

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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UNIFIED PATENTS INC.  
Petitioner

v.

DIGITAL AUDIO ENCODING SYSTEMS, LLC  
Patent Owner

IPR2016-01710  
Patent 7,490,037

**DECLARATION OF LEONARD LAUB**

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I, Leonard Laub, hereby declare:

## **I. INTRODUCTION**

1. I have been retained by Counsel for Petitioner Unified Patents Inc. (“Unified” or “Petitioner”) to provide opinions on certain issues concerning *Inter Partes* Review No. IPR2016-01710 of U.S. Patent No. 7,490,037 (“the ’037 Patent”).

2. I have been asked to opine on the matters set forth below. I make these statements based upon facts and matters within my own knowledge or on information provided to me by others. All such facts and matters are true to the best of my knowledge and belief.

3. I am the President of Keryston Associates, Inc. (“Keryston”). My firm is compensated at a rate of \$300 per hour for my work on this matter. This compensation is not dependent on my opinions or testimony or the outcome of this matter.

## **II. BACKGROUND AND QUALIFICATIONS**

4. A copy of my curriculum vitae is attached as Exhibit A.

5. I received a Bachelor’s degree in Physics, with a minor in Mathematics, from the Illinois Institute of Technology in 1970. I then pursued a Master’s degree in Mathematics from Northeastern Illinois University, and a Ph.D. degree in Physics from Northwestern University.

6. I have over 50 years of professional experience in encoding, transmission, storage, decoding, and presentation of digitized audio and video signals, optics and optical systems design, lasers and laser applications, search and database techniques, telecommunications, technology licensing, and many other fields of commercial significance. I am named as an inventor on 20 patents. I have been a member of the Audio Engineering Society for over 40 years.

7. I have been President of Keryston and its predecessor Vision Three, Inc. for over 35 years. Keryston provides professional consulting services to companies, investors, and government agencies relating to business and technical matters in a wide range of industries including audio and video recording, storage, transmission, and presentation; broadcast, mobile, and fiber telecommunications; computer and storage networks; mass data storage and retrieval; advanced energy storage and power generation; consumer electronics; optical and photographic systems; and microelectronics and display design and manufacture. Such consulting services include working with clients on specific business and technology projects, assisting with definition and optimization of products and business models, development, protection, and licensing of intellectual property, and other technology and business issues. Keryston also provides professional expert witness services.

8. At Keryston, I have been frequently called upon to provide my expert opinion on matters concerning patent disputes. I have consultatively supported counsel and/or been qualified as a technical expert in over 50 litigation matters, including in areas that relate to the technology described in the '037 Patent. However, I have not testified in any of these cases during the last four years.

9. In my professional career, I worked for Zenith Radio Corporation, Xerox Corporation, and Exxon Corporation before starting my current consulting practice. My consulting clients have included Agilent, Du Pont, Exxon, Fuji Photo Film, Fujitsu, Funai, General Electric, Google, IBM, ICI, MediaTek, Microsoft, 3M, Mitsubishi, NCR, NTT, Olympus, Philips, Ricoh, Samsung, Seagate, Sony, Thomson (now Technicolor), Toshiba, and Warner Bros, plus many young, growing, and evolving companies worldwide.

10. The following is a summary of my professional experience relevant to these proceedings:

11. **Zenith** (1968-1973) – development of techniques for bandwidth reduction encoding and decoding of audio and video content (patent granted on video technique);

**Xerox and Star Systems** (1976-1981) – built from scratch business making large-scale systems for digital storing, networking, and retrieval of image and text

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