IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLIED CONCEPTS INC. **Petitioner,** **v.** **KUSTOM SIGNALS INC.,** **Patent Owner**	**U.S. Patent No. 11,703,602**

Declaration of Kent Hayes

1. My name is Kent Hayes. I am over the age of 18 and I am competent to make this declaration.

2. I have worked at Kustom Signals, Inc. ("Kustom") for approximately 18 years. Kustom is in the business of designing and marketing public safety and traffic management solutions. As part of its mission, Kustom designs, develops, and markets speed enforcement tools for law enforcement departments across the United States and elsewhere. These offerings include radar- and laser-based speed measuring devices—colloquially known as speed guns. Speed guns are used by law enforcement to measure the speed of vehicles to issue citations to speeders.

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3. I have a bachelor's degree in electrical engineering that I earned in 1996. I am currently the Senior Product Manager at Kustom. In that role I am responsible for speed product lines and work to develop, introduce, and market new products capable of measuring speed. I frequently communicate among sales, engineering, and customers of Kustom's speed lines of products. Customers of Kustom's speed lines of products frequently are law enforcement agencies and police departments. From my experience I am familiar with specifications and features required by law enforcement agencies for their radar-based speed enforcement efforts.

4. Attached as Exhibit A to this declaration is a true and accurate copy of the U.S. Department of Transportation, National Highway Traffic Safety Administration's publication entitled Speed-Measuring Device Specifications: Down-The-Road Radar Module dated April 2016 (the "2016 DTR Standard"). The 2016 DTR Standard specifies "the minimum performance requirements and test procedures for radar speed-measuring devices used by law enforcement agencies for enforcing vehicle speed regulations." (Exhibit A, § 1.2). The 2016 DTR Standard identifies the minimum acceptable performance parameters that must be met or exceeded by a down-the-road speed gun to be accepted for use by law enforcement agencies. Indeed, the Foreword to the 2016 DTR Standard states:

> "By defining minimum performance requirements and verification procedures, this technical document establishes a baseline for acceptable traffic radar speed-measuring device performance. Citizens, courts, and law enforcement

> officers should be assured that those radar speed-measuring device models, determined by testing to comply with these specifications, will provide the high-quality service they require.
>
> Radar equipment buyers are encouraged to use these performance specifications in the development of purchasing criteria. It is recommended that these specifications be incorporated into procurement documents requiring that devices offered for purchase, at a minimum, meet these specifications.
>
> Manufacturers are similarly encouraged to produce radar speed-measuring devices that meet or exceed these performance specifications."

5. Section 2.15 of the 2016 DTR Standard specifies the maximum error of speed calculated when a radar is in stationary mode is +1 mph or -2 mph depending on whether the vehicle whose speed is being measured is moving toward or away from the radar device. (2016 DTR Standard § 2.15.1).

6. Section 2.15 of the 2016 DTR Standard specifies the maximum error of speed calculated when a radar is in moving mode is +/- 2 mph. (2016 DTR Standard § 2.15.2).

7. Attached as Exhibit B to this declaration is a true and accurate copy of the U.S. Department of Transportation, National Highway Traffic Safety Administration's publication entitled Speed-Measuring Device Performance Specifications: Down-The-Road Radar Module dated June 2004 (the "2004 DTR Standard"). The 2004 DTR Standard is an earlier superseded version of the 2016

DTR Standard. Like the 2016 DTR Standard, the 2004 DTR Standard specifies the maximum error of speed calculated when a radar is in stationary mode or moving mode. The maximum error allowed by the 2004 DTR Standard is the same as the 2016 DTR Standard. (Compare Exhibit A § 2.15 with Exhibit B § 2.15).

8. These standards for maximum error in speed determination by a down-the-road radar device ensure that if a citation is issued by law enforcement, it is legally and technically defensible in court proceedings.

9. I am personally familiar with the foregoing standards, and they are generally accepted in the United States as the standards that must be met to have a properly functioning, and therefore, saleable, radar-based speed system.

10.I hereby declare that all statements made of my own knowledge are true and that all statements made on information and belief are believed to be true. I further declare that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

2/4/2025
Date

Kent Hayes