IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent of Michel, et al.	§	Petition for Inter Partes Review	
	§		
U.S. Patent No. 8,457,676	§	Attorney Docket No.: 52959.20	
	§	Customer No.: 27683	
Issued: June 4, 2013	§		
	§	Real Party in Interest:	
Title: Power Headroom Reporting	§	Apple Inc.	
Method	§		
	§		

Supplemental Declaration of Zygmunt J. Haas, Ph.D. Under 37 C.F.R. § 1.68



Table of Contents

I.	INTRODUCTION
П.	CLAIMS 3 AND 21 ARE OBVIOUS
Ш	CONCLUSION

I. INTRODUCTION

- 1. My qualifications and experience, the level of ordinary skill in the art, and legal standards, are detailed in ¶¶ 7-21 in my previous declaration submitted as exhibit APPL-1006 ("Haas Decl.") in this IPR, i.e., IPR2016-01493.
- 2. In the preparation of this declaration, I have studied the Declaration of Dr. Jay P. Kesan, Ex. 2007 ("Kesan Decl."), and the exhibits cited in Dr. Kesan's declaration where necessary, including the Bark reference (APPL-1005) and including Dr. Kesan's newly submitted Exs. 2001-2006.
 - 3. In forming the opinions expressed below, I have considered:
 - (1) The documents listed above, and
 - (2) My own knowledge and experience based upon my work in the field of wireless communications.
- 4. I have been asked by Petitioner to respond to some particular points raised by Patent Owner, which are addressed in my analysis below.

II. CLAIMS 3 AND 21 ARE OBVIOUS

- 5. Claim 3 of the '676 patent includes an "absolute difference" and is recited below for reference.
 - 3. The method of claim 1, wherein the set of at least one triggering criterion comprises a triggering criterion such that an absolute difference between current and most recent path loss measurements has reached a threshold of difference.



APPL-1001, 6:44-47. Claim 21 is similar. Further, I previously construed "absolute difference" to be "absolute value of a difference," APPL-1006, ¶ 46, and my understanding is that this is uncontested.

6. As shown below, I previously explained that Bark teaches "a threshold value for the measured change" of a parameter is provided to the mobile station, and the "measured parameter value can be path loss":

Third, Bark teaches that one of its trigger events is defined by how quickly a measured parameter value changes (i.e., how large is the absolute difference between two consecutive measurements of the parameter value—as indicated by the slope of a plot of the measured parameter value). A threshold value for the measured parameter change is provided to the mobile station:

"Another example event is now described in conjunction with FIG. 12. Here the event is defined based on how quickly the measured parameter value for a channel changes. ... The threshold value for the parameter change or slope is provided to the mobile station in the measurement control message." Id., 11:11-20.

APPL-1006, p. 56.



Fourth, Bark teaches that its measured parameter value can be path loss:

"Qualitative and/or quantitative parameters may be specified and measured. Non-limiting example parameters include measured signal strength, signal power, bit error rate, signal-tointerference ratio, path loss, traffic volume, timing/synchronization offsets, etc." APPL-1005, 7:59-63.

7. In reference to Figure 12 of Bark, I previously explained that "it would have been well known to a POSITA that the way signals were typically measured is in discrete time, not continuous time." APPL-1006, p. 55. I also explained that samples of path loss would have been uniformly spaced (corresponding to periodic sampling). *Id.* at 56. Thus, POSITA would have understood that parameters, such as path loss, would have been periodically measured, resulting in uniformly spaced samples. I previously cropped and annotated Fig. 12 from Bark with "x" marks used to represent such "uniformly spaced samples." APPL-1006, pp. 56-57. Below is one such an example.

DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

