### UNITED STATES PATENT AND TRADEMARK OFFICE

### BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC., Petitioner,

v.

Saint Lawrence Communications LLC, Patent Owner

### PETITION FOR INTER PARTES REVIEW

OF

U.S. PATENT NO. 6,807,524

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### I. INTRODUCTION

U.S. Patent No. 6,807,524 ("the '524 Patent," Ex-1001) describes perceptually weighting speech signals during encoding. Specifically, the claims of the '524 Patent are based upon the well-known techniques of: (i) code excited linear prediction, and (ii) signal frequency shaping via pre-emphasis and perceptual weighting. Notably, it was known before the '524 Patent to apply CELP and frequency shaping techniques such as pre-emphasis and perceptual weighting together to speech signals. Further, it was known to separately control perceptualrelated characteristics such as tilt and formant weighting by separate control parameters and terms in the transfer equations of filters, as well as to select various parameter values or transfer function equations, to optimize computational efficiency. While this field uses technical terms and math equations that create an appearance of complexity, the '524 Patent is directed to a straight-forward and well-known solution to pre-emphasizing and perceptually weighting an encoded speech signal.

This petition demonstrates that claims 1-21 and 29-42 of the '524 Patent are unpatentable under pre-AIA 35 U.S.C. § 103. Accordingly, Apple Inc. ("Petitioner") respectfully requests that claims 1-21 and 29-42 of the '524 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 '524 Patent has been asserted in:

- *HTC Corp., et al. v. Acacia Research Corp.*, 2:15-cv-01510 (E.D. Tex. 2015), terminated;
- Saint Lawrence Communications LLC v. LG Electronics, Inc., et al., 2:14cv-01055 (E.D. Tex. 2014), terminated;
- Saint Lawrence Communications LLC v. Sony Mobile Communications (USA) Inc., et al., 2:15-cv-00350 (E.D. Tex. 2015), terminated;
- Saint Lawrence Communications LLC v. Samsung Electronics Co. Ltd., et al., 2:14-cv-00293 (E.D. Tex. 2014), terminated;
- Saint Lawrence Communications LLC v. HTC Corp., et al., 2:15-cv-00919 (E.D. Tex. 2015), terminated;
- *HTC Corp., et al. v. Acacia Research Corp.*, 8:15-cv-00378 (C.D. Cal. 2015), terminated;
- Saint Lawrence Communications LLC v. Motorola Mobility LLC, 2:15-cv-00351 (E.D. Tex. 2015), ongoing;
- Saint Lawrence Communications LLC v. ZTE Corp., et al., 2:16-cv-00349 (E.D. Tex. 2015), ongoing; and

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