

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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BONERGE LIFESCIENCE (HUNAN) CO., LTD.,  
Petitioner

v.

NANJING NUTRABUILDING BIO-TECH CO., LTD.,  
Patent Owner

U.S. Patent No. 10,278,961  
Filing Date: April 19, 2017  
Issue Date: May 7, 2019  
Title: Administration of berberine metabolites

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*Inter Partes* Review No.: IPR2025-01593

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**PETITIONER'S AUTHORIZED ADDITIONAL BRIEFING**

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## EXHIBIT LIST

<b>No.</b>	<b>Description</b>
1017	<i>Nanjing Nutrabuilding Bio-Tech Co., Ltd. v. Bonerge Lifescience (Hunan) Co., Ltd.</i> , No. 5:25-cv-00271 (C.D. Cal.), Dkt. 37, Amended Joint Claim Construction and Prehearing Statement (AJCC)

Petitioner respectfully submits that the precedential decision in *Revvo Technologies, Inc. v. Cerebrum Sensor Technologies, Inc.*, IPR2025-00632, Paper 20 (Nov. 3, 2025) and the informative decision in *Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00340, Paper 18 (Nov. 5, 2025) do not adversely impact the institution of IPR2025-01593.

**I. Preamble of Claim 1: “A method of managing glucose tolerance in an individual, the method comprising”**

Petitioner has treated the claim 1 preamble as limiting with a consistent scope in both forums.

In the district court litigation, Patent Owner (PO) and Petitioner both agree that the preamble of claim 1 is limiting. *See* Ex. 1017, Amended Joint Claim Construction and Prehearing Statement (AJCC), Dkt. 37 at 1. Here, Petitioner treats the preamble as limiting and analyzes how the preamble is disclosed in the prior art references. *See* Pet. at 27, 49.

Further, Petitioner acknowledges here that the preamble phrase (“managing glucose tolerance”) should carry its “ordinary meaning[s].” *Id.* at 9. In the district court litigation, Petitioner proposes that the scope of the preamble be “enhancing an individual’s ability to process glucose that is measurable via a glucose tolerance test,” which is consistent with its understanding of the plain meaning of the phrase “managing glucose tolerance.” AJCC at 2; Pet. at 9. “Glucose tolerance” is a term that a POSA associates with a glucose tolerance test. *See* AJCC, Dkt. 37-9 at 381

(“By this introduction [of oral glucose tolerance tests], glucose tolerance became a standardized entity, which enabled studies in metabolism, physiology, and clinical medicine with detection of risk factors as well as progressive follow-up studies using a standard recognized worldwide.”). A POSA would understand the plain import of “managing glucose tolerance in an individual” is to enhance the individual’s ability to process glucose that is measurable via a glucose tolerance test. *See id.* at 37-6 (“The glucose tolerance test measures the body’s response to sugar, also called glucose.”) Moreover, Petition’s prior art analysis is consistent with the proposed scope in the district court litigation. *See Pet.* at 18-19 (Petition takes note that the Turner reference discloses “glucose tolerance tests” on rodent subjects). Petitioner’s upcoming district court claim construction brief will show that its proposed construction reflects the element’s plain and ordinary meaning.

**II. Claim 1: “administering, to an individual, a pharmaceutically effective amount of dihydroberberine”**

In the district court litigation, PO contends that this claim element should be given its plain and ordinary meaning and provides its understanding of the plain meaning to be “administering, to a human, an amount of dihydroberberine sufficient to achieve a therapeutic effect.” AJCC at 3. The construction Petitioner proposes is “administering to an individual an amount of dihydroberberine that improves the individual’s ability to process glucose that is measurable via a glucose tolerance test.” *Id.* Here, the Petition advocates that this claim element be given its plain and

ordinary meaning. *See* Pet. at 9. As explained below, Petitioner has taken a consistent position on this claim element in both forums.

First, Petitioner disagrees with PO's proposed plain meaning of this claim element in the district court and provides a further construction to elaborate its understanding of its "plain and ordinary" meaning, which would be demonstrated in Petitioner's upcoming district court claim construction brief.

Second, the construction that Petitioner proposed in the district court achieves clarity on the plain and ordinary meaning of the claim element by providing context of what constitutes a "pharmaceutically effective amount." By construing the term as "improv[ing] an individual's ability to process glucose that is measurable via a glucose tolerance test," the proposed construction emphasizes that the phrase "pharmaceutically effective" should be tied back to the preamble, which requires the administration of dihydroberberine that results in "managing glucose tolerance in an individual."

Third, Petition's prior art analysis is consistent with the proposed scope in the district court litigation. *Compare* AJCC at 3 (improvement measurable via a glucose tolerance test) *with* Pet. at 28-29 (Petition takes note of pharmaceutically effective dosage amount during "glucose tolerance tests" on rodent subjects).

**III. Claim 1: "approximately 25 mg to approximately 800 mg of dihydroberberine"**

Petitioner advocates in the district court litigation that this claim element is

indefinite. *See* AJCC at 4. The Petition does not advocate the element is indefinite. Petitioner's apparent inconsistent positions in the two forums fit the exception allowable under *Telsa* and are thus warranted.

In *Telsa*, the Director specifically states that "Petitioner's explanation may have risen to a sufficient level, for example, if Petitioner had shown that, notwithstanding the alleged indefiniteness of the claim term [in a district court litigation], an ordinarily skilled artisan would understand that the asserted art satisfies the claim limitation (such as **if the limitation prescribed a range and only the outer bounds of the range were unclear**)." *Telsa* at 3-4 (emphasis added). The situation here meets squarely within the scenario the Director calls out.

Petitioner's upcoming district court claim construction brief will show that the claim element is indefinite because the outer bounds of the dosage phrase are unclear. It is unclear how low below 25mg and how high above 800mg would the outer bounds of "approximately 25 mg to approximately 800 mg of dihydroberberine" be. Would 20mg still be considered within the scope of the claim element? How about 825mg at the upper range? PO's proposal to construe the element to mean "about 25 mg to about 800 mg of dihydroberberine" does not resolve this issue. On the other hand, a POSA would understand that the references asserted in the Petition satisfy this claim element because the dosages disclosed in the asserted arts all fall squarely within the 25mg to 800mg range, and nowhere near the uncleared outer bounds. *See*

Pet. at 24 (486 mg), 30 (same), 32 (same), 47 (300 mg), 48 (83.3 mg).

In short, Petitioner has a sufficient explanation for taking an indefiniteness position in the district court litigation while not taking the same position in the Petition because it is the exact exemplary situation that the Director deemed allowable in *Tesla*.

**IV. Claim 2: “reduces fasting glucose levels”**

In the district court litigation, PO contends that this claim element should be given its plain and ordinary meaning and does not require construction. *See* AJCC at 5. PO further contends that if plain and ordinary meaning is not adopted, then it should be construed as “lowering glucose levels after not eating or drinking anything other than water for approximately 8 or more hours.” *See id.* Petitioner proposes that the claim element should mean “lowers fasting blood glucose levels that may be satisfied via a comparative glucose tolerance test.” *See id.* This is consistent with the Petition. *See* Pet. at 11 (“claim 2 would be satisfied if a prior art reference (or a combination of prior art references) demonstrates via ... **glucose tolerance tests** where the administration of dhBBR would keep blood glucose levels closer to fasting blood glucose levels than BBR would.”) (emphasis added).

DATE: March 5, 2026

Respectfully submitted,

/s/ John Handy

John Handy

Registration No. 68,906

Counsel for Petitioner

## CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.105 (b), the undersigned hereby certifies that a copy of this Petitioner's Opposition to Patent Owner's Discretionary Denial has been served on March 5, 2026 upon the following litigation counsel via electronic means:

- Mark Nielsen ([mark.nielsen@solidcounsel.com](mailto:mark.nielsen@solidcounsel.com))
- Wook Pak ([wook@cislo.com](mailto:wook@cislo.com))

DATE: March 5, 2026

Respectfully submitted,

*/s/ John Handy* \_\_\_\_\_

John Handy  
Registration No. 68,906  
Counsel for Petitioner