



Lexkannabis LLC

Intellectual Property & Business Development

Intellectual Property Considerations in Medical Cannabis

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Founder & Registered Patent Agent

November 14th, 2019 (San Diego, CA)



Intellectual Property (IP)

- Patents
 - Utility
 - Plant
 - Design
- Trademarks
- Copyrights
- Plant Breeders' Rights



Patents

- Utility patents - protect “new and useful” inventions, such as a process, a machine, a manufacturing method, a composition of matter or a similarly new and equally useful improvement of an existing invention
- Plant patents - new, distinct variations of plants invented or discovered through cultivation, mutation, hybridization or any other artificial process
- Design patents - intended for new, original and ornamental designs that can be used on goods, such as the shape of a smoking device such as a pipe or a bong



Utility Patents

(12) **United States Patent**
Verzura et al.

(10) **Patent No.:** US 9,730,911 B2
(45) **Date of Patent:** Aug. 15, 2017

(54) **CANNABIS EXTRACTS AND METHODS OF PREPARING AND USING SAME**

(71) Applicant: United Cannabis Corp., Denver, CO (US)

What is claimed is:

1. A liquid cannabinoid formulation, w/
of the total cannabinoids is tetrahydro-
(THCa).

PRODUCT

(12) **United States Patent**
Hampson et al.

(10) **Patent No.:** US 6,630,507 B1
(45) **Date of Patent:** Oct. 7, 2003

(54) **CANNABINOID AS ANTIOXIDANTS AND NEUROPROTECTANTS**

(75) Inventors: Aidan J. Hampson, Irvine, CA (US);
Julius Axelrod, Rockville, MD (US);
Maurizio Grimaldi, Bethesda, MD (US)

(73) Assignee: The United States of America as represented by the Department of Health and Human Services, Washington, DC (US)

We claim:

1. A method of treating diseases caused by oxidative stress, comprising administering an amount of a cannabinoid that binds to the NMDA receptor to a subject in need of treatment for oxidative stress.

Cannabidiol, *Acta Chem Scand B* 51, 9,807-812 (1997)
Cunha et al., "Chronic Administration of Cannabidiol"

METHOD OF USING A PRODUCT

(12) **United States Patent**
Rossi et al.

(10) **Patent No.:** US 9,814,775 B2
(45) **Date of Patent:** *Nov. 14, 2017

(54) **METHOD FOR MAKING AND STORING STABLE CANNABINOID COMPOSITIONS AND METHOD FOR TREATMENT USING SUCH COMPOSITIONS**

(71) Applicant: Johnson Matthey Public Limited Company, London (GB)

The invention claimed is:

1. A method for making a composition comprising; combining a tetrahydrocannabinol, a solvent and an acid to provide a product; and evaporating a portion of the solvent from the product to provide a stable cannabinoid composition.

**METHOD OF
MAKING A PRODUCT**



Plant Patents

(10) Patent No.: **US PP27,475 P2**

(45) Date of Patent: **Dec. 20, 2016**

(54) **CANNABIS PLANT NAMED 'ECUADORIAN SATIVA'**

(50) Latin Name: *Cannabis sativa*; ssp. *sativa* and
Cannabis sativa ssp. *indica* (Lam.)
Varietal Denomination: **Ecuadorian Sativa**

(10) Patent No.: **US PP30,668 P3**

(45) Date of Patent: **Jul. 9, 2019**

(54) **CANNABIS PLANT NAMED 'DD-CT-BR5'**

(50) Latin Name: *Cannabis sativa L.*
Varietal Denomination: **DD-CT-BR5**

(10) Patent No.: **US PP30,434 P3**

(45) Date of Patent: **Apr. 23, 2019**

(54) **CANNABIS PLANT NAMED 'LW-BB1'**

(50) Latin Name: *Cannabis indica L.*
Varietal Denomination: **LW-BB1**



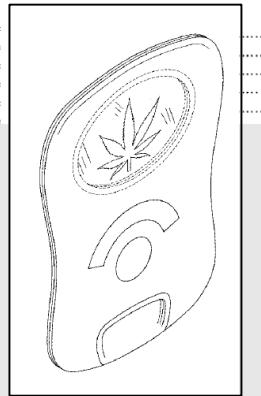
Design Patents

(12) **United States Design Patent** (10) Patent No.: **US D840,809 S**
Reaux
(45) Date of Patent: ** Feb. 19, 2019

(54) **PULL TAB SIMULATING A CANNABIS LEAF CUTOUT**

D547,198 S *
D551,976 S *
D555,478 S *
D620,193 S *
D627,662 S *
D642,202 S *

(71) Applicant: Brian K. Reaux, Red Oak, TX (US)

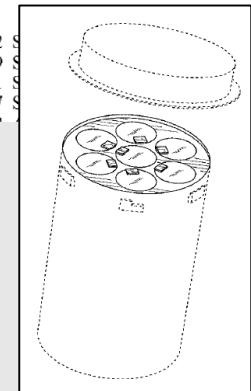


(12) **United States Design Patent** (10) Patent No.: **US D844,892 S**
Reaux
(45) Date of Patent: ** Apr. 2, 2019

(54) **CANNABIS CONTAINER**

(71) Applicant: Brian K. Reaux, Red Oak, TX (US)

D392,562 S
D396,189 S
D401,971 S
D403,467 S
S 065,502
D9/731
D9/574
D19/105
D27/190
A 24E 15/00



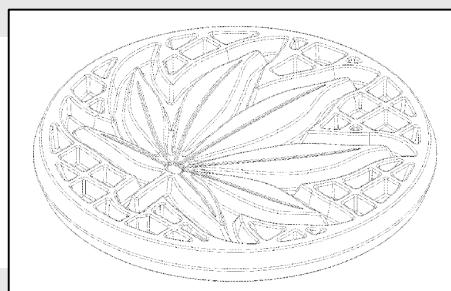
(12) **United States Design Patent** (10) Patent No.: **US D844,280 S**
Owczarski
(45) Date of Patent: ** Apr. 2, 2019

(54) **WAFFLE WITH CANNABIS LEAF SHAPE**

(71) Applicant: William Hunt Owczarski, Ventura, CA
(US)

OTHER PUBLICATIONS

Sesosmasrefritos. "Medical Marijuana Cookie Stamp." Thingiverse.
Jun. 8, 2013. Web. Aug. 14, 2018. <<https://www.thingiverse.com/thing:100347>>.*





Trademarks

- 2018 Farm Bill provides exception for registration of trademarks for "hemp" (*cannabis plants and its derivatives containing no more than 0.3% THC on a dry-weight basis*)
 - ALL other cannabis products remain ineligible for federal trademark registration

Important:

- Trademark protection applies not only to products that a company makes now, but also to products that a company might be reasonably expected to make later on
- In states where Marijuana is legal, it is possible to be granted State Trademarks



Copyrights

- Under current copyright law, illegal works are often treated similarly to other works. Illegal works are entitled to copyright protection and are eligible for registration so long as the works are:
 - Original, meaning that the works are independently created by their authors and possess a "modicum of creativity;" and
 - Fixed in a tangible medium of expression, which allows for their reproduction.



Plant Breeders' Right & Licensing

- A form of intellectual property rights by which breeders can protect their new varieties.
- If one can demonstrate that a cannabis plant breed is new and novel, one can obtain a licensing agreement that grants one plant breeders' rights (PBR).
- Rights granted to the breeder of a new variety of plant
 - Gives the breeder exclusive control over plant material, including over seed, cuttings, divisions, tissue culture, harvested material, etc.



What is a Patent?

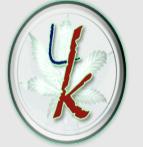
A patent is

- a set of exclusive rights (to exclude others from making, using, selling, offering for sale or importing the claimed invention)
- granted by a government (i.e., territorial, not world-wide)
- to an inventor or assignee
- for a fixed period of time in exchange for disclosure of its secrecy



Why Get a Patent?

- A patent can be
 - Used to gain entry to a market
 - Used to exclude others from a market
 - Used as a marketing tool to promote unique aspects of a product
 - Sold or licensed, like other property



Who Can File For a Patent?

- Anyone...from anywhere may apply, with only one exception:
 - Officers and employees of the USPTO
- An assignee, a person to whom the inventor is under an obligation to assign, or a person who otherwise shows sufficient proprietary interest



What Are The Requirements For a Patent?

- 35 USC § 101 – Utility
- 35 USC § 112(a) – Enablement, Written Description & Best Mode
- 35 USC § 112(b) – Definiteness
- 35 USC § 102 – Anticipation
- 35 USC § 103 – Obviousness

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title."



What is Protected?

- **CLAIMS**

- During prosecution, claims may be searched, rejected, amended and allowed
- Specification may include numerous embodiments and elements – but only subject matter claims is afforded protection
- Broadest reasonable interpretation during examination – Search of invention may extend to unrelated areas.



Specification

- The specification
 - Is a **written description** of the invention and of the manner and process of making and using the invention that concludes with the claims to the invention
 - Must be in **clear, full, concise, and exact** terms to enable any person skilled in the art or science to which the invention pertains to make and use the same



Prior Art - Anticipation

- 35 U.S.C. 102(a) defines the prior art that will preclude the grant of a patent on a claimed invention unless an exception in AIA 35 U.S.C. 102(b) is applicable. Specifically, AIA 35 U.S.C. 102(a) provides that:

[a] person shall be entitled to a patent **unless** —

(1) the claimed invention was **patented, described** in a printed publication, **or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention**; or

(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.



Prior Art - Obviousness

- 35 U.S.C. 103 Conditions for patentability; nonobvious subject matter
 - (a) A patent **may not be obtained though the invention is not identically disclosed or described** as set forth in section 102, **if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made** to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made..



Product Claims

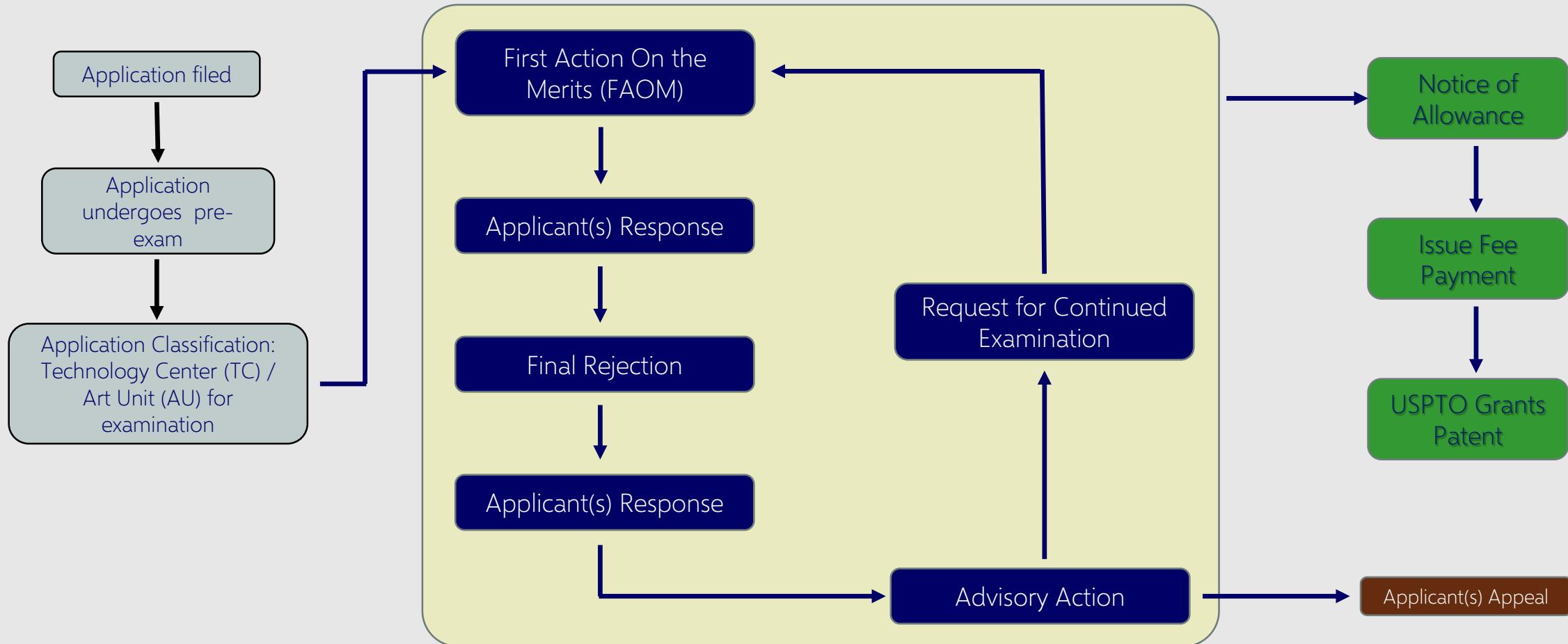
- Best
- Example:
 - A composition comprising A, B and C.
 - Including ranges for amounts of A, B and/or C
- It is, generally, irrelevant:
 - what A, B and/or C do or capable of doing, and/or
 - how they are made
 - for a product claim



Method Claims

- Examples:
 - A method for preparing a composition, comprising:
 - (i) mixing A, B and C to form a homogenous mixture,
 - (ii) drying the homogenous mixture obtained in step (i), and
 - (iii) heating, to obtain the composition.
 - A method for treating cancer in a subject, wherein the method comprises administering a composition comprising A, B and C to a subject in need thereof.

Patent Application Examination





How Long Does it Take to Get a Patent?

- Utility Patents
 - 18 – 19 months avg. for a first office action
 - 30 – 32 months avg. for total pendency
- Time can vary depending on the technology and amount of prosecution
 - 200K – 300K applications backlog



Considerations For Filing

- Conduct cost/benefit analysis
 - Consider the shelf life of a product, e.g., changes in technology, style
 - Consider how the patent will be used, e.g. licensing, to exclude competitors
 - Consider whether the product can be used outside your market
- Determine patentability
 - Searching yourself vs. engaging a professional searcher
- Preparation of a thorough and accurate application
- Are there workarounds for the invention?
- Costs – Patents can be expensive
 - Annuity & Maintenance fees



Patent Infringement in the U.S.

- Occurs when –

Without authorization of patent owner:

- Making or using the invention
- Offer to sell or sells within the U.S.
- Import the invention into the U.S.
- Actively induce infringement by another



Enforcement Considerations

- Enforceability of patents
 - Effectiveness of enforcement laws and procedures in the country/region of interest
 - Some countries allow recordation of patent with customs
- Enforcement requires patent owner action
- Competitor products should be monitored
 - In stores
 - At trade shows
- Licensing may be beneficial
 - Limit as to time, geographical area, or field of use



Patent Litigation

- On July 30, 2018, United Cannabis Corporation ("UCANN") filed a lawsuit against Pure Hemp Collective Inc. (Pure Hemp)
 - alleging that Pure Hemp's "Vina Bell" products infringe UCANN's U.S. Patent No. 9,730,911 ("the '911 Patent").
- UCANN alleged that Pure Hemp's product line includes a variety of topical and ingestible cannabis preparations that have concentrations of CBD in excess of 95 percent.



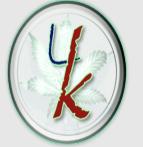
UCANN v. Pure Hemp

- On November 29, 2018 Pure Hemp tried disposing of the case and filed a motion for partial summary judgement.
- In the motion, Pure Hemp argued to the court that the '911 Patent is invalid because the claims are directed to "natural phenomena," namely, cannabinoids and terpenes that are found naturally in the cannabis plant.



UCANN v. Pure Hemp

- The '911 claims
 - 1. A liquid cannabinoid formulation, wherein at least 95% of the total cannabinoids is tetrahydrocannabinolic acid (THCa).
 - 5. A liquid cannabinoid formulation, wherein at least 95% of the total cannabinoids is tetrahydrocannabinol (THC).
 - 10. A liquid cannabinoid formulation, wherein at least 95% of the total cannabinoids is cannabidiol (CBD).
 - 16. A liquid cannabinoid formulation, wherein at least 95% of the total cannabinoids is THCa and cannabidiolic acid (CBDa).
 - 25. A liquid cannabinoid formulation, wherein at least 95% of the total cannabinoids are CBD, cannabinol (CBN) and THC.



UCANN v. Pure Hemp

- Issue
 - Whether the '911 claims are directed to patent ineligible subject matter.



Thank You

- Parithosh K. Tungaturthi

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