Document	Title	Abstract	Claims	Patentee	Granted	Priority
EP1718353B1	SYNTHETIC JET BASED MEDICAMENT DELIVERY APPARATUS	A dry powder inhaler consisting of first chamber having an orifice for holding a dry powder and a gas, and a second chamber for receiving a deaggregated form of the dry powder and for communicating the deaggregated dry powder to a user. A synthetic jet drives the dry powder from the first chamber to the second chamber.	1. A dry powder inhaler (205) comprising: a first chamber (203) for holding a dry powder and gas; a second chamber (202) directly connected to the first chamber by a passageway (201), for receiving an aerosolized form of the dry powder from the first chamber and communicating the aerosolized dry powder from the second chamber to a user; and a vibrator (204), characterised in that : the passageway (201) has an aspect ratio of length to cross-section of at least 0.5; the vibrator (204) is for aerosolizing and driving the dry powder back and forth in the passageway (201) from the first chamber (203) to the second chamber (202) such that vortices of gas are formed at ends of the passageway (201) and a net flow of gas is created away from the first chamber (203) to the second chamber (202); and in that the first chamber (203) communicates only with the second chamber (202), such the aerosolized dry powder is introduced into the second chamber (202) by a synthetic jet created by said net flow of gas.	MicroDose Therapeutx Inc., Ewing, NJ 08628, US, 101631577	2019-12-11	2004-02-24
EP2311923B1	Use of compositions comprising trans-1, 1, 1, 3-tetrafluoropropene in a chiller	A heat transfer composition comprises at least one fluoroalkene of Formula I: XCF zR3-z (I) where X is a C 2 or C3 unsaturated, substituted or unsubstituted, alkyl radical, R is independently Cl, F, Br, I or H, and z is 1 to 3 having a Global Warming Potential (GWP) of not greater than about 1000.	1. Use, in a chiller used in connection with a commercial air conditioning system, of a refrigerant composition comprising trans-1, 1, 1, 3-tetrafluoropropene (trans-HFO-1234ze), wherein the composition has a Global Warming Potential (GWP) of not greater than 1000.	Honeywell International Inc., Morris Plains, NJ 07950, US, 101557600	2019-12-11	2004-04-29
EP3339348B1	POLYLACTIDE COMPOSITIONS AND USES THEREOF	The present invention provides compositions and methods relating to polylactides which may be used for drug delivery (e.g., parenteral delivery), wherein an organic solent is not required.	1. A compound having the formula: wherein R 1 , R 2 , R 3 , and R 4 are each independently selected from the group consisting of unsubstituted C 1-20 alkyl, H, C 2-20 alkenyl and unsubstituted alkylaryl with C 1-20 alkyl; n is 1 to 100; X is selected from the group consisting of hydrogen, a functional group and a crosslinking group; and Y is -O-(CH 2 -CH 2 -O) p -CH 3 ; and p is 1 to 700.	Université de Genève, 1211 Genève 4, CH, 101659371	2019-12-04	2005-04-22
EP2957312B1	Inhalation device	The present invention relates to a drug delivery system comprising: a chamber including an air inlet and an air outlet and defining an air path from the air inlet to the air outlet; and a dose metering system formed into the walls of the chamber to assist in drug dispersion into the air path; a reservoir in proximity to the dose metering system and configured to retain a drug to be dispersed into the air path; and wherein the dose metering system is designed to divert, deflect or direct at least a portion of airflow from the chamber into the reservoir.	1. A drug delivery system comprising: a chamber (1301) including an air inlet(1305) and an air outlet (1306) and defining an air path (1302) from the air inlet (1305) to the air outlet (1306); a dose metering system (1303), and a reservoir (1304) in proximity to the dose metering system (1303) and configured to retain a drug to be dispersed into the air path (1302); characterized in that the dose metering system (1303) is formed into the walls of the chamber (1301) to assist in drug dispersion into the air path (1302); wherein the dose metering system (1303) is designed to divert, deflect or direct at least a portion of airflow from the chamber (1301) into the reservoir (1304). | 12. A drug delivery method comprising: containing a drug in a reservoir (1304) of a drug delivery device; opening an air path (1302) through a chamber (1301) in the drug delivery device, wherein the air path (1302) extends from an air inlet (1305) to an air outlet (1306); causing an airflow along the air path (1302) from the	Manta Devices LLC, Roslindale MA 02131, US, 100952653	2019-12-04	2005-07-20

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			air inlet (1305) to the air outlet (1306); characterized by diverting at least a portion of the airflow through the air path (1302) from the chamber (1301) into the reservoir (1304) as the airflow moves along the air path (1302); and receiving the airflow diverted from the air path (1302) in the reservoir (1304) and causing the drug to fluidize, thereby entraining the drug in the airflow.			
EP3375474B1	INHALATION THERAPY DEVICE COMPRISING AN AMPOULE FOR HOLDING A DRUG TO BE ATOMIZED	Die Inhalationstherapievorrichtung 1 weist eine Vernebelungseinrichtung 2 auf, die ein vorteilhafterweise in Form eines Fluides 8 bereitstehendes Medikament in eine Vernebelerkammer 12 hinein vernebelt, so dass ein Aerosol bzw. Nebel 21 in der Vernebelerkammer 12 bereit gestellt wird. Der Patient bzw. Anwender kann das von der Verneblereinrichtung 2 erzeugte Aerosol 21 aus der Verneblerkammer 12 über ein Mundstück 13 einatmen. Die Ampulle 100 wird in eine Ampullenaufnahme 3 eingesetzt, die die fluidenthaltende Ampulle 100 hält. Die Inhalationstherapievorrichtung 1 weist ferner eine Öffnungseinrichtung 4 auf, die zum Öffnen der fluidenthaltenden Ampulle 100 dient. Die Ampullenaufnahme 3 umfasst vorteilhafterweise einen ersten Teil 31, der verschiebbar zu der Öffnungseinrichtung 4 angeordnet ist, so dass eine in der Ampullenaufnahme befindliche Ampulle 100 in Richtung der Öffnungseinrichtung bewegt werden kann.	1. Inhalation therapy device comprising an atomising device (2), an ampoule holder (3) in which a fluid-containing ampoule (100) with a wall region (130) provided for opening is held, an opening device (4) which cuts into the wall region (130) in order to open the fluid-containing ampoule (100), wherein the opening device (4) has a blade (42) which is formed on one end of a line (41) through which the fluid (8) contained in the ampoule (100) reaches the atomising device; the opening device (4) and the ampoule (100) held in the ampoule holder (3) are arranged moveably relative to one another such that when the opening device (4) is moved the ampoule (100) located in the ampoule holder (3) opens so that a fluid (8) contained in the ampoule (100) reaches the atomising device (2) through the line (41), characterised in that the ampoule holder (3) is arranged in a cover (5) of the inhalation therapy device so that, on closing the inhalation therapy device with the cover (5), the user positions the ampoule (100) located in the ampoule holder (3) in the cover (5) in the inhalation therapy device and/or opens said ampoule.	PARI Pharma GmbH, 82319 Starnberg, DE, 100963786	2019-12-18	2005-08-16
EP2007479B1	Solid oral compositions based on S-adenosyl methionine salt and process for obtaining them	This invention relates to solid oral compositions based on SAMe and/or NADH or their salts in association with calcium oxide and/or calcium hydroxide and a process for obtaining them. This invention also relates to a method for stabilising a solid oral composition based on SAMe and/or NADH or their salts, making use of calcium oxide, calcium hydroxide optionally in association with malic acid, glutamic acid, xylitol, calcium sulphate hemihydrate, magnesium oxide and/or mixtures thereof. This invention also relates to the use of SAMe or its salts in association with calcium oxide and/or calcium hydroxide with the possible further addition of melatonin and/or l-the^anine and/or 1 -tryptophan and/or 5- hydroxytryptophan for the treatment of depressive states.	1. A composition comprising S-adenosyl methionine sulphate paratoluene sulphonate or S-adenosyl methionine-1, 4-butane disulphonate in association with calcium oxide and optionally pharmaceutically acceptable excipients. 12. Use of S-adenosyl methionine sulphate paratoluene sulphonate or S-adenosyl methionine-1, 4-butane disulphonate in association with calcium oxide for the preparation of a composition for the treatment of depressive states. 14. A method for stabilising a composition based on S-adenosyl methionine sulphate paratoluene sulphonate or S-adenosyl methionine-1, 4-butane disulphonate comprising use of the mixture of S-adenosyl methionine sulphate paratoluene sulphonate or S-adenosyl methionine-1, 4-butane disulphonate with calcium oxide.	Gnosis S.p.A., 20121 Milano, IT, 101823500	2019-12-04	2006-03-31
EP2152341B1	ATOMIZER IN THE FORM OF AN INHALER FOR MEDICAL AEROSOL THERAPY	Disclosed are an atomizer for a fluid, especially for medical aerosol therapy, and a filter for said atomizer in order to prevent germs from spreading. The atomizer comprises a protective device for preventing germs from infesting the preferably preservative-free fluid. Particularly the filter can be used as a protective device. This prevents germs from infesting the fluid during the service life of the atomizer even when the atomizer is used several times.	1. Atomiser (1), in the form of an inhaler for medical aerosol therapy, for atomising a fluid (2), the atomiser (1) comprising a container (3) holding the fluid (2), a discharge nozzle (12) for atomising the fluid (2), and a pressure generator (5) as a conveying means for conveying and atomising the fluid (2) having a holder (6) for the container (3), a conveyor tube (9) and a drive spring (7), the pressure generator (5) having a pressure chamber (11) for generating a spring pressure of from 5 to 60 MPa on the fluid (2), the container (3) being movable in a stroke-like manner during the fluid conveyance,	Boehringer Ingelheim Pharma GmbH & Co. KG, 55216 Ingelheim am Rhein, DE, 100793965	2019-12-11	2007-05-15

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			pressure generation and atomisation and, during atomisation, a fluid volume of from 10 to 50 µl per stroke being released, characterised in that the atomiser (1) has protection devices (32) for preventing bacterial contamination of the fluid (2) and the protection devices (32) comprise an at least largely germ-proof filter (42) and a lockable valve (38) for blocking a channel portion for guiding the fluid, the filter and the valve (38) being arranged downstream of the pressure chamber (11).			
EP2209511B1	INHALATION DEVICE	A dry inhaler system includes a vibrating mechanism. A supply of a dry powder is operatively coupled to the vibrating mechanism. A power source communicates with the vibrating mechanism. A sensor communicates with the vibrating mechanism. A feedback control communicates with the sensor and the power source. The feedback control controls power delivered to the vibrating mechanism relative to information provided by the sensor about the performance of the vibrating mechanism.	1. A dry powder inhaler (2), comprising: a vibrating mechanism (28); a supply of a dry powder (50) operatively coupled to the vibrating mechanism (28); a power source (26) in communication with the vibrating mechanism (28); an airflow sensor (40); a vibration sensor (88) in communication with the vibrating mechanism (28); and a feedback control in communication with the airflow sensor (40), the vibration sensor (88), and the power source (26), whereby the feedback control controls power delivered to the vibrating mechanism (28), the feedback control comprising a frequency sweep generator (76) connected between the power source and the vibrating mechanism, thereby controlling a characteristic of power delivered to the vibrating mechanism, characterised in that the feedback control is adapted to control power delivered to the vibrating mechanism to drive the vibrating mechanism to a steady state condition at plural different power inputs, the vibration sensor being adapted to sense a continued vibration from the vibrating mechanism after each respective power input is removed.	MicroDose Therapeutx Inc., Ewing, NJ 08628, US, 101631577	2019-12-04	2007-10-09
EP2695609B1	Oral formulations of cytidine analogs and methods of use thereof	The present disclosure provides pharmaceutical compositions comprising cytidine analogs for oral administration, wherein the compositions release the cytidine analog substantially in the stomach. Also provided are methods of treating diseases and disorders using the oral formulations provided herein.	1. A pharmaceutical composition for use in a method of treating a subject having cancer, wherein said method comprises orally administering said pharmaceutical composition once per day, and wherein said pharmaceutical composition comprises a therapeutically effective amount of 5-azacytidine and is an immediate release composition.	CELGENE CORPORATION, Summit, NJ 07901, US, 100096657	2019-12-11	2008-05-15
EP2344605B1	AZEOTROPE-LIKE COMPOSITIONS COMPRISING 1-CHLORO-3, 3, 3-TRIFLUOROPROPENE	An azeotrope-like mixture consisting essentially of chlorotrifluoropropene and at least one component selected from the group consisting of a C 1 - C3 alcohol, a C5 - C6 hydrocarbon, a halogenated hydrocarbon, methylal, methyl acetone, water, nitromethane, and combinations thereof.	1. The use of a composition comprising a binary azeotrope-like mixture consisting essentially of 1-chloro-3, 3, 3-trifluoropropene and a C1 - C3 alcohol selected from the group consisting of methanol, ethanol and isopropanol as a solvent for cleaning a soil from a substrate wherein said 1-chloro-3, 3, 3-trifluoropropene is trans 1-chloro-3, 3, 3-trifluoropropene or cis 1-chloro-3, 3, 3-trifluoropropene. 6. The use of a composition comprising a binary azeotrope-like mixture consisting essentially of 1-chloro-3, 3, 3-trifluoropropene and ethanol or isopropanol for the deposition of silicone oil wherein said 1-chloro-3, 3, 3-trifluoropropene is trans 1-chloro-3, 3, 3-trifluoropropene or cis 1-chloro-3, 3, 3-trifluoropropene. 11. A sprayable composition comprising a solvent, said solvent comprising a binary azeotrope-like mixture consisting essentially of 1-chloro-3, 3, 3-trifluoro-propene and C1-C3 alcohol	Honeywell International Inc., Morris Plains, NJ 07950, US, 101557600	2019-12-04	2008-10-28

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			selected from the group consisting of methanol, ethanol and isopropanol and a material to be sprayed, wherein said 1-chloro-3, 3, 3-trifluoropropene is trans 1-chloro-3, 3, 3-trifluoropropene or cis 1-chloro-3, 3, 3-trifluoropropene. 22. A composition comprising a binary azeotrope-like mixture consisting essentially of 1-chloro-3, 3, 3-trifluoropropene and methanol, ethanol or isopropanol, wherein the 1-chloro-3, 3, 3-trifluoropropene is cis-1-chloro-3, 3, 3-trifluoropropene or trans-1-chloro-3, 3, 3-trifluoropropene. 25. A composition comprising a ternary azeotrope-like mixture consisting essentially of trans -1-chloro-3, 3, 3-trifluoropropene, methanol, and a third component selected from n-pentane and trans -1, 2-dichloroethylene. 28. Use of a binary azeotrope-like mixture consisting of 98% by weight of trans-1-chloro-3, 3, 3-trifluoropropene and 2% by weight methanol in the deposition of silicon oil. 29. Use of a binary azeotrope-like mixture consisting of 98% by weight of trans-1-chloro-3, 3, 3-trifluoropropene and 2% by weight methanol as a solvent, for mineral oil. 30. Use as a blowing agent of a blowing agent comprising a binary azeotrope-like mixture consisting essentially of 85 to 99.9 weight percent trans-1-chloro-3, 3, 3-trifluoropropene and 0.1 to 15 weight percent ethanol.			
EP3260152B1	DRY POWDER INHALERS	Dry powder inhalers and dry powder inhaler storage cassettes including a compartment housing an elongate carrier preloaded with a plurality of doses of finely divided powder comprising a biologically active substance, the compartment being configured such that said preloaded doses are sealed within said compartment and such that the carrier may be advanced from the compartment to the chamber through an exit provided with a moisture barrier sealing system, wherein the moisture barrier sealing system is configured and arranged such that it is relaxable during advancement of the carrier, said sealing system being in sealing configuration prior to an advancement of the carrier, relaxed upon an advancement of the carrier and returned to its sealing configuration at the latest after release of the powder associated with said area of the carrier.	1. A dry powder inhalation device comprising: a chamber (200); a patient port (300) in communication with said chamber (200); a storage device comprising a cassette (105), an elongate carrier (100) preloaded with a plurality of doses of finely divided powder comprising a biologically active substance, said powder being releasably retained on a surface of the carrier, and a moisture barrier sealing system (110); an advancement mechanism for advancing a portion of the carrier (100) within the chamber (200) so that the powder associated with an advanced area of the carrier (100) can be released from the carrier (100) for inhalation by a patient through the patient port (300); and a hammer (205) configured to strike the portion of the carrier (100) within the chamber (200) to release at least some of the powder from the carrier (100), characterized in that , the moisture barrier sealing system (110) comprises a first clamping system (111) and in that the storage device further comprises a second clamping system (125), wherein said storage device is configured and arranged such that during use in a dry powder inhaler a portion of the carrier (100) is advanced out of the cassette (105) so that the powder associated with an advanced area can be released from the carrier (100) for inhalation by a patient, and the first and second clamping systems (111, 125) are configured to be moved into a clamping configuration at least prior to release of the powder associated with said area of the carrier (100), so that said area of the carrier (100) will be clamped between the first and the second clamping systems (111, 125) during release of the powder associated with said	Adamis Pharmaceuticals Corporation, San Diego, CA 92130, US, 101465977	2019-12-18	2009-05-18

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			area of the carrier (100); further characterized in that at least one of the first and second clamping systems (111, 125) comprises a grip.			
EP3111927B1	COMPOSITIONS FOR RESPIRATORY DELIVERY OF ACTIVE AGENTS AND ASSOCIATED METHODS AND SYSTEMS	Compositions, methods and systems are provided for pulmonary or nasal delivery of active agents via a metered dose inhaler. In one embodiment, 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 co-suspension deliverable from a metered dose inhaler, the stable co-suspension comprising: a suspension medium comprising a pharmaceutically acceptable propellant; a plurality of active agent particles wherein the active agent particles comprise glycopyrrolate and at least 90% of the active agent particles by volume exhibits an optical diameter of 7 μm or less; and a plurality of respirable suspending particles comprising perforated phospholipid microstructures, wherein the total mass of the respirable suspending particles exceeds the total mass of the active agent particles, the plurality of active agent particles associate with the plurality of respirable suspending particles to form a co-suspension despite buoyancy differences between the active agent particles and the respirable suspending particles within the suspension medium.	Pearl Therapeutics Inc., Redwood City, CA 94063, US, 101218265	2019-12-11	2009-05-29
EP3111926B1	COMPOSITIONS, METHODS & SYSTEMS FOR RESPIRATORY DELIVERY OF TWO OR MORE ACTIVE AGENTS	Compositions, methods and systems are provided for pulmonary or nasal delivery of two or more active agents via a metered dose inhaler. In one embodiment, 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; at least three different species of active agent particles, wherein each of the at least three different species of active agent particles comprises a different active agent, wherein a first species of active agent particles comprises glycopyrrolate including any pharmaceutically acceptable salts, esters, or solvates thereof, a second species of active agent particles comprises formoterol including any pharmaceutically acceptable salts, esters, or solvates thereof, and a third species of active agent particles comprises beclomethasone, budesonide, ciclesonide, flunisolide, fluticasone, methyl-prednisolone, mometasone, prednisone and triamcinolone, including any pharmaceutically acceptable salts, esters, or solvates thereof and at least 50% of the active agent particle material by volume exhibits an optical diameter of 4 μm or less; and one or more species of respirable suspending particles; wherein at least one species of respirable suspending particles comprises perforated phospholipid microstructures; wherein a total mass of the at least one species of suspending particles exceeds a total mass of the at least one species of active agent particles, and the three or more different species of active agent particles co-locate with the respirable suspending particles within the suspension medium to form a co-suspension.	Pearl Therapeutics Inc., Redwood City, CA 94063, US, 101218265	2019-12-11	2009-05-29
EP3360566B1	METHODS FOR DETECTING A MYCOBACTERIUM TUBERCULOSIS INFECTION	Methods for detecting an infection with Mtb in a subject are disclosed. The methods include detecting the presence of CD8 + T cells that specifically recognize an Mtb polypeptide. The methods include in vitro assays for detecting the presence of CD8+ T cells in a biological sample, and in vivo assays that detect a delayed type hypersensitivity reaction. The methods also include detecting Mtb polypeptides and polynucleotides.	1. An in vitro method for detecting in a subject Mycobacterium tuberculosis which expresses a polypeptide comprising the amino acid sequence set forth as SEQ ID NO: 6 or at least nine to twenty consecutive amino acids of the amino acid sequence set forth as SEQ ID NO: 6, which nine to twenty consecutive amino acids can specifically bind major histocompatibility complex (MHC) class I, comprising contacting a biological sample from the subject comprising T cells with one or more	Oregon Health & Science University, Portland, OR 97201, US, 101185956 | The United States Government Represented by the Department of	2019-12-25	2009-11-20

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			Mycobacterium polypeptides, and an antigen presenting cell presenting the one or more Mycobacterium polypeptides wherein the one or more Mycobacterium polypeptides consists of an amino acid sequence set forth as (a) the amino acid sequence set forth as SEQ ID NO: 6 or (b) at least nine to twenty consecutive amino acids of the amino acid sequence set forth as SEQ ID NO: 6, wherein the nine to twenty consecutive amino acids specifically bind major histocompatibility complex (MHC) class I; and determining if the T cells specifically recognize the Mycobacterium polypeptide, wherein the presence of T cells that specifically recognize the Mycobacterium polypeptide detects Mycobacterium tuberculosis in the subject. 8. A composition comprising an effective amount of a Mycobacterium polypeptide wherein the Mycobacterium polypeptide consists of an amino acid sequence set forth as (a) the amino acid sequence set forth as SEQ ID NO: 6; or (b) at least nine to twenty consecutive amino acids of the amino acid sequence set forth as SEQ ID NO: 6, wherein the nine to twenty consecutive amino acids can specifically bind major histocompatibility complex (MHC) class I; for use in a method for detecting in a subject Mycobacterium tuberculosis which expresses a polypeptide comprising the amino acid sequence set forth as SEQ ID NO: 6 or at least nine to twenty consecutive amino acids of the amino acid sequence set forth as SEQ ID NO: 6, which nine to twenty consecutive amino acids can specifically bind major histocompatibility complex (MHC) class I, wherein the method comprises administering the Mycobacterium polypeptide into the skin of the subject and detecting a delayed type hypersensitivity reaction in the subject.	Veterans Affairs, Washington, DC 20420, US, 101615543		
EP3088512B1	USE OF PLACENTAL STEM CELLS FOR TREATING HEART AND CIRCULATORY DISEASES BY PROMOTING ANGIOGENESIS	The invention provides a population of placental-derived adherent cells that are CD10+, CD34-, CD105+, and CD200+ for use in a method for treatment of an individual having a disease or injury of the heart or circulatory system. Said placental-derived adherent cells may additionally be one or more of CD45-, CD90+, or OCT-4+.	1. A population of placental-derived adherent cells that are CD10+, CD34-, CD105+, and CD200+, as detectable by flow cytometry, for use in a method for treatment of an individual having a disease or injury of the heart or circulatory system, wherein said disease or injury of the heart or circulatory system is angioplasty, angina, aortic stenosis, aortitis, arrhythmias, arteriosclerosis, arteritis, asymmetric septal hypertrophy, atherosclerosis, atrial fibrillation and flutter, bacterial endocarditis, Barlow's Syndrome (mitral valve prolapse), bradycardia, Buerger's Disease, cardiomegaly, cardiomyopathy, carditis, carotid artery disease, coarctation of the aorta, congenital heart disease, congestive heart failure, coronary artery disease, Eisenmenger's Syndrome, embolism, endocarditis, erythromelalgia, fibrillation, fibromuscular dysplasia, heart block, heart murmur, hypertension, hypotension, idiopathic infantile arterial calcification, Kawasaki Disease, metabolic syndrome, microvascular angina, myocardial infarction, myocarditis, paroxysmal atrial tachycardia, periarteritis nodosa, pericarditis, diabetic vasculopathy, phlebitis, pulmonary valve stenosis, Raynaud's Disease, renal artery stenosis, renovascular hypertension, rheumatic heart disease, septal defects,	Celularity Inc., Warren, NJ 07059, US, 101751546	2019-12-11	2010-04-07

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			silent ischemia, syndrome X, tachycardia, Takayasu's Arteritis, Tetralogy of Fallot, transposition of the great vessels, tricuspid atresia, truncus arteriosus, valvular heart disease, varicose ulcers, varicose veins, vasculitis, ventricular septal defect, Wolff-Parkinson-White Syndrome, or endocardial cushion defect; or wherein said disease or injury of the heart or circulatory system is acute rheumatic fever, acute rheumatic pericarditis, acute rheumatic endocarditis, acute rheumatic myocarditis, chronic rheumatic heart disease, a disease of the mitral valve, mitral stenosis, rheumatic mitral insufficiency, a disease of aortic valve, ischemic heart disease, angina pectoris, acute pulmonary heart disease, pulmonary embolism, chronic pulmonary heart disease, kyphoscoliotic heart disease, myocarditis, endocarditis, endomyocardial fibrosis, endocardial fibroelastosis, atrioventricular block, cardiac dysrhythmia, myocardial degeneration, atherosclerosis.			
EP3173080B1	PHARMACEUTICAL COMPOSITIONS COMPRISING DERIVATIVES OF PERILLYL ALCOHOL	The present invention provides for a derivative of monoterpene or sesquiterpene, such as a perillyl alcohol derivative. For example, the perillyl alcohol derivative may be a perillyl alcohol carbamate. The perillyl alcohol derivative may be perillyl alcohol conjugated with a therapeutic agent such as a chemotherapeutic agent. The present invention also provides for a method of treating a disease such as cancer, comprising the step of delivering to a patient a therapeutically effective amount of a derivative of monoterpene (or sesquiterpene). The route of administration may vary, and can include, inhalation, intranasal, oral, transdermal, intravenous, subcutaneous or intramuscular injection.	1. A perillyl alcohol carbamate comprising perillyl alcohol conjugated with dimethyl celecoxib (DMC). | 2. A composition comprising a perillyl alcohol carbamate, wherein the perillyl alcohol carbamate comprises perillyl alcohol conjugated with dimethyl celecoxib (DMC).	Neonc Technologies Inc., Inglewood, CA 90304, US, 101269807	2019-12-11	2010-08-27
EP2613831B1	nCPAP TO LOWER BREATHING EFFORT	A nasal continuous positive airway pressure device for lowering patient breathing effort comprising: an inspiratory tubing in fluid communication with at least two nasal prongs; expiratory tubing; and a generator body coupled therebetween, the generator body comprising: at least two jets for receiving gas from the inspiratory tubing; and a flow enhancer for directing received gas, the flow enhancer comprising: a gas manager configured for channeling received gas towards a jet impingement point via at least two jet paths; a fluidic flip trigger configured for triggering a fluidic flip of channeled gas back towards the expiratory tubing by directing a first portion of exhaled patient breath towards the jet impingement point along a first pathway; and an isolated pathway manager for directing a second portion of the exhaled patient breath along a second pathway towards the expiratory tubing, the second pathway isolated from the first pathway.	1. A nasal continuous positive airway pressure (nCPAP) device for use in an nCPAP system for lowering patient work-of-breathing, said nCPAP device comprising: at least two inspiratory limbs (102) configured to couple to a ventilator, and in fluid communication with a pair of nasal prongs (104); an expiratory limb (106) configured for receiving and expelling exhaled patient breath; a generator body (108) coupled with said at least two inspiratory limbs (102) and said expiratory limb (106), said generator being configured for conveying gas received from said at least two inspiratory limbs (102) to pass to said pair of nasal prongs (104), said generator body (108) comprising a flow enhancer (112) configured for redirecting gas moving within said generator body (108) to a pathway of lesser resistance during patient inhalation and exhalation characterized by said flow enhancer (112) comprising a gas manager (114) configured for channeling gas moving within said generator body toward a jet impingement point via at least two jet paths (118a, 118b); a fluidic flip trigger (120) configured for directing a first portion of exhaled patient breath along a first pathway (122) toward said jet impingement point; and an isolated pathway manager (124) configured for directing a second portion of said exhaled patient	Vyaire Medical Capital LLC, Franklin Lakes NJ 07417, US, 101716751	2019-12-11	2010-09-10

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			breath through a second pathway (126) toward said expiratory limb (106), wherein said second pathway (126) is isolated from said first pathway (122).			
EP2616078B1	FULVESTRANT COMPOSITIONS AND METHODS OF USE	Provided are inclusion complexes comprising fulvestrant and a cyclodextrin. The complexes may be useful for treating various conditions, such as cancer and systemic lupus erythematosus. Also provided are methods of producing the inclusion complexes, methods of using the inclusion complexes in therapy, and kits and unit dosages comprising the complexes.	1. Aformulation comprising a) a cyclodextrin; and b) a compound of the formula (I): or a salt thereof or hydrate of the foregoing; and c) a liquid carrier. | 23. A method for improving solubility of a compound of the formula (I): or a salt, hydrate, or solvent thereof and water comprising complexing the compound of the formula (I) with a cyclodextrin.	Shimoda Biotech (Pty) Ltd, 6600 Plettenberg Bay, ZA, 101375780	2019-12-25	2010-09-16
EP2682110B1	LAMINATED TABLET AND MANUFACTURING METHOD THEREFOR	According to the present invention, a multilayer tablet showing suppressed layer separation and a production method thereof are provided. A concave portion having a depth of not less than 0.1 mm Ka is formed on at least one surface Sa of the both front and back surfaces (Sa, Sb) of a multilayer tablet. Particularly, a multilayer structure obtained by, in tableting, forming a convex portion for forming the concave portion on at least the upper punch, and preliminarily compressing all layers in the multilayer tablet with the upper punch to form a concave portion having the same shape with a depth of not less than 0.1 mm on the upper surface of all layers, wherein the powder materials of the next layer are protruding into the concave portion, is a preferable embodiment.	1. A multilayer tablet produced by a tableting step, the multilayer tablet comprising a concave portion having a depth comprised between 0.1 mm and 0.4 mm formed on at least one surface of both the front and back surfaces of the multilayer tablet, wherein a layer having said one surface having the concave portion is the top layer, wherein each of all layers other than the top layer has a concave portion with the same shape as said concave portion, in a top layer-side surface of the both surfaces of each layer, and the materials of the next layer are protruding into the concave portion, wherein said concave portion is one or more groove-like concave portions and said groove-like concave portion is a V-shaped groove, and said V-shaped groove has an inside angle of the V-shape of 70 degrees - 100 degrees, wherein the multilayer tablet contains various active pharmaceutical ingredients. 6. A method for suppressing layer separation of a multilayer tablet the method comprising, a step of sequentially laminating respective layers in said multilayer tablet on a mold surface of the lower punch, and tableting by an upper punch, wherein at least the upper punch has a convex portion having a height comprised between 0.1 mm and 0.4 mm on its mold surface, said step has a pressing step of pressing all layers in said multilayer tablet by said upper punch, and said pressing step forms a multilayer structure wherein a concave portion having the same shape with a depth comprised between 0.1 mm and 0.4 mm is formed on an upper punch side surface of the both surfaces of all layers, and the materials of the next layer are protruding into the concave portions of all layers other than the top layer, and wherein said concave portion is one or more groove-like concave portions, and said groove-like concave portion is a V-shaped groove, and said V-shaped groove has an inside angle of the V-shape of 70 degrees - 100 degrees and wherein the multilayer tablet contains various active pharmaceutical ingredients.	Takeda Pharmaceutical Company Limited, Osaka-shi, Osaka 541-0045, JP, 101150715	2019-12-04	2011-03-03
EP2688619B1	INHALATOR FOR SUBSTANCES IN POWDER FORM	The invention refers to an inhalation device provided with a dose ring (2, 38, 65) intended for storage and release of substances in powder form such as a drug, comprising a plurality of substantially circular recesses or powder chambers (1, 37, 66) for storing a respective dose of a preloaded powdery substance, and an air channel (7, 43, 43a, 67) or uncovering device (68) for dispensing one dose at a time, wherein an	1. Inhalation device provided with a dose ring (2, 38, 65) intended for storage and release of a preloaded amount of a powdery substance such as a drug, comprising a plurality of substantially circular recesses or powder chambers (1, 37, 66), oriented in one or more substantially circular lines in the surface of the dose ring (2, 38, 65), for storing a respective dose of preloaded powdery substance, and an air channel (7,	Simplified Solutions Sweden AB, 437 31 Lindome, SE, 101338945	2019-12-11	2011-03-21

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		advancing mechanism (5, 41) is arranged to feed the dose ring (2, 38, 65) in its direction of rotation one powder chamber (1, 37, 66) at a time. The invention is achieved by that the powder chambers (1, 37, 66) are oriented in the surface of the dose ring (2, 38, 65), that at least one seal (27, 29, 35) is arranged to seal the dose ring (2, 38, 65) so that the powder chambers (1, 37, 66) are sealed from each other for retaining the doses of powder in the respective powder chambers (1, 37, 66), that the dose ring (2, 38, 65) is arranged so that said powder chambers (1, 37, 66) can be uncovered or opened to at least a portion of an air channel (7, 43, 43a, 67) arranged in the position for the powder chamber (1, 37, 66) which is to dispense a dose of powder, and that the seal (27, 29, 35), at the rotation position for dispensing the dose of powder, is or can be opened to the air channel (7, 43, 67) so that the powder chamber (1, 37, 66) and its content is exposed to, and can pass through, the air channel (7, 43, 43a, 67) by means of an air flow.	43, 43a, 67) for dispensing one dose at a time, wherein an advancing mechanism (5, 41) is arranged to feed the dose ring (2, 38, 65) by rotation to expose one powder chamber (1, 37, 66) in the air channel (7, 43, 43a, 67) at a time, wherein - at least one seal (35) is arranged to seal the dose ring (2, 38, 65) so that the powder chambers (1, 37, 66) are sealed from each other for retaining the doses of powder in the respective powder chamber (1, 37, 66), and - the seal (35) is arranged to rotate with the dose ring (2, 38, 65), characterized in - that the seal (35) is provided with at least a number of openable elements (36) corresponding to the number of powder chambers (1, 37, 66) in the dose ring (2, 38, 65) - that the openable elements (36) are integrated and pre-pierced in the seal (35), - that the air channel (7, 43, 43a, 67) is arranged with a increasing cross-section as seen in the air flow direction, i.e. the cross-sectional area in a first area (B1) is smaller than the cross sectional area in a second area (B2), and - that the openable element (36) positioned in the air channel (7, 43, 43a, 67) is arranged to automatically open by means of the underpressure when air flows in the intended direction through the air channel, exposing the content of the powder chambers (1, 37, 66) to the air channel (7, 43, 43a, 67).			
EP2710007B1	KINASE INHIBITORS	Provided herein are kinase inhibiting compounds and methods of using the same.	1. A compound having the structure of Formula (XI): wherein: y is an integer from 0 to 2; j is an integer from 0 to 3; f is 0; Ar is unsubstituted phenyl or phenyl substituted at meta and/or para position; R 12 is absent; R 14 is absent, methyl, fluoro, methoxy, chloro, trifluoromethyl or trifluoromethoxy; L 1 is -C(O)- or SO 2 ; L 4 is a bond, -O-, -NH-, or methylene; ring A is azetidin-1-yl, pyrrolidin-1-yl, piperidin-1-yl, or piperazin-1-yl; L 11 is -O-, -CO-, -CH 2 -, -S-, -SO-, -SO 2 -, -NR 15C -, -NR 15C CO-, -CONR 15C -, -NR 15C SO 2 -, -SO 2 NR 15C -, or -NR 15C CONR 15D -, wherein each R 15C and R 15D is hydrogen; R 23 is absent, unsubstituted saturated (C 1 -C 6) alkyl, unsubstituted saturated (C 1 -C 6) alkoxy, halo, unsubstituted saturated (C 1 -C 6) haloalkyl, unsubstituted saturated (C 1 -C 6) haloalkoxy, or cyano; R 2 and R 3 are independently unsubstituted saturated C 1 -C 6 alkyl or together form (C 3 -C 6) unsubstituted saturated cycloalkyl; and R 4 is hydrogen, methyl, hydroxymethyl, hydroxyethyl, 2-methylamino ethyl, or 2, 2-dimethylaminoethyl; or a pharmaceutically acceptable salt thereof. 8. A compound of any of the claims 1 to 6 for use in treating cancer, epilepsy, HIV infection, autoimmune disease, ischemic disease, stroke, neurodegenerative diseases, metabolic disease or inflammation.	The Regents of the University of California, Oakland, CA 94607, US, 100236880 | Principia Biopharma Inc., Menlo Park, California 94025, US, 101350860	2019-12-11	2011-05-17
EP2731571B1	IMPROVEMENTS RELATING TO DELIVERY DEVICES	A delivery device (100, 200) is disclosed, which comprises a container (80) containing a dose of a powder, a chamber (110) adapted to receive the container (80), at least one gas inlet (26) by which gas may enter the chamber (110), and at least one gas outlet (72) by which gas and entrained powder may	1. A delivery device (100) comprising a container (80) containing a dose of powder, a chamber (110) adapted to receive the container (80), at least one gas inlet (26) by which gas may enter the chamber, and at least one gas outlet (72) by which gas and entrained powder may exit the chamber (110) for	Pharmaxis Ltd, Frenchs Forest, NSW 2086, AU, 101839495	2019-12-18	2011-07-13

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		exit the chamber (110) for inhalation, the delivery device (100, 200) having a pre-use configuration in which the container (80) is accommodated, at least partially, within a storage enclosure in a wall of the chamber (110), the delivery device (100, 200) having a deployment member (60) adapted to put the delivery device (100, 200) in an operative configuration by displacing the container (80) from the storage enclosure into the chamber (110), such that the container (80) is movable within the chamber (110), in use, the deployment member (60) being adapted to at least partially occupy the storage enclosure in the operative configuration.	inhalation, the delivery device (100) having a pre-use configuration in which the container (80) is accommodated, at least partially, within a storage enclosure in a wall of the chamber, the delivery device (100) having a deployment member (60) adapted to put the delivery device (100) in an operative configuration by displacing the container (80) from the storage enclosure into the chamber (110), such that the container (80) is movable within the chamber (110), in use, the deployment member (60) being adapted to at least partially occupy the storage enclosure in the operative configuration; characterised in that the deployment member (60) is retained in a pre-use position by retaining formations (36, 74), which are adapted to maintain the deployment member (60) in the pre-use position during normal handling, wherein the retaining formations (36, 74) have the form of a cooperating projection (36) and recess (74).			
EP2758114B1	INHALABLE MICROEMULSION COMPRISING ANAESTHETIC	The invention concerns a cartridge for an inhalation device for delivering anaesthetic to a human or animal wherein anaesthetic in said cartridge is dispersed in an anaesthetic control release medium; an inhalation device for use with said cartridge and a formulation comprising at least one selected anaesthetic and anaesthetic control release medium.	1. A Kit comprising: a formulation comprising at least one selected inhalation anaesthetic and an anaesthetic control release medium in the form of an emulsion provided by at least one, including any selected combination of, non-ionic surfactant(s) selected from the group comprising ethylene oxide based fluorocarbon surfactants, and propylene oxide or ethylene oxide based hydrocarbon surfactants, wherein the amount of said medium relative to said anaesthetic is such that anaesthetic is delivered at a selected Minimum alveolar concentration (MAC), at a substantially constant or controllable rate, within the range of 0.25 - 4.0 x Minimum alveolar concentration (MAC) thereby allowing for either i) induction and/or maintenance of anaesthesia or ii) sedation; and a cartridge containing said formulation wherein said cartridge is for use with an inhalation device to deliver an inhalational or volatilised anaesthetic to a patient wherein said cartridge comprises an adjustable stirrer or agitator.	University College Cardiff Consultants Ltd., South Glamorgan, Cardiff CF24 0DE, GB, 100998019	2019-12-11	2011-09-21
EP2809180B1	ELECTRONIC CIGARETTE	An electronic smoking article includes a liquid supply including liquid material, a heater operable to heat the liquid material to a temperature sufficient to vaporize the liquid material and form an aerosol, a wick in communication with the liquid material and in communication with the heater such that the wick delivers the liquid material to the heater, at least one air inlet operable to deliver air to a central air passage upstream of the heater, and a mouth end insert having at least two diverging outlets.	1. An electronic smoking article (60) comprising: a vapor generating arrangement; and a mouth-end insert (8), characterized in that said mouth-end insert (8) comprises at least two diverging outlet passages (24) operable to distribute vapor throughout a mouth of a smoker during a puff; and wherein the electronic smoking article (60) further comprises a gasket (10) including a central orifice (84) that is sized and spaced from the mouth-end insert (8) and operable to substantially reduce a velocity of the vapor approaching the mouth-end insert (8).	Altria Client Services LLC, Richmond, Virginia 23230, US, 101545372	2019-12-04	2012-01-31
EP2854759B1	DOSAGE FORMS COMPRISING APIXABAN AND MATRIX FORMER	The invention relates to oral dosage forms for modified release of apixaban. The invention also relates to methods of preparing said dosage forms and to an agglomerated mixture of matrix former and filler for preparing an oral dosage form for use in the treatment of venous thromboembolism.	1. Oral dosage form for modified release containing a) particulate, crystalline apixaban and b) matrix former, wherein the apixaban particle size distribution has a D50-value of 11 to 75 µm, and wherein the matrix former is selected from cellulose ether, cellulose ester, starch, gum, shellac, fatty substances, polyvinylchloride, polyvinyl alcohol polyvinyl acetate or copolymers thereof, polymers based on acrylic acid and/or	ratiopharm GmbH, 89079 Ulm, DE, 101115943	2019-12-18	2012-05-24

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			methacrylic acid and ion exchange resins, wherein the fatty substances refer to wax, fat, oil, fatty acid, fatty alcohol, monoglyceride, diglyceride, triglyceride and mixtures thereof, and wherein modified release means that after 60 minutes 1% to 20% of the active agent are released, determined according to the USP method, paddle apparatus II, 900 ml test medium, phosphate buffer with 0.5% sodium dodecyl sulfate, pH 6.8 at 37°C and 75 rpm.			
EP2890437B1	AEROSOL INHALATION DEVICE	The invention deals with an actuator (1) for an aerosol inhalation device comprising a housing adapted to receive an aerosol canister (2) containing a pressurised medicament formulation, a mouthpiece portion through which the user inhales, a nozzle block (5), an orifice (8), and a tubular element (11) extending in the mouthpiece portion from the orifice aperture in a longitudinal axis aligned with a longitudinal axis of the mouthpiece portion. In particular said tubular element is positioned to enclose the orifice aperture within a recess. The tubular element is configured such that one of its terminal openings may be close fit to the nozzle block external surface, around the orifice aperture, so as to be in a continuous flow path with the orifice. Such configuration provides for a significant reduction in the non-respirable, coarse fraction of the emitted aerosol medicament via inertial impaction and retention in the actuator than in the oro-pharynx, with consequent less associated side effects and oral candidiasis in the patient. The presence of the tubular element has minimal, negligible impact on the fine particle dose and on the particle size distribution (PSD) of the delivered particles having aerodynamic diameter lower than 9 μm.	1. An actuator (1) for an oral aerosol inhalation device comprising: a housing adapted to receive an aerosol canister (2) containing a pressurised medicament formulation, provided with a metering valve having a hollow valve stem (3), a mouthpiece portion terminating in a mouthpiece opening (10), a nozzle block (5) defining a valve stem receptacle (13), an expansion chamber or sump (6), and an orifice (7) ending in an aperture (8) having an enlarging frusto-conical section to propel the aerosol formulation towards the mouthpiece opening (10), the frusto-conical section enlarging in the aerosol flow direction, wherein the longitudinal axis of the orifice (7) in the nozzle block (5), aligned with the longitudinal axis (9) of the mouthpiece portion, is located at an angle greater than 90° to the direction of the longitudinal axis of the hollow valve stem (3), characterized by the presence of a tubular element (11) extending in the mouthpiece portion from the orifice aperture (8) in a longitudinal axis aligned with the longitudinal axis (9) of the actuator mouthpiece portion and coinciding with the orifice (7) longitudinal axis.	Chiesi Farmaceutici S.p.A., 43100 Parma, IT, 101292318	2019-12-18	2012-08-29
EP2914320B1	SYSTEMS FOR ADMINISTERING PULMONARY MEDICATION	Example techniques and systems include detecting patient inhalation with a pulmonary medication dosing device and controlling a valve to release medication based on the detection. For example, a method includes generating a signal indicative of air flow within a portion of a pulmonary medication dosing device, receiving, by a processor, a command based on the signal and associated with a valve configured to at least partially control release of medication via the pulmonary medication dosing device, and controlling, by the processor and based on the received command, the valve to release at least a portion of a dose of the medication into the air flow. In some examples, a mobile computing device may be configured to generate and transmit the command to the pulmonary medication dosing device for controlling the valve.	1. A pulmonary medication dosing device (14, 26, 33, 50, 80, 140) configured to divide a prescribed full medication dose into a plurality of sub-doses, the device comprising: a dosing chamber (72) configured to retain the full dose of medication released by a metering valve (21, 53) of a medication canister (20, 52) coupled to the device upon the medication canister being depressed a single time; a valve (30, 39, 70, 88, 152) coupled to the dosing chamber and configured to control release of at least a portion of the full dose ; a sensor (31, 94, 110, 126, 154) configured to generate a signal indicative of an air flow within a portion of the device, the air flow caused by an inhalation; and a processor (150) configured to: receive a command based on the signal indicative of the air flow and associated with the valve; and control, based on the received command, the valve to open when a parameter value indicative of the air flow is above a threshold and control the valve to close when the parameter value is below the threshold, wherein when the valve is closed due to low air flow prior to completion of the prescribed full medication dose, the pulmonary medication dosing device controls the valve to open	Inhaletech LLC, Minneapolis, MN 55411, US, 101517268	2019-12-04	2012-10-31

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			again, deliver remaining medication, and continue with this process until the full dose has been delivered to patient.			
EP3035887B1	INHALER	This invention relates to an inhaler, preferably for insertion into a nostril, in particular a horse's nostril, with an inhalation valve, which has a movable valve element, wherein the valve element is designed in an annular manner and has an outer edge and an inner edge, wherein the valve element is fastened to the outer edge, the inner edge forms the boundary of an indentation of the valve element, and the inhalation valve has a valve body seat that corresponds to the inner edge.	1. Inhaler (1), preferably for insertion into a nostril (9), in particular of a horse (5), with an inhalation valve (66), which has a movable valve element (67) which is configured in an annular manner and has an outer edge (68) and an inner edge (69), wherein the valve element (67) is fastened at the outer edge (68), wherein the inner edge (69) forms the boundary of a through passage (70) of the valve element (67), wherein the inhalation valve (66) has a valve body seat (72) that corresponds to the inner edge (69), characterized in that the inhaler (1) comprises a discharge nozzle (2), wherein the discharge nozzle (2) is arranged in the through passage (70) of the valve element (67).	Boehringer Ingelheim Vetmedica GmbH, 55216 Ingelheim am Rhein, DE, 100089553	2019-12-25	2013-08-20
EP3035885B1	INHALER	This invention relates to an inhaler, preferably for insertion into a nostril, in particular a horse's nostril, with a pressure generator, which has a tensioning device for the drive, and with a tensioning mechanism for tensioning the tensioning device, whereby the tensioning mechanism has a lever gear for tensioning the tensioning device.	1. Inhaler (1), preferably for insertion into a nostril (9), in particular a nostril of a horse (5), with a pressure generator (20), which has a tensioning device (21) for driving the pressure generator (20), and with a tensioning mechanism (28) for tensioning the tensioning device (21), characterized in that the tensioning mechanism (28) has a lever gear (29) for tensioning the tensioning device (21), wherein the lever gear (29) comprises an actuating lever (26) comprising an actuation section (40) and a pivot point (41), and wherein the lever gear (29) comprises an arm (38), wherein the actuating lever (26) realizes a one-sided lever (35), wherein the actuating lever (26) together with the arm (38) forms an elbow lever (30), and wherein the arm (38) is hinged to the actuating lever (26) between the pivot point (41) and the actuation section (40).	Boehringer Ingelheim Vetmedica GmbH, 55216 Ingelheim am Rhein, DE, 100089553	2019-12-25	2013-08-20
EP3035813B1	VAPORIZER	A vaporizer may include a battery housing and a cartomizer connectable to the battery housing. A battery may be housed within the battery housing. The cartomizer may have a cartomizer body dimensioned to hold a vaporizable substance. The cartomizer may also include a heating element to heat the vaporizable substance. A cutoff device may be connectable to the heating element to disrupt the heating element.	1. A vaporizer comprising: a battery housing (100); a battery (120) housed within the battery housing (100); a cartomizer (200) connectable to the battery housing (100), the cartomizer (200) including a cartomizer body (210) dimensioned to hold a vaporizable substance, and a heating element (240) operable to heat the vaporizable substance; and a cutoff device connectable to the heating element (240) operable to disrupt the heating element, wherein the cutoff device comprises a switch (330) operable to interrupt a current flow to the heating element (240), characterized in that the cartomizer includes fiber batting (270) disposed within the cartomizer body (210) to hold the vaporizable substance, whereby the cutoff device further comprises a temperature sensor (320) or a fluid level sensor (350) connectable to the switch (330) and disposed within the fiber batting (270) in proximity to the heating element (240), and associated circuitry configured to turn off the heating element (240) depending on the sensed temperature or the sensed fluid level.	VMR Products LLC, San Francisco, CA 94107, US, 101843828	2019-12-18	2013-08-20
EP3065730B1	VASODILATOR FORMULATION AND METHOD OF USE	A topically admimstrable vasodilator formulation comprises arginine and/or one or more derivatives thereof, black pepper extract and/or one or more components or derivatives	1. A topically administrable vasodilator formulation comprising: (i) arginine; (ii) black pepper extract; and (iii) peppermint extract.	Atp Institute Pty Ltd., Springwood	2019-12-25	2013-11-04

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		thereof; and peppermint extract and/or one or more components or derivatives thereof. The formulation may further comprise rosemary oil, a penetration enhancers, an ecdysteroid and/or one or more other agents that enhance the vasodilator activity of the formulation. The valodilalor formulation may be suitable for treating or preventing a disease, disorder or condition associated with a decrease and/or impairment of blood flow in a subject by topically administration to the subject.		QLD 4127, AU, 101602953		
EP3089607B1	AEROSOL-GENERATING SYSTEM COMPRISING A CYLINDRICAL POLYMERIC CAPSULE	An aerosol-generating system comprises: a nicotine source (8); a volatile delivery enhancing compound source (10), wherein the volatile delivery enhancing compound comprises an acid; and a heating means (18) for heating one or both of the nicotine source (8) and the volatile delivery enhancing compound source (10). One or both of the nicotine source (8) and the volatile delivery enhancing compound source (10) is encapsulated in a cylindrical polymeric capsule(2). The cylindrical polymeric capsule comprises a thermally conductive material.	1. An aerosol-generating system comprising: a nicotine source; a volatile delivery enhancing compound source, wherein the volatile delivery enhancing compound comprises an acid; and a heating means (18) for heating one or both of the nicotine source and the volatile delivery enhancing compound source, wherein one or both of the nicotine source and the volatile delivery enhancing compound source is encapsulated in a cylindrical polymeric capsule (2) comprising a thermally conductive material having a thermal conductivity of at least about 10 W/(m•K), wherein the thermally conductive material is included in one or both of: one or more walls of the cylindrical polymeric capsule (2); and a polymeric coating provided on at least part of the interior surface of the cylindrical polymeric capsule (2). 13. Use of a cylindrical polymeric capsule (2) comprising a thermally conductive material having a thermal conductivity of at least about 10 W/(m•K) in an aerosol-generating system for generating a nicotine-containing aerosol comprising a heating means (18), wherein the thermally conductive material is included in one or both of: one or more walls of the cylindrical polymeric capsule (2); and a polymeric coating provided on at least part of the interior surface of the cylindrical polymeric capsule (2).	Philip Morris Products S.A., 2000 Neuchâtel, CH, 101137385	2019-12-11	2014-01-02
EP3110269B1	ATOMIZER FOR AN AEROSOL DELIVERY DEVICE AND RELATED INPUT, AEROSOL PRODUCTION ASSEMBLY, CARTRIDGE AND METHOD	The present disclosure relates to atomizers for an aerosol delivery device such as a smoking article. The atomizer may include a liquid transport element and a wire extending along at least a portion of a longitudinal length thereof. The wire may define contact portions configured to engage heater terminals and a heating portion configured to produce heat. The heating portion may include a variable coil spacing. In other atomizers, the wire may extend at least partially through the liquid transport element proximate the contact portions. Related inputs, cartridges, aerosol production assemblies, and methods of forming atomizers are also provided.	1. An atomizer (208, 408, 1108, 1300, 1300') for an aerosol delivery device, the atomizer (208, 408, 1108, 1300, 1300') comprising: a segment of a liquid transport element (216, 402, 902, 1102, 1302) extending between a first liquid transport element end (238a, 426a, 1326a) and a second liquid transport element end (238b, 426b, 1326b); and a segment of a wire (240, 404, 904, 1104, 1304) extending along at least a portion of the segment of the liquid transport element (216, 402, 902, 1102, 1302) and defining a heating element (218, 406, 906, 1106, 1306, 1306') comprising a plurality of coils (412, 912, 1112, 1308) of the wire (240, 404, 904, 1104, 1304) including a heating portion (418, 918, 1118, 1346, 1346') at which the coils (412, 912, 1112, 1308) define a variable pitch, the variable pitch of the coils (412, 912, 1112, 1308) being greatest at a plurality of outer sections (1126a, 1126b, 1350a, 1350b) and smallest at a center section (1128, 1352) positioned between the outer sections (1126a, 1126b, 1350a, 1350b).	RAI Strategic Holdings Inc., Winston-Salem, NC 27101, US, 101588532	2019-12-04	2014-02-28

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			12. A method of forming an atomizer (208, 408, 1108, 1300, 1300'), the method comprising: providing a liquid transport element (216, 402, 902, 1102, 1302); providing a wire (240, 404, 904, 1104, 1304); and coupling the wire (240, 404, 904, 1104, 1304) to the liquid transport element (216, 402, 902, 1102, 1302) such that the wire (240, 404, 904, 1104, 1304) extends along at least a portion of a longitudinal length of the liquid transport element (216, 402, 902, 1102, 1302) and defines at least one heating element (218, 406, 906, 1106, 1306, 1306'), the heating element (218, 406, 906, 1106, 1306, 1306') comprising a plurality of coils (412, 912, 1112, 1308) of the wire (240, 404, 904, 1104, 1304) including a heating portion (418, 918, 1118, 1346, 1346') at which the coils (412, 912, 1112, 1308) define a variable pitch, the variable pitch of the coils (412, 912, 1112, 1308) being greatest at a plurality of outer sections (1126a, 1126b, 1350a, 1350b) and smallest at a center section (1128, 1352) positioned between the outer sections (1126a, 1126b, 1350a, 1350b).			
EP3119219B1	AEROSOL-GENERATING DEVICES INCORPORATING AN INTERTWINED WICK AND HEATING ELEMENT	There is provided an aerosol-generating system comprising a heater comprising at least one heating element; and a capillary body, wherein the capillary body is wound around the heating element. The heating element and capillary body may be intertwined with one another. An aerosol-generating system in accordance with the invention has the advantage that the manufacturing process can be a fast and robust process. The heater can be formed with high precision and consistency. Furthermore, the heater and wick assembly is mechanically robust, allowing manual or automatic handling without affecting its dimensions. This allows for a consistent quality of production.	1. An aerosol-generating system comprising: a heating element (200); and a capillary body (210), wherein the capillary body is wound around the heating element and wherein the heating element and capillary body are intertwined with one another. 13. A method of manufacture: comprising providing a capillary body (210) and a heating element (200); and winding the capillary body around the heating element by winding the capillary body and the heating element together to intertwine the capillary body and the heating element.	Philip Morris Products S.A., 2000 Neuchâtel, CH, 101137385	2019-12-18	2014-03-19
EP3129010B1	COATED EDIBLE PLANT-DERIVED MICROVESICLE COMPOSITIONS AND METHODS FOR USING THE SAME	Compositions are provided that comprise a microvesicle derived from an edible plant. The microvesicles are coated with a plasma membrane derived from a targeting cell and can further be utilized to encapsulate a therapeutic agent. Methods for treating an inflammatory disorder and/or a cancer are further provided and include the step of administering to a subject an effective amount of a composition that includes a microvesicle coated with a plasma membrane derived from a targeting cell.	1. A composition, comprising: a microvesicle derived from an edible plant; and a plasma membrane coating the microvesicle, the plasma membrane derived from a targeting cell.	University Of Louisville Research Foundation Inc., Louisville, KY 40202-1959, US, 101505817	2019-12-04	2014-04-11
EP3148521B1	FLUTICASONE FUROATE IN THE TREATMENT OF COPD	The present invention relates to pharmaceutical products comprising fluticasone furoate for use in the treatment of COPD patients, particularly a subgroup of COPD patients that through analysis have been identified as possessing an eosinophil blood count of ≥150 cells/μl. The present invention is further directed to methods for treating a patient with COPD which methodsinclude identifying a patient that will respond to treatment and administering a pharmaceutical product of the present invention comprising fluticasone furoate to said patient.	1. A pharmaceutical product comprising fluticasone furoate for use in the treatment of COPD in a patient, wherein the patient has a blood eosinophil count of ≥150 cells/μL and wherein the pharmaceutical product reduces the rate of decline in lung function in the patient. 2. A pharmaceutical product comprising fluticasone furoate for use in a method of treating COPD in a patient, wherein the patient has a blood eosinophil count of ≥150 cells/μL and wherein the pharmaceutical product reduces the rate of decline in lung function in the patient, the method comprising identifying that the patient has a blood eosinophil count of ≥150 cells/μL by analysis of a blood sample taken from said	GlaxoSmithKline Intellectual Property Development Limited, Brentford, Middlesex TW8 9GS, GB, 101363041	2019-12-18	2014-05-28

Document	Title	Abstract	Claims	Patentee	Granted	Priority
			patient and then administering the pharmaceutical product comprising fluticasone furoate to the patient. 3. A pharmaceutical product comprising fluticasone furoate for use in the treatment of COPD in a patient classified as a responder using a method comprising: a. calculating the number of eosinophils per microlitre of blood in a blood sample taken from a COPD patient; b. determining that the patient is a responder if the number of eosinophils in the blood sample is ≥150 cells/μL, and wherein the pharmaceutical product reduces the rate of decline in lung function in the patient.			
EP3156063B1	BINDING INHIBITOR BETWEEN TCTP DIMER TYPE IGE-DEPENDENT HISTAMINE RELEASING FACTOR AND RECEPTOR THEREOF, AND USE THEREOF	The present invention relates to a receptor-binding domain of an IgE-dependent histamine releasing factor (HRF), and a use thereof and, more specifically, ascertains, as an HRF framework region, an FL domain and an H2 domain which bind to a receptor of an HRF existing in a cell membrane, ascertains the C-terminus of the HRF, and ascertains that a material binding thereto inhibits IL-8 secretion, thereby determining that the FL and H2 domains and the C-terminus can be utilized in: the development of a therapeutic agent for and prevention of HRF-related diseases including malaria and inflammatory diseases such as asthma, bronchitis, chronic obstructive pulmonary disease, bronchiectasis, rhinitis, atopic dermatitis, hives, hay fever, conjunctivitis, anaphylactic allergic diseases, pneumonia, arthritis, nephritis, psoriasis, dermatitis, Crohn's disease, enteritis, gingivitis, arteriosclerosis, coronary arteritis, hepatitis, Behcet's disease, bladder cancer, prostatitis, pyelonephritis, glomerulonephritis, osteomyelitis, thyroiditis, uveitis, abdominal cavity inflammation, meningitis, pulmonary fibrosis and rheumatoid arthritis; and a method for screening for the HRF-related diseases.	1. A domain selected from the group consisting of: a flexible loop (FL) domain that characteristically binds to the HRF (histamine releasing factor) receptors or is involved in the binding thereof, wherein the FL domain consists of one of the amino acid sequences represented by SEQ. ID. NOs: 1 to 4, helix 2(H2) domain that characteristically binds to the HRF (histamine releasing factor) receptors or is involved in the binding thereof, wherein the H2 domain consists of one of the amino acid sequences represented by SEQ. ID. NOs: 11 to 12, and a C-terminus domain involved in the binding to the HRF receptor or the activation of HRF or in the formation of HRF dimer, wherein the C-terminus domain consists of one of the amino acid sequences represented by SEQ. ID. NO: 33 to NO: 34.	Ewha University-Industry Collaboration Foundation, Seoul 120-750, KR, 101321655	2019-12-25	2014-06-16
EP3160509B1	ANTITUMOR COMPOSITION BASED ON HYALURONIC ACID AND INORGANIC NANOPARTICLES, METHOD OF PREPARATION THEREOF AND USE THEREOF	The invention relates to an antitumor composition based on hydrophobized hyaluronan and inorganic nanoparticles stabilized by oleic acid. The hydrophobized hyaluronan in the form of an acylated hyaluronan serves in the composition as a carrier of inorganic nanoparticles. Out of the group of inorganic nanoparticles, the composition may comprise superparamagnetic nanoparticles, nanoparticles of ZnO and moreover, upconversion nanoparticles. Said composition is selectively cytotoxic with respect to both suspension and adherent tumor cell lines, especially with respect to tumor cell lines of colorectum carcinoma and adenocarcinoma, lung carcinoma, hepatocellular carcinoma and breast adenocarcinoma. The highest cytotoxic effects were observed in case of the composition based on an oleyl derivative of hyaluronan with SPIONs. The composition of acylated hyaluronan with SPIONs may also be advantageously used for an in vivo detection of accumulation of the composition in the body, preferably in a tumor or in liver. Said composition is sterilizable in the final package.	1. An antitumor composition based on a C 6 -C 18 -acylated derivative of hyaluronic acid according to the general formula (I) where R is H + or Na + , and where R 1 is H or -C(=O)C x H y or -C(=O)CH=CH-het, where x is an integer within the range of 5-17 and y is an integer within the range of 11-35 and C x H y is a linear or branched, saturated or unsaturated C 5 -C 17 chain and het is a heterocyclic or heteroaromatic residue, optionally containing N, S or O atoms, wherein at least in one repeating unit one or more R 1 is -C(=O)C x H y or -C(=O)CH=CH-het, and where n is within the range of 12 to 4000, characterized by that it further contains inorganic nanoparticles with the stabilizing oleic acid, wherein the inorganic nanoparticles are selected from the group consisting of superparamagnetic nanoparticles, upconversion nanoparticles or zinc oxide nanoparticles, especially superparamagnetic nanoparticles.	Contipro a.s., 56102 Dolni Dobrouc, CZ, 101605259	2019-12-18	2014-06-30
EP3192875B1	SUSTAINED-RELEASE PHARMACEUTICAL	The present invention relates to a terpenoid derivative that has the ability to activate the Keap1/Nrf2/ARE signaling	1. A terpenoid derivative represented by the following formula (I):	Daiichi Sankyo Company Limited, Tokyo	2019-12-18	2014-09-10

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	COMPOSITION FOR TREATING AND PREVENTING OPHTHALMIC DISEASES	pathway and is excellent in anti-inflammatory action and cytoprotective action, and a sustained-release pharmaceutical composition effective for the treatment and prevention of a posterior eye disease caused by oxidative stress, comprising the terpenoid derivative as an active ingredient. The present invention provides a local administration-type sustained-release pharmaceutical composition for the treatment or prevention of a posterior eye disease, comprising the terpenoid derivative of the present invention as an active ingredient, wherein the sustained-release pharmaceutical composition maintains a pharmacological action thereof for 1 week or longer by the sustained release of the terpenoid derivative under physiological conditions and has a base material administrable to the vitreous body and a form administrable to the vitreous body	2. A terpenoid derivative represented by the following formula (II): 6. A method for producing a terpenoid derivative represented by the following formula (III): comprising using a compound represented by the formula (1) as a substrate, culturing together with this compound in a medium Chaetomium sp. SANK 11867 (Deposition No. NITE BP-01916) belonging to the genus Chaetomium capable of transforming the compound to the terpenoid derivative represented by the formula (III), and collecting the terpenoid derivative represented by the formula (III) from the culture. 13. A nucleotide sequence having any of the following nucleotide sequences (f) to (j) and encoding a protein having hydroxylase activity against a substrate compound represented by the formula (2): (f) the nucleotide sequence described in SEQ ID NO: 3, (g) the nucleotide sequence described in SEQ ID NO: 4, (h) the nucleotide sequence of DNA hybridizing under stringent conditions to DNA comprising a complementary sequence of any nucleotide sequence defined in the nucleotide sequence (f), (i) a nucleotide sequence having 90% or higher identity to any nucleotide sequence defined in the nucleotide sequence (f), and (j) a nucleotide sequence which does not hybridize under stringent conditions to DNA comprising a complementary sequence of any nucleotide sequence defined in the nucleotide sequence (f) due to the degeneracy of the genetic code, but encodes the same amino acid sequence as the nucleotide sequence defined in any of (f) to (h). 14. A protein having any of the following amino acid sequences (k) to (n) and having hydroxylase activity against a substrate compound represented by the formula (2): (k) the amino acid sequence described in SEQ ID NO: 5, (1) the amino acid sequence described in SEQ ID NO: 6, (m) an amino acid sequence derived from any amino acid sequence defined in the amino acid sequence (k) by the deletion, substitution, and/or addition of one amino acid, and (n) an amino acid sequence having 90% or higher identity to any amino acid sequence defined in the amino acid sequence (k). | 19. Bacillus sp. SANK 70214 (Deposition No. NITE BP-01914) belonging to the genus Bacillus. 20. Bacillus megaterium SANK 70314 (Deposition No. NITE BP-01915) belonging to the genus Bacillus.	103-8426, JP, 101226854		
EP3206666B1	LIQUID PHARMACEUTICAL COMPOSITION COMPRISING PEMETREXED	The present invention relates to a liquid pharmaceutical composition suitable for parenteral administration comprising: a) pemetrexed diacid; b) at least one organic amine; c) at least one antioxidant; d) 10-200 mg/ml of propylene glycol; and e) one or more parenteral solvents, wherein the preparation thereof is conducted in an atmosphere of inert gas and wherein the organic amine(s) is present in an amount sufficient to reach a pH of the composition in the range from 8.3 to 9.1 The invention further relates to the use of said liquid pharmaceutical composition as medicament in the treatment of	1. A liquid pharmaceutical composition suitable for parenteral administration comprising: a. pemetrexed diacid; b. arginine; c. at least one monothiolic antioxidant; d. 10-200 mg/ml of propylene glycol, and e. one or more parenteral solvents, wherein the preparation thereof is conducted in an atmosphere of inert gas and wherein arginine is present in an amount sufficient to reach a pH of the composition in the range from 8.3 to 9.1.	Synthon B.V., 6545 CM Nijmegen, NL, 100230985	2019-12-11	2014-10-16

Document	Title	Abstract	Claims	Patentee	Granted	Priority
		malignant pleural mesothelioma and non-small cell lung cancer.				
EP3209356B1	DISPENSING CONTAINER	The present invention provides a dispensing container comprising a vessel, the vessel having: a formation and/or discrete element in or on the vessel which causes the centre of gravity of contents of the vessel to be positioned differently, when oriented in a lain-on- side attitude, from its notional position, in the absence of the formation or element in or on the vessel; an additional formation or discrete element in or on the vessel which, when the container is in the lain-on-side attitude, lifts at least a portion of the container away from a surface, wherein, when the container is in the lain-on-side attitude and has a first volume of content, the centre of gravity of the content biases the container to a first orientation, and when the container is in the lain-on-side attitude and has a second volume of content, the centre of gravity of the container biases the container to a second orientation, different to the first.	1. A dispensing container (10) comprising a vessel (12), the vessel having: a groove (10) extending along the vessel which causes the centre of gravity of liquid contents of the vessel to be positioned differently, when oriented in a lain-on-side attitude, from its notional position, in the absence of the formation or element; characterised in that : the dispensing container further comprises a circumferential formation (28) arranged circumferentially around the vessel, wherein, when the container is in the lain-on-side attitude and contains a first volume of content, the centre of gravity of the content biases the container to roll on the circumferential formation to a first orientation, and when the container is in the lain-on-side attitude and has a second volume of content, the centre of gravity of the container biases the container to roll on the circumferential formation to a second orientation, different to the first, characterised in that the circumferential formation is arranged to project from the vessel such that when the container is in the lain-on-side attitude, the circumferential formation lifts at least a portion of the container away from a surface to reduce the surface area of the container that is in contact with the surface.	Trig1 Limited, Waterlooville P07 7SG, GB, 101439202	2019-12-11	2014-10-20
EP3372097B1	ATOMIZER, ATOMIZING ASSEMBLY AND INHALER	Atomizer (100) for an inhaler, comprising a housing (110) comprising a first housing (112) and a second housing (114), the first housing (112) being at least partially positioned in the second housing (114), the first housing (112) defining an air flow passage (113) therein; the first housing (112) and the second housing (114) forming a liquid reservoir (115) therebetween for storing liquid; a liquid absorbing sheet (130) sleeved on the first housing (112) in contact with the gasket (120), a wick (140) in contact with the liquid absorbing sheet (130) and configured to draw the liquid from the liquid absorbing sheet (130); the wick (140) comprises a plurality of fiber filaments (142); the plurality of fiber filaments (142) located at the end of the wick (140) are separated; at least part of the ends of the plurality of fiber filaments (142) are in contact with the liquid absorbing sheet (130).	1. An atomizer (100) for an inhaler, comprising: a housing (110) comprising a first housing (112) and a second housing (114), the first housing (112) being at least partially positioned in the second housing (114), the first housing (112) defining an air flow passage (113) therein; the first housing (112) and the second housing (114) forming a liquid reservoir (115) therebetween for storing liquid; a gasket (120) sleeved on the first housing (112), the gasket (120) defining a liquid conducting hole (122) in communication with the liquid reservoir (115); a liquid absorbing sheet (130) sleeved on the first housing (112) in contact with the gasket (120), the liquid absorbing sheet (130) being configured to absorb the liquid in the liquid reservoir (115) via the liquid conducting hole (122); a wick (140) in contact with the liquid absorbing sheet (130) and configured to draw the liquid from the liquid absorbing sheet (130); and an atomizing element fixed to the wick (140) and configured to atomize the liquid in the wick (140); characterized in that the atomizer further comprises an atomizing base (160) defining an atomizing cavity (161), the wick (140) is located in the atomizing cavity (161), the wick (140) comprises a plurality of fiber filaments (142); the plurality of fiber filaments (142) located at the end of the wick (140) are separated; at least part of the ends of the plurality of fiber filaments (142) are in contact with the liquid absorbing sheet (130), the other ends of the plurality of fiber filaments (142) are clamped between the atomizing base (160) and the liquid absorbing sheet (130).	Shenzhen Smoore Technology Limited, Shenzhen, Guangdong 518102, CN, 101707028	2019-12-18	2014-10-29

Document	Title	Abstract	Claims	Patentee	Granted	Priority
EP3223799B1	A PROCESS FOR PREPARATION OF A DRUG-POLYMER COMPOSITION	The present invention relates to an improved active or inactive pharmaceutical ingredient-polymer composition and process of preparation thereof. In particular, the present invention relates to an improved active or inactive pharmaceutical ingredient-polymer composition and process of preparation thereof wherein the monomer encapsulates particles of active or inactive pharmaceutical ingredient at molecular level and with controlled polymerization process the monomer turns into the said polymer coat over the said active or inactive pharmaceutical ingredient that facilitates the disclosed invention to be completed a single step process.	1. A process for preparation of a drug-polymer composition based on monomer and pharmaceutically active ingredient which produces composite sensitive to pH for the purpose of use in masking taste of bitter drugs, sustained release of Active Pharmaceutical Ingredient (API), enteric coating, multiple coating, film coating, pH sensitive coating, protection from outer atmosphere, stability of light sensitive material, stability of moisture sensitive material, smell masking, stability from ultraviolet (UV) radiation, prevent leaching of the coated material into the vehicle and increasing bioavailability of the API etc. comprising the steps of: (a) Preparing a uniform blend of the vehicle water saturated with salt and surfactants as part A, whereby the salt is selected from edible mineral salt; (b) Preparing a blend of the desired amount of active drug and thickener and adding it to part A with constant stirring keeping the suspension over a desired period of time in desired temperature as part B; (c) preparing a catalyst content with desired amount of DM water as part C; (d) Adding part C to part B with constant stirring and maintaining the desired temperature as part D; (e) Separately preparing a homogeneous blend containing desired monomers, from which polymer is formed, and a catalyst and pouring the entire content to the uniformly dispersed part D; (f) Initiating the reaction in an inert atmosphere for complete polymerization of the monomer, over the subject molecules, in the contents of step (e) by maintaining the desired pH, temperature, pressure and time; (g) Recovering the polymerized product by filtration and washing repeatedly; (h) Feeding the contents of step (g) to a spray drier for drying the final product; (i) wherein the monomers selected are the derivatives of acrylic acid and methacrylic acid, wherein the Acrylic Acid derivatives are selected from the group consisting of: Acrylic acid, Bromo acrylic acid, Bromo methyl acrylic acid, Ethylacrylic acid, Carboxyethyl acrylate, Propylacrylic acid, Fluoromethylacrylic acid, Benzoylhydroxyphenoxyethyl acrylate, Benzylpropylacrylate, Butyl acrylate, Butyl aminocarbonyl oxyethy acrylate, Butyl bromoacrylate, Butylcyclohexyl acrylate, Carboxyethyl acrylate, Chloroethyl acrylate, Diethylamino ethyl acrylate, Ethylene glycol ethyl ether acrylate, Ethylene glycol ethylhexyl ether acrylate, Dimethylamino ethyl acrylate, Dimethylamino propyl acrylate, Ethyl acrylate, Bromomethy acrylate, Cyano acrylate, Ethylene glycol dicyclopentenyl ether acrylate, Ethylene glycol methyl ether acrylate, Ethylene glycol phenyl ether acrylate, Ethyl ethylacrylate, Ethyl hexyl acrylate, Ethyl propylacrylate, Ethyl trimethylsilylmethyl acrylate, Hexyl acrylate, Hydroxybutyl acrylate, Hydroxyethyl acrylate, Hydroxy phenoxypropyl acrylate, Hydroxypropyl acrylate, Bornyl acrylate, Butyl acrylate, Decyl acrylate, Octyl acrylate, Lauryl acrylate, Methacrylic acid, Methyl acetamidoacrylate, Methyl acrylate, Methyl bromoacrylate, Methyl bromomethylacrylate, Methyl chloromethyl acrylate, Methyl hydroxy methylenebutyrate, Methyl fluoromethyl acrylate, Octadecyl acrylate, Pentabromobenzyl	Patel Kirit, Naranpura, Ahmedabad 380013, IN, 101598996	2019-12-18	2014-11-30

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			acrylate, Pentabromophenyl acrylate, Pentafluorophenyl acrylate, Polyethyleneglycol acrylate, Polyethyleneglycol diacrylate, Polyethyleneglycol methyl ether acrylate, Polypropyleneglycol acrylate, Tetrahydrofurfuryl acrylate, Tetrahydropyranyl acrylate, Trimethoxysilyl propyl acrylate, Trimethylhexyl acrylate, Undecenyl acrylate, and wherein the Methacrylic acid derivatives are selected from the group consisting of: Allyl methacrylate, Aminoethyl methacrylate hydrochloride, Benzotriazol hydroxyphenyl ethy methacrylate, Benzyl methacrylate, Amino ethyl methacrylate, Bromoisobutyryloxy ethyl methacrylate, Butylamino ethyl methacrylate, Butyl methacrylate, Carbazole ethylmethacrylate, Chloro hydroxypropyl methacrylate, Cyclohexyl methacrylate, Diethylamino ethyl methacrylate, Diethylene glycol butyl ether methacrylate, Diethylene glycol methyl ether methacrylate pricing, Diisopropylamino ethyl methacrylate, Dimethylamino ethyl methacrylate, Ethoxyethyl methacrylate, Ethyleneglycol dicyclopentenyl ether methacrylate, Ethyleneglycol methacrylate phosphate, Ethyleneglycol methyl ether methacrylate, Ethyleneglycol phenyl ether methacrylate, Ethylhexyl methacrylate, Ethyl methacrylate, Ferrocenylmethyl methacrylate, Furfuryl methacrylate, Glycidyl methacrylate, Glycidyl methacrylate, Glycosyloxyethyl methacrylate, Hexyl methacrylate, Hydroxybutyl methacrylate, Hydroxyethyl methacrylate, Hydroxypropyl methacrylate, Bornyl methacrylate, Isobutyl methacrylate, Isocyanatoethyl methacrylate, Isodecyl methacrylate, Lauryl methacrylate, Methyl methacrylate, Methylthiothyl methacrylate, Methacryloyloxyethyl maleate, Methacryloyloxyethyl succinate, Morpholinoethyl methacrylate, Naphthyl methacrylate, Imidazolidinyl ethyl methacrylate, Pentabromophenyl methacrylate, Pentafluorophenyl methacrylate, Phenylene dimethacrylate, Phenyl methacrylate, Polyethylene glycol behenyl ether methacrylate, Polypropylene glycol methacrylate, Propyl methacrylate, Pyrenemethyl methacrylate, Solketal methacrylate, Stearyl methacrylate, TEMPO methacrylate, Tetrahydrofurfuryl methacrylate, Tribromophenyl methacrylate, Trichlorosilyl propyl methacrylate, Triethylene glycol methyl ether methacrylate, Trimethoxysilyl propyl methacrylate, Trimethylcyclohexyl methacrylate, Trimethylsilyl methacrylate, Trimethylsilyloxy ethyl methacrylate, Trimethylsiloxy silyl propyl methacrylate, Vinyl methacrylate.			
EP3111951B1	ANTICANCER FUNCTIONAL PEPTIDE FOR THE TREATMENT OF BREAST CANCER	The present invention relates to an anticancer composition comprising a peptide that inhibits the proliferation of cancer stem cells present in tumor tissue and that induces apoptosis of such cancer stem cells, and more particularly, to an anticancer peptide that inhibits the activity of NF-kB which is overexpressed specifically in cancer stem cells present in tumors.	1. A composition containing, as an active ingredient, a peptide represented by an amino acid sequence SEQ ID NOs: 2 or 3 for use in the treatment of breast cancer.	Seoul National University R&DB Foundation, Seoul 08826, KR, 101619621 | Nano Intelligent Biomedical Engineering Corporation Co. Ltd., Jincheon-gun, Chungcheongbuk-do,	2019-12-11	2015-03-26

Document	Title	Abstract	Claims	Patentee	Granted	Priority
				27816, KR, 101602298		
EP3273811B1	AEROSOL-GENERATING SYSTEM COMPRISING INTEGRATED PIERCING ELEMENT	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) configured to engage with the aerosol-generating device (70). The aerosol-generating article (60) comprises a medicament source (18), a volatile delivery enhancing compound source (22), and at least one frangible barrier (14, 16) sealing the medicament source (18) and the volatile delivery enhancing compound source (22). The aerosol-generating system (80) also comprises at least one piercing element (48, 50) provided on one of the aerosol-generating device (70) and the aerosol-generating article (60), wherein the at least one piercing element (48, 50) is arranged to pierce the at least one frangible barrier (14, 16) when activated by a user.	1. An aerosol-generating system comprising: an aerosol-generating device comprising a heater element; and an aerosol-generating article configured to engage with the aerosol-generating device and comprising: a medicament source; a volatile delivery enhancing compound source; and at least one frangible barrier sealing the medicament source and the volatile delivery enhancing compound source; wherein the heater element is an elongate heater element comprising a proximal end attached to the aerosol-generating device and a free distal end for insertion into the aerosol-generating article, and wherein the elongate heater element forms a piercing element and is arranged so that the elongate heater element pierces the at least one frangible barrier when a user engages the aerosol-generating article with the aerosol-generating device. 3. An aerosol-generating system comprising: an aerosol-generating device comprising a heater element; and an aerosol-generating article configured to engage with the aerosol-generating device and comprising: a medicament source; a volatile delivery enhancing compound source; a tubular portion housing the medicament source and the volatile delivery enhancing compound source; at least one frangible barrier extending across at least one end of the tubular portion and sealing the medicament source and the volatile delivery enhancing compound source; and a mouthpiece portion housing at least one piercing element and configured to receive the tubular portion within the mouthpiece portion, wherein the at least one piercing element comprises at least one resilient member arranged to pierce the at least one frangible barrier when the tubular portion is inserted into the mouthpiece portion. 6. An aerosol-generating system comprising: an aerosol-generating device comprising a heater element; and an aerosol-generating article configured to engage with the aerosol-generating device and comprising: a medicament source; a volatile delivery enhancing compound source; at least one frangible barrier sealing the medicament source and the volatile delivery enhancing compound source; and at least one piercing element provided on a wall of the aerosol-generating article, wherein the medicament source and the volatile delivery enhancing compound source are moveable relative to the at least one piercing element, and wherein the at least one piercing element is arranged to pierce the at least one frangible barrier when activated by a user.	Philip Morris Products S.A., 2000 Neuchâtel, CH, 101137385	2019-12-18	2015-03-27
EP3297762B1	INHALATION DEVICE AND INHALATION DEVICE SET	The invention relates to an inhalation device (10) for inhaling a liquid in nebulized form. The inhalation device (10) according to the invention has a housing (20), which encloses a liquid reservoir (21), in which the liquid is stored before discharge, and an applicator head (40) having a nebulization chamber (42) and an applicator piece (80; 86) connected thereto,	1. Inhalation device (10) for inhaling a liquid in nebulized form, with the following features: a. the inhalation device (10) has a housing (20) which is configured at least in part as a rotationally symmetrical body, of which the centre axis defines a main axis of extent (2) of the housing (20), and which encloses a liquid reservoir (21) in which the liquid is stored in	Aptar Radolfzell GmbH, 78315 Radolfzell, DE, 101329005	2019-12-11	2015-05-20

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		wherein the applicator piece (80; 86) is designed either as a mouthpiece (86), to be taken into the mouth of a patient, or as an inhalation mask (80), for sealed covering of the mouth, nose, or mouth and nose. The inhalation device (10) furthermore has a discharge channel (26) which connects the liquid reservoir (21) to the applicator head (40). According to the invention, the inhalation device (10) is used for the discharge of a saline aqueous solution, of an aqueous solution in the form of a Ringer's solution or a buffered solution, of an aqueous solution having at least one of the additives carbohydrates, essential oils, menthol and plant extracts, of an aqueous solution containing vitamins, trace elements, manganese or zinc, or of an aqueous solution having at least one of the additives from the group comprising cinnamon oil, tea tree oil, sage oil, thyme oil, lemon balm oil, and, for this purpose, has a nozzle plate (90) at the end of the discharge channel (26) having a plurality of nozzle openings (92) for generating an inhalation mist and through which the liquid from the liquid reservoir (21) is directed into the nebulization chamber (42). The invention further relates to use thereof, in particular for discharge of the specified liquids in nebulized form into the respiratory tracts and/or lungs of a patient.	pressurized form before being discharged when acted upon by propellant gas, by compressed air or by a pretensioned spring mechanism, and b. the inhalation device (10) has an applicator head (40) with - a nebulization chamber (42), and - an applicator piece (80; 86) which is connected to the nebulization chamber (42) and provided laterally on the applicator head, wherein the applicator piece (80; 86) is designed either as a mouthpiece (86), to be received in the mouth of a patient, or as an inhalation mask (80), to sealingly cover the mouth, the nose, or the mouth and the nose, or as an adapter piece for fitting a mouthpiece (86) or an inhalation mask (80), c. the inhalation device (10) has a discharge channel (26) which connects the liquid reservoir (21) to the applicator head (40), d. the inhalation device (10) has a switchable rotary outlet valve (30), by which the discharge channel (26) can be opened and closed, characterized in that e. the rotary outlet valve (30) is switchable with respect to the applicator piece (80; 86) by a rotation movement of the housing (20) about the main axis of extent (2).			
EP3315035B1	ATOMIZING UNIT	This atomization unit (111) is provided with a liquid holding member (12) that holds an aerosol source, a heating element (13) that atomizes the aerosol source held by the liquid holding member, and a cover member (15) that restricts the amount of the aerosol source supplied to the liquid holding member, wherein the liquid holding member has a shape that extends along a prescribed direction (A), at least a portion of the inner side surface of the liquid holding member in an orthogonal direction (B) which is orthogonal to the prescribed direction is in contact with or in close proximity to the heating element, and at least a portion of the outer side surface of the liquid holding member in the orthogonal direction is covered by the cover member.	1. An atomizing unit (111) comprising: a liquid holding member (12) configured to hold an aerosol source; a heating element (13) configured to atomize the aerosol source held by the liquid holding member (12); and a cover member (15) configured to restrict a supply amount of the aerosol source to the liquid holding member (12), wherein the liquid holding member (12) has a shape extending along a predetermined direction (A), at least a part of an inner side surface of the liquid holding member (12) in an orthogonal direction (B) perpendicular to the predetermined direction (A) contacts or comes close to the heating element (13), characterised in that at least a part of an outer side surface of the liquid holding member (12) in the orthogonal direction (B) is covered by the cover member (15), and wherein the cover member (15) brings the inner side surface of the liquid holding member (12) into contact with or close to the heating element (13) by pressing the outer side surface of the liquid holding member (12) inwardly in the orthogonal direction (B). | 7. The atomizing unit according (111) to claim 4, wherein the cover member (15) has a plurality of equally spaced openings, and a covering area that is an area of the outer side surface of the liquid holding member (12) covered by the cover member (15) is 60% or more of an area of the outer side surface of the liquid holding member (12).	Japan Tobacco Inc., Tokyo 105-8422, JP, 100151448	2019-12-25	2015-06-26
EP3301095B1	NOVEL PHOSPHODIESTERASE TYPE-5 INHIBITOR AND APPLICATION THEREOF	Disclosed are a compound represented by general formula (I) as a phosphodiesterase type-5 inhibitor or pharmaceutically acceptable salts thereof and uses thereof in treating and/or	1. A compound or a pharmaceutically acceptable salt thereof,	Chongqing Dikang Erle Pharma Co. Ltd., Shiqiaopu, Jiulongpo District, Chongqing	2019-12-04	2015-06-26

Document	Title	Abstract	Claims	Patentee	Granted	Priority
		preventing diseases or conditions related to the phosphodiesterase type-5 in mammals,		400717, CN, 101833139		
EP3292115B1	CRYSTALLINE FORM OF FUSED PYRIDINE DERIVATIVE'S MALEATE AND USES THEREOF	The compound of Formula I, the crystalline form thereof, and methods of preparing and using them are provided.	1. A Crystalline Form of the Compound of Formula I, wherein its X-ray powder diffraction pattern has characteristic peaks at diffraction angles 2θ of 8.6°±0.2°, 16.5°±0.2° and 26.5°±0.2°, wherein the diffraction peak positions are calibrated by single crystal silicon which has a 2-theta (2θ) value of 28.443 degrees and wherein a Copper (Cu) target X-ray tube K-Alpha radiation was used as the source.	Betta Pharmaceuticals Co. Ltd., Yuhang, Hangzhou, Zhejiang 311100, CN, 101431487	2019-12-25	2015-07-20
EP3344316B1	DRY POWDER INHALER	The present invention relates to an inhaler device for delivering a dose of medicament in dry powder form from a container to a patient in need thereof. The inhaler comprises first and second airflow paths (80, 85) which are arranged such that during inhalation, a capsule (40) having a longitudinal axis and first and second end sections (90, 95) delimiting the capsule on opposing ends located in a capsule chamber (30) performs an oscillating movement in the capsule chamber parallel to its longitudinal axis between first and second sidewall portions (60, 65) of the capsule chamber.	1. An inhaler device comprising an inhaler housing (10) comprising one air inlet duct (20) ; an elongated capsule chamber (30) adapted for receiving a capsule (40) which contains a dose of medicament in dry powder form, and wherein the capsule chamber (30) has a longitudinal axis and is defined by a wall arrangement including a first and a second supporting wall portion (50, 55) opposing each other in a direction perpendicular to the longitudinal axis and first and second sidewall portions (60, 65) opposing each other in the direction of the longitudinal axis; a mouthpiece portion (70) through which the medicament in dry powder form is dispensable; and at least first and second airflow paths (80, 85) which extend between the air inlet duct (20), the capsule chamber (30) and the mouthpiece portion (70) to enable an inhalation airflow formed upon inhalation to flow through the air inlet duct (20) via the capsule chamber (30) and the mouthpiece portion (70) such that the dose of medicament is entrained in air and dispensed through the mouthpiece portion (70); wherein the first and second airflow paths (80, 85) are arranged such that during inhalation, a capsule (40) having a longitudinal axis and first and second end sections (90, 95) delimiting the capsule on opposing ends located in the capsule chamber (30) performs an oscillating movement in the capsule chamber (30) parallel to the longitudinal axis of the capsule chamber (30) between the first and the second sidewall portions (60, 65) when an airflow is initiated through the at least first and the second airflow paths (80, 85) in a direction from the air inlet duct (20) towards the mouthpiece portion (70), wherein the first airflow path (80) comprises at least a first intermediate duct (100) extending from the air inlet duct (20) to a first capsule chamber inlet (110) adjacent to the first sidewall portion (60), and at least a first outlet duct (120) extending from a first capsule chamber outlet (130) adjacent to the first sidewall portion (60) to the mouthpiece portion (70); and the second airflow path (85) comprises at least a second outlet duct (125) extending from a second capsule chamber outlet (135) adjacent to the second sidewall portion (65) to the mouthpiece portion (70); characterised in that the second airflow path (85) further comprises at least a second intermediate duct (105) extending from the air inlet duct (20) to a second capsule chamber inlet (115) adjacent to the second sidewall	Presspart Manufacturing Ltd., Blackburn, Lancashire BB1 5RF, GB, 101736562	2019-12-04	2015-10-23

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			portion (65), and in that the air inlet duct (20) discontinuously expands prior to its connection with the at least first and second airflow paths (80, 85) to cause an inhalation airflow formed upon inhalation to form an air jet which is attracted to flow either along a first intermediate sidewall portion (240) of the first intermediate duct (100) or alternatively to flow along a second intermediate sidewall portion (225) of the second intermediate duct (105) such that it either streams into the first or second airflow path (80, 85).			
EP3383459B1	INHALER HOUSING	The invention relates to the type of housing (107 310, 410, 510) used to carry an inhaler canister (12) for delivery of an active agent. The inhaler housing has a body (16, 316, 416, 516) for receiving the inhaler canister and a mouthpiece (14, 314, 414, 514) which is to be placed in the mouth of a user and through which a dose from the inhaler canister is to be delivered. In one embodiment the body and the mouthpiece are rotatably coupled to one another so that by turning the mouthpiece relative to the body the inhaler housing is reversibly converted between a carry configuration in which the mouthpiece and body are mutually aligned, and a use configuration in which the mouthpiece projects laterally from the body. The inhaler housing has a member (26) which is variably elastically deformed as the mouthpiece is turned relative to the body, investing the member with elastic potential energy which varies with the mouthpiece's rotational position with respect to the body and which has at least two minima corresponding to the carry configuration and the use configuration respectively, so that rotation of the mouthpiece relative to the body tends to stop when either of these configurations is reached.	1. An inhaler housing (10) having a body (16) for receiving an inhaler canister (12) and a mouthpiece (14) which is to be placed in the mouth of a user and through which a dose of an active agent from the inhaler canister (12) is to be delivered, wherein the body (16) and the mouthpiece (14) are rotatably coupled to one another so that by turning the mouthpiece (14) relative to the body (16) the inhaler housing (10) is reversibly converted between a carry configuration in which the mouthpiece (14) and body (16) are mutually aligned, and a use configuration in which the mouthpiece (14) projects laterally from the body (16), characterised in that the inhaler housing (10) having a member (26) which is variably elastically deformed as the mouthpiece (14) is turned relative to the body (16), investing the member (26) with elastic potential energy which varies with the mouthpiece's rotational position with respect to the body (16) and which has at least two minima corresponding to the carry configuration and the use configuration respectively, so that rotation of the mouthpiece (14) relative to the body tends to stop when either of these configurations is reached.	Mirror 5 Ltd, West Kirby CH48 5DW, GB, 101674797	2019-12-04	2015-12-02
EP3175842B1	DRY POWDER MIXING PROCESS	The present invention relates to a simple, robust and effective process for preparing a dry powder inhalation formulation containing at least one drug, preferably a highly active drug, more preferably Tiotropium bromide or Tiotropium bromide monohydrate, and a lactose carrier. The process is characterized in that a three-layered composition containing a drug layer in between layers of the lactose carrier is mixed and the obtained preblend is mixed with additional lactose carrier. The process combines a simple manufacturing procedure with an excellent content uniformity obtained over a wide range of mixing parameters.	1. Process for preparing a dry powder inhalation formulation containing tiotropium bromide and a lactose carrier, comprising the steps: a) splitting the lactose carrier into a first, a second and a third portion, b) mixing the first and the second portion of the lactose carrier and the drug by i) placing the first portion of the lactose carrier in a mixer to obtain a first layer, ii) placing the entire drug on top of the first lactose layer to obtain a second layer, iii) placing the second portion of the lactose carrier on top of the second layer to obtain a third layer, iv) blending the three-layered composition obtained in step (iii) to obtain a preblend, v) optionally sifting the preblend, c) mixing the preblend obtained in step (b) and the third portion of the lactose carrier to obtain the dry powder inhalation formulation, and d) optionally sifting the dry powder inhalation formulation.	Alfred E. Tiefenbacher (GmbH & Co. KG), 22767 Hamburg, DE, 100239209 | Nanopharm Ltd., Bath, Somerset BA1 2PA, GB, 101564156	2019-12-11	2015-12-03
EP3327015B1	BREAST CANCER THERAPEUTIC AGENT CONTAINING 5'-HYDROXY-5-NITRO-INDIRUBIN- 3'-OXIME AS ACTIVE INGREDIENT	A breast cancer therapeutic agent containing 5'-hydroxy-5-nitro-indirubin-3'-oxime as active ingredient has been disclosed. Further, a breast cancer therapeutic agent containing 5'-hydroxy-5-nitro-indirubin-3'-oxime as cyclin-dependent kinase (CDK) inhibitor, wherein said breast cancer is triple negative	1. A therapeutic agent containing 5'-hydroxy-5-nitro-indirubin-3'-oxime as cyclin-dependent kinase (CDK) inhibitor as active ingredient for use in the treatment of a triple negative breast cancer (TNBC) and/or estrogen receptor (ER) positive breast cancer.	Anygen Co. Ltd., Gwangju 61008, KR, 101844122	2019-12-25	2016-11-25

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		breast cancer (TNBC) and/or an estrogen receptor (ER) positive breast cancer including the tamoxifen-resistant estrogen receptor (ER) positive breast cancer has been disclosed.				
EP3424499B1	A PHARMACEUTICAL COMPOSITION FOR NEUROPATHIC PAIN	The present application describes a pharmaceutical composition/formulation for use in controlling neuropathic pain. The composition/formulation includes Pal-mitoylethanolamide (PEA) and one or more natural ingredients. The application also provides various formulations and methods of preparing the same.	1. A pharmaceutical composition comprising: Palmitoylethanolamide (PEA) and one or more naturally occurring Fatty Acid Amide Hydrolase (FAAH) Inhibitor wherein the naturally occurring FAAH inhibitor is selected from Myricetin, Isorhamnetin, Kaempferol, Pristimerin, Biochanin A, Genistein, Daidzein or a combination thereof.	Frimline Private Limited, 380015 Ahmedabad Gujarat, IN, 101731390	2019-12-25	2017-07-05