IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NETFLIX, INC., Petitioner,

v.
REALTIME ADAPTIVE STREAMING LLC,
Patent Owner.

Case No. IPR2018-01630 Patent 9,769,477

DECLARATION OF JAMES A. STORER, PH.D.



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I, James A. Storer, declare as follows:

- 1. My name is James A. Storer. I am a Professor of Computer Science at Brandeis University and a member of the Brandeis Center for Complex Systems. I have prepared this report as an expert witness retained by Netflix, Inc., (hereinafter "Petitioner"). In this report I give my opinions as to whether certain claims of U.S. Patent No. 9,769,477 ("the '477 Patent") are invalid. I provide technical bases for these opinions as appropriate.
- 2. This report contains statements of my opinions formed to date and the bases and reasons for those opinions. I may offer additional opinions based on further review of materials in this case, including opinions and/or testimony of other expert witnesses. I make this declaration based upon my own personal knowledge and, if called upon to testify, would testify competently to the matters contained herein.

I. <u>BACKGROUND AND QUALIFICATIONS</u>

- 3. I have summarized in this section my educational background, career history, publications, and other relevant qualifications. My full curriculum vitae is attached as Appendix 1 to this declaration.
- 4. I am an expert in the field of computer algorithms, including data communications and network computing, data compression, data and image retrieval, storage and processing of large data sets, and image / video processing. I



have studied, taught, practiced, and researched in the field of Computer Science for over thirty years. Currently, I am Professor of Computer Science at Brandeis University in Waltham, Massachusetts, where I have been on the faculty since 1981.

- 5. I received my Doctor of Philosophy (Ph.D.) degree in the field of Computer Science from Princeton University in 1979. I received my Masters of Arts (M.A.) degree in Computer Science from Princeton University and my Bachelor of Arts (B.A.) degree in Mathematics and Computer Science from Cornell University.
- 6. After receiving my Ph.D. degree, I worked in industry as a researcher at AT&T Bell Laboratories from 1979 to 1981 before joining the faculty of Brandeis University.
- 7. I have been involved in computer science research since 1976. My research has been funded by a variety of governmental agencies, including the National Science Foundation (NSF), National Aeronautics and Space Administration (NASA), and Defense Advanced Research Projects Agency (DARPA). In addition, I have received government Small Business Innovation Research (SBIR) funding, as well as numerous industrial grants.
- 8. I regularly teach courses in software and hardware technology for data compression and communications (including text, images, video, and



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