

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

**CHROMADEx, INC., TRUSTEES OF DARTMOUTH
COLLEGE,**
Plaintiffs-Appellants

v.

ELYSIUM HEALTH, INC.,
Defendant-Appellee

2025-1227

Appeal from the United States District Court for the
District of Delaware in No. 1:18-cv-01434-CFC-JLH, Chief
Judge Colm F. Connolly.

Decided: October 30, 2026

MARK MOSIER, Covington & Burling LLP, Washington,
DC, argued for plaintiffs-appellants. Also represented by
ROBERT ALLEN LONG, JR..

JEREMY YOUNKIN, Foley Hoag LLP, Boston, MA, ar-
gued for defendant-appellee. Also represented by DONALD
ROSS WARE.

Before PROST, CHEN, and STOLL, *Circuit Judges*.

CHEN, *Circuit Judge*.

In 2023, this court affirmed the U.S. District Court for the District of Delaware's grant of summary judgment that the asserted claims of a patent owned by ChromaDex, Inc. and the Trustees of Dartmouth College (collectively, ChromaDex) are directed to a product of nature and thus not patent eligible under 35 U.S.C. § 101. *See ChromaDex, Inc. v. Elysium Health, Inc.*, 59 F.4th 1280, 1285–86 (Fed. Cir. 2023) (*ChromaDex I*). After our decision, defendant Elysium Health, Inc. (Elysium) moved for an award of attorneys' fees pursuant to 35 U.S.C. § 285, arguing that the case was exceptional, because in its view, ChromaDex never attempted to show how its claims could survive the Supreme Court's decision in *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576 (2013). *See ChromaDex, Inc. v. Elysium Health, Inc.*, No. CV 18-1434-CFC, 2024 WL 1255520, at *1 (D. Del. Mar. 25, 2024) (*Decision*). The district court agreed with Elysium that *Myriad* specifically decided the particular patent-eligibility issue in this case, *id.* at *3, and awarded Elysium \$9.1 million in attorneys' fees, *see ChromaDex, Inc. v. Elysium Health, Inc.*, No. CV 18-1434-CFC, 2024 WL 5105618 (D. Del. Aug. 20, 2024) (*Fee Order*).

We disagree because the patent-eligibility question here required evaluating several considerations beyond *Myriad*. The district court thus erred in its understanding of the substantive strength of ChromaDex's § 101 position, and we therefore conclude that the district court abused its discretion in granting the § 285 fee award. We *reverse*.

BACKGROUND

I

ChromaDex owns U.S. Patent Nos. 8,197,807 ('807 patent) and 8,383,086 ('086 patent). The claimed inventions in both patents concerns dietary supplements containing

several elements, including isolated nicotinamide riboside (NR), to increase NAD⁺ biosynthesis upon oral administration.¹ Increased NAD⁺ biosynthesis can treat a disease associated with the NR kinase pathway. *See* '807 patent col. 4 ll. 24–31. Claim 1 of the '807 patent is representative for both patents and recites:

1. A composition comprising *isolated nicotinamide riboside* [NR] in combination with one or more of tryptophan, nicotinic acid, or nicotinamide,

wherein said combination is in admixture with a carrier comprising a sugar, starch, cellulose, powdered tragacanth, malt, gelatin, talc, cocoa butter, suppository wax, oil, glycol, polyol, ester, agar, buffering agent, alginic acid, isotonic saline, Ringer's solution, ethyl alcohol, polyester, polycarbonate, or polyanhydride,

wherein said composition is formulated for oral administration and increases NAD⁺ biosynthesis upon oral administration.

Id. col. 53 l. 59 – col. 54 l. 59 (emphasis added).

Relevant here, NR is a form of vitamin B3 naturally present in cow's milk.² No one disputes that NR is found in milk only in trace amounts, and that those trace amounts of NR are not bioavailable (because it is bound to the lactalbumin whey protein) and thus do not themselves increase NAD⁺ biosynthesis. But the tryptophan in milk, however, increases NAD⁺ biosynthesis. The inventor of

¹ A more detailed description of the claimed invention can be found in *ChromaDex I*. *See* 59 F.4th at 1281–85.

² “Milk,” throughout this opinion, refers to natural cow's milk.

the '807 patent purports to have discovered that a composition comprising isolated NR—that is, unbound from other components such as the lactalbumin whey protein—has the benefit of increasing NAD⁺ biosynthesis upon oral administration. *See* '807 patent col. 4 ll. 24–31; *see also* J.A. 62, 3326.

II

In July 2017, Elysium filed a petition requesting *inter partes* review (IPR) of claims 1–3 of the '807 patent before the Patent Trial and Appeal Board (Board). Elysium's petition contended that milk falls within the scope of the claims and therefore anticipates the claims. J.A. 1321. The parties disputed the meaning of the claim term “isolated,” and the Board construed the term to require the NR to be “separated or substantially free from at least some of the other components . . . such that it constitutes at least about 25% (w/w) of the composition,” i.e., 25% purity. J.A. 1319–20. In January 2018, the Board denied instituting the IPR, finding that milk does not anticipate the challenged claims because the NR in milk is not “isolated,” as construed by the Board.

In September 2018, after the Board's denial of institution, ChromaDex sued Elysium for infringement of claims 1–3 of the '807 patent and claim 2 of the '086 patent. The parties again disputed the meaning of the claim term “isolated [NR]”; ChromaDex proposed a construction similar to the Board's 25% purity requirement,³ whereas Elysium argued that such a requirement is unsupported. The district

³ ChromaDex's proposed construction in district court varied from the Board's 25% purity requirement in that it calculates the 25% purity requirement by dividing “the weight of [NR]” by “the total weight of the [NR] and *any other components* associated with the source of the molecule in said composition.” J.A. 1127 (emphasis added). In

court agreed with Elysium, thus disagreeing with the Board's construction, and construed the term as "[NR] that is separated or substantially free from at least some of the other components associated with the source of the [NR]." J.A. 1838. Although ChromaDex indicated that it would not resist the district court's articulated construction, it indicated that it would continue to argue that "separated or substantially free" included a 25% purity requirement. *See* J.A. 4190 (29:8–22); J.A. 4191 (30:3–20).

Elysium then moved for summary judgment, arguing that the asserted claims are invalid under 35 U.S.C. § 101 because they claim patent-ineligible products of nature. Elysium asserted that all the elements of the claimed compositions exist in naturally-occurring milk, except the claim requirement that NR is "isolated," and that the claims are thus not materially different from milk. ChromaDex responded that the claimed compositions possess characteristics markedly different from milk and have the potential for significant utility beyond milk, because, unlike the claimed compositions, the NR in milk is neither bioavailable nor stable, and cannot, on its own, increase NAD⁺ biosynthesis.

The district court determined that the asserted claims are directed to a natural phenomenon and granted Elysium's summary judgment motion. Elysium appealed to this court, and we affirmed the district court's judgment that claims 1–3 of the '807 patent are ineligible under § 101.⁴ *ChromaDex I*, 59 F.4th at 1285.

other words, the denominator used to calculate the purity differs from that under the Board's construction.

⁴ Because the invalidity challenge to claim 2 of the '086 patent was voluntarily dismissed, we did not address it. *See ChromaDex I*, 59 F.4th at 1281 n.1.

In *ChromaDex I*, we explained that, when comparing a claim to a product of nature, such as milk, “*Chakrabarty* defines the inquiry: to be patentable, the claimed composition must ‘ha[ve] markedly different characteristics and have the potential for significant utility.’” *Id.* at 1284 (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 310 (1980)). As to the structural distinction in the claimed compositions that the NR is isolated, we relied on *Myriad* to determine that “the act of isolating the NR compared to how NR naturally exists in milk is not sufficient, on its own, to confer patent eligibility.” *Id.* (citing *Myriad*, 569 U.S. at 590–93). That is, NR’s structural “separation from some other components” did not amount to a markedly different characteristic.

ChromaDex’s main argument, however, rested on a different theory: the claimed compositions, due to the NR being “isolated,” allowed for significantly increased NAD⁺ biosynthesis upon administration, resulting in a characteristic markedly different from those found in nature because milk has only trace amounts of NR that are not bioavailable (due to being bound to the lactalbumin whey protein). *Id.* at 1284–85. In ChromaDex’s view, the claimed compositions’ significantly increased utility was analogous to the significant utility recited in the claims at issue in *Natural Alternatives International, Inc. v. Creative Compounds, LLC*, 918 F.3d 1338, 1348 (Fed. Cir. 2019) (concluding that claimed dietary supplements containing the natural product beta-alanine had markedly different characteristics over the natural product because the claims recited a particular amount of beta-alanine sufficient to “effectively increase[] athletic performance when administered.”). *Id.*

We concluded that the claimed increased NAD⁺ biosynthesis could not be considered a markedly different characteristic, after considering several factors. First, we observed that milk *also* increases NAD⁺ biosynthesis “albeit because it contains tryptophan rather than because of the trace amounts of NR.” *Id.* at 1285. Second, we noted

that the claims “do not require any specific quantity of isolated NR,” which could then result in a certain amount of increased NAD⁺ biosynthesis. *Id.* Third, we concluded that the claims do not specifically attribute the claimed increased NAD⁺ biosynthesis to the isolated NR. *Id.* at 1284–85. Finally, after considering the district court’s claim construction, we determined that the “isolated NR” as construed need not necessarily be bioavailable for all embodiments because the NR was required to be separated only from “some of the other components,” which could leave the NR still bound to the lactalbumin whey protein. *Id.* at 1285. For those reasons, we found ChromaDex’s reliance on our decision in *Natural Alternatives* unpersuasive.

III

After *ChromaDex I*, Elysium moved for an award of attorneys’ fees pursuant to § 285, arguing that “ChromaDex has pursued this litigation against Elysium as if the *Myriad* case did not exist.” J.A. 2885.

ChromaDex responded that it had addressed *Myriad* during expert discovery and in response to Elysium’s summary judgment motion. J.A. 3262. Furthermore, ChromaDex pointed to its arguments relying on *Chakrabarty* and *Natural Alternatives*—how in its view, the claimed compositions possess characteristics markedly different from milk, above and beyond the mere structural distinction of NR that is “isolated.” *Id.*; see J.A. 2378–83.

The district court found the case exceptional and granted Elysium’s attorneys’ fee motion. See *Decision*, 2024 WL 1255520, at *3. In the district court’s view, “ChromaDex’s litigation position generally and with respect to *Myriad* specifically was so lacking in substance that it ‘st[oo]d out’ from the dozens of [other] § 101 challenges” the court had encountered. *Id.* As a basis for the § 285 fee award, the court explained that *Myriad* “addressed the specific issue presented” and “ChromaDex made *no attempt* to

distinguish *Myriad* in its summary judgment briefing.” *Id.* The court rejected ChromaDex’s argument that “it believed that the asserted claims were analogous to the claims at issue in *Natural Alternatives* and distinguishable from those in *Myriad*” by pointing to our § 101 analysis of the claims under *Chakrabarty*’s markedly different characteristics framework in *ChromaDex I*. *Id.* (cleaned up).

The district court awarded \$9,151,133 to Elysium, over ChromaDex’s objection to the inclusion of approximately \$3.9 million incurred before the *Markman* hearing. *See Fee Order*, 2024 WL 5105618, at *1. The court noted that ChromaDex stipulated to the court’s construction and “the outcome of this case would not have changed had [the court] adopted the purity requirement in the construction of ‘isolated NR’ originally proposed by ChromaDex.” *Id.*

ChromaDex timely appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

STANDARD OF REVIEW

“The court in exceptional cases may award reasonable attorney fees to the prevailing party.” 35 U.S.C. § 285. “District courts may determine whether a case is ‘exceptional’ in the case-by-case exercise of their discretion, considering the totality of the circumstances.” *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 572 U.S. 545, 554 (2014). An exceptional case is “one that stands out from others with respect to the substantive strength of a party’s litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated.” *Id.*

While we review “all aspects of a district court’s § 285 determination for abuse of discretion,” *Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.*, 572 U.S. 559, 561 (2014), the “abuse-of-discretion standard does not preclude an appellate court’s correction of a district court’s legal or factual error,” *id.* at 563 n.2. “A district court would necessarily

abuse its discretion if it based its ruling on an erroneous view of the law or on a clearly erroneous assessment of the evidence.” *Id.* (citation omitted).

DISCUSSION

“A party’s position on issues of law ultimately need not be correct for them to not ‘stand[] out,’ or be found reasonable.” *SFA Sys., LLC v. Newegg Inc.*, 793 F.3d 1344, 1348 (Fed. Cir. 2015) (quoting *Octane Fitness*, 572 U.S. at 554). In other words, an exceptionality finding hinges not on “the *correctness* or eventual success of [a party’s] position,” but on its “substantive strength.” *Id.* The substantive strength of the party’s position must be “exceptionally meritless” to warrant an award of attorneys’ fees pursuant to 35 U.S.C. § 285. See *Realtime Adaptive Streaming L.L.C. v. Sling TV, L.L.C.*, 113 F.4th 1348, 1356 (Fed. Cir. 2024).

Here, the district court grounded its exceptionality finding on its view that *Myriad* completely foreclosed ChromaDex’s § 101 position. See *Decision*, 2024 WL 1255520, at *3 (“And even though the law of patent eligibility has perhaps become unpredictable and unclear on the fringes, the law is very clear when, as here, the Supreme Court has addressed the specific issue presented.”) (cleaned up). The court reasoned that “[t]he holding of *Myriad* is crystal clear—the mere isolating of a naturally occurring molecule without changing the chemistry of that molecule is not patent eligible under § 101,” and “that holding—which ChromaDex essentially ignored—was dispositive.” *Id.* at *2. The court also found it significant that “ChromaDex’s briefing in opposition to Elysium’s summary judgment motion . . . mentioned *Myriad* just once.” *Id.* That is, in the court’s view, “ChromaDex made *no attempt* to distinguish *Myriad*” to defend the validity of the patents-in-suit. *Id.* at *3.

In our view, it was legal error to treat *Myriad* as the beginning and the end of the patent-eligibility analysis for ChromaDex’s claims. To be sure, *Myriad* played a key role in our analysis in *ChromaDex I*. As we explained, “the act

of isolating the NR compared to how NR naturally exists in milk is not sufficient, *on its own*, to confer patent eligibility.” 59 F.4th at 1284 (emphasis added) (citing *Myriad*, 569 U.S. at 590–93). Had ChromaDex’s § 101 arguments rested solely on the distinction that its NR is structurally “isolated” from other components in its claimed compositions, such an argument “on its own” would have closely resembled the rejected § 101 argument for the isolated DNA at issue in *Myriad*.

But ChromaDex’s arguments went further, thus requiring additional, meaningful analysis. Namely, ChromaDex’s patent-eligibility position centered on the alleged similarity between its claimed composition and the composition in *Natural Alternatives*, and how the patent eligibility analysis there could apply equally here. *See* J.A. 2383. In particular, ChromaDex argued that its claimed compositions possessed markedly different characteristics and had the potential for significant utility because its isolated NR can increase NAD⁺ biosynthesis in a way that naturally-occurring NR cannot. *See ChromaDex I*, 59 F.4th at 1284–85; *see also* J.A. 3314–27 (expert report from Dr. Sobol, who opined that the claimed compositions “have significant utility to be used in ways that NR appearing in nature cannot.”). Evaluating the merits of ChromaDex’s position required working through several distinct considerations, beyond just *Myriad*, including whether the claimed compositions have markedly different characteristics and the potential for significant utility, the amount of NR required by the claims, and NR’s role in increasing NAD⁺ biosynthesis.

Our decision in *ChromaDex I* illustrates this point. 59 F.4th at 1284–85. There, we explained that the claimed dietary supplements in *Natural Alternatives* were patent eligible because they possess significant utility and markedly different characteristics over naturally occurring beta-alanine. *ChromaDex I*, 59 F.4th at 1284. Specifically, the

“natural products ha[d] been isolated and then incorporated into a dosage form” in an amount to “effectively increase[] athletic performance. *Id.* (quoting *Natural Alternatives*, 918 F.3d at 1348–49). Likewise, ChromaDex contended that its claimed compositions provided the same sort of “significant utility” because “the isolation of NR allows for significantly more NAD⁺ biosynthesis than is found in milk and that the large quantity of NR itself can alone increase NAD⁺ biosynthesis.” *Id.*

We ultimately rejected that argument and its reliance on *Natural Alternatives* after considering a number of factors. Our analysis reached the following conclusions: (1) the claims “do not require any specific quantity of isolated NR” and do not “attribute the claimed increase in NAD⁺ biosynthesis to the isolated NR”; (2) under the district court’s claim construction for “isolated [NR],” the isolated NR need not be separated from the lactalbumin whey protein and thus need not be bioavailable; and (3) milk, through tryptophan rather than the trace amounts of NR, increases NAD⁺ biosynthesis. *ChromaDex I*, 59 F.4th at 1284–85. These were factors we had to consider beyond the facts and analysis provided in *Myriad* in addressing ChromaDex’s “markedly different characteristics” argument. Thus, we do not view this case as open and shut in light of *Myriad*.

For the foregoing reasons, we conclude that while ChromaDex’s arguments ultimately did not prevail, it cannot be said that the substantive strength of its § 101 position was so exceptionality meritless or unreasonable as to make this case stand out from others. Because the district court legally erred in finding *Myriad* dispositive, it abused

its discretion in granting the § 285 fee award.⁵ *See Highmark*, 572 U.S. at 561.

CONCLUSION

We have considered Elysium’s remaining arguments and find them unpersuasive. For the foregoing reasons, we reverse the district court’s § 285 fee award.

REVERSED

COSTS

Costs to Appellant.

⁵ We also reject Elysium’s invitation to remand the case to the district court. We conclude that neither the district court’s analysis nor the record developed and argument presented by Elysium, *see, e.g.*, J.A. 2883–89, can support the exceptionality finding. Under these circumstances, “[a] remand is not warranted in this case for additional costly proceedings to give [Elysium] a chance to develop and present new evidence or arguments.” *mCom IP, LLC v. City Nat’l Bank of Fla.*, 175 F.4th 1370, 1381 (Fed. Cir. 2026) (citing *Fox v. Vice*, 563 U.S. 826, 838 (2011) (“The determination of fees ‘should not result in a second major litigation.’”)).