Document	Title	Abstract	Claims	Patentee	Granted	Priority
EP2944648B1	Guanylate cyclase receptor agonists for the treatment of organ inflammation	A method of treatment of inflamed, pre-cancerous or cancerous tissue or polyps in a mammalian subject is disclosed. The treatment involves administration of a composition of at least one peptide agonist of a guanylate cyclise receptor and/or other small molecules that enhance intracellular production of cGMP. Then at least one peptide agonist of a guanylate cyclise receptor may be administered either alone or in combination with an inhibitor of cGMP-dependent phosphodiesterase. The inhibitor may be a small molecule, peptide, protein or other compound that inhibits the degradation of cGMP. Without requiring a particular mechanism of action, this treatment may restore a healthy balance between proliferation and apoptosis in the subject's population of epithelial cells, and also suppress carcinogenesis. Thus, the method may be used to treat, <i>inter alia<i/>, inflammation, including gastrointestinal inflammatory disorders, general organ inflammation and asthma, and carcinogenesis of the lung, gastrointestinal tract, bladder, testis, prostate and pancreas, or polyps.	1. A (4, 12;7, 15) bicyclic peptide consisting of the amino acid sequence of SEQ ID NO: 20 for use in a method for preventing or treating organ inflammation in a patient.	Bausch Health Ireland Limited, Dublin 24, IE, 101826708	2019-11-13	2001-03-29
EP2258428B1	AEROSOL DELIVERY SYSTEMS	The present invention provides a system for aerosol delivery of agents to a patient. The present system can be used to administer various types of agents, such as a vaccine or other types of pharmaceutical substances. Certain embodiments of the present system utilise an actuator (18) coupled to a disposable aerosolizing element (16) that aersolizes an agent for delivery to a patient when acted upon by the actuator. The aerosolizing element prevents the agent from contacting the actuator and other non-disposable components of the system so that little or no cleaning or maintenance is required. The present system can also include an aerosolization rate monitor that monitors the rate at which an agent is being aerosolized and provides feedback to the user to ensure that the proper dose is being administered.	1. An aerosolizing device (10, 900), comprising: a housing (12, 902) sized and shaped to be held in a hand of a user; a disposable aerosolizing element (16, 130, 150, 180, 200, 250, 800, 906) disposed in the housing (12, 902) and capable of expelling aerosolized agent, the aerosolizing element (16, 130, 150, 180, 200, 250, 800, 906) comprising a body (78, 152, 182, 202, 252, 802), a front portion (80, 154, 184, 204, 254, 804), a rear portion (82, 156, 186, 206, 256, 806), a chamber (84, 158, 188, 208, 258, 808) cooperatively formed between the front portion (80, 154, 184, 204, 254, 804) and the rear portion (82, 156, 186, 206, 256, 806), agent releasing orifices (110, 138, 818) defined in the front portion (80, 154, 184, 204, 254, 804) and in communication with the chamber (84, 158, 188, 208, 258, 808), a movable portion (106) defined in the rear portion (82, 156, 186, 206, 256, 806) and positioned in the body opposite the agent releasing orifices (110, 138, 818), and an integral reservoir (86, 160, 190, 210, 260, 810) spaced from and above the chamber at an upper end portion of the aerosolizing element in fluidic communication with an inlet of the chamber; an actuator (18) disposed in the housing (12) and positioned to exert vibratory oscillations on the movable portion (106) of the disposable aerosolizing element (16) to aerosolize agent in the chamber (84, 158, 188, 208, 258, 808) of the aerosolizing element wherein the aerosolizing element (16) is thereby arranged to prevent agent from contacting the actuator (18); and wherein the disposable aerosolizing element (16) is removable from the housing (12) for installation and disposal; a patient interface (30, 350, 400, 450, 500, 550, 600, 650, 700, 750, 936) coupled to the housing and shaped to deliver aerosolized agent expelled from the disposable aerosolizing element (16) to a patient; wherein the actuator (18) comprises a first electrode	The Government of the United States of America as represented by the Secretary of the Department of Health and Human Services, Atlanta, GA 30341, US, 101033119 | Creare Inc., Hanover, NH 03755, US, 100104762	2019-11-27	2004-04-02

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			(48a), a second electrode (48b), a piezoelectric element (50) between the first and second electrodes (48a, 48b), and a motion transmitting member (52) secured to the first electrode (48a) and having an end portion (53) coupled to the movable portion (106) of the aerosolizing element (16, 130, 150, 180, 200, 250, 800, 906), such that an oscillating electric current applied to the first and second electrodes (48a, 48b) induces vibratory motion of the piezoelectric element (50), which in turn induces vibratory motion of the motion transmitting member (52), which transmits vibratory motion to the movable portion (106) such that the movable portion (106) alternately moves toward the orifices (110, 138, 818) to increase pressure in the chamber and cause agent in the chamber (84, 158, 188, 208, 258, 808) to be expelled as aerosol droplets through the orifices and away from the orifices to decrease pressure in the chamber to draw agent from the reservoir through the fluid inlet and into the region of the chamber behind the orifices.			
EP1970842B1	Inhaler	Die Erfindung betrifft ein Handgerät (1) zur portionierten Ausgabe von Substanzen, vorzugsweise Medikamenten, durch Verlagerung einer Kartusche (3) unter welcher ein Schrittschaltzählwerk (11) angeordnet ist mit einem um die Kartuschen-Längsachse drehbaren Skalenring (26) vor einem entsprechendem Sichtfenster (47, 48). Insbesondere zur Erzielung einer Funktions-Kontroll-Möglichkeit wird vorgeschlagen, dass die Skala bei Druckbetätigung der Kartusche (3) hinter dem Sichtfenster (47, 48) des Handgerät-Gehäuses (2) abtaucht.	1. Hand-held device (1) for delivering portions of sprayable substances, in particular inhaler medicaments, having a cartridge (3) which is displaceable in a housing (2) into the open position for delivery by pressing, and an indexing mechanism (11) which is moved along with and by the cartridge (3) during the opening stroke thereof, for registering and displaying delivery actuations which have been carried out, which indexing mechanism (11) is disposed in a housing (34) centrally below the opening-side end wall of the cartridge (3), overlappingly with respect to the valve tube (5) of the cartridge, characterized by a step-by-step indexing mechanism (11) which is disposed in a plate-shaped housing (34) and has indexing members (S, 28, 29, 16, 17, 20, 15, 21, 22, 13, 26) which revolve about axes lying in the longitudinal direction of the cartridge (3), wherein, a scale of the step-by-step indexing mechanism (11) is configured as a graduated ring (26) which revolves concentrically with the valve tube (5) and is rotated step-by-step by a toothed ring (16), which likewise revolves concentrically with the valve tube (5) and is driven by the opening stroke of the cartridge (3), via a planet-wheel gear mechanism (12), wherein, a step-by-step indexing-finger star (S) is provided, a hub (29) of the step-by-step indexing-finger star (S) is seated on an end surface of a supporting portion (9) for the valve tube (5), which supporting portion is on the hand-held device-housing side and the step-by-step indexing-mechanism housing (34) when an actuating stroke of the cartridge (3) is carried out together with an associated vertical displacement of the cartridge (3) in the direction of the supporting portion (9), the step-by-step indexing-mechanism housing (34) is carried along via a cartridge head (4), with displacement of the housing (34), the planet-wheel gear mechanism (12) and the graduated ring (26)	Von Schuckmann Alfred, 47627 Kevelaer, DE, 100250998	2019-11-13	2004-11-10

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			relative to the step-by-step indexing-finger star (S), which receives support on the supporting portion (9).			
EP2109475B1	INTRANASAL CARTRIDGE DEVICES	Intranasal delivery devices include dosage forms containing medical compositions for use in the intranasal devices, and methods of delivering medical compositions to the nasal mucosa of users. The devices dispense a predetermined quantity of fluid into the nasal passage of a user, in which the predetermined quantity of fluid is contained in, or produced in a dosage form or blister that is crushed by a plunger with sufficient force to drive the dosage form against a piercing mechanism, piercing the dosage form and forcing the liquid contents from the dosage form and through a delivery channel into a spray to be directed into the nasal passage of a user. The plunger is connected to a trigger device by a linkage that confers a mechanical advantage to the trigger mechanism.	1. A device (90) for dispensing a predetermined quantity of fluid into the nasal passage of a user, said device comprising: a body (91) comprising a nozzle end (33) designed for insertion into the nostril of a user; a user operated trigger device (2); a discharge nozzle; an actuator in contact with the trigger device; a plunger (9) connected to the actuator; a dosage form (80) comprising a piercable membrane (82) and containing the fluid (84); and a piercing mechanism (70, 72); and an activation knob (5) that is rotatable from a first position to a second position; wherein operating the trigger causes the piercing mechanism to penetrate the dosage form and discharge the fluid through the discharge channel; wherein the actuator (10) is a toggle mechanism that provides a mechanical advantage and the piercing mechanism is contained in the dosage form; wherein the activation knob is connected to the actuator such that when the activation knob is rotated from the first position to the second position, the toggle mechanism is rotated from an inactive first position to an activated position; and wherein rotation of the toggle mechanism to the second position pushes the trigger device into an activated position; and further wherein the actuator is a bar joined at one end to the activation knob in a flexible joint, joined to the plunger at the opposite end in a flexible joint and forming approximately a 90° central angle at the center point of the bar, wherein the center point is a flexible point.	Mystic Pharmaceuticals Inc., Cedar Park, Texas 78613, US, 100754550	2019-11-27	2007-01-09
EP3115054B1	ANTIBACTERIAL PHAGE, PHAGE PEPTIDES AND METHODS OF USE THEREOF	The present invention is directed to the field of phage therapy for the treatment and control of bacterial infections. In particular, the present invention is directed to the novel bacteriophage F770/05 comprising the nucleic acid sequence of SEQ ID NO:3, isolated tail tape measure protein or tail protein thereof, compositions comprising the novel bacteriophage and/or isolated proteins and methods for the treatment and prevention of bacterial infection, either alone or in combination with other antibacterial therapies, e.g., antibiotics or other phage therapies.	1. A purified bacteriophage having a genome which comprises at least 99% sequence identity to the nucleotide sequence of SEQ ID NO:3, and having antibacterial activity against one or more strains of Pseudomonas aeruginosa.	Technophage Investigação E Desenvolvimento Em Biotecnologia SA, 1649-028 Lisboa, PT, 101077700 | Tecnifar-Indústria Técnica Farmacêutica S.A., 1099-036 Lisboa, PT, 101197278	2019-11-20	2009-02-06
EP3100728B1	PHARMACEUTICAL COMPOSITIONS COMPRISING PRASUGREL AND CYCLODEXTRIN DERIVATIVES AND METHODS OF MAKING AND USING THE SAME	The present invention is directed to pharmaceutical compositions comprising prasugrel and a cyclodextrin derivative, and methods of making and using the same.	1. A pharmaceutical composition comprising: prasugrel, and a cyclodextrin derivative of formula 1: wherein n is 4, 5 or 6, wherein R 1 , R 2 , R 3 , R 4 , R 5 , R 6 , R 7 , R 8 , and R 9 are independently a straight-chain or branched -O-(C 1 -C 8 -(alkylene))-SO 3 - group having a degree of substitution of about 4 to about 8 per cyclodextrin derivative, and the remaining substituents are -OH; wherein the cyclodextrin derivative is present in a concentration of about 100:1 to about 8000:1 by weight relative to the prasugrel. 10. A pharmaceutical composition in the form of a unit dosage form comprising: about 1 mg to about 120 mg prasugrel, and a cyclodextrin derivative of formula I: wherein n is 4, 5 or 6, wherein R 1 , R 2 , R 3 , R 4 , R 5 , R 6 , R 7 , R 8 , and R 9	Cydex Pharmaceuticals Inc., San Diego, CA 92121, US, 101619249	2019-11-20	2009-05-13

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			are independently selected from: -OH, a straight-chain or branched -O-(C 1 -C 8 -(alkylene))-SO 3 - group, an optionally substituted straight-chain, branched, or cyclic -O-(C 1 -C 10) group, an optionally substituted straight-chain, branched, or cyclic -S-(Ci-Cio) group, and a saccharide, preferably wherein the unit dosage form comprises about 1 mg to about 20 mg of prasugrel or about 20 mg to about 120 mg of prasugrel; wherein the cyclodextrin derivative is present in a concentration of about 100:1 to about 8000:1 by weight relative to the prasugrel.			
EP3106149B1	COMPOSITIONS FOR PULMONARY DELIVERY OF LONG-ACTING MUSCARINIC ANTAGONISTS AND LONG-ACTING BETA-2 ADRENERGIC RECEPTOR AGONISTS AND ASSOCIATED METHODS AND SYSTEMS	Compositions, methods and systems are provided for pulmonary delivery of long-acting muscarinic antagonists and long-acting β 2 adrenergic receptor agonists via a metered dose inhaler. In particular embodiments, the compositions include a suspension medium, active agent particles, and suspending particles, in which the active agent particles and suspending particles form a co-suspension within the suspension medium.	1. A pharmaceutical composition deliverable from a metered dose inhaler, comprising: a suspension medium comprising a pharmaceutically acceptable propellant; a plurality of micronized active agent particles comprising an active agent selected from glycopyrrolate and formoterol, including any pharmaceutically acceptable salts, esters, or solvates thereof, wherein at least 90% of the active agent particle material by volume exhibits an optical diameter of 7 µm or less; and a plurality of respirable suspending particles comprising perforated phospholipid microstructures and exhibiting a volume median optical diameter selected from between 0.2 µm and 50 µm, between 0.5 µm and 15 µm, between 1.5 µm and 10 µm, and between 2 µm and 5 µm; wherein a total mass of the suspending particles exceeds a total mass of the active agent particles, and the plurality of active agent particles associate with the plurality of suspending particles to form a co-suspension.	Pearl Therapeutics Inc., Redwood City, CA 94063, US, 101218265	2019-11-20	2009-05-29
EP2566446B1	NOVEL LOW CONCENTRATION MELOXICAM TABLETS	The invention relates to a solid tablet that is directly-compressed of powder, comprising meloxicam and one or more excipients which are homogenously dispersed within the tablet that can be broken into two, three and/ or four units with each unit containing equal amounts of the active ingredient.	1. A solid tablet that is directly-compressed of powder, comprising meloxicam or a pharmaceutically acceptable salt thereof and excipients, characterized in that (i) the directly-compressed powder was not subjected to a granulation step, (ii) the solid tablet contains 1.0 mg meloxicam, (iii) the solid tablet has a tablet weight of 800 mg, (iv) meloxicam is homogenously dispersed within the solid tablet, (v) the solid tablet has one or two breaking notches/score lines that enable the solid tablet to be broken into two, three or four units with each unit containing equal amounts of the active ingredient, and (vi) the excipients comprise maize starch, microcrystalline cellulose, ferric oxide brown, ferric oxide yellow, sodium citrate dehydrate, anhydrous silicon dioxide, magnesium stearate and an artificial beef flavour. 3. A solid tablet that is directly-compressed of powder, comprising meloxicam or a pharmaceutically acceptable salt thereof and excipients, characterized in that (i) the directly-compressed powder was not subjected to a granulation step, (ii) the solid tablet contains 2.5 mg meloxicam, (iii) the solid tablet has a tablet weight of 1200 mg, (iv) meloxicam is homogenously dispersed within the solid tablet, (v) the solid tablet has one or two breaking notches/score lines that enable the solid tablet to be broken into two, three or four units	Boehringer Ingelheim Vetmedica GmbH, 55216 Ingelheim am Rhein, DE, 100089553	2019-11-20	2010-05-05

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			with each unit containing equal amounts of the active ingredient, and (vi) the excipients comprise maize starch, microcrystalline cellulose, ferric oxide brown, ferric oxide yellow, sodium citrate dehydrate, anhydrous silicon dioxide, magnesium stearate and an artificial beef flavour.			
EP2571988B1	COMPOSITIONS FOR USE IN TREATING OR DIAGNOSING BONE DISORDERS AND/OR CARDIOVASCULAR DISORDERS	The present invention relates to compositions comprising an inhibitor of a polynucleotide, said polynucleotide to be inhibited being capable of decreasing or suppressing expression of FZD3 (Frizzled-3) or a biologically active derivative thereof for use in treating or preventing bone disorders and/or cardiovascular disorders. Such bone disorders comprise, inter alia, osteoporosis, osteopenia, bone fracture, bone cancer, as well as impaired bone homeostasis. Cardiovascular diseases to be treated by the compounds of the present invention may be selected from the group consisting of infarction, stroke, hypertension, thrombosis, vascular stenosis, coronary syndromes, vascular dementia, heart failure, renal failure, stress-related cardiovascular disorders and atherosclerosis. Preferred compounds to be used in these medical interventions are antagonistic compounds, like nucleic acid molecules, directed against miR- 31 and derivatives thereof. Also, the present invention relates to methods for diagnosing and compositions for use in diagnosing bone disorders and/or cardiovascular disorders. Compounds to be employed in these diagnostic methods and uses may be compounds (like primers and probes) that are capable of detecting such a polynucleotide that is capable of decreasing or suppressing expression of FZD3 or a biologically active derivative thereof. miR-31 is provided herein as a polynucleotide that is capable of decreasing or suppressing expression of FZD3.	1. Composition comprising an antagonist/inhibitor of miR-31 or its 5' or 3' isoforms for use in treating or preventing bone disorders and/or cardiovascular disorders in a subject, wherein said antagonist/inhibitor is capable of hybridizing to miR- 31 or to its 5' or 3' isoforms. 9. Method for diagnosing bone disorders and/or cardiovascular disorders in a subject, said method comprising the steps of: (a) contacting a biological sample from said subject with a nucleic acid molecule which hybridizes to miR-31 or its 5' or 3' isoforms, (b) detecting and evaluating the hybridization signal of the nucleic acid molecule of (a) with said miR-31 or its 5' or 3' isoforms; and (c) comparing the detected and evaluated hybridization signal of (b) with a correspondingly detected and evaluated hybridization or binding signal in a control sample, wherein a stronger hybridization signal or a stronger binding signal in the sample of the subject compared to that of said control sample is indicative for a risk of developing or having a bone disorder and/or cardiovascular disorder. 10. Method for diagnosing bone disorders and/or cardiovascular disorders in a subject, said method comprising the steps of: (a) detecting via a PCR method the expression level and/or quantity of miR-31 or of isoforms thereof in a biological test sample; and (b) comparing the detected expression level and/or quantity of said miR-31 or of said isoforms in said biological sample with a corresponding expression level and/or quantity of said miR-31 in a control sample.	Universität für Bodenkultur Wien, 1180 Wien, AT, 100996588	2019-11-20	2010-05-21
EP2608769B1	HUMIDIFIED PARTICLES COMPRISING A THERAPEUTICALLY ACTIVE SUBSTANCE	The invention relates to aerosolized and humidified particles comprising a therapeutically active substance which can be obtained by suspending dry inhalable particles in a carrier gas, adding water vapor and causing condensation of water on the particles. The invention further relates to methods to generate these particles, and apparatus useful to carry out such methods.	1. Particles, comprising at least one therapeutically active substance and being obtainable by the following steps: a. providing essentially dry inhalable particles comprising the at least one therapeutically active substance, b. suspending the particles of step (a) in a carrier gas to obtain a first aerosol, c. adding water vapor to the first aerosol to obtain a second aerosol having a higher water content than the first aerosol, and d. adjusting the temperature and/or the pressure of the second aerosol as to exceed the second aerosol's dew point and to cause condensation of water on the particles. 17. Method for the generation of an aerosol of particles comprising at least one therapeutically active substance, comprising the following steps: a. providing essentially dry inhalable particles comprising the at least one therapeutically active substance, b. suspending the particles of step (a) in a carrier gas to obtain a first aerosol, c. adding water vapor to the first aerosol to obtain a second aerosol having a higher water content than the first aerosol, and d. adjusting the temperature	Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V., 80686 München, DE, 101521442	2019-11-06	2010-08-23

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			and/or the pressure of the second aerosol as to exceed the second aerosol's dew point and to cause condensation of water on the particles.			
EP2613828B1	METERED-DOSE INHALER ACTUATOR, METERED-DOSE INHALER	Metered-dose inhaler actuator, metered-dose inhaler and method of using the same An actuator (11) for a metered-dose inhaler (1) is provided. The actuator (11) com- prises a housing having a mouthpiece portion (13) and a canister receiving portion (12) configured to receive a canister (2). The actuator (11) further comprises a member (14) disposed within the housing and defining a valve stem receptacle (15) con- figured to receive a valve stem (3) of the canister (2). An orifice (16) is formed in the member (14), which is in fluid communication with the valve stem receptacle (15) and extending to a face (19) of the member (14) opposite to the valve stem receptacle (15). A longitudinal axis (18) of the orifice (16) is aligned with a longitudinal axis (17) 15 of the valve stem receptacle (15). At least one air inlet opening (20) is provided in an outer shell of the housing so as to be spaced from an opening (21) for receiving the canister (2) and a mouthpiece opening (22).	1. A metered-dose inhaler actuator, comprising: a housing having a mouthpiece portion (13) and a canister receiving portion (12) configured to receive a canister (2), said housing extending from an opening (21) for receiving said canister (2) to a mouthpiece opening (22); a member (14) disposed within said housing and defining a valve stem receptacle (15) configured to receive a valve stem (3) of said canister (2), an orifice (16; 73, 74; 76, 77; 79, 80; 84; 88) for emitting an aerosol plume being formed in said member (14), said orifice (16; 73, 74; 76, 77; 79, 80; 84; 88) being in fluid communication with said valve stem receptacle (15) and extending to a face (19) of said member (14) opposite to said valve stem receptacle (15); a longitudinal axis (18) of said orifice (16; 73, 74; 76, 77; 79, 80; 84; 88) being aligned with a longitudinal axis (17) of said valve stem receptacle (15); and at least one air inlet opening (20) being provided in an outer shell of said housing so as to be spaced from said opening (21) for receiving said canister (2) and from said mouthpiece opening (22), said at least one air inlet opening (20) being in fluid communication with said mouthpiece opening (22), and a longitudinal axis (25) of said mouthpiece portion (13) being arranged at an angle and not parallel relative to said longitudinal axis (18) of said orifice (16; 73, 74; 76, 77; 79, 80; 84; 88), characterized in that an air inlet opening (20) of said at least one air inlet opening (20) is arranged to produce an airflow essentially perpendicular to the direction of the aerosol plume and is positioned on a line of view (29) which passes through said mouthpiece opening (22) and is aligned with said longitudinal axis (25) of said mouthpiece portion (13), and is arranged to produce an airflow essentially perpendicular to the direction of the aerosol plume.	CHIESI FARMACEUTICI S.p.A., 43122 Parma, IT, 101841954	2019-11-27	2010-09-06
EP2663304B1	COMBINATION THERAPY	The invention relates to pharmaceutical compositions comprising: (a) at least one angiotensin receptor blocker or a pharmaceutically acceptable salt thereof, and (b) at least one chemokine receptor pathway inhibitor or a pharmaceutically acceptable salt thereof. The invention also relates to pharmaceutical compositions comprising: (a) at least one angiotensin receptor blocker or a pharmaceutically acceptable salt thereof; and (b) at least one chemokine receptor pathway inhibitor or a pharmaceutically acceptable salt thereof which inhibits a component of the chemokine receptor pathway other than the chemokine receptor. Oral sustained release pharmaceutical compositions comprising the pharmaceutical composition, as well as injectable sustained release pharmaceutical compositions comprising the pharmaceutical composition are described. The invention further relates to tablets, capsules, injectable suspensions, and compositions for	1. A pharmaceutical composition comprising: a) at least one angiotensin receptor type 1 (AT 1 R) blocker or a pharmaceutically acceptable salt thereof, wherein the AT 1 R blocker is irbesartan, and b) at least one chemokine receptor 2 (CCR2) inhibitor or a pharmaceutically acceptable salt thereof chosen from the list consisting of a direct CCR2 antagonist; an inverse CCR2 agonist; and a negative allosteric CCR2 modulator, wherein the CCR2 inhibitor is propagermanium, for use in the treatment of a kidney disease selected from the group comprising: fibrotic disorders in the kidney, chronic kidney disease caused by diabetic nephropathy, renal insufficiency, renal failure conditions, diabetic nephropathy, glomerulonephritis, glomerular sclerosis, proteinuria of primary renal disease. 2. At least one AT 1 R blocker or a pharmaceutically acceptable salt thereof, wherein the AT 1 R blocker is irbesartan, and	Dimerix Bioscience Pty Ltd, Nedlands, Western Australia 6009, AU, 101153204	2019-11-20	2011-01-11

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		pulmonary or nasal delivery comprising the pharmaceutical composition. Also described are: methods for assessing the efficacy of the pharmaceutical composition; methods for assessing the inhibition or partial inhibition activity of the pharmaceutical composition; methods for the treatment, amelioration or prevention of a condition or disease comprising administering to a subject a therapeutically effective amount of the pharmaceutical composition; and the use of the pharmaceutical composition for the manufacture of a dosage form for the treatment of a disease.	at least one CCR2 inhibitor or a pharmaceutically acceptable salt thereof, wherein the CCR2 inhibitor is propagermanium, in a dosage form, for use in medicine for the treatment, amelioration or prevention of a disease, optionally wherein the at least one AT 1 R blocker or a pharmaceutically acceptable salt thereof and the at least one CCR2 inhibitor or a pharmaceutically acceptable salt thereof are administered concurrently or sequentially, wherein the disease is a kidney disease associated with proteinuria selected from the group comprising: fibrotic disorders in the kidney, chronic kidney disease caused by diabetic nephropathy, renal insufficiency, renal failure conditions, diabetic nephropathy, glomerulonephritis, glomerular sclerosis, proteinuria of primary renal disease. 5. At least one AT 1 R blocker or a pharmaceutically acceptable salt thereof, wherein the AT 1 R blocker is irbesartan, for use in medicine for the treatment, amelioration or prevention of a disease wherein the at least one AT 1 R blocker or pharmaceutically acceptable salt thereof is administered to the subject concurrently or sequentially with at least one CCR2 inhibitor or a pharmaceutically acceptable salt thereof, wherein the CCR2 inhibitor is propagermanium, wherein the disease is a kidney disease associated with proteinuria selected from the group comprising: fibrotic disorders in the kidney, chronic kidney disease caused by diabetic nephropathy, renal insufficiency, renal failure conditions, diabetic nephropathy, glomerulonephritis, glomerular sclerosis, proteinuria of primary renal disease. 6. At least one CCR2 inhibitor or a pharmaceutically acceptable salt thereof, wherein the CCR2 inhibitor is propagermanium, for use in medicine for the treatment, amelioration or prevention of a disease wherein the at least one CCR2 inhibitor or pharmaceutically acceptable salt thereof is administered to the subject concurrently or sequentially with at least one AT 1 R blocker or a pharmaceutically acceptable salt thereof, wherein the AT 1 R blocker is irbesartan, wherein the disease is a kidney disease associated with proteinuria selected from the group comprising: fibrotic disorders in the kidney, chronic kidney disease caused by diabetic nephropathy, renal insufficiency, renal failure conditions, diabetic nephropathy, glomerulonephritis, glomerular sclerosis, proteinuria of primary renal disease.			
EP2773369B1	COMPOSITIONS AND METHODS FOR PREVENTING AND TREATING ORAL DISEASES	Compositions comprising iron-sequestering glycoproteins, chelating agents, stabilizing agents, binding agents, surfactants, fluorides, antimicrobials and a pH adjuster or buffer for the prevention and treatment of oral cavity diseases caused by dental plaque/biofilm, such as dental caries, gingivitis and periodontitis, through anti-infective properties are disclosed. The anti-infective properties of a composition include reduction or killing of anaerobic/aerobic/facultative gram-negative and gram-positive oral bacteria occurring in polymicrobial dental biofilms. The composition may be in the form of	1. A composition for use in the prevention and treatment of oral cavity diseases associated with bacteria comprising: sodium citrate and disodium EDTA, wherein the disodium EDTA and sodium citrate are present at 2 mg/ml and 3 mg/ml, respectively, or wherein the disodium EDTA has a concentration between 0.025 mg/ml and 2 mg/ml, and the sodium citrate has a concentration between 0.5 mg/ml and 3.5 mg/ml.	Kane Biotech Inc., Winnipeg, Manitoba R3T 2N2, CA, 101381344	2019-11-06	2011-10-31

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		wash, rinse, soak, paste, gel, spray, or other suitable form. Additionally, the invention offers an efficient method of delivering the formulated composition containing a PEGylated or fluorinated iron-sequestering glycoprotein and one or two chelating agents or chelating agents alone using either a liposomal or a nanoparticle delivery system.				
EP2868317B1	2, 2', 6, 6'-TETRAISOPROPYL-4, 4'-2-BIPHENOL SOFT CAPSULE AND METHOD FOR PREPARING SAME	Disclosed is a 2, 2', 6, 6'-tetraisopropyl-4, 4'-biphenol soft capsule composed of a capsule shell and the contents in the capsule, wherein the contents in the capsule comprise 2, 2', 6, 6'-tetraisopropyl-4, 4'-biphenol, a solvent, and an antioxidant, among others.	1. A soft capsule of 2, 2', 6, 6'-tetraisopropyl-4, 4'-biphenol, characterized in that the contents encapsulated in the soft capsule comprise the following components: 1% to 30% of 2, 2', 6, 6'-tetraisopropyl-4, 4'-biphenol, 60% to 90% of a dispersant, 1% to 20% of an antioxidant, 0% to 0.3% of a preservative, on the basis of the contents in the capsule, wherein, the dispersant is selected from one of vegetable oils, medium-chain oils, and structured oils, or a mixture of at least two of them, and the vegetable oils are selected from Perilla oil, cottonseed oil, olive oil, linolenic acid, soybean oil, peanut oil, safflower oil, and corn oil. 5. A soft capsule of 2, 2', 6.6'-tetraisopropyl-4, 4'-biphenol, dispersant and antioxidant for use in the treatment of epilepsy, the treatment including treatment of various epileptic symptoms such as generalized tonic-clonic seizures, absence seizures, simple partial seizures, complex partial seizures, and autonomic seizures, wherein, the dispersant is selected from one of vegetable oils, medium-chain oils and structured oils, or a mixture of at least two of them, and the vegetable oils are selected from Perilla oil, cottonseed oil, olive oil, linolenic acid, soybean oil, peanut oil, safflower oil, and corn oil.	Xi'an Libang Pharmaceutical Co. Ltd, Xi'an, Shaanxi 710075, CN, 101414124	2019-11-13	2012-07-02
EP2881112B1	PHARMACEUTICAL COMPOSITION FOR PROMOTING NERVE INJURY RESTORATION AND APPLICATION THEREOF	A pharmaceutical composition for promoting nerve injury restoration and a use thereof are disclosed. Each unit of the pharmaceutical composition contains 0.5 to 8 g of L-ornithine, 1 to 5 g of aspartic acid, 3 to 10 g of arginine and 3 to 10 g of vitamin B 6. The pharmaceutical composition can significantly promote recovery of the spinal nerve function, and particularly has a good therapeutic effect on acute myelitis.	1. A pharmaceutical composition for use in a method of promoting nerve injury restoration, wherein each unit of the pharmaceutical composition comprises: 0.5 to 8 g of L-ornithine, 1 to 5 g of aspartic acid, 3 to 10 g of arginine, 3 to 10 g of vitamin B 6 , with the rest being an excipient and/or other ingredients.	Huang Tongge, Jiangsu 210000, CN, 101298508	2019-11-13	2012-08-01
EP2928463B1	LYOPHILIZED PREPARATIONS OF MELPHALAN FLUFENAMIDE	The present invention is directed to lyophilized pharmaceutical preparations comprising melphalan flufenamide, or pharmaceutically acceptable salts thereof, and sucrose. Further independent claims are directed to methods for their preparation, compositions comprising the lyophilized pharmaceutical preparations and their use in the treatment of cancer.	1. A lyophilized pharmaceutical preparation comprising melphalan flufenamide hydrochloride (J1), and sucrose wherein the weight ratio (w/w) between said melphalan flufenamide hydrochloride (J1) and sucrose is from 1:25 to 1:75.	Oncopeptides AB, 111 53 Stockholm, SE, 101695066	2019-11-20	2012-10-26
EP2922565B1	SKIN CARE COMPOSITIONS AND METHODS COMPRISING SELECTIVE AGONISTS OF MELANOCORTIN 1 RECEPTOR	Short tri- and tetrapeptides according to the following Formula I Ar(CH 2)mX1-X2-CO-X3-X4-X5-(Trp)n-NX6R are potent, selective agonists of melanocortin 1 receptor (MC1R). Provided herein are skin care compositions including Formula I peptide agonists of MC1R and methods of regulating a skin condition of a mammal that include applying to a treatment surface of the body a safe and effective amount of a skin care composition including a Formula I peptide. The peptides, skin care compositions, and skin care methods	1. A selective peptide agonist of melanocortin 1 receptor (MC1R) according to the following formula: Ar(CH 2) m X 1 -X 2 -CO-X 3 -X 4 -X 5 -(Trp) n -NX 6 R Formula I or a dermatologically-acceptable salt, solvate, or enantiomer thereof, wherein: Ar is selected from the group consisting of unsubstituted or substituted phenyl; m is 3; X 1 is absent; X 2 is absent; X 3 is selected from the group consisting of unsubstituted or substituted L-histidine (His); X 4 is selected from the group consisting of D-4-t-Bu-	University Of Cincinnati, Cincinnati, OH 45221-0829, US, 101142724 | Abdel-Malek Zalfa A., Cincinnati, OH 45209, US, 101459771 | Koikov Leonid, Cincinnati, OH 45233, US, 101459772 | Knittel	2019-11-13	2012-11-21

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		described herein are useful in regulating a skin condition of a mammal associated with exposure ultraviolet (UV) radiation, including sunburn, UV sensitivity, photoaging, and skin pigmentation, particularly in the absence of sun exposure.	phenylalanine (D-4-tBuPhe), D-4-biphenylalanine (D-4-Bip), D-1-naphthylalanine (D-1-Nal), D-2-naphthylalanine (D-2-Nal); X 5 is selected from the group consisting of unsubstituted or substituted L-arginine (Arg); n is 0 or 1; X 6 is selected from the group consisting of H, methyl or ethyl; and R is selected from the group consisting of H, methyl or ethyl.	James J., Belchertown, MA 01007, US, 101459773		
EP3173116B1	CANNULA FOR MINIMIZING DILUTION OF DOSING DURING NITRIC OXIDE DELIVERY	The present invention generally relates to, amongst other things, systems, devices, materials, and methods that can improve the accuracy and/or precision of nitric oxide therapy by, for example, reducing the dilution of inhaled nitric oxide (NO). As described herein, NO dilution can occur because of various factors. To reduce the dilution of an intended NO dose, various exemplary nasal cannulas, pneumatic configurations, methods of manufacturing, and methods of use, etc. are disclosed.	1. A nasal cannula for therapeutic gas delivered to a patient in need thereof, comprising: a first tube, a second tube and a cannula nosepiece: the first tube being a nitric oxide tube for delivering a first therapeutic gas comprising nitric oxide to the patient in need thereof, the second tube being an oxygen tube for delivering a second therapeutic gas comprising oxygen to the patient; and the nitric oxide tube and the oxygen tube aggregating at the cannula nosepiece, the cannula nosepiece allowing separate flow paths to the patient for the nitric oxide tube and the oxygen tube such that the nitric oxide and the oxygen do not mix in the cannula nosepiece, wherein the nitric oxide delivery tube has an inner diameter that is smaller than the inner diameter of the oxygen delivery tube but larger than an inner diameter of the nitric oxide tube at the cannula nares.	Ino Therapeutics LLC, Hampton, New Jersey 08827-9001, US, 101314551	2019-11-20	2012-12-04
EP2939224B1	DEVICES, SYSTEMS AND METHODS FOR LOCATING AND INTERACTING WITH MEDICAMENT DELIVERY SYSTEMS	In some embodiments, a method includes producing, from an adapter, a first wireless signal characterized by a first communication mode with a computing device when a portion of at least one of a medicament delivery device or a simulated medicament delivery is disposed within the adapter. An indication is received when the portion of the medicament delivery device or the simulated medicament delivery device is removed from the adapter. A second wireless signal characterized by a second communication mode with the computing device is produced in response to the indication. The second communication mode is different from the first communication mode. The second communication mode can be, for example, a hold mode, a sniff mode or a park mode.	1. An apparatus, comprising: an adapter (1210, 4200, 120, 14240, 3120) configured to be removably coupled to at least a portion of at least one of a medicament delivery device (1100, 4000, 100, 3100) or a simulated medicament delivery device, the adapter defining a cavity (4242, 14242) within which the portion of the medicament delivery device or the simulated medicament delivery device is received; and an electronic circuit system coupled to the adapter, the electronic circuit system including a power source, a radio (1212, 122, 14243), and a sensor (1214, 126), the radio configured to electronically communicate with a computing device (1510, 150, 3122, 3150) via a wireless protocol, the sensor configured to detect when the portion of the medicament delivery device or the simulated medicament delivery device is within the cavity of the adapter, the radio operating according to a first communication mode associated with a first power consumption when the portion of the medicament delivery device or the simulated medicament delivery device is within the adapter, characterised in that the radio operating according to a second communication mode associated with a second power consumption when the portion of the medicament delivery device or the simulated medicament delivery device is physically separated from the adapter, the second power consumption different from the first power consumption.	Kaleo Inc., Richmond VA 23219, US, 101532538	2019-11-06	2012-12-27
EP2777820B1	SPRAYABLE HEMOSTAT USING SOLUBLE OXIDIZED CELLULOSE WITH	An applicator for forming a film is disclosed. The applicator includes: a first extension tube coupled to a source of a modified cellulose solution; a shaft coupled to the first extension tube at a proximal end thereof, the shaft defining a first	1. An applicator (100, 200) for forming a film comprising: a first extension tube (116, 216a) coupled to a source of a modified cellulose solution; a shaft (114, 214) coupled to the first extension tube (116, 216a) at a proximal end of the shaft	Covidien LP, Mansfield, MA 02048, US, 101340844	2019-11-06	2013-03-15

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	MINIATURIZED ELECTROSPRAY SYSTEM AND METHOD	lumen in fluid communication with the first extension tube for transmission of the modified cellulose solution through the shaft; and an atomizer disposed at a distal end of the and configured to atomize the modified cellulose solution into a plurality of particles.	(114, 214), the shaft (114, 214) defining a first lumen (130, 230a) in fluid communication with the first extension tube (116, 216) for transmission of the modified cellulose solution through the shaft (114, 214); and an atomizer (138, 238) including an electrospray assembly further comprising a plurality of electrodes (142, 144, 242, 244) coupled to a power source, wherein the atomizer (138, 238) is disposed at a distal end of the shaft (114, 214) and configured to atomize the modified cellulose solution into a plurality of particles. 12. A process for forming a film on a medical device comprising: supplying a modified cellulose solution to a first lumen (130, 230a) defined by a shaft (114, 214); supplying a cross-linking agent to a second lumen (230b) defined by the shaft (114, 214); and atomizing the modified cellulose solution and the cross-linking agent at a tip member (140, 240) coupled to the shaft (114, 214) to form a plurality of particles that are deposited onto the medical device to form the film thereon, wherein the modified cellulose solution is supplied to the shaft (114, 214) and is atomized prior to the cross-linking agent.			
EP2982367B1	PHARMACEUTICAL COMPOSITION FOR PARENTERAL ADMINISTRATION, CONTAINING DONEPEZIL	The present invention relates to a composition for parenteral administration, containing donepezil as an active ingredient, and a preparation method therefor. Donepezil, which has been conventionally used for oral or transdermal administration, is prepared as microparticles comprising a biodegradable and biocompatible polymer and a release controller so as to be provided as a pharmaceutical composition for sustained release parenteral administration, thereby enabling in vivo sustained release continuously for 2-12 weeks or more. Therefore, it is possible to reduce the frequency of administration to a patient and maintain an effective concentration in the blood for a long time.	1. A donepezil microsphere comprising a biodegradable, biocompatible polymer, which comprises donepezil or a pharmaceutically acceptable salt thereof, and a poorly soluble salt of donepezil as a controlled release agent, wherein the content of donepezil is 15% by weight or more; the poorly soluble salt of donepezil is xinafoate, napadisilate or pamoate; and the biodegradable, biocompatible polymer is poly(lactide-co-glycolide), polylactide, polyglycolide, polycaprolactone, gelatin, hyaluronate or a mixture thereof.	Dongkook Pharmaceutical Co. Ltd., Suwon-si, Gyeonggi-do 443-270, KR, 101488111	2019-11-27	2013-04-03
EP3013159B1	COMPOSITIONS AND NUTRITIONAL PRODUCTS WITH IMPROVED EMULSION STABILITY	The present invention relates to a method of preparing a protein composition, comprising enzymatic modification of milk lecithin using phospholipase. This protein composition is then included in nutritional products to increase emulsion quality and heat stability of the final nutritional products.	1. A method of preparing a protein composition comprising hydrolysed protein, said method comprising the steps of a) providing an ingredient mix comprising at least one protein comprising a whey protein concentrate or a whey protein fraction, and milk lecithin in an amount of 20 to 100 mg per 100 g of the ingredient mix; b) adding at least one phospholipase, wherein the at least one phospholipase is phospholipase A1 and/or phospholipase A2, and performing conversion of milk lecithin, c) performing hydrolysis of said protein. | 3. The method according to any of the previous claims wherein the milk lecithin is native milk lecithin.	Société des Produits Nestlé S.A., 1800 Vevey, CH, 101826417	2019-11-13	2013-06-27
EP3031465B1	PHARMACEUTICAL COMPOSITION FOR PROMOTING BONE TISSUE FORMATION, CONTAINING STAUNTONIA HEXAPHYLLA LEAF EXTRACT AS ACTIVE INGREDIENT	The present invention relates to a composition for promoting osteoblast or cartilage cell differentiation. More particularly, the present invention relates to a composition, which includes stauntonia hexaphylla leaf extract that may be safely used without toxicity and side effects by using a natural ingredient, for promoting bone (tissue) formation to be used for suppressing and treating bone and cartilage tissue	1. A pharmaceutical composition comprising stauntonia hexaphylla crude leaf extract or non-polar solvent soluble leaf extract as an active ingredient, for use in promoting bone or cartilage tissue formation in a subject in need thereof, wherein the promotion of bone formation is by increasing direct osteoblast differentiation and osteoblast activity.	Jeonnam Bioindustry Foundation, Jeollanam-do 520-330, KR, 101441388 | Yungjin Pharmaceutical Co. Ltd., Gangdong-gu, Seoul 134-721, KR, 101434231	2019-11-13	2013-06-30

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		damage. A pharmaceutical composition including the stauntonia hexaphylla leaf extract according to the present invention as an active ingredient may be used as a medicine for periodontitis or osteoporosis to treat or prevent periodontitis or osteoporosis.				
EP3041368B1	PEROXIDE DISPERSIONS	The viscosity of aqueous dispersions of normally solid organic peroxides may be advantageously lowered through the use of surfactants which are polyglyceryl esters of C6-C12 fatty acids. The reduction in viscosity facilitates milling the peroxides to reduce particle size and also provides dispersions of small particle size peroxides which may be readily poured or pumped. The aqueous dispersions are useful as components of pharmaceutical, personal care, and cleaning products and the like and are effective decolorizing agents for food products, industrial products and the like.	1. A method of decolorizing a non-food industrial product or a food product, said food product being chosen in the group consisting of dairy products, edible oils, edible fats, polysaccharides, beverages and combinations thereof, comprising contacting the product with an aqueous dispersion having a viscosity between 800-2, 000 mPa.s using ASTM D2196-10 comprising a) 35% by weight or more of water-insoluble, solid organic peroxide having an average particle size of less than 10 µm, preferably of less than 5 µm and b) surfactant which is a polyglyceryl ester of one or more C6-C18 fatty acids selected from the group consisting of octanoic acid, decanoic acid, and mixtures thereof. 13. A composition comprising: - an aqueous organic peroxide decolorizing dispersion having a viscosity between 800-2, 000 mPa.s using ASTM D2196-10 and comprising a) water, b) 35% by weight or more of water-insoluble, solid organic peroxide having an average particle size of less than 10 µm, c) surfactant, preferably selected from the group consisting of food grade surfactants and pharmaceutically acceptable surfactants, which is a polyglyceryl ester of one or more C6-C18 fatty acids selected from the group consisting of octanoic acid, decanoic acid, and mixtures thereof, and optionally a gelling agent, wherein the dispersion is pumpable, pourable, or sprayable, preferably said dispersion is a paste or liquid; and - a food product selected from the group consisting of dairy products, edible oils, edible fats, polysaccharides, beverages and combinations thereof. 14. A personal care composition comprising: - an aqueous decolorizing dispersion having a viscosity between 800-2, 000 mPa.s using ASTM D2196-10 and comprising a) water, b) 35% by weight or more of water-insoluble, solid organic peroxide having an average particle size of less than 10 µm, c) surfactant, preferably selected from the group consisting of food grade surfactants and pharmaceutically acceptable surfactants, which is a polyglyceryl ester of one or more C6-C18 fatty acids selected from the group consisting of octanoic acid, decanoic acid, and mixtures thereof, and optionally a gelling agent, wherein the dispersion is pumpable, pourable, or sprayable, preferably said dispersion is a paste or liquid; and - at least one additional personal care ingredient. 15. A cleaning product comprising: - an aqueous decolorizing dispersion having a viscosity between 800-2, 000 mPa.s using ASTM D2196-10 and comprising a) water, b) 35% by weight or more of water-insoluble, solid organic peroxide having an average particle size of less than 10 µm, c) surfactant, preferably selected from the group consisting of food grade	Arkema Inc., King of Prussia, PA 19406, US, 101285614	2019-11-20	2013-08-29

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			surfactants and pharmaceutically acceptable surfactants, which is a polyglyceryl ester of one or more C6-C18 fatty acids selected from the group consisting of octanoic acid, decanoic acid, and mixtures thereof, and optionally a gelling agent, wherein the dispersion is pumpable, pourable, or sprayable, preferably said dispersion is a paste or liquid; and - at least one additional cleaning product ingredient. 16. A pharmaceutical composition comprising: - an aqueous decolorizing dispersion having a viscosity between 800-2, 000 mPa.s using ASTM D2196-10 and comprising a) water, b) 35% by weight or more of water-insoluble, solid organic peroxide having an average particle size of less than 10 µm, c) surfactant being a polyglyceryl ester of one or more C6-C18 fatty acids selected from the group consisting of octanoic acid, decanoic acid, and mixtures thereof, and optionally a gelling agent, wherein the dispersion is pumpable, pourable, or sprayable, preferably said dispersion is a paste or liquid, wherein said surfactant is preferably selected from the group consisting of food grade surfactants and pharmaceutically acceptable surfactants; and - at least one additional pharmaceutically acceptable ingredient selected from the group consisting of antibacterial agents, antimicrobial agents, fillers, carriers, surfactants, pigments, stabilizers, rheology control agents and gelling agents. 17. A system for decolorization of food, cleaning, personal care, or pharmaceutical compositions, said system comprising an aqueous dispersion having a viscosity between 800-2, 000 mPa.s using ASTM D2196-10 and comprising a) water, b) 35% by weight or more of water-insoluble, solid organic peroxide having an average particle size of less than 10 µm, c) surfactant, preferably selected from the group consisting of food grade surfactants and pharmaceutically acceptable surfactants, which is a polyglyceryl ester of one or more C6-C18 fatty acids selected from the group consisting of octanoic acid, decanoic acid, and mixtures thereof, and optionally a gelling agent, wherein the dispersion is pumpable, pourable, or sprayable, preferably said dispersion is a paste or liquid, and a spray nozzle configured to dispense said dispersion by spraying said dispersion.			
EP3357919B1	AROMATIC HETEROCYCLIC COMPOUNDS AS ANTIINFLAMMATORY COMPOUNDS	There is provided a compound of formula (I) as defined in the specification which is a p38 MAP kinase inhibitor for use as medicament for the treatment inter alia of inflammatory diseases.	1. A dry powder pharmaceutical formulation comprising a compound of formula (I): or a pharmaceutically acceptable salt thereof.	Respivert Limited, High Wycombe, Buckinghamshire HP12 4EG, GB, 101277396	2019-11-20	2014-02-14
EP3119218B1	MONOLITHIC PLANE WITH ELECTRICAL CONTACTS AND METHODS FOR MANUFACTURING THE SAME	The present disclosure relates to an electrically operated aerosol generating device, comprising: an electrical power supply; an electronic circuit board; an electrical heating element configured to receive power from the electrical power supply via the electronic circuit board; and a ground plane comprising an elongate conductive member configured to: electrically couple the power supply to the electronic circuit board and	1. An electrically operated aerosol generating device, comprising: an electrical power supply; an electronic circuit board; an electrical heating element configured to receive power from the electrical power supply via the electronic circuit board; and a ground plane comprising an elongate conductive member configured to: electrically couple the power supply to the electronic circuit board and the electrical	Philip Morris Products S.A., 2000 Neuchâtel, CH, 101137385	2019-11-06	2014-03-19

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		the electrical heating element; and structurally retain the power supply and plurality of components of the electrically operated aerosol generation device. The disclosure also relates to a ground plane, and a single laminar blank configured to form the ground plane. A method of assembling an electrically operated aerosol generating device is also provided.	heating element; and structurally retain the power supply and plurality of components of the electrically operated aerosol generation device, characterized in that the ground plane is configured to form a cavity adapted to receive and retain the power supply. 12. A method of assembling an electrically operated aerosol generating device, comprising: forming a ground plane by folding a plurality of connected elongate electrically conductive portions, the ground plane having a cavity bounded by the elongate electrically conductive portions; inserting an electrical power supply into the cavity of the formed ground plane, such that it is structurally retained by the plurality of elongate portions, and electrically coupled to the ground plane; connecting an electronic circuit board to the ground plane; and connecting an electrical heating element to the ground plane.			
EP3116570B1	INHALER DEVICE	A device (20) is disclosed for dispensing a fluid supplied from an external fluid source. The device comprises a transducer (32) adapted to receive a fluid from the fluid source, and a collapsible linkage and trip link (502) coupling the transducer and the fluid source. The linkage has a collapsible joint inhibiting discharge of the fluid source when in a locked orientation. The device (20) further comprises a moveable member coupled to the linkage such that inhalation forces on the device cause the linkage to collapse thereby discharging the fluid from the fluid source. The device may further include a dose counter coupled to the fluid source for registering the amount of doses administered from the fluid source.	1. An inhaler for dispensing metered doses of a medicament, the inhaler comprising a housing, an actuator member (508) moveable relative to the housing; a first link member (504) for coupling with a container of medicament; and a restraining surface (514) connectable with the first link member (504) for restraining movement of the first link member (504) from a first position, in which the medicament container is located in a stowed configuration, to a second position, in which the medicament container is located in a discharge configuration so as to dispense medicament; wherein the restraining surface (514) is moveable from a restraining position in response to movement of the actuator member (508) so as to allow movement of the first link member (504) from the first position to the second position; whereby the inhaler further comprises an elastically and resiliently deformable member (536) arranged adjacent the first link member (504) so as to be compressed as the first link member moves towards the second position and thereby bias the first link member (504) towards said first position, characterised in that said deformable member (536) is a helical compression spring; an end of said deformable member (536) is retained in a desired position by virtue of said end receiving a boss (537) and; there are two compression springs (536) and each has a first end abutting the lower link (504) and a second end abutting an internal surface of the housing, the lower link including bosses (537) projecting therefrom which are located within ends of the compression springs (536), the bosses (537) being provided on a member (670), the member (670) being secured between free end portions (680) of elongate elements (690) of the lower link (504). | 6. An inhaler as claimed in any of clams 5 to 8, wherein the first link member (504), when in said first position, is located in a groove in the trip link member (502) and abuts a first side (510) of said groove.	Cipla (EU) Limited, Bourne Business Park, Addlestone, Surrey KT15 2LE, GB, 101693816	2019-11-20	2014-03-29

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EP3129037B1	POXVIRAL ONCOLYTIC VECTORS	The present invention relates to compositions comprising poxvirus comprising a defective F4L and/or 14L gene as well as one or more substances effective in anticancer therapy, and to the methods and use of such compsositions for therapeutic purposes, and more particularly for the treatment of cancer.	1. A composition comprising an oncolytic poxvirus comprising a defective gene encoding the large subunit of ribonucleotide reductase (I4L) and/or the small subunit of ribonucleotide reductase (F4L) and a defective gene encoding thymidine kinase (J2R) and further comprising a suicide gene for use in treating cancer in combination with one or more substances effective in anticancer therapy, wherein the one or more substances effective in anticancer therapy are selected from irinotecan and oxaliplatin.	TRANSGENE, 67400 Illkirch Graffenstaden, FR, 101839187	2019-11-13	2014-04-10
EP3145338B1	AEROSOL-GENERATING ARTICLE WITH INTERNAL SUSCEPTOR	An aerosol-generating article (10) comprises a plurality of elements assembled in the form of a rod having a mouth end (70) and a distal end (80) upstream from the mouth end. The plurality of elements include an aerosol-forming substrate (20) located at or towards the distal end of the rod. An elongate susceptor (25) is arranged substantially longitudinally within the rod and in thermal contact with the aerosol-forming substrate (20). The susceptor allows the article to be consumed using an electrically-operated aerosol-generating device having an inductor.	1. An aerosol-generating article (10) comprising a plurality of elements assembled in the form of a rod having a mouth end (70) and a distal end (80) upstream from the mouth end, the plurality of elements including an aerosol-forming substrate (20) located at or towards the distal end of the rod, in which an elongate susceptor (25), having a thickness between 10 and 100 micrometres, is arranged substantially longitudinally within the rod and in thermal contact with the aerosol-forming substrate (20).	Philip Morris Products S.A., 2000 Neuchâtel, CH, 101137385	2019-11-06	2014-05-21
EP3164221B1	LIQUID NEBULIZATION SYSTEMS	Embodiments provide aerosolization device for providing aerosolized medicament to user. The aerosolization device includes conduit, aerosol generator, fluid receiving chamber, restrictor within the conduit, and indicator mechanism. Conduit has an inner wall and a mouthpiece end for causing an inspiratory flow. Aerosol generator includes a vibratable mesh laterally offset from the inner wall. Fluid receiving chamber receives liquid medicament. At least a portion of chamber is tapered such that liquid medicament is directed onto vibratable mesh for aerosolization. Restrictor defines a plurality of apertures that provide increases in pressure differential that vary with inspiratory flow rate within conduit and provide relatively laminar flow downstream of restrictor. Indicator mechanism indicates a state of flow parameters relative to a predefined range. Aerosol generator is configured to aerosolize at least a portion of liquid medicament only when flow parameters of the inspiratory flow are within range.	1. An aerosolization device (100) for providing aerosolized medicament to a user, the aerosolization device comprising: a conduit (102) having an inner wall (120) and a mouthpiece end (110) by which a user may cause an inspiratory flow through the conduit (102); an aerosol generator (104) in communication with the conduit (102) and comprising a vibratable mesh (112); a fluid receiving chamber (114) in communication with the aerosol generator (104) for receiving a volume of a liquid medicament, wherein at least a portion of the fluid receiving chamber is tapered such that substantially all of the liquid medicament is directed onto the vibratable mesh (112) for aerosolization; and a restrictor disposed within the conduit (102), wherein the restrictor defines a plurality of apertures, the plurality of apertures being configured to: provide an increase in pressure differential that varies with an inspiratory flow rate within the conduit (102); and wherein the aerosol generator (104) is configured to aerosolize at least a portion of the volume of the liquid medicament only when the one or more flow parameters of the inspiratory flow are within the predefined desired range, characterized in that the vibratable mesh (112) is disposed at a distance (122) from the inner wall (120) of the conduit (102) such that a lower surface of the vibratable mesh (112) is offset from the most proximate wall (120) of the conduit (102) to laterally offset the vibratable mesh (112) from the inner wall (120), and the plurality of apertures being configured to: provide a relatively laminar flow downstream of the restrictor plate compared to upstream of the restrictor plate.	Dance BioPharm Inc., Durham, NC 27713, US, 101843458	2019-11-06	2014-07-01
EP3166429B1	AEROSOL-FORMING CARTRIDGE COMPRISING A LIQUID NICOTINE SOURCE	There is provided anaerosol-forming cartridge (220) for use in an electrically operated aerosol-generating system. The cartridge (220) comprises a base layer (222), at least one	1. An aerosol-forming cartridge (220, 320) for use in an electrically operated aerosol-generating system, the cartridge comprising: a base layer (222, 322); at least one aerosol-	Philip Morris Products S.A., 2000 Neuchâtel, CH, 101137385	2019-11-13	2014-07-11

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		aerosol-forming substrate (224) arranged on the base layer (222) and comprising a liquid nicotine source, and an electric heater (226) including at least one heating element (236) arranged to heat the at least one aerosol-forming substrate (224). The base layer (222) and the at least one aerosol-forming substrate (224) are in contact at a contact surface which is substantially planar. The electric heater (226) and one or both of the base layer (222) and the at least one aerosol-forming substrate (224) are in contact at a contact surface which is substantially planar and substantially parallel to the contact surface between the base layer (222) and the at least one aerosol-forming substrate (224).	forming substrate (224, 324) arranged on the base layer and comprising a liquid nicotine source; and an electric heater (226, 326) including at least one heating element (236, 336) arranged to heat the at least one aerosol-forming substrate, wherein the base layer and the at least one aerosol-forming substrate are in contact at a contact surface which is substantially planar, wherein a contact surface between the electric heater and the at least one aerosol-forming substrate is substantially planar and substantially parallel to the contact surface between the base layer and the at least one aerosol-forming substrate, and wherein the at least one heating element is positioned on an opposite side of the at least one aerosol-forming substrate to the base layer. 10. A method of manufacturing an aerosol-forming cartridge (220) for use in an electrically operated aerosol-generating system, the method comprising the steps of: providing a base layer (222); placing at least one aerosol-forming substrate (224) on the base layer such that the base layer and the at least one aerosol-forming substrate are joined at a contact surface which is substantially planar, wherein the aerosol-forming substrate comprises a liquid nicotine source; and attaching an electric heater (226) comprising at least one heating element (236) to the base layer such that the electric heater and the at least one aerosol-forming substrate are in contact at a contact surface which is substantially planar and is substantially parallel to the contact surface between the base layer and the at least one aerosol-forming substrate, and such that the at least one heating element is positioned on an opposite side of the at least one aerosol-forming substrate to the base layer.			
EP3174538B1	METHODS AND THERAPEUTIC COMBINATIONS FOR TREATING TUMORS	Methods and therapeutic combinations useful for increasing cell-mediated anti-tumor responses are described. The methods include administering to a subject a therapeutically effective amount of an Immune Response Modifier Compound and a therapeutically effective amount of one or more immune checkpoint inhibitor compounds.	1. A combination comprising a first immune checkpoint inhibitor and an IRM compound for use in the treatment of a tumor; wherein the IRM compound is N-{4-{[4-amino-2-butyl-1 H -imidazo[4, 5- c]quinolin-1-yl]oxy}butyl)octadecanamide, or a pharmaceutically acceptable salt thereof, and wherein the immune checkpoint inhibitor compound is (i) a CTLA-4 receptor antibody or a fragment thereof or (ii) an anti-PD-L1 antibody or a fragment thereof. 2. A therapeutic combination comprising: a first immune checkpoint inhibitor compound and an IRM compound, wherein the IRM compound is N-(4-{[4-amino-2-butyl-1 H -imidazo[4, 5- c]quinolin-1-yl]oxy}butyl)octadecanamide, or a pharmaceutically acceptable salt thereof, and wherein the immune checkpoint inhibitor compound is (i) a CTLA-4 receptor antibody or a fragment thereof or (ii) an anti-PD-L1 antibody or a fragment thereof. 7. The combination for use of any of the claims 1 and 3-6, wherein the tumor is a breast cancer tumor, a bladder cancer tumor, a head and neck cancer tumor, a non-small cell lung cancer tumor, a small cell lung cancer tumor, a colorectal cancer tumor, a gastrointestinal stromal tumor, a	3M Innovative Properties Company, St. Paul, MN 55133-3427, US, 101715403 | Board of Regents The University of Texas System, Austin, TX 78701, US, 101484604	2019-11-06	2014-08-01

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			gastroesophageal carcinoma, a renal cell cancer tumor, a prostate cancer tumor, a liver cancer tumor, a colon cancer tumor, a pancreatic cancer tumor, an ovarian cancer tumor, a lymphoma, or a cutaneous T-cell lymphoma, or a melanoma. 8. The combination for use of any of the claims 3-7 or the therapeutic combination of any of the claims 3-6 further comprising a second immune checkpoint inhibitor compound. 12. A kit for treating a tumor comprising at least one immune checkpoint inhibitor compound; an IRM compound; wherein the IRM compound is N-{4-{[4-amino-2-butyl-1 H- imidazo[4, 5- c]quinolin-1-yl]oxy}butyl)octadecanamide, or a pharmaceutically acceptable salt thereof, and wherein the immune checkpoint inhibitor compound is (i) a CTLA-4 receptor antibody or a fragment thereof and/or (ii) an anti-PD-L1 antibody or a fragment thereof; and a set of instructions for use.			
EP3181136B1	MICELLE CONTAINING EPIRUBICIN-COMPLEXED BLOCK COPOLYMER AND ANTI-CANCER AGENT, AND PHARMACEUTICAL COMPOSITION CONTAINING SAID MICELLE APPLICABLE TO TREATMENT OF CANCER, RESISTANT CANCER OR METASTATIC CANCER	The problem addressed by the present invention is to develop a pharmaceutical having therapeutic efficacy against epirubicin-resistant tumors. The present invention provides a micelle having an anti-cancer agent disposed inside the core of the micelle formed by an epirubicin-conjugated copolymer.	1. A pH-sensitive micelle comprising a compound which is an anti-cancer agent, wherein the anti-cancer agent is a compound having an indolocarbazole backbone, and an epirubicin-conjugated copolymer, in which epirubicin or a salt thereof is bound to a block copolymer represented by the following Chemical Formula (I) or Chemical Formula (II) via hydrazide groups of the block copolymer, and wherein as a result of binding epirubicin or salt thereof, units having a hydrazide group in a side chain account for more than 0% to no more than 35% of the total number of polyamino acid units in the block copolymer: or wherein, R 1 , which may be the same or different, represents a hydrogen atom, methoxy group, methyl group, substituted linear, branched or cyclic C 1 -C 12 alkyl group, in which the substituent is a functional group selected from the group consisting of a maleimido group, amino group, carboxyl group, thiol group, hydroxyl group and active ester group, which may be protected, R 2 represents a hydrogen atom, saturated or unsaturated C 1 -C 30 aliphatic carbonyl group or arylcarbonyl group, R 3 represents -O-R 5 or -NH-R 5 in which R 5 , which may be the same or different, represents a hydrophobic group, R 4 represents a hydroxyl group, saturated or unsaturated C 1 -C 30 aliphatic oxy group or aryl-lower alkyloxy group, L 1 and L 2 independently from each other represents a linker, m represents an integer of 5 to 1000, n represents an integer of 0 to 1000, p represents an integer of 1 to 1000, q represents an integer of 1 to 1000, provided that in the case units having a hydrophobic group in a side chain thereof account for 25% to 75% of the total number of polyamino acid units in the block copolymer and units having a carboxylic acid group are present in a side chain thereof, units having a carboxylic acid group in a side chain thereof, units having a hydrophobic group in a side chain thereof and units having a hydrazide group in a side chain thereof are randomly distributed throughout the entire polyamino acid region, while in the case units having a carboxylic acid group in a side chain	The University of Tokyo, Tokyo 113-8654, JP, 101448593 | Tokyo Institute of Technology, Tokyo 152-8550, JP, 101024991	2019-11-27	2014-08-11

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			thereof are not present, units having a hydrophobic group in a side chain thereof and units having a hydrazide group in a side chain thereof are randomly distributed throughout the entire polyamino acid region, and y represents an integer of 1 or 2.			
EP3200775B1	COMBINATION THERAPIES	Combination therapies are disclosed. The combination therapies can be used to treat or prevent cancerous conditions and/or disorders.	1. A combination comprising an anti-PD-1 antibody chosen from Nivolumab, Pembrolizumab or Pidilizumab, and LCL161, for use in a method of treating a cancer or a hematopoiesis disorder in a subject, wherein LCL161 is (S)-N-((S)-1-cyclohexyl-2-((S)-2-(4-(4-fluorobenzoyl)thiazol-2-yl)pyrrolidin-1-yl)-2-oxoethyl)-2-(methylamino)propanamide or a pharmaceutically acceptable salt thereof. 12. A composition, or a kit comprising one or more compositions or dosage forms, comprising an anti-PD-1 antibody and a second therapeutic agent, wherein: (i) the anti-PD-1 antibody is chosen from Nivolumab, Pembrolizumab, or Pidilizumab; and (ii) the second therapeutic agent is LCL161, wherein LCL161 is (S)-N-((S)-1-cyclohexyl-2-((S)-2-(4-(4-fluorobenzoyl)thiazol-2-yl)pyrrolidin-1-yl)-2-oxoethyl)-2-(methylamino)propanamide or a pharmaceutically acceptable salt thereof.	Novartis AG, 4056 Basel, CH, 101062816	2019-11-20	2014-10-03
EP3206491B1	USE OF METHYLNALTREXONE TO ATTENUATE TUMOR PROGRESSION	Presented herein are methods for preventing or treating tumor growth, tumor metastasis and/or abnormal proliferation of tumor cells in a subject, wherein the methods involve administration of a pharmaceutical composition comprising methylnaltrexone. Also presented herein are methods for inhibiting or slowing the growth of a tumor in a subject, wherein the methods include selecting a subject who is a suitable candidate for treatment with methylnaltrexone, and administering a composition comprising methylnaltrexone to the subject.	1. A mu opioid receptor antagonist for use in a method of treating cancer in a subject, increasing the survival of a subject suffering from cancer, slowing or stopping the growth of a tumor in a subject, or inhibiting or slowing the proliferation of tumor cells in a subject, wherein the subject is a fast responder to administration of said mu opioid receptor antagonist for treatment of constipation. 4. A composition comprising a mu opioid receptor antagonist for use in a method of treating a subject suffering from cancer, comprising identifying the subject as a fast responder to administration of said mu opioid receptor antagonist for treatment of constipation, and administering said composition to the subject to prolong survival from cancer.	Salix Pharmaceuticals Inc., Bridgewater, NJ 08807, US, 101587501 | The University of Chicago, Chicago, IL 60637, US, 101523882	2019-11-27	2014-10-17
EP3210480B1	ELECTRONIC CIGARETTE HAVING TEMPERATURE CONTROL	An electronic cigarette capable of temperature control and a temperature control method therefor, the electronic cigarette comprises a casing (10), a liquid storage device (101) within the casing (10), an atomizing assembly, a power supply (102), and a circuit control board (103) having a smoking switch SW, the atomizing assembly comprises a heating unit and leads thereof made from thermo-sensitive material whose resistance varies along with the temperature in certain proportion, the circuit control board (103) comprises a power supply managing module (104) which determines temperature of the heating unit and leads thereof by continuously detecting their resistance when the smoking switch SW on, and sends corresponding control signal to make the heating unit and leads thereof connect to/disconnect from the power supply (102) to achieve temperature control, pernicious gas and burnt matter produced by heating unit dry-	1. An electronic cigarette capable of temperature control, comprising a casing (10), a liquid storage device (101) within the casing (10), an atomizing assembly, a power supply (102), and a circuit control board (103) provided with a smoking switch SW, the atomizing assembly comprises a heating unit and leads thereof (20), material of the heating unit and/or the leads is thermo-sensitive whose resistance varies along with the temperature in certain proportion, the circuit control board (103) comprises a power supply managing module (104), when the smoking switch SW is on, the power supply managing module (104) determines the corresponding temperature of the heating unit and the leads thereof by continuously detecting resistance of them, and sends corresponding control signal to make the heating unit and leads thereof connect to or disconnect from the power supply; characterized in that the power supply managing	Lin Guangrong, Shenzhen, Guangdong 518104, CN, 101592678	2019-11-20	2014-10-24

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		burn caused by lack of e-liquid threatening users' health is prevented.	module further comprises a chip U1, a triode Q4, a metal oxide semi-conductor field effect transistor M1, a third resistor R3, a fifth resistor R5, a sixth resistor R6, wherein the chip U1 has a number of pins, wherein a first pin is an on/off signal end KEY 1, a fourth pin is a power supply signal end BT+, a ninth pin is a control signal end HOT, a thirteenth pin is a grounding end and a sixteenth pin is a temperature signal detecting end FB; one end of the smoking switch SW is grounded while the other end thereof is connected to the end KEY 1; one end of the third resistor R3 is connected to the end HOT while the other end thereof is connected to the base of the triode Q4; the emitter of the triode Q4 is grounded and between the base and the emitter thereof is provided a fourth resistor R4, the collector of the triode Q4 is connected to both the gate of the metal oxide semi-conductor field effect transistor M1 and one end of the fifth resistor R5, while both the other end of R5 and the source of the metal oxide semi-conductor field effect transistor M1 are connected to the end BT+; the drain of the metal oxide semi-conductor field effect transistor M1 also acts as an end F+, one end of the heating unit and leads thereof is connected to the end F+ while the other end thereof is grounded; one end of the sixth resistor R6 is grounded while the other end thereof and the drain of the metal oxide semi-conductor field effect transistor M1 are both connected to the end FB, so that temperature control of the heating unit within the electronic cigarette is performed and the problem of over-temperature due to dry-burn of the heating unit caused by a lack of e-liquid is effectively prevented.			
EP3273814B1	AEROSOL-GENERATING SYSTEM COMPRISING A RESILIENT MEMBER	An aerosol-generating system (80) is provided, the aerosol-generating system (80) comprising an aerosol-generating device (70) comprising a heater element (72), and an aerosol-generating article (60). The aerosol-generating article (60) comprises a medicament source (18) and a volatile delivery enhancing compound source (22). The aerosol-generating system (80) also comprises at least one resilient member (48, 58) provided in the aerosol-generating device (70) or the aerosol-generating article (60) and resiliency biased against the heater element (72). At least one of the medicament source (18) and the volatile delivery enhancing compound source (22) contacts the at least one resilient member (48, 58), and the aerosol-generating system (80) is configured to heat the medicament source (18) and the volatile delivery enhancing compound source (22) of the aerosol-generating article (60) so that the medicament source (18) has a higher temperature than the volatile delivery enhancing compound source (22).	1. An aerosol-generating system (80) comprising: an aerosol-generating device (70) comprising a heater element (72); an aerosol-generating article (60) comprising: a medicament source (18); and a volatile delivery enhancing compound source (22); and at least one resilient member (48, 50) provided in the aerosol-generating device or the aerosol-generating article and resiliently biased against the heater element; wherein at least one of the medicament source and the volatile delivery enhancing compound source contacts the at least one resilient member; and wherein the aerosol-generating system is configured to heat the medicament source and the volatile delivery enhancing compound source of the aerosol-generating article so that the medicament source has a higher temperature than the volatile delivery enhancing compound source.	Philip Morris Products S.A., 2000 Neuchâtel, CH, 101137385	2019-11-20	2015-03-27
EP3097936B1	INHALATION SYSTEM	Inhaliersystem mit einer Inhaliervorrichtung und einem Flussmesser (12), der einen Strömungsraum (15), einen Widerstandskörper (20) und einen Flussanzeiger (21) aufweist,	1. Inhalation system comprising an inhalation device and a flowmeter (12) that comprises a flow chamber (15), a resistor body (20) and a flow indicator (21), wherein said flow	PARI GmbH Spezialisten für effektive Inhalation,	2019-11-13	2015-05-26

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		wobei der Strömungsraum (15) eine Einlassöffnung (17), die wirksam mit der Umgebung verbindbar ist, eine Auslassöffnung (18), die wirksam mit einem Innenraum der Inhaliervorrichtung verbindbar ist, und eine Flusswiderstandseinrichtung aufweist, das Inhaliersystem eingerichtet ist, eine Zuluft durch die Einlassöffnung (17) in den Strömungsraum (15), durch die Auslassöffnung (18) aus dem Strömungsraum (15) heraus und in den Innenraum der Inhaliervorrichtung zu leiten, der Widerstandskörper (20) eingerichtet ist, in dem Strömungsraum (15) verschiedene Positionen einnehmen zu können, und der Flussanzeiger (21) eingerichtet ist, eine Position des Widerstandskörpers (20) in dem Strömungsraum (15) anzuzeigen.	chamber (15) comprises an inlet opening (17) that can be actively connected to the surroundings, an outlet opening (18) that can be actively connected to an interior of the inhalation device, and a flow resistance device, said inhalation system being configured to guide supply air through the inlet opening (17) into the flow chamber (15), through the outlet opening (18) out of the flow chamber (15) and into the interior of the inhalation device, said resistor body (20) being configured to be able to assume different positions in the flow chamber (15), and said flow indicator (21) being configured to indicate a position of the resistor body (20) in the flow chamber (15), characterised in that the inhalation system has at a location of the airway a narrowing of the cross-section which, in order to increase the inhalation resistance, can be influenced such that different cross-sections can be set, and in that (a) the flow chamber has a cross section which increases in the opening direction and in the direction of flow or (b) the inhalation system has a spring which is configured to exert a force on the resistor body, or (c) the inhalation system has a magnet which is configured to exert a force on the resistor body.	82319 Starnberg, DE, 100195714		
EP3303333B1	COMPOUNDS HAVING MUSCARINIC RECEPTOR ANTAGONIST AND BETA2 ADRENERGIC RECEPTOR AGONIST ACTIVITY	The present invention relates to compounds acting both as muscarinic receptor antagonists and beta2 adrenergic receptor agonists, to processes for their preparation, to compositions comprising them, to therapeutic uses and combinations with other pharmaceutical active ingredients.	1. A compound of formula I wherein Y is selected from Y2 and Y1 which are divalent groups of formula |-A 1 -B-A 2 -C-D-(CH 2) n' -E-(CH 2) n" -| Y2 or |-A 1 -C-B-D-(CH 2) n' -E-| Y1 wherein A1 and A2 are independently absent or selected from the group consisting of (C 1 -C 12)alkylene, (C 3 -C 8)cycloalkylene and (C 3 -C 8)heterocycloalkylene optionally substituted by one or more substituents selected from the group consisting of (C 1 -C 6)alkyl, aryl(C 1 -C 6)alkyl and heteroaryl(C 1 -C 6)alkyl; B is absent or is selected from the group consisting of (C 3 -C 8)cycloalkylene, (C 3 -C 8)heterocycloalkylene, arylene or heteroarylene optionally substituted by one or more groups selected from halogens, nitrile, (C 1 -C 6)alkyl, (C 1 -C 6)alkoxy and aryl(C 1 -C 6)alkyl; C is absent or is selected from the group consisting of -O-, -C(O)-, -OC(O)-, -(O)CO-, -S-, -S(O)-, -S(O) 2 - and -N(R 7)-, or is one of the following groups C1-C4 wherein R 7 is in each occurrence independently H or selected from the group consisting of linear or branched (C 1 -C 8)alkyl, (C 3 -C 8)cycloalkyl, (C 3 -C 8)heterocycloalkyl, aryl, heteroaryl, aryl(C 1 -C 6)alkyl, heteroaryl(C 1 -C 6)alkyl, (C 1 -C 8)alkylcarbonyl, (C 3 -C 8)cycloalkylcarbonyl, arylcarbonyl, (C 1 -C 8)alkoxycarbonyl, (C 1 -C 8)alkylaminocarbonyl, (C 1 -C 10)alkylsulfanyl, (C 1 -C 10)alkylsulfinyl, (C 1 -C 10)alkylsulfonyl, arylsulfanyl, arylsulfinyl and arylsulfonyl; and wherein R 7 may optionally be further substituted by one or more groups selected from halogen, -CN, (C 1 -C 8)alkyl, halo(C 1 -C 8)alkyl, aryl, aryl(C 1 -C 6)alkyl, (C 1 -C 8)alkoxy, aryl(C 1 -C 8)alkoxy, (C 3 -C 8)cycloalkyl, (C 3 -C 8)heterocycloalkyl, substituted or unsubstituted aryloxy; R 8 is in each occurrence independently H or selected from the	Chiesi Farmaceutici S.p.A., 43100 Parma, IT, 101292318	2019-11-20	2015-06-01

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			group consisting of linear or branched (C 1 -C 8)alkyl, (C 3 -C 8)cycloalkyl, (C 3 -C 8)heterocycloalkyl, aryl, heteroaryl, aryl(C 1 -C 6)alkyl, (C 3 -C 8)cycloalkyl(C 1 -C 6)alkyl, and heteroaryl(C 1 -C 6)alkyl; D is absent or is selected from the group consisting of (C 1 -C 12)alkylene, arylene, (C 2 -C 12)alkenylene, heteroarylene, (C 3 -C 8)heterocycloalkylene and (C 2 -C 6)alkynylene; n, n', n" and n"' are at each occurrence independently 0 or an integer from 1 to 3; E is absent or is selected from -O-, -NR 7 -, -NR 7 -C(O)-, -C(O)-NR 7 -, -OC(O)- and - S-; G is absent or arylene or heteroarylene, optionally substituted by one or more substituents selected from the group consisting of halogen atoms, -OH, oxo (=O), -SH, -NO 2 , -CN, -CON(R 6) 2 , -NH 2 , -NHCOR 6 , -CO 2 R 6 , (C 1 -C 10)alkylsulfanyl, (C 1 -C 10)alkylsulfinyl, (C 1 -C 10)alkylsulfonyl, (C 1 -C 10)alkyl, aryl, haloaryl, heteroaryl and (C 1 -C 10)alkoxy; L is absent or a divalent group selected from -C(O)-, -OC(O)-, -S(O) 2 - (C 1 -C 8)alkylene, (C 1 -C 8)alkylcarbonyl-ene and (C 2 -C 8)alkenylcarbonyl-ene; or is one of the following groups L1-L3 wherein m is 0 or an integer from 1 to 3; i is 1 or 2; i' is 1 or 2; R 1 is at each occurrence selected independently from hydrogen, halogen, (C 1 -C 8)alkyl and (C 1 -C 10)alkoxy; s is 0 or an integer from 1 to 3; R 2 is a group of formula J1 and pharmaceutically acceptable salts and solvates thereof.			
EP3108882B1	NANOPARTICLE DRUG DELIVERY	Therapeutic formulations are described for use in the treatment of chronic obstructive pulmonary disease, bronchial asthma, cystic fibrosis, chlorine inhalation, influenza and acute myocardial infarction. The formulations comprise polymeric nanoparticles or polymeric nanoparticles encapsulated within cross-linked polymeric hydrogel microparticles, wherein the polymeric nanoparticles carry a therapeutic agent suitable for treatment of chronic obstructive pulmonary disease, bronchial asthma, cystic fibrosis, chlorine inhalation, influenza, acute myocardial infarction and heart failure. Preferred formulations are inhalable, dry powder therapeutic formulations, which are able to swell on administration to the lungs of a patient.	1. A pharmaceutical formulation comprising polymeric nanoparticles, wherein the polymeric nanoparticles carry a therapeutic agent suitable for treatment of chlorine inhalation loaded within them, for use in the treatment of chlorine inhalation, wherein the therapeutic agent is a Nitric Oxide and/or Nitrite donor and wherein the polymeric nanoparticles comprise a chitosan or a chitosan-derivative polymer.	Heart Biotech Pharma Limited, London W1S 1YN, GB, 101501154	2019-11-27	2015-06-25
EP3325068B1	RADIO-FREQUENCY IDENTIFICATION (RFID) AUTHENTICATION SYSTEM FOR AEROSOL DELIVERY DEVICES	A control body (102) and cartridge (104) that are coupleable with one another to form an aerosol delivery device (100) are provided. The control body comprises a control component (208) and an RFID reader (306) contained within at least one housing (206). The cartridge comprises at least one heating element (222) and an RFID tag (314) contained within at least one housing (216). The RFID reader of the control body is coupled to the control component of the control body and configured to communicate with the RFID tag of the cartridge upon coupling of the control body with the cartridge. The control component of the control body is configured to authorize the cartridge for use with the control body based at	1. A control body (102) coupleable with a cartridge (104) that is equipped with a heating element (222) and contains an aerosol precursor composition, and that is further equipped with a radio-frequency identification (RFID) tag (314), the control body (102) being coupleable with the cartridge (104) to form an aerosol delivery device (100) in which the heating element (222) is configured to activate and vaporize components of the aerosol precursor composition, the control body (102) comprising: at least one housing including a coupler (230) having a cavity (232) therein, the cartridge (104) having a base (228) adapted to engage the coupler (230) and including a projection (234) adapted to fit within the cavity (232) when the control body (102) is	RAI Strategic Holdings Inc., Winston-Salem, NC 27101, US, 101588532	2019-11-06	2015-07-24

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		least in part on communication between the RFID reader and the RFID tag.	coupled with the cartridge (104); and contained within the at least one housing, a control component (208) configured to control operation of at least one functional element of the aerosol delivery device (100) based on a detected flow of air through at least a portion of the aerosol delivery device (100); and an RFID reader (306) coupled to the control component (208) and configured to communicate with the RFID tag (314) of the cartridge (104) upon coupling of the control body (102) with the cartridge (104), the control component (208) being configured to authorize the cartridge (104) for use with the control body (102) based at least in part on communication between the RFID reader (306) and the RFID tag (314), wherein the RFID reader (306) includes an antenna (310) positioned in the cavity (232) of the coupler (230), and the RFID tag (314) includes a corresponding antenna (318) positioned on the projection (234) of the base (228) of the cartridge (104), the antenna (310) of the RFID reader (306) and the corresponding antenna (318) of the RFID tag (314) being coaxially aligned and proximate one another when the control body (102) is coupled with the cartridge (104), and wherein the antenna (310) of the RFID reader (306) is up to two millimeters in length to render the RFID reader (306) substantially incapable of communication with any device external to the control body (102) other than the RFID tag (314). 5. A cartridge (104) coupleable with a control body (102) equipped with a radio-frequency identification (RFID) reader (306), the cartridge (104) being coupleable with the control body (102) to form an aerosol delivery device (100), the cartridge (104) comprising: at least one housing including a base (228) having a projection (234), the control body (102) having a coupler (230) adapted to engage the base (228) and including a cavity (232) within which the projection (234) is adapted to fit when the cartridge (104) is coupled with the control body (102); and contained within the at least one housing, a heating element (222) configured to activate and vaporize components of an aerosol precursor composition in response to a flow of air through the aerosol delivery device (100), the air being combinable with a thereby formed vapor to form an aerosol; and an RFID tag (314) configured to communicate with the RFID reader (306) of the control body (102) upon coupling of the cartridge (104) with the control body (102), the control body (102) being configured to authorize the cartridge (104) for use with the control body (102) based at least in part on communication between the RFID tag (314) and the RFID reader (306), wherein the RFID tag (314) includes an antenna (318) positioned on the projection (234) of the base (228), and the RFID reader (306) includes a corresponding antenna (310) positioned in the cavity (232) of the coupler (230) of the control body (102), the antenna (318) of the RFID tag (314) and the corresponding antenna (310) of the RFID reader (306) being coaxially			

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			aligned and proximate one another when the cartridge (104) is coupled with the control body (102), and wherein the antenna (318) of the RFID tag (314) is up to two millimeters in length to render the RFID tag (314) substantially incapable of communication with any device external to the cartridge (104) other than the RFID reader (306). 9. A method of operation of a control body (102) coupleable with a cartridge (104) that is equipped with a heating element (222) and contains an aerosol precursor composition, and that is further equipped with a radio-frequency identification (RFID) tag (314), the control body (102) being coupleable with the cartridge (104) to form an aerosol delivery device (100) in which the heating element (222) is configured to activate and vaporize components of the aerosol precursor composition, the method comprising at the control body (102): coupling the control body (102) with the cartridge (104), the control body (102) comprising at least one housing including a coupler (230) having a cavity (232) therein, the cartridge (104) having a base (228) adapted to engage the coupler (230) and including a projection (234) adapted to fit within the cavity (232) when the control body (102) is coupled with the cartridge (104); a control component (208) controlling operation of at least one functional element of the aerosol delivery device (100) based on a detected flow of air through at least a portion of the aerosol delivery device (100); an RFID reader (306) communicating with the RFID tag (314) of the cartridge (104) upon coupling of the control body (102) with the cartridge (104); and the control component (208) authorizing the cartridge (104) for use with the control body (102) based at least in part on communication between the RFID reader (306) and the RFID tag (314), wherein the RFID reader (306) includes an antenna (310) positioned in the cavity (232) of the coupler (230), and the RFID tag (314) includes a corresponding antenna (318) positioned on the projection (234) of the base (228) of the cartridge (104), the antenna (310) of the RFID reader (306) and the corresponding antenna (318) of the RFID tag (314) being coaxially aligned and proximate one another when the control body (102) is coupled with the cartridge (104), and wherein the antenna (310) of the RFID reader (306) is up to two millimeters in length to render the RFID reader (306) substantially incapable of communication with any device external to the control body (102) other than the RFID tag (314). 13. A method of operation of a cartridge (104) coupleable with a control body (102) equipped with a radio-frequency identification (RFID) reader (306), the cartridge (104) being coupleable with the control body (102) to form an aerosol delivery device (100), the method comprising at the cartridge (104): coupling the cartridge (104) with the control body (102), the cartridge (104) comprising at least one housing including a base (228) having a projection (234), the control			

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			body (102) having a coupler (230) adapted to engage the base (228) and including a cavity (232) within which the projection (234) is adapted to fit when the cartridge (104) is coupled with the control body (102); a heating element (222) activating to vaporize components of an aerosol precursor composition in response to a flow of air through the aerosol delivery device (100), the air being combinable with a thereby formed vapor to form an aerosol; and an RFID tag (314) communicating with the RFID reader (306) of the control body (102) upon coupling of the cartridge (104) with the control body (102), the cartridge (104) being authorized at and for use with the control body (102) based at least in part on communication between the RFID reader (306) and the RFID tag (314), wherein the RFID tag (314) includes an antenna (318) positioned on the projection (234) of the base (228), and the RFID reader (306) includes a corresponding antenna (310) positioned in the cavity (232) of the coupler (230) of the control body (102), the antenna (318) of the RFID tag (314) and the corresponding antenna (310) of the RFID reader (306) being coaxially aligned and proximate one another when the cartridge (104) is coupled with the control body (102), and wherein the antenna (318) of the RFID tag (314) is up to two millimeters in length to render the RFID tag (314) substantially incapable of communication with any device external to the cartridge (104) other than the RFID reader (306).			
EP3138600B1	DRY POWDER INHALER	A dry powder inhaler for a capsule containing dry powder, the inhaler comprising a base body having a capsule receptacle, two actuator buttons arranged on opposing sides of the base body and two perforation needles, each needle being fixedly connected to an actuator button and movable relative to the base body towards each other from a normal position to a perforation position along an actuation direction to perforate a capsule arranged in the capsule receptacle, wherein the capsule receptacle is arranged in an inclined angle within the range of about 40° to about 50° with respect to the actuation direction.	1. A dry powder inhaler (10) for a capsule (69) containing dry powder, the inhaler (10) comprising a base body (12) having a capsule receptacle (36), two actuator buttons (22) arranged on opposing sides of the base body (12) and two perforation needles (30), each needle (30) being fixedly connected to an actuator button (22) and movable relative to the base body (12) towards each other from a normal position to a perforation position along an actuation direction (24) to perforate a capsule (69) arranged in the capsule receptacle (36), characterized in that the capsule receptacle (36) is arranged in an inclined angle (48) within the range of about 40° to about 50° with respect to the actuation direction (24).	Esteve Victor, 13.306-530 Itu, BR, 101546442	2019-11-06	2015-09-04
EP3353991B1	TOPOLOGY FORMED BY ELECTRONIC NICOTINE DELIVERY DEVICES.	The present disclosure teaches provision of a method that comprises a step of passing a data token from a first wirelessly connectable electronic nicotine delivery (END) device to a second wirelessly connectable END device. The method also comprises a step of using the token to control an aspect of the operation of a third wirelessly connectable device, the third wirelessly connectable device having an established communications relationship with the second wirelessly connectable END device.	1. A method comprising: passing a data token from a first wirelessly connectable electronic nicotine delivery (END) device to a second wirelessly connectable END device, wherein the first wirelessly connectable END device passes the token to the second wirelessly connectable END device by the first wirelessly connectable END device adopting an advertising mode and including the token in advertising data while the second wirelessly connectable END device is in a listening mode in which it can receive advertising data, the second wirelessly connectable END device being configured to switch back and forth between a first persona corresponding to an advertising mode and a second persona corresponding	Nicoventures Holdings Limited, London WC2R 3LA, GB, 101423781	2019-11-27	2015-09-21

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			to a listening mode according to a switching schedule that alternates between periods for each of the first and second personas, such that at any one time the device adopts only one persona; and using the token to control an aspect of the operation of a third wirelessly connectable device, the third wirelessly connectable device having an established communications relationship with the second wirelessly connectable END device.			
EP3365051B1	POWER SUPPLY FOR AN AEROSOL DELIVERY DEVICE	A control body is coupled or coupleable with a cartridge to form an aerosol delivery device, with the cartridge being equipped with a heating element. The control body includes a power source and a microprocessor. The power source is connected to an electrical load that includes the heater when the control body is coupled with the cartridge, and includes a supercapacitor configured to provide power to the electrical load. The microprocessor is configured to operate in an active mode in which the control body is coupled with the cartridge. In the active mode, the microprocessor is configured to direct power from the supercapacitor to the heating element to activate and vaporize components of the aerosol precursor composition.	1. A control body (102) coupled or coupleable with a cartridge (104) that is equipped with a heating element (222) and contains an aerosol precursor composition, the control body (102) being coupled or coupleable with the cartridge (104) to form an aerosol delivery device (100) in which the heating element (222) is configured to activate and vaporize components of the aerosol precursor composition, the control body (102) comprising: a power source (212) connected to an electrical load (402) that includes the heating element (222) when the control body (102) is coupled with the cartridge (104), the power source (212) comprising: a supercapacitor (SC) configured to provide power to the electrical load (402), wherein the supercapacitor (SC) is a hybrid capacitor; a DC-to-DC converter (410) connected to the supercapacitor (SC), between the supercapacitor (SC) and electrical load (402); and a snubber circuit (404) connected in parallel with the supercapacitor (SC) and thereby forming a parallel combination, the DC-to-DC converter (410) being connected in series with the parallel combination of the snubber circuit (404) and supercapacitor (SC); and a microprocessor (306) configured to operate in an active mode in which the control body (102) is coupled with the cartridge (104), the microprocessor in the active mode being configured to direct power from the supercapacitor (SC) to the heating element (222) to activate and vaporize components of the aerosol precursor composition.	RAI Strategic Holdings Inc., Winston-Salem, NC 27101, US, 101588532	2019-11-20	2015-10-21
EP3397097B1	AEROSOL DELIVERY DEVICE INCLUDING A HOUSING AND A COUPLER	The present disclosure relates to aerosol delivery devices. The aerosol delivery devices include a control body and a cartridge including an atomizer and a reservoir configured to contain an aerosol precursor composition. The control body includes a housing defining an electrical power source cavity that extends along a first longitudinal axis and is configured to receive an electrical power source. The control body additionally includes a coupler configured to engage a cartridge including an aerosol precursor composition such that the cartridge extends along a second longitudinal axis. The first longitudinal axis and the second longitudinal axis are non-coaxial and oriented substantially parallel to one another. A related assembly method is also provided.	1. An aerosol delivery device (100), comprising: a housing (102) defining an electrical power source cavity (104) configured to receive an electrical power source (300), the electrical power source cavity (104) defining a first longitudinal axis; and a coupler (114) engaged with the housing (102) and configured to engage a cartridge (200) including an aerosol precursor composition such that the cartridge (200) extends along a second longitudinal axis, the first longitudinal axis and the second longitudinal axis being non-coaxial and oriented substantially parallel to one another, wherein the housing (102) comprises a button assembly (544) partially defining a dividing wall (550) that separates the cartridge (200) from the electrical power source cavity (104), the button assembly (544) being configured to control a power output level directed from the electrical power source (300) to the cartridge (200).	RAI Strategic Holdings Inc., Winston-Salem, NC 27101, US, 101588532	2019-11-20	2015-12-28

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EP3413871B1	COMPOSITION FOR THE USE IN THE TREATMENT OF BACTERIAL INFECTIONS	Composition comprising lactobionic acid, or a salt thereof, or comprising the association of lactobionic acid, or a salt thereof, and hyaluronic acid, or a salt thereof, for the use in the treatment of microbial infections.	1. A composition comprising 4% w/w lactobionic acid, or a salt thereof, and one or more pharmaceutically acceptable excipients and carriers for the use in the treatment of bacterial eye infections. | 16. Eye pad or ocular bandage impregnated with a composition comprising 4.0% w/w lactobionic acid, or a salt thereof.	Sooft Italia S.p.A., 63833 Montegiorgio (FM), IT, 101011336	2019-11-06	2016-02-08
EP3419708B1	INHALER	Disclosed is an inhaler (1) comprising an annular cartridge (5) with capsule chambers (4) oriented radially and capsules (3) provided in said chambers, which allow ease-of-use and reliable dispensing of a formulation to be inhaled that is held in the capsules.	1. Inhaler (1) for inhalation of a formulation (2) preferably in powder form from capsules (3) which each contain a dose of the formulation (2), wherein the inhaler (1) comprises a magazine (5) having the capsules (3), a mouthpiece (15) and a cover (18) associated with the mouthpiece (15), wherein the magazine (5) is substantially circular, plate-shaped and/or disc-shaped, characterised in that the cover (18) is radially movable and pivotable relative to the magazine (5) for opening or closing of the mouthpiece (15), wherein by pivoting (S) of the cover (18) the magazine (5) can be conveyed from one capsule (3) to the next capsule (3) and wherein by radial movement (B) of the cover (18) a capsule (3) can be moved in the radial direction out of the magazine (5) into a discharge position (A), in which the capsule (3) can be opened and the formulation can then be inhaled by the patient.	Boehringer Ingelheim International GmbH, 55216 Ingelheim am Rhein, DE, 100089526	2019-11-20	2016-02-24
EP3386575B1	DISPOSABLE MONODOSE INHALER FOR POWDERED MEDICAMENTS	An inhaler for powdered medicaments consists of a substantially smoking pipe- shaped hollow body that has a first portion (1), for housing a cartridge of powdered medicament, and a second portion (2) for delivering the medicament by means of an airstream that carries the powder from an inner drop region (5) along a delivery duct (3) whose end is suitable to be placed in a patient's mouth, the intake of the air being achieved through at least three air intakes (7) arranged symmetrically with respect to the longitudinal midplane of the inhaler, which includes a support base (9, 9') for the cartridge in which oriented flow channels (11) are formed that extend between the three air intakes (7) and the inner powder drop region (5).	1. Inhaler for powdered medicaments consisting of a substantially smoking pipe-shaped hollow body that has a first portion (1), for housing a cartridge (C) of powdered medicament and including a support base for said cartridge (C), and a second portion (2) connected substantially perpendicularly to said first portion (1) for delivering the medicament by means of a primary airstream (FP) that carries the powder from an inner drop region (5), located at the bottom of said first portion (1), along a delivery duct (3) whose end is suitable to be placed in a patient's mouth, said delivery duct (3) being divided horizontally by a dividing baffle (4) into an upper duct (3a) that delivers said primary airstream (FP) and a lower duct (3b) that delivers a powderless secondary airstream (FS), the intake of the air forming the primary airstream (FP) being achieved through at least three air intakes (7) formed in the first portion (1) that are preferably arranged symmetrically with respect to the longitudinal midplane of the inhaler, the intake of the air forming the secondary airstream (FS) being achieved through an air intake (8) formed at the distal end of said lower duct (3b), the inhaler being characterized in that said support base for the cartridge (C) includes a plurality of horizontal support surfaces (9) projecting inside the first portion (1), oriented flow channels (11) being formed in the support base which extend between said at least three air intakes (7) and the inner powder drop region (5).	Hollycon Italy Pte. Ltd. - S.r.l., 20083 Gaggiano (MI), IT, 101841348	2019-11-20	2016-09-19