UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NIDEC CORPORATION AND
AMERICAN HONDA MOTOR CO., INC.

Petitioners

v.

INTELLECTUAL VENTURES II LLC

Patent Owner

Case No. IPR2018-00597

Patent No. 7,067,952

DECLARATION OF DR. GERALD JOHN MICKLOW, Ph.D. IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 7,067,952

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I, Dr. Gerald John Micklow, declare as follows:

I. Introduction

1. I have been asked to submit this declaration on behalf of Nidec Corporation and American Honda Motor Co., Inc. in connection with a petition for *inter partes* review of U.S. Patent No. 7,067,952 ("the '952 patent"),[1] which I understand is being submitted to the Patent Trial and Appeal Board of the United States Patent and Trademark Office.

2. Specifically, I have been retained as a technical expert to study and provide my opinions on the technology claimed in claims 10-12 of the '952 patent ("the Challenged Claims"), including whether a POSITA would have found the claimed technology to be obvious. For purposes of this declaration, I was not asked to provide any opinions that are not expressed herein.

II. Summary of Opinions

3. As set forth in this Declaration, it is my opinion that a person of ordinary skill in the art ("POSITA") would have found it obvious to combine the teachings of JP7-245895 (Ex. 1006, "Nakahara") with JP11-89128 (Ex. 1007, "Ishihara") and WO 01/45233 (Ex. 1008, "Lieu") to arrive at the invention recited in claims 10-12 of the '952 patent.

[1] I understand that the '952 patent is Exhibit 1001 to the petition for *Inter Partes* Review of the '952 patent.

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4. It is also my opinion that a POSITA would have found those claims obvious over the combined teachings of JP1997-308163 (Ex. 1009, "Iikuma") with Nakahara and Lieu.

5. It is also my opinion that a POSITA would have found those claims obvious over the combined teachings of U.S. Patent No. 7,471,025 (Ex. 1010, "Sheeran") in view of Nakahara and Lieu.

III. Background and Qualifications

A. Background

6. I am currently employed as a full Professor of Mechanical and Aerospace Engineering at Florida Institute of Technology ("FIT") in Melbourne, FL. I have been a Licensed Professional Engineer in the State of North Carolina since December of 2004 and active in the mechanical engineering field for decades, including through my membership in the American Society of Mechanical Engineers (ASME) since 1988. My mechanical engineering experience was developed through a variety of academic and industrial projects directed to automotive components, including electric motors. I have been involved in the design and evaluation of advanced power producing systems, such as electric motors, for over 40 years. I have worked within the areas of automotive engineering, mechanics of materials, electric motor design, fluid dynamics, and

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