

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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VOLKSWAGEN GROUP OF AMERICA, INC.,

Petitioner,

v.

SIGNAL IP, INC.,

Patent Owner.

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Case IPR2015-01116

Patent 6,012,007

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PATENT OWNER'S PRELIMINARY RESPONSE

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## TABLE OF AUTHORITIES

### CASES

*CFMT, Inc. v. Yieldup Int'l. Corp.*, 349 F.3d 1333 (Fed. Cir. 2003)..... 10, 17

## **I. INTRODUCTION**

Petitioner challenges the patentability of claims 1, 17, and 19-21 of U.S. Patent 6,012,007 (“the ’007 patent”). The Patent Trial and Appeal Board should not institute *inter partes* review of the ’007 patent because Petitioner has not met its burden to show a reasonable likelihood that any challenged claim of the ’007 patent is unpatentable.

## **II. SUMMARY OF THE ’007 PATENT AND PROSECUTION HISTORY**

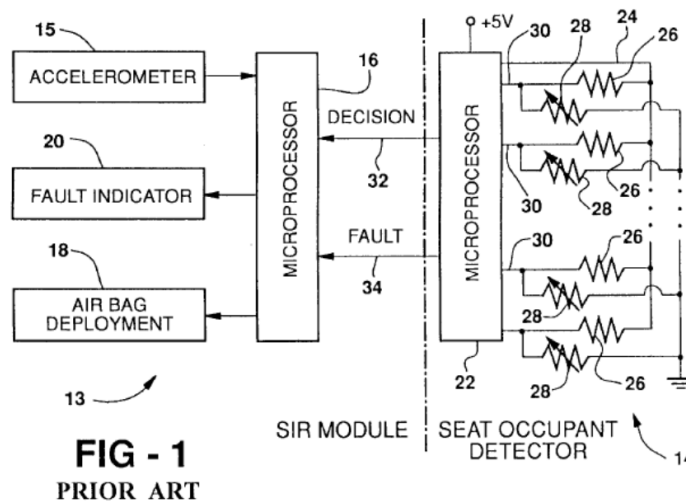
### **A. Overview**

The ’007 patent relates to “discriminat[ing] in a SIR [supplemental inflatable restraint] system between large and small seat occupants for a determination of whether an airbag deployment should be permitted” and “maintain[ing] reliable operation in spite of dynamic variations in sensed pressures.” Ex. 1001 at 1:52-57. The ’007 patent is a continuation-in-part of U.S. Pat. No. 5,732,375 (“Cashler”, Ex. 1003). *Id.* at 1:4-7. The background section of the ’007 patent notes that Cashler and U.S. Pat. No. 5,474,327 (“Schousek”, Ex. 1004), “form a foundation for the present invention and are incorporated herein by reference,” but “[i]t is desirable, however to provide a system which is particularly suited for discriminating between heavy and light occupants and for robust operation under dynamic

conditions such as occupant shifting or bouncing due to rough roads.” *Id.* at 1:43-49.

The '007 patent describes systems and approaches for accomplishing such a goal—e.g., a method of controlling airbag deployment using pressure sensors to allow or inhibit airbag deployment based on passenger weight. *Id.* at Abstract. According to the specification, the system aims to “inhibit air bag deployment when a seat is empty or occupied by a small child, while allowing deployment when the occupant is large.” *Id.* at 2:55-58.

Figure 1 of the '007 patent (below) shows a typical airbag/SIR system that incorporates a seat occupant detector:



*Id.* at 1:15-16; 2:18-19. In the SIR module, an accelerometer (15) senses an impending crash and a microprocessor (16) receives signals from the accelerometer and determines whether to deploy an air bag. *Id.* at 2:46-49. In

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