

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: CAAMTECH INC. Confirmation No.: 5607
Serial No.: 18/248,577 Group No.:
Filing or 371(c) Date: October 12, 2021 Examiner:
Entitled:

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.

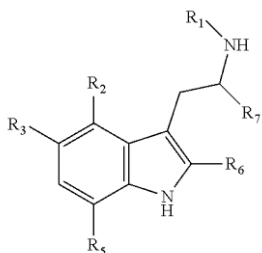
1. CERLETTI (1968) "Pharmacologic Studies on the Structure-Activity Relationship of Hydroxyindole Alkylamines" *Advances in Pharmacology*. Vol 6(B): 233-246.
2. ENTHEOGENIC-GNOSIS (2016) "Rue Psilohuasca vs Vine Psilohuasca" DMT Nexus. Retrieved from October 31, 2016. URL: <https://www.dmt-nexus.me/forum/default.aspx?g=posts&t=72878>
3. US. Pat. App. Pub. No. US/2018/022/1396 "Compositions and methods comprising a psilocybin derivative" (Published 2 March 2018)

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

U.S.S.N. 18/248,577
Pending Claims

References

139. A tryptamine compound selected from the group consisting of a compound of formula (I):



wherein:

R1 is a straight chain or branched C2-C6 alkyl or a straight chain or branched C2-C6 alkenyl;

R2 and R3 are independently chosen from hydrogen, hydroxyl, —OR9, —OC(O)R8, or —OC(O)OR4, —OSO2R4;

R4 is a straight chain or branched C1-C6 alkyl or a substituted or unsubstituted aryl;

R8 is a straight chain or branched C1-C6 alkyl or a substituted or unsubstituted aryl;

R9 is a straight chain or branched C1-C6 alkyl or a substituted or unsubstituted aryl; and R5, R6 and R7 are each independently hydrogen or a straight chain or branched C1-C6 alkyl, or a pharmaceutically acceptable acid-

From the application of interest 18/248,577 Claim 139

a compound of formula (I)

wherein:

R1 is a straight chain or branched C2-C6 alkyl or a straight chain or branched C2-C6 alkenyl;

R2 and R3 are independently chosen from hydrogen, hydroxyl, —OR9, —OC(O)R8, or —OC(O)OR4, —OSO2R4;

R5, R6 and R7 are each independently hydrogen or a straight chain or branched C1-C6 alkyl

1. CERLETTI (1968) "Pharmacologic Studies on the Structure-Activity Relationship of Hydroxyindole Alkylamines. Advances in Pharmacology. Vol 6(B): 233-246.

From Results, Table III, Entry 7:

TABLE III
INFLUENCE OF SUBSTITUTION IN POSITION 3 OF INDOLE AND 4-HYDROXYINDOLE

Substituent		Knee jerk	Serotonin antagonism	Pressure activity
R3	R4			
CH ₂ —CH ₂ —NH ₂	—	↓ > 50	S	61
CH ₂ —CH ₂ —N<CH ₃	—	∅	S	40
CH ₂ —CH ₂ —N<CH ₃	—	↑ 20-50	20	39
CH ₂ —CH ₂ —NH ₂	OH	↓ 20-50	S	64
CH ₂ —CH ₂ —N<CH ₃	OH	↓ 20-50	14	35
CH ₂ —CH ₂ —N<CH ₃	OH	↑ 5-10	100	50
CH ₂ —CH ₂ —N<C ₂ H ₅	OH	↑ 20-50	11	50

From the application of interest 18/248,577 Claim 1

a compound of formula (Ia)

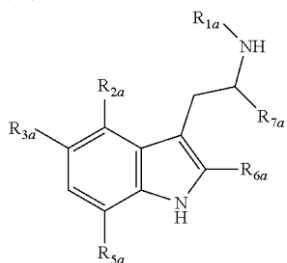
wherein:

R1a is a straight chain or branched C1-C6 alkyl or a straight chain or branched C2-C6 alkenyl;

one of R2a and R3a is hydrogen and the other of R2a and R3a is selected from —OC(O)R8a, —OC(O)OR4a, and —OSO2R4a;

R8a is selected from straight chain or branched C1-C6 alkyl;

addition salt thereof;
and
a compound of formula
(Ia):



wherein:

R1a is a straight chain
or branched C1-C6
alkyl or a straight chain
or branched C2-C6
alkenyl;

one of R2a and R3a is
hydrogen and the other
of R2a and R3a is

selected from —
OC(O)R8a, —
OC(O)OR4a, and —
OSO2R4a;

R4a is a straight chain
or branched C1-C6
alkyl or a substituted or
unsubstituted aryl;

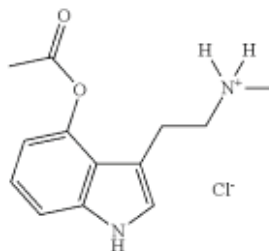
R8a is selected from
straight chain or
branched C1-C6 alkyl;

R5a, R6a and R7a are
each independently
hydrogen or a straight
chain or branched C1-
C6 alkyl, or a
pharmaceutically
acceptable acid-
addition salt thereof.

R5a, R6a and R7a are each independently hydrogen or a straight chain or branched C1-C6 alkyl

From the application of interest 18/248,577 [0039]

The invention also relates to 2-[4-(acetyloxy)-1H-indol-3-yl]ethyl}(methyl)azanium chloride (4-AcO-NMT chloride) and to its crystalline form. 4-AcO-NMT chloride has the following chemical formula

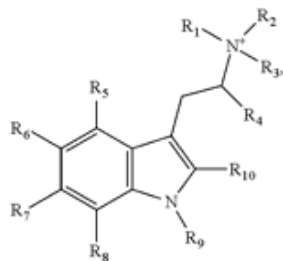


2. ENTHEOGENIC-GNOSIS (2016) "Rue Psilohuasca vs Vine Psilohuasca" DMT Nexus. Retrieved from October 31, 2016. URL: <https://www.dmt-nexus.me/forum/default.aspx?g=posts&t=72878>

It would be interesting to experiment with Baeocystin and norbaeocystin as pure compounds, then as pure compounds in combination with an MAOI...I believe that 4-aco-NMT is available as a research chemical, this compound should metabolize to 4-HO-NMT or "norbaeocystin", this May be a means of experimentation....

3. US. Pat. App. Pub. No. US/2018/022/1396 "Compositions and methods comprising a psilocybin derivative" (Published 2 March 2018)

From [0082]: **In one embodiment, a psilocybin derivative within the compositions disclosed herein is a compound defined by the following structural formula A:**



wherein each of R1, R2, R3, R4, R5, R6, R7, R8, R9, and R10 is chosen from an electron pair, a hydrogen, an alkyl, an alkenyl, an alkynyl, a phenyl, a halide, a hydroxyl, a carbonyl, an aldehyde, a haloformyl, a carbonate ester, a carboxylate, a carboxyl, an ester, a hydroperoxy, a peroxy, an ether, a hemiacetal, a hemiketal, an acetal, a ketal, an orthoester, a methylenedioxy, an orthocarbonate ester, carboxamide, an amine, an imine, an amide, an azide, an azo, a cyanate, a nitrate, a

nitrile, an isonitrile, a nitrosooxy, a nitro, a pyridyl, a thiol, a sulfide, sulfinyl, a sulfonyl, a thiocyanate, a carbonothioyl, or a phosphate.

From [0396]: Where reference is made to a particular compound, it should be understood that this disclosure also contemplates salts and derivatives of that compound as well as degradation products, such as oxidized versions of explicitly disclosed molecules.

140. The tryptamine compound of claim 139, wherein the tryptamine compound is a compound of formula (I) and R1 is selected from the group consisting of butyl, 2-butenyl, **ethyl**, isopropyl, propyl, allyl, vinyl, 1-methylethylidenyl, and 3-pentanyl.

From the application of interest 18/248,577 Claim 139

a compound of formula (I)

wherein:

R1 is a straight chain or branched C2-C6 alkyl or a straight chain or branched C2-C6 alkenyl;

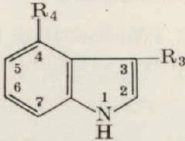
R2 and R3 are independently chosen from hydrogen, hydroxyl, —OR9, —OC(O)R8, or —OC(O)OR4, —OSO2R4;

R5, R6 and R7 are each independently hydrogen or a straight chain or branched C1-C6 alkyl

1. CERLETTI (1968) "Pharmacologic Studies on the Structure-Activity Relationship of Hydroxyindole Alkylamines. Advances in Pharmacology. Vol 6(B): 233-246.

From Results, Table III, Entry 7:

TABLE III
INFLUENCE OF SUBSTITUTION IN POSITION 3 OF INDOLE AND 4-HYDROXYINDOLE



Substituent		Knee jerk	Serotonin antagonism	Pressure activity
R ₃	R ₄			
CH ₂ —CH ₂ —NH ₂	—	↓ > 50	S	61
CH ₂ —CH ₂ —N$\begin{matrix} \text{H} \\ \text{CH}_3 \end{matrix}$	—	o	S	40
CH ₂ —CH ₂ —N$\begin{matrix} \text{CH}_3 \\ \text{CH}_3 \end{matrix}$	—	↑ 20-50	20	39
CH ₂ —CH ₂ —NH ₂	OH	↓ 20-50	S	64
CH ₂ —CH ₂ —N$\begin{matrix} \text{H} \\ \text{CH}_3 \end{matrix}$	OH	↓ 20-50	14	35
CH ₂ —CH ₂ —N$\begin{matrix} \text{CH}_3 \\ \text{CH}_3 \end{matrix}$	OH	↑ 5-10	100	50
CH ₂ —CH ₂ —N$\begin{matrix} \text{H} \\ \text{C}_2\text{H}_5 \end{matrix}$	OH	↑ 20-50	11	50

141. The tryptamine compound of claim 139, wherein the

From the application of interest 18/248,577 Claim 139

a compound of formula (Ia)

tryptamine compound is a compound of formula (Ia) and R1a is selected from the group consisting of **methyl**, butyl, 2-butenyl, ethyl, isopropyl, propyl, allyl, vinyl, 1-methylethylidenyl, and 3-pentanyl.

wherein:

R1a is a straight chain or branched C1-C6 alkyl or a straight chain or branched C2-C6 alkenyl;

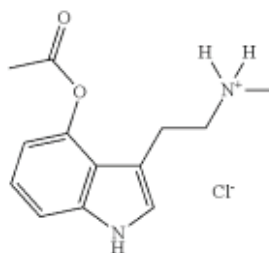
one of R2a and R3a is hydrogen and the other of R2a and R3a is selected from —OC(O)R8a, —OC(O)OR4a, and —OSO2R4a;

R8a is selected from straight chain or branched C1-C6 alkyl;

R5a, R6a and R7a are each independently hydrogen or a straight chain or branched C1-C6 alkyl

From the application of interest 18/248,577 [0039]

The invention also relates to 2-[4-(acetyloxy)-1H-indol-3-yl]ethyl(methyl)azanum chloride (4-AcO-NMT chloride) and to its crystalline form. 4-AcO-NMT chloride has the following chemical formula



2. ENTHEOGENIC-GNOSIS (2016) “Rue Psilohuasca vs Vine Psilohuasca” DMT Nexus. Retrieved from October 31, 2016. URL: <https://www.dmt-nexus.me/forum/default.aspx?g=posts&t=72878>

It would be interesting to experiment with Baeocystin and norbaeocystin as pure compounds, then as pure compounds in combination with an MAOI...I believe that 4-aco-NMT is available as a research chemical, this compound should metabolize to 4-HO-NMT or "norbaeocystin", this May be a means of experimentation....

142. The tryptamine compound of claim 139, wherein the tryptamine compound is a compound of formula (I) and one of R2 and R3 is hydrogen and the other of R2 and R3 is selected from the group consisting of pivaloyloxyl, acetoxy, methylcarbonato, **hydroxyl**, (methylsulfonyl)oxyl, (benzyl)oxyl, and methoxyl.

From the application of interest 18/248,577 Claim 139

wherein:

R1 is a straight chain or branched C2-C6 alkyl or a straight chain or branched C2-C6 alkenyl;

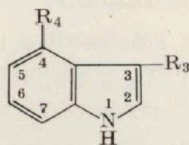
R2 and R3 are independently chosen from hydrogen, hydroxyl, —OR9, —OC(O)R8, or —OC(O)OR4, —OSO2R4;

R5, R6 and R7 are each independently hydrogen or a straight chain or branched C1-C6 alkyl

1. CERLETTI (1968) “Pharmacologic Studies on the Structure-Activity Relationship of Hydroxyindole Alkylamines. Advances in Pharmacology. Vol 6(B): 233-246.

From **Results, Table III, Entry 7:**

TABLE III
INFLUENCE OF SUBSTITUTION IN POSITION 3 OF INDOLE AND 4-HYDROXYINDOLE



Substituent		Knee jerk	Serotonin antagonism	Pressure activity
R ₃	R ₄			
CH ₂ -CH ₂ -NH ₂	—	↓ > 50	S	61
CH ₂ -CH ₂ -N(CH ₃) ₂	—	o	S	40
CH ₂ -CH ₂ -N(CH ₃) ₂	—	↑ 20-50	20	39
CH ₂ -CH ₂ -NH ₂	OH	↓ 20-50	S	64
CH ₂ -CH ₂ -N(CH ₃) ₂	OH	↓ 20-50	14	35
CH ₂ -CH ₂ -N(CH ₃) ₂	OH	↑ 5-10	100	50
CH ₂ -CH ₂ -N(CH ₃) ₂	OH	↑ 20-50	11	50

143. The tryptamine compound of claim 139, wherein the tryptamine compound is a compound of formula (Ia) and one of R_{2a} and R_{3a} is hydrogen and the other of R_{2a} and R_{3a} is selected from the group consisting of pivaloyloxyl, **acetoxy**, methylcarbonato, hydroxyl, (methylsulfonyl)oxyl, (benzyl)oxyl, and methoxyl.

From the application of interest 18/248,577 Claim 139

wherein:

R1a is a straight chain or branched C1-C6 alkyl or a straight chain or branched C2-C6 alkenyl;

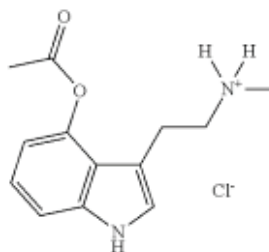
one of R_{2a} and R_{3a} is hydrogen and the other of R_{2a} and R_{3a} is selected from —OC(O)R_{8a}, —OC(O)OR_{4a}, and —OSO₂R_{4a};

R_{8a} is selected from straight chain or branched C1-C6 alkyl;

R_{5a}, R_{6a} and R_{7a} are each independently hydrogen or a straight chain or branched C1-C6 alkyl

From the application of interest 18/248,577 [0039]

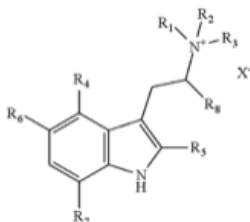
The invention also relates to 2-[4-(acetyloxy)-1H-indol-3-yl]ethyl(methyl)azanium chloride (**4-AcO-NMT chloride**) and to its crystalline form. **4-AcO-NMT chloride** has the following chemical formula



2. ENTHEOGENIC-GNOSIS (2016) "Rue Psilohuasca vs Vine Psilohuasca" DMT Nexus. Retrieved from October 31, 2016. URL: <https://www.dmt-nexus.me/forum/default.aspx?g=posts&t=72878>

It would be interesting to experiment with Baecocystin and norbaecocystin as pure compounds, then as pure compounds in combination with an MAOI...I believe that 4-aco-NMT is available as a research chemical, this compound should metabolize to 4-HO-NMT or "norbaecocystin", this May be a means of experimentation....

144. A tryptamine compound selected from the group consisting of a compound of formula (II):

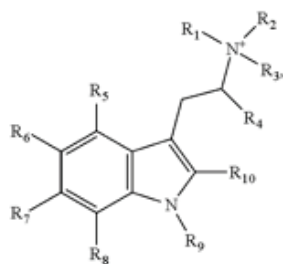


wherein:

R1 is a straight chain or branched C1-C6 alkyl or a straight chain or branched C2-C6 alkenyl;
 R2 and R3 are both hydrogen;
 R4 and R6 are independently chosen from hydrogen, hydroxyl, —OR5, —OC(O)R11, —OC(O)OR12, —OSO2R12;
 R5 is a straight chain or branched C1-C6 alkyl or a substituted or unsubstituted aryl;
 R11 is a straight chain or branched C1-C6 alkyl or a substituted or unsubstituted aryl;
 R12 is a straight chain or branched C1-C6 alkyl or a substituted or unsubstituted aryl;

3. US. Pat. App. Pub. No. US/2018/022/1396 “Compositions and methods comprising a psilocybin derivative” (Published 2 March 2018)

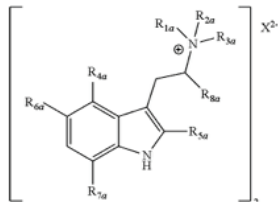
From [0082]: **In one embodiment, a psilocybin derivative within the compositions disclosed herein is a compound defined by the following structural formula A:**



wherein each of R1, R2, R3, R4, R5, R6, R7, R8, R9, and R10 is chosen from an electron pair, a hydrogen, an alkyl, an alkenyl, an alkynyl, a phenyl, a halide, a hydroxyl, a carbonyl, an aldehyde, a haloformyl, a carbonate ester, a carboxylate, a carboxyl, an ester, a hydroperoxy, a peroxy, an ether, a hemiacetal, a hemiketal, an acetal, a ketal, an orthoester, a methylenedioxy, an orthocarbonate ester, carboxamide, an amine, an imine, an amide, an azide, an azo, a cyanate, a nitrate, a nitrile, an isonitrile, a nitrosooxy, a nitro, a pyridyl, a thiol, a sulfide, sulfinyl, a sulfonyl, a thiocyanate, a carbonothioyl, or a phosphate.

From [0396]: **Where reference is made to a particular compound, it should be understood that this disclosure also contemplates salts and derivatives of that compound as well as degradation products, such as oxidized versions of explicitly disclosed molecules.**

R7, R8 and R9 are each independently hydrogen or a straight chain or branched C1-C6 alkyl; and X⁻ is a pharmaceutically acceptable anion; and a compound of formula (IIa):



wherein:

R1a is a straight chain or branched C1-C6 alkyl or a straight chain or branched C2-C6 alkenyl;

R2a and R3a are both hydrogen;

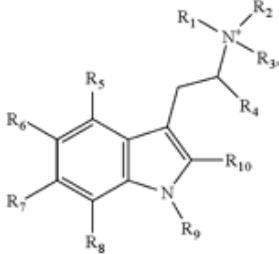
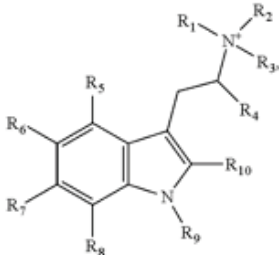
R4a and R6a are independently chosen from hydrogen, hydroxyl, —OR5a, —OC(O)R11a, —OC(O)OR12a, —OSO2R12a;

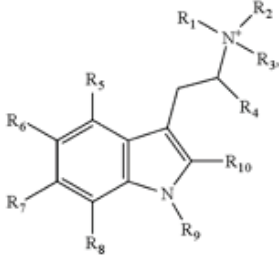
R5a is a straight chain or branched C1-C6 alkyl or a substituted or unsubstituted aryl;

R11a is a straight chain or branched C1-C6 alkyl or a substituted or unsubstituted aryl;

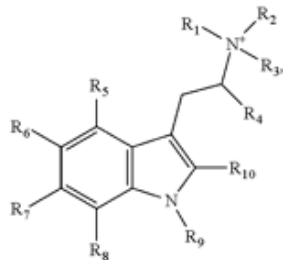
R12a is a straight chain or branched C1-C6 alkyl or a substituted or unsubstituted aryl;

R7a, R8a and R9a are each independently hydrogen or a straight

<p>chain or branched C1-C6 alkyl; and X2⁻ is a pharmaceutically acceptable dianion.</p>	
<p>145. The tryptamine compound of claim 144, wherein the tryptamine compound is a compound of formula (II) and R1 is selected from the group consisting of methyl, butyl, 2-butenyl, ethyl, isopropyl, propyl, allyl, vinyl, 1-methylethylidanyl, and 3-pentanyl.</p>	<p>3. US. Pat. App. Pub. No. US/2018/022/1396 “Compositions and methods comprising a psilocybin derivative” (Published 2 March 2018)</p> <p>From [0082]: In one embodiment, a psilocybin derivative within the compositions disclosed herein is a compound defined by the following structural formula A:</p>  <p>wherein each of R1, R2, R3, R4, R5, R6, R7, R8, R9, and R10 is chosen from an electron pair, a hydrogen, an alkyl, an alkenyl, an alkynyl, a phenyl, a halide, a hydroxyl, a carbonyl, an aldehyde, a haloformyl, a carbonate ester, a carboxylate, a carboxyl, an ester, a hydroperoxy, a peroxy, an ether, a hemiacetal, a hemiketal, an acetal, a ketal, an orthoester, a methylenedioxy, an orthocarbonate ester, carboxamide, an amine, an imine, an amide, an azide, an azo, a cyanate, a nitrate, a nitrile, an isonitrile, a nitrosooxy, a nitro, a pyridyl, a thiol, a sulfide, sulfinyl, a sulfonyl, a thiocyanate, a carbonothioyl, or a phosphate.</p>
<p>146. The tryptamine compound of claim 144, wherein the tryptamine compound is a compound of formula (IIa) and R1a is selected from the group consisting of methyl, butyl, 2-butenyl, ethyl, isopropyl, propyl, allyl, vinyl, 1-methylethylidanyl, and 3-pentanyl.</p>	<p>3. US. Pat. App. Pub. No. US/2018/022/1396 “Compositions and methods comprising a psilocybin derivative” (Published 2 March 2018)</p> <p>From [0082]: In one embodiment, a psilocybin derivative within the compositions disclosed herein is a compound defined by the following structural formula A:</p>  <p>wherein each of R1, R2, R3, R4, R5, R6, R7, R8, R9, and R10 is chosen from an electron pair, a hydrogen, an alkyl, an alkenyl, an alkynyl, a phenyl, a halide, a hydroxyl, a carbonyl, an aldehyde, a haloformyl, a</p>

	<p>carbonate ester, a carboxylate, a carboxyl, an ester, a hydroperoxy, a peroxy, an ether, a hemiacetal, a hemiketal, an acetal, a ketal, an orthoester, a methylenedioxy, an orthocarbonate ester, carboxamide, an amine, an imine, an amide, an azide, an azo, a cyanate, a nitrate, a nitrile, an isonitrile, a nitrosooxy, a nitro, a pyridyl, a thiol, a sulfide, sulfinyl, a sulfonyl, a thiocyanate, a carbonothioyl, or a phosphate.</p> <p>From [0396]: Where reference is made to a particular compound, it should be understood that this disclosure also contemplates salts and derivatives of that compound as well as degradation products, such as oxidized versions of explicitly disclosed molecules.</p>
<p>147. The tryptamine compound of claim 144, wherein the tryptamine compound is a compound of formula (II) and one of R4 and R6 is hydrogen and the other of R4 and R6 is selected from the group consisting of pivaloyloxyl, acetoxy, methylcarbonato, hydroxyl, (methylsulfonyl)oxyl, (benzyl)oxyl, and methoxyl.</p>	<p>3. US. Pat. App. Pub. No. US/2018/022/1396 “Compositions and methods comprising a psilocybin derivative” (Published 2 March 2018)</p> <p>From [0082]: In one embodiment, a psilocybin derivative within the compositions disclosed herein is a compound defined by the following structural formula A:</p>  <p>wherein each of R1, R2, R3, R4, R5, R6, R7, R8, R9, and R10 is chosen from an electron pair, a hydrogen, an alkyl, an alkenyl, an alkynyl, a phenyl, a halide, a hydroxyl, a carbonyl, an aldehyde, a haloformyl, a carbonate ester, a carboxylate, a carboxyl, an ester, a hydroperoxy, a peroxy, an ether, a hemiacetal, a hemiketal, an acetal, a ketal, an orthoester, a methylenedioxy, an orthocarbonate ester, carboxamide, an amine, an imine, an amide, an azide, an azo, a cyanate, a nitrate, a nitrile, an isonitrile, a nitrosooxy, a nitro, a pyridyl, a thiol, a sulfide, sulfinyl, a sulfonyl, a thiocyanate, a carbonothioyl, or a phosphate.</p>
<p>148. The tryptamine compound of claim 144, wherein the tryptamine compound is a compound of formula (IIa) and one of R4a and R6a is hydrogen and the other of R4a and R6a is selected from the group</p>	<p>3. US. Pat. App. Pub. No. US/2018/022/1396 “Compositions and methods comprising a psilocybin derivative” (Published 2 March 2018)</p> <p>From [0082]: In one embodiment, a psilocybin derivative within the compositions disclosed herein is a compound defined by the following structural formula A:</p>

consisting of pivaloyloxyl, acetoxy, methylcarbonato, hydroxyl, (methylsulfonyl)oxyl, (benzyl)oxyl, and methoxyl.



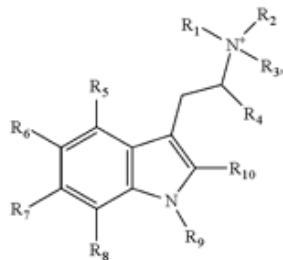
wherein each of R1, R2, R3, R4, R5, R6, R7, R8, R9, and R10 is chosen from an electron pair, a hydrogen, an alkyl, an alkenyl, an alkynyl, a phenyl, a halide, a hydroxyl, a carbonyl, an aldehyde, a haloformyl, a carbonate ester, a carboxylate, a carboxyl, an ester, a hydroperoxy, a peroxy, an ether, a hemiacetal, a hemiketal, an acetal, a ketal, an orthoester, a methylenedioxy, an orthocarbonate ester, carboxamide, an amine, an imine, an amide, an azide, an azo, a cyanate, a nitrate, a nitrile, an isonitrile, a nitrosooxy, a nitro, a pyridyl, a thiol, a sulfide, sulfinyl, a sulfonyl, a thiocyanate, a carbonothioyl, or a phosphate.

From [0396]: Where reference is made to a particular compound, it should be understood that this disclosure also contemplates salts and derivatives of that compound as well as degradation products, such as oxidized versions of explicitly disclosed molecules.

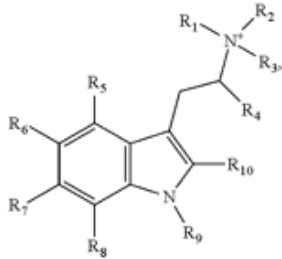
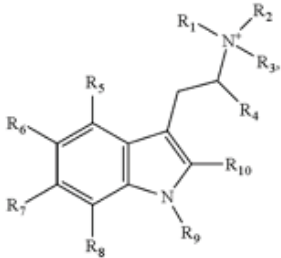
149. A composition comprising a therapeutically effective amount of a tryptamine compound of claim 139 and a pharmaceutically acceptable excipient.

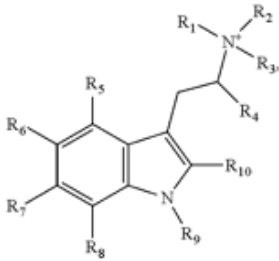
3. US. Pat. App. Pub. No. US/2018/022/1396 “Compositions and methods comprising a psilocybin derivative” (Published 2 March 2018)

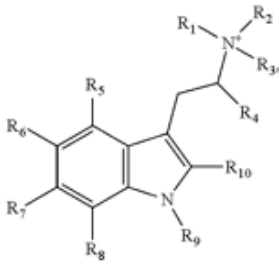
From [0082]: In one embodiment, a psilocybin derivative within the compositions disclosed herein is a compound defined by the following structural formula A:

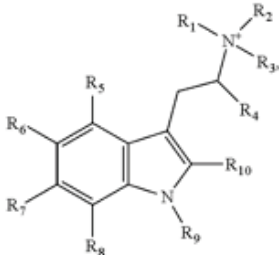
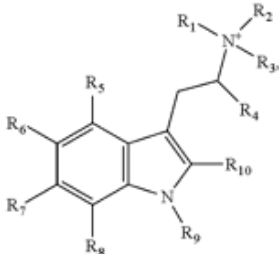


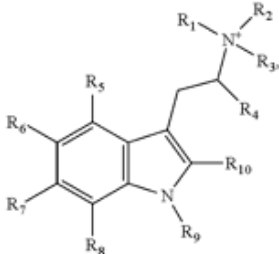
wherein each of R1, R2, R3, R4, R5, R6, R7, R8, R9, and R10 is chosen from an electron pair, a hydrogen, an alkyl, an alkenyl, an alkynyl, a phenyl, a halide, a hydroxyl, a carbonyl, an aldehyde, a haloformyl, a carbonate ester, a carboxylate, a carboxyl, an ester, a hydroperoxy, a peroxy, an ether, a hemiacetal, a hemiketal, an acetal, a ketal, an orthoester, a methylenedioxy, an orthocarbonate ester, carboxamide, an amine, an imine, an amide, an azide, an azo, a cyanate, a nitrate, a nitrile, an isonitrile, a nitrosooxy, a nitro, a pyridyl, a thiol, a sulfide, sulfinyl, a sulfonyl, a thiocyanate, a carbonothioyl, or a phosphate.

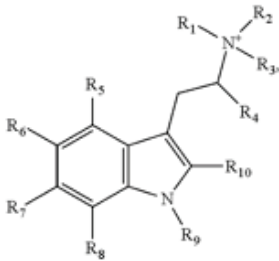
	<p>From [0277]: In one embodiment, the methods and compositions disclosed herein comprise an excipient.</p>
<p>150. A composition comprising a therapeutically effective amount of a tryptamine compound of claim 144 and a pharmaceutically acceptable excipient.</p>	<p>3. US. Pat. App. Pub. No. US/2018/022/1396 “Compositions and methods comprising a psilocybin derivative” (Published 2 March 2018)</p> <p>From [0082]: In one embodiment, a psilocybin derivative within the compositions disclosed herein is a compound defined by the following structural formula A:</p>  <p>wherein each of R1, R2, R3, R4, R5, R6, R7, R8, R9, and R10 is chosen from an electron pair, a hydrogen, an alkyl, an alkenyl, an alkynyl, a phenyl, a halide, a hydroxyl, a carbonyl, an aldehyde, a haloformyl, a carbonate ester, a carboxylate, a carboxyl, an ester, a hydroperoxy, a peroxy, an ether, a hemiacetal, a hemiketal, an acetal, a ketal, an orthoester, a methylenedioxy, an orthocarbonate ester, carboxamide, an amine, an imine, an amide, an azide, an azo, a cyanate, a nitrate, a nitrile, an isonitrile, a nitrosooxy, a nitro, a pyridyl, a thiol, a sulfide, sulfinyl, a sulfonyl, a thiocyanate, a carbonothioyl, or a phosphate.</p> <p>From [0396]: Where reference is made to a particular compound, it should be understood that this disclosure also contemplates salts and derivatives of that compound as well as degradation products, such as oxidized versions of explicitly disclosed molecules.</p> <p>From [0277]: In one embodiment, the methods and compositions disclosed herein comprise an excipient.</p>
<p>151. A composition comprising a first active component: a tryptamine compound of claim 139; and a second active component selected from the group consisting of (a) a serotonergic drug, (b) a purified psilocybin derivative, (c) a purified cannabinoid, (d) a monoamine</p>	<p>3. US. Pat. App. Pub. No. US/2018/022/1396 “Compositions and methods comprising a psilocybin derivative” (Published 2 March 2018)</p> <p>From [0082]: In one embodiment, a psilocybin derivative within the compositions disclosed herein is a compound defined by the following structural formula A:</p> 

<p>oxidase inhibitor, (e) a purified terpene, (f) a purified erinacine, (g) a purified hericenone, and (h) a purified monoamine oxidase inhibitor.</p>	<p>wherein each of R1, R2, R3, R4, R5, R6, R7, R8, R9, and R10 is chosen from an electron pair, a hydrogen, an alkyl, an alkenyl, an alkynyl, a phenyl, a halide, a hydroxyl, a carbonyl, an aldehyde, a haloformyl, a carbonate ester, a carboxylate, a carboxyl, an ester, a hydroperoxy, a peroxy, an ether, a hemiacetal, a hemiketal, an acetal, a ketal, an orthoester, a methylenedioxy, an orthocarbonate ester, carboxamide, an amine, an imine, an amide, an azide, an azo, a cyanate, a nitrate, a nitrile, an isonitrile, a nitrosooxy, a nitro, a pyridyl, a thiol, a sulfide, sulfinyl, a sulfonyl, a thiocyanate, a carbonothioyl, or a phosphate.</p> <p>From [0396]: Where reference is made to a particular compound, it should be understood that this disclosure also contemplates salts and derivatives of that compound as well as degradation products, such as oxidized versions of explicitly disclosed molecules.</p> <p>From [0022]: 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</p>
<p>152. A composition comprising a first active component: a tryptamine compound of claim 144; and a second active component selected from the group consisting of (a) a serotonergic drug, (b) a purified psilocybin derivative, (c) a purified cannabinoid, (d) a monoamine oxidase inhibitor, (e) a purified terpene, (f) a purified erinacine, (g) a purified hericenone, and (h) a purified monoamine oxidase inhibitor.</p>	<p>3. US. Pat. App. Pub. No. US/2018/022/1396 “Compositions and methods comprising a psilocybin derivative” (Published 2 March 2018)</p> <p>From [0082]: In one embodiment, a psilocybin derivative within the compositions disclosed herein is a compound defined by the following structural formula A:</p>  <p>wherein each of R1, R2, R3, R4, R5, R6, R7, R8, R9, and R10 is chosen from an electron pair, a hydrogen, an alkyl, an alkenyl, an alkynyl, a phenyl, a halide, a hydroxyl, a carbonyl, an aldehyde, a haloformyl, a carbonate ester, a carboxylate, a carboxyl, an ester, a hydroperoxy, a peroxy, an ether, a hemiacetal, a hemiketal, an acetal, a ketal, an orthoester, a methylenedioxy, an orthocarbonate ester, carboxamide, an amine, an imine, an amide, an azide, an azo, a cyanate, a nitrate, a nitrile, an isonitrile, a nitrosooxy, a nitro, a pyridyl, a thiol, a sulfide, sulfinyl, a sulfonyl, a thiocyanate, a carbonothioyl, or a phosphate.</p> <p>From [0396]: Where reference is made to a particular compound, it should be understood that this disclosure also contemplates salts and</p>

	<p>derivatives of that compound as well as degradation products, such as oxidized versions of explicitly disclosed molecules.</p> <p>From [0022]: 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</p>
<p>153. A method of preventing or treating a psychological disorder comprising: identifying a subject in need of treatment or prevention; and administering to a subject in need thereof a therapeutically effective amount of the compound of claim 139.</p>	<p>3. US. Pat. App. Pub. No. US/2018/022/1396 “Compositions and methods comprising a psilocybin derivative” (Published 2 March 2018)</p> <p>From [0082]: In one embodiment, a psilocybin derivative within the compositions disclosed herein is a compound defined by the following structural formula A:</p>  <p>wherein each of R1, R2, R3, R4, R5, R6, R7, R8, R9, and R10 is chosen from an electron pair, a hydrogen, an alkyl, an alkenyl, an alkynyl, a phenyl, a halide, a hydroxyl, a carbonyl, an aldehyde, a haloformyl, a carbonate ester, a carboxylate, a carboxyl, an ester, a hydroperoxy, a peroxy, an ether, a hemiacetal, a hemiketal, an acetal, a ketal, an orthoester, a methylenedioxy, an orthocarbonate ester, carboxamide, an amine, an imine, an amide, an azide, an azo, a cyanate, a nitrate, a nitrile, an isonitrile, a nitrosooxy, a nitro, a pyridyl, a thiol, a sulfide, sulfinyl, a sulfonyl, a thiocyanate, a carbonothioyl, or a phosphate.</p> <p>From [0396]: Where reference is made to a particular compound, it should be understood that this disclosure also contemplates salts and derivatives of that compound as well as degradation products, such as oxidized versions of explicitly disclosed molecules.</p> <p>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</p>

	disclosed herein and a neurotransmitter activity modulator, e.g., a serotonergic drug, a dopaminergic drug, etc
154. 2-[4-(acetyloxy)-1H-indol-3-yl]ethyl} (methyl)azanium chloride (4-AcO-NMT chloride).	<p>3. US. Pat. App. Pub. No. US/2018/022/1396 “Compositions and methods comprising a psilocybin derivative” (Published 2 March 2018)</p> <p>From [0082]: In one embodiment, a psilocybin derivative within the compositions disclosed herein is a compound defined by the following structural formula A:</p>  <p>wherein each of R1, R2, R3, R4, R5, R6, R7, R8, R9, and R10 is chosen from an electron pair, a hydrogen, an alkyl, an alkenyl, an alkynyl, a phenyl, a halide, a hydroxyl, a carbonyl, an aldehyde, a haloformyl, a carbonate ester, a carboxylate, a carboxyl, an ester, a hydroperoxy, a peroxy, an ether, a hemiacetal, a hemiketal, an acetal, a ketal, an orthoester, a methylenedioxy, an orthocarbonate ester, carboxamide, an amine, an imine, an amide, an azide, an azo, a cyanate, a nitrate, a nitrile, an isonitrile, a nitrosooxy, a nitro, a pyridyl, a thiol, a sulfide, sulfinyl, a sulfonyl, a thiocyanate, a carbonothioyl, or a phosphate.</p> <p>From [0396]: Where reference is made to a particular compound, it should be understood that this disclosure also contemplates salts and derivatives of that compound as well as degradation products, such as oxidized versions of explicitly disclosed molecules.</p>
155. Crystalline 2-[4-(acetyloxy)-1H-indol-3-yl]ethyl} (methyl)azanium chloride (4-AcO-NMT chloride).	<p>3. US. Pat. App. Pub. No. US/2018/022/1396 “Compositions and methods comprising a psilocybin derivative” (Published 2 March 2018)</p> <p>From [0082]: In one embodiment, a psilocybin derivative within the compositions disclosed herein is a compound defined by the following structural formula A:</p> 

	<p>wherein each of R1, R2, R3, R4, R5, R6, R7, R8, R9, and R10 is chosen from an electron pair, a hydrogen, an alkyl, an alkenyl, an alkynyl, a phenyl, a halide, a hydroxyl, a carbonyl, an aldehyde, a haloformyl, a carbonate ester, a carboxylate, a carboxyl, an ester, a hydroperoxy, a peroxy, an ether, a hemiacetal, a hemiketal, an acetal, a ketal, an orthoester, a methylenedioxy, an orthocarbonate ester, carboxamide, an amine, an imine, an amide, an azide, an azo, a cyanate, a nitrate, a nitrile, an isonitrile, a nitrosooxy, a nitro, a pyridyl, a thiol, a sulfide, sulfinyl, a sulfonyl, a thiocyanate, a carbonothioyl, or a phosphate.</p> <p>From [0396]: Where reference is made to a particular compound, it should be understood that this disclosure also contemplates salts and derivatives of that compound as well as degradation products, such as oxidized versions of explicitly disclosed molecules.</p> <p>From [0035]: In one embodiment, a dried powder is composed of particles with a crystalline structure.</p>
<p>157. A composition comprising a therapeutically effective amount of crystalline 4-AcO-NMT chloride of claim 155 and a pharmaceutically acceptable excipient.</p>	<p>3. US. Pat. App. Pub. No. US/2018/022/1396 “Compositions and methods comprising a psilocybin derivative” (Published 2 March 2018)</p> <p>From [0082]: In one embodiment, a psilocybin derivative within the compositions disclosed herein is a compound defined by the following structural formula A:</p>  <p>wherein each of R1, R2, R3, R4, R5, R6, R7, R8, R9, and R10 is chosen from an electron pair, a hydrogen, an alkyl, an alkenyl, an alkynyl, a phenyl, a halide, a hydroxyl, a carbonyl, an aldehyde, a haloformyl, a carbonate ester, a carboxylate, a carboxyl, an ester, a hydroperoxy, a peroxy, an ether, a hemiacetal, a hemiketal, an acetal, a ketal, an orthoester, a methylenedioxy, an orthocarbonate ester, carboxamide, an amine, an imine, an amide, an azide, an azo, a cyanate, a nitrate, a nitrile, an isonitrile, a nitrosooxy, a nitro, a pyridyl, a thiol, a sulfide, sulfinyl, a sulfonyl, a thiocyanate, a carbonothioyl, or a phosphate.</p> <p>From [0396]: Where reference is made to a particular compound, it should be understood that this disclosure also contemplates salts and derivatives of that compound as well as degradation products, such as oxidized versions of explicitly disclosed molecules.</p> <p>From [0277]: In one embodiment, the methods and compositions disclosed herein comprise an excipient.</p>

	<p>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</p> <p>From [0035]: In one embodiment, a dried powder is composed of particles with a crystalline structure.</p>
<p>158. A composition comprising a first active component: crystalline 4-AcO-NMT chloride of claim 155; and a second active component selected from the group consisting of (a) a serotonergic drug, (b) a purified psilocybin derivative, (c) a purified cannabinoid, (d) a monoamine oxidase inhibitor, (e) a purified terpene, (f) a purified erinacine, (g) a purified hericenone, and (h) a purified monoamine oxidase inhibitor.</p>	<p>3. US. Pat. App. Pub. No. US/2018/022/1396 “Compositions and methods comprising a psilocybin derivative” (Published 2 March 2018)</p> <p>From [0082]: In one embodiment, a psilocybin derivative within the compositions disclosed herein is a compound defined by the following structural formula A:</p>  <p>wherein each of R1, R2, R3, R4, R5, R6, R7, R8, R9, and R10 is chosen from an electron pair, a hydrogen, an alkyl, an alkenyl, an alkynyl, a phenyl, a halide, a hydroxyl, a carbonyl, an aldehyde, a haloformyl, a carbonate ester, a carboxylate, a carboxyl, an ester, a hydroperoxy, a peroxy, an ether, a hemiacetal, a hemiketal, an acetal, a ketal, an orthoester, a methylenedioxy, an orthocarbonate ester, carboxamide, an amine, an imine, an amide, an azide, an azo, a cyanate, a nitrate, a nitrile, an isonitrile, a nitrosooxy, a nitro, a pyridyl, a thiol, a sulfide, sulfinyl, a sulfonyl, a thiocyanate, a carbonothioyl, or a phosphate.</p> <p>From [0396]: Where reference is made to a particular compound, it should be understood that this disclosure also contemplates salts and derivatives of that compound as well as degradation products, such as oxidized versions of explicitly disclosed molecules.</p> <p>From [0022]: 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</p>

disclosed herein and a neurotransmitter activity modulator, e.g., a serotonergic drug, a dopaminergic drug, etc

From [0035]: In one embodiment, a dried powder is composed of particles with a crystalline structure.



ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #
18/248,577

RECEIPT DATE / TIME
05/21/2024 11:39:16 AM Z ET

ATTORNEY DOCKET #

Title of Invention

Application Information

APPLICATION TYPE	PATENT #
CONFIRMATION #	FILED BY Jeremy Rolquin
PATENT CENTER # 65608725	FILING DATE 04/11/2023
CUSTOMER # -	FIRST NAMED INVENTOR
INTL. APPLICATION # -	INTL. FILING DATE -
CORRESPONDENCE ADDRESS	AUTHORIZED BY -

Documents

TOTAL DOCUMENTS: 8

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)	
third-party-preissuance-submission.pdf	2	Third-Party Submission Under 37 CFR 1.290	51 KB	
Concise-description-generated.pdf	2	Concise Description of Relevance	28 KB	
Third-party-notification-request.pdf	1	Request for Notification of Non-compliant Third-Party Submission	14 KB	
3PS US20230406824A1 Embedded.pdf	18	-	484 KB	
3PS US20230406824A1	(1-18)	18	Concise Description of	486 KB

Embedded-3P.RELEVANCE.pdf			Relevance	
3PS US20230406824A1 Embedded-3P.RELEVANCE.pdf	(1-18)	18	Concise Description of Relevance	486 KB
3PS US20230406824A1 Embedded-3P.RELEVANCE.pdf	(1-18)	18	Concise Description of Relevance	486 KB
1_Cerletti.pdf		14	-	2241 KB
1_Cerletti-NPL.pdf	(1-14)	14	Non Patent Literature	2237 KB
2_DMT Nexus.pdf		6	-	155 KB
2_DMT Nexus-NPL.pdf	(1-6)	6	Non Patent Literature	151 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
third-party-preissuance-submission.pdf	FD9485E43F4EBC0123132748FE4DDBD10A40F780B24F300BB103D0AB3B53212BAC2992574AE07554D1A567303AC3BC0F76DD97ECECE58EF9ED51635F563C3946
Concise-description-generated.pdf	FCC923FDCE826B19A1FAA24C5B4CBECFAB9B4DF3B5C814F36029E437CE39A4A55EE682025B5D482B4E27B8D8DD4E8479BC7A9060F4BF77C21B28ECC6DCC3F053
Third-party-notification-request.pdf	95B8D7B1FA59915EBAF9D00438892760C7476CF9B0C52306754AF7DD42C6F5194996FDBF7D4D662DF609A8D9394163638755CA28497B928C00635EE285E4DE09
3PS US20230406824A1 Embedded.pdf	5AB1280F2CA6D23831BE2304C29DD0DA9281B6F52EAA59AC64A2039CB76EE9AB962BCDFAA5768EB341CE3CA365C1F867163AF9EE7D769C156FB8F45427ACBDDE

3PS US20230406824A1 Embedded- 3P.RELEVANCE.pdf	1656B277ECD12BB65A793CE255F11B195348870FD27D4CB05 1DDEF72CA406C96B28EF92DD78B645873B36587EEC9D8902 C87DD8C4622F2301891DA004A7AC017
3PS US20230406824A1 Embedded- 3P.RELEVANCE.pdf	F3171B796ED468FD80540A98DE17803340BB3890DE5165489A 704A2847B3FA60CDC0A8663804C705B25B0F51D2032A5F186B F06F0EBA7CA39474AB9DF44580E7
3PS US20230406824A1 Embedded- 3P.RELEVANCE.pdf	5148571DE6AAB639C30C38F0F645BB999FF5FF768D5780B812 25B55FC36FDB1E4598D3B849A7D779E930EBCAAED6A302 D540D2A623838DCBD38B6594196787
1_Cerletti.pdf	7AE92E5453A133909FFC4DE00A2F495CB5E4C5766519375B29 C55219DC5B875FB6564AB12FEE8584D302955FD13E99BE80B 44664A63DBDA06FCB11AC94E23A50
1_Cerletti-NPL.pdf	B8EB8CFE0C7EE0C5AD649AC8668A46AD9A2E13D7D629EAC 3BB5E842C876691747790FFA9A7A1AE85C295B0F187A27F015 5A2E4AE928D8A974B910DC6C03A428D
2_DMT Nexus.pdf	75E49768F12646D3816881A1F632D50C5FAF010344F68FEC0F 1AEC2C925F4CE0CF24A34A07BE46F19A5F3E5202DA6C88474 036CE3D6665095097C64ED7CB904A
2_DMT Nexus-NPL.pdf	F9BD6228FCC49E3F46632CE6D128634A53210EF5897B9D43A C8AF74FEA32581C5F2E3114209B7432BF56A318DC6F639F3A6 CB22C18CCE7ADC81C0EFF4BB131F2

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for 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.