger-diameter sphincter-dilation tip, as desired. The respective diameters can be 1.0 to 1.2 cm. and 2.0 to 3.0 cm. They can be cylindrical and with domed ends, the respective lengths being 4.5 cm. and 9.0 to 10.0 cm. ADVANTAGE - Simplicity and ease of use, both for injection and subsequent anal dilation to ensure ointment enters fissures.

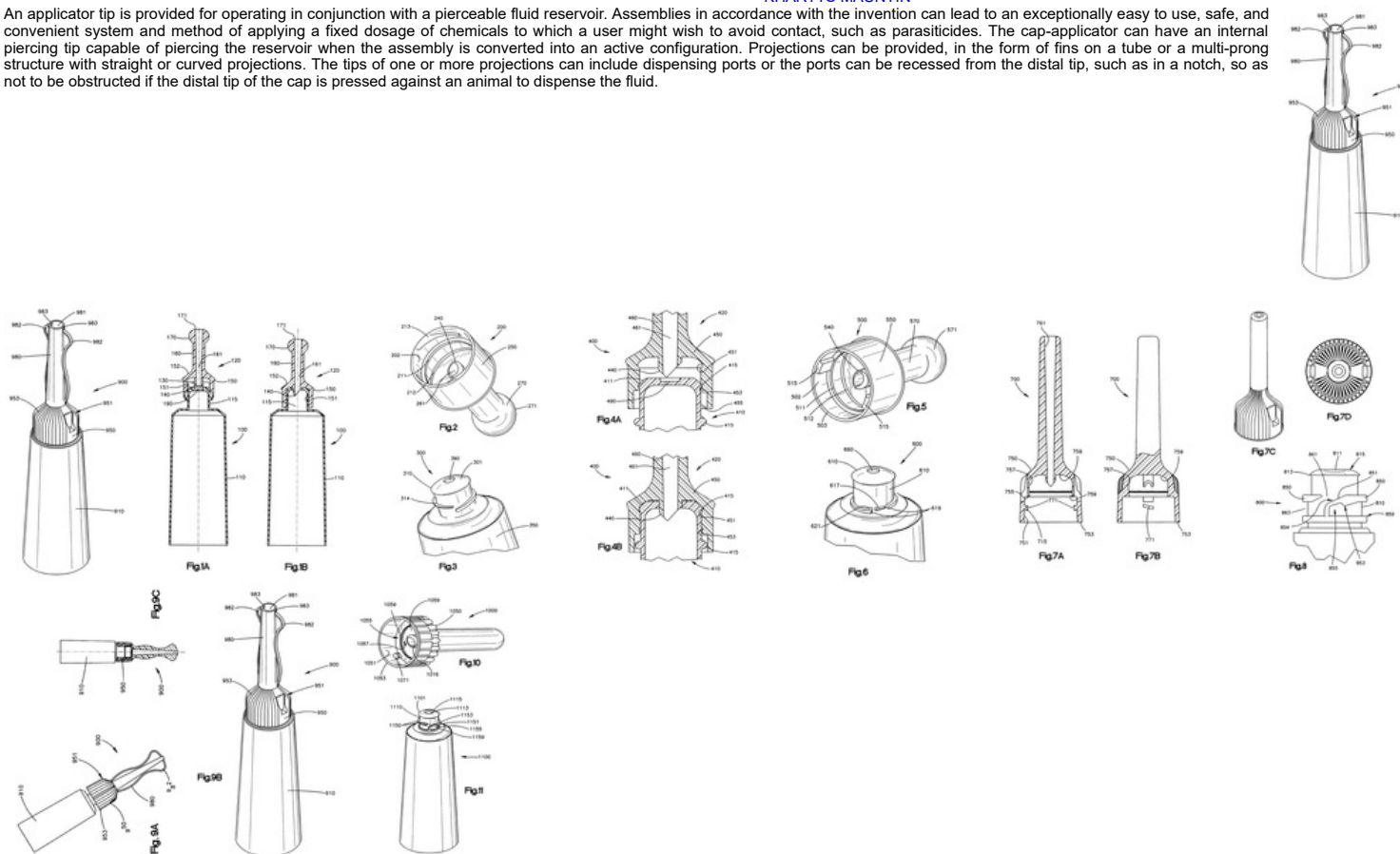
15. Medicinal product for applying a liquid medicinal treatment medium to an area to be treated

WO2009039838 2007-09-27 LINHARDT*
LINHARDT METALLWARENFABR
TEMMLER PHARMA* 2009-04-02 2009-04-02

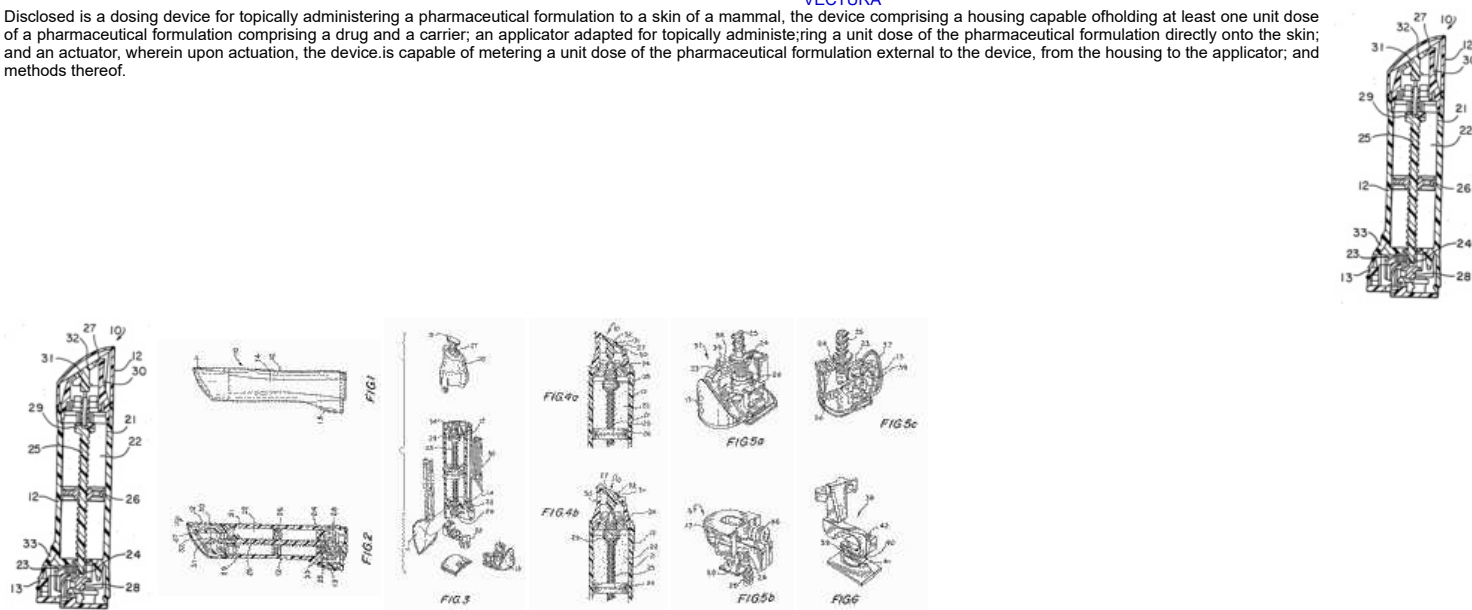
Specific application of a liquid medical treatment medium for an external treatment of a human or animal body on an area to be treated, comprises application of the treatment medium (8), which contains at least a medical active agent in a solution, by a pin-like applicator (1, 1a), which contains the treatment medium in a reservoir or container (2) and which is provided with an application head (5) at one end by which the treatment medium from the inside of the container is applied on the area to be treated, by over coating. An independent claim is included for a medicinal product with an applicator for the specific application of a liquid medicinal treatment medium for an external treatment of a human or animal body on an area to be treated. ACTIVITY : Dermatological; Virucide; Antiseborrheic; Fungicide; Vulnery; Vasotropic; Antiinflammatory; Antiulcer. MECHANISM OF ACTION : None given.



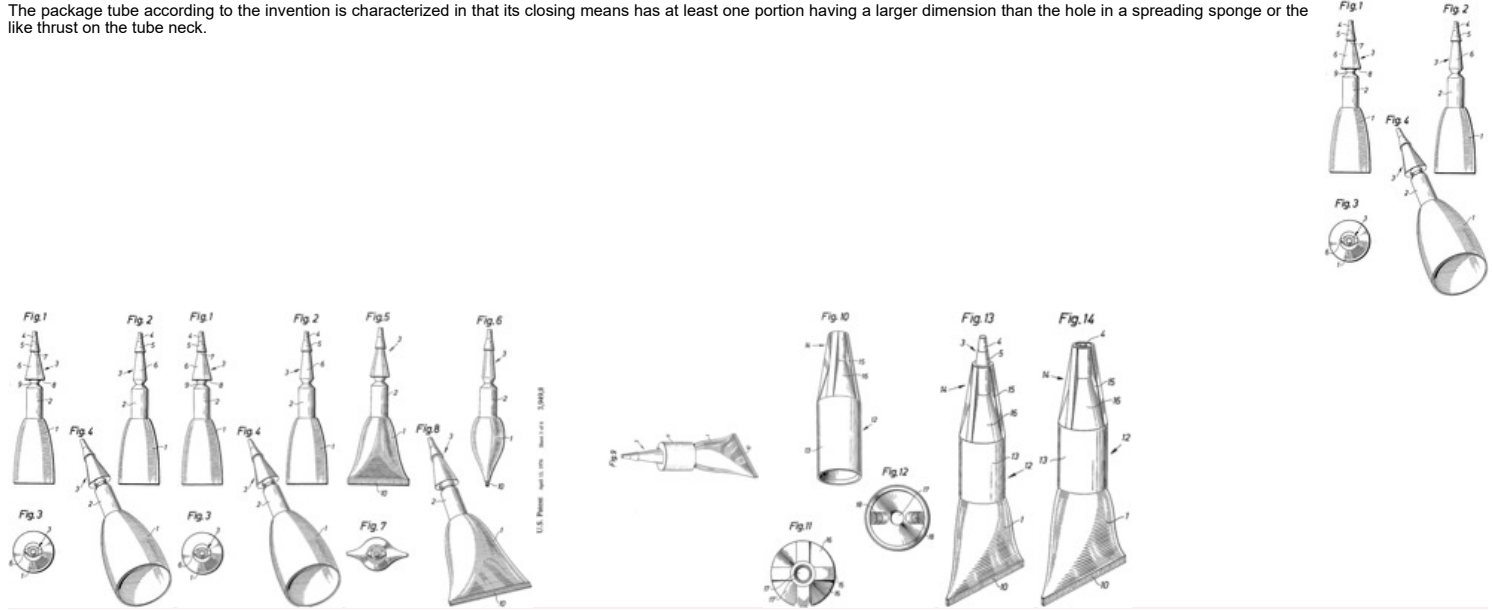
An applicator tip is provided for operating in conjunction with a pierceable fluid reservoir. Assemblies in accordance with the invention can lead to an exceptionally easy to use, safe, and convenient system and method of applying a fixed dosage of chemicals to which a user might wish to avoid contact, such as parasiticides. The cap-applicator can have an internal piercing tip capable of piercing the reservoir when the assembly is converted into an active configuration. Projections can be provided, in the form of fins on a tube or a multi-prong structure with straight or curved projections. The tips of one or more projections can include dispensing ports or the ports can be recessed from the distal tip, such as in a notch, so as not to be obstructed if the distal tip of the cap is pressed against an animal to dispense the fluid.



Disclosed is a dosing device for topically administering a pharmaceutical formulation to a skin of a mammal, the device comprising a housing capable of holding at least one unit dose of a pharmaceutical formulation comprising a drug and a carrier; an applicator adapted for topically administering a unit dose of the pharmaceutical formulation directly onto the skin; and an actuator, wherein upon actuation, the device is capable of metering a unit dose of the pharmaceutical formulation external to the device, from the housing to the applicator; and methods thereof.



The package tube according to the invention is characterized in that its closing means has at least one portion having a larger dimension than the hole in a spreading sponge or the like thrust on the tube neck.



19. Device for dispensing flowable food products

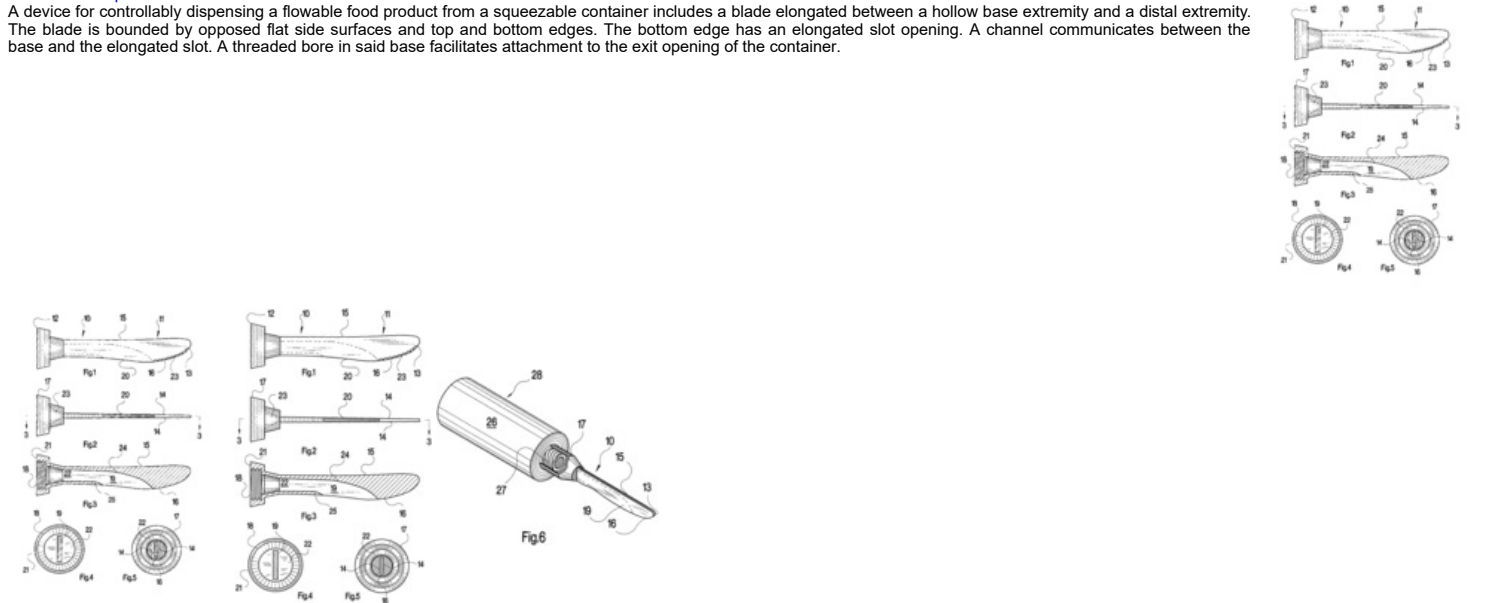
US5890630

1997-09-05

LOBDELL; RAYMOND J.

1999-04-06 1999-04-06

A device for controllably dispensing a flowable food product from a squeezable container includes a blade elongated between a hollow base extremity and a distal extremity. The blade is bounded by opposed flat side surfaces and top and bottom edges. The bottom edge has an elongated slot opening. A channel communicates between the base and the elongated slot. A threaded bore in said base facilitates attachment to the exit opening of the container.



20. Packaging for liquid, semiliquid or pasty food product

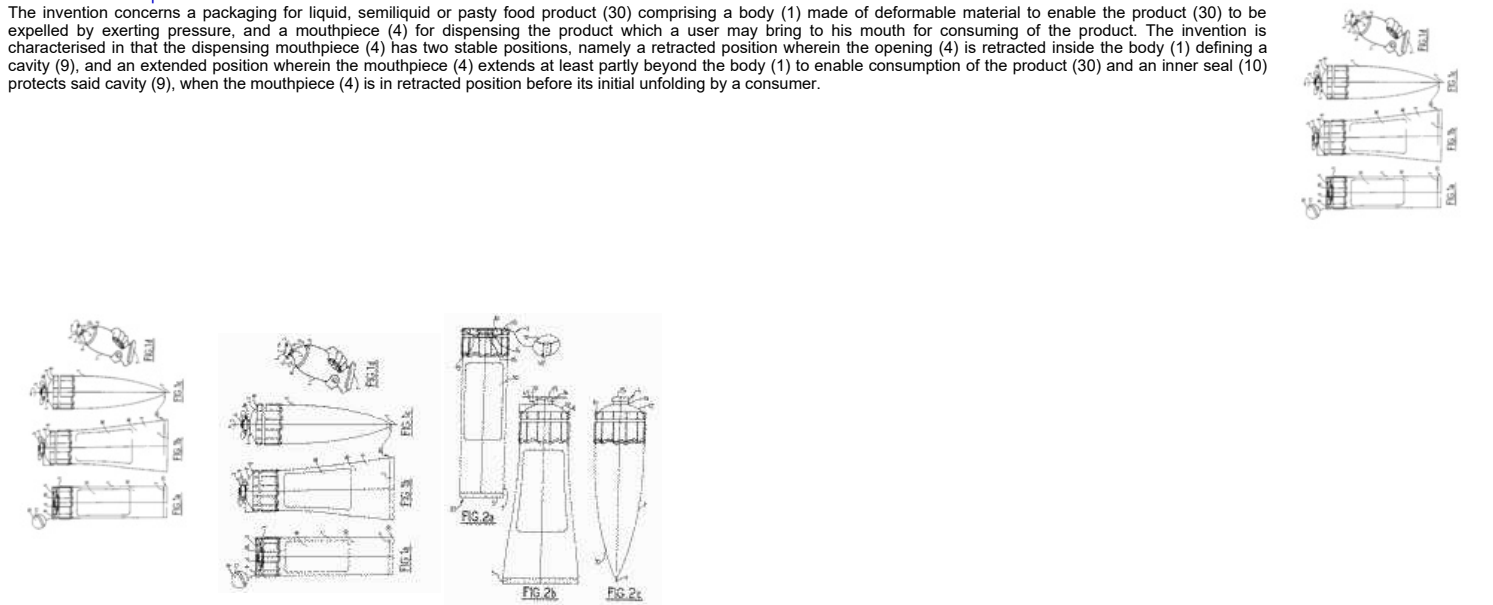
FR2808259

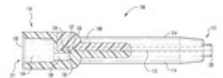
2000-04-28

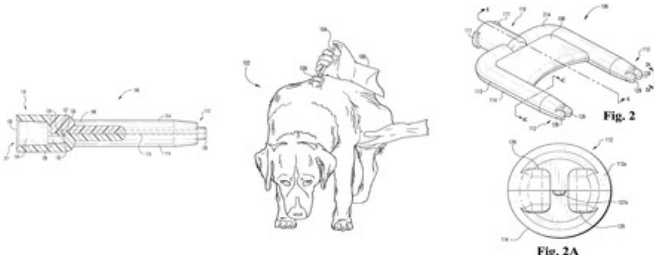
GERVAIS DANONE*

2001-11-02 2001-11-02

The invention concerns a packaging for liquid, semiliquid or pasty food product (30) comprising a body (1) made of deformable material to enable the product (30) to be expelled by exerting pressure, and a mouthpiece (4) for dispensing the product which a user may bring to his mouth for consuming of the product. The invention is characterised in that the dispensing mouthpiece (4) has two stable positions, namely a retracted position wherein the opening (4) is retracted inside the body (1) defining a cavity (9), and an extended position wherein the mouthpiece (4) extends at least partly beyond the body (1) to enable consumption of the product (30) and an inner seal (10) protects said cavity (9), when the mouthpiece (4) is in retracted position before its initial unfolding by a consumer.



21.	Transdermal dispensing apparatus and methods	US20110092922	2009-10-19	AIRCOM MANUFACTURING* AIRCOM MANUFACTURING INK ALCON ELANCO* ELI LILLY ELI LILLY PHARMACEUTICALS	2011-04-21	2011-04-21
An applicator (106) for dispensing a therapeutic agent to an animal comprising a housing including first (114) and second sections (214) coupled together, the first and second sections defining a channel (127) therebetween that includes at least one outlet (123,125); a hub (110) integral with the first section and extending therefrom, the hub (110) defining a conduit (134); and a bent path (128) connecting the conduit to the channel. In accordance with this embodiment, the conduit, the bent path and the channel are fluidly connected.						

22.	Assembling apparatus, assembling method and packaging combination	WO2012152928	2012-05-11	POLY CLIP SYSTEM*	2012-11-15	2012-11-15
The present invention relates to an apparatus and a method for assembling a packaging combination (600) including a tubular casing (610) having a first end (612) and a second end (614), wherein the tubular casing (610) is partially filled with filling material and closed at its first as well as its second end (612, 614) by a closure means (C), like a closure clip, and wherein the partially filled tubular casing (610) comprises a plait-like portion (P) at its first end (32) being at least approximately free of filling material, and further including a dispensing device (620) having a passageway extending through the dispensing device (620) with an inlet opening at its one end and a dispensing opening at its other end for guiding and dispensing the filling material in a dispensing direction. The apparatus (1) comprises at least one supporting means (10, 20) for accommodating and retaining the at least partially filled tubular casing (610), including at least one cartridge (20) for arranging the at least partially filled tubular casing (610); at least one shaping means (210) for creating a defined shape to the first end (612) of the tubular casing (610), including at least one gripper means (230) for gripping the first end of the at least partially filled tubular casing (610) and at least one forming shoulder (220) for forming a defined shape to the said first end (612); and at least one mounting means (310) for mounting the dispensing device (620) to said first end (612) of the tubular casing (610). The present invention further relates to packaging combination (1) comprises a tubular casing(610),a dispensing device(620)and a sealing device(630) is removably attached to the dispensing device (620).						

23.	Single-use dispensing device and method of manufacturing a single-use dispensing device	US20050281608	2004-06-21	DENTACO DENTALINDUSTRIE & MARKETING SULZER*	2005-12-22	2005-12-22
A single use dispensing device comprises fillable and sealable plastic container, applicator, plug-like closure mechanisms, first transversal sealing seam, and tearable perforation seam The plastic container receives substance. The container has neck end, filling end opposite to the neck end, and lateral sealing seams defining lateral contour of the container. A single use dispensing device comprises fillable and sealable plastic container (1), applicator (2), plug-like closure mechanisms (3), first transversal sealing seam (8), and tearable perforation seam. The plastic container receives substance. The container has neck end (1b), filling end (1a) opposite to the neck end, and lateral sealing seams defining lateral contour of the container. The applicator is inserted into the neck end of the container. The applicator has opening extending through the applicator for dispensing the substance. The closure mechanism closes the opening. A portion of the closure mechanism protrudes from the applicator. The protruding portion is surrounded by outer portion of the neck end. The first transversal sealing seam extends transversely through the lateral sealing seams of the container at the outer portion of the neck end and sealing from all sides the protruding portion of the closure mechanisms. The perforation seam extends transversely through the lateral sealing seams and is displaced towards the filling end relative to the first transversal sealing seam and front substance dispensing end of the applicator. An independent claim is also included for manufacturing single use dispensing device for liquid, pasty, and other flowable and fluid substances comprising manufacturing container, brining two thermoplastic synthetic foils in contact with one another, sealing together the foils at contours of side edges of the container, heating the foils and subsequently by using vacuum or alternately overpressure, drawing, or pressing the foils into molds disposed on both sides of the synthetic foils to provide plastic container after cooling, inserting the applicator into the neck end of the container, applying the substance, inserting plug-like closure mechanism into the opening of applicator prior to or after inserting the applicator so that a portion of closure mechanism protrudes from substance dispensing end from the applicator, and is surrounded by outer portion of neck end of the container, applying sealing seam and perforation seam, and closing the filling end of the container after its has been filled with substance.						

24.	Infectious skin disease drug applicator	CN106178242	2016-09-27	WANG GUANGYING	2016-12-07	2016-12-07
The invention relates to an infectious skin disease drug applicator and belongs to the technical field of medical instruments. The infectious skin disease drug applicator comprises a drug applicator body, a transmission rod, a supporting spring, a connecting column, a pressing plug and a drug box. The drug applicator body comprises a drug delivery portion with a vertically-stretching cavity. A radially-stretching flange is arranged on an end cap at the upper end of the transmission rod. The transmission rod is sleeved with the supporting spring, and the supporting spring stretches into the cavity of the drug delivery portion. A cover plate is arranged at the upper end of the drug delivery portion, the flange of the end cap is pressed into the cavity of the drug delivery portion, the upper end of the end cap penetrates out of the cover plate, the transmission rod can linearly reciprocates in the vertical direction relative to the drug delivery portion, the lower end of the drug delivery portion is connected with the connecting column, and the lower end of the transmission rod finally stretches to the position of a through hole of the connecting column to be matched with the pressing plug. The lower end of the connecting column is connected with the drug box, the drug box is provided with a drug collecting cavity matched with the pressing plug, and a drug seepage plate is arranged on the lower end opening of the drug collecting cavity. The infectious skin disease drug applicator is simple in structure and convenient to use, the operating efficiency of drug application work can be improved, time and labor are saved, and the working difficulty of medical staff is greatly relieved.						

25.	Active agent delivery devices and methods of using the same	WO2016054015	2015-09-29	UNIVERSITY OF CALIFORNIA* UNIVERSITY OF CALIFORNIA BERKELEY*	2016-04-07	2016-04-07
Provided are active agent delivery devices configured to deliver an active agent formulation into or through a mucosal layer in a subject. The active agent delivery devices include a power reservoir configured to eject the active agent formulation at a pressure sufficient to deliver the active agent formulation into or through a mucosal layer in a subject. Methods of using the subject active agent delivery devices are also provided.						