No. 2019-2302, 2019-2303, 2019-2304, 2019-2305, 2019-2452

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

The Trustees of Columbia University in the City of New York,

Appellant,

v.

Illumina, Inc.,

Appellee.

Appeals from the United States Patent and Trademark Office,
Patent Trial and Appeal Board in Nos. IPR2018-00291,
IPR2018-00318, IPR2018-00322, IPR2018-00385, and IPR2018-00797

MOTION FOR JUDICIAL NOTICE

John D. Murnane
Robert S. Schwartz
Justin J. Oliver
Zachary L. Garrett
VENABLE LLP
1290 Avenue of the Americas
New York, NY 10104
212-218-2100

John P. White
COOPER & DUNHAM LLP
30 Rockefeller Plaza, 20th Floor
New York, NY 10112
212-278-0400

CERTIFICATE OF INTEREST

Counsel for The Trustees of Columbia University in the City of New York certifies the following:

1. The full name of every party or amicus represented by me is:

    - The Trustees of Columbia University in the City of New York.

2. The real party in interest is:

    - The Trustees of Columbia University in the City of New York.

3. All parent corporations and any publicly held companies that own 10% or more of the stock of the parties I represent are:

    - None.

4. The names of all law firms and the partners or associates that appeared for the parties now represented by me in the trial court or are expected to appear in this court (and who have not or will not enter an appearance in this case) are:

    - Cooper & Dunham: Gary J. Gershik;

    - Morris, Nichols, Arsht & Tunnell: Jack B. Blumenfeld; Maryellen Noreika (now Judge Maryellen Noreika).

5. The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this Court's decision in the pending appeal:

    - *The Trustees of Columbia University in the City of New York et al. v. Illumina, Inc.*, 17-cv-00973 (D. Del.)

I. INTRODUCTION

Pursuant to Federal Circuit Rule 27 and Federal Rule of Evidence 201, Appellant The Trustees of Columbia University in the City of New York ("Columbia") moves the Court to take judicial notice of two documents filed by Appellee Illumina, Inc. ("Illumina") in an *Inter Partes Review* proceeding. Specifically, the documents are Illumina's Petition and Expert Declaration filed in IPR2020-00988, which are attached hereto as Exhibits A and B to the Declaration of John D. Murnane (the "IPR2020-00988 documents"). IPR2020-00988 involves Columbia's U.S. Patent No. 10,407,458, which is in the same patent family and shares the same specification and priority date as the patents at issue in the present appeal.

Judicial notice of the IPR2020-00988 documents is needed so that Columbia can demonstrate that Illumina's statements therein are incompatible with, and therefore undercut, Illumina's arguments in the present appeals. Columbia was unable to raise this issue in the course of the briefs submitted to the Court in this appeal because Illumina filed the IPR2020-00988 documents after the filing of Columbia's Reply Brief in the present appeals.[1] While briefing is complete,

[1] Subsequently, Illumina made similar statements in related Petitions and Expert Declarations in IPR2020-01065 (filed June 9, 2020), IPR2020-01125 (filed June 19, 2020), IPR2020-01177 (filed June 26, 2020), and IPR2020-01323 (filed July 20, 2020).

Columbia plans to address Illumina's inconsistencies during the upcoming Oral Argument.

II. BACKGROUND AND RELEVANCE OF ILLUMINA'S STATEMENTS

In the present appeal, Illumina contends that it was obvious that a 3'-O-allyl nucleotide would work for Sequencing by Synthesis ("SBS"). The parties agree that for a nucleotide to work for SBS, the nucleotide must be ***efficiently*** incorporated by a polymerase. Thus, a central issue in these appeals is whether a POSA would have believed that a 3'-O-allyl nucleotide would be efficiently incorporated, and therefore work for SBS. On appeal, Illumina concedes that the prior art evidenced that such nucleotides were not efficiently incorporated, but alleges that a POSA could nonetheless achieve efficient incorporation with the 3'-O-allyl nucleotide by increasing the concentration of that nucleotide. *See* Illumina's Response Brief, D.I. 30 in 19-2302 (April 13, 2020) ("Response Br.") at 25-26, 29-30, 36, 48-50.

To support its theory, Illumina relies on data reported in Metzker 1994 regarding a different nucleotide, namely a 3'-O-methyl nucleotide (also referred to as a "methoxy" nucleotide). Whereas Metzker examined the 3'-O-allyl nucleotide at a maximum concentration of 250 μM, he examined the 3'-O-methyl nucleotide at concentrations up to 500 μM. Illumina alleges that the 3'-O-methyl nucleotide achieved high incorporation rates at these higher concentrations, and concludes that

a POSA would extrapolate this data to conclude that the 3'-O-allyl nucleotide would work for SBS at high concentrations. *See* Response Br. at 26, 29-30, 49-50.

Columbia wishes the Court to take judicial notice of Illumina's statements in its IPR2020-00988 that report that the 3'-O-methyl nucleotide data referenced above pertain to Sanger sequencing, not SBS. Specifically, Columbia wishes the Court to take judicial notice of the following statements from Illumina's petition and expert declaration:

> Metzker evaluated a methoxy capping group, recommended it for Sanger sequencing, and provided a contrasting discussion of this group against "labile" terminators for SBS. . . . ***This suggests that Metzker considered a methoxy group to be unsuitable for SBS***.

Petition in IPR2020-00988 (attached hereto as Exhibit A to the Declaration of John D. Murnane) at ExhibitA_00068 – ExhibitA_00069 (emphasis added).

> Upon evaluating a methyl ether blocked nucleotide [i.e., a 3'-O-methyl nucleotide], Metzker commented that "[i]n Sanger sequencing, the 3′-O-methyl analogs generated clean terminating ladders, thus demonstrating their possible role as alternative terminators to ddNTPs." *Id*. at 4265; *see also id*. at 4266 (referring to "[t]he eventual utility of the 3′-O-methyl terminators in Sanger sequencing"). ***Metzker did not recommend that this analog would be useful in sequencing-by-synthesis***, which Metzker referred to as "BASS DNA sequencing."

Declaration of Floyd Romesberg, Ph.D. in IPR2020-00988 (attached hereto as Exhibit B to the Declaration of John D. Murnane) at Exhibit B_00112 – Exhibit B_00113 (emphasis added).

DOCKET ALARM

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.