

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

One or more of Mr. Ji-Soo Lee, Ms. Jin-Won Oh, and Mr. Heung-Soo Lee,
Patent Owner

PETITION FOR *INTER PARTES* REVIEW

OF

U.S. PATENT NO. 6,233,518

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	MANDATORY NOTICES	2
	A. Real Party-in-Interest.....	2
	B. Related Matters.....	2
	C. Lead and Back-up Counsel and Service Information	3
III.	GROUND FOR STANDING.....	3
IV.	RELIEF REQUESTED	3
V.	THE REASONS FOR THE REQUESTED RELIEF	4
	A. The '518 Patent.....	4
	1. Overview	4
	2. Prosecution History.....	7
	B. Identification of Challenges	8
	1. Challenged Claims	8
	2. Statutory Ground for Challenges	8
	3. Claim Construction	10
	i. “image vector entity”	10
	ii. “attribute-designating statement”	12
	iii. “shape-designating statement”	13
	iv. “position-designating statement”	14
	4. Identification of How the Claims Are Unpatentable	14

i. Challenge: Claims 45 and 46 are obvious under 35 U.S.C §
103 over Fujitsu and Ichiura14

VI. THIS PETITION PRESENTS DIFFERENT PRIOR ART AND
ARGUMENTS THAN THE PREVIOUSLY-FILED PETITION
CHALLENGING THE '518 PATENT41

VII. Conclusion43

I. INTRODUCTION

U.S. Patent No. 6,233,518 (“the ’518 Patent,” Ex. 1001) is generally directed to receiving and displaying image-based traffic information to a user. The ’518 Patent itself admits that it was already known to provide image-based traffic information. Ex. 1001, 1:22-23. The alleged novelty recited in claims 45 and 46—transmitting traffic information as “image vector entities” consisting of attribute, shape, and position data—however, was well known to persons of ordinary skill in the art before the earliest alleged priority date of the ’518 patent.

For example, five years before the alleged priority date drivers in Japan were already receiving vector-based traffic information from the Vehicle Information and Communication System (VICS). The 1995 article “Onboard System Devices for a Vehicle Information and Communication System” (Ex. 1005, “Fujitsu”) describes a VICS-compatible Fujitsu system that receives vector-based, graphical traffic information consisting of attribute data, shape data, and position data. Fujitsu teaches that its system superimposes the vector-based traffic information over unchanging road map data and displays the resulting image to a driver.

Another reference, U.S. Patent No. 5,734,780 (Ex. 1006, “Ichiura”), describes the data format of the FM broadcast signal that carries the traffic information to Fujitsu’s system. Ichiura teaches that the FM broadcast signal transmits the traffic information within a hierarchal data structure that corresponds

to the data structure recited in claims 45 and 46 of the '518 Patent.

The evidence in this petition demonstrates that claims 45 and 46 of the '518 Patent are unpatentable under pre-AIA 35 U.S.C. § 103. Accordingly, Apple Inc. (“Petitioner”) respectfully requests that claims 45 and 46 of the '518 Patent be held invalid and cancelled.

II. MANDATORY NOTICES

A. Real Party-in-Interest

The real party-in-interest is Apple Inc.

B. Related Matters

As of the filing date of this petition, the '518 Patent has been asserted in:

- *Porto Technology Co. Ltd., et. al. v. Cellco Partnership d/b/a Verizon Wireless*, 3:12-cv-00678 (E.D. Va. 2012), terminated;
- *Porto Technology Co. Ltd., et. al. v. Cellco Partnership d/b/a Verizon Wireless*, 3:13-cv-00265 (E.D. Va. 2013), terminated; and
- *Porto Technology Co. Ltd., et. al. v. Apple., et al.*, consolidated case no. 2:15-cv-457-JRG-RSP (E.D. Tex. 2015), transferred to N.D. Cal.; and
- *Porto Technology Co. Ltd., et. al. v. Apple.*, case no. 5:16-cv-01515-PSG (N.D. Cal. 2016), ongoing.

Additionally, the '518 Patent has been challenged in the *inter partes* review proceeding IPR2016-00045 filed by Google Inc., Samsung Electronics America, Inc., LG Electronics Mobilecomm U.S.A., Inc., HTC America, Inc., and Motorola

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