UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

INITIATIVE FOR MEDICINES, ACCESS & KNOWLEDGE (I-MAK), INC.

Petitioner

V.

GILEAD PHARMASSET LLC
Patent Owner

Case No. IPR2018-00390 U.S. Patent No. 8,889,159

DECLARATION OF JOSEPH M. FORTUNAK, Ph.D.



TABLE OF CONTENTS

I.	QUALIFICATIONS				
II.	SCOPE OF WORK6				
III.	OVERVIEW OF THE '159 PATENT				
IV.	FILE HISTORY OF THE '159 PATENT				
V.	LEGAL STANDARDS1				
VI.	PERSON OF ORDINARY SKILL IN THE ART				
VII.	CLAIM CONSTRUCTION				
VIII.	BACKGROUND KNOWLEDGE IN THE ART				
	A.	GS-7977 Was A Known And Promising Antiviral Agent for Treati HCV	_		
	B.	Crystalline Forms of GS-7977 Were Known	16		
	C.	Tablet and Capsule Formulations Comprising Pharmaceutical Excipients Were Known	19		
	D.	Tablet And Capsule Formulations Comprising Crystalline GS-7977 And Pharmaceutical Excipients Were Known			
	E.	GS-7977 Was Known to Be in Human Clinical Trials at a 400mg Daily Dose	23		
	F.	Method of Treating HCV Using A Tablet Or Capsule Comprising Crystalline GS-7977 And A Pharmaceutical Excipient Was Known	ı.24		
IX.	SCOPE AND CONTENT OF THE PRIOR ART				
	A.	Ross '645	25		
	R	Ross '257	28		



X.			Γ REFERENCES DISCLOSE OR SUGGEST EACH OF THE FEATURES OF EACH CLAIM OF THE '159 PATENT31			
	A.	Clain	ns 1-37 Were Anticipated By And Obvious Over Ross '64531			
		1.	Claims 1 and 2 (composition comprising compound and excipient)			
		2.	Claims 3-12 (pharmaceutical composition comprising at least one pharmaceutically acceptable excipient)			
		3.	Claims 13-15 (composition comprising at least one pharmaceutically acceptable excipient by specific weight)40			
		4.	Claims 16-17 (unit dosage form comprising 400mg of crystalline GD-7977)			
		5.	Claims 18-27 (unit dosage form comprising at least one pharmaceutical excipient)			
		6.	Claims 28-29 (unit dosage form comprising at least one pharmaceutically acceptable excipient by specific weight)45			
		7.	Claim 30 (unit dosage form comprising a capsule or tablet)47			
		8.	Claims 31-32 (process for preparing a tablet composition comprising the unit dosage form where GS-7977 is 400mg)47			
		9.	Claims 33-37 (method of treatment comprising administering the composition)			
	B.	Claims 1-37 Were Anticipated By And Obvious Over Ross '25750				
		1.	Claims 1 and 2 (composition comprising compound and excipient)			
		2.	Claims 3-12 (pharmaceutical composition comprising at least one pharmaceutically acceptable excipient)			
		3.	Claims 13-15 (composition comprising at least one pharmaceutically acceptable excipient by specific weight)59			



	4.	Claims 16-17 (unit dosage form comprising 400mg of crystalline GS-7977)			
	5.	Claims 18-27 (unit dosage form comprising at least one pharmaceutical excipient)			
	6.	Claims 28-29 (unit dosage form comprising at least one pharmaceutically acceptable excipient by specific weight)64			
	7.	Claim 30 (unit dosage form comprising a capsule or tablet)65			
	8.	Claims 31-32 (process for preparing a tablet composition comprising the unit dosage form where GS-7977 is 400mg)66			
	9.	Claims 33-37 (method of treatment comprising administering the composition)			
XI.	CONCLUS	ION68			
XII.	APPENDIX-LIST OF EXHIBITS70				



I. QUALIFICATIONS

- 1. I am a Professor of Chemistry and Pharmaceutical Sciences at Howard University, in Washington, D.C., where I regularly teach courses in Organic Chemistry to undergraduate students. I also teach courses in drug discovery, drug development, pharmaceutical chemistry, pharmaceutical sciences, and green chemistry/chemical synthesis to PharmD and PhD students in Chemistry and Pharmacy.
- 2. I received my Bachelor of Science in Chemistry from Purdue University in 1976, and my Doctorate in Philosophy in Organic Chemistry from the University of Wisconsin-Madison in 1981. After earning my Ph.D., I was a postdoctoral fellow and a research assistant professor at Cambridge University in the United Kingdom from 1981-1983.
- 3. My career has spanned both the industrial and academic sectors, including senior managerial and academic appointments.
- 4. From 1983-1993, I worked at SmithKline Beecham Pharmaceutical Corp. (GlaxoSmithKline), and served as Associate Senior Research Investigator, Senior Research Investigator and Assistant Director. During that time, I was primarily responsible for inventing processes to synthesize active pharmaceutical ingredients ("APIs") for investigational new drugs, including the drugs halofantrine, ropinerole, topotecan and eprosartan, which the U.S. Food and Drug



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