

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

BLUEBIRD BIO, INC.,  
Petitioner,

v.

SLOAN KETTERING INSTITUTE FOR CANCER RESEARCH,  
Patent Owner.

---

Case No. IPR2023-00070  
Patent No. 7,541,179

---

**PATENT OWNER'S PRELIMINARY RESPONSE**

**TABLE OF CONTENTS**

	<b>Page</b>
INTRODUCTION .....	1
Background .....	3
A.    The ‘179 Patent and Cited Art.....	7
1.    The Invention .....	7
a)    Conception and Reduction to Practice .....	7
b)    The ‘179 Patent.....	8
c)    Relevant Prosecution History of the ‘179 Patent .....	12
2.    The Cited Art .....	14
a)    May Abstract (Ex. 1006) .....	14
b)    The Nature Article (Ex. 1005).....	14
c)    The May Thesis (Ex. 1004).....	15
ARGUMENT .....	16
I.    The Relied Upon Art Does Not Qualify as Invalidating Prior Art.....	17
A.    The May Thesis and <i>Nature</i> Article Do Not Meet the Statutory Requirements to Qualify as Prior Art.....	18
1.    The ‘179 Patent’s Priority Date Is June 29, 2001 .....	18
a)    Petitioner Has Not Met Its Burden to Show the ‘179 Patent Is Not Entitled to Its Claimed Priority Date .....	18
b)    The Provisional Applications Provide Sufficient Support to Entitle the ‘179 Patent to a June 29, 2001 Priority Date.....	20
2.    The May Thesis Does Not Qualify as Prior Art .....	27

3.	The <i>Nature</i> Article Does Not Qualify as Section 102(b) Art ...	28
B.	The May Thesis and <i>Nature</i> Article Cannot Serve as Invalidating Art Under Section 102(a) .....	29
1.	The May Thesis and <i>Nature</i> Article Describe the Inventive Work of the Inventors .....	29
2.	The ‘179 Invention Was Conceived and/or Reduced to Practice Before the Publication of the Cited References.....	32
C.	Petitioner Has Not Shown the May Abstract Qualifies as Prior Art...37	
II.	Discretionary Denial Is Appropriate.....	38
A.	The Cited Art Is the Same or Substantially Same as Art Previously Considered by the Examiner .....	41
B.	Petitioner Has Not Alleged Material Error by the Examiner.....	43
III.	Petitioner Has Failed to Show a Reasonable Likelihood that at Least One Claim Is Invalid .....	44
A.	The <i>Nature</i> Article Does Not Render the Challenged Claims Anticipated .....	44
B.	The <i>Nature</i> Article and May Abstract Do Not Render the Challenged Claims Obvious.....	48
1.	The <i>Nature</i> Article Does Not Render the Claims Obvious .....	50
2.	The May Abstract Does Not Render the Challenged Claims Obvious .....	55
	CONCLUSION.....	61

**TABLE OF AUTHORITIES**

	<b>Page(s)</b>
<b>Cases</b>	
<i>Abbott Labs. v. Sandoz, Inc.</i> , 544 F.3d 1341 (Fed. Cir. 2008) .....	54
<i>AbbVie Deutschland GmbH &amp; Co. v. Janssen Biotech, Inc.</i> , 759 F.3d 1285 (Fed. Cir. 2014) .....	24, 26, 27
<i>Advanced Bionics, LLC v. Med-El Elektromedizinische Geräte GMBH</i> , IPR2019-01469, Paper 6 (P.T.A.B. Feb. 13, 2020).....	40, 43
<i>All Dental Prodx, LLC v. Advantage Dental Prods., Inc.</i> , 309 F.3d 774 (Fed. Cir. 2002) .....	21
<i>Amgen Inc. v. F. Hoffman-La Roche Ltd</i> , 580 F.3d 1340 (Fed. Cir. 2009) .....	49
<i>Apple Inc. v. Uniloc USA, Inc.</i> , IPR2017-00224, Paper 7 (P.T.A.B. May 25, 2017) .....	42
<i>Apple, Inc. v. DSS Tech. Mgmt., Inc.</i> , IPR2015-00369, Paper 14 (P.T.A.B. Aug. 12, 2015).....	38
<i>Biogen Inv. B. Amgen Inc.</i> , 973 F.Supp. 39 (D. Mass. 1997).....	47
<i>Capon v. Eshhar</i> , 418 F.3d 1349 (Fed. Cir. 2005) .....	20
<i>Continental Can Co. USA, Inc. v. Monsanto Co.</i> , 948 F.2d 1267 (Fed. Cir. 1991) .....	47
<i>Cultec Inc. v. StormTech LLC</i> , IPR2017-00777, Paper 7 (P.T.A.B. Aug. 22, 2017).....	42
<i>Cuozzo Speed Techs., LLC v. Lee</i> , 579 U.S. 261 (2016).....	38
<i>In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Pat. Litig.</i> , 676 F.3d 1063 (Fed. Cir. 2012) .....	49

Case IPR2023-00070  
Patent 7,541,179

<i>Dorco Co. v. Gillette Co.</i> , IPR2017-00500, Paper 7 (P.T.A.B. June 21, 2017) .....	42
<i>Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.</i> , 800 F.3d 1375 (Fed. Cir. 2015) .....	16, 17
<i>Ecolochem, Inc. v. S. Cal. Edison Co.</i> , 227 F.3d 1361 (Fed. Cir. 2000) .....	50, 51, 58, 60
<i>Falkner v. Inglis</i> , 448 F.3d 1357 (Fed. Cir. 2006) .....	13
<i>Green Cross Corporation v. Shire Human Genetic Therapies Inc.</i> , IPR2016-00258, Paper 89 (P.T.A.B. Mar. 22, 2017) .....	33
<i>Harmonic Inc. v. Avid Tech., Inc.</i> , 815 F.3d 1356 (Fed. Cir. 2016) .....	16
<i>Hybritech Inc. v. Monoclonal Antibodies, Inc.</i> , 802 F.2d 1367 (Fed. Cir. 1986) .....	20
<i>InTouch Techs., Inc. v. VGO Commc'ns, Inc.</i> , 751 F.3d 1327 (Fed. Cir. 2014) .....	50
<i>Intromedic Co., Ltd. v. Given Imaging, Ltd.</i> , IPR2015-00579, Paper 9 (P.T.A.B. Aug. 5, 2015) .....	41
<i>In re Katz</i> , 687 F.2d 450 (C.C.P.A. 1982) .....	21, 29, 30, 31
<i>Kennaetal, Inc. v. Ingersoll Cutting Tool Company</i> , 780 F.3d 1376 (Fed. Cir. 2015) .....	48, 49
<i>KSR Int'l Co. v. Teleflex Inc.</i> , 550 U.S. 398 (2007) .....	48, 49
<i>In re Kubin</i> , 561 F.3d 1351 (Fed. Cir. 2009) .....	50
<i>Lumenis Be Ltd. v. Btl Healthcare Techs. A.S.</i> , IPR2021-01275, 2022 WL 433628 (P.T.A.B. Feb. 8, 2022) .....	39

# 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.