

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TOYOTA MOTOR CORPORATION,

Petitioner

v.

AMERICAN VEHICULAR SCIENCES,

Patent Owner

Patent No. 5,845,000

Issue Date: December 1, 1998

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

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

Case No. IPR2013-00424

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I. INTRODUCTION

Petitioner Toyota Motor Corporation (“TMC”) submits this Reply under 37 C.F.R. § 42.23-24 to Patent Owner’s Response (Paper 29) in IPR2013-00424 concerning U.S. Patent No. 5,845,000 (“the ’000 patent”). This filing is timely. *See* Papers 17 (Scheduling Order) and 26 (Stipulation to Adjust Schedule).

AVS argues that U.S. Patent No. 6,553,130 (Ex. 1002, “Lemelson”) does not disclose either a pattern recognition algorithm “generated from data of possible exterior objects and patterns of received electromagnetic illumination from the possible exterior objects,” as required by claims 10 and 23, or the materially indistinct language in claim 16 (hereinafter referred to individually or collectively as the “generated from” language). AVS asserts that this language requires training with data and waves from actual objects (hereinafter, “real data”), as opposed to simulated data and waves (hereinafter, “simulated data”) or “data and waves not representing exterior objects to be detected” (hereinafter, “partial data”). AVS also asserts that Lemelson’s disclosure of training is too vague to discern which of the three categories of data (real, simulated, or partial) is taught. AVS asserts that Petitioner and the Board must, therefore, have implicitly been relying on the doctrine of inherency. AVS is wrong.

First, the “generated from” language is not a limitation in claims 10 or 16, because it is a process step within apparatus claims. *See SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1317, 1319 (Fed. Cir. 2006) (“one cannot avoid anticipation by an earlier product disclosure by claiming the same product more

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