



US 20250255914A1

(19) **United States**

(12) **Patent Application Publication**
Randel

(10) **Pub. No.: US 2025/0255914 A1**

(43) **Pub. Date: Aug. 14, 2025**

(54) **CANNABINOIDS INFUSED CONSUMABLES**

A61K 47/44 (2017.01)

(71) Applicant: **TLCO Holdings Inc.**, Playa Del Rey,
CA (US)

(52) **U.S. Cl.**

A61K 47/46 (2006.01)

CPC *A61K 36/185* (2013.01); *A61K 9/0056*
(2013.01); *A61K 47/44* (2013.01); *A61K 47/46*
(2013.01); *A61K 2236/31* (2013.01); *A61K*
2236/35 (2013.01); *A61K 2236/37* (2013.01);
A61K 2236/39 (2013.01); *A61K 2236/53*
(2013.01)

(72) Inventor: **Michael William Randel**, Lakebay, WA
(US)

(73) Assignee: **TLCO Holdings Inc.**, Playa Del Rey,
CA (US)

(21) Appl. No.: **19/192,912**

(57)

ABSTRACT

(22) Filed: **Apr. 29, 2025**

Related U.S. Application Data

(63) Continuation of application No. 17/404,346, filed on
Aug. 17, 2021, now Pat. No. 12,311,003, which is a
continuation-in-part of application No. 17/039,829,
filed on Sep. 30, 2020, now Pat. No. 11,464,819.

Publication Classification

(51) **Int. Cl.**

A61K 36/185 (2006.01)

A61K 9/00 (2006.01)

The present disclosure is directed to cannabinoids infused consumables, including cacao beans, dehydrated fruit, and raw popcorn kernels, along with methods of producing the cannabinoid infused cacao beans, dehydrated fruit, and raw popcorn kernels. The consumables are infused in an overall two-step process, in which cannabinoids from a *Cannabis* species are first infused into coconut oil, which in turn is used to infuse cacao beans, dehydrated fruit and raw popcorn kernels with cannabinoids to generate the cannabinoids infused cacao beans, dehydrated fruit and raw popcorn kernels.

100
Oil is infused
with cannabinoids



200
End food
product/consumable
is infused with
cannabinoids using
the cannabinoids
infused oil from 100

FIG. 1

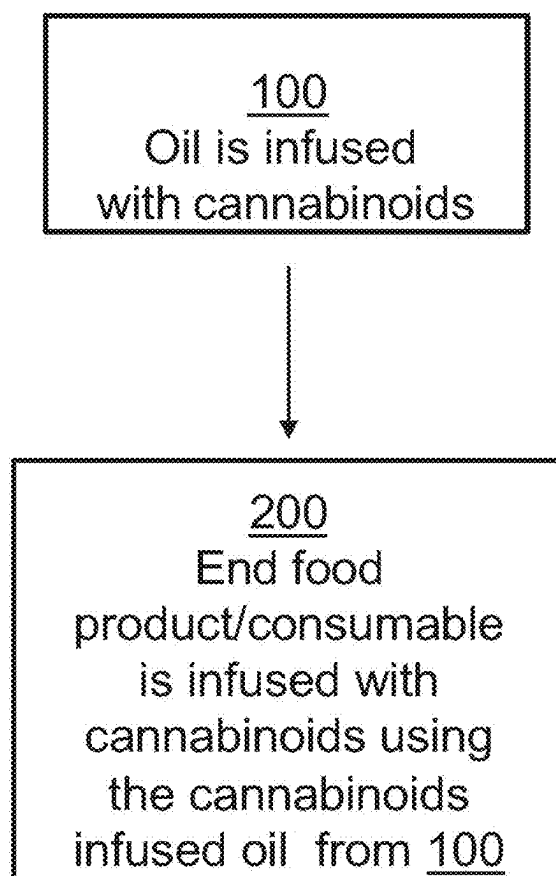


FIG. 2

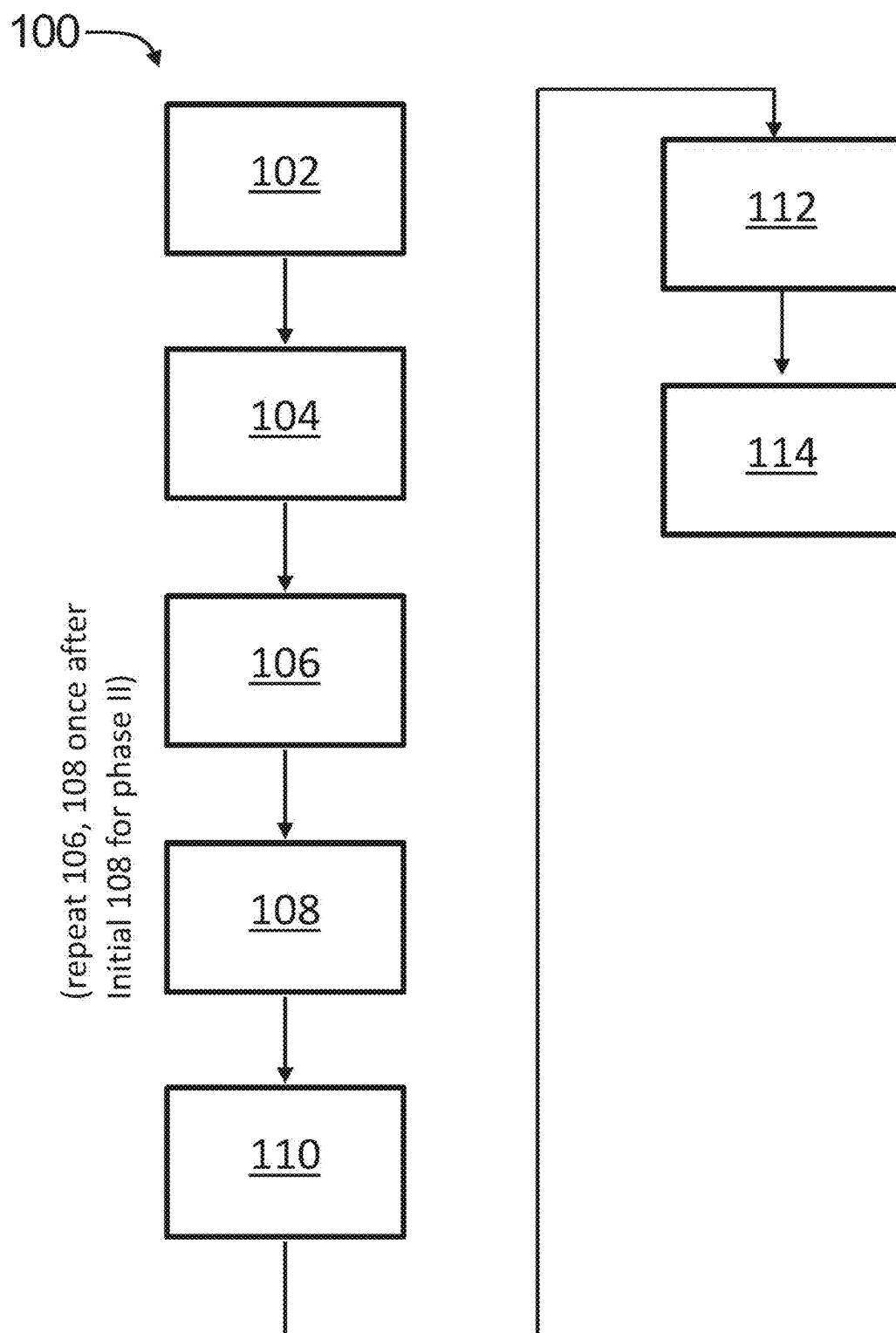
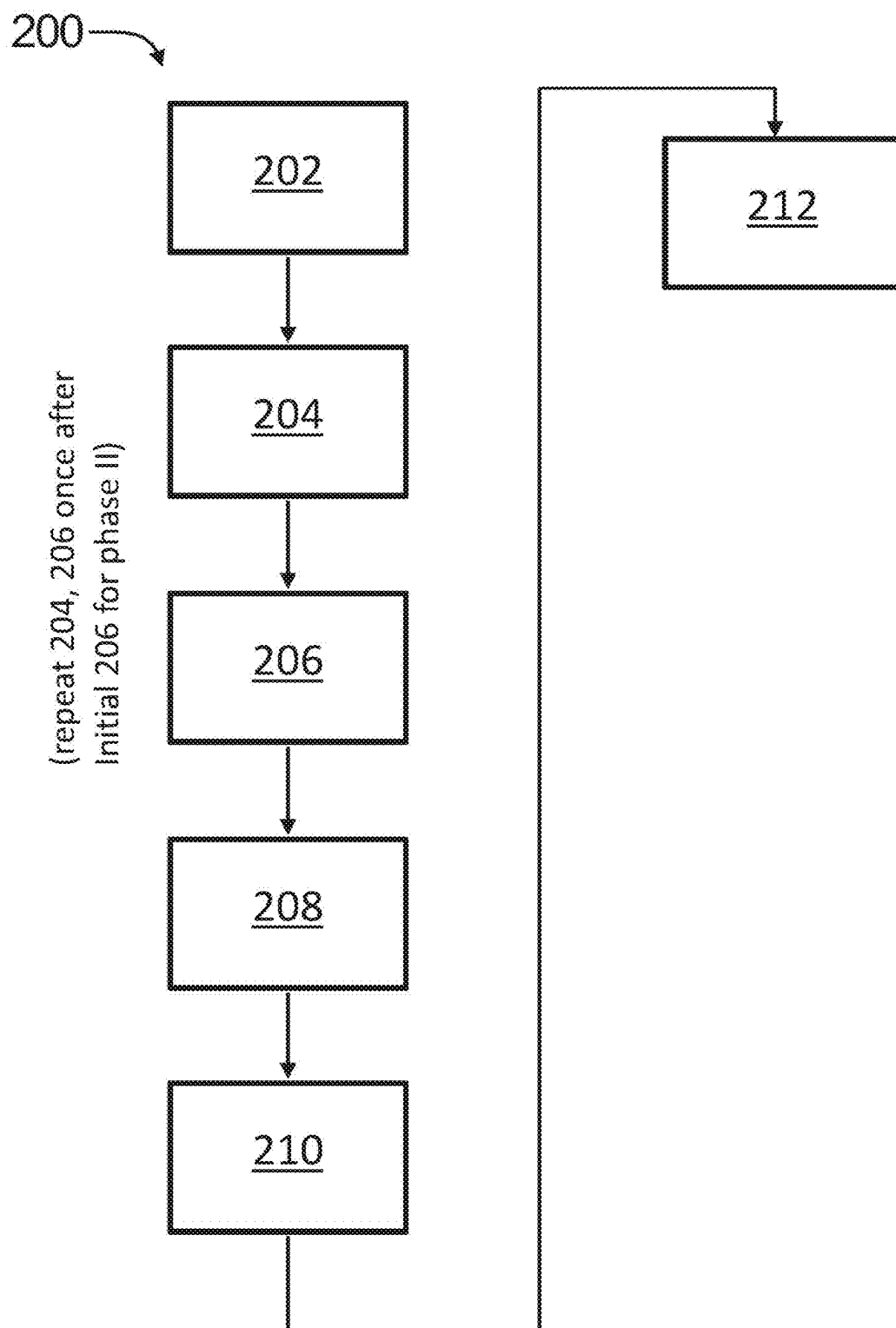


FIG. 3



CANNABINOIDS INFUSED CONSUMABLES

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation of Non-provisional application Ser. No. 17/404,346 filed on Aug. 17, 2021, and entitled “CANNABINOIDS INFUSED CONSUMABLES”, which is a Continuation in-part of Non-Provisional application Ser. No. 17/039,829, filed on Sep. 30, 2020, now U.S. Pat. No. 11,464,819 issued on Oct. 11, 2022, and entitled “CANNABINOIDS INFUSED CONSUMABLES AND NON-CONSUMABLES”, the entirety of which is incorporated herein by reference.

FIELD OF THE INVENTION

[0002] The invention relates to *cannabis* whole spectrum cannabinoids that are infused into coconut oil, which in turn is used to infuse a variety of consumables, including cacao beans, dehydrated fruit, and raw popcorn kernels.

BACKGROUND

[0003] *Cannabis* has been used to alleviate stress and other illnesses caused by posttraumatic stress disorder, seizures, epilepsy, multiple sclerosis, and the like. *Cannabis*, commonly known as marijuana or hemp, is a genus of flowering plants that includes at least three species, *Cannabis sativa*, *Cannabis indica*, and *Cannabis ruderalis*.

[0004] *Cannabis* plants produce a variety of potentially useful or beneficial cannabinoids, which produce mental and physical effects when consumed. Cannabinoids are a chemical group or family of 21-carbon-containing terpenophenolic compounds produced by *Cannabis* species. Current estimates of the number of cannabinoids found in *Cannabis* species is well in excess of 100 different cannabinoids. Two of the most prominent cannabinoids are Cannabidiol (CBD) and Tetrahydrocannabinol (THC). In addition to CBD and THC, other cannabinoids such as cannabichromene (CBC), cannabigerol (CBG), cannabinol (CBN), and others are present in varying amounts in *cannabis* plant material.

[0005] Commonly consumed sources of cannabinoids include extracts, oils, isolates, and the like from *Cannabis* species including marijuana, hemp, and industrial hemp, which contains a THC content of less than 0.3% of overall mass. While providing useful or beneficial effects to the user, such extracts, oils, and isolates are typically found to have undesirable tastes, flavors, odors, and/or other unfavorable attributes. Accordingly, addition of cannabinoid containing extracts or isolates to food or beverage consumables imparts an undesirable taste, since the extracts or isolates typically have an undesirable taste.

[0006] Accordingly, there exists a need in the art for consumable cannabinoids-containing consumables including cacao beans, dehydrated fruit, and raw popcorn kernels that do not have the tastes and odors of typically consumed sources of cannabinoid(s). The presently disclosed cannabinoids-containing cacao beans, dehydrated fruit, and raw popcorn kernels, along with methods of preparing such consumables address this need.

SUMMARY OF THE DISCLOSURE

[0007] In an aspect, a process of infusing *cannabis* into coconut oil, wherein the process includes: providing *cannabis*; freezing the *cannabis* to provide frozen *cannabis*;

providing coconut oil; adding at least a portion of the frozen *cannabis* into the coconut oil to form a first *cannabis* and coconut oil mixture; heating the first *cannabis* and coconut oil mixture to a temperature of 150° F.-200° F.; freezing the *cannabis* and coconut oil mixture into a solid, frozen biomass; heating the solid, frozen biomass at a temperature of 150° F.-200° F. for 2-4 hours to yield a heated biomass; and straining the heated biomass to separate the coconut oil from the *cannabis* to yield a whole spectrum cannabinoids infused orally ingestible coconut oil.

[0008] In another aspect, a process of infusing *cannabis*-infused coconut oil into a consumable, wherein the process includes: heating a whole spectrum cannabinoids infused orally ingestible coconut oil; adding an orally ingestible consumable to the cannabinoids infused coconut oil to form a consumable and cannabinoids infused coconut oil mixture; heating the consumable and cannabinoids infused coconut oil mixture to a temperature of 175° F.-195° F. for 5-6 hours; freezing the consumable and cannabinoids infused coconut oil heated mixture to form a solid, frozen biomass mixture of consumable and cannabinoids infused coconut oil; heating the solid, frozen biomass mixture of consumable and cannabinoids infused coconut oil; and straining the liquified cannabinoids infused coconut oil to yield a whole spectrum cannabinoids infused consumable.

[0009] In another aspect, a process of creating a *cannabis*-infused consumable using coconut oil, wherein the process includes: freezing the *cannabis* to provide frozen *cannabis*; providing coconut oil; adding at least a portion of the frozen *cannabis* into the coconut oil to form a first *cannabis* and coconut oil mixture; heating the first *cannabis* and coconut oil mixture to a temperature of 150° F.-200° F.; freezing the *cannabis* and coconut oil mixture into a solid, frozen biomass; heating the solid, frozen biomass at a temperature of 150° F.-200° F. for 2-4 hours to yield a heated biomass; straining the heated biomass to separate the coconut oil from the *cannabis* to yield a whole spectrum cannabinoids infused orally ingestible coconut oil; heating the whole spectrum cannabinoids infused orally ingestible coconut oil; adding an orally ingestible consumable to the cannabinoids infused coconut oil to form a consumable and cannabinoids infused coconut oil mixture; heating the consumable and cannabinoids infused coconut oil mixture to a temperature of 175° F.-195° F. for 5-6 hours.

[0010] These and other aspects and features of non-limiting embodiments of the present invention will become apparent to those skilled in the art upon review of the following description of specific non-limiting embodiments of the invention in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] For the purpose of illustrating the invention, the drawings show aspects of one or more embodiments of the invention. However, it should be understood that the present invention is not limited to the precise arrangements and instrumentalities shown in the drawings, wherein:

[0012] FIG. 1 shows example steps of a method according to exemplary embodiments hereof;

[0013] FIG. 2 shows example steps of a method according to exemplary embodiments hereof;

[0014] FIG. 3 shows example steps of a method according to exemplary embodiments hereof;

[0015] The drawings are not necessarily to scale and may be illustrated by phantom lines, diagrammatic representations and fragmentary views. In certain instances, details that are not necessary for an understanding of the embodiments or that render other details difficult to perceive may have been omitted.

DETAILED DESCRIPTION

[0016] As is known in the art, cannabinoids are a class of chemical compounds found in plants in the *cannabis* family (e.g., hemp, marijuana, etc.). To date, more than 100 cannabinoids have been identified, accounting for up to 40% of the plant's extract. Well known cannabinoids include Cannabidiol (CBD), Tetrahydrocannabinol (THC) among others, each of which may include a variety of health benefits.

[0017] In general, the presently disclosed cannabinoids infused consumables include cacao beans, dehydrated fruit, and raw popcorn kernels and, in some cases, resultant beverages made from the food/consumable that provide a source cannabinoids. The presently disclosed consumables are infused with cannabinoids in a way that increases the levels and quantities of cannabinoids transferred to the consumables while reducing undesirable tastes, flavors, odors and the like typically associated with and found in commonly used cannabinoid extracts, oils, isolates, edibles and such.

[0018] As used herein, the term "infused cannabinoids" or "cannabinoids infused" refers to consumables to which whole spectrum cannabinoids from *cannabis* have been infused by a method(s) disclosed herein. The infusion method generally involves preparing a mixture made with whole *cannabis* plant materials and coconut oil (or similar food grade oil) under specific heating and cooling conditions to produce whole spectrum cannabinoids infused oil, and then in turn using the cannabinoids infused oil to infuse consumables as detailed herein. Throughout this specification, cannabinoids infused food and/or drink may be referred to as "cannabinoids infused" or simply "infused," such as "cannabinoids infused cacao beans" or "infused cacao beans."

[0019] In some embodiments as shown in FIG. 1, cannabinoids infused foods and/or drinks prepared by the methodology disclosed herein are generated in an overall two-step process. In the first step (at 100), whole *cannabis* plant material, preferably small buds, is used to infuse an oil, preferably coconut oil, with cannabinoids. Alternatively, whole *cannabis* plant material that has been ground can be used to infuse an oil. Note that because whole *cannabis* plant material is used at 100, the resulting infusion of the oil from the *cannabis* provides a full spectrum of cannabinoids from the *cannabis* to the oil. In a second step (at 200), the infused coconut oil is used to infuse an end food product/consumable with whole spectrum cannabinoids. After the end product is infused with cannabinoids, it may be consumed in any typical fashion, such as direct consumption, used to make a beverage as in the case of cacao beans, and so forth.

[0020] Consumption of the cannabinoids infused food and drink consumables generated by the methods described herein provides the beneficial effects generally associated with cannabinoids. These effects include, but are not limited to, mental and physical effects, such as pain relief from CBDs and other cannabinoids, mental high from THC (in foods infused with marijuana cannabinoids), and other effects attributed to consumption of cannabinoids.

[0021] FIG. 2 refers to steps that may be taken to infuse a food grade oil with cannabinoids to complete step 100 of FIG. 1. Suitable food grade oils for this process include, but are not limited to, coconut oil, medium chain triglycerides (MCT) oil, vegetable oil, sunflower oil, grape seed oil, and combinations thereof. Likewise, butter, shortening, margarine, or lard may be used in the process.

[0022] In one embodiment as shown in FIG. 2, whole, raw *cannabis* plant material (e.g., flowers, buds, leaves or other plant material; preferably small buds) is frozen (at 102). The *cannabis* plant material can be used whole or ground (which is preferably produced by grinding the frozen plant material). The *cannabis* plant may include *Cannabis sativa*, *Cannabis indica*, *Cannabis ruderalis*, other types of *cannabis* and any combination thereof. The *cannabis* may be classified as marijuana, hemp, and/or other types of *cannabis*.

[0023] The *cannabis* plant material may also be a strain that is particularly rich in one or more specific cannabinoids, such as a strain that is particularly rich in cannabidiol (CBD) or cannabigerol (CBG). In addition, the *cannabis* plant material may be a combination of two or more different strains that are particularly rich for a specific cannabinoid. Currently available *Cannabis* strains are typically rich in CBD, but strains that are rich for other cannabinoids have been and are being developed. For example, more recently developed strains include those that are rich in CBG. Generally, cannabigerol (CBG) and cannabigerolic acid (CBGA) only account for 1% of a hemp strain's total cannabinoids. In a CBG-rich hemp strain, cannabigerol makes up around 10-15% or more of the *cannabis* flower's total cannabinoids. In a preferred embodiment, the *cannabis* plant material used in the presently disclosed method(s) is a mixture of equal parts of two strains that are rich in CBD and CBG, respectively. Additional strains that are particularly rich in a specific cannabinoid and combinations thereof fall within the scope of the presently disclosed method(s).

[0024] Next (at 104), a suitable food grade oil such coconut oil, MCT oil, a combination of coconut oil and MCT oil (or similar oil as described above) is heated to a temperature equal to or between 150° and 200° F., and preferably to about 185° F. For the purposes of this specification, the term "about" used in relation to temperatures will mean within $\pm 1\%$. Regarding a combination of coconut oil and MCT oil, a preferred embodiment is to use a ratio of 75% coconut oil to 25% MCT oil. Alternatively, ratios of coconut oil to MCT oil can range from 90% coconut oil:10% MCT to 75% coconut oil: 25% MCT oil.

[0025] Next (at 106), the frozen *cannabis* (preferably small buds) is added to the coconut oil and held at the temperature (e.g., preferably at about 185° F.) for 5-7 hours, while occasionally (and/or continuously) stirring the mixture. In some embodiments, the ratio of plant material to Attorney Docket No. 1567-003USC2 coconut oil is 1 lb plant material to 2 gallons oil. For example, on a commercial scale, 100 lbs plant material/buds may be mixed with 200 gallons of oil. However, other ratios within 10%, 20%, 30%, 40%, 50%, 75%, 100% of this ratio also may be used. In general, the ratio will be chosen to provide high levels/concentration(s) of cannabinoids within the oil.

[0026] After the heating step of 106, in the next step (at 108), the *cannabis* and coconut oil mixture is frozen to obtain a solid, frozen biomass of *cannabis* and coconut oil mixture.

[0027] At this juncture, the solid, frozen biomass of *cannabis* and coconut oil can be processed in one of two ways. First, the *cannabis* and coconut oil can be heated and strained as per steps **110**, **112**, and **114** to yield cannabinoids infused coconut oil produced by a single round or phase of heating and freezing. Second, the *cannabis* and coconut oil alternatively can be treated with a second round or phase of heating and freezing, in which steps **106** and **108** are repeated, followed by subsequent steps **110**, **112**, and **114** to yield cannabinoids infused coconut oil produced by two rounds of heating and freezing. The single round/phase treatment will produce cannabinoids infused coconut oil having about a 50% relative level of infused cannabinoids compared to a double round/phase treatment that will produce cannabinoids infused coconut oil having about an arbitrary 100% relative level of infused cannabinoids. The double round/phase treatment has been found to provide maximal levels of cannabinoids infused into the coconut oil, which are arbitrarily referred to as 100% levels of infused cannabinoids. The single round/phase treatment can produce cannabinoids-infused coconut oil that is adequate for many applications. If higher infused levels of cannabinoids in coconut oil are desired for a particular application, the double round/phase treatment of cannabinoids infused coconut oil can be applied.

[0028] Following step **108**, at step **110**, the solid, frozen *cannabis* and coconut oil biomass is reheated to 150° to 200° F., and preferably to about 185° F., and held at the temperature for a sufficient period of time to liquify the mixture, typically for about 2-4 hours.

[0029] Next (at **112**), the *cannabis* and coconut oil mixture is strained using a press bag (or other suitable straining techniques) to separate the cannabinoids infused coconut oil from the *cannabis* biomass.

[0030] In a further step (**114**), the strained, cannabinoids infused oil is heated to between 250° F. to 350° F. for 3-6 hours. This step will decarboxylate the carboxylated cannabinoids in the oil, such as CBD-A or THC-A. The temperature and time will vary based in part on the *cannabis* strain used and desired decarboxylation. For example, using a CBD-rich strain that provides high levels of CBD-A, the step will preferably include a temperature of 250° F. for 3-6 hours. In another example, using a CBG-rich strain that provides high levels of CBG-A, the step will preferably include a temperature of 300° F. for 3-6 hours.

[0031] This method results in a whole spectrum cannabinoids infused coconut or other oil that may be used for infusing consumables, including cacao beans, dehydrated fruit, and raw popcorn kernels, with cannabinoids as described below.

[0032] In another embodiment as shown in FIG. 3, cannabinoids infused coconut or similar oil, such as the infused coconut oil produced by process **102-114** (FIG. 2) described above, is used to infuse consumables, including cacao beans, dehydrated fruit, and raw popcorn kernels with cannabinoids.

[0033] First (at **202**), at least a portion of the cannabinoids infused coconut oil obtained from **102-114** (FIG. 2) is heated to a first temperature between 175° F. and 195° F.

[0034] Next (at **204**), a selection of consumables, either cacao beans, dehydrated fruit, or raw popcorn kernels, is added and stirred into the mixture (preferably with continuous stirring) and held at the first temperature of about 175°

F. to 195° F. for about 5-6 hours. For the purposes of this specification, the term “about” used in relation to periods of time will mean $\pm 3\%$.

[0035] Next (at **206**), the mixture of the consumable (cacao beans, dehydrated fruit, or raw popcorn kernels) and infused oil is frozen into a solid, frozen biomass. In one example for a commercial scale, this step can be carried out by covering the mixture in a stock pot with a freezer blanket that will rapidly freeze the mixture and keep it frozen. Alternatively, the material can be rapidly frozen in a blast freezer.

[0036] At this juncture, the solid, frozen biomass of coconut oil and consumable can be processed in one of two ways. First, the coconut oil and consumable can be heated, strained, and frozen or packaged as per steps **208**, **210**, and **212** to yield cannabinoids infused consumable produced by a single round or phase of heating and freezing. Second, the coconut oil and consumable alternatively can be treated with a second round or phase of heating and freezing, in which steps **204** and **206** are repeated, followed by subsequent steps **208**, **210**, and **212** to yield cannabinoids infused consumable (cacao beans, dehydrated fruit, or raw popcorn kernels) produced by two rounds of heating and freezing. The single round/phase treatment will produce a cannabinoids infused consumable having about a 50% relative level of infused cannabinoids compared to a double round/phase treatment that will produce a cannabinoids infused consumable having about an arbitrary 100% relative level of infused cannabinoids. The double round/phase treatment has been found to provide maximal levels of cannabinoids infused into the cacao beans, dehydrated fruit, or raw popcorn kernels; these maximal levels are arbitrarily referred to as 100% levels of infused cannabinoids. The single round/phase treatment can produce cannabinoids infused consumables that are adequate for many applications. If higher infused levels of cannabinoids in a consumable are desired for a particular application, the double round/phase treatment of cannabinoids infused consumables can be applied.

[0037] Following step **206**, at step **208**, the mixture including the now infused consumable (cacao beans, dehydrated fruit, or raw popcorn kernels) and infused oil is heated to a temperature equal to or between 100° F. and 150° F. and held at the temperature for a sufficient period of time to liquify the oil, typically about 2-4 hours, and preferably for about 2 hours.

[0038] After this heating step at **208**, the mixture is strained at step **210** (using any suitable straining techniques) and the cannabinoids infused consumables (cacao beans, dehydrated fruit, or raw popcorn kernels) are removed from the coconut oil.

[0039] Then (at **212**), the cannabinoids infused consumables (cacao beans, dehydrated fruit, or raw popcorn kernels) are frozen, such as in a blast freezer, and stored frozen for subsequent use/packaging/consumption.

[0040] This process **202-212** (FIG. 3) results in cacao beans, dehydrated fruit, or raw popcorn kernels infused with cannabinoids, which can be referred to as cannabinoids infused cacao beans, dehydrated fruit, or raw popcorn kernels.

[0041] In some embodiments, the freezing step at **206** provides organic pressure to the cacao beans, dehydrated fruit, or raw popcorn kernels that deepens the physical depth of the cannabinoid infusion into the consumables. For example, in some embodiments, the freezing step at **206**

causes the cannabinoids to be pressed 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90% and/or 100% to the centers of the cacao beans, dehydrated fruit, or raw popcorn kernels.

[0042] It is understood that the acts described above are meant as a general overview and demonstration of an exemplary method, and that the method may include different and/or additional acts as described herein or otherwise.

[0043] While the present invention has been described as having particular configurations disclosed herein, the present invention can be further modified within the spirit and scope of this disclosure. This application is therefore intended to cover any variations, uses, or adaptations of the invention using its general principles. Further, this application is intended to cover such departures from the present disclosure as come within known or customary practice in the art to which this invention pertains.

[0044] It is understood that any aspect and/or element of any embodiment of the method(s) described herein or otherwise may be combined in any way to form additional embodiments of the method(s) all of which are within the scope of the method(s).

[0045] Where a process is described herein, those of ordinary skill in the art will appreciate that the process may operate without any user intervention. In another embodiment, the process includes some human intervention (e.g., a step is performed by or with the assistance of a human).

[0046] As used herein, including in the claims, the phrase “at least some” means “one or more,” and includes the case of only one. Thus, e.g., the phrase “at least some ABCs” means “one or more ABCs,” and includes the case of only one ABC.

[0047] As used herein, including in the claims, term “at least one” should be understood as meaning “one or more”, and therefore includes both embodiments that include one or multiple components. Furthermore, dependent claims that refer to independent claims that describe features with “at least one” have the same meaning, both when the feature is referred to as “the” and “the at least one”.

[0048] As used in this description, the term “portion” means some or all. So, for example, “A portion of X” may include some of “X” or all of “X”. In the context of a conversation, the term “portion” means some or all of the conversation.

[0049] As used herein, including in the claims, the phrase “using” means “using at least,” and is not exclusive. Thus, e.g., the phrase “using X” means “using at least X.” Unless specifically stated by use of the word “only”, the phrase “using X” does not mean “using only X.”

[0050] As used herein, including in the claims, the phrase “based on” means “based in part on” or “based, at least in part, on,” and is not exclusive. Thus, e.g., the phrase “based on factor X” means “based in part on factor X” or “based, at least in part, on factor X.” Unless specifically stated by use of the word “only”, the phrase “based on X” does not mean “based only on X.”

[0051] In general, as used herein, including in the claims, unless the word “only” is specifically used in a phrase, it should not be read into that phrase.

[0052] As used herein, including in the claims, the phrase “distinct” means “at least partially distinct.” Unless specifically stated, distinct does not mean fully distinct. Thus, e.g., the phrase, “X is distinct from Y” means that “X is at least partially distinct from Y,” and does not mean that “X is fully distinct from Y.” Thus, as used herein, including in the

claims, the phrase “X is distinct from Y” means that X differs from Y in at least some way.

[0053] It should be appreciated that the words “first,” “second,” and so on, in the description and claims, are used to distinguish or identify, and not to show a serial or numerical limitation. Similarly, letter labels (e.g., “(A)”, “(B)”, “(C)”, and so on, or “(a)”, “(b)”, and so on) and/or numbers (e.g., “(i)”, “(ii)”, and so on) are used to assist in readability and to help distinguish and identify, and are not intended to be otherwise limiting or to impose or imply any serial or numerical limitations or orderings. Similarly, words such as “particular,” “specific,” “certain,” and “given,” in the description and claims, if used, are to distinguish or identify, and are not intended to be otherwise limiting.

[0054] As used herein, including in the claims, the terms “multiple” and “plurality” mean “two or more,” and include the case of “two.” Thus, e.g., the phrase “multiple ABCs,” means “two or more ABCs,” and includes “two ABCs.” Similarly, e.g., the phrase “multiple PQRs,” means “two or more PQRs,” and includes “two PQRs.”

[0055] The present invention also covers the exact terms, features, values and ranges, etc. in case these terms, features, values and ranges etc. are used in conjunction with terms such as about, around, generally, substantially, essentially, at least etc. (i.e., “about 3” or “approximately 3” shall also cover exactly 3 or “substantially constant” shall also cover exactly constant).

[0056] As used herein, including in the claims, singular forms of terms are to be construed as also including the plural form and vice versa, unless the context indicates otherwise. Thus, it should be noted that as used herein, the singular forms “a,” “an,” and “the” include plural references unless the context clearly dictates otherwise.

[0057] Throughout the description and claims, the terms “comprise”, “including”, “having”, and “contain” and their variations should be understood as meaning “including but not limited to” and are not intended to exclude other components unless specifically so stated.

[0058] It will be appreciated that variations to the embodiments of the invention can be made while still falling within the scope of the invention. Alternative features serving the same, equivalent or similar purpose can replace features disclosed in the specification, unless stated otherwise. Thus, unless stated otherwise, each feature disclosed represents one example of a generic series of equivalent or similar features.

[0059] The present invention also covers the exact terms, features, values and ranges, etc. in case these terms, features, values and ranges etc. are used in conjunction with terms such as about, around, generally, substantially, essentially, at least etc. (i.e., “about 3” shall also cover exactly 3 or “substantially constant” shall also cover exactly constant). Use of exemplary language, such as “for instance”, “such as”, “for example” (“e.g.”) and the like, is merely intended to better illustrate the invention and does not indicate a limitation on the scope of the invention unless specifically so claimed.

[0060] While the invention has been described in connection with what is presently considered to be the most practical and preferred embodiments and is further described in the examples below, it is to be understood that the invention is not to be limited to the disclosed embodiment, but on the contrary, is intended to cover various modifica-

tions and equivalent arrangements included within the spirit and scope of the appended claims.

Example I: Cacao Beans

[0061] Cannabinoids infused cacao beans may be made by infusing cacao beans with a cannabinoids infused oil, such as infused coconut oil or any of the other oils and combinations thereof disclosed herein. The process by which cacao beans are infused with cannabinoids follows the process described above and outlined in FIGS. 2 and 3. Once the cannabinoids infused cacao beans are obtained, they can be stored frozen to help preserve freshness and slow/prevent deterioration of the cannabinoids that reduces the efficacy of the cannabinoids.

[0062] The cannabinoids infused cocoa beans can be processed in any of a variety of methods similar to standard cacao beans (which are not infused) to produce cannabinoid infused cacao and chocolate products, such as but not limited to, hot chocolate beverage, chocolate chips, chocolate bars, chocolate bars with nuts and fruit, chocolate bars with nougat, and so on. In a preferred embodiment, cannabinoids infused chocolate bars with dehydrated fruits are made with chocolate from cannabinoids infused cacao beans and cannabinoids infused dehydrated fruits that are produced by the methods disclosed herein. Such chocolate bars made with cannabinoids infused chocolate and/or dehydrated fruits have a greater level of cannabinoids and therefore potency than chocolate bars made solely with cannabinoids infused chocolate with nut and/or fruits that are not infused.

Example II: Popcorn

[0063] Cannabinoids infused popcorn kernels may be made by infusing popcorn kernels with a cannabinoids infused oil. In the case of popcorn kernels, suitable infused oils include essentially all food grade oils and butter, including but not limited to, coconut oil, butter, MCT oil, shortening, lard, vegetable oil, sunflower oil, olive oil, grape seed oil, and combinations thereof. Any of these oils and butter can be infused with cannabinoids using the oil infusion process described above and outlined in FIG. 2.

[0064] Once cannabinoids infused, the infused kernels can then be used directly for popcorn or can be treated using methods that impart various flavors and/or seasoning to the popcorn. Infused kernels that are to be used directly for popcorn are typically stored in a cooking oil (preferably a cannabinoids infused oil), typically at about a 1:1 kernels to oil ratio. The infused kernels can then be popped directly from the stored mixture.

Example III: Infused Dehydrated Fruit

[0065] Cannabinoids infused dehydrated fruit can be made using suitable cannabinoids infused oils that include essentially all food grade oils and butter, including but not limited to, coconut oil, butter, MCT oil, shortening, lard, vegetable oil, sunflower oil, olive oil, grape seed oil, and combinations thereof. Any of these oils and butter can be infused with cannabinoids using the oil infusion process described above and outlined in FIG. 2.

[0066] The process by which dehydrated fruit is infused with cannabinoids follows the general process described above and outlined in FIGS. 2 and 3. Virtually any dehydrated fruit can be used in the process, such as, but not

limited to, dehydrated strawberries, other berries, cherries, apricots, mangos, grapes (raisins), cranberries, prunes, and so forth. Once the cannabinoids infused dehydrated fruit is obtained, the fruit can be stored frozen to help preserve freshness and slow/prevent deterioration of the cannabinoids that reduces the efficacy of the cannabinoids. The cannabinoids infused dehydrated fruit can be consumed directly or used in the preparation of various foods that contain dehydrated fruit, such as granola bars, chocolate bars, baked goods, and the like. When used in the preparation of other foods, the cannabinoids infused dehydrated fruit will provide a source of whole spectrum cannabinoids to such foods.

What is claimed is:

1. A process of infusing *cannabis* into coconut oil, wherein the process comprises:

- providing *cannabis*;
- freezing the *cannabis* to provide frozen *cannabis*;
- providing coconut oil;
- adding at least a portion of the frozen *cannabis* into the coconut oil to form a first *cannabis* and coconut oil mixture;
- heating the first *cannabis* and coconut oil mixture to a temperature of 150° F.-200° F.;
- freezing the *cannabis* and coconut oil mixture into a solid, frozen biomass;
- heating the solid, frozen biomass at a temperature of 150° F.-200° F. for one or more of ranges: 2-4 hours or 3-6 hours to yield a heated biomass; and
- straining the heated biomass to separate the coconut oil from the *cannabis* to yield a whole spectrum cannabinoids infused orally ingestible coconut oil.

2. The process of claim 1, further comprising providing the coconut oil at a temperature of 150° F.-200° F.

3. The process of claim 1, wherein adding the at least a portion of frozen *cannabis* into the coconut oil comprises adding a ratio of 1 pound of the frozen *cannabis* per 2 gallons of the coconut oil.

4. The process of claim 1, wherein the *cannabis* is selected from a group consisting of *Cannabis sativa*, *Cannabis indica*, and *Cannabis ruderalis*.

5. The process of claim 1, wherein freezing the *cannabis* further comprises grinding the frozen *cannabis*.

6. The process of claim 1, wherein the provided *cannabis* is a combination of two or more different strains of cannabinoids.

7. The process of claim 1, further comprising, after freezing the *cannabis* and coconut oil mixture into a solid, frozen biomass:

- heating the solid, frozen biomass of *cannabis* and coconut oil mixture;
- freezing the *cannabis* and coconut oil mixture into a solid, frozen biomass; and
- heating the solid, frozen biomass of *cannabis* and coconut oil mixture.

8. The process of claim 1, wherein the provided *cannabis* is a whole *cannabis* plant material.

9. The process of claim 1, wherein the provided coconut oil is a mixture of coconut oil and MCT oil at a ratio ranging from 75% coconut oil:25% MCT oil to 90% coconut oil:10% MCT oil.

10. A process of infusing *cannabis*-infused coconut oil into a consumable, wherein the process comprises:

- heating a whole spectrum cannabinoids infused orally ingestible coconut oil;

adding an orally ingestible consumable to the cannabinoids infused coconut oil to form a consumable and cannabinoids infused coconut oil mixture;
 heating the consumable and cannabinoids infused coconut oil mixture to a temperature of 175° F.-195° F.;
 freezing the consumable and cannabinoids infused coconut oil heated mixture to form a solid, frozen biomass mixture of consumable and cannabinoids infused coconut oil;
 heating the solid, frozen biomass mixture of consumable and cannabinoids infused coconut oil; and
 straining the heated cannabinoids infused coconut oil to yield a whole spectrum cannabinoids infused consumable.

11. The process of claim 10, wherein adding the orally ingestible consumable to the cannabinoids infused coconut oil comprises continuously stirring in the orally ingestible consumable into the cannabinoids infused coconut oil.

12. The process of claim 10, wherein heating the solid, frozen biomass mixture of consumable and cannabinoids infused coconut oil comprises liquifying the cannabinoids infused coconut oil.

13. The process of claim 10, wherein freezing the consumable and cannabinoids infused coconut oil heated mixture comprises rapidly freezing the consumable and cannabinoids infused coconut oil heated mixture in a blast freezer.

14. The process of claim 10, further comprising, after freezing the consumable and cannabinoids infused coconut oil heated mixture to form a solid, frozen biomass mixture of consumable and cannabinoids infused coconut oil:

heating the solid, frozen biomass mixture of consumable and cannabinoids infused coconut oil;

freezing the consumable and cannabinoids infused coconut oil mixture into a solid, frozen biomass;

reheating the solid, frozen biomass mixture of consumable and cannabinoids infused coconut oil.

15. The process of claim 14, wherein heating the solid, frozen biomass mixture of consumable and cannabinoids infused coconut oil comprises liquifying the cannabinoids infused coconut oil.

16. The process of claim 10, wherein the orally ingestible consumable is cacao beans.

17. The process of claim 10, wherein the orally ingestible consumable is dehydrated fruit.

18. The process of claim 17, wherein the dehydrated fruit is selected from a group consisting of dehydrated strawberries, dehydrated cherries, dehydrated apricots, dehydrated mangoes, dehydrated grapes, dehydrated cranberries, and dehydrated prunes.

19. The process of claim 10, wherein the orally ingestible consumable is raw popcorn kernels.

20. A process of creating a *cannabis*-infused consumable using coconut oil, wherein the process comprises:

providing *cannabis*;

freezing the *cannabis* to provide frozen *cannabis*;

providing coconut oil;

adding at least a portion of the frozen *cannabis* into the coconut oil to form a first *cannabis* and coconut oil mixture;

heating the first *cannabis* and coconut oil mixture to a temperature of 150° F.-200° F.;

freezing the *cannabis* and coconut oil mixture into a solid, frozen biomass;

heating the solid, frozen biomass at a temperature of 150° F.-200° F. for 2-4 hours to yield a heated biomass;

straining the heated biomass to separate the coconut oil from the *cannabis* to yield a whole spectrum cannabinoids infused orally ingestible coconut oil;

heating the whole spectrum cannabinoids infused orally ingestible coconut oil;

adding an orally ingestible consumable to the cannabinoids infused coconut oil to form a consumable and cannabinoids infused coconut oil mixture;

heating the consumable and cannabinoids infused coconut oil mixture to a temperature of 175° F.-195° F.;

freezing the consumable and cannabinoids infused coconut oil heated mixture to form a solid, frozen biomass mixture of consumable and cannabinoids infused coconut oil;

heating the solid, frozen biomass mixture of consumable and cannabinoids infused coconut oil; and

straining the heated cannabinoids infused coconut oil to yield a whole spectrum cannabinoids infused consumable.

* * * * *