

**THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH CAROLINA
CHARLESTON DIVISION**

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

Plaintiffs

v.

NIAGEN BIOSCIENCE, INC., and
CHROMADEx, INC., and THE QUEEN'S
UNIVERSITY OF BELFAST

Defendants.

C.A. No. 2:26-cv-01758-RMG

JOINT RULE 26(f) REPORT

Pursuant to Federal Rule of Civil Procedure (“Fed. R. Civ. P.”) 26(f) and Local Civil Rule 26.03, Plaintiffs Thorne Research, Inc. (“Thorne Research”) and Thorne HealthTech, Inc. (“Thorne HealthTech”) (collectively, “Thorne” or “Plaintiffs”), and Defendants Niagen Bioscience (“Niagen”), ChromaDex Inc., (“ChromaDex”) and the Queen’s University of Belfast (“QUB”) (collectively, “Defendants”), by and through their attorneys, jointly submit the following report.

I. Discovery Plan

The parties will exchange initial disclosures pursuant to Fed. R. Civ. P. 26(a)(1) on September 21, 2026, consistent with the Court’s September 21, 2026 Text Order.

Discovery will address the claims and defenses set forth in the parties’ respective pleadings, including Plaintiffs’ claims for declaratory judgment of non-infringement and invalidity of U.S. Patent No. 12,252,506 (the “’506 patent”), Defendants’ licensing and offers to license the ’506 patent to Thorne and third parties, Defendants’ history of attempts to compel Thorne to purchase product from Defendants, and Defendants’ threats of litigation and/or intellectual

property enforcement, Defendants' sales of NAD+ precursor products and analyses of the market and competition therefore, Defendants' tortious interference with contract, Defendants' intentional interference with prospective contractual relations, and Defendants' engagement in unfair competition.

Discovery will also address Defendants' counterclaim for infringement of the '506 patent, the willfulness of Thorne's infringement, including Thorne's knowledge of the '506 patent and continued sales after receiving notice of ChromaDex's infringement position, Defendants' damages, including lost profits, a reasonable royalty, enhanced damages under 35 U.S.C. § 284, whether this is an exceptional case under 35 U.S.C. § 285, and Defendants' request for a permanent injunction under 35 U.S.C. § 283.

The timing and completion of discovery will be governed by the deadlines set forth in the Court's Conference and Scheduling Order, as may be amended.

Plaintiffs' Position

The patent at issue in this case was filed and prosecuted and owned (until at least December 2025) by The Queen's University of Belfast ("QUB"). Three of the four named inventors of the patent-in-suit reside outside the United States. Thus, this matter requires foreign discovery which can take significant time. Plaintiffs have proposed a schedule that balances a reasonable trial date with the need for such discovery.

In discussions regarding the schedule, the parties attempted to moot the need for foreign discovery, unfortunately that effort was not successful. QUB agreed to (1) produce documents and witnesses for deposition notwithstanding its foreign residence and regardless of whether QUB is dismissed from the case; and (2) "communicate with the inventors regarding the case and use best efforts for them to provide relevant documents and, if necessary, appear for a

deposition.” While Plaintiffs appreciate this agreement, Defendants represented that several named inventors of the patent-in-suit that reside outside of the United States are not employed by QUB (or any other defendant) and do not have an obligation (*e.g.* contract with Defendants) to provide discovery. Thus, even with these commitments from QUB, foreign discovery is necessary.

Additionally, Defendants’ schedule is unworkable at least because it does not provide adequate time for summary judgment briefing and decision (which may moot some issues) in advance of trial. Defendants’ schedule also does not provide sufficient time between close of expert discovery and pretrial exchanges, which will necessarily be informed by discovery and the Court’s order(s) on summary judgment. There is no justification for such a compressed schedule.

Defendants’ Position

This is a single-patent case involving a single accused ingredient—nicotinamide riboside hydrogen malate. The technical issues are not particularly complex for a patent case, and the core dispute involves straightforward questions of infringement and validity. Given the narrow scope of the issues, this case can be prepared for trial on the schedule proposed by Defendants, which is consistent with the Court’s initial scheduling order.

Defendants do not believe this matter presents the foreign discovery concerns identified by Plaintiff. With respect to conception and reduction to practice issues, one named inventor—Philip Redpath—is a ChromaDex employee and will provide party discovery. QUB agreed to produce documents and make witnesses available for deposition regardless of whether QUB is dismissed from this case. And Defendants have committed to communicate with the named

inventors regarding the case and to use best efforts to facilitate their voluntary production of relevant documents and, if necessary, appearance for deposition. Given these commitments, Defendants do not believe that foreign discovery through the Hague Convention or Letters Rogatory will be necessary. Should Plaintiff identify specific discovery it believes it cannot obtain through Defendants' facilitation, Defendants will work with Plaintiff in good faith to address any such needs. Indeed, Plaintiff will not be required to proceed through the Hague to serve a subpoena on QUB, as Defendants have agreed to provide such discovery from QUB in the case. For the inventors, this case is still very much in its infancy and beginning stages to where Plaintiff has ample time to effectuate service, which as noted above, may itself not be necessary through the good faith efforts of Defendants.

II. Statement of the Facts of the Case

Plaintiffs' Position

This action arises from Defendants' harassment of Thorne in an attempt to coerce Thorne into a business relationship with Defendants that Thorne has repeatedly rejected. That harassment includes Defendants' activities related to the '506 patent, issued by the U.S. Patent and Trademark Office 18 months ago, on March 18, 2025.

For many years (including several years prior to issuance of the '506 patent), Thorne has sold, *inter alia*, dietary supplements that contain nicotinamide riboside hydrogen malate ("Thorne's NR Products"). As detailed in the Complaint (Dkt. No. 1), in prior litigation, ChromaDex accused Thorne of infringing certain U.S. patents Chromadex licensed from Dartmouth College. Those patents were invalid. *Id.* at ¶¶ 10-11. Since conclusion of that failed litigation, ChromaDex, in concert with Niagen and QUB, has repeatedly threatened and harassed

Thorne in an attempt to pressure Thorne into buying nicotinamide riboside from Defendants—an offer that Thorne has repeatedly declined. *Id.* at ¶¶ 24-35. Those threats have involved various letters and patents, including threats related to the '506 patent.

For example, on May 13, 2025, ChromaDex sent Thorne a letter referencing issuance of the '506 patent to which ChromaDex claimed to hold exclusive rights. On July 22, 2025, ChromaDex sent another letter alleging without explanation that certain Thorne products infringed the '506 patent and asking that Thorne cease sales of said products and destroy existing inventory. On December 16, 2025, QUB signed an agreement with ChromaDex, allegedly transferring certain rights and title to the '506 patent to ChromaDex. Less than four months later, on April 10, 2026, Defendants submitted a patent evaluation through Amazon's APEX program, signed by an individual employed at ChromaDex, identifying three Thorne product listings—ResveraCel®, NiaCel® 400, and SynaQuell™—as allegedly infringing the '506 patent. Defendants initiated that APEX dispute only after purportedly transferring rights in the '506 patent away from QUB—which filed and prosecuted the patent and employed the majority of the purported inventors. Thus, the result of that alleged transfer of rights executed shortly before Defendants provoked this dispute may be that highly relevant discovery from QUB and the inventors of the '506 patent require lengthy foreign discovery processes.

As detailed in the complaint, Defendants' filing of the APEX evaluation left Thorne with no other option than to engage in the present litigation. Dkt. No. 1 at ¶¶ 30-35. Thorne filed this action on April 28, 2026, seeking a declaratory judgment of non-infringement and asserting claims for tortious interference with a contract, intentional interference with prospective contractual relations, and unfair competition arising from the APEX submission.

Niagen and ChromaDex answered the Complaint, admitting that Defendants sent the harassing letters to Thorne and initiated the APEX proceeding. ChromaDex filed a counterclaim alleging that certain Thorne products infringe one or more claims of the '506 patent. Thorne denies that any of its products infringe the '506 patent. Thorne asserted a counter-counterclaim for declaratory judgment that the asserted claims of the '506 patent are invalid. Defendants' answer to that claim is due on September 23, 2026.

QUB did not answer the Complaint, and instead moved to dismiss the claims against it. Thorne opposed QUB's motion on September 11, 2026.

Defendants' Position

This case concerns Thorne's unauthorized offers to sell and sales of dietary-supplement products containing nicotinamide riboside hydrogen malate ("NR hydrogen malate"), which are covered by the claims of U.S. Patent No. 12,252,506 (the "'506 patent").

The '506 patent, entitled "Methods of Preparing Nicotinamide Riboside and Derivatives Thereof," issued on March 18, 2025 and addresses practical problems in preparing NR compounds, including yield, purity, and scale-up limitations of prior protocols. QUB solely owned the '506 patent family and exclusively licensed it to ChromaDex, and effective December 16, 2025, QUB assigned to ChromaDex all worldwide right, title, and interest in the '506 patent, together with the right to enforce it and recover damages for infringement occurring before, on, or after that date. ChromaDex is the owner of the '506 patent and possesses the right to enforce it.

For more than a decade, ChromaDex advanced NR science and built a commercial platform around NR products, research, and supply, including its proprietary NR chloride ingredient, NIAGEN®, commercialized in 2013. In July 2013, Thorne entered a written agreement to

purchase NIAGEN® from ChromaDex for use in its dietary supplements, and for more than seven years Thorne purchased NIAGEN® under that supply arrangement. Thorne terminated the operative supply agreement effective December 31, 2020. After that relationship ended, Thorne began marketing supplements labeled as containing NR hydrogen malate—a different NR salt that is covered by the '506 patent.

After the '506 patent issued, ChromaDex gave Thorne written notice of the patent and its infringement position. ChromaDex's May 13, 2025 and July 22, 2025 letters placed Thorne on actual notice that its sale of NiaCel and any other Thorne product containing NR malate infringed at least claims 1 and 26 of the '506 patent. ChromaDex later initiated Amazon's Patent Evaluation Express ("APEX") procedure in good faith based on its position that the identified listings offered infringing products. Despite this notice, Thorne continued its accused offers to sell and sales, and instead Thorne then filed this declaratory-judgment action. Defendants deny that their good-faith enforcement of the '506 patent gives rise to any liability, submits that it is clear that Thorne infringes on the '506 Patent and that Thorne's post-notice infringement has been intentional, knowing, and willful.

QUB separately moved to dismiss all claims against it because, effective December 16, 2025, (before the APEX proceeding and before Thorne filed this action) QUB assigned the '506 patent and every exclusionary and enforcement right to ChromaDex "absolutely," retaining only a nonexclusive, royalty-free license to use the technology for internal, noncommercial academic purposes. QUB had no right to assert the '506 patent against Thorne and did not initiate, submit, or otherwise participate in the APEX proceeding. That motion remains pending before the Court. QUB will serve its initial disclosures on resolution of the motion to dismiss, if necessary.

III. Fact Witnesses

The Parties will supplement the identifications below on an ongoing basis pursuant to Rule 26(a)(1) and in accordance with the case schedule.

Plaintiffs' Position

The below individuals' last known address is in Northern Ireland. Based on representations made by Defendants in negotiation of the case schedule, Plaintiffs understand these individuals are not currently employed by QUB or any other defendant, and therefore discovery through the Hague Convention will be necessary.

Further, to the extent that QUB is dismissed as a party from this case, QUB has agreed to provide document and deposition discovery notwithstanding its foreign residence. To the extent that is not sufficient, foreign discovery may be necessary.

Name	General Subject Matter of Expected Testimony
Marie Migaud Lurgan, Great Britain Based on representations made by Defendants in negotiation of the case schedule, Plaintiffs understand that Defendants do not have current contact information for this individual. QUB has committed to communicate with the inventors regarding the case and use best efforts for them to provide relevant documents and appear for a deposition.	Named inventor of the '506 patent Information related to, among other things, the subject matter and prosecution of the '506 patent, and the invalidity and/or unenforceability of the '506 patent

Kerri Crossey Magherafelt, Great Britain Based on representations made by Defendants in negotiation of the case schedule, Plaintiffs understand that Defendants do not have current contact information for this individual. QUB has committed to communicate with the inventors regarding the case and use best efforts for them to provide relevant documents and appear for a deposition.	Named inventor of the '506 patent Information related to, among other things, the subject matter and prosecution of the '506 patent, and the invalidity and/or unenforceability of the '506 patent
Mark Doherty Newtownabbey, Great Britain Based on representations made by Defendants in negotiation of the case schedule, Plaintiffs understand that Defendants do not have current contact information for this individual. QUB has committed to communicate with the inventors regarding the case and use best efforts for them to provide relevant documents and appear for a deposition.	Named inventor of the '506 patent Information related to, among other things, the subject matter and prosecution of the '506 patent, and the invalidity and/or unenforceability of the '506 patent

Further, the following individuals have relevant knowledge:

Name	General Subject Matter of Expected Testimony
Philip Redpath (ChromaDex) Portadown, Great Britain Based on representations made by Defendants in negotiation of the case schedule, Plaintiffs understand this individual is a party employee and will provide party discovery.	Named inventor of the '506 patent Information related to, among other things, the subject matter and prosecution of the '506 patent, and the invalidity and/or unenforceability of the '506 patent

Name	General Subject Matter of Expected Testimony
Carlos Lopez ChromaDex, Inc. 10900, Wilshire Blvd., Suite 600, Los Angeles, California 90024	Signatory on Defendants' request for APEX proceedings regarding Thorne products Signatory on Defendants' threat letter(s) to Thorne Information related to, among other things, the subject matter and prosecution of the '506 patent, and the invalidity and/or unenforceability of the '506 patent, Defendants' initiation of the APEX proceedings and related facts
Amin Wasserman Gurnani LLP 230 W. Monroe Street, Suite 1405 Chicago, IL 60606	Information related to, among other things, the subject matter and prosecution of the '506 patent, and the invalidity and/or unenforceability of the '506 patent
George M. Carrera Jr. Amin Wasserman Gurnani LLP <i>address above</i>	Information related to, among other things, the subject matter and prosecution of the '506 patent, and the invalidity and/or unenforceability of the '506 patent
Jonathan Krit Amin Wasserman Gurnani LLP <i>address above</i>	Signatory on Defendants' threat letter(s) to Thorne Information related to, among other things, the subject matter and prosecution of the '506 patent, and the invalidity and/or unenforceability of the '506 patent
Leydig, Voit & Mayer, Ltd 4940 Pearl East Circle, Suite 200 Boulder, CO 80301	Information related to, among other things, the subject matter and prosecution of the '506 patent, and the invalidity and/or unenforceability of the '506 patent
Sally A. Sullivan Leydig, Voit & Mayer, Ltd <i>address above</i>	Information related to, among other things, the subject matter and prosecution of the '506 patent, and the invalidity and/or unenforceability of the '506 patent
Myron Krochak, Senior Finance Manager (Niagen Bioscience/ChromaDex) Disclosed by Defendants	Revenues, costs, royalty rates, and financial data bearing on damages; and licensing practices and royalty/valuation of the NR technology relevant to a reasonable royalty.
Andrew Shao, SVP, Global Regulatory & Scientific Affairs (Niagen Bioscience/ChromaDex) Disclosed by Defendants	ChromaDex's NR science, NIAGEN® (NR chloride), commercialization, specifications, and the differences between NR chloride and NR hydrogen malate.
Michiko Kelley, Chief Marketing Officer (Niagen Bioscience/ChromaDex). Disclosed by Defendants	Marketing, branding, and commercialization of the NR products, including consumer positioning and go-to-market strategy.

Name	General Subject Matter of Expected Testimony
Aron Erickson, VP of R&D (Niagen Bioscience/ChromaDex). Disclosed by Defendants	NR science and the prior art relating to nicotinamide riboside and its dicarboxylate and hydrogen malate salts; ChromaDex's pre-suit scientific assessment of the '506 patent claims; and the distinctions between NR chloride and NR hydrogen malate.
Matthew Wilson, Commercial Development Manager (QUB). Disclosed by Defendants	The QUB-ChromaDex License Agreement (Nov. 23, 2015), the Joint Ownership and Management Agreement (Oct. 9, 2015), and the QUB Assignment Agreement (Dec. 16, 2025).
Amanda Frick Senior Vice President, Medical, Clinical & Scientific Affairs (Thorne) Contact through Plaintiffs' counsel	Composition of Thorne's products that contain nicotinamide riboside hydrogen malate ("Thorne's NR Products") to the extent such relates to the claims of the patents-in-suit and based on Thorne's current understanding of Defendants' infringement assertion
Mary Beech Chief Growth Officer (Thorne) Contact through Plaintiffs' counsel	Thorne's interactions and contractual relationship with Pattern Inc., and Thorne's economic relationships with Amazon, Pattern, end-user customers, and authorized resellers with respect to the sale of Thorne NR Products, including the economic benefits of these relationships; and Defendants' submission through Amazon's Patent Evaluation Express ("APEX") procedure concerning Thorne's NR Products, including its impact on Thorne's contractual relationship with Pattern Inc. and injury to Thorne (including to its reputation and goodwill).
Alex Wang Vice President of Strategic Finance (Thorne) Contact through Plaintiffs' counsel	The financial performance and business aspects of Thorne's NR Products to the extent such relates to the claims of the patents-in-suit and based on Thorne's current understanding of Defendants' infringement assertion, including sales, pricing, potential sales channels, distribution, and competition of Thorne's NR Products, as well as the impact on sales of Thorne's NR Products of Defendants' submission through Amazon's Patent Evaluation Express ("APEX") procedure.

Thorne also anticipates discovery regarding at least the following information:

Defendants' Amazon Patent Evaluation Express ("APEX") submission concerning Thorne products.
Defendants' pursuit of a commercial relationship with Thorne including through litigation, threats of litigation, and APEX.
Alleged invention, prosecution, ownership, expiration, licensing, and/or products and methods alleged to be covered, disclosed, and/or claimed, relating to or regarding U.S. Patent No. 12,252,506 ("the '506 patent"), and the APEX procedure involving Thorne NR Products.

Defendants' Position

Defendants identify the following individuals likely to have discoverable information that Defendants may use to support their claims or defenses. Subjects are stated generally and are not exhaustive, and Defendants will supplement these identifications as discovery proceeds.

Name	General Subject Matter of Expected Testimony
Myron Krochak , Senior Finance Manager (Niagen Bioscience/ChromaDex) Contact through Defendants' Counsel	Revenues, costs, royalty rates, and financial data bearing on damages; and licensing practices and royalty/valuation of the NR technology relevant to a reasonable royalty.
Andrew Shao , SVP, Global Regulatory & Scientific Affairs (Niagen Bioscience/ChromaDex) Contact through Defendants' Counsel	ChromaDex's NR science, NIAGEN® (NR chloride), commercialization, specifications, and the differences between NR chloride and NR hydrogen malate.
Michiko Kelley , Chief Marketing Officer (Niagen Bioscience/ChromaDex). Contact through Defendants' Counsel	Marketing, branding, and commercialization of the NR products, including consumer positioning and go-to-market strategy.
Aron Erickson , VP of R&D (Niagen Bioscience/ChromaDex). Contact through Defendants' Counsel	NR science and the prior art relating to nicotinamide riboside and its dicarboxylate and hydrogen malate salts; ChromaDex's pre-suit scientific assessment of the '506 patent claims; and the distinctions between NR chloride and NR hydrogen malate.

Marie Migaud (named inventors of the '506 patent). Last known residence Lurgan, County Armagh, UK (per the '506 Patent file history); current contact information otherwise unknown.	Conception, reduction to practice, and the subject matter of the '506 patent methods and compounds.
Philip Redpath (named inventors of the '506 patent). Contact through Defendants' Counsel	Conception, reduction to practice, and the subject matter of the '506 patent methods and compounds.
Kerri Crossey (named inventors of the '506 patent). Last known residence Magherafelt, County Derry, UK (per the '506 Patent file history); current contact information otherwise unknown.	Conception, reduction to practice, and the subject matter of the '506 patent methods and compounds.
Mark Doherty (named inventors of the '506 patent). Last known residence Newtownabbey, County Antrim, UK (per the '506 Patent file history); current contact information otherwise unknown.	Conception, reduction to practice, and the subject matter of the '506 patent methods and compounds.
Matthew Wilson, Commercial Development Manager (QUB). Contact through Defendants' Counsel	The QUB-ChromaDex License Agreement (Nov. 23, 2015), the Joint Ownership and Management Agreement (Oct. 9, 2015), and the QUB Assignment Agreement (Dec. 16, 2025).
Amanda Frick, ND, LAc, SVP, Medical, Clinical & Scientific Affairs (Thorne). On information and belief, this individual may be contracted through Plaintiff's counsel.	Thorne's NR science; the Accused Products containing NR hydrogen malate, including their formulation, specifications, and scientific and medical substantiation; and the differences between NR hydrogen malate and NR chloride.
Amy Caplette, SVP, Quality and Regulatory Affairs (Thorne). On information and belief, this individual may be contracted through Plaintiff's counsel.	Quality assurance, regulatory compliance, manufacturing and product specifications, and ingredient sourcing for the Accused Products, including the sourcing and specifications of NR hydrogen malate.

Alex Wang , VP, Strategic Finance (Thorne). On information and belief, this individual may be contracted through Plaintiff's counsel.	Thorne's revenues, costs, pricing, and financial data concerning U.S. offers to sell and sales of the Accused Products, relevant to damages and a reasonable royalty.
Lee Tsukroff , Chief Financial & Operating Officer (Thorne). On information and belief, this individual may be contracted through Plaintiff's counsel.	Thorne's finances and operations, including revenues, costs, and profitability of the Accused Products, and financial data bearing on damages and a reasonable royalty.
Frankie Templeton , Director, Customer and Distribution Marketing (Thorne). On information and belief, this individual may be contracted through Plaintiff's counsel.	Marketing, sales, and customer and distribution channels for the Accused Products, including U.S. offers to sell and the Amazon/Pattern relationship.
Pattern, Inc. Lehi, Utah	Thorne's Amazon sales through Pattern; the receipt and handling of the April 10, 2026 APEX notice; and listing status and account health.
Matthew Gunnison , Biosynth, Chief Executive Officer San Francisco, CA	Biosynth's relationship with Thorne, including its provision of nicotinamide riboside; the manufacturing of the nicotinamide riboside in Thorne's products
Eric Simpson , Biosynth, Corporate Development San Francisco, CA	Biosynth's relationship with Thorne, including its provision of nicotinamide riboside; the manufacturing of the nicotinamide riboside in Thorne's products.
NR Therapeutics LLC Lebanon, NH	NR Therapeutics relationship with Thorne, including its provision of nicotinamide riboside through Biosynth to Thorne; the manufacturing of the nicotinamide riboside in Thorne's products

Defendants also anticipate discovery regarding at least the following information:

- Thorne's offers to sell and sales of the Accused Products containing NR hydrogen malate, and Thorne's infringement of the '506 patent.
- ChromaDex's ownership and enforcement rights in the '506 patent, including the December 16, 2025 QUB assignment, and ChromaDex's good-faith enforcement of the '506

patent, including its pre-suit correspondence and the Amazon Patent Evaluation Express (“APEX”) submission.

- Damages arising from Thorne’s infringement, including lost profits, a reasonable royalty, and enhanced damages, and Thorne’s revenues, costs, pricing, and profits from the Accused Products.
- The validity and enforceability of the ’506 patent, including the subject matter, conception, reduction to practice, and prosecution of the ’506 patent.
- Thorne’s relationship with BioSynth, including BioSynth’s preparation, acquisition, formulation, manufacturing, delivery, and/or use of nicotinamide riboside and provision thereof to Thorne.
- Thorne’s relationship with NR Therapeutics, including NR Therapeutics preparation, acquisition, formulation, manufacturing, delivery, and/or use of nicotinamide riboside and provision thereof to Thorne.

IV. Expert Witnesses

The Parties will provide Rule 26(a)(2) expert disclosures in accordance with the schedule set by the Court.

Plaintiff’s Position

The subject matter and field of expertise likely to be offered includes testimony from experts related to non-infringement and invalidity, with expertise in chemistry, as well as experts in business tort damages and patent damages.

Defendants’ Position

The subject matter and field of expertise likely to be offered includes testimony from experts related to infringement and validity, with expertise in chemistry, as well as experts in business tort damages and patent damages.

V. Summary of Claims and Defenses

Thorne's Complaint

- Declaratory Judgment of Noninfringement
- Tortious Interference with a Contract
- Intentional Interference with Prospective Contractual Relations
- Unfair Competition under the South Carolina Unfair Trade Practices Act (S.C. Code § 39-5-10, et seq.)

Niagen and ChromaDex's Answer and Counterclaim

Defenses

- Failure to state a claim
- Federal patent-law preemption and absence of bad faith
- Justification; proper purpose and means
- No causation or actual injury; independent third-party conduct
- Limitations on relief

Counterclaim

- Direct Infringement of U.S. Patent No. 12,252,506 under 35 U.S.C. § 271(a), including willful infringement.

Thorne's Answer to Counterclaim and Counter-Counterclaims

Affirmative Defenses

- Failure to state a claim
- Non-infringement (literal and under doctrine of equivalents)

- Invalidity under 35 U.S.C. §§ 101, 102, 103, and/or 112
- Prosecution history estoppel
- Limitation on damages (notice date, issuance date, six-year statutory cap)
- No willful infringement
- Not an exceptional case (§ 285)
- Failure to mark (35 U.S.C. § 287)
- Equitable doctrines (estoppel, patent misuse, implied license, exhaustion, disclaimer, waiver)

Counter-Counterclaim—Declaratory Judgment of Invalidity under 35 U.S.C. §§ 102, 103, 112

Dated: September 21, 2026

Respectfully submitted,

/s/ Addie K.S. Ries

Addie K. S. Ries

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University of Belfast*

IN THE UNITED STATES DISTRICT COURT
DISTRICT OF SOUTH CAROLINA
CHARLESTON DIVISION

Thorne Research, Inc, et al,	)	C/A No.: 2:26-cv-1758
	)	
Plaintiff(s),	)	PROPOSED AMENDED
	)	SCHEDULING ORDER
v.	)	
	)	Judge Richard Mark Gergel
Niagen Bioscience, Inc, et al.	)	
	)	
Defendant(s).	)	

Pursuant to the Federal Rules of Civil Procedure and the Local Civil Rules of this Court, the following schedule is established for this case. This order is entered to administer the trial of cases in a manner consistent with the ends of justice, in the shortest possible time, and at the least possible cost to litigants. Discovery may begin upon receipt of this order.

Plaintiffs’ Position Regarding the Schedule and Foreign Discovery:

The patent at issue in this case was filed and prosecuted and owned (until at least December 2025) by The Queen’s University of Belfast (“QUB”). Three of the four named inventors of the patent-in-suit reside outside the United States. Thus, this matter requires foreign discovery which can take significant time. Plaintiffs have proposed a schedule that balances a reasonable trial date with the need for such discovery.

In discussions regarding the schedule, the parties attempted to moot the need for foreign discovery, unfortunately that effort was not successful. QUB agreed to (1) produce documents and witnesses for deposition notwithstanding its foreign residence and regardless of whether QUB is dismissed from the case; and (2) “communicate with the inventors regarding the case and use best efforts for them to provide relevant documents and, if necessary, appear for a deposition.” While Plaintiffs appreciate this agreement, Defendants represented that several named inventors of the patent-in-suit that reside outside of the United States are not employed by QUB (or any other defendant) and do not have an obligation (*e.g.* contract with Defendants) to provide discovery. Thus, even with these commitments from QUB, foreign discovery is necessary.

Additionally, Defendants’ schedule is unworkable at least because it does not provide adequate time for summary judgment briefing and decision (which may moot some issues) in advance of trial. Defendants’ schedule also does not provide sufficient time between close of expert discovery and pretrial exchanges, which will necessarily be informed by discovery and the Court’s order(s) on summary judgment. There is no justification for such a compressed schedule. **Defendants’ Position Regarding the Schedule and Foreign Discovery:**

Defendants dispute that the need for foreign discovery justifies extending the case schedule by approximately nine months. QUB has agreed to produce documents and witnesses for deposition

notwithstanding its foreign residence, regardless of whether QUB is dismissed from the case. Defendants have further agreed to communicate with the named inventors regarding the case and to use best efforts for them to provide relevant documents and, if necessary, appear for a deposition.

Defendants' proposed schedule reflects these commitments and provides sufficient time for the parties to conduct discovery, including any discovery involving foreign witnesses, while also advancing this matter to trial in a reasonable timeframe. Defendants' dates balance the need for thorough discovery with the interests of judicial economy. This case involves a single patent and the infringement and validity issues are straightforward and do not require extensive technical discovery. The accused products are limited to a few dietary supplement formulations, and the relevant chemistry is well-understood in the field. Additionally, one of the four named inventors (Philip Redpath) is a party employee who will provide discovery through ordinary party channels. Plaintiffs' proposed nine-month extension is disproportionate to the actual discovery needs of this matter.

1. Rule 26(f) Conference: A conference of the parties pursuant to Fed. R. Civ. P. 26(f) shall be held no later than **[Plaintiffs' Date: September 3, 2026 / Defendants' Date: September 3, 2026]**¹
2. Rule 26(a)(1) Initial Disclosures: No later than **[Plaintiffs' Date: September 21, 2026 / Defendants' Date: September 21, 2026]** the required initial disclosures under Fed. R. Civ. P. 26(a)(1) shall be made.²
3. Rule 26(f) Report: No later than **[Plaintiffs' Date: September 21, 2026 / Defendants' Date: September 21, 2026]**, the parties shall file a Fed. R. Civ. P. 26(f) Report in the form attached to this order.³
4. Mediation: The parties have attached the form "Mediation of Cases Pending Before Judge Gergel".⁴

¹ Plaintiff's counsel shall initiate the scheduling of the Rule 26(f) conference with all counsel known to plaintiff regardless of whether they have filed appearances. At conference, the parties shall confer concerning all matters set forth in Rule 26(f) and whether the schedule set forth in this order is appropriate and, if not, what modifications are necessary. See attached form – RULE 26(f) REPORT. The parties shall also consider whether they wish to consent to trial before a United States Magistrate Judge (form available on website).

² Pursuant to Fed. R. Civ. P. 26(a)(1), the parties may, by stipulation, agree not to make some or all of the Rule 26(a)(1) initial disclosures. If such a stipulation is made, it shall be confirmed in writing between the parties. See Fed. R. Civ. P. 29 and Local Civil Rule 29.01.

³ Parties are hereby notified that Local Civil Rule 26.03 lists additional queries to be answered in the Rule 26(f) Report. See also Local Civil Rule 26.02 (rules for answering court interrogatories).

⁴ The Court will issue a separate Order on mediation.

5. Defendant's Initial Infringement Contentions: No later than **[Plaintiffs' Date: October 2, 2026 / Defendants' Date: September 21, 2026]**, Defendant shall serve its initial infringement contentions.
6. Plaintiff's Initial Non-Infringement Contentions: No later than **[Plaintiffs' Date: October 30, 2026 / Defendants' Date: October 16, 2026]**, Plaintiff shall serve its initial non-infringement contentions.
7. Plaintiff's Initial Invalidity Contentions: No later than **[Plaintiffs' Date: October 30, 2026 / Defendants' Date: October 23, 2026]**, Plaintiff shall serve its initial invalidity contentions.
8. Defendant's Response to Invalidity Contentions: No later than **[Plaintiffs' Date: November 20, 2026 / Defendants' Date: November 20, 2026]**, Defendant shall serve its response to Plaintiff's invalidity contentions.
9. Exchange Proposed Claim Terms for Construction: The parties shall exchange a list of claim terms proposed to be construed no later than **[Plaintiffs' Date: June 4, 2027 / Defendants' Date: December 4, 2026]**.
10. Exchange Preliminary Claim Construction: The parties shall exchange preliminary constructions for the claims terms identified no later than **[Plaintiffs' Date: June 11, 2027 / Defendants' Date: December 11, 2026]**.
11. Joint Claim Construction and Pre-Hearing Statement: No later than **[Plaintiffs' Date: June 18, 2027 / Defendants' Date: December 18, 2026]**, the parties shall jointly submit their preliminary joint claim construction statement identifying the list of proposed terms to be construed and proposed constructions.
12. Claim Construction Discovery Complete: The parties are to complete claim construction discovery by **[Plaintiffs' Date: July 8, 2027 / Defendants' Date: January 8, 2027]**.
13. Deadline for Parties to Exchange Opening Claim Construction Briefs: The parties shall exchange their opening claim construction briefs to the Court by **[Plaintiffs' Date: July 15, 2027 / Defendants' Date: January 15, 2027]**.
14. Deadline for Parties to Exchange Rebuttal Claim Construction Briefs: The parties shall exchange their rebuttal claim construction briefs by **[Plaintiffs' Date: July 29, 2027 / Defendants' Date: January 29, 2027]**.
15. Joint Claim Construction Brief: No later than **[Plaintiffs' Date: August 5, 2027 / Defendants' Date: February 5, 2027]**, the parties shall submit their joint claim construction brief identifying the claim terms proposed to be construed and the proposed construction.
16. Markman Hearing: The claim construction hearing shall be held in Charleston, South Carolina in front of Judge Gergel on or about **[Plaintiffs' Date: August 12,**

2027 (at the convenience of the Court) / Defendants' Date: February 12, 2027].

17. Claim Construction Order (assumed): **[Plaintiffs' Date: September 12, 2027 / Defendants' Date: March 12, 2027].**
18. Substantial Completion of Document Production: The parties shall substantially complete document production no later than **[Plaintiffs' Date: July 23, 2027 / Defendants' Date: January 15, 2027].**
19. Final Infringement and Invalidity Contentions: No later than **[Plaintiffs' Date: September 30, 2027 / Defendants' Date: March 26, 2027]**, Defendant shall serve their Final Infringement Contentions and Plaintiff shall serve their Final Invalidity Contentions.
20. Final Non-Infringement and Response to Invalidity Contentions: No later than **[Plaintiffs' Date: October 15, 2027 / Defendants' Date: April 9, 2027]**, Plaintiff shall serve their Final Non-Infringement Contentions and Defendant shall serve their Response to Invalidity Contentions.
21. Records Custodian Witnesses: Counsel shall file and serve affidavits of records custodian witnesses proposed to be presented by affidavit at trial no later than **[Plaintiffs' Date: September 10, 2027 / Defendants' Date: March 19, 2027]**. Objections to such affidavits must be made within fourteen (14) days after the service of the disclosure. (See Fed. R. Evid. 803(6), 902(11), or 902(12) and Local Civil Rule 16.02(D)(3)).
22. Amendment of Pleadings: Motions to join other parties and amend the pleadings shall be filed no later than **[Plaintiffs' Date: May 12, 2027 / Defendants' Date: November 12, 2026]**
23. Fact Discovery Cutoff: Discovery shall be completed no later than **[Plaintiffs' Date: September 10, 2027 / Defendants' Date: March 19, 2027]**. All discovery requests shall be served in time for the responses thereto to be served by this deadline. Depositions must be completed by discovery deadline. No motions relating to discovery shall be filed until counsel have consulted and attempted to resolve the matter as required by Local Civil Rule 7.02.
24. Disclosure of Expert Witnesses by the Party with the Burden of Proof: The parties shall file and serve a document identifying by full name, address, and telephone number each person whom they expect to call as an expert at trial on issues for which that party bears the burden of proof, and serve all disclosures required under Fed. R. Civ. P. 26(a)(2)(B) to be disclosed by the party with the burden of proof, by **[Plaintiffs' Date: November 5, 2027 / Defendants' Date: April 23, 2027]**.
25. Advice-of-Counsel Disclosures: Each party relying on advice of counsel as part of a patent-related claim or defense shall make a disclosure no later than **[Plaintiffs' Date: November 19, 2027 / Defendants' Date: May 1, 2027]**.

26. Disclosure of Rebuttal Expert Witnesses: The parties shall file and serve a document identifying by full name, address, and telephone number each person whom they expect to call as an expert at trial on issues for which that party bears the rebuttal burden, and serve all disclosures required under Fed. R. Civ. P. 26(a)(2)(B) to be disclosed by the party with the rebuttal burden, by **[Plaintiffs' Date: December 3, 2027 / Defendants' Date: May 7, 2027]**.
27. Expert Discovery Close: Expert discovery shall be completed no later than **[Plaintiffs' Date: December 21, 2027 / Defendants' Date: May 21, 2027]**.
28. Motions in Limine: Motions in limine must be filed **[Plaintiffs' Date: March 22, 2028 (no sooner than fifteen (15) days and no later than ten (10) days prior to the date certain set for jury selection and trial) / Defendants' Date: June 21, 2027 (fixed date)]**.
29. Dispositive Motions: All dispositive motions shall be filed on or before **[Plaintiffs' Date: January 14, 2028 / Defendants' Date: May 28, 2027]**. No dispositive motions may be filed after this date without leave of the Court, and nothing in this Order precludes a party from filing a dispositive motion at any time before this date.
30. Daubert Motions: All Daubert motions shall be filed on or before **[Plaintiffs' Date: January 14, 2028 / Defendants' Date: May 28, 2027]**. No such motions may be filed after this date without leave of the Court.
31. Pretrial Disclosures: No later than **[Plaintiffs' Date: March 13, 2028 (twenty-one (21) business days prior to jury selection) / Defendants' Date: June 7, 2027 (fixed date)]**, the parties shall file and exchange Fed. R. Civ. P. 26(a)(3) pretrial disclosures. Within fourteen (14) days thereafter, a party shall file and exchange Fed. R. Civ. P. 26(a)(3) objections, any objections to use of a deposition designated by another party and any deposition counter-designations under Fed. R. Civ. P. 32(a)(4).
32. Pretrial Briefs: Parties shall furnish the Court and serve pretrial briefs **[Plaintiffs' Date: March 27, 2028 (five (5) business days prior to the date set for jury selection) / Defendants' Date: June 29, 2027 (fixed date)]** (Local Civil Rule 26.05). Attorneys shall meet at least five (5) business days prior to the date set for submission of pretrial briefs for the purpose of exchanging and marking all exhibits. See Local Civil Rule 26.07.
33. Trial: This case is subject to being called for jury selection and/or trial on or after **[Plaintiffs' Date: April 3, 2028 / Defendants' Date: July 6, 2027]**.

The parties' attention is directed to the Special Instructions for Cases Before Judge Richard Mark Gergel, attached hereto and also available on the District Court's website at www.scd.uscourts.gov.

September __, 2026
CHARLESTON, South Carolina

s/
United States District Judge

**THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH CAROLINA
CHARLESTON DIVISION**

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

Plaintiffs,

v.

NIAGEN BIOSCIENCE, INC., CHROMADEx,
INC., and THE QUEEN'S UNIVERSITY OF
BELFAST,

Defendants.

C.A. No. 2:26-cv-01758-RMG
DEMAND FOR JURY TRIAL

MEDIATION OF CASES PENDING BEFORE JUDGE GERGEL

Instructions: Complete this form and file it with the joint Rule 26(f) Report.

Case Name: Thorne Research, Inc. and Thorne HealthTech, Inc. v. Niagen Bioscience, Inc., ChromaDex, Inc., and The Queen's University of Belfast

C/A No.: 2:26-cv-01758-RMG

1. Would early mediation be useful in this case? If the answer is in the affirmative, when would you propose to conduct mediation in this matter?

Plaintiffs' Position:

Plaintiffs Thorne Research, Inc. and Thorne HealthTech, Inc. ("Thorne") do not believe early mediation is likely to be useful or successful in this case. All parties are represented by sophisticated patent litigation counsel, and the parties have already engaged directly, at arm's length, in extensive settlement discussions outside of mediation over a period of months, including an exchange of correspondence between counsel addressing potential resolution of the parties' dispute. Those direct discussions have not resulted in a resolution, and the parties' positions remain firmly and materially apart. Given this history, Thorne does not believe that introducing a mediator at this early stage would meaningfully advance settlement beyond what direct negotiations between counsel have already achieved.

Defendants' Position:

Defendants Niagen Bioscience, Inc., Chromadex, Inc., and The Queens University of Belfast ("Defendants") have communicated several offers in an effort to resolve the matter and agree that the parties currently remain far apart, but is hopeful that discussions will continue. While Defendants are interested in conducting a mediation at some point in the case if the parties are unable to reach a resolution, Defendants agree that an early mediation would likely not be productive.

2. If early mediation is not thought to be useful, when is the earliest stage in which you believe it might be useful?

Plaintiffs' Position:

Because of the reasons listed in response to Question 1, Thorne believes mediation is not likely to be successful in this litigation until at least after the parties have closed fact discovery and the Court issues a claim construction order.

Defendants' Position:

Defendants agree that the typical litigation benchmarks in a patent infringement case where mediation might be most productive is following fact discovery and claim construction decision. However, Defendants remain interested in furthering the potential resolution of the case as early as practical and, if things progress among the parties to the point where mediation may be productive earlier, Defendants will approach Plaintiffs about informing the Court that the parties are ready and prepared for mediation.

3. Please provide the Court with any additional information that would assist in setting a timeline for required mediation.

The parties have already conducted direct, arm's-length settlement discussions without the assistance of a mediator, and those discussions remain ongoing.