IPR2015-01624 Patent Owners' Preliminary Response Filed on behalf of Patent Owners Genentech, Inc. and City of Hope by:

David L. Cavanaugh Reg. No. 36,476 Heather M. Petruzzi Reg. No. 71,270 Robert J. Gunther, Jr. *Pro Hac Vice* Application Pending Wilmer Cutler Pickering Hale and Dorr LLP 1875 Pennsylvania Ave., NW Washington, DC 20006

DOCKE

Adam R. Brausa Reg. No. 60,287 Daralyn J. Durie *Pro Hac Vice* Application Pending Durie Tangri LLP 217 Leidesdorff Street San Francisco, CA 94111

# UNITED STATES PATENT AND TRADEMARK OFFICE

# **BEFORE THE PATENT TRIAL AND APPEAL BOARD**

# SANOFI-AVENTIS U.S. LLC AND REGENERON PHARMACEUTICALS, INC., Petitioners

V.

GENENTECH, INC. AND CITY OF HOPE Patent Owners

> Case IPR2015-01624 Patent 6,331,415

# PATENT OWNERS' PRELIMINARY RESPONSE UNDER

37 C.F.R. § 42.107

# **TABLE OF CONTENTS**

Page(s)
I. Introduction
II. The Cabilly '415 Patent Claims
III. Claim Construction
IV. Background of the Technology10
A. Antibodies Are Large, Complex Multimeric Proteins
B. As of April of 1983, Protein Production Using Recombinant DNA Technology Was Still in Its Infancy
C. In April of 1983, Insulin, the Only Multimeric Protein Produced Using Recombinant DNA Technology, Was Produced by Expressing Each Subunit in a Separate Host Cell
D. The "Mindset" of a Person of Ordinary Skill in the Art at the Time of the Invention
1. Substantial Evidence Demonstrates That an Ordinarily Skilled Person Would Approach Production of Multimeric Proteins by Producing One Protein of Interest Per Host Cell in April of 1983
2. Petitioners Have Failed To Demonstrate a Countervailing "Mindset" of Multiple Proteins in One Host Cell as of April of 1983
E. The Cabilly '415 Patent Inventors Advanced the Art by Demonstrating That Recombinant Heavy And Light Chains Could Be Co-Expressed in a Single Host Cell to Produce Functional Antibodies
V. Each Of Petitioners' Proposed Grounds Is Deficient and Repetitive of Arguments Already Rejected During Reexamination
A. Petitioners Have Not Shown a Reasonable Likelihood That Bujard Anticipates Claims 1, 3-4, 9, 11-12, 15-17, 19 or 33
1. Bujard (Ex. 1002)
2. Bujard Does Not Anticipate Independent Claims 1, 15, 17, and 3330
3. Bujard Does Not Anticipate Dependent Claims 3, 4, 9, 11, 12, 16, and 19 
B. Claims 1, 3-4, 11-12, 14, 19, and 33 Are Not Obvious Over Bujard in View of Riggs & Itakura

1. Riggs & Itakura (Ex. 1003)	47
2. Petitioners Have Failed to Demonstrate a Reasonable Likelihood of Success	48
C. Claims 1, 2, 18, 20 and 33 Are Not Obvious Over Bujard in View of Southern	50
1. Southern (Ex. 1004)	50
2. Petitioners Have Failed to Demonstrate a Reasonable Likelihood of Success	51
D. Claims 1, 3-4, 11-12, 14, and 33 Are Not Obvious in View of Cohen & Boyer in Combination With Riggs & Itakura	52
1. Cohen & Boyer (Ex. 1005)	53
2. Petitioners' Arguments Regarding the Prior Art's Disclosure of "Genes" and "Antibodies" Have Already Been Rejected	
3. Petitioners Have Failed to Demonstrate a Reasonable Likelihood of Success	54
VI. The Petition Should Be Denied Under 35 U.S.C. § 325(d)	58
VII. The Grounds Presented in the Petition Are Redundant	59
VIII. Conclusion	60

### **TABLE OF AUTHORITIES**

# Cases Fortinet, Inc. v. Sophos Inc., Hopkins Mfg. Corp. v. Cequent Performance Prods., Inc., Int'l Securities Exchange, LLC v. Chicago Board Options Exchange, Inc., Integrated Global Concepts, Inc. v. Advanced Messaging Techs., Inc., KSR Int'l Co. v. Teleflex Inc., Motorola, Inc. v. Interdigital Tech. Corp., Net MoneyIN, Inc. v. VeriSign, Inc., Nora Lighting Inc. v. Juno Mfg., LLC, Oracle Corp. v. Clouding IP, LLC, Therasense, Inc. v. Becton, Dickinson & Co., Trintec Indus., Inc. v. Top-U.S.A. Corp., **Statutes and Regulations**

...

### Page(s)

## I. INTRODUCTION

In their Petition, Sanofi-Aventis U.S. LLC and Regeneron Pharmaceuticals, Inc. ("Petitioners") ask the Board to disregard the prior determinations of the Patent and Trademark Office (the "Office") that the claims of U.S. Patent No. 6,331,415 (the "Cabilly '415 patent") define a patentable invention. The grounds advanced by Petitioners, however, present arguments that were already thoroughly considered, and ultimately rejected, by the Office in prior proceedings, and ignore the substantial evidence considered by the Office in reaching that prior determination.

Petitioners contend the primary prior art references it is advancing—Bujard (Ex. 1002) and Cohen & Boyer (Ex. 1005)—describe or would have made obvious the claimed invention, which requires production of an immunoglobulin by independent expression of DNA sequences encoding the heavy and light chains in a single transformed host cell. But this prior art does not show actual production of an antibody, or doing so via a single transformed host cell as required by the claims. If anything, the prior art advanced in the Petition is *less* probative on the issues already considered and rejected by the Office.

Specifically, in earlier reexamination proceedings, the Office considered the question whether the mere appearance of the plural term "genes" along with the

# DOCKET A L A R M



# 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.