IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ARGENTUM PHARMACEUTICALS LLC, Petitioner,

V.

RESEARCH CORPORATION TECHNOLOGIES, INC., Patent Owner.

Case No. IPR2016-00204 Patent No. RE 38,551

DECLARATION OF CARL W. BAZIL, M.D., Ph.D., IN SUPPORT OF PATENT OWNER RESPONSE PURSUANT TO 37 C.F.R. § 42.120



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I, Carl W. Bazil, M.D., Ph.D., declare as follows:

I. <u>Introduction</u>

- I have been retained by Patent Owner Research Corporation 1. Technologies, Inc., ("Patent Owner") in the present inter partes review. I understand that the petition names Argentum Pharmaceuticals LLC as the petitioner, and that Intelligent Pharma Research LLC, APS GP LLC, and APS GP Investors LLC have been identified as real parties-in-interest. I further understand that KVK-TECH, Inc. has also been identified as a potential real party-in-interest. I have no financial interest in, or affiliation with, the petitioner, the identified actual or potential real parties-in-interest, or the patent owner. I am being compensated at my usual and customary hourly rate, and my compensation is not dependent upon the outcome of, or the content of my opinions in, this proceeding or in any other proceeding. The opinions I set forth herein are my own and are based on my review of materials in this matter and the education, experience, training, and skills I have accumulated.
- 2. I am a clinical epileptologist with decades-long experience in treating patients with epilepsy, in publishing and reviewing literature regarding epilepsy, teaching students, residents, and other doctors regarding epilepsy, and in conducting studies regarding epilepsy. In this Declaration, I offer my opinions on the effects of epilepsy on patients, the treatment of epilepsy, the need for improved



antiepileptic drugs ("AEDs") particularly as of 1996, a failure to meet that need, and also the contributions of lacosamide to the armamentarium of practicing epileptologists such as myself.

3. I have reviewed the articles and documents cited in this Declaration. I am aware of information generally relied upon by physicians and others treating people with epilepsy at the relevant times, and my opinions below are based on such awareness.

II. Professional Background and Education

- 4. I am the Caitlin Tynan Doyle Professor of Neurology at the College of Physicians and Surgeons, Columbia University. I am also the Director of the Comprehensive Epilepsy Center at New York Presbyterian Hospital/Columbia. Additionally, since 1996, I have been an attending neurologist at New York Presbyterian Hospital, specializing in epilepsy. Since 2006, I have also taught at the City University of New York. Before joining the medical faculty at Columbia University in 1996, I served on the faculties at Long Island University (adjunct) and Mount Sinai School of Medicine.
- 5. My primary research interests are in the areas of epilepsy and sleep disorders.
- 6. I received an undergraduate degree in 1983 from the Massachusetts Institute of Technology. I also have a M.S. in pharmacology and Ph.D. in



pharmacology from Emory University, and an M.D. from Emory University. After medical school, I was an intern in internal medicine at Emory University from 1989 to 1990 and then completed a residency in neurology at New York University from 1990 to 1993. Thereafter, from 1993 to 1995, I completed a clinical fellowship in epilepsy/EEG at the Neurological Institute, Columbia Presbyterian Medical Center.

- 7. I received Board Certification from the National Board of Medical Examiners in 1990, from the American Board of Clinical Neurophysiology in 1996, and from the American Board of Sleep Medicine in 2005. Additionally, I received Board Certification from the American Board of Neurology and Psychiatry in 1995 (last recertified in 2015), with added qualifications in Clinical Neurophysiology (1999), Sleep Medicine (2009), and Epilepsy (2013).
- 8. I am the author of more than 160 scientific papers, scholarly reviews, and book chapters on neurology, including articles on epilepsy, as well as three books on epilepsy. *See, e.g.*, Carl W. Bazil et al., *What Do I Do Now? Epilepsy* (2011) (Ex. 2077) ("*What Now?*"); Carl W. Bazil et al., *Epilepsy*, 13 Merritt's Neurology 468 (2016) (Ex. 2078); Carl W. Bazil & Timothy A. Pedley, *Epilepsy*, 12 Merritt's Neurology 927 (2010); Carl W. Bazil et al., *Epilepsy*, 11 Merritt's Neurology 990 (2005); Carl W. Bazil, *Living Well with Epilepsy and Other Seizure Disorders* (2004) (Ex. 2079) ("*Living Well*"); Carl W. Bazil, *Epilepsy*:



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