

## Cannabis Patent Found Patent Eligible

*United Cannabis Corporation v. Pure Hemp Collective Inc.*, No. 18-cv-1922 (D. Colo. 2019)

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In one of the first cases of its kind, a court held that a cannabis patent covers patent eligible subject matter. In *United Cannabis Corporation v. Pure Hemp Collective, Inc.*, a district court in Colorado found cannabis claims patent-eligible, not a natural phenomena, because the claims involved use of liquified cannabinoids at specific concentrations above what may be found in nature.

United Cannabis, a biotechnology company that develops phytocannabinoid-based therapeutic products, brought suit against Pure Hemp in 2018 for allegedly infringing a patent covering liquid formulations of highly enriched extracts of plant cannabinoids. Products covered by the patent offer physicians and patients the ability to mix-and match cannabinoids, such as tetrahydrocannabinol (THC) and cannabidiol (CBD), to better target particular medical conditions.

United Cannabis' patent claimed "[a] liquid cannabinoid formulation, wherein at least 95% of the total cannabinoids is tetrahydrocannabinolic acid (THCa)." In addition, the patent covered liquid formulations where 95% of the total cannabinoids are THC and CBD, and liquid formulations with a mixture of 95% CBD, THC, and cannabinol (CBN).

Early in the litigation, Pure Hemp challenged the validity of the patent under Section 101 relating to patent eligibility. Courts employ the two part "Alice" test, named after the Supreme Court's 2014 decision in *Alice Corp v. CLS Bank International* on patent eligibility, to determine whether a patent claim is directed to patentable subject matter. First, the court asks whether the claim is "directed to" a law of nature, natural phenomenon, or abstract idea, which are independently unpatentable. If so, the court determines whether the limitations of the claim merely recite routine and well-known applications of the subject matter or provide an "inventive step" so as to transform the nature of the claim into something patent-eligible.

In finding the claims valid under Section 101, the Court rested its analysis on the first prong of the Alice test and determined that the claims were "directed to" patentable subject matter. The Court cited to prior Supreme Court decisions, including *Funk Bros.* and *Chakrabarty*, to find that the challenged claims were not "the handiwork of nature" but instead United Cannabis' own invention.

In *Funk Bros.*, the Supreme Court held that the natural properties of nitrogen-fixing bacteria were not patentable subject matter, and claims covering different combinations of bacteria for application to seeds in advance of cultivation by farmers was "hardly more than an advance in the packaging of the [bacteria]." *Funk Brothers Seed Co. v. Kalo Inoculant Co.*, 33 U.S. 127, 130-31 (1948). Conversely, in *Chakrabarty*, the Supreme Court held that a genetically engineered bacterium, created to replace a mixture of four naturally occurring strains of bacterium, and a method of distributing the new bacterium to assist with the cleanup of oil spills was patentable because the inventor "produced a new bacterium with markedly different characteristics from any found in nature." *Diamond v. Chakrabarty*, 447 U.S. 303, 310 (1980).

Here, the Court found that the claimed liquefied versions of cannabinoids and related chemicals were not naturally occurring phenomenon and instead manufactured by United Cannabis. The Court noted that even though cannabinoids can naturally exist in a highly-viscous resin “liquid” form, the specific threshold concentrations of cannabinoids claimed were far above the concentrations found in nature. Accordingly, the claims were valid under 35 U.S.C. § 101.

While the Court did not reach the second step of the Alice test, it did express reservations about the patentability of the challenged claims under 35 U.S.C. §§ 102 (novelty) and 103 (obviousness). Indeed, the asserted claims cover broad formulations; they do not claim a process for extracting cannabinoids, a process for making the liquid formulations, or any features or ratios of the inactive ingredients in the formulations. Further, no method for using the claimed formulations to treat a particular disease, condition, or symptom was claimed. The patent’s specification also did not discuss the significance of the “95%” threshold or how it may be more effective over other concentrations of cannabinoids. Accordingly, while the patent claims survived a challenge based on patentability, it remains to be seen whether they will be considered novel and non-obvious.