

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

American Honda Motor Company, Inc.
Petitioner

v.

Intellectual Ventures II LLC
Patent Owner

Case IPR2018 – 00619

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

**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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