#### 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.

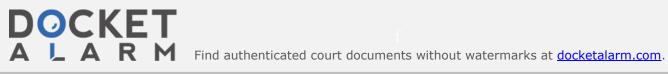


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### I. QUALIFICATIONS

- 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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