

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LUPIN LTD. and LUPIN PHARMACEUTICALS INC.
Petitioner,

v.

SENJU PHARMACEUTICAL CO., LTD.,
Patent Owner.

Case IPR2015-01100
Patent 8,927,606

DECLARATION OF STEPHEN G. DAVIES, D.Phil.

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I, Stephen G. Davies, under penalty of perjury, declare as follows:

1. I have been retained by Finnegan, Henderson, Farabow, Garrett & Dunner, LLP on behalf of Senju Pharmaceutical, Co., Ltd. in connection with this action as an expert in organic chemistry and medicinal chemistry.

I. BACKGROUND AND QUALIFICATIONS

2. I am the Waynflete Professor of Chemistry at the University of Oxford, Oxford, England. I have been employed teaching chemistry at Oxford since 1980. From 2006 to 2011, I was Chairman of the Department of Chemistry. In this position, I had full responsibility for all teaching, research, financial and managerial matters in one of the largest chemistry departments in the world. I have also supervised more than 100 graduate students and 100 post-doctoral fellows in the area of organic, organometallic and medicinal chemistry.

3. In 1973, I earned a B.A. in Chemistry from the University of Oxford. In 1975, I earned a D. Phil. in Chemistry from the University of Oxford. In 1980, I received a D. Sc. in Chemistry from the University of Paris.

4. Over the course of my career, I have been a committee member of many professional organizations, a list of which can be found in my curriculum vitae, attached as Exhibit 2049.

5. I have authored over 550 publications and have given scores of research lectures. My research interests include synthetic organic and medicinal

chemistry, and in particular, the preparation of enantiomerically pure organic compounds, including the asymmetric and stereoselective synthesis of enantiomerically pure organic compounds for potential therapeutic use. A list of my publications may be found attached as Exhibit 2050.

6. I have also held several editorial appointments. I am the Founding Editor and Editor of Organic Series of "Oxford Chemistry Primers" and "Oxford Chemistry Masters," an Executive Editorial Board Member of "Tetrahedron," the Founding Editor and Editor-in-chief of "Tetrahedron: Asymmetry," and the Editor of the "On Chemistry" Books.

7. Over the course of my career, I have received several awards, including the Hickinbottom Fellowship (1984), Pfizer Award for Chemistry (1985), 1984 Corday Morgan Medal, Royal Society of Chemistry (1986), Royal Society of Chemistry Award for Organometallic Chemistry (1987), Pfizer Award for Chemistry (1988), Royal Society of Chemistry Bader Award (1989), Tilden Lecture Award, Royal Society of Chemistry (1996), Royal Society of Chemistry Award in Stereochemistry (1997), Prize Lectureship of the Society of Synthetic Organic Chemistry, Japan (1998), Distinguished Technopreneur Award, Singapore (2008), and Royal Society of Chemistry Perkin Prize for Organic Chemistry (2011).

8. I am also the founder of numerous companies including ones focused on the preparation of compounds for potential pharmaceutical use. Along with several others, I founded Oxford Asymmetry, Ltd. in 1992, which became a division of Oxford Asymmetry International plc, with a mission to provide pharmaceutical companies with enantiomerically pure compounds of interest on any desired scale, from small amounts for biological evaluation and research, to commercial quantities. Currently, I am the Founder and Non-executive Chairman of SciInk Ltd. I am also the Non-executive Director of Isis Innovation Ltd. I am also the Founder and Non-executive Director of OxStem Ltd. I am also the Founder and Non-executive Director of Summit Therapeutics plc, which develops pharmaceutical compounds and has two such compounds currently undergoing Phase II/III clinical trials.

9. On the basis of my education and the experience described above, I believe I am qualified to give the opinion set out herein.

II. INFORMATION CONSIDERED

10. The opinions expressed in this declaration are based on my review of U.S. Patent No. 8,927,606 (“the ’606 patent”), the “Petition for *Inter Partes* Review of U.S. Patent No. 8,669,606” (“Petition”) and Exhibits to the Petition, including the declaration of Dr. Jayne Lawrence (EX1005). I have also reviewed the transcript of Dr. Lawrence’s cross examination (EX2316). I have also

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