

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

AQUESTIVE THERAPEUTICS, INC.,  
Petitioner,

v.

NEURELIS, INC.,  
Patent Owner.

---

IPR2019-00451  
Patent 9,763,876 B2

---

Before ZHENYU YANG, JON B. TORNQUIST, and JAMIE T. WISZ,  
*Administrative Patent Judges.*

WISZ, *Administrative Patent Judge.*

JUDGMENT

Final Written Decision

Determining All Claims Unpatentable

Denying Petitioner's Motion to Exclude

Denying Patent Owner's Motion to Exclude

*35 U.S.C. § 318(a); 37 C.F.R. § 42.64*

## I. INTRODUCTION

### A. Background

Aquestive Therapeutics, Inc. (“Petitioner”) filed a Petition (Paper 3, “Pet.”) requesting an *inter partes* review of claims 1–36 (“the challenged claims”) of U.S. Patent No. 9,763,876 B2 (Ex. 1001, “the ’876 patent”). Petitioner supported its Petition with the Declaration of Nicholas A. Peppas, Sc.D. (Ex. 1041). Neurelis, Inc.<sup>1</sup> (“Patent Owner”) filed a Preliminary Response (Paper 7, “Prelim. Resp.”). Upon consideration of the Petition, the Preliminary Response, and the preliminary evidence of record, we determined that Petitioner had demonstrated a reasonable likelihood that it would prevail with respect to at least one of the challenged claims of the ’876 patent (Paper 8, “Institution Decision” or “Inst. Dec.”). Thus, we instituted review with respect to all of the challenged claims.

Following institution of trial, Patent Owner filed a Request for Rehearing (Paper 10, “Request for Rehearing” or “Req. Reh’g”), which was denied (Paper 14, “Decision on Request for Rehearing” or “Dec. on Req. Reh’g”), and a request for Precedential Opinion Panel (POP) review (Ex. 3001, “POP Request”), which was also denied (Paper 17).

Patent Owner filed a Patent Owner Response (Paper 16, “PO Response” or “PO Resp.”) and supported its Response with the Declaration of Sveinbjörn Gizurarson, Ph.D. (Ex. 2012). Petitioner filed a Reply (Paper

---

<sup>1</sup> Patent Owner informs us that, subsequent to the filing of the Petition, Hale Biopharma Ventures, LLC, the originally named Patent Owner in this case, assigned its rights in the ’876 patent to Neurelis, Inc. Paper 6, 2 (citing Reel 048271; Frame 0304).

IPR2019-00451  
Patent 9,763,876 B2

21, “Reply”) with a Declaration of Daniel P. Wermeling, Pharm.D. (Ex. 1150). Patent Owner filed a Sur-Reply (Paper 28, “PO Sur-Reply”).

Petitioner and Patent Owner each separately filed Motions to Exclude regarding certain evidence of record (Paper 34, “Pet. MTE”; Paper 35, “PO MTE”). We address each of these Motions in this Decision.

An oral hearing was held on May 14, 2020, and a transcript of the hearing is included in the record (Paper 43, “Tr.”).

We have jurisdiction under 35 U.S.C. § 6. After considering the parties’ arguments and supporting evidence, we conclude that Petitioner has proven by a preponderance of the evidence that claims 1–36 of the ’876 patent are unpatentable. 35 U.S.C. § 316(e).

#### *B. Real Parties-in-Interest*

Petitioner identifies Aquestive Therapeutics, Inc. (formerly Monosol Rx, LLC) as the real party-in-interest. Pet. 1. Patent Owner identifies Neurelis, Inc. as the real party-in-interest. Paper 6, 2.

#### *C. Related Proceedings*

The ’876 patent was challenged by Petitioner in IPR2019-00449 and IPR2019-00450. Institution of *inter partes* review in both cases was denied. IPR2019-00449, Paper 7; IPR2019-00450, Paper 8.

Patent Owner also indicates that it filed a tort suit against Petitioner in which it cited Petitioner’s IPR petitions “as evidence of a pattern of tortious behavior” against Patent Owner. Paper 29, 2 (citing *Neurelis, Inc. v. Aquestive Therapeutics, Inc.*, No. 37-00064665-CU-BT-CTL (Super. Ct. Cal., San Diego)).

*D. The '876 Patent*

The '876 patent is directed to nasally administered pharmaceutical solutions containing one or more benzodiazepine drugs. Ex. 1001, 9:14–17. The '876 patent explains that solubility challenges associated with benzodiazepine drugs previously hindered the development of formulations intended for oral, rectal, or parenteral administration. *Id.* at 1:53–57, 19:12–15. According to the '876 patent, it was discovered, however, that vitamin E (which includes tocopherols and tocotrienols) is an effective carrier for benzodiazepine drugs, as these compounds are soluble, or at least partially soluble, in vitamin E. *Id.* at 33:8–13, 33:42–45. The '876 patent also reports that vitamin E “can have the added benefit of either avoiding irritation of sensitive mucosal membranes and/or soothing irritated mucosal membranes.” *Id.* at 33:47–49.

The '876 patent discloses that one or more lower alcohols, such as ethanol and benzyl alcohol, may be used in the formulation. Ex. 1001, 2:57–64, 33:55–67 (noting that to “avoid the drawbacks of emulsions,” the disclosed solutions contain vitamin E and “one or more lower alkyl alcohols”). In addition, an alkyl glycoside may be added to the formulation to act as a penetration enhancer. *Id.* at 34:2–9.

*E. Illustrative Claim*

Petitioner challenges claims 1–36 of the '876 patent. Claim 1, which is the only independent claim of the '876 patent, is illustrative of the challenged claims, and is reproduced below:

1. A method of treating a patient with a disorder which is treatable with a benzodiazepine drug, comprising:

administering to one or more nasal mucosal membranes of a patient a pharmaceutical solution for nasal administration consisting of

a benzodiazepine drug,

one or more natural or synthetic tocopherols or tocotrienols, or any combinations thereof, in an amount from about 30% to about 95% (w/w);

ethanol and benzyl alcohol in a combined amount from about 10% to about 70% (w/w); and

an alkyl glycoside.

Ex. 1001, 63:26–34 (formatting added). Challenged claims 2–36 depend from claim 1, either directly or indirectly.

*F. Instituted Grounds of Unpatentability*

We instituted trial to determine whether claims 1–36 of the '876 patent are unpatentable based on the following grounds:

Claims Challenged	35 U.S.C. §	References/Basis
1–16, 24–36	103(a)	Gwozdz, <sup>2</sup> Meezan '962 <sup>3</sup>
17–23	103(a)	Gwozdz, Meezan '962, Cartt '784 <sup>4</sup>

Inst. Dec. 5.

<sup>2</sup> PCT Pub. No. WO 2009/120933 A2, published October 1, 2009 (Ex. 1014, “Gwozdz”).

<sup>3</sup> U.S. Pub. No. 2006/0046962 A1, published March 2, 2006 (Ex. 1011, “Meezan '962”).

<sup>4</sup> U.S. Pub. No. 2008/0279784 A1, published November 13, 2008 (Ex. 1015, “Cartt '784”).

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.