

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: TURTLE BEAR HOLDINGS, LLC

Confirmation No.:

Serial No.: 18/115,966

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Examiner:

Entitled: TRYPTAMINE COMPOSITIONS FOR ENHANCING NEURITE OUTGROWTH

THIRD-PARTY PRE-ISSUANCE SUBMISSION

Examiner:

The following documents, which are also identified in the Form PTO/SB/429 filed herewith, are submitted for your consideration as being of potential relevance to the examination of the present application

1. U.S. Pat. App. Pub. No. 2018/0021405 “Nutritional Approach to the Control of Anemia, Diabetes, and Other Diseases or Conditions and Prevention of Associated Comorbid States with the Use of Ergothioneine” (Published January 25, 2018)
2. LENZ (2017) “Identification of ω -N-Methyl-4-hydroxytryptamine (Norpsilocin) as a Psilocybe Natural Product” Journal of Natural Products. 80:10(2835-2838)
3. JULSON, “16 Foods That Are High in Niacin (Vitamin B3)” October 5, 2018; retrieved from WaybackMachine Internet Archive, Healthline.
<https://web.archive.org/web/20190507113644/https://www.healthline.com/nutrition/foods-high-in-niacin>, retrieved May 07, 2019
4. U.S. Pat. App. Pub. No. 2017/0035820 “Integrative Fungal Solutions For Protecting Bees And Overcoming Colony Collapse Disorder (CCD)” (Published February 09, 2017)
5. WILCOX (2014) “Psilocybin and Obsessive Compulsive Disorder” Journal of Psychoactive Drugs. 46:5(393-395)
6. DRUGS.COM, “lovie... Taken for 1 to 6 months July 12, 2018” July 12, 2018; retrieved from Drugs.com comment. <https://www.drugs.com/comments/niacin/for-depression.html>, retrieved July 12, 2018
7. J, “My Cognition Improves Tremendously: Mushrooms & Amphetamines (Adderall XR)” August 11, 2018; retrieved from Erowid.
<https://erowid.org/experiences/exp.php?ID=111984>, retrieved August 11, 2018
8. SAUL, “Treating ADHD with Vitamin B-3 (Niacinamide)” October 30, 2013; retrieved from Orthomolecular.org. <http://orthomolecular.org/resources/omns/v09n23.shtml>, retrieved on October 30, 2013

9. GARCIA-ROMEU (2015) "Psilocybin-occasioned Mystical Experiences in the Treatment of Tobacco Addiction" *Current Drug Abuse Reviews*. 7:3(157-164)
10. PSOODONYM, "4-Ho-NMT" 2007; retrieved from [Bluelight.org](https://bluelight.org/xf/threads/4-ho-nmt.321417/) comment. <https://bluelight.org/xf/threads/4-ho-nmt.321417/>, retrieved June 18, 2007
11. U.S. Pat. App. Pub. No. 2019/0142851 "Compositions Comprising a Psilocybin Derivative and a Cannabinoid" (Published May 16, 2019)
12. LAKE, "Some Vitamins and Minerals May Reduce Alcohol Toxicity: Promising findings for certain B vitamins, vitamin C, magnesium and zinc." January 29, 2019; retrieved from *Psychology Today*. <https://www.psychologytoday.com/us/blog/integrative-mental-health-care/201901/some-vitamins-and-minerals-may-reduce-alcohol-toxicity>, retrieved January 29, 2019

Attached hereto is a claim chart providing a concise description of the relevance of each reference in the document list o the elements of the presently pending claims.

U.S.S.N. 18/115,966 Pending Claims	References
<p>1. A method of treating serotonin (5-hydroxytryptamine, 5-HT) receptor disorders, neurological diseases, or augmenting neurogeneration in a subject in need thereof, the method comprising administering to the subject a pharmaceutical composition comprising: 0.5-4 mg of norpsilocin or a salt or combinations thereof; and 0.5-4 mg of niacin.</p>	<p>2. LENZ (2017) "Identification of ω-N-Methyl-4-hydroxytryptamine (Norpsilocin) as a Psilocybe Natural Product" Journal of Natural Products. 80:10(2835-2838)</p> <p>From abstract: "We report the identification of ω-N-methyl-4-hydroxytryptamine (norpsilocin, 1) from the carpophores of the hallucinogenic mushroom Psilocybe cubensis."</p> <p>4. U.S. Pat. App. Pub. No. 2017/0035820 "Integrative Fungal Solutions For Protecting Bees And Overcoming Colony Collapse Disorder (CCD)" (Published February 09, 2017)</p> <p>From [0292]: "Psilocybin and psilocybin-producing fungi, including but not limited to species of Psilocybe, Panaeolus, Gymnopilus, Pluteus and Conocybe such as Psilocybe azureus, Psilocybe cyanescens, Psilocybe allenii, Psilocybe cyanofibrillosa, Psilocybe cubensis, Psilocybe ovoideocystidiata, Psilocybe subaeruginosa, Copelandia Panaeoli (Copelandia cyanescens, Copelandia tropicalis, Copelandia bispora), Pluteus salicinus, Gymnopilus luteofolius, Gymnopilus spectabilis, Conocybe cyanopus and Conocybe smithii can trigger neurogenesis. (See Catlow et al., Effects of psilocybin on hippocampal neurogenesis and extinction of trace fear conditioning, Exp Brain Res (2013) 228:481-491 DOI 10.1007/s00221-013-3579-0). Individually or in combination, mixtures of extracts of psilocybin mushroom and Hericium mushroom fruitbodies, or more preferably their mycelial extracts, could help repair neurons damaged by toxins, cholinergic pesticides, fungicides, herbicides, glyphosates, oxidation, old age, or other sources of neuro-damaging toxins. The net effect of ingesting these mixtures of nerve regenerating Hericium and psilocybin species would improve the neurological health of bees through neurogenesis and re-myelination, and indeed of animals, including humans. Another, improved form of "smart mycohoney" might incorporate these elements for the benefits of bees and people, improving cognition, preventing or repairing neuropathies presenting themselves as diseases to humans within scope of the definitions for Alzheimer's, Parkinson's, Parkisonisms, MS (multiple sclerosis), or as yet uncategorized forms of neurological impairment. Indeed such combinations could increase intelligence, sensory abilities, memory, reflexes, reaction times, and problem solving abilities.</p>

Moreover, to the above mixture, vitamins can be added for further enhancement of beneficial properties. **The addition of vitamin D—either from UV exposed fungal cells or from external sources, with or without Vitamin B (niacin, nicotinic acid, or related congener), enhance neurogenesis and are preferred ingredients.** As such a smart nutraceutical in many forms are possible, including a ‘smart mycohoney’ or ‘smart mycosyrup’ both of which are anticipated to be within the scope of this invention. Such a mycosyrup can be reduced into solid or powdered form added to any food consumed by animals, or by any means known to pharmaceutical science.”

10. PSOODONYM, “4-Ho-NMT” 2007; retrieved from Bluelight.org comment. <https://bluelight.org/xf/threads/4-ho-nmt.321417/>, retrieved June 18, 2007

From **Bluelight webpage comment #3: “4-ho-NMT may be much more influential in combination with psilocin than it is alone.** Manic energy and ideomotor effects were pronounced when I combined the two. Over the weekend I did psilocin alone (4mg IM, 6mg oral, 4mg insufflated over an hour) and found it to be much smoother and relaxing than the first time, even though I expected that the 4-ho-NMT had little to no influence on it. After the oral dose plateaued **I IM'd 5mg of 4-ho-NMT** to see what influence it would have, if any. After 10 minutes nothing had changed and I started to think my first experience was a fluke. The whole time I was waiting for the 4-ho-NMT to come on I was sitting down. Upon getting up and walking I began to feel compulsions to contort my arms, legs, and neck in strange jerking or rolling motions just like last time. **The manic energy and ideomotor movement was not as pronounced as it was with 10mg oral and 5mgs insufflated 4-ho-NMT with just 8mg psilocin insufflated (at once, over an hour after the 4-ho-NMT), suggesting that the 4-ho-NMT requires psilocin to produce the effect, but is itself responsible for the brunt of it.** (I'll also mention that during the first experience there was a reflexive swallowing effect whose speed and irresistibility was directly proportional to the coldness of the liquid I drank.) This continued for the next two or so hours, but would stop when I sat back down to watch a DVD. I don't think it was a placebo effect because the spastic movements (which were accompanied by an extremely giddy sensation) would occur even when I was immersed in thought with no expectation of the movements occurring, so long as I was already in motion. I'm interested to know if anyone else tried the combo and each alone, and noticed

similar effects. **I've only done this twice and it's possible that the second time the idiomotor effects of the psilocin were simply delayed and just happened to coincide with the injection of 4-ho-NMT, or that the phenomenon is entirely idiosyncratic.**"

3. JULSON, "16 Foods That Are High in Niacin (Vitamin B3)" October 5, 2018; retrieved from WaybackMachine Internet Archive, Healthline.
<https://web.archive.org/web/20190507113644/https://www.healthline.com/nutrition/foods-high-in-niacin>, retrieved May 07, 2019

From webpage: **"Mushrooms are one of the best vegetable sources of niacin, providing 2.5 mg per cup (70 grams) — that's 15% and 18% of the RDA for men and women, respectively (40)."**

1. U.S. Pat. App. Pub. No. 2018/0021405 "Nutritional Approach to the Control of Anemia, Diabetes, and Other Diseases or Conditions and Prevention of Associated Comorbid States with the Use of Ergothioneine" (Published January 25, 2018)

From [0059]: **"Any type of mushroom, mushroom part, component, fungi or even used substrate for cultivating mushrooms, with ergosterol present may be used.** This includes all filamentous fungi where ergosterol has been shown to be present and includes the use of tissues such as the mycelia, spores or vegetative cells. This includes, but is not limited to, for example, Coprinus, Agrocybe, Hypholoma, Hypsizyugus, Pholiota, Pleurotus, Stropharia, Ganoderma, Grifola, Trametes, Hericium, Tramella, **Psilocybe**, Agaricus, including for example Agaricus bisporus (e.g. white button mushrooms), Phytophthora achlya, Flammulina, Melanoleuca, Agrocybe, Morchella, Mastigomycotina, Auricularia, Gymnopilus, Mycena, Boletus, Gyromitra, Pholiota, Calvatia, Kuegneromyces, Phylacteria, Cantharellus, Lactarius, Pleurotus, Clitocybe, Lentinula (Lentinus), Stropharia, Coprinus, Lepiota, Tuber, Tremella, Drosophia, Leucocoprinus, Tricholoma, Dryphila, Marasmius, and Volvariella."

From [0008]: "These and other valuable health benefits of ET-enhanced mushrooms are disclosed in U.S. patent application Ser. Nos. 12/887,276 and 12/386,810, titled "Vitamin D2 Enriched Mushrooms and Fungi for Treatment of Oxidative

Stress, Alzheimer's Disease and Associated Disease States,” and “Methods and Compositions for Improving the Nutritional Content of Mushrooms and Fungi,” respectively, which are herein incorporated by reference in its entirety. **Mushrooms are a valuable health food**—low in calories, high in vegetable proteins, chitin, iron, zinc, fiber, essential amino acids, vitamins and minerals. **They are also an excellent source of organic selenium compounds, riboflavin, pantothenic acid, copper, niacin, potassium and phosphorous.** Selenium is needed for the proper function of the antioxidant system, which works to reduce the levels of damaging free radicals in the body. Selenium is a necessary cofactor of one of the body's most important internally produced antioxidants, glutathione peroxidase, and also works with vitamin E in numerous vital antioxidant systems throughout the body. Mushrooms are also a primary source of natural Vitamin D, in the form of D2, which is naturally present in very few foods. Most other natural food sources of Vitamin D, in the form Vitamin D3, are of animal, poultry or seafood origin.”

From [0051]: “The term “**treating**” or “**treatment**” as used herein, refers to any indicia of success in the **prevention or amelioration of an injury, pathology or condition**, including any objective or subjective parameter such as abatement; remission; diminishing of symptoms or making the injury, pathology, or condition more tolerable to the patient; **slowing in the rate of degeneration or decline**; making the final point of degeneration less debilitating; or **improving a subject's physical or mental well-being**. The treatment or amelioration of symptoms can be based on objective or subjective parameters; including the results of a physical examination, **neurological examination, and/or psychiatric evaluations.**”

From [0118]: “Applicants demonstrated that the combination of antioxidants, including phytonutrient turmeric and Ergothioneine, along with Vitamin D enriched mushrooms increase longevity in Drosophila kept under nutritionally deficient diet. These results represent a novel use of the compositions of the invention for **treating a variety of disease states associated with** inflammation and oxidative stress. According to the invention, Applicants have shown that the compositions increase survival and decrease biologic death in conditions associated with oxidative stress, which include disease states such as Alzheimer's disease and other associated diseases including those involving chronic markers of inflammation, such as **chronic depression**, traumatic brain

	<p>injury and PTSD. Thus the supplements, food compositions and pharmaceutical compositions according to the invention, employing the Vitamin D enriched mushrooms, turmeric and Ergothioneine have surprising benefits for treatment of such disease states.”</p> <p>From [0083]: “The therapeutically effective dosage of any specific compound will vary somewhat from compound to compound, patient to patient, and will depend upon the condition of the patient and the route of delivery. As a general proposition, a dosage from about 0.01 to about 50 mg/kg will have therapeutic efficacy, with still higher dosages potentially being employed for oral and/or aerosol administration. Toxicity concerns at the higher level may restrict intravenous dosages to a lower level such as up to about 10 mg/kg, all weights being calculated based upon the weight or volume of the enriched mushrooms, fractions thereof or compounds thereof of the present invention, including the cases where a salt is employed. In an aspect of the invention a pharmaceutical composition provided in 500 mg capsules may be dosed to a patient from 1 to 4 capsules a day, preferably 2 to 4 capsules a day.”</p>
<p>2. The method of claim 1, wherein the composition further comprises an extract of or isolate from <i>Hericiium erinaceus</i>.</p>	<p>4. U.S. Pat. App. Pub. No. 2017/0035820 “Integrative Fungal Solutions For Protecting Bees And Overcoming Colony Collapse Disorder (CCD)” (Published February 09, 2017)</p> <p>From [0292]: “Psilocybin and psilocybin-producing fungi, including but not limited to species of Psilocybe, Panaeolus, Gymnopilus, Pluteus and Conocybe such as Psilocybe azurescens, Psilocybe cyanescens, Psilocybe allenii, Psilocybe cyanofibrillosa, Psilocybe cubensis, Psilocybe ovoideocystidiata, Psilocybe subaeruginosa, Copelandian Panaeoli (Copelandia cyanescens, Copelandia tropicalis, Copelandia bispora), Pluteus salicinus, Gymnopilus luteofolius, Gymnopilus spectabilis, Conocybe cyanopus and Conocybe smithii can trigger neurogenesis. (See Catlow et al., Effects of psilocybin on hippocampal neurogenesis and extinction of trace fear conditioning, Exp Brain Res (2013) 228:481-491 DOI 10.1007/s00221-013-3579-0). Individually or in combination, mixtures of extracts of psilocybin mushroom and Hericiium mushroom fruitbodies, or more preferably their mycelial extracts, could help repair neurons damaged by toxins, cholinergic pesticides, fungicides, herbicides, glyphosates, oxidation, old age, or other sources of neuro-damaging toxins. The net effect of ingesting these mixtures of nerve</p>

regenerating *Herichium* and psilocybin species would improve the neurological health of bees through neurogenesis and re-myelination, and indeed of animals, including humans. **Another, improved form of “smart mycohoney” might incorporate these elements for the benefits of bees and people, improving cognition, preventing or repairing neuropathies presenting themselves as diseases to humans within scope of the definitions for Alzheimer's, Parkinson's, Parkinsonisms, MS (multiple sclerosis), or as yet uncategorized forms of neurological impairment.** Indeed such combinations could increase intelligence, sensory abilities, memory, reflexes, reaction times, and problem solving abilities. Moreover, to the above mixture, vitamins can be added for further enhancement of beneficial properties. **The addition of vitamin D—either from UV exposed fungal cells or from external sources, with or without Vitamin B (niacin, nicotinic acid, or related congener), enhance neurogenesis and are preferred ingredients.** As such a smart nutraceutical in many forms are possible, including a ‘smart mycohoney’ or ‘smart mycosyrup’ both of which are anticipated to be within the scope of this invention. Such a mycosyrup can be reduced into solid or powdered form added to any food consumed by animals, or by any means known to pharmaceutical science.”

1. U.S. Pat. App. Pub. No. 2018/0021405 “Nutritional Approach to the Control of Anemia, Diabetes, and Other Diseases or Conditions and Prevention of Associated Comorbid States with the Use of Ergothioneine” (Published January 25, 2018)

From [0059]: “Any type of mushroom, mushroom part, component, fungi or even used substrate for cultivating mushrooms, with ergosterol present may be used. This includes all filamentous fungi where ergosterol has been shown to be present and includes the use of tissues such as the mycelia, spores or vegetative cells. This includes, but is not limited to, for example, *Coprinus*, *Agrocybe*, *Hypholoma*, *Hypsizygus*, *Pholiota*, *Pleurotus*, *Stropharia*, *Ganoderma*, *Grifola*, *Trametes*, ***Herichium***, *Tramella*, ***Psilocybe***, *Agaricus*, including for example *Agaricus bisporus* (e.g. white button mushrooms), *Phytophthora achlya*, *Flammulina*, *Melanoleuca*, *Agrocybe*, *Morchella*, *Mastigomycotina*, *Auricularia*, *Gymnopilus*, *Mycena*, *Boletus*, *Gyromitra*, *Pholiota*, *Calvatia*, *Kuegneromyces*, *Phylacteria*, *Cantharellus*, *Lactarius*, *Pleurotus*, *Clitocybe*, *Lentinula* (*Lentinus*), *Stropharia*, *Coprinus*, *Lepiota*, *Tuber*,

Tremella, Drosophila, Leucocoprinus, Tricholoma, Dryphila, Marasmius, and Volvariella.”

From [0008]: “These and other valuable health benefits of ET-enhanced mushrooms are disclosed in U.S. patent application Ser. Nos. 12/887,276 and 12/386,810, titled “Vitamin D2 Enriched Mushrooms and Fungi for Treatment of Oxidative Stress, Alzheimer's Disease and Associated Disease States,” and “Methods and Compositions for Improving the Nutritional Content of Mushrooms and Fungi,” respectively, which are herein incorporated by reference in its entirety. **Mushrooms are a valuable health food**—low in calories, high in vegetable proteins, chitin, iron, zinc, fiber, essential amino acids, vitamins and minerals. **They are also an excellent source of organic selenium compounds, riboflavin, pantothenic acid, copper, niacin, potassium and phosphorous.** Selenium is needed for the proper function of the antioxidant system, which works to reduce the levels of damaging free radicals in the body. Selenium is a necessary cofactor of one of the body's most important internally produced antioxidants, glutathione peroxidase, and also works with vitamin E in numerous vital antioxidant systems throughout the body. Mushrooms are also a primary source of natural Vitamin D, in the form of D2, which is naturally present in very few foods. Most other natural food sources of Vitamin D, in the form Vitamin D3, are of animal, poultry or seafood origin.”

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From [0118]: “Applicants demonstrated that the combination of antioxidants, including phytonutrient turmeric and Ergothioneine, along with Vitamin D enriched mushrooms increase longevity in Drosophila kept under nutritionally deficient diet. These results represent a novel use of the compositions of the invention for **treating a variety of disease**

	<p>states associated with inflammation and oxidative stress. According to the invention, Applicants have shown that the compositions increase survival and decrease biologic death in conditions associated with oxidative stress, which include disease states such as Alzheimer's disease and other associated diseases including those involving chronic markers of inflammation, such as chronic depression, traumatic brain injury and PTSD. Thus the supplements, food compositions and pharmaceutical compositions according to the invention, employing the Vitamin D enriched mushrooms, turmeric and Ergothioneine have surprising benefits for treatment of such disease states.”</p>
<p>3. The method of claim 1, wherein the composition further comprises one or more cannabinoids in pure form or extracts or isolates from <i>Cannabis sativa</i>, <i>Cannabis sativa</i>, <i>Cannabis indica</i>, or <i>Cannabis ruderalis</i>.</p>	<p>11. U.S. Pat. App. Pub. No. 2019/0142851 “Compositions Comprising a Psilocybin Derivative and a Cannabinoid” (Published May 16, 2019)</p> <p>From [0002]: “This disclosure relates to psilocybin technology, which at the time of this disclosure is primarily concerned with mycology, mushroom cultivation, crude mushroom extracts, natural mushroom preparations, fruitbody extracts, mycelium preparations, and (in a few cases) the isolated compound psilocybin.”</p> <p>From claim 1: “A composition, comprising: a first purified psilocybin derivative; and a first purified cannabinoid.”</p> <p>From [0023]: “Disclosed herein are new compositions comprising a first purified psilocybin derivative and a serotonergic drug. In one embodiment, the compositions disclosed herein comprise a first purified psilocybin derivative and a serotonergic drug present in purposefully engineered and unnaturally occurring molar ratios.”</p> <p>From [0310]: “Some exemplary serotonergic drugs include the following molecules: 4-hydroxy-N-methyltryptamine (aka 3[2-(methylamino)ethyl]-1H-indol-4-ol), aeruginascin (aka [3-[2-(trimethylazaniumyl)ethyl]-1H-indol-4-yl] hydrogen phosphate), baeocystin (aka [3-[2-(methylamino)ethyl]-1H-indol-4-yl] dihydrogen phosphate), bufotenidine (aka 3-[2-(trimethylazaniumypethyl)-1H-indol-5-olate), bufotenin (aka 3-[2-(dimethylamino)ethyl]-1H-indol-5-ol), ethocybin (aka [3-[2-(diethylamino)ethyl]-1H-indol-4-yl] dihydrogen phosphate), norbaeocystin (aka [3-(2-aminoethyl)-1H-indol-4-yl] dihydrogen phosphate), norpsilocin, psilocin (aka 3-[2-(dimethylamino)ethyl]-1H-indol-4-ol), psilocybin (aka [3-[2-</p>

(dimethylamino)ethyl]-1H-indol-4-yl] dihydrogen phosphate),...etc”

From [0022]: “In one embodiment, the methods disclosed herein comprise administering the compositions disclosed herein. In one embodiment, the methods disclosed herein comprise **treating a psychological disorder, e.g., an anxiety disorder, a compulsive disorder, a depressive disorder, etc., with the compositions disclosed herein, e.g., a composition with one or more psilocybin derivatives, a composition with one or more cannabinoids, a composition with one or more terpenes, and/or a combination thereof.** In one embodiment, the methods disclosed herein comprise treating a psychological disorder, e.g., an anxiety disorder, a compulsive disorder, a depressive disorder, etc., with the compositions disclosed herein and a neurotransmitter activity modulator, e.g., a serotonergic drug, a dopaminergic drug, etc”

2. LENZ (2017) “Identification of ω -N-Methyl-4-hydroxytryptamine (Norpsilocin) as a Psilocybe Natural Product” Journal of Natural Products. 80:10(2835-2838)

From abstract: “We report the **identification of ω -N-methyl-4-hydroxytryptamine (norpsilocin, 1) from the carpophores of the hallucinogenic mushroom Psilocybe cubensis.**”

3. JULSON, “16 Foods That Are High in Niacin (Vitamin B3)” October 5, 2018; retrieved from WaybackMachine Internet Archive, Healthline.
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From webpage: “**Mushrooms are one of the best vegetable sources of niacin, providing 2.5 mg per cup (70 grams) — that’s 15% and 18% of the RDA for men and women, respectively (40).**”

4. U.S. Pat. App. Pub. No. 2017/0035820 “Integrative Fungal Solutions For Protecting Bees And Overcoming Colony Collapse Disorder (CCD)” (Published February 09, 2017)

From [0292]: “**Psilocybin and psilocybin-producing fungi, including but not limited to species of Psilocybe, Panaeolus,**

	<p>Gymnopilus, Pluteus and Conocybe such as Psilocybe azureus, Psilocybe cyanescens, Psilocybe allenii, Psilocybe cyanofibrillosa, Psilocybe cubensis, Psilocybe ovoideocystidiata, Psilocybe subaeruginosa, Copelandia Panaeoli (Copelandia cyanescens, Copelandia tropicalis, Copelandia bispora), Pluteus salicinus, Gymnopilus luteofolius, Gymnopilus spectabilis, Conocybe cyanopus and Conocybe smithii can trigger neurogenesis. (See Catlow et al., Effects of psilocybin on hippocampal neurogenesis and extinction of trace fear conditioning, Exp Brain Res (2013) 228:481-491 DOI 10.1007/s00221-013-3579-0). Individually or in combination, mixtures of extracts of psilocybin mushroom and Hericium mushroom fruitbodies, or more preferably their mycelial extracts, could help repair neurons damaged by toxins, cholinergic pesticides, fungicides, herbicides, glyphosates, oxidation, old age, or other sources of neuro-damaging toxins. The net effect of ingesting these mixtures of nerve regenerating Hericium and psilocybin species would improve the neurological health of bees through neurogenesis and re-myelination, and indeed of animals, including humans. Another, improved form of “smart mycohoney” might incorporate these elements for the benefits of bees and people, improving cognition, preventing or repairing neuropathies presenting themselves as diseases to humans within scope of the definitions for Alzheimer's, Parkinson's, Parkisonisms, MS (multiple sclerosis), or as yet uncategorized forms of neurological impairment. Indeed such combinations could increase intelligence, sensory abilities, memory, reflexes, reaction times, and problem solving abilities. Moreover, to the above mixture, vitamins can be added for further enhancement of beneficial properties. The addition of vitamin D—either from UV exposed fungal cells or from external sources, with or without Vitamin B (niacin, nicotinic acid, or related congener), enhance neurogenesis and are preferred ingredients. As such a smart nutraceutical in many forms are possible, including a ‘smart mycohoney’ or ‘smart mycosyrup’ both of which are anticipated to be within the scope of this invention. Such a mycosyrup can be reduced into solid or powdered form added to any food consumed by animals, or by any means known to pharmaceutical science.”</p>
<p>4. The method of claim 1, wherein the composition comprises one or more pharmaceutically acceptable excipients.</p>	<p>11. U.S. Pat. App. Pub. No. 2019/0142851 “Compositions Comprising a Psilocybin Derivative and a Cannabinoid” (Published May 16, 2019)</p>

From [0337]: “In one embodiment, the methods and compositions disclosed herein comprise an **excipient**.”

From [0002]: “This disclosure relates to psilocybin technology, which at the time of this disclosure is primarily concerned with **mycology, mushroom cultivation, crude mushroom extracts, natural mushroom preparations, fruitbody extracts, mycelium preparations, and (in a few cases) the isolated compound psilocybin**.”

From [0306]: “In one embodiment, a **serotonergic drug is an antidepressant**.”

From [0310]: “**Some exemplary serotonergic drugs include the following molecules:** 4-hydroxy-N-methyltryptamine (aka 3[2-(methylamino)ethyl]-1H-indol-4-ol), aeruginascin (aka [3-[2-(trimethylazaniumyl)ethyl]-1H-indol-4-yl] hydrogen phosphate), baecocystin (aka [3-[2-(methylamino)ethyl]-1H-indol-4-yl] dihydrogen phosphate), bufotenidine (aka 3-[2-(trimethylazaniumypethyl)-1H-indol-5-olate), bufotenin (aka 3-[2-(dimethylamino)ethyl]-1H-indol-5-ol), ethocybin (aka [3-[2-(diethylamino)ethyl]-1H-indol-4-yl] dihydrogen phosphate), norbaecocystin (aka [3-(2-aminoethyl)-1H-indol-4-yl] dihydrogen phosphate), **norpsilocin**, psilocin (aka 3-[2-(dimethylamino)ethyl]-1H-indol-4-ol), psilocybin (aka [3-[2-(dimethylamino)ethyl]-1H-indol-4-yl] dihydrogen phosphate),...etc”

From [0022]: “In one embodiment, the methods disclosed herein comprise administering the compositions disclosed herein. In one embodiment, the methods disclosed herein comprise **treating a psychological disorder, e.g., an anxiety disorder, a compulsive disorder, a depressive disorder, etc., with the compositions disclosed herein, e.g., a composition with one or more psilocybin derivatives, a composition with one or more cannabinoids**, a composition with one or more terpenes, and/or a combination thereof. In one embodiment, the methods disclosed herein comprise treating a psychological disorder, e.g., an anxiety disorder, a compulsive disorder, a depressive disorder, etc., with the compositions disclosed herein and a neurotransmitter activity modulator, e.g., a serotonergic drug, a dopaminergic drug, etc”

2. LENZ (2017) “Identification of ω -N-Methyl-4-hydroxytryptamine (Norpsilocin) as a Psilocybe Natural Product” *Journal of Natural Products*. 80:10(2835-2838)

From **abstract**: “We report the **identification of ω -N-methyl-4-hydroxytryptamine (norpsilocin, 1) from the carpophores of the hallucinogenic mushroom *Psilocybe cubensis*.**”

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From **webpage**: “**Mushrooms are one of the best vegetable sources of niacin, providing 2.5 mg per cup (70 grams) — that’s 15% and 18% of the RDA for men and women, respectively (40).**”

4. U.S. Pat. App. Pub. No. 2017/0035820 “Integrative Fungal Solutions For Protecting Bees And Overcoming Colony Collapse Disorder (CCD)” (Published February 09, 2017)

From **[0292]**: “**Psilocybin and psilocybin-producing fungi, including but not limited to species of *Psilocybe*, *Panaeolus*, *Gymnopilus*, *Pluteus* and *Conocybe* such as *Psilocybe azurescens*, *Psilocybe cyanescens*, *Psilocybe allenii*, *Psilocybe cyanofibrillosa*, *Psilocybe cubensis*, *Psilocybe ovoideocystidiata*, *Psilocybe subaeruginosa*, *Copelandia Panaeoli* (*Copelandia cyanescens*, *Copelandia tropicalis*, *Copelandia bispora*), *Pluteus salicinus*, *Gymnopilus luteofolius*, *Gymnopilus spectabilis*, *Conocybe cyanopus* and *Conocybe smithii* can trigger neurogenesis.** (See Catlow et al., Effects of psilocybin on hippocampal neurogenesis and extinction of trace fear conditioning, *Exp Brain Res* (2013) 228:481-491 DOI 10.1007/s00221-013-3579-0). Individually or in combination, mixtures of extracts of psilocybin mushroom and *Herichium* mushroom fruitbodies, or more preferably their mycelial extracts, could help repair neurons damaged by toxins, cholinergic pesticides, fungicides, herbicides, glyphosates, oxidation, old age, or other sources of neuro-damaging toxins. The net effect of ingesting these mixtures of nerve regenerating *Herichium* and **psilocybin species would improve the neurological health of bees through neurogenesis and re-**

	<p>myelination, and indeed of animals, including humans. Another, improved form of “smart mycohoney” might incorporate these elements for the benefits of bees and people, improving cognition, preventing or repairing neuropathies presenting themselves as diseases to humans within scope of the definitions for Alzheimer's, Parkinson's, Parkisonisms, MS (multiple sclerosis), or as yet uncategorized forms of neurological impairment. Indeed such combinations could increase intelligence, sensory abilities, memory, reflexes, reaction times, and problem solving abilities. Moreover, to the above mixture, vitamins can be added for further enhancement of beneficial properties. The addition of vitamin D—either from UV exposed fungal cells or from external sources, with or without Vitamin B (niacin, nicotinic acid, or related congener), enhance neurogenesis and are preferred ingredients. As such a smart nutraceutical in many forms are possible, including a ‘smart mycohoney’ or ‘smart mycosyrup’ both of which are anticipated to be within the scope of this invention. Such a mycosyrup can be reduced into solid or powdered form added to any food consumed by animals, or by any means known to pharmaceutical science.”</p>
<p>5. The method of claim 1, wherein the composition is a powder admixture, liquid, suspension, or emulsion.</p>	<p>4. U.S. Pat. App. Pub. No. 2017/0035820 “Integrative Fungal Solutions For Protecting Bees And Overcoming Colony Collapse Disorder (CCD)” (Published February 09, 2017)</p> <p>From [0216]: “Example 17</p> <p>Preferred liquid sprays include aqueous solutions, emulsifiable concentrates, emulsions such as oil-in-water and water-in-oil emulsions, dispersions, suspoemulsions, microemulsions, water-dispersible granules, wettable powders, microcapsules, etc. Wettable powders are formulations that are typically uniformly dispersible in water and also contain surface active agents (surfactants) such as wetting agents, emulsifiers and dispersing agents. Emulsifiable concentrates are prepared with organic solvents and/or one or more emulsifiers. Sticking agents such as oils, gelatin, gums, tackifiers and adhesives may be used to improve the adhesion of the spray. Humectants may also be used to decrease the rate of evaporation, including for example glycols having from 3 to 10 carbon atoms and glycerin and solutes such as salts or sugars in water.”</p> <p>From [0209]: “A liquid extract of the mycelium, or a precipitate from such extract, or a concentrated extract from which all or part of the solvent has been removed, containing</p>

these active principles can be added to the honey, to honey-enriched water, to sugar water or bee candy, to pollen, to pollen substitutes, or to other substances in other manners obvious to those skilled in the art of apiary science or commercial practices. The extract can be used as an adjunct to other remedies making them more effective. **The extracts can be in liquid, frozen, freeze dried, air dried, vacuum desiccated, refractance window dehydrated, sonically dehydrated, or partially purified forms**, in amounts sufficient to have the effect of attracting bees and/or benefiting bee health, honey production and pollinations. Moreover, **these derivative forms of extracts will be useful for human consumption** as they are palatable, high in antioxidants, and in other properties beneficial to people and other animals, including bees.”

From [0292]: **“Psilocybin and psilocybin-producing fungi, including but not limited to species of Psilocybe**, Panaeolus, Gymnopilus, Pluteus and Conocybe such as Psilocybe azurescens, Psilocybe cyanescens, Psilocybe allenii, Psilocybe cyanofibrillosa, Psilocybe cubensis, Psilocybe ovoideocystidiata, Psilocybe subaeruginosa, Copelandian Panaeoli (Copelandia cyanescens, Copelandia tropicalis, Copelandia bispora), Pluteus salicinus, Gymnopilus luteofolius, Gymnopilus spectabilis, Conocybe cyanopus and Conocybe smithii **can trigger neurogenesis**. (See Catlow et al., Effects of psilocybin on hippocampal neurogenesis and extinction of trace fear conditioning, Exp Brain Res (2013) 228:481-491 DOI 10.1007/s00221-013-3579-0). Individually or in combination, mixtures of extracts of psilocybin mushroom and Hericium mushroom fruitbodies, or more preferably their mycelial extracts, could help repair neurons damaged by toxins, cholinergic pesticides, fungicides, herbicides, glyphosates, oxidation, old age, or other sources of neuro-damaging toxins. The net effect of ingesting these mixtures of nerve regenerating Hericium and psilocybin species would improve the neurological health of bees through neurogenesis and re-myelination, and indeed of animals, including humans. **Another, improved form of “smart mycohoney” might incorporate these elements for the benefits of bees and people, improving cognition, preventing or repairing neuropathies presenting themselves as diseases to humans within scope of the definitions for Alzheimer's, Parkinson's, Parkisonisms, MS (multiple sclerosis), or as yet uncategorized forms of neurological impairment**. Indeed such combinations could increase intelligence, sensory abilities, memory, reflexes, reaction times, and problem solving abilities. Moreover, to the above mixture,

	<p>vitamins can be added for further enhancement of beneficial properties. The addition of vitamin D—either from UV exposed fungal cells or from external sources, with or without Vitamin B (niacin, nicotinic acid, or related congener), enhance neurogenesis and are preferred ingredients. As such a smart nutraceutical in many forms are possible, including a ‘smart mycohoney’ or ‘smart mycosyrup’ both of which are anticipated to be within the scope of this invention. Such a mycosyrup can be reduced into solid or powdered form added to any food consumed by animals, or by any means known to pharmaceutical science.”</p> <p>From [0150]: “Additional pharmaceutical excipients useful for the compositions as described herein include, for example, the following: ... Carbon dioxide sorbents (barium hydroxide lime, soda lime); Stiffening agents (hydrogenated castor oil, cetostearyl alcohol, cetyl alcohol, cetyl esters wax, hard fat, paraffin, polyethylene excipient, stearyl alcohol, emulsifying wax, white wax, yellow wax); Suspending and/or viscosity-increasing agents (acacia, agar, alginic acid, aluminum monostearate, bentonite, purified bentonite, magma bentonite, carbomer, carboxymethylcellulose calcium, carboxymethylcellulose sodium, carboxymethylcellulose sodium 12, carrageenan, microcrystalline and carboxymethylcellulose sodium cellulose, dextrin, gelatin, guar gum, hydroxyethyl cellulose, hydroxypropyl cellulose, hydroxypropyl methylcellulose, magnesium aluminum silicate, methylcellulose, pectin, polyethylene oxide, polyvinyl alcohol, povidone, alginate, silicon dioxide, colloidal silicon dioxide, sodium alginate, tragacanth, xanthan gum);...etc”</p>
<p>6. The method of claim 1, wherein the serotonin (5-hydroxytryptamine, 5-HT) receptor disorder comprises depression, anxiety, major depressive disorder, treatment resistant depression, persistent depression, manic depression, bipolar disorder, depressive psychosis, perinatal depression, premenstrual dysphoric disorder, seasonal depressions,</p>	<p>1. U.S. Pat. App. Pub. No. 2018/0021405 “Nutritional Approach to the Control of Anemia, Diabetes, and Other Diseases or Conditions and Prevention of Associated Comorbid States with the Use of Ergothioneine” (Published January 25, 2018)</p> <p>From [0059]: “Any type of mushroom, mushroom part, component, fungi or even used substrate for cultivating mushrooms, with ergosterol present may be used. This includes all filamentous fungi where ergosterol has been shown to be present and includes the use of tissues such as the mycelia, spores or vegetative cells. This includes, but is not limited to, for example, Coprinus, Agrocybe, Hypholoma, Hypsizygus, Pholiota, Pleurotus, Stropharia, Ganoderma, Grifola, Trametes, Hericium, Tramella, Psilocybe, Agaricus, including for example Agaricus bisporus (e.g. white button mushrooms), Phytophthora</p>

<p>situational depression, panic disorder, obsessive compulsive disorder, post-traumatic stress disorder, attention deficit/hyperactivity disorder, substance abuse disorders or combinations thereof.</p>	<p>achlya, Flammulina, Melanoleuca, Agrocybe, Morchella, Mastigomycotina, Auricularia, Gymnopilus, Mycena, Boletus, Gyromitra, Pholiota, Calvatia, Kuegneromyces, Phylacteria, Cantharellus, Lactarius, Pleurotus, Clitocybe, Lentinula (Lentinus), Stropharia, Coprinus, Lepiota, Tuber, Tremella, Drosophia, Leucocoprinus, Tricholoma, Dryphila, Marasmius, and Volvariella.”</p> <p>From [0008]: “These and other valuable health benefits of ET-enhanced mushrooms are disclosed in U.S. patent application Ser. Nos. 12/887,276 and 12/386,810, titled “Vitamin D2 Enriched Mushrooms and Fungi for Treatment of Oxidative Stress, Alzheimer's Disease and Associated Disease States,” and “Methods and Compositions for Improving the Nutritional Content of Mushrooms and Fungi,” respectively, which are herein incorporated by reference in its entirety. Mushrooms are a valuable health food—low in calories, high in vegetable proteins, chitin, iron, zinc, fiber, essential amino acids, vitamins and minerals. They are also an excellent source of organic selenium compounds, riboflavin, pantothenic acid, copper, niacin, potassium and phosphorous. Selenium is needed for the proper function of the antioxidant system, which works to reduce the levels of damaging free radicals in the body. Selenium is a necessary cofactor of one of the body's most important internally produced antioxidants, glutathione peroxidase, and also works with vitamin E in numerous vital antioxidant systems throughout the body. Mushrooms are also a primary source of natural Vitamin D, in the form of D2, which is naturally present in very few foods. Most other natural food sources of Vitamin D, in the form Vitamin D3, are of animal, poultry or seafood origin.”</p> <p>From [0051]: “The term “treating” or “treatment” as used herein, refers to any indicia of success in the prevention or amelioration of an injury, pathology or condition, including any objective or subjective parameter such as abatement; remission; diminishing of symptoms or making the injury, pathology, or condition more tolerable to the patient; slowing in the rate of degeneration or decline; making the final point of degeneration less debilitating; or improving a subject's physical or mental well-being. The treatment or amelioration of symptoms can be based on objective or subjective parameters; including the results of a physical examination, neurological examination, and/or psychiatric evaluations.”</p>
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From [0118]: “Applicants demonstrated that the combination of antioxidants, including phytonutrient turmeric and Ergothioneine, along with Vitamin D enriched mushrooms increase longevity in Drosophila kept under nutritionally deficient diet. These results represent a novel use of the compositions of the invention for **treating a variety of disease states associated with inflammation and oxidative stress**. According to the invention, Applicants have shown that the compositions increase survival and decrease biologic death in conditions associated with oxidative stress, which include disease states such as Alzheimer's disease and other associated diseases including those involving chronic markers of inflammation, such as **chronic depression**, traumatic brain injury and **PTSD**. Thus the supplements, food compositions and pharmaceutical compositions according to the invention, employing the Vitamin D enriched mushrooms, turmeric and Ergothioneine have surprising benefits for treatment of such disease states.”

5. WILCOX (2014) “Psilocybin and Obsessive Compulsive Disorder” Journal of Psychoactive Drugs. 46:5(393-395)

From page 394: “...In desperation, he looked for herbal remedies and found no relief until a friend gave him “**magic mushrooms**” he had grown at home from a spore sample, labeled as “**psilocybin cubensis**.” The patient reported that he consumed three of these mushrooms in his apartment with a friend watching over him. The subject found the immediate experience of mushrooms to be unpleasant and anxiety-provoking; **however, the next day, his intrusive thoughts were significantly reduced**. The subject denied actual hallucinations or strong psychedelic effects, but did report a feel of disassociation for four hours post-ingestion. **He related that the next day his intrusive thoughts were significantly reduced. Several months later, when he appeared for an appointment at the clinic, the patient reported that he had found ongoing relief from his anxiety, intrusive thoughts, and rituals. This individual reported that each time he ingested approximately two grams of psilocybin mushrooms, he experienced about three weeks of relief from his intrusive thoughts and anxiety. The patient said that he did this about every three weeks to keep symptoms away...etc”**

6. DRUGS.COM, "lovie... Taken for 1 to 6 months July 12, 2018" July 12, 2018; retrieved from Drugs.com comment. <https://www.drugs.com/comments/niacin/for-depression.html>, retrieved July 12, 2018

From **webpage**: "lovie...: Taken for 1 to 6 months· July 12, 2018

"I can't recommend this vitamin enough! **For the last couple of years my mind was plagued with lots of intrusive thoughts (OCD)**. It started with one thing and from then the cycle went on and on and on. Each time I got very anxious and later on even to the point that I got more and more depressed. My doctor recommended to take an SSRI, but somehow I didn't like that. So I've looked up for natural supplements and finally read more about **Niacin**. **So I've ordered it online and it works!** I'm so happy!! I also sleep way much better than since a long time and **the intrusive thoughts have been reduced**. Sometimes they are there, but that constant feeling of sadness and regret is gone! Everyone who has mental health issues should try this! **I've started with 100 gram (I've been using Solgar's Niacin) and I've been upgrading the dosage each time (currently I take 500 on a daily basis).**"

7. J, "My Cognition Improves Tremendously: Mushrooms & Amphetamines (Adderall XR)" August 11, 2018; retrieved from Erowid. <https://erowid.org/experiences/exp.php?ID=111984>, retrieved August 11, 2018

From **website**: "Boring Story, Psilocybin mushroom/Adderall XR

My friend and I split a **1/8 of Psilocybin mushrooms**, not knowing that it wasn't enough to get us high. After a couple hours, I went home, feeling completely sober. I was about to go to bed when I experienced a pleasant sensation of profound WAKEFULNESS. I cleaned my room, which was in a terrible state, and I experienced for the first time in recent memory being 'done' with a task 'before I knew it.' My room became orderly - as if an intelligence and benign presence had manifested there.

This may not seem to be a big deal to many but I have the Inattentive subtype of ADHD and was diagnosed with Major Depressive Disorder four years ago. This means that for the most part, I experience life as kind of a half-person, slow to

complete tasks and difficult to motivate. **On even a sub-optimal dose of mushrooms, however, my cognition improves tremendously.** I really love who I am on Mushrooms. I really love who I am on Mushrooms. I feel like I'm the person I was 'meant' to be - positive, sharp and solution-oriented.”

8. SAUL, “Treating ADHD with Vitamin B-3 (Niacinamide)” October 30, 2013; retrieved from Orthomolecular.org. <http://orthomolecular.org/resources/omns/v09n23.shtml>, retrieved on October 30, 2013

From **website**: “FOR IMMEDIATE RELEASE
Orthomolecular Medicine News Service, October 30, 2013

Treating ADHD with Vitamin B-3 (Niacinamide)
by Andrew W. Saul, Editor

(OMNS Oct 30, 2013) ADHD is not caused by a drug deficiency. But it may indeed be caused by profound nutrient deficiency, more accurately termed nutrient dependency.

Although all nutrients are important, the one that an ADHD child is most likely in greatest need of is vitamin B-3, niacinamide.

Over 60 years ago, niacinamide therapy pioneer William Kaufman, M.D., Ph.D, wrote:

"Some patients have a response to niacinamide therapy which seems to be the clinical equivalent of 'decreased running' observed in experimental animals. When these animals are deprived experimentally of certain essential nutrients, they display 'excessive running,' or hyperkinesis. When these deficient animals receive the essential nutrients in sufficient amounts for a sufficient period of time, there is exhibited a marked 'decrease in running.'"

9. GARCIA-ROMEU (2015) “Psilocybin-occasioned Mystical Experiences in the Treatment of Tobacco Addiction” Current Drug Abuse Reviews. 7:3(157-164)

From **abstract**: “Psilocybin-occasioned mystical experiences have been linked to persisting effects in healthy volunteers including positive changes in behavior, attitudes, and values, and increases in the personality domain of openness. **In an open-**

label pilot-study of psilocybin-facilitated smoking addiction treatment, 15 smokers received 2 or 3 doses of psilocybin in the context of cognitive behavioral therapy (CBT) for smoking cessation. Twelve of 15 participants (80%) demonstrated biologically verified smoking abstinence at 6-month follow-up. Participants who were abstinent at 6 months (n=12) were compared to participants still smoking at 6 months (n=3) on measures of subjective effects of psilocybin. Abstainers scored significantly higher on a measure of psilocybin-occasioned mystical experience. No significant differences in general intensity of drug effects were found between groups, suggesting that mystical-type subjective effects, rather than overall intensity of drug effects, were responsible for smoking cessation. Nine of 15 participants (60%) met criteria for "complete" mystical experience. Smoking cessation outcomes were significantly correlated with measures of mystical experience on session days, as well as retrospective ratings of personal meaning and spiritual significance of psilocybin sessions. These results suggest a mediating role of mystical experience in psychedelic-facilitated addiction treatment.”

12. LAKE, “Some Vitamins and Minerals May Reduce Alcohol Toxicity: Promising findings for certain B vitamins, vitamin C, magnesium and zinc.” January 29, 2019; retrieved from Psychology Today.

<https://www.psychologytoday.com/us/blog/integrative-mental-health-care/201901/some-vitamins-and-minerals-may-reduce-alcohol-toxicity>, retrieved January 29, 2019

From webpage: “**Some B-vitamins and Vitamin C may decrease craving**, increase alcohol clearance from the blood, and reduce the severity of hangovers

Animal studies suggest that low serum thiamin levels are associated with increased alcohol craving (Zimatkin 1996). **There is evidence that the B vitamin niacin in the form of nicotinamide dosed at 1.25 grams taken with a meal before drinking may protect the liver against the acute toxic effects of alcohol in individuals who have relapsed or are unable to abstain (Volpi 1997). Niacin in the form of nicotinic acid may reduce the risk of developing alcohol dependence by interfering with the synthesis of a morphine-like substance that is formed when acetaldehyde—a metabolite of alcohol—condenses with dopamine (Davis 1970).”**

Electronic Acknowledgement Receipt

EFS ID:	48390002
Application Number:	18115966
International Application Number:	
Confirmation Number:	9636
Title of Invention:	TRYPTAMINE COMPOSITIONS FOR ENHANCING NEURITE OUTGROWTH
First Named Inventor/Applicant Name:	Paul Edward STAMETS
Customer Number:	23409
Filer:	Sisi Li
Filer Authorized By:	
Attorney Docket Number:	888690-9002-US19
Receipt Date:	03-AUG-2023
Filing Date:	01-MAR-2023
Time Stamp:	12:55:24
Application Type:	

Payment information:

Submitted with Payment	no
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Total Files Size (in bytes):				15711631	

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Electronic Acknowledgement Receipt

EFS ID:	48390046
Application Number:	18115966
International Application Number:	
Confirmation Number:	9636
Title of Invention:	TRYPTAMINE COMPOSITIONS FOR ENHANCING NEURITE OUTGROWTH
First Named Inventor/Applicant Name:	Paul Edward STAMETS
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Time Stamp:	12:58:36
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File Listing:

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National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.