

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

THORNE RESEARCH, INC. and THORNE HEALTHTECH, INC.,
Petitioners,

v.
CHROMADEx, INC.,
Patent Owner.

IPR2026-00400
U.S. Patent No. 12,252,506

PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL

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EXHIBIT LIST	
Exhibit No.	Description
2001	Conference and Scheduling Order, Case No. 2:26-cv-01758-RMG (D.S.C.)
2002	Complaint for Declaratory Judgment, Case No. 2:26-cv-01758-RMG (D.S.C.)
2003	Notice of Filing Proof of Service, Case No. 2:26-cv-01758-RMG (D.S.C.)
2004	U.S. Patent No. 11,981,698 to Migaud et al.
2005	U.S. Patent No. 11,584,770 to Migaud et al.
2006	U.S. Patent No. 10,815,262 to Migaud et al.
2007	U.S. Patent No. 10,000,519 to Migaud et al.
2008	U.S. Patent No. 10,815,262 File History
2009	U.S. Patent Publication No. 2018/0186824 to Migaud et al.
2010	Answer and Counterclaim, Case No. 2:26-cv-01758-RMG (D.S.C.)

ChromaDex, Inc. (“Patent Owner”) submits this request for discretionary denial of the petition filed by Thorne Research, Inc. and Thorne Healthtech, Inc. (collectively, “Petitioner”) seeking *inter partes* review (“IPR”) of U.S. Patent No. 12,252,506 (“the ’506 patent”).

I. INTRODUCTION

Patent Owner’s request for discretionary denial should be granted for three independent reasons. *First*, the *Fintiv* factors favor denial because the parallel district-court case filed by Petitioner is tentatively scheduled to reach trial well before any final written decision would be due. In *Thorne Research, Inc. v. Niagen Biosciences, Inc.*, C/A No. 2:26-cv-01758-RMG, the District of South Carolina entered a proposed scheduling order setting the case for jury selection and/or trial “on or after July 06, 2027.” Ex. 2001, p.3. That date is nearly six months before the statutory deadline for a final written decision.

After initiating the district-court action, Petitioner delayed service for nearly four months, creating the illusion that validity is not at issue in order to avoid filing a *Sotera* (or similar) stipulation. This delay was intentional. Without any kind of stipulation, Petitioner is free to litigate the same priority and validity issues in district court, while seeking a second forum before the Board. That is precisely the type of duplication that discretionary denial under *Fintiv* and Section 314(a) is designed to avoid.

Second, the petition asks the Board to revisit a priority issue the Office already considered. Petitioner’s entire case is based on the premise that the claimed Formula (IV) compounds in the ’506 patent are the basis for Formula (III) compounds and that R₆, R₇, and R₈ in the Formula (III) compounds cannot be hydrogen (H). Petitioner contends that this limitation is found throughout the series of continuation applications to which the ’506 patent claims priority. But during prosecution of U.S. Patent 10,815,262 (’262 patent)—the great-grandparent of the ’506 patent and a continuation sharing the same disclosure—the examiner allowed claims directed to Formula (III) that expressly permitted R₆, R₇, and R₈ to be hydrogen. Petitioner omitted this important detail in its petition and expert declaration. As discussed herein, the petition identifies no materially new art or issue; it simply manufactures a priority challenge to convert otherwise inapplicable references into prior art.

Third, the petition does not present a straightforward prior-art challenge. Petitioner relies on a selective reading of the ’506 patent’s Formula (IV) disclosure to advance a theory that the claims create a “logical impossibility.” Those arguments implicate claim scope, written description, enablement, and indefiniteness issues that are better addressed in district court with the benefit of Markman briefing and expert discovery—particularly where the Office already considered the underlying priority issue.

The Director should deny institution.

II. PARALLEL PROCEEDINGS

This dispute did not materialize overnight. Patent Owner first alerted Petitioner of its NR-related patents in a cease-and-desist letter on September 20, 2024—nearly two years before Petitioner filed its petition. Ex. 2002, ¶ 24. On May 13, 2025, Patent Owner again wrote to Petitioner specifically identifying the ’506 patent; the parties exchanged communications thereafter. *Id.*, ¶¶ 26-28. Patent Owner received no response to its last letter, dated July 22, 2025.

A. Amazon APEX Evaluation

Patent Owner learned Petitioner was selling infringing products on Amazon, and on April 6, 2026, Patent Owner initiated an evaluation through Amazon’s Patent Evaluation Express (“APEX”) seeking removal of Petitioner’s infringing products. Ex. 2002, ¶¶ 30, 35. In response, Petitioner filed a declaratory judgment action, which terminated the APEX proceeding in accordance with Amazon policy.

B. District of South Carolina Litigation

On April 28, 2026, Petitioner filed a complaint in the District of South Carolina seeking declaratory judgment “that its products do not infringe any valid and enforceable claim of the ’506 patent” and asserting unfair competition claims under state law. Ex. 2002, ¶¶ 1-2. Petitioner delayed service of its complaint for nearly four months until well after it filed its petition. Ex. 2003 (service on July 22, 2026).

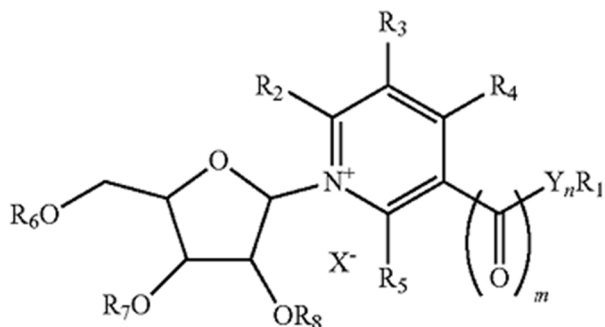
III. THE '506 PATENT

A. Overview of the '506 Patent

The '506 patent concerns methods of preparing nicotinamide riboside (NR) and its derivatives in a chemically stable, pharmaceutically acceptable salt form, together with the resulting isomerically pure compounds and nutritional supplement compositions. Ex. 1001, 1:23-24. The '506 patent discloses a chemical process for installing a safe counter-ion onto the nicotinamide riboside core, along with the beta-anomer compounds that process reliably produces. Ex. 1001, 2:26-34.

The '506 patent explains that researchers had long recognized NR as a valuable NAD⁺ precursor with potential nutritional and pharmaceutical applications, but that known synthetic routes were poorly suited to commercial production. Ex. 1001, 1:28-2:8. Against this backdrop, the inventors of the '506 patent sought to provide “a novel, useful and efficient method for the preparation of NR and derivatives” that avoids the disadvantages of the prior art. Ex. 1001, 2:26-28.

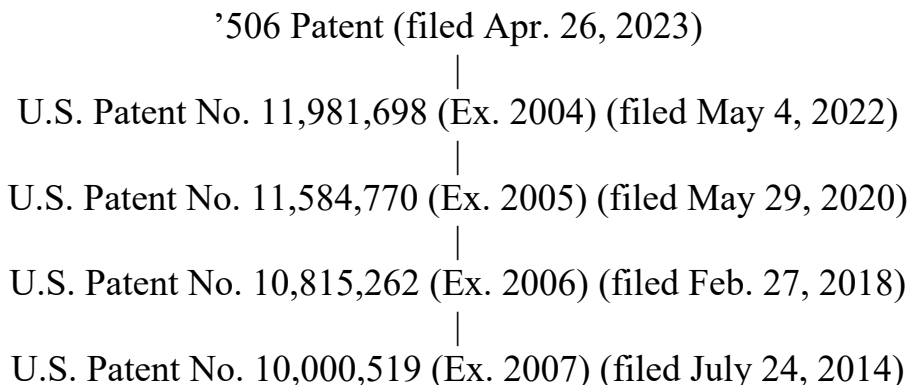
The '506 patent issued with 43 claims, including five independent claims. For purposes of this request, the most relevant portion of the independent claims is the recitation that “***R6, R7, and R8***, which may be the same or different, ***are each independently H*** or a hydroxyl-protecting group....” Ex. 1001, cls. 1, 6, 13, 18, 37 (emphasis added).



Ex. 1001, cl. 1.

B. Prosecution of the '506 Patent

The '506 patent claims priority to a British application filed July 29, 2013 and is the youngest member of a continuation chain:



Ex. 1001, p.1. Because all patents in the '506 patent family's continuation chain share substantively identical specifications, and the same examiner evaluated all five patent applications, prosecution of the '506 patent application proceeded relatively smoothly. Ex. 1001; Ex. 2004; Ex. 2005; Ex. 2006; Ex. 2007 (Patrick T Lewis as primary examiner). In response to a double patenting rejection, the applicant filed a terminal disclaimer of any term beyond the expiration dates of the '770 grandparent and '519 great-great-grandparent patents. Ex. 1002, pp. 96-97. The examiner also

flagged a Section 112(b) issue regarding the variable X⁻, which the applicant clarified with an amendment. Ex. 1002, pp. 96, 178.

The examiner's evaluation of the '262 great grandparent patent is most relevant, here—and most devastating to Petitioner's case. Claims 1 and 2 of the '262 patent—both as originally filed in the application and as issued—recite a limitation for the claimed compounds of Formula (III) that is identical to a limitation for the claimed compounds of Formula (IV) of the '506 patent. This is significant because Petitioner's entire case is based on the premise that Formula (IV) compounds are the basis for Formula (III) compounds and that R₆, R₇, and R₈ in the Formula (III) compounds cannot be hydrogen (H). But a review of the language of claim 1 of the '262 patent shows otherwise:

Claim	Relevant Claim Language
'506, cls. 1, 6, 13, 18, 37	<i>“R₆, R₇, and R₈, which may be the same or different, are each independently H or a hydroxyl-protecting group”</i>
'262 (Ex. 2006), cl. 1	<i>“R₆, R₇, and R₈, which may be the same or different, are each independently a hydroxyl protecting group or are each H”</i>
'262 (Ex. 2006), cl. 2	<i>“wherein R₆, R₇, and R₈ are each H.”</i>

During the prosecution of the '262 patent, the examiner did not overlook this limitation. His initial rejection found this limitation was anticipated by each of Tietze and Franchetti. Ex. 2008, pp. 221-23. In response, the applicant amended claim 1 to further specify circumstances in which R₆, R₇, and R₈ were not all simultaneously H:

R₆, R₇, and R₈, which may be the same or different, are each independently a hydroxyl protecting group or ***are each H ... provided*** that when n is 1, m is 1, Y is 0, R₁ is unsubstituted alkyl wherein alkyl is methyl, and R₂ – R₅ are each H, ***then R₆, R₇, and R₈ are not all simultaneously H or unsubstituted acetyl;***

further provided that when n is 0, m is 1, R₁ is NH₂, and R₂ – R₅ are each H, then R₆, R₇, and R₈ are not all simultaneously H or unsubstituted benzoyl.

Ex. 2008, p.197 (underlining in original; bold added). The applicant cited paragraphs [0010-0014, 0016, 0055, and 0077-0078] as providing support. Ex. 2008, p.203; Ex. 2009, [0010]-[0014], [0016], [0055], [0077]-[0078].

When considering this amendment, the examiner issued a final rejection—in part—under Section 112(b), finding the new language rendered the claims indefinite, as “the metes and bounds of variables R₆, R₇, and R₈ were unclear. Ex. 2008, pp.183-84. The applicant subsequently amended the claim:

R₆, R₇, and R₈, which may be the same or different, are each independently a hydroxyl protecting group or ***are each H, optionally*** ~~wherein the hydroxyl protecting group is substituted or unsubstituted acetyl, or substituted or unsubstituted benzoyl;~~ provided that when n is 1, m is 1, Y is 0, R₁ is ~~unsubstituted alkyl wherein alkyl is methyl,~~ and R₂ – R₅ are each H, ***then R₆, R₇, and R₈ are not all simultaneously H*** or unsubstituted acetyl;

further provided that when n is 1, m is 1, Y is 0, R1 is methyl, R3 and R4 are methyl, and R2 and R5 are each H, ***then R₆, R₇, and R₈ are not all simultaneously H*** or unsubstituted acetyl; and

yet further provided that when n is 0, m is 1, R1 is NH₂, and R2 – R5 are each H, ***then R₆, R₇, and R₈ are not all simultaneously H*** or unsubstituted benzoyl.

Ex. 2008, pp. 143-44. The applicant again cited the same paragraphs for written support. Ex. 2008, p.138 (citing Ex. 2009, [0010]-[0014], [0016], [0055], [0077]-[0078]). The Examiner accepted the amendment, finding no lack of written description or enablement and allowing the claims to issue. Ex. 2006, cls. 1-2. The examiner was satisfied. Petitioner now asks the Board to disagree with the examiner's conclusion that R₆, R₇, and R₈ in Formula (III) can be hydrogen.

IV. DISCRETIONARY DENIAL IS APPROPRIATE

A. Discretionary Denial Is Warranted Under Section 314(a)

The *Fintiv* factors confirm that institution in spite of the parallel district court proceeding would not promote efficiency or conserve the resources of the Board or the parties.

The first *Fintiv* factor (likelihood of a stay) does not favor institution. Petitioner identifies no stay, and the current record contains no evidence that the District of South Carolina has granted or is likely to grant a stay if review is instituted. To the contrary, the district court has entered a proposed scheduling order

that places the case on a rapid path to trial in July 2027. Ex. 2001, p.3. Without concrete evidence of a likely stay, this factor cannot overcome the inefficiency created by instituting a parallel Board proceeding that would trail the district-court trial by nearly six months. *See Luxshare Precision Industry v. Amphenol Corp.*, IPR2022-00132, Paper 10, at 9 (PTAB May 3, 2022).

The second *Fintiv* factor (proximity of trial date to the final written decision) strongly favors denial. The District of South Carolina has scheduled jury selection and/or trial for July 6, 2027, nearly six months before the Board's projected statutory deadline for a final written decision. That timing weighs heavily against institution because the district court is positioned to resolve the parties' dispute well before the Board would issue any final written decision. The Board has granted discretionary denial in analogous circumstances where the parallel litigation was scheduled to reach trial months before the Board's final written decision. *See Ericsson Inc. & Cellco P'ship d/b/a Verizon Wireless v. Procomm Int'l Pte. Ltd*, IPR2024-01455, Paper 15 (PTAB May 16, 2025).

The third *Fintiv* factor (investment in the parallel proceeding) also supports denial, or at minimum does not favor institution. Petitioner initiated the district-court action by filing a declaratory judgment complaint, and the court has since issued a proposed scheduling order establishing case-management deadlines and a trial setting. The record reflects that Petitioner delayed service of its complaint for nearly

four months, until after filing its IPR petition. Petitioner should not be permitted to manufacture an appearance of limited district-court investment through its own delay, while simultaneously preserving a second forum to litigate the same priority challenge. The Director should consider “the duplicative efforts that will occur during the [] duration of the [] review,” as the parties spend nearly a year expending precisely the duplicative, unnecessary, and counterproductive litigation costs that the AIA was designed to avoid. *NXP USA, Inc. v. Impinj, Inc.*, PGR2022-00005, Paper 20 at 7 (PTAB Aug. 25, 2022); *Fintiv*, IPR2020-00019, Paper 11 at 10.

The fourth *Fintiv* factor (overlap of issues raised by the petition) favors denial because the issues raised in the petition substantially overlap with issues that will be litigated in the district court. Petitioner’s invalidity theory rises or falls on whether the ’506 patent is entitled to its claimed priority date. That same priority dispute will necessarily be implicated in the parallel litigation because Patent Owner has counterclaimed for infringement of the ’506 patent and Petitioner will challenge validity in response. Ex. 2010. The only reason validity is not yet in front of the district court is the Petitioner’s delay in serving the complaint—which delayed its obligation to respond with an invalidity defense. Petitioner also has not eliminated overlap through *any* kind of stipulation—let alone a Sotera or Sotera-plus stipulation. Institution therefore would not narrow the parties’ dispute; it would give Petitioner a second forum to litigate the same priority and Section 112 issues.

The fifth *Fintiv* factor (party identity) favors denial because Petitioner is the district-court plaintiff. Petitioner filed the district court complaint and now seeks Board review of the same patent, while preserving the ability to litigate overlapping invalidity issues in district court. This is not a case involving unrelated parties or materially distinct disputes. Rather, Petitioner seeks two opportunities to present overlapping challenges to the '506 patent.

The sixth *Fintiv* factor (other factors supporting denial) favors denial. The petition rests on a weak priority theory that asks the Board to revisit issues the Office already considered. Petitioner argues that the '506 patent claims lack written description and enablement support because R₆, R₇, and R₈ may be hydrogen. Petitioner's analysis overlooks the fact that the examiner allowed the '262 patent—the great-grandparent of the '506 patent—with claims directed to compounds of Formula (III) expressly reciting that R₆, R₇, and R₈ could be H. *Infra* Section IV(B). Petitioner's invalidity theories rely on a selective reading of Formula (IV) that treats the immediately preceding Formula (III) discussion as limiting while ignoring other passages of the specification that show R₆, R₇, and R₈ as hydrogen. *Id.* The petition thus does not present a straightforward prior-art challenge; it depends on a priority and claim-scope dispute intertwined with Section 112 issues that are better suited for resolution in district court with the benefit of claim construction and expert discovery. *Infra* Section IV(C).

Taken together, the *Fintiv* factors favor discretionary denial. Institution would not simplify or narrow the parties’ dispute. It would merely create a second forum for Petitioner to litigate the same issues while the district-court case proceeds toward an earlier trial. *Magnolia Med. Techs., Inc. v. Kurin, Inc.*, IPR2026-00097, Paper 17 at 3-4 (PTAB May 14, 2026) (precedential) (“Congress intended AIA review to narrow disputes—not create another forum where litigation can be expanded.”).

B. Discretionary Denial Is Warranted Under Section 325(d)

Discretionary denial under Section 325(d) is appropriate because Petitioner asks the Board to revisit an issue already before the Office—an issue the examiner resolved without error.

When presented with a petition for *inter partes* review (IPR), “the Director may ... reject the petition or request because, ***the same or substantially the same*** prior art or ***arguments*** previously were presented to the Office.” 35 U.S.C. § 325(d); *Advanced Bionics, LLC v. Med-El Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 (PTAB Feb. 13, 2020) (precedential) (emphasis added). When deciding whether to exercise its Section 325(d) discretion, the Board considers a two-part framework: “(1) whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and (2) if either condition of the first part of the framework is satisfied, whether the petitioner has demonstrated that the Office

erred in a manner material to the patentability of challenged claims.” *Advanced Bionics*, IPR2019-01469, Paper 6 at 8. “[T]his framework reflects a commitment to defer to previous Office evaluations of the evidence of record unless material error is shown.” *Id.* at 9.

1. Petitioner’s argument is directed to the exact same issue the Office previously considered.

Petitioner’s argument is directed to the same issue the Office already considered because it depends on the premise that the challenged claims—directed to a compound of Formula (IV)—cannot encompass compounds in which R₆, R₇, and R₈ are H. According to Petitioner, compounds of Formula (III) are derived from compounds of Formula (IV), and Formula (III) purportedly requires R₆, R₇, and R₈ to be hydroxyl-protecting groups rather than hydrogen. Paper 2 at 13-14.

Petitioner’s argument is framed as a lack of written description or enablement necessary for priority. Paper 2 at 13-20. But Petitioner’s priority argument rests on its assertion that the construction of Formula (IV) in the independent claims should be limited to only one Formula (III) embodiment in the specification. Paper 2 at 13-14 (“the definition of R₁-R₈ immediately above formula (IV), which is the disclosure of formula (III)”). This is incorrect. The specification states that, for Formula (IV), “R₁-R₈ ... are as defined above” (Ex. 1001, 8:30), yet Petitioner reads that cross-reference as if it incorporates only the immediately preceding discussion of an

embodiment of Formula (III), an embodiment which identifies R₆-R₈ as hydroxyl-protecting groups.

That selective reading ignores the surrounding disclosure: Formula (I), which also appears “above” Formula (IV) as part of the same integrated disclosure, expressly shows R₆, R₇, and R₈ as hydrogen and provides written-description and enablement support for that embodiment. Ex. 1001, Fig. (I). Nothing in the specification justifies artificially truncating “defined above” to the immediately preceding Formula (III) embodiment while excluding the earlier Formula (I) disclosure. Read as a whole, the specification supports the claimed alternative in which R₆, R₇, and R₈ are hydrogen, and Petitioner’s contrary reading depends on an arbitrary narrowing of the disclosure.

This precise issue was previously presented to the Office during prosecution of the ’262 patent, the great-grandparent application of the ’506 patent that shares the same disclosure. The claims of the ’262 patent were directed to compounds of Formula (III), and the examiner allowed claims expressly reciting that R₆, R₇, and R₈ independently could be H. Ex. 2008, pp. 138, 203; Ex. 2006, cl. 1. Thus, the very foundation of Petitioner’s priority challenge—that Formula (III) excludes R₆, R₇, and R₈ as hydrogen—was already rejected by the Office. As discussed in detail above in Section III(B), the ’262 great grandparent patent—like all of the

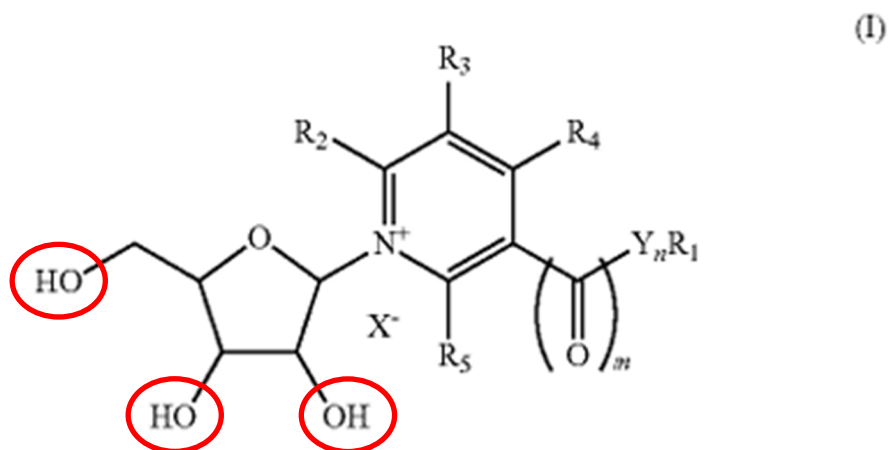
continuations in the '506 patent priority chain—contains language showing that R₆, R₇ and R₈ may be “each independently H” for Formula (III).

These limitations—which recite that R₆, R₇, and R₈ may each be independently hydrogen—did not escape the examiner’s notice. His 102, 103, and 112 rejections focused squarely on these very limitations. *See supra* Section III(B). The applicant twice amended these same limitations to overcome the rejections, resulting in the final versions below. Section III(B), *supra* (citing Ex. 2008, pp. 143-44, 197).

Claim	Relevant Claim Language
'262 patent, cl. 1	“A compound of formula (III) wherein... <i>R₆, R₇, and R₈</i>, which may be the same or different, are each independently a hydroxyl protecting group or <i>are each H</i>, provided that when n is 1, m is 1, Y is 0, R₁ is methyl, and R₂-R₅ are each H, then <i>R₆, R₇, and R₈ are not all simultaneously H</i> or unsubstituted acetyl further provided that when n is 1, m is 1, Y is 0, R₁ is methyl, R₃ and R₄ are methyl, and R₂ and R₅ are each H, then <i>R₆, R₇, and R₈ are not all simultaneously H</i> or unsubstituted acetyl; and yet further provided that when n is 0, m is 1, R₁ is NH₂, and R₂-R₅ are each H, then <i>R₆, R₇, and R₈ are not all simultaneously H</i> or unsubstituted benzoyl.”
'262 patent, cl. 2	“A compound of claim 1, wherein <i>R₆, R₇, and R₈ are each H.</i>”

Ex. 2006, cls. 1-2 (emphases added).

To support these amendments specifying when R₆, R₇, and R₈ are independently hydrogen in Formula (III), the applicant cited the application specification at paragraphs [0010]-[0014]. Ex. 2008, pp. 138, 203. Notably, the paragraphs the applicant cited to the examiner—which appear in all specifications in the '506 priority chain—include those that relate to Formula (I), which illustrate R₆, R₇, and R₈ *as hydrogen*:



Ex. 2009, Fig. (I) (annotated). *Compare* Ex. 2009, [0010]-[0014], [0016], [0055], and [0077]-[0078] *with* Ex. 1001, 2:38-55, Fig. (I). The applicant's reliance on these disclosures regarding Formula (I) to support the '262 patent's claims to the Formula (III) compounds with R₆, R₇, and R₈ each as hydrogen (or not all simultaneously hydrogen) was considered and accepted by the examiner, leading to the allowance of the '262 patent. Ex. 2008, pp. 138, 184; Ex. 2006, cl. 1.

Thus, Petitioner's priority challenge fails at its premise: because the '262 patent and every other continuation application in the '506 patent's priority chain

share the same specification, the examiner's acceptance of that disclosure as support for R₆, R₇, and R₈ as hydrogen in the '262 patent applies with equal force throughout the chain, leading to the disqualification of Petitioner's cited references as prior art. The Director should decline to revisit an issue previously presented to the Office.

2. Petitioner relies on the same prior art already before the Office and well-known to the examiner of the '506 patent.

Petitioner's only primary reference—U.S. Patent Application Publication No. 2016/0168184 (“the '184 publication”)—was no stranger to the examiner. He relied on it in an initial rejection of the '506 patent application.

The '184 publication corresponds to the '506 patent's great-great-grandparent application, which issued as U.S. Patent No. 10,000,519. Ex. 2007; Section III(B), *supra*. Applicant and examiner cited the '519 patent extensively during prosecution of the '506 patent—in the priority claims and in IDSs the examiner marked as considered. Ex. 1002, pp. 56, 69, 74, 87 (IDS signed by examiner), *passim*. The examiner of the '506 patent knew the '519 patent (and its publication) well because he reviewed every patent in the '506 patent's continuation chain. *See* Ex. 1001; Ex. 2004; Ex. 2005; Ex. 2006; Ex. 2007 (Patrick T Lewis as primary examiner). The examiner initially rejected the '506 patent's claims as unpatentable over the '519 patent (i.e., corresponding to the '184 publication), which the applicant overcame with a terminal disclaimer. Ex. 1002, pp. 98, 151-52, 178. Petitioner not only raises

the same issues already presented to the Office—it relies on the exact same prior art. There is nothing new here.

3. The examiner did not err.

The same examiner evaluated every application in the '506 patent's continuation chain, and made sound determinations on all of the issues and prior art Petitioner now raises. Petitioner has not—and cannot—demonstrate otherwise. “[I]t is Petitioner’s burden to show error under Part Two of the *Advanced Bionics* framework.” *BMW of N. Am., LLC v. Stragent, LLC*, IPR2021-00418, Paper 19 at 6-7 (PTAB Mar. 21, 2022). “If a condition in the first part of the framework is satisfied and the petitioner fails to make a showing of material error, the Director generally will exercise discretion not to institute *inter partes* review.” *Advanced Bionics*, IPR2019-01469, Paper 6 at 8-9.

“If reasonable minds can disagree regarding the purported treatment of the art or arguments, *it cannot be said that the Office erred in a manner material to patentability.*” *Id.* at 9 (emphasis added). For example, where an examiner previously allowed claims over the same art or argument, a petitioner must demonstrate that the claims should not have been allowed and “that *no reasonable examiner could have found otherwise.*” *Ecto World*, at 6 (“[G]eneralized statements as to the strength of [a] petition fail to identify sufficiently a material error.”) (emphasis added).

The same examiner reviewed the '262 great grandparent patent and allowed the claims containing the language Petitioner now attacks, based on the applicant's cited specification support. Ex. 1001, cl. 1; Ex. 2006, cl. 1. That same examiner rejected—and then allowed—the '506 patent to issue over the '519 great-great-grandparent patent, the publication of which serves as Petitioner's only primary prior art reference. *Supra* Section IV(B)(2); Paper 2 at 9. No evidence shows the examiner erred. No evidence shows he acted unreasonably. *Google LLC v. EcoFactor, Inc.*, IPR2022-00535, Paper 9 at 5-7 (PTAB Oct. 5, 2022) (finding the examiner had previously considered priority, even if his Section 112 rejection was general and applicant's response provided specification citations without discussion).

Discretionary denial under Section 325(d) is appropriate.

C. Discretionary Denial Is Warranted Because Petitioner Argues for Indefiniteness

Petitioner's "logical impossibility" argument rests on its assertion that the claims are internally contradictory: Petitioner interprets Formula (IV) to require R₆–R₈ to be limited to hydroxyl-protecting groups, then argues that the claims cannot also recite that R₆–R₈ may be "each independently H or a hydroxyl-protecting group." Paper 2 at 12-14. But Petitioner's argument is still based on the same flawed reading of the specification. Petitioner first assumes that the phrase "R₁–R₈ are as defined above" incorporates only the immediately preceding Formula (III) embodiment, and therefore that R₆–R₈ in Formula (IV) must be hydroxyl-protecting

groups. *Id.* at 13. From that premise, Petitioner argues that the challenged claims create a “logical impossibility” because they also expressly recite that R₆–R₈ may be “each independently H or a hydroxyl-protecting group.” Paper 2 at 12–14, 20–21.

But the premise is wrong. As explained above, Formula (I) also appears above Formula (IV) and shows R₆, R₇, and R₈ as hydrogen, and the examiner accepted that same disclosure as support for the ’262 patent’s Formula (III) claims reciting R₆, R₇, and R₈ as hydrogen. Petitioner cannot manufacture a contradiction by artificially limiting “as defined above” to one immediately preceding embodiment while ignoring other disclosures above Formula (IV). Read in context, the specification supports the claimed alternative in which R₆, R₇, and R₈ are independently hydrogen.

Petitioner’s argument confirms why institution would be inefficient. Although framed as a priority, written-description, and enablement challenge, Petitioner’s “logical impossibility” depends on construing the claims to contain an internal contradiction. That is, in substance, a claim-scope and indefiniteness argument better addressed in the parallel district-court case with the benefit of claim construction and expert discovery. It provides no reason for the Board to revisit the same R₆–R₈-as-hydrogen issue the Office considered during prosecution of the ’262 patent.

V. CONCLUSION

For the foregoing reasons, Patent Owner respectfully requests that the Director deny institution of *inter partes* review.

Date: August 19, 2026

Respectfully submitted,

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BY: /s/ Mikaela M. Stone

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ChromaDex Inc.*

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing **PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL** and all supporting **EXHIBITS 2001-2010** were served by filing the documents through the Patent Trial and Appeal Case Tracking System (P-TACTS) as well by sending via Federal Express on August 19, 2026 and courtesy copies were also served via electronic mail, in their entireties on the following:

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