

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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TOYOTA MOTOR CORPORATION  
Petitioner

Patent No. 5,845,000  
Issue Date: December 1, 1998

Title: OPTICAL IDENTIFICATION AND MONITORING SYSTEM USING  
PATTERN RECOGNITION FOR USE WITH VEHICLES

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PETITION FOR INTER PARTES REVIEW  
OF U.S. PATENT NO. 5,845,000  
PURSUANT TO 35 U.S.C. § 312 and 37 C.F.R. § 42.104

Case No. IPR2015-00262

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## LISTING OF EXHIBITS

Exhibit 1101	U.S. Patent No. 5,845,000 to Breed et al.
Exhibit 1102	U.S. Patent No. 6,553,130 to Lemelson et al.
Exhibit 1103	File History for U.S. Patent Application No. 08/105,304
Exhibit 1104	U.S. Patent No. 5,541,590 to Nishio
Exhibit 1105	File History for US Patent Application No. 08/097,178
Exhibit 1106	U.S. Patent No. 5,214,408 to Asayama
Exhibit 1107	Japanese Unexamined Patent Application Publication JP-S62-131837 to Yanagawa
Exhibit 1108	English Translation of Japanese Unexamined Patent Application Publication JP-S62-131837 to Yanagawa
Exhibit 1109	Declaration of Nikolaos Papanikolopoulos, Ph. D.

Pursuant to 35 U.S.C. §§ 311-319 and 37 C.F.R. Part 42, real party in interest Toyota Motor Corporation (“Toyota” or “Petitioner”) respectfully requests *inter partes* review of claims 10, 11, 16, 17, 19, 20, and 23 of U.S. Patent No. 5,845,000 (“the ’000 patent”), filed June 7, 1995 and issued December 1, 1998 to David S. BREED. According to U.S. Patent and Trademark Office records, the ’000 patent is currently assigned to American Vehicular Sciences LLC (“AVS” or the “Patent Owner”).

This Petition for *Inter Partes* Review is being filed along with a motion requesting joinder with the pending *inter partes* review initiated by Mercedes-Benz USA LLC (“Mercedes”) concerning the ’000 patent: *Mercedes-Benz USA LLC, v. American Vehicular Sciences, LLC*, Case No. IPR2014-00647 (“Mercedes 647 IPR”). This Petition proposes a subset of the same grounds on which the Board instituted *inter partes* review of claims 10, 11, 15, 16, 17, 19, 20, and 23 in the Mercedes 647 IPR.<sup>1</sup> (IPR2014-00647 Institution Decision, at 29.)

**I. MANDATORY NOTICES (37 C.F.R. § 42.8)**

**A. Real Party-in-Interest (37 C.F.R. § 42.8(b)(1))**

Petitioner, Toyota, is the real party-in-interest.

**B. Related Matters (37 C.F.R. § 42.8(b)(2))**

The ’000 patent is currently the subject of the following litigation: *American Vehicular Sciences LLC v. Toyota Motor Corp. et al.*, No. 2:14-cv-13017 (E.D. Mich.), which was transferred from the Eastern District of Texas, No. 6:12-CV-406 (E.D. Tex.)

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<sup>1</sup> Toyota does not seek *inter partes* review of claim 15.

(collectively, the “AVS 406 Litigation”); Petitioner is a named defendant in the AVS 406 Litigation. The earliest that Petitioner or any of its subsidiaries was served with the complaint was July 26, 2012. Petitioner previously filed a petition for *inter partes* review in IPR 2013-00424 on July 12, 2013 asserting invalidity of claims 10, 11, 16, 17, 19, 20, and 23 of the ’000 patent. On January 14, 2014 (Paper 16), the Board instituted the proceeding with respect to all challenged claims (the “Toyota IPR”). That proceeding is currently pending.

Petitioner has also filed petitions in IPR2013-00419, -00420, -00421, -00422 and -00423, which addressed patents that were asserted against Toyota in a related case: *American Vehicular Sciences LLC v. Toyota Motor Corp., et al.*, 12-CV-410 (E.D. Tex.) (“AVS 410 Litigation”). IPR2013-00420, -00422, and -00423 have settled and been terminated, and the Board has issued a final written decision in IPR2013-00421. IPR2013-00419, which addresses U.S. Patent No. 6,772,057 (“the ’057 patent”), is currently pending. Petitioner is concurrently filing a motion for joinder in IPR2014-00646, which also addresses the ’057 patent. On November 13, 2014, Petitioner filed a request for ex parte reexamination of claims 10, 11, 16, 17, 19, 20 and 23 of the ’000 patent. Petitioner is not aware of any other pending judicial or administrative matter that would affect, or be affected by, a decision in this proceeding.

**C. Counsel & Service Information (37 C.F.R. §§ 42.8(b)(3)-(4))**

Lead Counsel: Matt Berkowitz (Reg. No. 57,215)

Back-up Counsel: Thomas R. Makin (*pro hac vice* to be requested upon authorization)

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