Synthetic, Non-Scheduled, Cannabinoid for Reducing the Frequency and Severity of Seizure

Tech ID: 30051 / UC Case 2018-485-0

ABSTRACT

Researchers at the University of California, Davis have developed H2CBD, a fully synthetic analog of CBD designed to treat seizures without the psychoactive effects associated with Cannabis.

FULL DESCRIPTION

H2CBD is a non-Cannabis derived, fully synthetic compound that mirrors the antiepileptic benefits of cannabidiol (CBD) without the legal and abuse liabilities associated with natural cannabinoids. Unlike CBD, H2CBD cannot be converted into THC, the intoxicating compound found in Cannabis, making it a safer and more accessible option for patients with seizure disorders.

APPLICATIONS

- Pharmaceuticals for seizure disorders and epilepsy.
- Alternative treatments for conditions currently addressed by CBD.
- Non-intoxicating cannabinoid therapies.
- Legal and accessible cannabinoid-based medications.
- Therapeutics for pediatric and adult epilepsy.

FEATURES/BENEFITS

- Non-psychoactive, avoids the intoxicating effects of THC.
- Circumvents legal restrictions and cultivation impacts by not being derived from Cannabis.
- Eliminates abuse potential as it cannot be chemically converted to THC.
- Reduces seizure frequency and severity with comparable efficacy to CBD.
- Provides a new therapeutic option for treatment-resistant epilepsy.
- Navigates legal and regulatory challenges of CBD and Cannabis-derived products.
- Addresses environmental and ethical concerns related to Cannabis cultivation.
- Expands treatment options for refractory epilepsy.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Published Application	20250152520	05/15/2025	2018-485

PATENT INFORMATION

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OTHER INFORMATION

KEYWORDS

Cannabis, Cannabinoid, THC, Hemp, Seizures, Anticonvulsant, CBD, Anti-seizure, Epilepsy, H2CBD, Non-psychoactive, Pharmaceuticals, Synthetic CBD, Therapeutic, THC alternative

CATEGORIZED AS

- **Materials & Chemicals**
  - Chemicals
  - Other
- **Medical**
  - Disease: Central Nervous System

JP7620984B2

▶ Therapeutics

RELATED CASES

2018-485-0

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- ▶ Preparation of Furan Fatty Acids from 5-(Chloromethyl) Furfural
- ▶ Azocino[4,5,6-cd]Indoles, Methods for Preparation and Medical Use Thereof: Simplified Synthetic Access to a New Class of 5-HT Ligands
- ▶ Cannabigerol (CBG) In The Treatment Of Seizures And Epilepsy
- ▶ Process for Converting Waste Biomass
- ▶ 1-(Benzo[1,2-b:4,5-b']Difuran-4-yl)alkyl-2-amines and 1-(2,3,6,7-Tetrahydrobenzo[1,2-b:4,5-b']Difuran-4-yl)butan-2-amines as Serotonin Receptor Modulators for Neurodegenerative Disorders

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