UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD

PHARMACOSMOS A/S, Petitioner,

v.

LUITPOLD PHARMACEUTICALS, INC., Patent Owner.

Cases¹ IPR2015-01490; Patent 7,754,702 B2 IPR2015-01493; Patent 8,431,549 B2

CORRECTED DECLARATION OF DR. ADRIANA MANZI

4830-3717-4576.1



¹ The word-for-word identical paper is filed in each proceeding identified in the heading.

TABLE OF CONTENTS

I.	QUA	QUALIFICATIONS1					
II.	OVE	OVERVIEW					
III.	THE	THE '702 and '549 PATENTS					
IV.	PERS	PERSON OF ORDINARY SKILL IN THE ART					
V.	PATENT OWNER RESPONSE						
	A.	"substantially non-immunogenic carbohydrate component"					
	В.	"iron sorbitol complex" does not include "iron polyglucose sorbitol carboxymethyl ether complex"					
	C.	"iron carboxymaltose complex"		19			
	D.	van Zyl-Smit					
		1.	van Zyl-Smit does not teach a "substantially non-immunogenic carbohydrate component"	20			
		2.	van Zyl-Smit's sample size is not large enough to demonstrate "substantial non-immunogenicity"	21			
		3.	The results of van Zyl-Smit are not generalizable to iron polymaltose	22			
	E.	E. Funk		23			
	F.	Groman					
		1.	Groman's complex is not an "iron sorbitol complex"	26			
		2.	Groman does not teach a rate of administration of "about 15 minutes or less"	27			
		3.	The complexes of Groman and Geisser are not "structurally analogous"	28			
			i				

4830-3717-4576.1



IPR2	015-01	1490; 1	PR2015-01493	Declaration of Dr. Manzi
VI.	PAT	ENT C	OWNER'S MOTION TO AMEND	30
	A.	State	of the Art	32
	B.	Prior	Art of Record	35
		1.	Art Relating Specifically to Iron Dex	tran Complexes35
		2.	Art Relating Specifically to Restless	Leg Syndrome36
		3.	Art Relating Specifically to "Ferumo	xytol"37
		4.	Art Relating Specifically to Iron Poly	maltose Complexes39
		5.	Art Relating to Other Iron Carbohyda	rate Complexes40
		6.	Other	43
VII.	CON	ICLUS	SION	44

ii

4830-3717-4576.1



IPR2015-01490; IPR2015-01493

Declaration of Dr. Manzi

I, Dr. Adriana E. Manzi, declare as follows:

I. QUALIFICATIONS

- 1. I have been retained by Foley and Lardner LLP to act as an expert witness in a matter on behalf of its client, Luitpold Pharmaceuticals, Inc. ("Patent Owner"). The matter is *Inter Partes* Review No. 2015-01490 of United States Patent No. 7,754,702 by Helenek ("the '702 Patent") and *Inter Partes* Review No. 2015-01493 of United States Patent No. 8,431,549 by Helenek ("the '549 Patent") brought by Pharmacosmos A/S ("Petitioner").
- 2. I am being compensated for my time in connection with this matter. My compensation is not dependent on the outcome of this matter.
- 3. I earned a "Licenciature" degree (five-year program equivalent to a combination of Bachelor and Master of Science degree focusing on Food Sciences and Industrial Chemistry) and a Ph.D. degree in organic chemistry from the University of Buenos Aires, in Argentina. My Doctoral Thesis focused on the study of plant polysaccharides and the relationship between their structure and properties. I conducted four years of postdoctoral research in biochemistry and glycobiology at the Cancer Center, Department of Medicine, University of California San Diego followed by seven years as an Adjunct Assistant Professor. In parallel, I was the Director of the Glycobiology Core Facility, that conducted

1

4830-3717-4576.1



IPR2015-01490; IPR2015-01493

Declaration of Dr. Manzi

carbohydrate analysis for University of California investigators as well as external institutions and the private sector.

- 4. A copy of my *curriculum vitae* ("CV") is Exhibit 2057. As reflected in my CV, I have significant expertise in carbohydrate chemistry and biochemistry (glycobiology) as well as in the development of pharmaceutical products. I have worked on research on plant and animal polysaccharides as well as carbohydrate-containing natural molecules from 1978 to 1998. From 1998 to 2006, I worked on the development of carbohydrate therapeutics (for inflammation and xenotransplantation) at positions of increasing responsibilities at the Baxter International group. During this period I worked on glycoconjugates (molecules containing carbohydrates and peptides or lipids), polysaccharide solutions for dialysis (i.e., icodextrin based), and polysaccharide vaccines as well as natural and recombinant glycoproteins for different indications. I have been involved in many projects encompassing carbohydrate-containing molecules, including the evaluation of antigenicity of these molecules, and have encountered many issues related to the isolation of natural polysaccharides. Ex. 2057, pp. 3-5.
- 5. Since 2006, as part of my consulting work, I supported many projects related to carbohydrate-containing molecules from polysaccharides to glycoproteins and glycolipids. My work includes all CMC (chemistry manufacturing and controls) aspects of carbohydrate-containing molecules,

4830-3717-4576.1



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