

**PATENT COOPERATION TREATY**  
**PCT**  
**THIRD PARTY OBSERVATION**  
**(PCT Administrative Instructions Part 8)**

Applicant's or agent's file reference JRNY-PCT-001	
International application number PCT/US2022/031423	International filing date (day/month/year) 27 May 2022 (27/05/2022)
Applicant JOURNEY COLAB CORP.	
Third party observation submitted by Sisi LI	Observation submitted on behalf of Porta Sophia
Date of submission(day/month/year) 03 Mar 2023 (03/03/2023)	Language of observation English

<b>Basis and contents of observation</b>
1. The observation is made on the basis of the claims in the international application as filed.
2. The observation comprises: References to documents: 10 Uploaded copies of documents: 6
3. Further explanations: Uploaded copies of documents: 0

**Citation # 1 (Patent/utility model) (# uploaded documents: 0):**

Country code: US	Publication number: 20200147038	Document kind code: A1	
Patent Applicant/Patent Owner: Eleusis Benefit Corporation, PBC	Title of invention: ASSESSING AND TREATING PSYCHEDELIC-RESPONSIVE SUBJECTS		
Link to document:			
Publication Date: 14 May 2020 (14/05/2020)	Filing Date:	Priority Date:	
Source of Abstract:	Accession number:	Publication Date of Abstract:	Retrieval Date of Abstract:
Most relevant passages or drawings: Claims 1, 2, 29, 90, [0137], [0006], [0139]		Relevant to Claims: 1, 2, 25, 26, 63...	

Pending process

Brief explanation of relevance:

From claim 1: "1. A method of improving mental or physical well-being of a subject, the method comprising: (i) providing a subject, wherein based on a score of one or more predictors in the subject, the subject has been identified as likely to have a positive therapeutic response to a psychedelic agent; and (ii) following step (i), administering to the subject the psychedelic agent." relevant to WO2022251690 claims 1, 63, 64, 65

From claim 2: "The method of claim 1, wherein the method is for treating stress in the subject, treating anxiety in the subject, treating addiction in the subject..." relevant to WO2022251690 claims 1, 63, 64, 65

From claim 29: "The method of any one of claims 1-28, wherein the psychedelic agent is administered as an adjunctive therapy, wherein the subject is being treated with a psychotherapy." relevant to WO2022251690 claims 1, 65

From claim 90: "90. The method of claim 89, wherein the 5-HT.sub.2A receptor agonist is selected from ... 3,4,5-trimethoxyphenethylamine (mescaline); 5-methoxy-N,N-dimethyltryptamine (5-meo-DMT); ibogaine; a compound of ##STR00007## or a pharmaceutically acceptable salt thereof." relevant to WO2022251690 claims 1, 25, 26, 63, 64, 65

From [0137]: "Treatment facilities in which psychedelic and/or complex therapies can be administered include other settings that are authorized to administer therapies including psychedelic therapies, adjunctive psychotherapies, and/or complex therapies. For example, authorized treatment facilities may be associated with a hospital, a mental health clinic, or a retreat center. Treatment facilities may be in-patient or out-patient facilities and may provide screening, evaluation, and follow-up services. In some embodiments, treatment facilities may be associated with a research facility/program." relevant to WO2022251690 claims 2

From [0006]: "In some embodiments, the one or more predictors include one or more state predictors. In some instances, the one or more state predictors are selected from the group consisting of a measure of distress, a measure of preoccupation, and a measure of surrender. In some embodiments, a high measure of distress is positively correlated with a positive therapeutic response." relevant to WO2022251690 claims 25, 26

From [0139]: "The methods and compositions of the invention can be used to treat substance abuse, drug addictions, and addictive behaviors. Addictive behaviors which can be treated using the methods of the invention include food addiction, binge eating disorder, pathological gambling, pathological use of electronic devices, pathological use of electronic video games, pathological use of electronic communication devices, pathological use of cellular telephones, addiction to pornography, sex addiction, obsessive-compulsive disorder, compulsive spending, intermittent explosive disorder, kleptomania, pyromania, trichotillomania, compulsive over-exercising, and compulsive overworking. Drug addictions which can be treated using the methods of the invention include addictions to recreational drugs, as well as addictive medications. Examples of addictive agents include, but are not limited to, alcohol, e.g., ethyl alcohol, gamma hydroxybutyrate (GHB), caffeine, nicotine, cannabis (marijuana) and cannabis derivatives, opiates and other morphine-like opioid agonists such as heroin, phencyclidine and phencyclidine-like compounds, sedative hypnotics such as ..." relevant to WO2022251690 claims 63, 64

**Citation # 2 (Patent/utility model) (# uploaded documents: 0):**

Country code: US	Publication number: 20210087593	Document kind code: A1	
Patent Applicant/Patent Owner: Willow BioSciences Inc.		Title of invention: N-ALKYLATION OF ALKALOID COMPOUNDS	
Link to document:			
Publication Date: 25 Mar 2021 (25/03/2021)	Filing Date:	Priority Date:	
Source of Abstract:	Accession number:	Publication Date of Abstract:	Retrieval Date of Abstract:
Most relevant passages or drawings: [0109], [0343]		Relevant to Claims: Claim 6	
Brief explanation of relevance: <p>From [0109]: "In some embodiments, the alkaloid substrate can be mescaline." relevant to WO2022251690 claims 6</p> <p>From [0343]: "The terms "substantially pure" and "isolated", as may be used interchangeably herein describe a compound, e.g., an alkaloid, nucleic acid sequence or a polypeptide, which has been separated from components that naturally accompany it. Typically, a compound is substantially pure when at least 60%, more preferably at least 75%, more preferably at least 90%, 95%, 96%, 97%, or 98%, and most preferably at least 99% of the total material (by volume, by wet or dry weight, or by mole percent or mole fraction) in a sample is the compound of interest. Purity can be measured by any appropriate method, e.g., in the case of polypeptides, by chromatography, gel electrophoresis or HPLC analysis." relevant to WO2022251690 claims 6</p>			

**Citation # 3(Web page) (# uploaded documents:1):**

Author:	Title of Page Or Article: Mescaline Dosage by Erowid	
URL: <a href="https://erowid.org/chemicals/mescaline/mescaline_dose.shtml">https://erowid.org/chemicals/mescaline/mescaline_dose.shtml</a>		
DOI:		
Name of Website: Erowid	Publication Date: 21 Feb 2015 (21/02/2015)	Retrieval Date: 02 Mar 2023 (02/03/2023)
Most relevant passages or drawings: Table, quote from post	Relevant to Claims:	
Brief explanation of relevance: <p>From webpage: "The two most commonly produced synthetic forms of mescaline are mescaline hydrochloride and mescaline sulfate which have very similar dosages." relevant to WO2022251690 claims 10, 11, 15, 16, 42, 43, 70, 72</p> <p>From webpage: "Oral Mescaline HCL Dosages" table describing dosage range of 100 mg – 700 mg relevant to WO2022251690 claims 15, 16, 72</p>		

## Citation # 4(Web page) (# uploaded documents:1):

Author:		Title of Page Or Article: Focusing The Third Eye Mescaline by Brent	
URL: <a href="https://erowid.org/experiences/exp.php?ID=73076">https://erowid.org/experiences/exp.php?ID=73076</a>			
DOI:			
Name of Website: Erowid	Publication Date: 20 Jul 2009 (20/07/2009)	Retrieval Date: 02 Mar 2023 (02/03/2023)	
Most relevant passages or drawings: Quote from post		Relevant to Claims:	
Brief explanation of relevance: From webpage: "The trip: Last night I consumed 1 capsule of mescaline" relevant to WO2022251690 claims 17, 47, 79			

## Citation # 5(Web page) (# uploaded documents:1):

Author:		Title of Page Or Article: Mescaline hydrochloride	
URL: <a href="https://pubchem.ncbi.nlm.nih.gov/compound/Mescaline-hydrochloride">https://pubchem.ncbi.nlm.nih.gov/compound/Mescaline-hydrochloride</a>			
DOI:			
Name of Website: PubChem	Publication Date: 27 Mar 2005 (27/03/2005)	Retrieval Date: 02 Mar 2023 (02/03/2023)	
Most relevant passages or drawings: Webpage section 1.1 2D Structure mescaline HCL image		Relevant to Claims:	
Brief explanation of relevance: From PubChem webpage section 1.1 2D Structure, Chemical Structure Depiction of mescaline HCL , relevant to WO2022251690 claims 9, 70, 71			

Pending processing

## Citation # 6 (Patent/utility model) (# uploaded documents: 0):

Country code: US	Publication number: 20220096504	Document kind code: A1	
Patent Applicant/Patent Owner: Diamond Therapeutics Inc.		Title of invention:	
Link to document:			
Publication Date: 31 Mar 2022 (31/03/2022)	Filing Date:	Priority Date:	
Source of Abstract:	Accession number:	Publication Date of Abstract:	Retrieval Date of Abstract:
Most relevant passages or drawings: Claim 1, TABLE-US-00005, [0298], [0195]		Relevant to Claims: Claim 20	
Brief explanation of relevance:			
<p>From claim 1: "A method of managing a neurological condition or one or more symptoms thereof in a subject in need thereof, comprising administering to the subject a pharmaceutical composition comprising: a) a therapeutically effective amount of one or more 5HT receptor agonist or a pharmaceutically acceptable salt, solvate, metabolite, derivative, or prodrug thereof; and b) a pharmaceutically acceptable excipient wherein the therapeutically effective amount of the 5HT receptor agonist or a pharmaceutically acceptable salt, solvate, metabolite, derivative, or prodrug thereof is provided to the subject in need thereof in an amount insufficient to provide an adverse side effect, such as hallucinogenic experience." relevant to WO2022251690 claims 20</p> <p>From TABLE-US-00005: "Receptor Drugs acting on receptor Agonists 5HT.sub.2A Bufotenin, Ergonovine, Lisuride, LSD, Mescaline, Myristicin, Psilocin, Psilocybin, DMT, DOM, PNU-22394, TFMPP, 25I-NBOMe, 2C-B, 5-MeO- DMT..." relevant to WO2022251690 claims 20</p> <p>From [0298]: "For human individuals, depressed individuals, aged 18-55 years inclusive, with a body mass index (BMI) within 18-30 kg/m.sup.2 inclusive, having provided a written informed consent..." relevant to WO2022251690 claims 20</p> <p>From [0195]: "Provided herein are methods for managing or treating disorders, conditions or symptoms including but not limited to addiction disorders, such as but not limited to alcohol abuse, substance abuse, smoking, or obesity." relevant to WO2022251690 claims 20</p>			

Citation # 7(Web page) (# uploaded documents:1):

Author:		Title of Page Or Article: The Sacrament Mescaline by Sweet Galenas	
URL: <a href="https://erowid.org/experiences/exp.php?ID=107600">https://erowid.org/experiences/exp.php?ID=107600</a>			
DOI:			
Name of Website: Erowid	Publication Date: 16 Jul 2020 (16/07/2020)	Retrieval Date: 02 Mar 2023 (02/03/2023)	
Most relevant passages or drawings: Quote from post		Relevant to Claims:	
<p>Brief explanation of relevance:</p> <p>From webpage: "Yesterday was a mellow day. I went for a run, meditated and read. I had a pizza at 19.00 and then some camomile tea later in the evening. Next time I will probably have something lighter to eat. I slept well and woke up at 08.00... 09.00 – I mix 200 mg of mescaline hcl with water. It tastes bitter so I have a sip of orange juice to chase it. That's it. No breakfast...I think the point of fasting is about focus. If metabolism is brought to a minimum then there is only yourself and the mescaline. Like I said, the hunger seems to be relieved by the mescaline. I never felt hungry...I thought fasting was about increasing effect and shortening the come up." relevant to WO2022251690 claims 21</p>			

Pending processing

Citation # 8 (Patent/utility model) (# uploaded documents: 0):

Country code: US	Publication number: 20210069170	Document kind code: A1	
Patent Applicant/Patent Owner: Paul Edward STAMETS		Title of invention: TRYPTAMINE COMPOSITIONS FOR ENHANCING NEURITE OUTGROWTH	
Link to document:			
Publication Date: 11 Mar 2021 (11/03/2021)	Filing Date:	Priority Date:	
Source of Abstract:	Accession number:	Publication Date of Abstract:	Retrieval Date of Abstract:
Most relevant passages or drawings: [0106], [0054], [0260], claim 9		Relevant to Claims: Claim 17, 24, 47, 79	
<p>Brief explanation of relevance:</p> <p>From [0106]: "The pharmaceutically acceptable compositions described herein may be orally administered in any orally acceptable dosage form including, but not limited to, capsules, tablets, aqueous suspensions, or solutions. In the case of tablets for oral use, carriers commonly used include lactose and corn starch" relevant to WO2022251690 claims 17, 47, 79</p> <p>From claim 9: "The composition of claim 8, wherein the phenethylamines or amphetamines comprises 3,4,5-trimethoxyphenethylamine (Mescaline),..." relevant to WO2022251690 claims 17, 47, 79</p> <p>From [0054]: "As used herein, the terms "phenethylamine" and "amphetamine" refers to any compound related to or derived from the monoamine alkaloids, which acts as a central nervous system stimulant. The phenethylamines and amphetamines may be natural products extracted from or isolated from natural sources or synthetically synthesized. Exemplary phenethylamines and amphetamines include 3,4,5-trimethoxyphenethylamine (Mescaline),..." relevant to WO2022251690 claims 24</p> <p>From [0260]: "This research has revealed distinct roles of psilocybin analogs in benefiting neurological health. ELISA assays in human 1321N1 brain cells found that norbaeocystin induces the expression of nerve growth factor (NGF) protein while norpsilocin induces the expression of the anti-inflammatory cytokine IL-10. Moreover, Ly et al. found that psychedelic compounds are unable to induce the expression of BDNF transcript, while we have observed strong induction of BDNF transcript by lion's mane extract." relevant to WO2022251690 claims 24</p>			

Pending Proceedings

**Citation # 9(Periodical article) (# uploaded documents:1):**

Author: Lin Lu, Yanli Liu, Weili Zhu, Jie Shi, Yu Liu, Walter Ling, Thomas R Kosten	Title of article: Traditional medicine in the treatment of drug addiction	Title of Periodical: The American Journal of Drug and Alcohol Abuse	Publication Date: 2009
Issue Number of Periodical: Volume 35/Issue 1	Publisher of Periodical:	Place of publication:	
Page range of article within periodical:	ISBN:	ISSN:	
DOI: 10.1080/00952990802455469			
Most relevant passages or drawings: Page 6		Relevant to Claims: Claims 27, 39, 66	
Brief explanation of relevance: From page 6: "The advantage of this therapeutic procedure is the ability of Peyote to rapidly alter the attitudes and behavior toward alcohol, long before the physical symptoms present. Through the ritual, many individuals testify to unprecedented periods of mental clarity, during which they report visions of their future life as an alcoholic. Later in the period of sobriety, the Peyote ritual potentiates a heightened state of consciousness that once experienced in the ritual becomes incorporated in the person's lifestyle. Although this mode of treatment is not widely accepted and has not been conclusively proven to be effective; nevertheless, it seems important to consider the mechanism of ethnopsychedelic therapy for alcoholics. It was presumed that the action mechanism of the efficacy of Peyote in the treatment of alcoholism may act through the biomedical nature of the cactus itself" relevant to WO2022251690 claims 27, 39, 66			

**Citation # 10(Web page) (# uploaded documents:1):**

Author:	Title of Page Or Article: The Grinch Who Took Mescaline Mescaline by Samanthe		
URL: <a href="https://erowid.org/experiences/exp.php?ID=11253">https://erowid.org/experiences/exp.php?ID=11253</a>			
DOI:			
Name of Website: Erowid	Publication Date: 13 Dec 2001 (13/12/2001)	Retrieval Date: 02 Mar 2023 (02/03/2023)	
Most relevant passages or drawings: Quote from post		Relevant to Claims:	
Brief explanation of relevance: From webpage table describing 3 doses of oral capsule delivery of 100 mg of mescaline relevant to WO2022251690 claims 28, 29, 40, 41, 67, 68  From webpage: "But essentially my trips have shown me two simple things that have stuck about what I'm to do in the world: breathe, and strengthen my body. If I don't follow that imperative, learn better breathing and body consciousness, what business do I have tripping? I have to do the work to keep moving forward. So I finally kept a promise to myself, by starting yoga. I also decided to abstain from drinking any alcohol for six months, just to see what that's like, and to explore Cannabis, which I discovered I've been chronically overdosing myself on for years (for an illustration , read any of my old Cannabis trip reports)." relevant to WO2022251690 claims 28, 29, 40, 41, 67, 68			



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Applicant's or agent's file reference JRNY-PCT-001	
International application number PCT/US2022/031423	International filing date (day/month/year) 27 May 2022 (27/05/2022)
Applicant JOURNEY COLAB CORP.	
Third party observation submitted by Taylor KURTZWEIL	Observation submitted on behalf of Porta Sophia
Date of submission(day/month/year) 03 Mar 2023 (03/03/2023)	Language of observation English

**Basis and contents of observation**

1. The observation is made on the basis of the claims in the international application as filed.
2. The observation comprises:  
References to documents: 10  
Uploaded copies of documents: 8
3. Further explanations:  
Uploaded copies of documents: 0

**Citation # 1(Periodical article) (# uploaded documents:1):**

Author: B J Albaugh, P O Anderson	Title of article: Peyote in the treatment of alcoholism among American Indians	Title of Periodical: The American Journal of Psychiatry	Publication Date: 1974
Issue Number of Periodical: Volume 131/Issue 11	Publisher of Periodical:	Place of publication:	
Page range of article within periodical:	ISBN:	ISSN:	
DOI:			
Most relevant passages or drawings: Pages 1247, 1249			Relevant to Claims: See explanation

Pending processing

Brief explanation of relevance:

Relevant to Claims 19, 27, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 53, 54, 55, 56, 59, 60, 61, 66, 69, 73, 74, 75

From page 1247: "Upon entering the program, the patient agrees to stay for 30 days at the lodge, although he may stay longer if he wishes. The patient is initially interviewed and any medical problems are treated at the Indian hospital. During the first week, the patient undergoes three or four sessions of individual counseling with one of the in-house counselors, the hospital social worker, the mental health technician, or one of the local Indian missionaries. There after, counseling is done in small groups and individual counseling is given only as requested by the patient. Therapy consists of work at the lodge, community service work, occupational therapy, and participation in local Indian Alcoholics Anonymous groups. Cultural therapy includes formal instruction in native arts and crafts, periodic group counseling, discussions with traditional ceremonial chiefs, and participation in gourd clans (men's social organizations) and in the services of the Native American Church (NAC), the peyote religion. Services or meetings of the NAC (peyote meetings) are held for the benefit of the persons at the lodge once a month in a teepee just outside the building... During the meeting, participants are encouraged to openly express their problems. Considerable empathy and group support is provided to the person who does this by the other participants" relevant to WO2022251690 claims 19, 30, 31, 32, 33, 34, 36, 37, 38, 53, 54, 55, 56, 59, 60, 61, 69, 73, 74, 75

From page 1249: "If each peyote button contains 45 mg. of mescaline (9), each participant ingests an average of about 500 mg. of mescaline. It can be seen that most participants receive a dose of mescaline comparable to the dose of LSD used in psychedelic-peak therapy. The peyote meeting parallels psychedelic-peak therapy in many respects." relevant to WO2022251690 claims 19, 30, 31, 32, 33, 34, 36, 37, 38, 53, 54, 55, 56, 59, 60, 61, 69, 73, 74, 75

From page 1249: "CASE REPORT Case 1. One member of the NAC related an event that had occurred during a peyote meeting several years before when he was attempting to resolve his long-time drinking problem. During the meeting, a tiny man appeared to walk out of the ceremonial fire and up the side of the low, crescent-shaped, earthen altar to the center of the "peyote road" that is drawn along the top of the altar. The tiny man paused for a long time as if he were trying to decide in which direction to walk. The tiny man finally took the path that led him to the way of the peyote religion rather than the path that led to a continuation of drinking. The patient interpreted this vision as an omen indicating that he should no longer continue drinking but should return to the peyote religion from which he had strayed. This was a turning point in his life. At the present time, he frequently attends peyote meetings, remains abstinent, has reestablished his family, and holds a job working with Indian alcoholics." relevant to WO2022251690 claims 27, 39, 66

From page 1249: "The road chief is skilled in guiding the group dynamics of the peyote meeting, and patients remain at the lodge for varying lengths of time during which the discussion of personal problems continues with counselors and other patients, both individually and in groups. We have noted a carry-over period marked by increased openness and willingness to communicate lasting 7 to 10 days among peyote meeting participants. This effect appears to be similar to the "psychedelic afterglow" reported to occur following psychedelic-peak therapy." relevant to WO2022251690 claims 35

Citation # 2(Periodical article) (# uploaded documents:1):

Author: A B WOLBACH Jr, H ISBELL, E J MINER	Title of article: Cross tolerance between mescaline and LSD-25, with a comparison of the mescaline and LSD reactions	Title of Periodical: Psychopharmacologi a	Publication Date: 1962
Issue Number of Periodical: Volume 12	Publisher of Periodical:	Place of publication:	
Page range of article within periodical:	ISBN:	ISSN:	
DOI:			
Most relevant passages or drawings: Pages 2, 3, 4		Relevant to Claims: See explanation	
<p>Brief explanation of relevance: Relevant to Claims 22, 23, 57, 58</p> <p>From page 2: "Experimental design. A "single-blind" cross-over design was employed in this experiment (patients did not know the drugs they were receiving, but observers did know). Each subject received, in randomized order at weekly intervals, two doses of LSD and mescaline. Placebos were not included since experience (ISBEL et al., 1956, 1961) has shown that former morphine addicts do not react markedly to placebos. For comparison, placebo data from another experiment (ISBELL et al., 1959) are presented." relevant to WO2022251690 claims 22, 23</p> <p>From page 2-3: "Analysis of data. The changes in rectal temperature, pulse rate, pupillary size, blood pressure and threshold for elicitation of the knee jerk were calculated by subtracting the average of the two pre-drug observations from the values obtained at the various hours after the drug." relevant to WO2022251690 claims 22, 23</p> <p>From page 2: "Subjects. The subjects who volunteered for this experiment were former opiate addicts who were serving sentences for violation of United States narcotic laws." relevant to WO2022251690 claims 57</p> <p>From page 4: Table 1 Summary of experimental design, Experiment II describing administering a first dose of mescaline and a second dose of mescaline 7-21 days after the first administration of mescaline, relevant to WO2022251690 claims 57</p> <p>From page 4-5: "Drugs and doses. LSD and mescaline were administered intramuscularly at 8 a.m. (during the control period and on test days) or at 6 a.m. (during the periods of chronic intoxication). No placebos were employed in this study because of the negligible Subjective response of our subjects, because placebos have no real value in assessing tolerance and cross tolerance, and because the addition of placebo trials would have prolonged the experiment unnecessarily. In the first and second control periods the patients received LSD 1.5 meg/kg, and mescaline 5.0 mg/kg in randomized order before chronic administration of the drugs was begun. Detailed observations were made on these test days. These control experiments were conducted at intervals of at least five days in order to prevent development of tolerance during the control period. During the first and second periods of chronic administration, the patients received intramuscularly 0.30 mcg/kg of LSD or 1 mg/kg of mescaline on the first day. These doses were increased by 0.30 meg/kg (LSD) or 1 mg/kg (mescaline) daily until the patients were receiving 1.5 meg/kg of LSD or 5.0 mg/kg of mescaline on the fifth day. These doses were maintained through the 14th day after beginning chronic intoxication. On the 15th day the patients were "challenged" with the dose of drug they had been receiving (test of "direct" tolerance). On the 16th day they were "challenged" with the test dose of the alternate drug (test of "cross" tolerance). On both of these days detailed measurements were made." relevant to WO2022251690 claims 58</p>			

Citation # 3(Periodical article) (# uploaded documents:1):

Author: Gabrielle Agin-Liebes , Trevor F Haas, Rafael Lancelotta, Malin V Uthaug, Johannes G Ramaekers, Alan K Davis	Title of article: Naturalistic Use of Mescaline Is Associated with Self-Reported Psychiatric Improvements and Enduring Positive Life Changes	Title of Periodical: ACS Pharmacology & Translational Science	Publication Date: 23 Mar 2021 (23/03/ 2021)
Issue Number of Periodical: Volume 4/Issue 2	Publisher of Periodical:	Place of publication:	
Page range of article within periodical:	ISBN:	ISSN:	
DOI:			
Most relevant passages or drawings: Pages 549, 543-545		Relevant to Claims: See explanation	
<p>Brief explanation of relevance: Relevant to Claims 1, 19, 25, 27, 39, 66</p> <p>From page 549: “Mental Health Measure. This questionnaire included a series of questions about whether respondents had been diagnosed with a mental health condition in the past, including depression, anxiety, PTSD, alcohol misuse or AUD, or drug misuse or DUD (categorical response options: yes, no, or unsure). Respondents could select multiple categories. The questionnaire also queried whether respondents’ conditions had changed after mescaline consumption (categorical response options: better, stayed the same, or worsened)” relevant to WO2022251690 claims 1, 25</p> <p>From page 543-545: “Psychiatric improvement following psychotherapeutic psilocybin administration has also been associated with the intensity of acute psychological factors including mysticaltype 11–13 and psychological insight experiences. 14–17 These findings suggest important psychological factors responsible for facilitating clinical improvements in addition to environmental variables such as interpersonal support, preparation, and therapeutic integration” relevant to WO2022251690 claims 19</p> <p>From page 544: “Table 1. Demographic Characteristics among the Total Sample and among Those with Depression, Anxiety, PTSD, Alcohol Misuse or Alcohol Use Disorder, and Drug... Misuse or Use Disorder as a Function of Whether Conditions Improved or Did Not Improve Following Mescaline Use” describing 4%-83% of various demographic participants responded better with alcohol misuse AUD following mescaline use. 0%-79% of various demographic participants responded better with drug misuse DUD following mescaline use relevant to WO2022251690 claims 27, 39, 66</p>			

## Citation # 4(Periodical article) (# uploaded documents:1):

Author: J Lundström, S Agurell	Title of article: A complete biosynthetic sequence from tyrosine to mescaline in two cactus species	Title of Periodical: Tetrahedron Letters	Publication Date: 1969
Issue Number of Periodical: Volume 39	Publisher of Periodical:	Place of publication:	
Page range of article within periodical:	ISBN:	ISSN:	
DOI:			
Most relevant passages or drawings: Pages 3371		Relevant to Claims: See explanation	
Brief explanation of relevance: Relevant to Claims 7, 45, 48, 49, 50, 51, 62, 76, 77  From page 3371: "The early steps in the pathway from tyrosine to mescaline in the peyote cactus, <i>Lophophora williamsii</i> Coult., have been reported before (1,2,3). Recently we reported the presence in two different cactus species of methoxylated phenolic alkaloids which could be regarded as possible Intermediates in the biosynthesis of mescaline" relevant to WO2022251690 claims 7, 45, 48, 49, 50, 51, 62, 76, 77			

Pending processing

**Citation # 5(Periodical article) (# uploaded documents:1):**

Author: Bruce K. Cassels	Title of article: Alkaloids of the Cactaceae – The Classics	Title of Periodical: NPC Natural Product Communications	Publication Date: 2019
Issue Number of Periodical: Volume 14	Publisher of Periodical:	Place of publication:	
Page range of article within periodical:	ISBN:	ISSN:	
DOI:			
Most relevant passages or drawings: Pages 85, 86		Relevant to Claims: See explanation	
Brief explanation of relevance: Relevant to Claims 8, 46, 52, 78  From page 85: “This early work included the preparation of various salts of the alkaloids (usually containing metals such as mercury, gold or platinum), elementary analyses and some other chemical tests based on oxidations and the Zeisel quantification of methoxyl groups [11(a,b)], but no convincing structure was determined until 1919, when a young Ernst Späth in the University of Vienna demonstrated the identity of “anhaline” with hordenine and proved the structure of mescaline [12(a)]. In the following decade Späth and his students, particularly Friedrich Becke and Johann Bruck, carried out a number of studies showing the structures of anhalonine and lophophorine [12(b)], camegine, found to be the same as the “pectenine” of Pachycereus species [12(c,d)], pellotine and anhalonidine [12(e)], anhalamine [12(f)], and then of a succession of “new” peyote alkaloids: anhalinine [12(g)], anhalidine [12(h)], N-methylmescaline [12(i)], the first non-basic cactus alkaloid N-acetylmescaline [12(j)], and O-methylanhalonidine [12(k)].” relevant to WO2022251690 claims 8, 46, 78 From page 86: “The early classic studies of cactus alkaloids revealed seven phenethylamine derivatives (Figure 1)... and nine simple 1,2,3,4-tetrahydroisoquinolines (Figure 2)” showing classic cactus phenethylamines and classic cactus isoquinolines, relevant to WO2022251690 claims 8, 46, 52, 78			

**Citation # 6(Other) (# uploaded documents:1):**

Identification of Document: Current Good Manufacturing Practice—Guidance for Human Drug Compounding Outsourcing Facilities Under Section 503B of the FD&C Act Guidance for Industry	Publication Date: Jan 2020 (01/2020)
Link to document:	
DOI:	
Most relevant passages or drawings: Page 1	Relevant to Claims: Claims 3, 4
Brief explanation of relevance: From page 1: “This guidance describes FDA’s policies regarding compliance with current good manufacturing practice (CGMP) requirements for facilities that compound human drugs and register with FDA as outsourcing facilities under section 503B of the Federal Food, Drug, and Cosmetic Act (FD&C Act). Under section 501(a)(2)(B) of the FD&C Act, a drug is deemed to be adulterated if it is not produced in accordance with CGMP.” relevant to WO2022251690 claims 3, 4	

## Citation # 7(Periodical article) (# uploaded documents:1):

Author: Raquel Casado, Iñigo Uriarte, Rita Yolanda Cavero & Maria Isabel Calvo	Title of article: LC-PAD Determination of Mescaline in Cactus “Peyote” (Lophophora williamsii)	Title of Periodical: Chromatographia Limited Short Communication	Publication Date: 2008
Issue Number of Periodical: n/a	Publisher of Periodical:	Place of publication:	
Page range of article within periodical:	ISBN:	ISSN:	
DOI:			
Most relevant passages or drawings: Pages 666		Relevant to Claims: See explanation	
<p>Brief explanation of relevance: Relevant to Claims 5, 6, 7, 8, 44, 45, 48, 49, 50, 51, 62, 76, 77</p> <p>From page 666: “We report an LC method for quantification of the mescaline content in cactus “peyote”. Under the conditions used the most successful solvent system consisted of a mixture of water (pH = 2) and acetonitrile (90:10 w/w) which gave the best resolution of mescaline in the presence of other compounds in the extract (Fig. 2). Peak identity of mescaline in the sample extracts was confirmed by overlaying its UV absorption spectrum with that of the standard mescaline. Purity of mescaline in the sample extract was confirmed by comparing the absorption spectra at start middle and end position of the peak. The method was validated in terms of precision , repeatability, accuracy and linearity. The precision of the method was determined by repeatability ( intra-day) and intermediate precision (inter-day). The intra-day coefficient of variation was 0.4–0.7% for mescaline, and the inter-day coefficient was 0.6–0.8%. Results indicate good repeatability and low inter-day variability (RSD maximum 1.0%). Good linearity was observed over the concentration range of 5–200 ug mL<sup>-1</sup> , with a correlation coefficient of 0.9992 and the linear regression equation <math>y = 10675x + 65642</math>. The percentage recovery at three different levels was found to be <math>99.9 \pm 0.898\%</math> and was considered highly satisfactory. The limits of detection (LOD) and the limits of quantification (LLOQ) were 0.28 and 1.40 ug of mescaline, respectively.” relevant to WO2022251690 claims 5, 6, 7, 8, 44, 45, 48, 49, 50, 51, 62, 76, 77</p>			

Citation # 8 (Patent/utility model) (# uploaded documents: 0):

Country code: US	Publication number: 20220265582	Document kind code: A1	
Patent Applicant/Patent Owner: Universitätsspital Basel		Title of invention: EFFECTS OF Mescaline AND OF Mescaline ANALOGS (SCALINES) TO ASSIST PSYCHOTHERAPY	
Link to document:			
Publication Date: 25 Aug 2022 (25/08/2022)		Filing Date:	Priority Date: 24 Feb 2021 (24/02/2021)
Source of Abstract:	Accession number:	Publication Date of Abstract:	Retrieval Date of Abstract:
Most relevant passages or drawings: [0090]		Relevant to Claims: Claims 3, 4	
Brief explanation of relevance: From [0090]: "Substance preparation and quality control: Mescaline was prepared as capsules containing 100 mg of analytically pure mescaline (ReseaChem GmbH, Burgdorf, Switzerland) and mannitol filler. Psilocybin was prepared as capsules containing 5 mg of analytically pure psilocybin ( ReseaChem GmbH, Burgdorf, Switzerland) and mannitol filler. LSD was prepared as an oral solution containing 100 µg of analytically pure LSD (Lipomed AG, Arlesheim, Switzerland) in 1 ml of ethanol. All three substance formulations plus matching placebos were prepared by a GMP facility ( Apotheke Dr. Hysek, Biel, Switzerland) according to GMP guidelines" relevant to WO2022251690 claims 3, 4			

Pending processing



## Citation # 9(Periodical article) (# uploaded documents:1):

Author: Makepeace U. Tsao	Title of article: Journal of the American Chemical Society	Title of Periodical: A New Synthesis of Mescaline	Publication Date: 01 Nov 1951 (01/11/ 1951)
Issue Number of Periodical: Volume 73/Issue 11	Publisher of Periodical:	Place of publication:	
Page range of article within periodical:	ISBN:	ISSN:	
DOI:			
Most relevant passages or drawings: Page 5495		Relevant to Claims: Claims 12, 13, 14	
<p>Brief explanation of relevance:</p> <p>From 5495: "Mescaline.—In 150 ml. of anhydrous ether is suspended 0.85 g. of lithium aluminum hydride powder. With stirring, 2.0 g. of 3,4,5-trimethoxyphenylacetonitrile in 150 ml. of anhydrous ether was added during the course of 15 minutes. After 15 minutes' stirring, 10 ml. of ice-water is dropped in carefully. Then a mixture of 10 g. of sulfuric acid in 40 ml. of water is added at a moderate rate. The aqueous layer is separated and treated with concentrated sodium hydroxide. The brown oil is extracted with three portions of 30 ml. each of ether. The combined extracts are washed once with water and dried over stick potassium hydroxide. To the decanted ether solution is added a mixture of 1 g. of sulfuric acid and 25 ml. of ether. The white precipitate is washed several times with ether; yield 1.2 g. (40%). After two recrystallizations from 95% ethanol, the colorless long thin plates soften at 172° and melt at 183°. A sample of mescaline acid sulfate prepared from the natural source and kindly furnished by Dr. SeEVERS of the Department of Pharmacology softens at 170° and melts at 180°. The mixed melting point of above two samples is 181°. The picrate, prepared from the acid sulfate, melts at 217° (dec.), after three recrystallizations from ethanol. The chloroplatinate prepared from free base melts at 184- 185°. Spath1 gave the following melting points: sulfate, 183-186°; picrate, 216-218°; chloroplatinate, 187-188°" relevant to WO2022251690 claims 12, 13, 14</p>			

Pending processing

## Citation # 10(Web page) (# uploaded documents:0):

Author:		Title of Page Or Article: The Chemistry of the Plant Phenethylamines Part 3.11 - Mescaline	
URL: <a href="https://www.erowid.org/archive/rhodium/chemistry/mescaline.the-alkaloids-3.html">https://www.erowid.org/archive/rhodium/chemistry/mescaline.the-alkaloids-3.html</a>			
DOI:			
Name of Website: Erowid	Publication Date: 01 May 2005 (01/05/2005)	Retrieval Date: 03 Mar 2023 (03/03/2023)	
Most relevant passages or drawings: Quote from post		Relevant to Claims: Claims 12, 13, 14	
Brief explanation of relevance: From webpage: "It is soluble in water, alcohol, and chloroform, but only slightly so in ether. It readily absorbs carbon dioxide from the air forming the solid carbonate..." B: Synthesis of Mescaline (Slotta & Syszka)111 iii. 3,4,5-trimethoxy-beta-nitrostyrene A solution of 40 mL of nitromethane and 100 g of 3,4,5-trimethoxybenzaldehyde in 200 mL alcohol is cooled to 0°C and while it is stirred mechanically there is introduced a solution of 45 g pure potassium hydroxide in 45 mL water and 90 mL methanol at the rate of about one drop per second, care being taken that the temperature does not rise. Fifteen minutes after the addition is completed the solution is poured into 500 mL concentrated hydrochloric acid mixed with sufficient ice to assure its presence throughout the slow addition and to maintain a temperature of -10°C. The precipitated nitrostyrene is separated by filtration and washing and may be purified by recrystallizing from 700 mL alcohol. The pale yellow plates which melt at 120-121°C are obtained in a yield of approximately 78% of theory. iv. Mescaline" relevant to WO2022251690 claims 12, 13, 14			

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**PATENT COOPERATION TREATY**  
**PCT**  
**THIRD PARTY OBSERVATION**  
**(PCT Administrative Instructions Part 8)**

Applicant's or agent's file reference JRNY-PCT-001	
International application number PCT/US2022/031423	International filing date (day/month/year) 27 May 2022 (27/05/2022)
Applicant JOURNEY COLAB CORP.	

Third party observation submitted by Shahin SHAMS	Observation submitted on behalf of Porta Sophia
Date of submission(day/month/year) 04 Mar 2023 (04/03/2023)	Language of observation English

<b>Basis and contents of observation</b> 1. The observation is made on the basis of the claims in the international application as filed. 2. The observation comprises: References to documents: 4 Uploaded copies of documents: 2 3. Further explanations: Uploaded copies of documents: 0
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Pending processing

## Citation # 1(Periodical article) (# uploaded documents:1):

Author: Hutten, Nadia R P W; Mason, Natasha L; Dolder, Patrick C; Theunissen, Eef L; Holze, Friederike; Liechti, Matthias E; Varghese, Nimmy; Eckert, Anne; Feilding, Amanda; Ramaekers, Johannes G; Kuypers , Ki	Title of article: Low Doses of LSD Acutely Increase BDNF Blood Plasma Levels in Healthy Volunteers	Title of Periodical: ACS pharmacology & translational science	Publication Date: 31 Aug 2020 (31/08/ 2020)
Issue Number of Periodical: Volume 4/Issue 2	Publisher of Periodical:	Place of publication:	
Page range of article within periodical:	ISBN:	ISSN:	
DOI: 10.1021/acscptsci.0c00099			
Most relevant passages or drawings: Pages 461, 462		Relevant to Claims: 24	
Brief explanation of relevance: <p>From page 461: "Preclinical research has demonstrated that psychedelic substances, including 2,5-dimethoxy-4-iodoamphetamine (DOI), lysergic acid diethylamide (LSD), N,N-dimethyltryptamine (DMT), and psilocybin, as well as alkaloids present in ayahuasca (harmine, tetrahydroharmine, and harmaline) affect neuroplasticity after acute and chronic administration.1–5</p> <p>Chronic administration in rats of twice the ritualistic dose of ayahuasca (150 mL/70 kg bodyweight containing 0.26 mg/kg DMT) for 28 days resulted in increased in brain-derived neurotrophic factor (BDNF) levels in the hippocampus of the female rats, compared to that in control animals." relevant to WO2022251690 claims 24</p> <p>From page 462: "BDNF plasma levels under the LSD conditions showed their highest levels at 4 h after administration of 5 µg of LSD (8.95 ng/mL), and at 6 h after administration of 10 µg of LSD (8.28 ng/mL) and 20 µg of LSD (11.49 ng/mL)" relevant to WO2022251690 claims 24</p>			

## Citation # 2(Periodical article) (# uploaded documents:1):

Author: Ricardo Jorge Dinis-Oliveira; Carolina Lança Pereira; Diana Dias da Silva	Title of article: Pharmacokinetic and Pharmacodynamic Aspects of Peyote and Mescaline: Clinical and Forensic Repercussions	Title of Periodical: Current Molecular Pharmacology	Publication Date: Aug 2019 (08/2019)
Issue Number of Periodical: Volume 12/Issue 3	Publisher of Periodical:	Place of publication:	
Page range of article within periodical:	ISBN:	ISSN:	
DOI: 10.2174/1874467211666181010154139			
Most relevant passages or drawings: Pages 2451		Relevant to Claims: see explanation	
Brief explanation of relevance: From page 2451: "LAH was also employed to obtain mescaline by reduction of 3,4,5-trimethoxyacetamide, prepared in turn from the 3,4,5-trimethoxybenzoyl chloride via the diazoketone. This method, in spite of its relatively poor overall yield, was used to prepare N-methylmescaline and N,N-dimethylmescaline trichocereine) (Scheme 1G)." relevant to WO2022251690 claims 7, 45, 48, 49, 50, 51, 62, 76, 77			

## Citation # 3 (Patent/utility model) (# uploaded documents: 0):

Country code: US	Publication number: 20220304980	Document kind code: A1	
Patent Applicant/Patent Owner: SW Holdings, Inc		Title of invention:	
Link to document:			
Publication Date: 29 Sep 2022 (29/09/2022)	Filing Date: 03 Jul 2020 (03/07/2020)	Priority Date:	
Source of Abstract:	Accession number:	Publication Date of Abstract:	Retrieval Date of Abstract:
Most relevant passages or drawings: Claims 13, 14, 15, 16, 17, 23, [0096], [0104]		Relevant to Claims: 18, 80	
Brief explanation of relevance: From claim 13: "A metered dosing formulation comprising:  An amount between 720 mcg to 8.4 g of one or more psychedelic compounds from a class of mescaline-related compounds with any one or more of a preservative, a buffer, a chloride salt, a polymer, a carbohydrate, a solvent, a terpene, a surfactant, a liquified gas, a solvent, and combinations thereof." relevant to WO2022251690 claims 18, 80  From claim 14: "Formulation of claim 13, wherein said mescaline-related compounds comprises mescaline (3,4,5-trimethoxyphenethylamine) or salts and isomers thereof (such as mescaline hydrochloride or mescaline fumarate); extracts of peyote ( Lophophora williamsii), San Pedro ( Echinopsis pachanoi), and Peruvian torch ( Echinopsis/Trichocereus peruviana) cactus; and combinations thereof." relevant to WO2022251690 claims 18, 80  From claim 15: "Formulation of claim 13. wherein said mescaline-related compounds include			

synthetic forms or their synthetic analogues thereof." relevant to WO2022251690 claims 18, 80

From claim 16: "Formulation of claim 13, wherein said formulation comprises a dose between 3 micrograms to 1.3 g of mescaline (3,4,5-trimethoxyphenethylamine) or salts and isomers thereof ( such as mescaline hydrochloride or mescaline fumarate); extracts of peyote ( *Lophophora williamsii*) , San Pedro ( *Echinopsis pachanoi*), and Peruvian torch ( *Echinopsis/Trichocereus peruviana*) cactus; and combinations thereof." relevant to WO2022251690 claims 18, 80

From claim 17: "17. Formulation of claim 13, wherein said formulation further comprises a ratio of at least 0.004 part terpene to 1 part psychedelic compound to less than a ratio of 10 parts terpene to 1 part psychedelic compound." relevant to WO2022251690 claims 18, 80

From claim 23: "23. A method for treating or mitigating a neurological, physiological or mental health condition comprising an amount of said formulation from claim 13 applied to a subject thereof." relevant to WO2022251690 claims 18, 80

From [0096]: "In some embodiments of the nasal spray invention, a preservative, such as Benzalkonium chloride, ascorbic acid, or any other biocompatible excipient that increases product shelf life thereof is added to the formulation along with the psychedelic compound. In some embodiments, the ratio of preservative ingredient is 10:1 to the active ingredient. In some embodiments, the ratio of preservative ingredient is 1.3:1 to the active ingredient. In some embodiments, the ratio of the preservative ingredient is 0.02:1 to the active ingredient." relevant to WO2022251690 claims 18, 80

From [0104]: "Provided herein are formulations of psychedelic compounds for transmucosal, buccal, or sublingual delivery. A composition or formulation is provided in some embodiments. In some embodiments, the psychedelic compound is present at a concentration of 0.001% to 75% by weight of the composition and/or formulation. In some embodiments, a combination of one or more psychedelic compounds are present at a total concentration of 0.001% to 90% by weight of the composition and/or formulation. An embodiment of the present invention is a new composition that is delivered via absorption through the mucosal membranes." relevant to WO2022251690 claims 18 , 80

## Citation # 4 (Patent/utility model) (# uploaded documents: 0):

Country code: US	Publication number: 20210015738	Document kind code: A1	
Patent Applicant/Patent Owner: Concept Matrix Solutions		Title of invention:	
Link to document:			
Publication Date: 21 Jan 2021 (21/01/2021)	Filing Date:	Priority Date:	
Source of Abstract:	Accession number:	Publication Date of Abstract:	Retrieval Date of Abstract:
Most relevant passages or drawings: Abstract, [0186], [0135], [0242], [0244], [0064]		Relevant to Claims: see explanation	
Brief explanation of relevance:			
<p>From abstract: "Provided is an oral dissolvable film that includes a psychedelic compound. Also provided is a method of treating in a subject a disease or disorder ameliorated by a psychedelic compound, that includes orally administering to a subject an oral dissolvable film that includes a therapeutically effective amount of the psychedelic compound." relevant to WO2022251690 claims 5, 6, 7, 8, 44, 45, 48, 49, 50, 51, 62, 76, 77</p> <p>From [0186]: "In specific embodiments, the oral dissolvable film includes: (a) plasticizer, (b) solvent, (c) sweetener, (d) flavoring agent, (e) binder, (f) coloring agent, (g) preservative, and (h) psychedelic compound selected from the group consisting of psilocybin, psilocin, baeocystin, mescaline, LSD, ketamine, salvinorin A, ibotenic acid, muscimol, DMT, MDMA, MDEA, MDA, and combinations thereof." relevant to WO2022251690 claims 5, 6, 7, 8, 44, 45, 48, 49, 50, 51, 62, 76, 77</p> <p>From [0135]: "In specific embodiments, the psychedelic compound has a purity of at least 99.5 wt. % pure." relevant to WO2022251690 claims 5, 6, 7, 8, 44, 45, 48, 49, 50, 51, 62, 76, 77</p> <p>From [0242]: "In specific embodiments, treating the disease or disorder includes treating alcohol addiction." relevant to WO2022251690 claims 5, 6, 7, 8, 44, 45, 48, 49, 50, 51, 62, 76, 77</p> <p>From [0244]: "In specific embodiments, treating the disease or disorder includes treating a drug addiction." relevant to WO2022251690 claims 5, 6, 7, 8, 44, 45, 48, 49, 50, 51, 62, 76, 77</p> <p>From [0064]: "The term "subject" is used herein to generally include humans." relevant to WO2022251690 claims 5, 6, 7, 8, 44, 45, 48, 49, 50, 51, 62, 76, 77</p>			