

UNITED STATES PATENT AND TRADEMARK OFFICE

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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American Honda Motor Company, Inc.  
Petitioner

v.

Intellectual Ventures II LLC  
Patent Owner

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**Case IPR2018 – 00619**

**U.S. Patent No. 7,067,952**

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**DECLARATION OF DR. JAMES KIRTLEY JR IN SUPPORT OF  
PETITION FOR *INTER PARTES* REVIEW OF  
U.S. PATENT NO. 7,067,952**

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I, Dr. James Kirtley, Jr., declare as follows:

**I. Introduction**

1. I am making this declaration in connection with the petition for *inter partes* review of U.S. Patent No. 7,067,952 (“the ’952 patent”).

2. I am being compensated for my work in these matters at a rate of \$400 per hour for my professional consulting services. I am also reimbursed for my reasonable expenses incurred in connection with my work in this proceeding. My compensation is not in any way contingent upon the outcome of this *Inter Partes* Review. I have no interest in the outcome of this proceeding or any related litigation.

**II. Qualifications**

3. My qualifications for presenting the opinions in this Declaration are set forth below and in my curriculum vitae.

4. I earned Bachelor’s and Master’s degrees in electrical engineering from the Massachusetts Institute of Technology (MIT) in September, 1968. I earned a Ph.D. in Electrical engineering from MIT in September, 1971.

5. In my research work in pursuit of the Ph.D. and afterwards, I constructed a large electric machine (a generator) in which the armature winding was fully encapsulated in resin material. That armature winding was cooled by a

fluid (transformer oil) flowing through channels formed by the copper windings and encapsulating resin.

6. I have been a professor of electrical engineering at MIT since 1971. While serving on the faculty at MIT for nearly 45 years, I taught courses in electric machinery; electric power systems; the design of electric motors, generators, and drives; and control systems and digital electronic systems.

7. One of the classes I have been teaching at MIT is design of motors, generators, and drive systems. It teaches the construction of aggressive, high-performance motor drives. From this class, professionals who design systems that employ electric machinery for generation or as motors in any of these industries can gain a deeper understanding of how electric machines operate. This class includes hands-on experiments that provide opportunities to compare analytical results with real motor/drive systems in the laboratory.

8. At MIT, I have supervised fifteen PhD theses, 88 Master's degree theses and sixteen Bachelor's degree theses, covering a wide range of topics in Electrical Engineering. In addition to thesis supervision, I have served on a number of PhD thesis committees, at MIT and at other universities. My resume does not detail the topics for these theses, but many of them deal with design issues. Specifically, I have supervised, collaborated with, and advised both Master's and

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