# UNITED STATES PATENT AND TRADEMARK OFFICE

#### BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

Petitioner

v.

GILEAD PHARMASSET LLC
Patent Owner

U.S. Patent No. 8,334,270

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DECLARATION OF JOSEPH M. FORTUNAK, Ph.D.



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I, Joseph M. Fortunak, declare as follows:

#### I. QUALIFICATIONS

- 1. My name is Joseph M. Fortunak. 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., 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,



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