

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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APPLE INC.  
Petitioner

v.

MAXEL, LTD.  
Patent Owner

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IPR2020-00200  
Patent No. 10,084,991

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**DECLARATION OF DR. ANDREW LIPPMAN**

IPR2020-00200

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I, Dr. Andrew Lippman, hereby declare the following:

**I. BACKGROUND AND QUALIFICATIONS**

1. My name is Andrew Lippman, and I am over 21 years of age and otherwise competent to make this Declaration. I make this Declaration based on facts and matters within my own knowledge and on information provided to me by others, and, if called as a witness, I could and would competently testify to the matters set forth herein.

2. I have been retained as a technical expert witness in this matter by Counsel for the Petitioner, Apple Inc. (“Petitioner”) to provide my independent opinions on certain issues requested by Counsel for Petitioner relating to the accompanying Petition for Inter Partes Review of U.S. Patent No. 10,084,991 (“the ’991 Patent”). I am being compensated at an hourly rate of \$650.00. My compensation in this matter is not based on the substance of my opinions or on the outcome of this matter. I have been informed that Maxell, Ltd. is the purported owners of the ’991 Patent. I note that I have no financial interest in Maxell, Ltd. or Petitioner, and I have no other interest in the outcome of this matter.

3. I have summarized in this section my educational background, career history, and other qualifications relevant to this matter. I have also included a current version of my curriculum vitae, attached as Appendix B.

4. I earned my undergraduate degree in Electrical Engineering from MIT in 1971. I earned a Master of Science degree in Computer Graphics from MIT in 1978. I earned a Ph.D. in Electrical Engineering from the École Polytechnique Fédérale de Lausanne (Switzerland) in 1995. My thesis was on scalable video, a technique for representing visual data in a fluid and variable networking and processing environment, similar to what we call streaming today.

5. I am currently a Senior Research Scientist at the Massachusetts Institute of Technology (“MIT”) and Associate Director of the MIT Media Laboratory, an approximately \$80 million per year research and teaching facility at MIT, which I helped establish in the early 1980s.

6. At MIT, I have supervised over 50 Masters and Ph.D. theses in the Media Arts and Sciences program and have taught courses such as Digital Video and MIT’s freshman physics seminar. Through the course of my career, I have directed and served as principal investigator of research projects supported by the Defense Advanced Research Projects Agency (DARPA), the Office of Naval Research (ONR), The National Science Foundation (NSF), and over 50 industrial companies. I have never precisely calculated my net research volume, but it is in excess of \$50 million.

7. I am named as an inventor on six patents in the area of video and digital processing and have served on the advisory boards for technology companies in

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