

Document	Title	Abstract	Independent Claims	Patentee	Granted	Priority
EP3442633B1	DEVICE FOR DISPENSING A FLUID PRODUCT SYNCHRONISED WITH INHALATION	The invention relates to a device for dispensing a fluid product synchronised with the inhalation, said device comprising a body (10) equipped with a mouthpiece (400). In addition, a product container (100) containing a fluid product and a propellant gas is mounted axially slidable inside the body (10), and a metering valve (200) including a plug (210) is assembled to the container (100) for the selective dispensing of the fluid product. The device also comprises: an actuation element (550) that can be moved and/or deformed between a non-actuation position, in which the metering valve (200) cannot be actuated, and an actuation position in which the metering valve (200) can be actuated; and a trigger system controlled by the inhalation, comprising an inhalation-sensitive member (60; 65) which can be deformed and/or moved by the inhalation and which, upon deforming and/or moving, moves and/or deforms the actuation element (550) from its non-actuation position to its actuation position, said actuation element being a locking element (550) which, in the non-actuation position, allows the axial movement of the plug (210) of the metering valve (200) together with the container (100) in the body (10), preventing the actuation of the metering valve (200) when the container (100) is moved axially inside the body (10) without inhalation.	1. An inhalation-synchronized fluid dispenser device comprising a body (10) provided with a mouthpiece (400), a fluid reservoir (100) containing a fluid and a propellant gas being mounted to slide axially in said body (10), a metering valve (200) including a valve member (210) being assembled on said reservoir (100) for selectively dispensing the fluid, said device further comprising: - an actuator element (550) that is movable and/or deformable between a non-actuation position, in which said metering valve (200) cannot be actuated, and an actuation position, in which said metering valve (200) can be actuated, and - an inhalation-controlled trigger system including an inhalation-sensitive member (61; 65), deformable and/or movable under the effect of inhaling, said inhalation-sensitive member (61; 65), when it is deformed and/or moved, moving and/or deforming said actuator element (550) from its non-actuation position towards its actuation position, characterized in that said actuator element is a locking element (550) that, in non-actuation position, enables axial movement of said valve member (210) of the metering valve (200) together with said reservoir (100) in the body (10), preventing the actuation of said metering valve (200) when said reservoir (100) is moved axially in the body (10) without inhaling.	Aptar France SAS, 27110 Le Neubourg, FR, 101324091 APTAR FRANCE SAS	2020-02-05	2016-04-15
EP3442632B1	DEVICE FOR THE DISPENSING OF A FLUID PRODUCT SYNCHRONISED WITH INHALATION	The invention relates to a device for the distribution of a fluid product synchronised with inhalation, comprising a body (10; 10') provided with a mouthpiece (400), a product reservoir (100) containing a fluid product and a propellant gas being mounted axially with the ability to slide in the said body (10; 10'), a metering valve (200) comprising a shutter (210) being assembled on the said reservoir (100) to selectively dispense the fluid product, the said device further comprising: - an actuating element (500, 500', 500"; 550) movable and/or deformable between a position of non-actuation, in which position the said metering valve (200) cannot be actuated, and an actuating position in which the said metering valve (200) can be actuated, - an initiation system controlled by inhalation comprising an inhalation-sensitive member (60, 61; 65, 66), deformable and/or movable under the effect of inhalation, the said inhalation-sensitive member (60, 61; 65, 66), as it deforms and/or moves, moving and/or deforming the said actuating element (500, 500', 500"; 550) from its position of non-actuation into its actuating position, - an electronic dose counter (1000), and - means of emitting signals (1100) in order to communicate to a remote location notably information relating to the actuations of the device.	1. An inhalation-synchronized fluid dispenser device comprising a body (10; 10') provided with a mouthpiece (400), a fluid reservoir (100) containing a fluid and a propellant gas being mounted to slide axially in said body (10; 10'), a metering valve (200) including a valve member (210) being assembled on said reservoir (100) for selectively dispensing the fluid, said device being characterized in that it further comprises: <ul style="list-style-type: none"> • an actuator element (500, 500', 500"; 550) movable and/or deformable between a non-actuation position, in which said metering valve (200) cannot be actuated, and an actuation position in which said metering valve (200) can be actuated, • an inhalation-controlled trigger system including an inhalation-sensitive member (60, 61; 65, 66) that is deformable and/or movable under the effect of inhaling, said inhalation-sensitive member (60, 61; 65, 66), when it deforms and/or moves, moving and/or deforming said actuator element (500, 500', 500"; 550) from its non-actuation position towards its actuation position, • an electronic dose counter (1000), and • signal-transmitter means (1100) for remotely communicating, in particular information relating to the actuations of the device. 	Aptar France SAS, 27110 Le Neubourg, FR, 101324091 APTAR FRANCE SAS	2020-02-05	2016-04-15

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EP3436033B1	A POLY-OXYGENATED METAL HYDROXIDE COMPRISING A CLATHRATE THAT INCREASES OXYGEN LEVELS IN MAMMALIAN TISSUES	A composition of a poly-oxygenated metal hydroxide comprising a clathrate containing oxygen gas molecules having particles sized of less than or equal to 3 um in diameter. The composition particles sized at 3 um and less can deposit into the deep airway ducts and diffuse evenly within the alveolar or gas exchange regions of the lung to treat internal hums. One exemplary embodiment is delivering poly-oxygenated metal hydroxide particles intravenously as a resuscitative fluid, and to treat diseases of organs when the diameter of the particles is in the range of 250 nm to 1000 nm. Particles having critical diameters between 250 to 1000 nm will stay in the capillary, vein, or artery linings of the circulatory system and not passively diffuse past the lining into surrounding tissue.	1. A composition, comprising: a poly-oxygenated metal hydroxide having particle sizes of less than or equal to 3 μm in diameter, wherein the poly-oxygenated metal hydroxide comprises a clathrate containing free oxygen gas (O ₂) molecules.	Baylor University, Waco, TX 76798-7014, US, 101700854 UNIV BAYLOR	2020-02-12	2016-03-30
EP3419705B1	AEROSOL DELIVERY SYSTEM	There is disclosed an aerosol delivery system comprising: an aerosol-generating device (12) comprising: - a device housing having an open-ended heating chamber configured to receive a carrier cartridge (14); - a heater element (24) disposed within the heating chamber (22) and configured to receive at least a first end of a carrier cartridge (14), said heating element operable to heat a carrier substrate of a carrier unit of said carrier cartridge (14) to cause release of an aerosol-forming precursor therefrom to generate an aerosol when gas is passed through the carrier cartridge (14); and - a carrier cartridge comprising a carrier unit (34), said carrier unit comprising a carrier substrate configured to hold an aerosol-forming precursor comprising a nicotine-containing and/or flavoured fluid, gel, wax, or powder. Also disclosed are a carrier cartridge (14), carrier unit (34), methods of manufacturing one or more components of said system, and a kit-of-parts for assembling the system.	1. An aerosol delivery system (10) comprising: an aerosol-generating device (12) comprising: a device housing (26) having an open-ended heating chamber (22) configured to receive a carrier cartridge (14); a heater element (24) disposed within the heating chamber and configured to receive at least a first end (16) of a carrier cartridge, said heater element operable to heat a carrier substrate (44) of a carrier unit (34) of said carrier cartridge to cause release of an aerosol-forming precursor therefrom to generate an aerosol when gas is passed through the carrier cartridge; and a carrier cartridge (14) comprising a carrier unit (34), said carrier unit comprising: a carrier substrate (44) configured to hold an aerosol-forming precursor comprising a nicotine-containing and/or flavoured fluid, gel, wax, or powder; and a thermally conductive substrate (46) configured to conduct heat from the heater element to the carrier substrate to cause release of said aerosol-forming precursor therefrom; and characterised in that: the thermally conductive substrate is formed into a cylinder and the carrier substrate is formed into an annular ring configured to fit around the thermally conductive substrate; and the thermally conductive substrate is formed from material that is penetrable by the heater element such that the thermally conductive substrate is penetrable by the heater element.	Nerudia Ltd., Liverpool, Merseyside L24 9HP, GB, 101603316 NERUDIA LTD	2020-02-12	2016-02-26
EP3397091B1	HOLDER FOR AEROSOL GENERATING ARTICLE	A holder (200) for an aerosol generating article (100) includes a body (210) defining a passage configured to receive the article. The holder also includes a retainer (240) longitudinally moveable relative to the body from a first position to a second position. The retainer comprises a deflectable arm (242) and a retention member (247) extending from the arm and configured to retain the article within the passage of the body	1. A holder (200) for an aerosol generating article (100) having a heat source (102), the holder (200) comprising: a body (210) defining a passage configured to receive the aerosol generating article (100); and a retainer (240) longitudinally moveable relative to the body (210) from a first position to a second position, the retainer (240) comprising a deflectable arm (242) and a retention member (247) extending from	Philip Morris Products S.A., 2000 Neuchatel, CH, 101542326 PHILIP MORRIS PRODUCTS SA	2020-02-05	2015-12-29

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		when the retainer is in the first position. Movement of the retainer to the second position causes the arm to deflect to provide access for introducing or withdrawing the article from the passage of the body. The holder may include a plurality of retainers moveable from a first position to the second position. The plurality of retainers may surround a combustible heat source (102) of the aerosol generating article when the retainers are in the first position.	the arm (242) and configured to retain the aerosol generating article (100) within the passage of the body (210) when the retainer (240) is in the first position, wherein movement of the retainer (240) to the second position causes the arm (242) to deflect to provide access for introducing or withdrawing the aerosol generating article (100) from the passage of the body (210).			
EP3393281B1	A CARTRIDGE FOR AN AEROSOL-GENERATING SYSTEM AND AN AEROSOL-GENERATING SYSTEM COMPRISING A CARTRIDGE	A cartridge (2, 102) for use in an aerosol-generating system, the cartridge comprises a first compartment (10, 110) having a first air inlet (20, 120) and a first air outlet (26, 126), the first compartment containing a nicotine source; and a second compartment (14, 114) having a second air inlet (22, 122) and a second air outlet (28, 128), the second compartment containing a lactic acid source. The ratio of flow area of the first air inlet to the flow area of the second air inlet is between about 3:4 and about 1:2. An aerosol-generating system (200) comprises: the cartridge (102); and an aerosol-generating device (202) comprising: a housing (206) defining a cavity (208) for receiving at least a portion of the cartridge; and a heater for heating the first compartment and the second compartment of the cartridge.	1. A cartridge (2, 102) for use in an aerosol-generating system, the cartridge comprising: a first compartment (10, 110) having a first air inlet (20, 120) and a first air outlet (26, 126), the first compartment (10, 110) containing a nicotine source; and a second compartment (14, 114) having a second air inlet (22, 122) and a second air outlet (28, 128), the second compartment (14, 114) containing a lactic acid source, wherein the ratio of flow area of the first air inlet (20, 120) to the flow area of the second air inlet (22, 122) is between 3:4 and 1:2.	Philip Morris Products S.A., 2000 Neuchâtel, CH, 101137385 PHILIP MORRIS PRODUCTS SA	2020-02-05	2015-12-22
EP3377108B1	A PROCESS FOR PREPARING A DRY POWDER FORMULATION COMPRISING AN ANTICHOLINERGIC, A CORTICOSTEROID AND A BETA-ADRENERGIC	The invention relates to a dry powder formulation for inhalation comprising a combination of an anti-cholinergic, a long-acting beta2-adrenoceptor agonist, and a corticosteroid, and to a process for preparation thereof.	1. A process for preparing a powder formulation for inhalation for use in a dry powder inhaler, said powder comprising: (A) a carrier comprising: (a) 80 to 95 percent by weight, based on the total weight of said carrier, of coarse particles of a physiologically acceptable excipient having a mean particle size of at least 175 µm; and (b) 19.6 to 4.9 percent by weight, based on the total weight of said carrier, of micronized particles of a physiologically acceptable excipient, and 0.1 to 0.4 percent by weight, based on the total weight of said carrier, of a salt of a fatty acid; and (B) micronized particles of an anti-muscarinic drug, a long-acting β 2 -agonist (LABA), and optionally, an inhaled corticosteroid (ICS), as active ingredients, said process comprising: (i) mixing all of said coarse particles of a physiologically acceptable excipient, all of said salt of a fatty acid, a first portion of said micronized particles of a physiologically acceptable excipient, all of said micronized particles of said long-acting β 2 -agonist, said anti-muscarinic drug, and, optionally, said inhaled corticosteroid in a vessel of a shaker mixer at a speed of rotation not lower than 16 r.p.m. for a time of not less than 60 minutes, to obtain a first mixture; and (ii) adding the remaining part of said micronized particles of a physiologically acceptable excipient to said first	Chiesi Farmaceutici S.p.A., 43122 Parma, IT, 101595592 CHIESI FARM SPA	2020-02-19	2015-11-16

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			<p>mixture, to obtain a second mixture, and mixing said second mixture at a speed of rotation not lower than 16 rpm for a time of at least 120 minutes, wherein the long-acting β 2 -agonist is selected from the group consisting of formoterol, salmeterol, indacaterol, olodaterol, and vilanterol; the anti-muscarinic drug is selected from the group consisting of glycopyrronium bromide or chloride, tiotropium bromide, umecidinium bromide, and aclidinium bromide; the inhaled corticosteroid is selected from the group consisting of beclomethasone dipropionate and its monohydrate form, budesonide, fluticasone propionate, fluticasone furoate, and mometasone furoate.</p> <p>9. A powder formulation for inhalation for use in a dry powder inhaler, said powder comprising: (A) a carrier, comprising: (a) 80 to 95 percent by weight, based on the total weight of said carrier, of coarse particles of a physiologically acceptable excipient having a mean particle size of at least 175 μm; and (b) 19.6 to 4.9 percent by weight, based on the total weight of said carrier, of micronized particles of a physiologically acceptable excipient, and 0.1 to 0.4 percent by weight, based on the total weight of said carrier, of magnesium stearate; and (B) micronized particles of glycopyrronium bromide, beclometasone dipropionate, and formoterol fumarate dehydrate, as active ingredients, wherein said formulation is obtainable by a process comprising: (i) mixing all of said coarse particles of a physiologically acceptable excipient, all of said magnesium stearate, a first portion of said micronized particles of a physiologically acceptable excipient, all of said micronized particles of glycopyrronium bromide, beclometasone dipropionate, and formoterol fumarate dihydrate in a vessel of a shaker mixer at a speed of rotation not lower than 16 rpm for a time of not less than 60 minutes, to obtain a first mixture; and (ii) adding the remaining part of said micronized particles of a physiologically acceptable excipient to said first mixture, to obtain a second mixture, and mixing said second mixture at a speed of rotation not lower than 16 rpm for a time of at least 120 minutes; whereby the extrafine particle fraction of each active ingredient is comprised between 20 and 35%.</p>			
EP3356256B1	METERED DOSE INHALER CANISTER AND METHOD OF MAKING THE CANISTER	A metered dose inhaler canister combination comprises a canister configured for containing a pharmaceutical composition, the canister having a canister base, a side wall extending from the canister base, an open end distal from the base and a first cooperating formation arranged at said open end and extending generally distally from said canister base; a shroud	1. A metered dose inhaler canister combination comprising a canister (102) configured for containing a pharmaceutical composition, the canister (102) having a canister base (106), a side wall (108) extending from the canister base (106), an open end distal from the base (106) and a first cooperating formation (112) arranged at said open end and extending generally	Presspart Manufacturing Ltd., Blackburn, Lancashire BB1 5RF, GB, 101556321 PRESSPART MFG LTD	2020-02-05	2015-10-01

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		having a shroud base and a side wall extending from the shroud base to a waist, the base and side wall defining a vessel configured to receive the canister therein, the waist defining an aperture of constricted width configured to receive the canister therethrough, and a second cooperating formation extending generally distally from said waist, wherein the respective first and second cooperating formations adopt an engaged condition in which the canister is retained within the shroud.	distally from said canister base (106) ; a shroud (104) having a shroud base (116) and a side wall (118) extending from the shroud base (116) to a waist (124), the base (116) and side wall (118) defining a vessel configured to receive the canister (102) therein, the waist (124) defining an aperture of constricted width configured to receive the canister (102) therethrough, and a second cooperating formation (114) extending generally distally from said waist (124), wherein the respective first and second cooperating formations (112, 114) adopt an engaged condition in which the canister (102) is retained within the shroud (104), characterized in that said shroud (104) includes a vent orifice (130) which allows communication between a shroud exterior and a shroud interior, that said first cooperating formation (112) comprises a flange portion (112F) extending outwardly from said cylindrical side wall (108) and a wall portion (112W) extending from said flange portion (112F) distally with respect to said canister base (106), that said second cooperating formation (114) comprises a flange portion (114F) extending outwardly from said waist (124) and a wall portion (114W) extending from said flange portion (114F) distally with respect to said shroud base (116) and that when the first and second cooperating formations (112, 114) are in the engaged condition the respective wall portions (112W, 114W) of the first and second cooperating formations (112, 114) are in contacting relation.			
EP3344253B1	VARLITINIB FOR USE IN THE TREATMENT OF RESISTANT OR REFRACTORY CANCER	The present disclosure provides a method of treating a patient with refractory or resistant cancer by administering a therapeutically effective amount of a compound of formula (I), such as Varlitinib, or an enantiomer thereof or a pharmaceutically acceptable salt of any one of the same. Also provided is a compound of formula (I) for use in the treatment of resistant or refractory cancer and use of a compound of formula (I) for the manufacture of a medicament for the treatment of resistant or refractory cancer.	1. A compound of formula (I): an enantiomer thereof or a pharmaceutically acceptable salt of any one of the same for use in treating refractory or resistant cancer, wherein each dose of the compound of formula (I) is in the range 100 to 900 mg, and wherein each dose is administered once or twice daily.	Aslan Pharmaceuticals PTE Limited, Singapore 239920, SG, 101704456 ASLAN PHARMACEUTICALS PTE LTD	2020-02-26	2015-09-04
EP3337541B1	A CARTRIDGE ASSEMBLY FOR AN AEROSOL-GENERATING SYSTEM AND AN AEROSOL-GENERATING SYSTEM COMPRISING A CARTRIDGE ASSEMBLY	A cartridge assembly having a proximal end and a distal end for use in an aerosol-generating system comprises: a cartridge (2) comprising: a first compartment (4) having a first air inlet (10) and a first air outlet (14); and a second compartment (6) having a second air inlet (18) and a second air outlet (22); and a mouthpiece (30) partially surrounding the cartridge (2), the mouthpiece (30) having a third air outlet. The cartridge (2) and the mouthpiece (30) are longitudinally movable relative to one another between a retracted position in which a proximal end of the	1. A cartridge assembly having a proximal end and a distal end for use in an aerosol-generating system, the cartridge assembly comprising: a cartridge (2) comprising: a first compartment (4) having a first air inlet (10) and a first air outlet (14); and a second compartment (6) having a second air inlet (18) and a second air outlet (22), and a mouthpiece (30) partially surrounding the cartridge (2), the mouthpiece (30) having a third air outlet (32); the cartridge (2) and the mouthpiece (30) being longitudinally movable relative to one another between a retracted position in which a	Philip Morris Products S.A., 2000 Neuchâtel, CH, 101137385 PHILIP MORRIS PRODUCTS SA	2020-02-12	2015-08-21

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		mouthpiece (30) abuts a proximal end of the cartridge (2), and an extended position in which the proximal ends of the mouthpiece (30) and the cartridge (2) are longitudinally spaced apart so as to create a chamber (36) there between in fluid communication with the first (14), second (22) and third (32) air outlets. In the retracted position the first (10) and second (18) air inlets and the first (14) and second (22) air outlets are obstructed by the mouthpiece (30) and the third air outlet (32) is obstructed by the cartridge(2). In the extended position air may be drawn into the chamber (36) along a first airflow pathway extending from the first air inlet (10), through the first compartment(4), to the first air outlet (14) and a second airflow pathway extending from the second air inlet(18), through the second compartment(4), to the second air outlet (22), and out of the chamber (36) through the third air outlet (32). An aerosol- generating system comprises the cartridge assembly and an aerosol-generating device (38) comprising a cavity (40) for at least partially receiving the cartridge assembly and a heater (42) for heating one or both of the first (4) and second (6) compartments of the cartridge (2) of the cartridge assembly.	proximal end of the mouthpiece (30) abuts a proximal end of the cartridge (2), and an extended position in which the proximal ends of the mouthpiece (30) and the cartridge (2) are longitudinally spaced apart so as to create a chamber (36) therebetween in fluid communication with the first, second and third air outlets (14, 22, 32), wherein in the retracted position the first and second air inlets (10, 18) and the first and second air outlets (14, 22) are obstructed by the mouthpiece (30) and the third air outlet is obstructed by the cartridge (2), and wherein in the extended position air may be drawn into the chamber (36) along a first airflow pathway extending from the first air inlet (10), through the first compartment (4), to the first air outlet (14) and a second airflow pathway extending from the second air inlet (18), through the second compartment (6), to the second air outlet (22), and out of the chamber (36) through the third air outlet (32).			
EP3322469B1	CATHETERS FOR DELIVERY OF MATERIAL TO THE LUNG	A device for introducing a material into a body cavity is shown. The device includes a catheter with a distal tip. A first lumen extends through the catheter. The catheter is configured to form a mist from liquid passed through the first lumen, for example including a misting nozzle in fluid communication with the first lumen and configured to provide a mist from a flow of liquid through the first lumen. An inflatable balloon may be included on the catheter to allow the user to isolate the portion of the body in which the material is introduced. Additional described features can provide for controlled deflection of a distal region of the catheter, guidewire or guide loop tool lumens, first and second misting nozzles on the catheter, and delivery apparatuses including the catheter devices coupled or that can be coupled to endoscopes such as bronchoscopes. Methods of use of the catheter devices and delivery apparatuses are also described.	1. A catheter device (10) for introducing a material into a body cavity comprising: a catheter shaft (12) having a proximal portion (14) and a distal portion (16); a first lumen (29) extending through the catheter shaft (12) from the proximal portion (14) to the distal portion (16); a second lumen (30) extending through the catheter shaft (12) from the proximal portion (14) to the distal portion (16); a deflecting wire (362) received in the second lumen (30), the deflecting wire (362) having a distal portion attached to the distal portion (16) of the catheter shaft (12) and a proximal portion; an actuator (96) coupled to the proximal portion of the deflecting wire (362) and selectively operable to tension the deflecting wire (362) to deflect the distal portion (16) of the catheter shaft (12); and characterized in that the catheter device (10) is configured to form a mist from a liquid passed through the first lumen (29); and wherein deflection of the distal portion (16) of the catheter shaft (12) is used to control a throw direction of a mist formed by the catheter device (10).	Cook Regentec LLC, Indianapolis, Indiana 46202, US, 101604111 COOK REGENTEC LLC	2020-02-05	2015-07-13
EP3305103B1	ATOMIZING UNIT	This atomization unit (111) is provided with a reservoir (11) that holds an aerosol source, an atomization part (13) that atomizes the aerosol source, and a cap body (16) that blocks a supply port for supplying the aerosol source to the reservoir, wherein movement of	1. An atomizing unit (111) comprising: a reservoir (11) configured to store an aerosol source; an atomizing portion (13) configured to atomize the aerosol source; and a cap (16) configured to cover a supply port for supplying the aerosol source to the reservoir	Japan Tobacco Inc., Tokyo 105-8422, JP, 101041048 JAPAN TOBACCO INC	2020-02-26	2015-06-26

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		the cap body away from the reservoir causes the atomization part and/or a power supply member, which electrically connects a power source and the atomization part, to break.	(11), wherein at least one of the atomizing portion (13) and a power supply member (14, 17) electrically connected to a power source and the atomizing portion (13) is broken by a movement of separating the cap (16) from the reservoir (11), and the supply port is provided on the opposite side of a connection part (111C) to the power source with respect to the reservoir (11).			
EP3307362B1	BIOLOGICAL CONTROL IN ELECTRONIC SMOKING ARTICLES	A smoking article includes a housing having a mouthpiece and configured to receive a nicotine-containing aerosol generating substance. The smoking article also includes control electronics configured to control delivery of an amount of nicotine-containing aerosol from the nicotine-containing aerosol generating substrate through the mouthpiece. The smoking article further includes a nicotine metabolite sensor positioned at the mouth piece and operably coupled to the control electronics. The sensor is positioned such that when a smoker places their lips in contact with the mouthpiece the sensor can detect an amount or concentration of a nicotine metabolite in the smoker's saliva. The smoking article can store or report data regarding the amount of nicotine metabolite detected by the sensor to, for example, the smoker. In addition or alternatively, the control electronics can receive data from the sensor to control whether the amount of the nicotine-containing aerosol is delivered.	1. A smoking article (100) comprising: a housing (110) having a mouthpiece (120) and configured to receive a nicotine-containing aerosol generating substrate (150); control electronics (200) configured to control delivery of an amount of a nicotine-containing aerosol from the nicotine-containing aerosol generating substrate through the mouthpiece; and characterized by a nicotine metabolite sensor (10) positioned at the mouthpiece and operably coupled to the control electronics.	Philip Morris Products S.A., 2000 Neuchâtel, CH, 101137385 PHILIP MORRIS PRODUCTS SA	2020-02-19	2015-06-12
EP3292772B1	NON-COMBUSTION TYPE FLAVOR INHALER	A non-combustion type flavor inhaler comprises: a reservoir storing an aerosol source; a transfer unit transferring the aerosol source from upstream of the liquid surface forming location to a liquid surface forming location at which a liquid surface of the aerosol source is formed, the transfer unit being configured to form the liquid surface; a suction port arranged downstream of the liquid surface forming location; a first atomizer atomizing the aerosol source located upstream of the liquid surface forming location; and a second atomizer atomizing a droplet generated from the liquid surface formed at the liquid surface forming location, the droplet being located downstream of the liquid surface forming location.	1. A non-combustion type flavor inhaler (1) comprising: a reservoir (20) storing an aerosol source (21); a transfer unit (30) transferring the aerosol source (21) from upstream of the liquid surface forming location to a liquid surface forming location at which a liquid surface (21A) of the aerosol source (21) is formed, the transfer unit (30) being configured to form the liquid surface (21A); a suction port (12) arranged downstream of the liquid surface forming location; a first atomizer (41) atomizing the aerosol source (21) located upstream of the liquid surface forming location; and a second atomizer (42) atomizing a droplet generated from the liquid surface (21A) formed at the liquid surface forming location, the droplet being located downstream of the liquid surface forming location.	JAPAN TOBACCO INC., Minato-ku, Tokyo 105-8422, JP, 101253409 JAPAN TOBACCO INC	2020-02-19	2015-05-29
EP3273948B1	LIQUISOFT CAPSULES	Described herein are oral pharmaceutical compositions suitable for chewing, sucking, or buccal dissolution comprising soft gel capsules and liquid fills, methods for making the same, and methods for treating subjects in need thereof with such capsules. In particular, oral pharmaceutical compositions comprising chewable, suckable, or dissolvable soft gel capsules with various flowable fill compositions are described.	1. A pharmaceutical composition comprising a soft dosage form comprising a shell encapsulating a liquid matrix, wherein the shell comprises: (a) about 10% to about 50% gelatin, 150 Bloom; (b) about 1% to about 20% gelatin, 100 Bloom; (c) about 1% to about 10% hydrolyzed collagen; (d) about 10% to about 20% maltitol syrup (lycasin®); (e) about 10% to about 50% glycerin; (f) about 0.1% to about 2% citric acid;	Patheon Softgels Inc., High Point, NC 27265, US, 101690277 PATHEON SOFTGELS INC	2020-02-12	2015-03-26

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			<p>(g) about 0.1% to about 5% xylitol; (h) about 0.1% to about 1% sucralose; and (i) about 10% to about 50% water; and the matrix comprises: (j) about 10% to about 40% polyethylene glycol 400; (k) about 1% to about 15% propylene glycol; (l) about 0.1% to about 5% polyvinylpyrrolidone K30; (m) about 25% to about 75% maltitol syrup (lycasin®); (n) about 0.1% to about 5% citric acid; (o) about 0.1% to about 5% lactic acid; (p) about 0.1% to about 5% sucralose; (q) about 0.1% to about 5% acesulfame potassium; (r) about 1% to about 10% water; (s) about 0.1% to about 5% dextromethorphan hydrobromide; and (t) about 0.05% to about 1% menthol.</p> <p>6. A pharmaceutical composition comprising a soft dosage form comprising a shell encapsulating a liquid matrix, wherein the shell comprises: (a) about 10% to about 40% gelatin, 100 Bloom; (b) about 1% to about 10% hydrolyzed collagen; (c) about 10% to about 30% maltitol syrup (lycasin®); (d) about 10% to about 40% glycerin; (e) about 1% to about 10% propylene glycol; (f) about 0.05% to about 2% citric acid; (g) about 1% to about 5% xylitol; (h) about 0.05% to about 2% sucralose; (i) about 0.05% to about 2% peppermint oil; and (j) about 10% to about 40% water; and the matrix comprises: (k) about 30% to about 60% glycerin; (l) about 0.05% to about 5% propylene glycol; (m) about 0.1% to about 5% polyvinylpyrrolidone K30; (n) about 20% to about 60% sorbitol; (o) about 0.1% to about 5% citric acid; (p) about 0.1% to about 5% sucralose; (q) about 0.025% to about 2% eucalyptol; (r) about 0.05% to about 2% peppermint oil; (s) about 1% to about 20% water; (t) about 0.001% to about 0.01% thymol; and (u) about 0.05% to about 3% menthol.</p> <p>11. A pharmaceutical composition comprising a soft dosage form comprising a shell encapsulating a liquid matrix, wherein the shell comprises: (a) about 10% to about 40% gelatin, 150 Bloom; (b) about 1% to about 20% gelatin, 100 Bloom; (c) about 1% to about 10% gelatin hydrolysate; (d) about 10% to about 40% glycerin; (e) about 10% to about 40% maltitol; (f) about 0.05% to about 2% citric acid; (g) about 1% to about 5% xylitol; (h) about 0.05% to about 2% sucralose; (i) about 0.05% to about 2% peppermint oil; and (j) about 10% to about 40% water; and the matrix comprises: (k) about 0.05% to about 5% polyethylene glycol 400; (l) about 10% to about 40% glycerin; (m) about 0.1% to about 5% xylitol; (n) about 10% to about 60% maltitol; (o) about 0.1% to about 10% glycine; (p) about 0.1% to about 5% sucralose; (q) about 0.025% to about 2% menthol; (r) about 0.025% to about 2% peppermint oil; (s) about 1% to about 30%</p>			

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			<p>water; and (t) about 0.01 % to about 5% nicotine polacrilex.</p> <p>16. A pharmaceutical composition comprising a soft dosage form comprising a shell encapsulating a liquid matrix, wherein the shell comprises: (a) about 10% to about 40% gelatin, 150 Bloom; (b) about 1% to about 20% gelatin, 100 Bloom; (c) about 1% to about 10% gelatin hydrolysate; (d) about 10% to about 40% glycerin; (e) about 10% to about 40% maltitol; (f) about 0.05% to about 2% citric acid; (g) about 1% to about 5% xylitol; (h) about 0.05% to about 2% sucralose; and (i) about 10% to about 40% water; and the matrix comprises: (j) about 0.05% to about 5% polyethylene glycol 400; (k) about 0.5% to about 5% glycerin; (l) about 1% to about 15% propylene glycol; (m) about 10% to about 40% sorbitol; (n) about 0.1% to about 5% xylitol; (o) about 0.05% to about 5% sucralose; (p) about 0.025% to about 2% menthol; (q) about 0.025% to about 2% peppermint oil; (r) about 1% to about 20% water; and (s) about 20% to about 80% bismuth subsalicylate.</p>			
EP3240531B1	DRUG BASED ON MAGHEMITE FOR SIMULTANEOUS REDUCTION OF GASTROINTESTINAL SODIUM RESORPTION AND PHOSPHATE RESORPTION	The invention relates to a substance based on nanocrystalline maghemite having a crystal size between 0.5 and 4 nm, which defines a magnetite proportion through the proportion of divalent iron ions smaller than five per cent by weight of the total iron, and reduces the transport of sodium and simultaneously phosphate in the stomach and intestine wall, from the stomach and intestine content into the blood flow, and can thus improve the imbalance of electrolytes, water and minerals in patients with impaired kidney function through oral application in conjunction with suitable pharmaceutical excipients.	1. A method for the preparation of maghemite crystals having a crystal size in the range of 0.5 to 4 nm and a magnetite content of less than 5 parts by weight of one hundred, the parts by weight referring to the proportion of divalent iron ions in the total iron and the method comprising the steps: S1: preparing an aqueous sodium hydroxide solution having a pH value in the range of 10 to 15, the sodium hydroxide solution containing one or more alditols and one or more carbohydrates and the temperature of the sodium hydroxide solution being 0 to 10° Celsius; S2: preparing a further aqueous solution containing chloride ions, iron(II) salts and iron(III) salts and having a temperature of 0 to 10° Celsius; and S3: preparing a mixture of the sodium hydroxide solution and the further solution, the temperature of the mixture being 0 to 10° Celsius.	Charité - Universitätsmedizin Berlin, 10117 Berlin, DE, 101475744 UNIV BERLIN CHARITE	2020-02-12	2014-12-29
EP3231797B1	QUINOLINE DERIVATIVE AGAINST NON-SMALL CELL LUNG CANCER	Provided in the present application is a quinoline derivative against non-small cell lung cancer. 1 - [[4-(4-fluoro-2-methyl-1H-indole-5-yl)oxy-6-methoxyquinoline-7-yl]oxy]methyl]cyclopropylamine or a pharmaceutically acceptable salt thereof as provided in the present application can be used for treating non-small cell lung cancer, and with respect to placebos, can significantly increase the progression-free survival of a patient with non-small cell lung cancer. The 1- [[4-(4-fluoro-2-methyl-1H-indole-5-yl)oxy-6-methoxyquinoline-7-yl]oxy]methyl]cyclopropylamine or a pharmaceutically acceptable salt thereof as provided in the	<p>1. A Compound I having the following structural formula: or a pharmaceutically acceptable salt thereof, for use in the treatment of non-small cell lung cancer, wherein the Compound I is administered at intervals wherein the ratio of the number of days in the dosing period to the withdrawal period is 2: 0.5 to 2 .</p> <p>11. A pharmaceutical composition comprising a therapeutically effective amount of a compound having the structural formula of Compound I and at least one pharmaceutically acceptable carrier, for use in the treatment of a non-small cell lung cancer, wherein the Compound I is administered at intervals wherein the</p>	Chia Tai Tianqing Pharmaceutical Group Co. Ltd., Jiangsu 222062, CN, 101843845 Advchen Laboratories Nanjing Ltd., Nanjing, Jiangsu 210061, CN, 101634843 CHIA TAI TIANQING PHARMACEUTICAL GROUP CO LTD ADVCHEN LABORATORIES NANJING LTD	2020-02-26	2014-12-09

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		present application can be used for treating lung adenocarcinoma, and with respect to placebos, can significantly increase the progression-free survival of a patient with lung adenocarcinoma.	ratio of the number of days in the dosing period to the withdrawal period is 2: 0.5 to 2.			
EP3207811B1	NON-COMBUSTING FLAVOR INHALER AND PACKAGE	This non-combusting flavor inhaler is provided with: a power source unit which comprises at least a battery; a first cartridge which comprises at least a vaporizer unit which, with power provided from an aerosol source and the battery, vaporizes an aerosol source without combustion; a second cartridge which has at least a flavor source and which imparts flavor to the aerosol vaporized by the vaporizer unit by said aerosol passing through said second cartridge; and a control unit which, upon detecting that it is time for the second cartridge to be replaced, controls a notification unit to notify that it is time for the second cartridge to be replaced.	1. A non-burning type flavor inhaler (1) comprising: a power source unit (10) including at least a battery (11); a first cartridge (20) including at least an aerosol source (21A) and an atomizer (22) configured to atomize the aerosol source (21A) without burning using power supplied from the battery (11); a second cartridge (30) including at least a flavor source (31A) and imparts flavor to the aerosol by letting the aerosol atomized by the atomizer (22) pass through; and a controller configured to control a notification unit (40) to notify a replacement timing of the second cartridge (30) in response to detection of the replacement timing of the second cartridge (30); wherein the controller has a counter (52X) configured to count the energization time of the atomizer (22), and wherein the controller detects the replacement timing of the second cartridge (30) based on the energization time of the atomizer (22) and resets the count value of the counter (52X), when a count value of the counter (52X) reaches a predetermined value.	Japan Tobacco Inc., Tokyo 105-8422, JP, 100151448 JAPAN TOBACCO INC	2020-02-12	2014-11-10
EP3206665B1	ANHYDROUS LIQUID MELATONIN COMPOSITION	The present invention relates to a concentrated melatonin solution, wherein melatonin is present in a quantity of 10.0 % or higher in a substantially water-free carrier mixture of ethanol and a polyethoxylated derivative. The concentrated solution, free of preserving agents, is suitable to prepare injectable sterile compositions for parenteral administration, or formulations for topical or oral administration. The invention also encompasses a method for the preparation of the concentrated solution, as well as the possible benefits of the intravenous infusion of high levels of melatonin as adjuvant therapy in Ebola or Dengue hemorrhagic fever (DHF) or as an anti-oxidant/anti-aging treatment.	1. A substantially water-free parenteral bulk solution consisting of an anhydrous liquid preparation of melatonin containing at least: a) melatonin (MLT) quantitatively at the concentration of or higher than 10.0 % weight/volume of the bulk solution; b) a polyethoxylated derivative (PED) selected among macrogolglycerol hydroxystearate, preferably polyoxyl 40 hydrogenated castor oil, or macrogolglycerol ricinoleate, preferably polyoxyl 35 castor oil, or macrogol 15 hydroxystearate, also polyoxyl 15 hydroxystearate, or a mixture thereof; whereas the mass ratio MLT/PED is 1 : 1 (weight/weight); and c) ethanol 10 volumes.	Worphmed Srl, 20146 Milan, IT, 101764778 WORPHMED SRL	2020-02-26	2014-10-13
EP3171718B1	AEROSOL PROVISION SYSTEM	An aerosol provision system comprising: a liquid storage area comprising a liquid formulation; an aerosol generating area; a membrane disposed between the liquid storage area and the aerosol generating area, said membrane fluidly communicating the liquid storage area with the aerosol generating area; wherein the liquid formulation has a water content of at least 18% w/w.	1. An aerosol provision system (500) comprising: a liquid storage area comprising a liquid formulation; an aerosol generating area; a membrane (601) disposed between the liquid storage area and the aerosol generating area, said membrane fluidly communicating the liquid storage area with the aerosol generating area; wherein the liquid formulation has a water content of at least 18% w/w; and wherein the aerosol generating area comprises an aerosol generating component.	Nicoventures Holdings Limited, London WC2R 3LA, GB, 101423781 NICOVENTURES HOLDINGS LTD	2020-02-12	2014-07-25

Document	Title	Abstract	Independent Claims	Patentee	Granted	Priority
EP2974721B1	A PHARMACEUTICAL COMPOSITION COMPRISING A GAS GENERATING INGREDIENT	The invention discloses an enteric-coated capsule encapsulating a pharmaceutical composition comprised of a gas generating agent, a compound that causes the gas generating agent to produce gas upon hydrolysis, optionally excipient(s), and at least a bioactive agent for oral delivery in an animal subject.	1. A pharmaceutical composition suitable for oral administration to an animal subject, comprising a gas generating ingredient, a surfactant, an acid initiator and at least one bioactive agent, wherein said pharmaceutical composition is loaded within an enteric-coated capsule, said gas generating ingredient is selected from the group consisting of ammonium bicarbonate, sodium bicarbonate, potassium bicarbonate, and calcium bicarbonate, and said acid initiator reacts with said gas generating ingredient in an intestinal tract of the animal subject to produce a gas which is carbon dioxide upon contacting water, and said acid initiator is an anhydride of complexone, said complexone being selected from the group consisting of DTPA (diethylene triamine pentaacetic acid), EDTA (ethylene diamine tetra acetate), IDA (iminodiacetic acid), NTA (nitrilotriacetic acid), EGTA (ethylene glycol tetraacetic acid), BAPTA (1, 2-bis(o-aminophenoxy)ethane-N, N, N', N'-tetraacetic acid), DOTA (1, 4, 7, 10-tetraazacyclododecane-N, N', N, N'-tetraacetic acid), and NOTA (2, 2', 2''-(1, 4, 7-triazonane-1, 4, 7-triyl)triacetic acid).	Nanomega Medical Corporation, Lake Forest CA 92630, US, 101535884 NANOMEGA MEDICAL CORP	2020-02-12	2014-07-18
EP3160558B1	FLOW REGULATING INHALER DEVICE	Some embodiments of the invention relate to an inhaler device for pulmonary delivery of at least one substance from a drug dose cartridge to an inhaling user, comprising: a first conduit for conducting a carrier airflow to a proximal opening of a mouthpiece for use by the user; a holder configured to position the dose cartridge within the carrier airflow; and a second conduit for conducting a shunting airflow to the mouthpiece without passing through the dose cartridge position. In some embodiments, a controller connected to a valve controls a rate of carrier airflow, for example by controlling the shunting airflow, based on a sensor indication of airflow rate and a target airflow profile.	1. An inhaler device for delivery to an inhaling user of at least one drug substance emitted from a dose cartridge, the inhaler device comprising: a first conduit (300, 402, 802, 904, 1106, 1204, 1320, 1522, 1532) for conducting a carrier airflow to a proximal opening (306, 816, 908, 1112) of a mouthpiece (304, 412, 810, 1108, 1404, 1502) from which the user (200) inhales; a holder (1520, 1530) configured to position a dose cartridge (310, 1500C, 1500D, 2300C, 2300D) at a dose cartridge position defined by the holder (1520, 1530) within the carrier airflow of the first conduit (300, 402, 802, 904, 1106, 1204, 1320, 1522, 1532); a second conduit (320, 408, 804, 902, 1400), pneumatically coupled to the first conduit (300, 402, 802, 904, 1106, 1204, 1320, 1522, 1532), for conducting a shunting airflow to the mouthpiece (304, 412, 810, 1108, 1404, 1502) without passing the shunting airflow through the dose cartridge position; at least one sensor (208, 314, 404, 800, 1104, 1540) positioned and configured for detecting at least one parameter indicating a rate of the carrier airflow; and at least one valve (322, 406) positioned along the second conduit and configured to at least partially close to limit a rate of said shunting airflow to thereby affect a rate of the carrier airflow; characterized in that said holder (1520, 1530) is configured to position the dose cartridge such that substantially all carrier airflow through the first conduit passes through said drug substance in said dose cartridge (310, 1500C, 1500D,	Syqe Medical Ltd., 6816914 Tel-Aviv, IL, 101570440 SYQE MEDICAL LTD	2020-02-12	2014-06-30

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			2300C, 2300D); wherein the at least one valve (322, 406) is operated by a valve controller (212), the valve controller (212) is functionally connected to receive an indication of the rate of the carrier airflow from the at least one sensor (208, 314, 404, 800, 1104, 1540), and the valve controller (212) is configured to operate the at least one valve (322, 406) based on the indication of the rate of the carrier airflow from the at least one sensor (208, 314, 404, 800, 1104, 1540).			
EP3145339B1	AN ELECTRICALLY HEATED AEROSOL-GENERATING SYSTEM WITH END HEATER	An electrically heated aerosol-generating system (10) for receiving an aerosol-forming article (30) is disclosed. The system (10) comprises a tubular portion (12) for receiving an aerosol-forming article (30) and a heater element (16) comprising an end face (22). The heater element (16) is positioned proximate an end of the tubular portion (12) so that the end face (22) is proximate an end of an aerosol-forming article (30) when the aerosol-forming article (30) is inserted into the tubular portion (12). The system (10) is configured to supply a first amount of electrical energy to the heater element (16) to heat the heater element (16) to a first temperature and to supply a second amount of electrical energy to the heater element (16) to maintain the heater element (16) at a second temperature, wherein the difference between the first and second temperatures is at least about 100 degrees Celsius.	1. An electrically heated aerosol-generating system (10) for receiving an aerosol-forming article (30), the system comprising: a tubular portion (12) for receiving an aerosol-forming article (30); a heater element (16) comprising an end face (22) and positioned proximate an end of the tubular portion (12) so that the end face (22) is proximate an end of an aerosol-forming article (30) when the aerosol-forming article (30) is inserted into the tubular portion (12); and an annular thermally conductive element (26) provided on an inner surface of the tubular portion (12), the annular thermally conductive element (26) comprising a first portion connected to the heater element (16) and a second portion arranged to contact an aerosol-forming article (30) when the aerosol-forming article (30) is inserted into the tubular portion (12); wherein the system (10) is configured to supply a first amount of electrical energy to the heater element (16) to heat the heater element (16) to a first temperature, wherein the system (10) is configured to supply a second amount of electrical energy to the heater element (16) to maintain the heater element (16) at a second temperature, wherein the second temperature is lower than the first temperature and wherein the difference between the first and second temperatures is at least 100 degrees Celsius.	Philip Morris Products S.A., 2000 Neuchâtel, CH, 101137385 PHILIP MORRIS PRODUCTS SA	2020-02-12	2014-05-21
EP3129087B1	METHOD, ELECTRONIC DEVICE, INHALATION TRAINING SYSTEM FOR PRACTICING AND/OR CONTROLLING AN INHALATION PROCESS OF A PATIENT	The present invention relates to a method, an electronic device, a system and an information storage medium for practicing and/or controlling an inhalation process of a patient. The method comprises quantifying an airflow in a mouthpiece of an inhaler during an inhalation process of the patient by means of an inhalation training device, evaluating an airflow signal received from the inhalation training device by means of an electronic device and providing visual feedback to the patient by means of the electronic device, wherein the visual feedback varies with one or more time-variant characteristics of the evaluated airflow signal. The electronic device is configured for evaluation of an airflow signal received from an inhalation training device and for provision of visual feedback to the patient,	1. Method for practicing an inhalation process of a patient, wherein the method comprises: - detachably mounting an inhalation training device (1) on a mouthpiece (3) of an inhaler (4), - quantifying an airflow in the mouthpiece (3) of the inhaler (4) during an inhalation process of the patient by means of the inhalation training device (1), - evaluating an airflow signal received from the inhalation training device (1) by means of a portable communications device (7), which is separate from the inhalation training device (1) and - providing visual feedback to the patient by means of the portable communications device (7), wherein the visual feedback varies with one or more time-variant characteristics of the evaluated airflow signal, - detecting the presence of the inhalation training device (1)	Boehringer Ingelheim International GmbH, 55216 Ingelheim am Rhein, DE, 100089526 BOEHRINGER INGELHEIM INT	2020-02-26	2014-04-07

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		wherein the visual feedback varies with one or more time-variant characteristics of the evaluated signal. The inhalation training system comprises an inhalation training device, an inhaler and the electronic device.	and/or a specific type of the inhaler (4) during training by means of the portable communications device (7) and providing airflow related feedback only when the inhalation training device (1) and/or a specific type of the inhaler (4) is detected during training, wherein an actuation of the inhaler (4) is blocked by a blocking device (2c) of the inhalation training device (1), so that drug release and/or dispensing of any fluid is prevented during training. 6. An electronic device for practicing and/or controlling an inhalation process of a patient, wherein the electronic device (7) is configured for - evaluation of a signal received from an inhalation training device (1), the signal quantifying an airflow in a mouthpiece (3) of an inhaler (4) during an inhalation process of the patient and - provision of visual feedback to the patient, wherein the visual feedback varies with one or more time-variant characteristics of the evaluated signal characterized in that the electronic device (7) is a portable communications device (7) which is configured for monitoring a reference tone generated by the inhalation training device (1) during training and thus for detecting the presence of the inhalation training device (1) during training.			
EP3115454B1	NOVEL RNA SEQUENCE HAVING ANTI-TUMOUR ACTIVITY	Provided is a novel useful microRNA having improved anti-tumour activity, obtained by introducing a variation in a microRNA which is present in-vivo and which exhibits an anti-tumour effect. This microRNA containing a base sequence (SEQ ID NO: 1) obtained by varying a predetermined region of the base sequence of miR-29b is able to exhibit a particularly outstanding anti-tumour effect.	1. A microRNA, comprising a polynucleotide (i) or (ii): (i) a polynucleotide having a base sequence represented by SEQ ID NO: 1; or (ii) a polynucleotide having a base sequence of 5'-X 1 CUA AACCAUX 2 UGAAAX 3 CAGX 4 -3', wherein each of X 1, X 2, X 3, and X 4 can be any base, and the polynucleotide having a comparable level of antitumor effect to the antitumor effect of the polynucleotide consisting of the base sequence represented by SEQ ID NO: 1. 7. A microRNA for use in treating cancer, comprising a polynucleotide (i) or (ii): (i) a polynucleotide having a base sequence represented by SEQ ID NO: 1; or (ii) a polynucleotide having a base sequence of 5'-X 1 CUA AACCAUX 2 UGAAAX 3 CAGX 4 -3', wherein each of X 1, X 2, X 3, and X 4 can be any base, and the polynucleotide having a comparable level of antitumor effect to the antitumor effect of the polynucleotide consisting of the base sequence represented by SEQ ID NO: 1.	Yamamoto Hirofumi, Suita-shi, Osaka 565-0871, JP, 101548193 Mori Masaki, Suita-shi, Osaka 565-0871, JP, 101548194 YAMAMOTO HIROFUMI MORI MASAKI	2020-02-12	2014-03-04
EP3104844B1	COMPLEXES OF SIROLIMUS AND ITS DERIVATIVES, PROCESS FOR THE PREPARATION THEREOF AND PHARMACEUTICAL COMPOSITIONS CONTAINING THEM	The invention is directed to a stable complex with controlled particle size, increased apparent solubility and increased dissolution rate comprising as active compound Sirolimus or derivatives thereof, which is useful in the prophylaxis of organ rejection in patients receiving renal transplants, in the treatment of psoriasis, facial angiofibromas associated with tuberous sclerosis, fibrofolliculomas found in Birt-Hogg-Dubé Syndrome, chronic erosive oral lichen planus, Early Stage	1. A stable complex comprising a) as active compound selected from the group of Sirolimus or its salts; b) polyvinylpyrrolidone as a complexing agent; c) sodium-lauryl-sulfate as a pharmaceutically acceptable excipient, wherein said complex is obtained by continuous flow mixing process and has a particle size in the range between 50 nm and 600 nm, preferably 50 nm and 200 nm.	Druggability Technologies IP Holdco Limited, Swatara, PA 17013, MT, 101540133 DRUGGABILITY TECH IP HOLDCO LIMITED	2020-02-12	2014-02-14

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		<p>Cutaneous T-cell Lymphoma, Treatment of Autoimmune Active Anterior Uveitis, dry eye syndrome, age-related macular degeneration, diabetic macular edema, noninfectious uveitis, telangiectasia, inflammatory skin diseases (dermatitis, including psoriasis and lichen ruber planus), Pachyonychia Congenita and in the suppression of angiogenesis pathways. More specifically, the complex of the present invention possesses increased apparent solubility, permeability and enhanced biological performance including significantly improved exposure, earlier t max, higher Cmax and higher trough concentrations at 24 hours which will allow the reduction of the dose. Furthermore, the complex of the present invention possesses exceptional stability as a redispersed solution allowing the development of liquid based formulation for transdermal and other topical applications. The invention also relates to methods of formulating and manufacturing complex according to the invention, pharmaceutical compositions containing it, its uses and methods of treatment using the complex and its compositions.</p>				
EP3076957B1	METHOD FOR PREPARING DRY POWDER INHALATION COMPOSITIONS	<p>A method for preparing dry powder inhalation compositions which comprise two or more active ingredients and inert particulate excipient, and a method for adjusting the performance of such compositions is described. The method comprises mixing the first active ingredient and a portion of the second active ingredient with a first excipient to provide a first preblend, mixing the remaining portion of the second active ingredient with a second excipient to provide a second preblend, and finally mixing the first and the second preblends together, wherein the two excipient grades differ in their median particle size. The FPD level of second active ingredient can be adjusted simply by changing the ratio how it is divided between the first and the second excipient.</p>	<p>1. A method of preparing a dry powder inhalation composition comprising a first and a second active ingredient in micronized form comprising the steps of: (a) mixing the first active ingredient and a portion of the second active ingredient with a first particulate excipient to provide a first preblend; (b) mixing the remaining portion of the second active ingredient with a second particulate excipient to provide a second preblend; and (c) mixing the first and the second preblends together; wherein the first particulate excipient and the second particulate excipient differ in their median particle size, such that VMD (volume median diameter) of the finer particulate excipient is less than 90 % of the VMD of the coarser particulate excipient. 4. A method of preparing a dry powder inhalation composition comprising a first and a second active ingredient in micronized form comprising the steps of: (a) mixing the first active ingredient and a portion of the second active ingredient with a first particulate excipient having VMD within the range of from 30 to 70 µm to provide a first preblend; (b) mixing the remaining portion of the second active ingredient with a second particulate excipient having VMD within the range of from 80 to 150 µm to provide a second preblend; and (c) mixing the first and the second preblends, optionally with additional first or second particulate excipient, together and (d) optionally mixing the obtained blend with additional first or second particulate excipient.</p>	Orion Corporation, 02200 Espoo, FI, 100193231 ORION CORP	2020-02-05	2013-12-06

Document	Title	Abstract	Independent Claims	Patentee	Granted	Priority
EP3076815B1	AEROSOL-GENERATING ARTICLE WITH LOW RESISTANCE AIR FLOW PATH	A heated aerosol-generating article (10) for use with an aerosol-generating device is designed to be difficult to light in the manner of traditional cigarettes. The heated aerosol-generating article (10) comprises a plurality of components, including an aerosol-forming substrate (20), assembled within a wrapper (60) to form a rod having a mouth end (70) and a distal end (80) upstream from the mouth end (70). The heated aerosol-generating article (10) defines a first air-flow path in which air drawn into the aerosol-generating article (10) through the mouth end (70) passes through the aerosol-forming substrate (20), and a second air-flow path in which air drawn into the aerosol-generating article (10) through the mouth end (70) does not pass through the aerosol-forming substrate (20). The resistance to draw (RTD) of the second air-flow path is lower than the RTD of the first air-flow path when the heated aerosol-generating article (10) is not coupled to an aerosol-generating device. As a result, the restricted air-flow through the aerosol-forming substrate makes it difficult for a user to inadvertently light the heated aerosol-generating article (10).	<p>1. A heated aerosol-generating article (10) having lowered propensity for flame ignition for use with an aerosol-generating device (110), the heated aerosol-generating article comprising a plurality of components including an aerosol-forming substrate (20) assembled within a wrapper (60) to form a rod having a mouth end (70) and a distal end (80) upstream from the mouth end, the heated aerosol-generating article defining a first air-flow path in which air drawn into the aerosol-generating article through the mouth end (70) passes through the aerosol-forming substrate, and a second air-flow path in which air drawn into the aerosol-generating article through the mouth end (70) does not pass through the aerosol-forming substrate, the resistance to draw (RTD) of the second air-flow path being lower than the RTD of the first air-flow path, in which the RTD of the second air-flow path is less than 10 mm WG.</p> <p>9. A heated aerosol-generating system (100) comprising, a heated aerosol-generating article (10) comprising a plurality of components including an aerosol-forming substrate (20) assembled within a wrapper (60) to form a rod having a mouth end and a distal end upstream from the mouth end, the heated aerosol-generating article defining a first air-flow path in which air drawn into the aerosol-generating article through the mouth end (70) passes through the aerosol-forming substrate, and a second air-flow path in which air drawn into the aerosol-generating article through the mouth end (70) does not pass through the aerosol-forming substrate, the resistance to draw (RTD) of the second air-flow path being lower than the RTD of the first air-flow path when the heated aerosol-generating article is not coupled to an aerosol-generating device (110), and an aerosol-generating device (110) comprising means for heating (120) the aerosol-forming substrate, the aerosol-generating device arranged to engage with the heated aerosol-generating article such that the second air flow path is disrupted to allow air to be drawn through the aerosol-forming substrate when a user draws on the mouth end of the rod. 15. A method of smoking a heated aerosol-generating article (10) comprising a plurality of components including an aerosol-forming substrate (20) assembled within a wrapper (60) to form a rod having a mouth end and a distal end upstream from the mouth end, the heated aerosol-generating article defining a first air-flow path in which air drawn into the aerosol-generating article through the mouth end passes through the aerosol-forming substrate, and a second air-flow path in which air drawn into the aerosol-generating article through the mouth end does not pass through the aerosol-</p>	Philip Morris Products S.A., 2000 Neuchâtel, CH, 101137385 PHILIP MORRIS PRODUCTS SA	2020-02-19	2013-12-05

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			forming substrate, the resistance to draw (RTD) of the second air-flow path being lower than the RTD of the first air-flow path when the heated aerosol-generating article is not coupled to an aerosol-generating device, the method comprising the steps of; a) engaging the heated aerosol-generating article (10) with an aerosol-generating device (110) such that the second air-flow path is disrupted, b) actuating the aerosol-generating device to heat the aerosol-forming substrate, and c) drawing on the mouth end of the rod to cause air to flow along the first air-flow path, an aerosol generated by heating of the aerosol-forming substrate being entrained in the air as it passes through the aerosol-forming substrate.			
EP3076808B1	HEATED AEROSOL GENERATING ARTICLE WITH AIR-FLOW BARRIER	A heated aerosol-generating article for use with an aerosol-generating device having a heating element comprises a solid aerosol-forming substrate and a breachable air-flow barrier assembled within a wrapper to form a rod. The rod has a mouth end and a distal end upstream from the mouth end. The breachable air-flow barrier is positioned, when intact, to substantially prevent air being drawn through the solid aerosol-forming substrate when a user draws on the mouth end of the rod. This decreases the propensity for ignition of the aerosol-forming substrate.	<p>1. A heated aerosol-generating article for use with an aerosol-generating device having a heating element, the heated aerosol-generating article comprising an aerosol-forming substrate and a breachable air-flow barrier assembled within a wrapper to form a rod having a mouth end and a distal end upstream from the mouth end, in which the breachable air-flow barrier is positioned to substantially prevent air being drawn through the aerosol-forming substrate when a user draws on the mouth end of the rod, and in which the aerosol-forming substrate comprises a gathered sheet of aerosol-forming material.</p> <p>11. A heated aerosol-generating system comprising, a heated aerosol-generating article comprising an aerosol-forming substrate and a breachable air-flow barrier assembled within a wrapper to form a rod having a mouth end and a distal end upstream from the mouth end, in which the breachable air-flow barrier is positioned to substantially prevent air being drawn through the aerosol-forming substrate when a user draws on the mouth end of the rod, and in which the aerosol-forming substrate comprises a gathered sheet of aerosol-forming material, and an aerosol-generating device having a heating element, the aerosol-generating device comprising means for breaching the breachable air-flow barrier of the aerosol-generating article to allow air to be drawn through the aerosol-forming substrate when a user draws on the mouth end of the rod. 15. A method of smoking a heated aerosol-generating article comprising an aerosol-forming substrate and a breachable air-flow barrier assembled within a wrapper to form a rod having a mouth end and a distal end upstream from the mouth end, the aerosol-forming substrate comprising a gathered sheet of aerosol-forming material, the method comprising the steps of; a) coupling the distal end of the rod with an aerosol-generating device having a</p>	Philip Morris Products S.A., 2000 Neuchâtel, CH, 101137385 PHILIP MORRIS PRODUCTS SA	2020-02-05	2013-12-05

Document	Title	Abstract	Independent Claims	Patentee	Granted	Priority
			heating element, b) breaching the breachable air-flow barrier, c) actuating the heating element to heat the aerosol-forming substrate and generate an aerosol, and d) inhaling the aerosol through the mouth end of the rod, in which steps a), b) and c) may be carried out in any order.			
EP3065714B1	POLYINOSINIC-POLYCYTIDYLIC ACID (POLY (I:C)) FORMULATIONS FOR THE TREATMENT OF UPPER RESPIRATORY TRACT INFECTIONS	The present invention concerns a composition comprising micro particles of polyinosinic—polycytidylic acid (Poly (I:C)) and a carrier polymer selected from the group pea starch, pregelatinized potato starch, lactose, microcrystalline cellulose, hyaluronate or glucosamine for use in preventing and/or treating viral infections of the upper respiratory tract or the common cold and a device, preferably a nasal delivery system, comprising said composition for use by a patient in need to prevent and/or treat infections or the common cold.	1. A microparticle consisting of polyinosinic acid, polycytidylic acid, pea starch, and water.	Janssen Sciences Ireland Unlimited Company, Co Cork, IE, 101778354 JANSSEN SCIENCES IRELAND UNLIMITED CO	2020-02-12	2013-11-06
EP3062618B1	CRYSTALLINE FORMS OF THERAPEUTIC COMPOUNDS AND USES THEREOF	Described herein is certain crystalline forms of Compound 3, as well as pharmaceutical compositions employing the crystalline forms. Also provided are particles (e.g., nanoparticles) comprising such crystalline forms or pharmaceutical compositions. In certain examples, the particles are mucus penetrating particles (MPPs). The present invention further relates to methods of treating or preventing diseases using crystalline forms or pharmaceutical compositions.	7-(3-(4-(4-Fluoro-2-methyl-1H-indol-5-yloxy)-6-methoxyquinazolin-7-yloxy)propyl)-2-oxa-7-azaspiro[3.5]nonane in crystalline Form A or crystalline Form B, wherein Form A is a form of 7-(3-(4-(4-fluoro-2-methyl-1H-indol-5-yloxy)-6-methoxyquinazolin-7-yloxy)propyl)-2-oxa-7-azaspiro[3.5]nonane having an X-ray powder diffraction (XRPD) pattern with peaks at 6.11±0.3, 9.63±0.3, 16.41±0.3, 18.60±0.3, 20.36±0.3 and 23.01±0.3 degrees two theta, or 1.445±0.03, 0.917±0.03, 0.540±0.03, 0.477±0.03, 0.436±0.03 and 0.386±0.03 nm (14.45±0.3, 9.17±0.3, 5.40±0.3, 4.77±0.3, 4.36±0.3 and 3.86±0.3 Å) in d-spacing, wherein Form B is a form of 7-(3-(4-(4-fluoro-2-methyl-1H-indol-5-yloxy)-6-methoxyquinazolin-7-yloxy)propyl)-2-oxa-7-azaspiro[3.5]nonane having an X-Ray Powder Diffraction (XRPD) pattern with peaks at 7.70±0.3, 13.53±0.3, 17.27±0.3, 18.44±0.3, 19.73±0.3, 23.10±0.3 and 26.07±0.3 degrees two theta or 1.147±0.03, 0.654±0.03, 0.513±0.03, 0.481±0.03, 0.450±0.03, 0.385±0.03 and 0.341±0.03 nm (11.47±0.3, 6.54±0.3, 5.13±0.3, 4.81±0.3, 4.50±0.3, 3.85±0.3 and 3.41±0.3 Å) in d-spacing, and wherein the XRPD pattern is obtained using Cu/Kα radiation at a wavelength of 0.154059 nm (1.54059 Å).	Kala Pharmaceuticals Inc., Wavertertown, MA 02472, US, 101809891 KALA PHARMACEUTICALS INC	2020-02-05	2013-11-01
EP3024489B1	SALTS OF 2-AMINO-1-HYDROXYETHYL-8-HYDROXYQUINOLIN-2(1H)-ONE DERIVATIVES HAVING BOTH MUSCARINIC RECEPTOR ANTAGONIST AND BETA-2 ADRENERGIC RECEPTOR AGONIST ACTIVITIES	The present invention is directed to crystalline addition salts of (i) 8-hydroxyquinolin- 2(1H)-one derivatives and (ii) a dicarboxylic acid or a sulfimide, or a pharmaceutically acceptable solvates thereof. The present invention is directed to crystalline addition salts of (i) 8-hydroxyquinolin- 2(1H)-one	1. A pharmaceutically acceptable crystalline addition salt, which is one of: trans -4-[[3-[5-(((2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1, 2-dihydroquinolin-5-yl)ethyl]amino)methyl)-1H-1, 2, 3-benzotriazol-1-yl]propyl](methyl)amino] cyclohexyl hydroxy(di-2-thienyl)acetate saccharinate, and trans -4-[[3-[6-(((2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1, 2-dihydroquinolin-5-yl)ethyl]amino)methyl)-2-oxo-1, 3-benzothiazol-	Almirall S.A., 08022 Barcelona, ES, 101156984 ALMIRALL SA	2020-02-19	2013-07-25

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		derivatives and (ii) a dicarboxylic acid or a sulfimide, or a pharmaceutically acceptable solvates thereof.	3(2 H -yl]propyl)(methyl)-amino]cyclohexyl hydroxy(di-2-thienyl)acetate fumarate, or a pharmaceutically acceptable solvate thereof.			
EP2950861B1	INHALATION DEVICE AND COMPUTER PROGRAM FOR CONTROLLING THEREOF	The invention provides an inhalation device using an electrically driven vibratory element (14) for releasing a drug dose into a flow channel (10), and a controller (26) for activating/deactivating the vibratory element. A sensor arrangement (18, 22) is able to differentiate between inhalation flow and exhalation flow through the flow channel, to assist in forming a model of the breathing pattern of the user. The device can detect reliably inhalation flow patterns from patients of all ages.	<p>1. An inhalation device for delivering medication from a container through a flow channel (10) to a patient, said inhalation device comprising: an electrically driven vibratory element (14); a blister pack advance mechanism (16); a controller (26) configured for activating/deactivating the vibratory element; a first sensor (18) arranged to face inhalation air and configured to generate inhalation flow signals, and a second sensor (22) arranged to face exhalation air and configured to generate exhalation flow signals; characterized in that the controller is configured for combining signals from the first and second sensors (18, 22) to generate a direction signal that indicates direction of airflow through the flow channel; and wherein the controller (26) is adapted generate a first trigger signal for advancing the blister pack advance mechanism (16) based on a detection of a first valid inhalation, and generate at least one additional trigger signal for controlling a timing of operation of the vibratory element (14) for releasing medication into the flow channel based on a detection of at least one consecutive valid inhalation, wherein valid inhalations are detected based on the inhalation and exhalation flow signals.</p> <p>7. A computer readable medium comprising computer program code means adapted to perform a method of controlling an inhalation device for delivering medication from a container through a flow channel (10) to a patient, the method comprising: obtaining a signal from a first sensor (18) arranged to face inhalation air and generating an inhalation flow signal; obtaining a signal from a second sensor (22) arranged to face exhalation air and generating an exhalation flow signal; characterized in that the method further comprises: combining signals from the first and second sensors (18, 22) to generate a direction signal that indicates direction of air flow; generating a first trigger signal for advancing a blister pack advance mechanism (16) based on a detection of a first valid inhalation; and generating one or more additional trigger signals for controlling a timing of operation of an electrically driven vibratory element (14) for releasing the medication into the flow channel based on a detection of at least one consecutive valid inhalation, wherein valid inhalations are detected based on the inhalation and exhalation flow signals.</p>	MicroDose Therapeutx Inc., Ewing, NJ 08628, US, 101631577 MICRODOSE THERAPEUTX INC	2020-02-26	2013-03-15

Document	Title	Abstract	Independent Claims	Patentee	Granted	Priority
EP3219316B1	MIXTURE OF FATTY ACIDS (F.A.G., FATTY ACIDS GROUP) FOR USE IN THE TREATMENT OF INFLAMMATORY PATHOLOGIES	<p>This invention relates to a mixture of at least three fatty acids selected from palmitic acid, oleic acid, stearic acid, linoleic acid, alpha-linolenic acid, gamma-linolenic acid, eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA), azelaic acid and myristic acid.</p> <p>This invention also relates to the use of the aforesaid mixture in the treatment of inflammatory pathologies.</p>	<p>1. Pharmaceutical, cosmetic and/or dietary composition comprising a mixture of at least five fatty acids selected from palmitic acid, oleic acid, stearic acid, linoleic acid, alpha linolenic acid, gamma linolenic acid, eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA), azelaic acid and myristic acid and the physiologically acceptable excipient N-2 hydroxyethyl palmitamide.</p>	<p>Again Life Italia Srl, 36015 Schio (VI), IT, 101552327 AGAIN LIFE ITALIA SRL</p>	2020-02-19	2013-03-08
EP3091485B1	DOSE INDICATOR DEVICE	<p>A dose indicator device for a pressurised metered dose inhaler comprises an inner wheel, annular outer wheel, actuator and housing;</p> <p>the inner wheel comprising primary indexing teeth and a flexible drive arm;</p> <p>the outer wheel comprising secondary indexing teeth on an outer face of the outer wheel;</p> <p>the inner wheel and outer wheel located at least partially within the housing such that the inner wheel and outer wheel are rotatable about a common longitudinal axis of rotation;</p> <p>the actuator movable in a plane perpendicular to the axis of rotation to engage the primary indexing teeth to rotate the inner wheel;</p> <p>the housing being fixed relative to the axis of rotation and comprising a deflector;</p> <p>the deflector configured such that, on rotation of the inner wheel, the drive arm is intermittently deflected and brought into contact with the secondary indexing teeth to rotate the outer wheel about the axis of rotation.</p>	<p>1. A dose indicator device (9) for a pressurised metered dose inhaler (1) comprising: an inner wheel (11), an annular outer wheel (12), an actuator (45) and a housing (70); the inner wheel (11) comprising a plurality of primary indexing teeth (22) and a flexible drive arm (23); the annular outer wheel (12) comprising a plurality of secondary indexing teeth (33) on an outer face of the annular outer wheel (12); the inner wheel (11) and outer annular wheel (12) being located at least partially within the housing such that the inner wheel (11) and annular outer wheel (12) are rotatable about a common longitudinal axis of rotation; the actuator being movable in a plane perpendicular to the longitudinal axis of rotation to engage the primary indexing teeth of the inner wheel (11) to rotate the inner wheel (11); the housing being fixed relative to the longitudinal axis of rotation and comprising a deflector (59); the deflector being configured such that, on rotation of the inner wheel (11), the flexible drive arm (23) is intermittently deflected by the deflector and is thereby brought into contact with the secondary indexing teeth so as to rotate the annular outer wheel (12) about the axis of rotation; wherein the housing further comprises a first flexible restraint (57) which engages the inner wheel (11) to restrain rotation of the inner wheel (11) when not being rotated by the actuator and a second flexible restraint (55) which engages the annular outer wheel (12) to restrain rotation of the annular outer wheel (12) when not being rotated by the inner wheel (11); and wherein the second flexible restraint is engagable with the secondary indexing teeth of the annular outer wheel (12) (12); and wherein the actuator (45) is provided on an actuator member (13), said actuator member (13) being movable by a dispensing container (3) of a pressurised metered dose inhaler (1) into an indexing position on actuation of the pressurised metered dose inhaler (1) to engage the actuator (45) with the primary indexing teeth (22) of the inner wheel (11) to rotate the inner wheel (11); wherein said actuator member (13) is biased away from the indexing position such that the actuator (45) is disengaged from the primary indexing</p>	<p>Consort Medical PLC, HP2 4TZ, GB, 101838495 CONSORT MEDICAL PLC</p>	2020-02-26	2012-06-06

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			teeth (22) when the pressurised metered dose inhaler (1) is in a non-dispensing position.			
EP2822558B1	PROCASPASE 3 ACTIVATION BY COMBINATION THERAPY	The invention provides compositions and methods for the induction of cell death, for example, cancer cell death. Combinations of compounds and related methods of use are disclosed, including the use of compounds in therapy for the treatment of cancer and selective induction of apoptosis in cells. The disclosed drug combinations can have lower neurotoxicity effects than other compounds and combinations of compounds.	<p>1. A composition comprising: (a) a compound PAC-1: (b) a second active agent, wherein the second active agent is bortezomib, doxorubicin, tamoxifen, carboplatin, or paclitaxel; and (c) a pharmaceutically acceptable diluent, excipient, or carrier.</p> <p>2. A composition comprising: (a) a compound PAC-1: (b) a second active agent, wherein the second active agent is staurosporine; and (c) a pharmaceutically acceptable diluent, excipient, or carrier; wherein the concentration of the compound PAC-1 is 7.5 or 15 μM and the concentration of staurosporine is 50 nM or 100 nM; or wherein the concentration of the compound PAC-1 is 30 μM and the concentration of staurosporine is 50 nM. 7. A combination of a compound PAC-1 and a second active agent for use in treating a cancer in a patient, wherein the combination is an effective amount of (a) the compound PAC-1: (b) the second active agent, wherein the second active agent is bortezomib, doxorubicin, tamoxifen, carboplatin, or paclitaxel; and (c) a pharmaceutically acceptable diluent, excipient, or carrier; and wherein said use comprises contacting cancer cells, concurrently or sequentially, with an effective amount of the compound PAC-1 and the second active agent, thereby inhibiting the growth or proliferation of the cancer cells.</p> <p>8. A combination of a compound PAC-1 and a second active agent for use in treating a cancer in a patient, wherein the combination is an effective amount of (a) the compound PAC-1: (b) the second active agent, wherein the second active agent is staurosporine; and (c) a pharmaceutically acceptable diluent, excipient, or carrier; wherein said use comprises contacting cancer cells, concurrently or sequentially, with an effective amount of the compound PAC-1 and the second active agent, thereby inhibiting the growth or proliferation of the cancer cells; and wherein the concentration of the compound PAC-1 is 7.5 or 15 μM and the concentration of staurosporine is 50 nM or 100 nM; or wherein the concentration of the compound PAC-1 is 30 μM and the concentration of staurosporine is 50 nM.</p>	The Board of Trustees of the University of Illinois, Urbana, IL 61801, US, 101206401 Vanquish Oncology Inc., Champaign, Illinois 61820, US, 101409099 UNIV ILLINOIS VANQUISH ONCOLOGY INC	2020-02-19	2012-03-06
EP2779994B1	SUSPENSIONS OF CYCLOSPORIN A FORM 2	Disclosed herein are methods of making suspensions of cyclosporin A Form 2.	<p>1. A formulation comprising cyclosporin A form 2, and a vehicle, wherein the vehicle comprises at least one surfactant and at least one stabilizer.</p> <p>9. A method of preparing a formulation of cyclosporin, the method comprising the steps of mixing cyclosporin A form 2 with a vehicle to form a suspension; milling the suspension.</p>	ALLERGAN INC., Irvine, CA 92612, US, 100074706 ALLERGAN INC	2020-02-19	2011-11-15

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			12. A formulation comprising particles of cyclosporin A form 2; and a vehicle, wherein the average size (d90) of the particles is less than 10 µm, wherein the vehicle comprises at least one surfactant and at least one stabilizer.			
EP2724775B1	METHOD FOR THE PRODUCTION OF MICRO-, SUB-MICRO- AND NANO-CAPSULES, BASED ON WHEY PROTEINS	The invention relates to a method for the production of capsules, based on milk serum proteins and comprising the following steps: a) the milk protein product is diluted; b) (i) ingredients to be encapsulated that are soluble in water or polar solvents, or (ii) a solution of the ingredient to be encapsulated is/are added to the solution from step (a); and c) the solution produced in step (b) is subjected to electro-spinning or electro-spraying or blow-spinning or blow-spraying. The capsules produced can be used as vehicles for the encapsulation of functional additives and ingredients for the incorporation thereof in pharmaceutical or food preparations.	1. Method for obtaining capsules from a whey protein product, comprising the following steps: a) diluting the whey protein product in water, b) adding the following to the solution of step a): i. functional ingredients to be encapsulated which are capable to be dissolved or suspended in water, or ii. a solution of the ingredient to be encapsulated; characterised in that the method also comprises: c) electrospinning or electro-spraying or blow spinning or blow spraying the solution produced in step b), wherein ◦ the electrospinning or electro-spraying is carried out with a distance between the capillary and the support of between 2 and 50 cm, a deposition rate range per needle from 0.01 to 10 ml/h and a voltage of between 0.1 and 1000 kV, and ◦ the blow spinning or blow spraying is carried out with a distance between the capillary and the support of between 2 and 50 cm, a deposition rate range per needle from 0.01 to 10 ml/h and by applying a flow of pressurized gas at between 200 and 300 m/s.	Consejo Superior De Investigaciones Científicas (CSIC), 28006 Madrid, ES, 101243085 CONSEJO SUPERIOR INVESTIGACION	2020-02-19	2011-06-22
EP2720680B1	INHALABLE PHARMACEUTICAL COMPOSITIONS	Inhalable pharmaceutical compositions can include an aqueous dispersion of particles including a hydrophobic bioactive agent (e.g., CoQ10) suitable for continuous aerosolization. Due to their chemical composition and methods of manufacture, the pharmaceutical compositions exhibit distinctive physicochemical properties that provide advantageous aerosol transmission and output.	1. An inhalable pharmaceutical composition comprising a dispersion of liposomal particles suitable for continuous aerosolization, the composition comprising: (a) a dispersion of liposomal particles having an average diameter between 30 and 500 nm, as determined by Dynamic Light Scattering (DLS) using a particle size analyzer at 25 °C and pre-equilibrated for 2 minutes, each liposomal particle comprising a hydrophobic bioactive agent, a phospholipid, and an aqueous dispersion vehicle, wherein the ratio of hydrophobic bioactive agent:phospholipid is between 5:1 and 1:5 (w/w), the hydrophobic bioactive agent is between 0.1 and 30 % w/w of the composition, the phospholipid is between 0.1 and 30 % w/w of the composition, and the liposomal particles are dispersed within the aqueous dispersion vehicle, wherein the hydrophobic bioactive agent comprises CoQ10, wherein the phospholipid comprises DPPC, DSPC, DMPC, or a combination thereof, and wherein, upon administration to a subject, the composition is characterized by continuous aerosolization sufficient to provide a therapeutic dose of the hydrophobic bioactive agent to the subject; or (b) a dispersion of liposomal particles having an average diameter between 30 and 300 nm, as determined by Dynamic Light Scattering (DLS) using a particle size analyzer at 25 °C and pre-equilibrated for 2 minutes,	Berg LLC, Framingham, MA 01701, US, 101732446 BERG LLC	2020-02-12	2011-06-17

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			<p>each liposomal particle comprising CoQ10, DPPC, and an aqueous dispersion vehicle, wherein the ratio of CoQ10:DPPC is between 5:1 and 1:5 (w/w), the CoQ10 is between 0.1 and 6 % w/w of the composition, and the liposomal particles are dispersed within the aqueous dispersion vehicle, and wherein, upon administration to a subject, the composition is characterized by continuous aerosolization sufficient to provide a therapeutic dose of the hydrophobic bioactive agent to the subject; or (c) a dispersion of liposomal particles having an average diameter between 30 and 300 nm, as determined by Dynamic Light Scattering (DLS) using a particle size analyzer at 25 °C and pre-equilibrated for 2 minutes, each liposomal particle comprising CoQ10, DSPC, and an aqueous dispersion vehicle, wherein the ratio of CoQ10:DSPC is between 5:1 and 1:5 (w/w), the CoQ10 is between 0.1 and 6 % w/w of the composition, and the liposomal particles are dispersed within the aqueous dispersion vehicle, and wherein, upon administration to a subject, the composition is characterized by continuous aerosolization sufficient to provide a therapeutic dose of the hydrophobic bioactive agent to the subject; or (d) a dispersion of liposomal particles having an average diameter between 30 and 300 nm, as determined by Dynamic Light Scattering (DLS) using a particle size analyzer at 25 °C and pre-equilibrated for 2 minutes, each liposomal particle comprising CoQ10, DMPC, and an aqueous dispersion vehicle, wherein the ratio of CoQ10:DMPC is between 5:1 and 1:5 (w/w), the CoQ10 is between 0.1 and 6 % w/w of the composition, and the liposomal particles are dispersed within the aqueous dispersion vehicle, and wherein, upon administration to a subject, the composition is characterized by continuous aerosolization sufficient to provide a therapeutic dose of the hydrophobic bioactive agent to the subject.</p> <p>2. An inhalable pharmaceutical composition comprising a dispersion of liposomal particles suitable for continuous aerosolization, wherein the inhalable pharmaceutical composition is an inhalable pharmaceutical composition prepared by a process comprising the steps of: hydrating a phospholipid, thereby forming a hydrated phospholipid; mixing the hydrated phospholipid, a hydrophobic bioactive agent, and an aqueous dispersion vehicle, thereby producing a mixture; and homogenizing the mixture, thereby producing a dispersion of liposomal particles comprising the phospholipid and hydrophobic bioactive agent dispersed within the aqueous dispersion vehicle and having an average diameter between 30 and 500 nm, as determined by Dynamic Light Scattering (DLS) using a particle size analyzer at 25 °C and pre-equilibrated for 2</p>			

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			<p>minutes, wherein the ratio of hydrophobic bioactive agent:phospholipid is between 5:1 and 1:5 (w/w), the hydrophobic bioactive agent is between 0.1 and 30 % w/w of the composition, and the phospholipid is between 0.1 and 30 % w/w of the composition, wherein the hydrophobic bioactive agent comprises CoQ10, wherein the phospholipid comprises DPPC, DSPC, DMPC, or a combination thereof, and wherein, upon administration to a subject, the composition is characterized by continuous aerosolization sufficient to provide a therapeutic dose of the hydrophobic bioactive agent to the subject.</p> <p>12. A method for preparing an inhalable pharmaceutical composition comprising the steps of: hydrating a phospholipid, thereby forming a hydrated phospholipid; mixing the hydrated phospholipid, a hydrophobic bioactive agent, and an aqueous dispersion vehicle, thereby producing a mixture; and homogenizing the mixture, thereby producing a dispersion of liposomal particles comprising the phospholipid and hydrophobic bioactive agent dispersed within the aqueous dispersion vehicle and having an average diameter between 30 and 500 nm, as determined by Dynamic Light Scattering (DLS) using a particle size analyzer at 25 °C and pre-equilibrated for 2 minutes, wherein the ratio of hydrophobic bioactive agent:phospholipid is between 5:1 and 1:5 (w/w), the hydrophobic bioactive agent is between 0.1 and 30 % w/w of the composition, and the phospholipid is between 0.1 and 30 % w/w of the composition, wherein the hydrophobic bioactive agent comprises CoQ10, wherein the phospholipid comprises DPPC, DSPC, DMPC, or a combination thereof, and wherein the composition is capable of being administered to a subject by continuous aerosolization sufficient to provide a therapeutic dose of the hydrophobic bioactive agent to the subject.</p>			
EP2526989B1	System comprising a nebulizer	A system (100) comprising a nebulizer (1), in particular inhaler, having a pre-installed container (3) is proposed. The system (100) comprises a packaging (30) preventing fluidic connection or opening of the container (3) in a delivery state of the nebulizer (1).	1. System (100) comprising a nebulizer (1), preferably forming an inhaler, for a fluid (2), and a packaging (30) for receiving and holding the nebulizer (1) in a delivery state, wherein the nebulizer (1) comprises a container (3) containing the fluid (2), the container (3) being pre-installed in the nebulizer (1) in the delivery state, wherein the packaging (30) prevents fluidic connection of the container (3) to a pressure generator (5) of the nebulizer (1) in the delivery state and prevents completely closing of a housing of the nebulizer (1) in the delivery state.	Boehringer Ingelheim International GmbH, 55216 Ingelheim, DE, 100987657 BOEHRINGER INGELHEIM INT	2020-02-12	2011-05-23
EP2643042B1	HUMIDIFICATION SYSTEM	The present invention provides a method and apparatus for reducing condensed humidifying agent in a humidification system by pulsing a delivery of	1. A humidification system (100) comprising a respiratory circuit (120) for delivering a volume of gas to a patient (140) and a humidifier portion (130; 200; 300;	Vyaire Medical Consumables LLC, Franklin Lakes, NY 07417,	2020-02-26	2010-11-23

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		humidifying agent into a respiratory circuit. During a non-pulsed interval, gas flowing through the respiratory circuit will evaporate the condensed humidifying agent present in the respiratory circuit. The present invention also provides a method and apparatus for delivering humidified gas to a patient, wherein the delivery avoids the problems associated with a stationary water humidifier. In the method, the delivery of humidifying agent is precisely controlled to deliver a flow of humidifying agent to a volume of gas.	400) for delivering a humidifying agent, more in particular comprising water, to the volume of gas flowing through the respiratory circuit (120), comprising: a flow controller (220, 340, 440) for pulsing, via the humidifier portion (130; 200; 300; 400), a delivery of humidifying agent to the volume of gas; a controller (250, 360, 460) configured to actuate the flow controller (220, 340, 440) such that a pulsed interval commences immediately after patient exhalation or during patient inhalation, and a non-pulsed interval commences immediately after patient inhalation or during patient exhalation; a heating element (320, 420) for heating the volume of gas upstream of a discharge line (260, 365, 490) of the respiratory circuit (120); and wherein the controller (250, 360, 460) is configured to actuate the flow controller (220, 340, 440) such that a dry volume of gas is delivered to the discharge line (260, 365, 490) of the respiratory circuit (120) during the non-pulsed interval, said dry volume of gas being capable of vaporizing condensed humidifying agent present in the respiratory circuit (120) to reduce the condensed humidifying agent present in the humidification system (100).	US, 101705963 VYAIR MEDICAL CONSUMABLES LLC		
EP3108888B1	TREATMENT FOR PULMONARY HYPERTENSION	One embodiment relates to a method of treating pulmonary hypertension based upon coadministering to a subject in need thereof a pharmaceutically effective amount of an oral therapeutic agent for treating pulmonary hypertension and a pharmaceutically effective amount of an inhaled therapeutic agent for treating pulmonary hypertension. The benefit of the co-administration of these agents is to eliminate or reduce one or more side effects associated with mono-therapy of either agent, as well as one or more side effects associated with other administration routes such as subcutaneous or intravenous administration.	1. A composition for use in treating pulmonary hypertension in a subject in need thereof comprising a pharmaceutically effective amount of an oral therapeutic agent for treating pulmonary hypertension and a pharmaceutically effective amount of an inhaled therapeutic agent for treating pulmonary hypertension, wherein the oral therapeutic agent and the inhaled therapeutic agent are co-administered, and wherein the oral therapeutic agent is beraprost or a pharmaceutically acceptable salt thereof and the inhaled therapeutic agent is treprostinil or a pharmaceutically acceptable salt thereof. 5. A composition for use in reducing a side effect of a pulmonary hypertension treatment administered by subcutaneous or intravenous delivery in a subject in need thereof, comprising a pharmaceutically effective amount of an oral therapeutic agent for treating pulmonary hypertension and a pharmaceutically effective amount of an inhaled therapeutic agent for treating pulmonary hypertension, wherein the oral therapeutic agent and the inhaled therapeutic agent are co-administered, and wherein the oral therapeutic agent is beraprost or a pharmaceutically acceptable salt thereof and the inhaled therapeutic agent is treprostinil or a pharmaceutically acceptable salt thereof.	United Therapeutics Corporation, Maryland 20910, US, 101160310 UNITED THERAPEUTICS CORP	2020-02-12	2010-03-15
EP2513325B1	FUCOSE-CONTAINING BACTERIAL BIOPOLYMER	The present invention concerns a microbial biopolymer comprising fucose in its composition. This	1. A process for preparing a polymer comprising a fucose-containing polysaccharide, wherein the polymer	73100 - Setenta E Três Mil E Cem Lda, 5000-599 Vila Real,	2020-02-26	2009-12-15

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		<p>biopolymer consists of a polysaccharide comprising fucose, which represents at least 10% of its composition. This fucose- containing polysaccharide also contains non-sugar components, namely, acyl group substituents. This invention also concerns the process for the production of the biopolymer, which is obtained cultivation of the bacterium Enterobacter A47 (DSM 23139), using glycerol or glycerol-rich mixtures as carbon sources. The fucose-containing biopolymer of the present invention may be used in several industrial applications (e.g. pharmaceutical, cosmetics and agro-food industries) and in the treatment of industrial wastes (e.g. oil and metal recovery).</p>	<p>is obtained by cultivation of the bacterium Enterobacter A47, with accession number DSM 23139, the process comprising the following steps: a) a batch phase comprising cultivating the bacterium Enterobacter A47 with accession number DSM 23139 in a culture medium in a stirred and aerated bioreactor, wherein the culture medium comprises a carbon source comprising glycerol or glycerol containing mixtures, a nitrogen source and inorganic salts; b) a fed-batch phase comprising cultivating the bacterium Enterobacter A47 under conditions of carbon availability and nitrogen limitation; and wherein the temperature during the batch phase and fed-batch phase is controlled between 15 and 45°C and the pH is controlled between 5.0 and 9.0.</p> <p>12. A polymer with average molecular weight of $10^6 - 10^7$, obtainable by the process according to any of the claims 1 to 11, wherein it comprises fucose in an amount of at least 10%, an amount of glucose between 20% -70%, an amount of galactose between 10 - 40%, an amount of glucuronic acid up to 15% of the total carbohydrate content and the acyl groups represent up to 25% of the polymer dry weight.</p> <p>16. Polymer according to any of the claims 12-15, having a pseudoplastic fluid behavior in aqueous media, with stable viscosity under temperatures up to 80°C, pH between 3-10 and ionic strength up to 20% NaCl.</p>	<p>PT, 101073288 73100 SETENTA E TRES MIL E CEM LDA</p>		
EP2416650B1	NANOPARTICLE FORMULATIONS AND USES THEREOF	<p>The present invention provides compositions comprising nanoparticles comprising: 1) a drug, such as a hydrophobic drug derivative; and 2) a carrier protein. Also provided are methods of treating diseases (such as cancer) using the compositions, as well as kits and unit dosages.</p>	<p>1. A composition comprising nanoparticles comprising a taxane and a carrier protein for use in a method of treating a proliferative disease in a human, wherein the carrier protein is albumin, and wherein the method comprises intravenously administering the composition to the human in 10 minutes or less at a drug dosage of 5 to 300 mg/m².</p>	<p>Abraxis BioScience LLC, Summit, NJ 07901, US, 101714737 ABRAXIS BIOSCIENCE LLC</p>	2020-02-26	2009-04-10
EP2772149B1	Improved atomizing electronic cigarette	<p>An improved atomizing electronic cigarette has a power device (1), a sensor (2), an atomizing core component and a liquid storage component (3). The cigarette also has a containing shell, an auxiliary air inlet (4) is provided on the shell. The atomizing core component includes an electric heater (5) and a liquid permeating component (6). The electric heater (5) has a through hole (51), the liquid storage component (3) has a channel (31), and the sensor (2) is connected with the through hole (51) and the channel (31), and forms an airflow loop by the auxiliary air inlet. The liquid permeating component (6) in the atomizing core component of the cigarette is directly sleeved on the electric heater (5), so that the cigarette can adequately heat gasified smoke with uniform small drops, and the user can accept easily and the smoke can easily enter</p>	<p>1. An improved atomizing electronic cigarette, comprising a housing having a power supply unit (1), an atomizing core component and a liquid storage component (3), an air facilitation inlet (4) being arranged on the housing (8, 8'), one end of the housing (8, 8') being provided with an air suction port (a), wherein the air facilitation inlet (4) and the air suction port (a) form an air circulation path, the atomizing core component comprises a liquid permeating component (6) contacted with the liquid storage component (3) to permeate liquid to the liquid permeating component (6), and an electric heater (5) operable to atomize liquid in the liquid permeating component (6), wherein the liquid storage component (3) internally has a channel (31) through which the atomized gas flows, and the electric heater (5) of the atomizing core</p>	<p>Fontem Holdings 1 B.V., 1083 HN Amsterdam, NL, 101462528 FONTEM HOLDINGS 1 BV</p>	2020-02-26	2009-02-11

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		lung bubble and can be absorbed conveniently. The electric heater (5) and the liquid storage component (3) are connected with the through hole (51) and the channel (31), so that the smoke generated by atomizing process can be cooled under the push of airflow, and the absorbed smoke meets the taste of smoker. The cigarette has detachable split structure, so that the cigarette can exchange and carry conveniently.	component is directly inserted into the channel (31), characterized in that the liquid permeating component (6) is sleeved on the electric heater (5), a through hole (51) through which gas flows is arranged in the atomizing core component, and the through hole (51) is made up of the structure of the electric heater (5).			
EP3135672B1	COMPOSITIONS AND METHODS FOR TREATING ALCOHOL USE DISORDERS, PAIN AND OTHER DISEASES	The present invention provides compounds which antagonize epsilon protein kinase C (PKCε). These compounds have a structural formula (Ia), (Ic) or (II). The present invention also provides pharmaceutical compositions containing these compounds and methods of treating various diseases, conditions, and/or symptoms by using these compounds.	1. A compound for use in a method of treatment, wherein the treatment is of a disease, disorder, symptom, or condition selected from acute pain, chronic pain, inflammatory pain, neuropathic pain, diabetic neuropathy, alcoholic polyneuropathy, cancer or cancer- or chemotherapy-induced pain, a generalized pain disorder, tonic pain, persistent pain, postoperative pain, chemical-induced pain, drug-induced pain, migraine, anxiety, skeletal muscle spasms, convulsive seizures, epilepsy, alcohol abuse and alcoholism associated disease, insomnia, pain associated with alcohol-induced hyperalgesia, type 1 and type 2 diabetes, diabetic complications, hepatic steatosis or liver cirrhosis, bipolar disorder, mania, sleeping disorder, burn, post-traumatic stress disorder, cardiac disorder, inflammation and immune-mediated disorders (including microbial infection and organ transplantation), cancer (including breast, head and neck, prostate and lung cancer), maladaptive substance use, substance dependence, alcohol abuse, substance abuse, drug abuse, or drug-related stimulant sedative, hypnotic or ataxic effects, and a combination thereof, wherein the compound is selected from the group consisting of: ID IUPAC Name 901 N -[3-(azepan-1-yl)propyl]-1-{{2-(4-chlorophenyl)-5-methyl-1, 3-oxazol-4-yl}methyl}piperidine-4-carboxamide; 943 N -[3-(azepan-1-yl)propyl]-1-{{5-methyl-2-[4-(trifluoromethyl)phenyl]-1, 3-oxazol-4-yl}methyl}piperidine-4-carboxamide; 945 N -[3-(azepan-1-yl)propyl]-1-{{5-methyl-2-(pyridin-4-yl)-1, 3-oxazol-4-yl}methyl}piperidine-4-carboxamide; 947 N -[3-(azepan-1-yl)propyl]-1-{{2-(2, 4-difluorophenyl)-5-methyl-1, 3-oxazol-4-yl}methyl}piperidine-4-carboxamide; 949 N -[3-(azepan-1-yl)propyl]-1-{{2-(1, 3-benzodioxol-5-yl)-5-methyl-1, 3-oxazol-4-yl}methyl}piperidine-4-carboxamide; 951 N -[3-(azepan-1-yl)propyl]-1-{{2-(2, 4-dimethoxyphenyl)-5-methyl-1, 3-oxazol-4-yl}methyl}piperidine-4-carboxamide; 953 N -[3-(azepan-1-yl)propyl]-1-{{2-(4-benzylphenyl)-5-methyl-1, 3-oxazol-4-yl}methyl}piperidine-4-carboxamide; 955 N -[3-(azepan-1-yl)propyl]-1-{{2-[4-(dimethylcarbamoyl)phenyl]-5-methyl-1, 3-oxazol-4-yl}methyl}piperidine-4-carboxamide; 957 N -[3-(azepan-1-yl)propyl]-1-{{5-methyl-2-[4-(piperidin-1-	VM Discovery Inc., Fremont CA 94538, US, 101263674 VM DISCOVERY INC	2020-02-19	2008-10-10

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			<p>yl)phenyl]-1, 3-oxazol-4-yl)methyl)piperidine-4-carboxamide; and 959 N -[3-(azepan-1-yl)propyl]-1-([5-methyl-2-(naphthalen-1-yl)-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; or a salt or solvate thereof. 7. A pharmaceutical composition comprising a therapeutically effective amount of a compound selected from the group consisting of: ID IUPAC Name 901 N -[3-(azepan-1-yl)propyl]-1-([2-(4-chlorophenyl)-5-methyl-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; 943 N -[3-(azepan-1-yl)propyl]-1-([5-methyl-2-[4-(trifluoromethyl)phenyl]-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; 945 N -[3-(azepan-1-yl)propyl]-1-([5-methyl-2-(pyridin-4-yl)-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; 947 N -[3-(azepan-1-yl)propyl]-1-([2-(2, 4-difluorophenyl)-5-methyl-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; 949 N -[3-(azepan-1-yl)propyl]-1-([2-(1, 3-benzodioxol-5-yl)-5-methyl-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; 951 N -[3-(azepan-1-yl)propyl]-1-([2-(2, 4-dimethoxyphenyl)-5-methyl-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; 953 N -[3-(azepan-1-yl)propyl]-1-([2-(4-benzylphenyl)-5-methyl-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; 955 N -[3-(azepan-1-yl)propyl]-1-([2-[4-(dimethylcarbamoyl)phenyl]-5-methyl-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; 957 N -[3-(azepan-1-yl)propyl]-1-([5-methyl-2-[4-(piperidin-1-yl)phenyl]-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; and 959 N -[3-(azepan-1-yl)propyl]-1-([5-methyl-2-(naphthalen-1-yl)-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; or a salt or solvate thereof. 13. A compound selected from the group consisting of: ID IUPAC Name 943 N -[3-(azepan-1-yl)propyl]-1-([5-methyl-2-[4-(trifluoromethyl)phenyl]-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; 945 N -[3-(azepan-1-yl)propyl]-1-([5-methyl-2-(pyridin-4-yl)-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; 947 N -[3-(azepan-1-yl)propyl]-1-([2-(2, 4-difluorophenyl)-5-methyl-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; 949 N -[3-(azepan-1-yl)propyl]-1-([2-(1, 3-benzodioxol-5-yl)-5-methyl-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; 951 N -[3-(azepan-1-yl)propyl]-1-([2-(2, 4-dimethoxyphenyl)-5-methyl-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; 953 N -[3-(azepan-1-yl)propyl]-1-([2-(4-benzylphenyl)-5-methyl-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; 955 N -[3-(azepan-1-yl)propyl]-1-([2-[4-(dimethylcarbamoyl)phenyl]-5-methyl-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; 957 N -[3-(azepan-1-yl)propyl]-1-([5-methyl-2-[4-(piperidin-1-yl)phenyl]-1, 3-oxazol-4-yl)methyl]piperidine-4-carboxamide; and 959 N -[3-</p>			

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			(azepan-1-yl)propyl]-1-[[5-methyl-2-(naphthalen-1-yl)-1,3-oxazol-4-yl]methyl]piperidine-4-carboxamide.			
EP2216062B1	AEROSOL INHALATOR	An aerosol inhalator has an aerosol generation passage extending from an ambient air inlet (2) to a mouthpiece (4), a liquid supply device (18) for feeding a predetermined amount of a solution to a feed position (A) in the passage (6), a ceramic heater (12) for heating the solution conveyed from the feed position (A) toward the mouthpiece (4) with a drawn-in flow of air created in the passage (6) by a user's sucking action, thereby causing the solution to evaporate and turn into an aerosol in the passage (6), and a protector provided at least either at a location near the feed position (A) or at a location between the feed position (A) and the liquid supply device (18), the protector having at least one of a radiation cover (2), a cooling device (21) and an open-close valve (22).	1. An aerosol inhalator comprising: an outer casing including an ambient air inlet (2) at a front end thereof, a mouthpiece (4) at a rear end thereof, and an aerosol generation passage (6) defined therein and extending from the ambient air inlet (2) to the mouthpiece (4); a liquid supply device (18) including a liquid chamber storing a solution from which an aerosol is to be generated, for being capable of feeding a predetermined amount of the solution to a feed position (A) defined in said aerosol generation passage (6); a heating device (12) disposed on said aerosol generation passage (6), downstream of the feed position (A), for heating the solution conveyed from the feed position (A) toward the mouthpiece (4) with a drawn-in flow of air created in said aerosol generation passage (6) by the mouthpiece (4) being sucked on, thereby causing the solution to evaporate and turn into an aerosol, wherein, said outer casing further includes an air induction tube (8) having the feed position (A) in an upstream portion thereof and defining a part of the aerosol generation passage (6) therein, and characterized in that, the aerosol inhalator further comprises a protector (20, 21) provided on a pathway from said heating device to said liquid supply device including the feed position (A), to prevent the solution at the feed position (A) from evaporating due to heat transfer from said heating device (12), wherein said protector (20, 21) includes a radiation cover (20) covering the upstream portion of the air induction tube (8), the radiation cover (20) having one end closed by receiving the upstream portion of the air induction tube (8) and the other end opened toward the ambient air inlet (2).	Japan Tobacco Inc., Tokyo 105-8422, JP, 101041048 JAPAN TOBACCO INC	2020-02-12	2007-12-05
EP2207597B1	LIGHT INHIBITORS FOR ASTHMA, LUNG AND AIRWAY INFLAMMATION, RESPIRATORY, INTERSTITIAL, PULMONARY AND FIBROTIC DISEASE TREATMENT	Methods of treating inflammatory conditions, disease and disorders are provided. Method include, for example, contacting or administering a sufficient amount of a LIGHT inhibitor to a subject to treat the inflammatory condition, disease or disorder.	1. An inhibitor of LIGHT (p30 polypeptide) for use in (a) reducing or inhibiting lung or airway inflammation; (b) treating a respiratory disease or disorder, wherein the respiratory disease or disorder is selected from asthma, allergic asthma, bronchiolitis and pleuritis; (c) treating an interstitial or pulmonary disease or disorder, wherein the interstitial or pulmonary disease or disorder is selected from Idiopathic pulmonary fibrosis and Interstitial Lung Disease; or (d) treating a fibrotic disease or disorder, in a subject, wherein the inhibitor of LIGHT (p30 polypeptide) comprises an antibody or subsequence thereof that specifically binds to LIGHT (p30 polypeptide). 10. An inhibitor of LIGHT (p30 polypeptide) for use in reducing or inhibiting a Th2-inflammatory response according to any previous claim, wherein the inhibitor	La Jolla Institute for Allergy and Immunology, La Jolla CA 92037, US, 100796690 LA JOLLA INST FOR ALLERGY AND IMMUNOLOGY	2020-02-19	2007-09-18

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			<p>of LIGHT (p30 polypeptide) comprises an antibody or subsequence thereof that specifically binds to LIGHT (p30 polypeptide).</p> <p>11. An inhibitor of LIGHT (p30 polypeptide) for use in reducing or decreasing the probability, severity, frequency, duration or preventing a subject from having an acute asthmatic episode, wherein the inhibitor of LIGHT (p30 polypeptide) comprises an antibody or subsequence thereof that specifically binds to LIGHT (p30 polypeptide).</p>			
EP3384946B1	AEROSOL DELIVERY SYSTEM	<p>A ventilator assembly for use in a ventilator circuit for administering medication to a patient comprises a housing defining an inhalation interior space and an exhalation interior space separate from the inhalation interior space, and a ventilator port positioned at a first location of the housing, the ventilator port defining a first passageway in communication with the inhalation interior space and the exhalation interior space. A patient port is positioned at a second location of the housing, the patient port defining a second passageway in communication with the inhalation interior space and the exhalation interior space. A one-way inhalation valve is positioned in the housing adjacent one of the first or second locations to permit one-way flow from the ventilator port to the patient port through the inhalation interior space. A one-way exhalation valve is positioned in the housing adjacent the one of the first or second locations adjacent the position of the one-way inhalation valve to permit one-way flow from the patient port to the ventilator port through the exhalation interior space. A receptacle is positioned on the housing and in communication with the inhalation interior space, the receptacle operative to receive a container comprising an aerosolized medication.</p>	<p>1. A ventilator assembly (200) for use in a ventilator circuit for administering medication to a patient, the ventilator assembly comprising: a housing (400, 402) defining an inhalation interior space (204) and an exhalation interior space (206) separate from the inhalation interior space; a ventilator port (212, 410) positioned at a first location of the housing (400), the ventilator port (236) defining a first passageway in communication with the inhalation interior space (204) and the exhalation interior space (206); a patient port (236) positioned at a second location of the housing (402), the patient port (236) defining a second passageway in communication with the inhalation interior space (204) and the exhalation interior space (206); a one-way inhalation valve (418) positioned in the housing (402) adjacent one of the first or second locations to permit one-way flow from the ventilator port (236) to the patient port (212) through the inhalation interior space (204); a one-way exhalation valve (420) positioned in the housing adjacent the one of the first or second locations adjacent the position of the one-way inhalation valve to permit one-way flow from the patient port (206) to the ventilator port through the exhalation interior space (212); and a receptacle (214) positioned on the housing (402) and in communication with the inhalation interior space (204), the receptacle operative to receive a container (225) comprising an aerosolized medication, characterized in that the one-way inhalation and exhalation valves are configured as flexible flaps extending in opposite directions from a base portion (424).</p>	<p>Trudell Medical International, London, Ontario N5V 5G4, CA, 101841555 TRUDELL MEDICAL INT</p>	2020-02-26	2007-04-24
EP2056908B1	DRUG DISPENSER	<p>There is provided a drug dispenser device comprising a housing defining a first chamber; extending from said housing and defining a second open chamber, an outlet for insertion into a body cavity of a patient; provided to said first chamber of the housing, a discharge block defining a discharge block orifice; receivable within the first chamber for movement therewithin, a drug discharge device, said drug discharge device having a longitudinal axis and comprising a container for</p>	<p>1. A drug dispenser device (1) for delivery of a drug by inhalation comprising (a) a housing (10a, 10b) defining a first chamber; (b) extending from said housing and defining a second open chamber, an outlet (14) for insertion into a body cavity of a patient; (c) provided to said first chamber of the housing, a discharge block (8) defining a discharge block orifice (9); (d) receivable within the first chamber for movement therewithin, a drug discharge device (5), said drug</p>	<p>Glaxo Group Limited, Brentford, Middlesex TW8 9GS, GB, 101370614 GLAXO GROUP LTD</p>	2020-02-26	2006-08-22

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		<p>storing a drug formulation to be dispensed, a discharge mechanism and a discharge channel from said container, wherein said discharge channel is receivable by said discharge block to enable discharge of said drug formulation via said discharge block orifice to said outlet; provided to the housing; and at least one finger operable member moveable to apply a force directly or indirectly to the drug discharge device for movement along the longitudinal axis towards the discharge block to actuate said discharge mechanism. The housing further defines an aperture through which said at least one finger operable member in part protrudes, and wherein the at least one finger operable member is moveable from a rest position in which the at least one finger operable member acts to block off said aperture to an actuating position in which the aperture is unblocked and through which air may be drawn into the housing in response to patient inhalation through the outlet.</p>	<p>discharge device having a longitudinal axis and comprising a container for storing a drug formulation to be dispensed, a discharge mechanism and a discharge channel (7) from said container, wherein said discharge channel is receivable by said discharge block to enable discharge of said drug formulation via said discharge block orifice to said outlet; and (e) provided to the housing, at least one finger operable member (20a, 20b) moveable to apply a force directly or indirectly to the drug discharge device for movement along the longitudinal axis (H-H) towards the discharge block to actuate said discharge mechanism, wherein said housing further defines an aperture (11a, 11b) through which said at least one finger operable member in part protrudes, wherein the at least one finger operable member comprises two opposing levers, each of which pivotally connects to part of the housing and arranged to urge the discharge device towards the discharge block when the two opposing levers are squeezed together by a user, wherein said two opposing levers are coupled to each other by a coupling mechanism (21a, 21b) which comprises meshing teeth provided to each of the two opposing levers characterised in that the at least one finger operable member is moveable from a rest position (figure 7) in which the at least one finger operable member acts to block off said aperture to an actuating position (figure 8) in which the aperture is unblocked and through which air may be drawn into the housing in response to patient inhalation (61) through the outlet.</p>			
EP3536344B1	FORMOTEROL SUPERFINE FORMULATION	<p>A pharmaceutical aerosol formulation to be administered by a pressurized metered dose inhaler comprising as active ingredients formoterol fumarate in a concentration comprised between 0.003 and 0.192% w/v and beclometasone dipropionate, in a solution of a liquefied hydrofluoroalkane (HFA) propellant, ethanol in anhydrous form as co-solvent, in a concentration comprised between 10% and 20% w/w, and hydrochloric acid, in a concentration such that the apparent pH range of the formulation is between 2.5 and 5.0, wherein the amount of residual water is less than 1500 ppm on the total weight of the formulation, and wherein the fraction of particles equal or less than 1.1 µm delivered on actuation of the inhaler is at least 30%, for use in the treatment of a respiratory disorder.</p>	<p>1. A pharmaceutical aerosol formulation to be administered by a pressurized metered dose inhaler comprising as active ingredients formoterol fumarate in a concentration comprised between 0.003 and 0.192% w/v and beclometasone dipropionate, in a solution of a liquefied hydrofluoroalkane (HFA) propellant, ethanol in anhydrous form as co-solvent, in a concentration comprised between 10% and 20% w/w, and hydrochloric acid, in a concentration such that the apparent pH range of the formulation is between 2.5 and 5.0, wherein the amount of residual water is less than 1500 ppm on the total weight of the formulation, for use in the treatment of a respiratory disorder.</p>	Chiesi Farmaceutici S.p.A., 43100 Parma, IT, 101292318 CHIESI FARM SPA	2020-02-19	2002-03-01
EP3494995B1	FORMOTEROL SUPERFINE FORMULATION	<p>A propellant/co-solvent system comprising fully dissolved formoterol, or a stereoisomer, physiologically acceptable salt or solvate thereof, and capable of providing on actuation of a pressurized metered dose</p>	<p>1. A propellant/co-solvent system comprising fully dissolved (R, R)-(±)-formoterol fumarate or a solvate thereof and beclometasone dipropionate, a hydrofluoroalkane (HFA) propellant and anhydrous ethanol</p>	Chiesi Farmaceutici S.p.A., 43100 Parma, IT, 101292318 CHIESI FARM SPA	2020-02-19	2002-03-01

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		<p>inhaler a fraction of at least 30% of emitted particles with an aerodynamic diameter equal or less than 1.1 μm for use in the treatment of a respiratory disorder selected from asthma and chronic obstructive pulmonary disease.</p>	<p>as co-solvent, wherein the concentration of ethanol is comprised between 10 and 20% w/w, the apparent pH is between 2.5 and 5.0 and the amount of residual water is less than 1500 ppm on the total weight of the formulation, for use in the treatment of a respiratory disorder selected from asthma and chronic obstructive pulmonary disease.</p> <p>13. A propellant/co-solvent system comprising fully dissolved (R, R)-(+/-)-formoterol fumarate and beclomethasone dipropionate, a hydrofluoroalkane (HFA) propellant and anhydrous ethanol as co-solvent, wherein the concentration of ethanol is comprised between 10 and 20% w/w, the apparent pH is between 2.5 and 5.0 and the amount of residual water is less than 1500 ppm on the total weight of the formulation.</p>			