

**UNITED STATES PATENT AND TRADEMARK OFFICE**

---

**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

---

BIOFRONTERA INCORPORATED, BIOFRONTERA BIOSCIENCE GMBH,  
BIOFRONTERA PHARMA GMBH, and BIOFRONTERA AG  
Petitioners

v.

DUSA PHARMACEUTICALS, INC.  
Patent Owner

---

*Inter Partes* Review Case No. 2018-\_\_\_\_\_

---

**PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 8,216,289  
UNDER 35 U.S.C. §§ 311–319 AND 37 C.F.R. § 42.100 *et seq.***

---

**TABLE OF CONTENTS**

I.	MANDATORY NOTICES .....	1
A.	Real Party-In-Interest (37 C.F.R. § 42.8(b)(1)) .....	1
B.	Related Matters (37 C.F.R. § 42.8(b)(2)).....	2
C.	Lead and Backup Counsel (37 C.F.R. § 42.8(b)(3)) .....	2
D.	Service Information (37 C.F.R. § 42.8(b)(4)) .....	3
E.	Payment of Fees (37 C.F.R. §§ 42.15(a) and 42.103(a)) .....	3
F.	Grounds for Standing (37 C.F.R. § 42.104(a)) .....	3
II.	OVERVIEW OF CHALLENGE AND RELIEF REQUESTED .....	3
A.	Publications Relied Upon.....	4
B.	Grounds For Challenge (37 C.F.R. §§42.104(b)(1) & (b)(2)) .....	4
III.	THE CONTESTED PATENT.....	5
A.	Effective Filing Date of the '289 Patent .....	5
B.	Overview of the '289 Patent.....	6
C.	Prosecution History .....	9
D.	Claim Construction .....	11
1.	Level of Ordinary Skill in the Art.....	11
2.	Petitioners' Proposed Constructions .....	11
3.	Claims 1–6 and 16–19: Illuminator .....	13
IV.	SUMMARY OF PRIOR ART AND REFERENCES RELIED ON.....	15
A.	Brief Summary of Rowland (Ex. 1009) .....	15
B.	Brief Summary of Lundahl (Ex. 1010) .....	17
C.	Brief Summary of Levin (Ex. 1011) .....	18
D.	Brief Summary of Bower (Ex. 1012).....	20
V.	A REASONABLE LIKELIHOOD EXISTS THAT THE CHALLENGED CLAIMS ARE UNPATENTABLE .....	22
A.	Ground 1: Claims 1, 2, 10, 12, and 16–19 of the '289 Patent are anticipated by Rowland.....	22
B.	Ground 2: Claims 1-2 and 4–19 of the '289 Patent are obvious over Rowland in view of the knowledge of a POSITA. ....	27

**TABLE OF AUTHORITIES**

(continued)

C.	Ground 3: Claims 4–15 of the '289 Patent are obvious over Rowland in view of Lundahl, further in view of the knowledge of a POSITA.....	32
D.	Ground 4: Claims 1-3, 12, and 16–19 of the '289 Patent are anticipated by Levin.....	38
E.	Ground 5: Claims 1–19 of the '289 Patent are obvious over Levin in view of the knowledge of a POSITA.....	44
F.	Ground 6: Claims 4–15 of the '289 Patent are obvious over Levin in view of Lundahl, further in view of the knowledge of a POSITA.....	49
G.	Ground 7: Claims 1-2 and 4-19 of the '289 Patent are obvious over Bower in view of the knowledge of a POSITA.....	54
H.	Ground 8: Claims 4–15 of the '289 Patent are obvious over Bower in view of Lundahl, further in view of the knowledge of a POSITA.....	61
VI.	CONCLUSION.....	67

**TABLE OF AUTHORITIES**

**CASES**

*Chicago Bd. Options Exch., Inc. v. Int’l Sec. Exch., LLC*, 677 F.3d 1361 (Fed. Cir. 2012).....12, 14

*DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005 (Fed. Cir. 2006).....12

*Digital Check Corp. v. E-Imagedata Corp.*, IPR2017-00178, Paper 6 (PTAB April 25, 2017) .....10

*Dusa Pharmaceuticals, Inc. v. Biofrontera Inc. et al* (Civil Action No. 1:18-cv-10568).....2

*First Quality Baby Products, LLC v. Kimberly-Clark Worldwide, Inc.*, IPR2014-01021, Final Written Decision (PTAB December 10, 2015) .....28

*Fox Factory, Inc. v. SRAM, LLC*, IPR2017-00427, Paper 10 (PTAB April 21, 2017).....10

*KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007) .....*passim*

*Openwave Sys., Inc. v. Apple Inc.*, 808 F.3d 509 (Fed. Cir. 2015).....12, 15

*Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc) .....12

*In re Rambus, Inc.*, 694 F.3d 42 (Fed. Cir. 2012).....11

*Unified Patents, Inc. v. Berman*, IPR2016-01571, Paper 10 (Dec. 14, 2016) .....11

*Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355 (Fed. Cir. 2011) .....13

**STATUTES**

35 U.S.C. § 102.....4, 5

35 U.S.C. § 102(b) .....4, 15

35 U.S.C. § 103.....4, 5

35 U.S.C. § 112.....6, 13

35 U.S.C. §§ 311-319 .....1, 67

35 U.S.C. § 315.....1

35 U.S.C. § 325(d) .....10

**TABLE OF AUTHORITIES**  
(continued)

**REGULATIONS**

37 C.F.R. § 42.8 .....	<i>passim</i>
37 C.F.R. § 42.15 .....	3
37 C.F.R. § 42.100 .....	1
37 C.F.R. § 42.103 .....	3
37 C.F.R. § 42.104 .....	3
37 C.F.R. § 42.104(b) .....	3
37 C.F.R. §§42.104(b)(1) & (b)(2) .....	4
MPEP § 2143 .....	<i>passim</i>

# 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.