

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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**APPLE INC.,**

Petitioner

vs.

**LOGANTREE, LP**

Patent Owner

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**Case IPR2022-00040 U.S. Patent No. 6,059,576**

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**Declaration of Vijay K. Madisetti, Ph.D.**

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I, Vijay K. Madiseti, hereby declare as follows:

**I. Introduction**

**A. Background**

1. My name is Vijay K. Madiseti, and I have been retained by counsel for LoganTree, LP (“LoganTree”) as a technical expert in the above-captioned case. Specifically, I have been asked to render certain opinions in regards to the Patent Owner Response with respect to U.S. Patent No. 6,059,576 (“the ’576 Patent”) in response to the IPR Petition submitted by Apple, Inc. (“Apple”). I understand that the Challenged Claims are claims 1-5, 8-11, 20, 25, 30-32, 36, 39-42, 45-51, 61-65, 144, and 147. My opinions are limited to those Challenged Claims.

2. In reaching my opinions in this matter, I have reviewed the following materials:

- Exhibit 1001: U.S. Patent No. 6,059,576
- Exhibit 1002: U.S. Patent No. 6,059,576 Prosecution History (“Prosecution History”)
- Exhibit 1006: *Ex Parte* Reexamination Certificate of U.S. Patent No. 6,059,576 (“Reexamination Certificate”)
- Exhibit 1007: Excerpts from the Prosecution History of the *Ex Parte* Reexamination of U.S. Patent No. 6,059,576 (“Reexamination History”)

*Inter Partes Review of U.S. Patent No. 6,059,576  
Declaration of Vijay K. Madiseti, Ph.D. (Exhibit 2001)*

- Exhibit 1009: U.S. Patent No. 5,778,882 (“Raymond”)
- Exhibit 1010: U.S. Patent No. 5,573,013 (“Conlan”)
- Exhibit 1014: U.S. Patent No. 5,803,740 (“Gesink”)
- Exhibit 1100: Declaration and Curriculum Vitae of Dr. Thomas Kenny (“Kenny Declaration”)
- Exhibit 1101: U.S. Patent No. 4,962,469 (“Ono”)
- Exhibit 1102: U.S. Patent No. 5,899,963 (“Hutchings”)
- Exhibit 1103: U.S. Patent No. 5,941,837 (“Amano”)
- Exhibit 1104: U.S. Patent No. 6,059,692 (“Hickman”)
- Exhibit 1105: U.S. Patent No. 5,857,939 (“Kaufman”)
- Exhibit 1106: U.S. Patent No. 5,808,903 (“Schiltz”)
- Exhibit 1107: U.S. Patent No. 5,976,083 (“Richardson”)
- Exhibit 1108: U.S. Patent No. 5,553,007 (“Brisson”)
- Exhibit 1109: U.S. Patent No. 5,916,181 (“Socci”)
- Exhibit 1110: U.S. Patent No. 5,593,431 (“Sheldon”)
- Exhibit 1111: U.S. Patent No. 5,511,045 (“Sasaki”)
- Exhibit 1112: U.S. Patent No. 4,387,437 (“Lowrey”)
- Exhibit 1113: Warwick, “Trends and Limits in the ‘Talk Time’ of Personal Communicators,” Proceedings of the IEEE, Vol. 83, No. 4 (April 1995) (“Warwick”)

- Paper 3: Institution of *Inter Partes* Review (“Institution Decision”)

**B. Expert Qualifications and Credentials**

3. My qualifications to testify about the patent-in-suit, relevant technology, and the prior art are set forth in my curriculum vitae (“CV”), which is attached hereto as Appendix 1. My CV includes my educational background and work history.

4. Briefly, I have over thirty years of experience as an electrical and computer engineer in industry, education, and consulting. I have served as an expert witness in intellectual property cases and other matters. A list of my prior testimony is included in my CV attached as Appendix 1.

5. I obtained my Ph.D. in Electrical Engineering and Computer Science at the University of California, Berkeley, in 1989. I received the Demetri Angelakos Outstanding Graduate Student Award from the University of California, Berkeley and the IEEE/ACM Ira M. Kay Memorial Paper Prize in 1989.

6. I joined Georgia Tech in the Fall of 1989 and am now a Professor in Electrical and Computer Engineering. I have been active in the areas of wireless communications, sensors, internet of things (IoT), digital signal processing, integrated circuit design (analog & digital), software engineering, system-level design methodologies and tools, and software systems. I have been the principal investigator (“PI”) or co-PI in several active research programs in these areas,

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