UNITED STATES DISTRICT COURT FOR THE CENTRAL DISTRICT OF CALIFORNIA WESTERN DIVISION

MEDIMMUNE, INC. ,

Plaintiff

۷.

GENENTECH, INC and CITY OF HOPE,

Defendants.

Case No. CV03-2567 (CTx)

RESTRICTED CONFIDENTIAL Attorney's Eyes Only

U.S. District Judge Mariana R. Pfaelzer

Expert Report of E. Fintan Walton

Dr E Fintan Walton

PharmaVentures Limited Magdalen Centre Oxford Science Park Oxford OX4 4GA United Kingdom

Dr E Fintan Walton Expert Report

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1 Introduction and Summary of Opinions

This report addresses the non-obviousness of U.S. Patent No. 6,331,415 ("the '415 patent") and, in particular, the objective consideration of industry acceptance. As I explain below, dozens of pharmaceutical companies, including some of the largest in the world, have licensed the '415 patent, and paid very substantial sums for the right to practice its technology. This licensing activity reflects the widely held view within the industry that the '415 patent represents not just a legitimate invention, but one of a handful of groundbreaking patents that have laid the foundation for the modern field of therapeutic antibodies. In this regard, I agree with MedImmune's corporate designee, Edward Mathers, who testified that "[i]t was well known in the industry that there are certain patents necessary if you are gong to be in the antibody field," and that these patents were "Cabilly, Boss, Queen, Winter, ultimately Adair," and possibly others.¹ The industry indeed recognises these patents—with the Cabilly '415 patent taking the place of Boss after priority of inventorship was awarded to the Cabilly inventors—as the scientific breakthroughs that have made this entire field possible.

2 **Professional Credentials and Qualifications**

My name is Edward Fintan Walton. I have been retained by Keker & Van Nest LLP ("KVN") and Sidley Austin LLP ("Sidley"), counsel to Genentech, Inc. ("Genentech"), to act as an expert witness in the above-identified action for Genentech and City of Hope. My background and experience are briefly summarised in the following paragraphs; a fuller curriculum vitae is presented in Appendix 1.

My initial training was as a scientist. I hold bachelor's and doctoral degrees, both from Trinity College, University of Dublin, Ireland. I also conducted research at the University of Michigan.

I gained broad commercial experience in biotechnology in management positions at Bass Brewing Ltd. (1982-1983) and

¹ Mathers deposition. at 65-66.

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Celltech Ltd. (1984-1992). Celltech, one of the first biotechnology companies, became one of the largest in Europe and a leader in the development of antibody-based drugs. My research experience, in which I reached the level of departmental head at Celltech, covered gene expression, antibody engineering, metalloproteinases and HIV research. I also gained business experience during my time at Celltech, including the establishment of contract research and licensing agreements with European, Japanese and US corporations.

In 1992, I co-founded CONNECT Pharma Ltd., a firm providing consultancy services and informational products to the international pharmaceutical industry. I acted as CEO of Connect Pharma from 1993 until 1997. In 1997, I established a new company, PharmaVentures Ltd. ("PharmaVentures"). I have been Chairman and CEO of PharmaVentures ever since. PharmaVentures assists healthcare company clients in forming alliances, conducting acquisitions and executing other transactions of strategic importance, including patent license agreements. PharmaVentures also performs technical and commercial evaluations of pharmaceutical and biotechnology products, product portfolios and companies. Through my experience at PharmaVentures and elsewhere, I have built up substantial expertise in the analysis of healthcare markets and of pharmaceutical and biotechnology companies, their technologies, and their intellectual property. Deal structuring, valuation and negotiation form a major part of my business.

In addition to its consulting services, PharmaVentures provides strategic information services to the pharmaceutical and related industries. Marketed under the brand name PharmaDeals[®], PharmaVentures' information products include PharmaDeals[®] Agreements, which is a comprehensive database of pharmaceutical industry deal making. Initiated in 1996, it now contains details of some 28,000 transactions, with around 200 new deal records typically being added each month. PharmaDeals[®] Agreements provides a summary of the deal and, where available, information on total deal value, upfront payments, equity investments, milestone payments, royalty rates and other financial parameters. Other PharmaVentures information products include PharmaDeals[®] Opportunities, a database of available licensing

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opportunities; and PharmaDeals[®] Intelligence Bank, a comprehensive online resource of hundreds of articles with regular updates on deal-making highlights, trends, news and analysis. PharmaVentures' publications include the monthly PharmaDeals[®] Review, which examines and analyses trends and developments within pharmaceutical deal making across a wide spectrum of technology and therapy areas; Valuing and Structuring Pharmaceutical Licensing Agreements; Effective Licensing and Commercialisation of Drug Delivery Systems; Pharmaceutical Deal Structures—The Essential Manual for Deal Makers; Facts and Trends in Deal Making—A Perspective on the Pharma & Biotech Industries; and Strategies and Tactics for Successful Partnering.

Under my direction, PharmaVentures also provides training and coaching to business-development and licensing executives from around the world at regular residential workshops on the negotiation and valuation of strategic alliances. Since 2000, it has trained more than 500 executives.

3 Documents, Data, and Other Information Considered

Appendix 2 lists the documents, data, and other information that I have considered in forming my opinions.

4 Background Information

4.1 The Parties

4.1.1 Genentech

Genentech was founded on 7 April 1976, following a meeting between the venture capitalist Robert A. Swanson and biochemist Dr Herbert W. Boyer (who had previously pioneered the development of recombinant DNA technology with geneticist Stanley Cohen²). In 1977 Genentech and City of Hope collaborated to produce the first recombinant human protein,

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² See Section 5.1 on breakthrough patents: Recombinant DNA (Cohen/Boyer).

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