Filed on behalf of: Mercedes-Benz USA, LLC

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### UNITED STATES PATENT AND TRADEMARK OFFICE

### BEFORE THE PATENT TRIAL AND APPEAL BOARD

Mercedes-Benz USA, LLC, Petitioner

Patent No. 7,384,177

### DECLARATION OF DR. ZANE COLEMAN

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### I, Dr Zane Coleman, declare as follows:

### I. INTRODUCTION

1. I have been retained by Mercedes-Benz USA, LLC ("Petitioner") as an independent expert consultant in this proceeding before the United States Patent and Trademark Office. Although I am being compensated at my usual rate of \$400.00 per hour for the time I spend on this matter, no part of my compensation depends on the outcome of this proceeding, and I have no other interest in this proceeding.

2. I understand that this proceeding involves U.S. Patent No. 7,384,177 ("the '177 patent") (attached as Ex. 1001 to the petition). I understand that the '177 patent was filed on October 6, 2005. I also understand that the '177 patent is part of a large family of patents and one of several continuations, continuation-in-part, and/or divisions stemming from U.S. Patent No. 5,613,751, which was filed on June 27, 1995.

3. I have been asked to render certain opinion regarding the '177 patent and whether certain references disclose or suggest certain features in the claims of the '177 patent.

### II. GUIDING LEGAL PRINCIPLES

### A. Person of Ordinary Skill in the Art

4. I am informed that a "person of ordinary skill in the art" ("POSITA") refers to a hypothetical person who is presumed to have known the relevant art at the time of the invention. Many factors may determine the level of ordinary skill in the

art, including: (1) the type of problems encountered in the art, (2) prior art solutions to those problems, (3) the rapidity with which innovations are made, (4) the sophistication of the technology, and (5) the educational level of active workers in the field. I understand that a POSITA is a person of ordinary creativity, not an automaton, meaning that a POSITA may employ inferences and creative steps in their work. I am informed that the relevant timeframe is prior to June 27, 1995, which is the earliest priority filing date for the '177 patent, and the opinions below pertain to that timeframe.

5. A POSITA in the art for this patent would have at least an undergraduate degree in a science or engineering discipline, and a few years of work experience in a field related to optical technology, a graduate degree in a field related to optical technology, or a few years of continuing education toward a graduate degree in a field related to optical technology. Accordingly, I have used this definition in my analysis below.

#### **B.** Anticipation Invalidity

6. I understand that a patent claim is "anticipated," and, therefore, invalid, if a single prior art reference discloses (expressly or inherently) each and every element of the claimed invention in a manner sufficient to enable a POSITA to practice the invention, thus placing the invention in possession of the public.

7. I also understand that under certain circumstances, multiple references may be used to prove anticipation, specifically to: (a) prove that the primary reference

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