

Apple Inc. (Petitioner)  
v.  
Qualcomm Incorporated (Patent Owner)  
Petitioner Demonstratives

Case Nos. IPR2018-01281 & IPR2018-01282

U.S. Patent No. 8,768,865

Before Hon. Daniel N. Fishman, Michelle N. Wormmeester, and

Amanda F. Wieker

Administrative Patent Judges

# Table of Contents

---

## **1: Wang-based grounds prevail under correct claim construction**

- 1A. Wang discloses using Table 1 to identify states
- 1B. Wang discloses using both Table 1 and XML file to identify states

## **2. Petitioner correctly construes “fixing” limitations**

- 2A. Fixing is construed by Petitioner, not removed
- 2B. Petitioner’s construction of fixing is distinct of identifying
- 2C. PO’s construction imports extraneous limitations

## **3. Wang-based grounds prevail even under PO’s narrow construction**

- 3A. Wang discloses additional mappings satisfying the claims
- 3B. Petitioner’s reliance on additional mappings are timely and complete

## **4. Louch-based grounds prevail even under PO’s narrow construction**

- 4A. Louch’s 1<sup>st</sup> mapping under the learning mode theory satisfies the claims
- 4B. A POSITA would appreciate Louch’s “duration” pattern includes a “first pattern”
- 4C. Louch discloses setting the scope of analysis for confirming a “duration”

## **5. Dependent claims are addressed by both Wang and Louch**

- 5A. [Claims 4&23] Wang discloses alleged causation
- 5B. [Claims 4&23] Louch discloses recognizing 2<sup>nd</sup> pattern in a reduced set of parameters
- 5C. [Claims 5,24&48] Louch discloses taking “snapshots” in response to detecting condition

# Overview of the '865 Patent

FISH

# '865 Patent Overview

- U.S. Patent No. 8,768,865 (the "865 Patent") claims an earliest priority date of 01/19/2011.
- The '865 Patent includes 53 claims, of which claims 1, 21, 31 and 46 are independent.
- The '865 Patent's claims are directed generally toward machine learning of situations via pattern matching or recognition for use in or with mobile communication devices.
- IPR2018-01281 challenges the '865 Patent's claims 1-6, 8-25, 27-30, 46-49, 51-53.
- IPR2018-01282 challenges the '865 Patent's claims 1-10, 12-30, 46-53.

APPLE-1001, 1:21-23; 01281Pet., 4; 01282Pet., 4.



US008768865B2

**United States Patent**  
(12) Narayanan et al.

(10) Patent No.: **US 8,768,865 B2**  
(45) Date of Patent: **Jul. 1, 2014**

2009/0033284 A1 12/29/09 Nair et al.  
2009/0026660 A1 12/29/09 Shkolnikov et al.  
2010/0001949 A1 12/29/10 Shkolnikov et al.  
2010/0001950 A1 12/29/10 Shkolnikov et al.  
2010/0212533 A1 8/20/10 Hwang et al.  
2010/0299757 A1 11/29/10 Lee  
2011/0039522 A1 2/20/11 Westerman et al.  
2011/0066383 A1\* 3/20/11 Jangle et al. 702/19  
2011/0708603 A1 3/20/11 Ma et al.

FOREIGN PATENT DOCUMENTS

GB 2434684 A 7/2007  
WO 2008054153 A1 5/2008

OTHER PUBLICATIONS

Callender, et al., "Recognition and Generation of Motion Primitives for Human-Computer Interaction," Proceedings of the 2009 IEEE International Conference on Multimedia and Expo, 2009, pp. 1-6.  
Exhibition Center, Singapore, Jul. 14-17, 2009, pp. 917-922.  
Ghasemzadeh, et al., "Collaborative Signal Processing for Action Recognition in Video Surveillance," Proceedings of the 2009 IEEE International Conference on Acoustics, Speech and Signal Processing, 2009, pp. 424-427.  
Stockholm, Sweden, pp. 244-255.  
Hoyak, et al., "Analyzing Features for Activity Recognition," Joint International Conference on Artificial Intelligence and Cognitive Science, 2009, pp. 1-3.  
Mishra et al., "Proactive and Adaptive Energy Profile Control for Mobile Phones", precom, pp. 1-3, 2009 IEEE International Conference on Pervasive Computing and Communications, 2009.

(Continued)

Primary Examiner—Alan Chen  
(74) Attorney, Agent, or Firm—Kilpatrick, Townsend & Stockton LLP

(57) **ABSTRACT**  
Example methods, apparatuses, or articles of manufacture are disclosed herein that may be utilized, in whole or in part, to facilitate machine learning of situations via pattern matching or recognition.

53 Claims, 5 Drawing Sheets

(12) **United States Patent**  
Narayanan et al.

(10) Patent No.: **US 8,768,865 B2**  
(45) Date of Patent: **Jul. 1, 2014**

(54) **LEARNING SITUATIONS VIA PATTERN MATCHING**

(75) **Inventors:** Vidya Narayanan, San Diego, CA (US); Sanjiv Nanda, Ramona, CA (US); Fuming Shih, Cambridge, MA (US)

(73) **Assignee:** Qualcomm Incorporated, San Diego, CA (US)

(\* ) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 250 days.

(21) **App. No.:** 13/269,516

(22) **Filed:** Oct. 7, 2011

(65) **Prior Publication Data**  
US 2012/0265717 A1 Oct. 18, 2012

(60) **Related U.S. Application Data**  
Provisional application No. 61/434,400, filed on Jan. 19, 2011.

(51) **Int. Cl.**  
*G06F 1/20* (2006.01)  
*G06F 15/00* (2006.01)

(52) **U.S. Cl.**  
702/127

(58) **Field of Classification Search**  
USPC: 706/12; 702/127

See application file for complete search history.

**References Cited**  
U.S. PATENT DOCUMENTS  
7,570,043 B2 8/2009 Swann et al.  
2007/060547 A1 2/2007 Fecher

APPLE-1001 ('865 Patent).

**DOCKET ALARM**

Find authenticated court documents without watermarks at [docketalarm.com](http://docketalarm.com).

# '865 Patent: Claim 1

---

## '865 Patent

1. A method comprising:
  - monitoring, at a mobile device, input signals from a plurality of information sources associated with said mobile device;
  - detecting at least one condition based, at least in part, on at least one of said monitored input signals;
  - identifying a first pattern based, at least in part, on said at least one detected condition; and
  - fixing a subset of varying parameters associated with said first pattern by associating at least one parameter of said subset of varying parameters with said first pattern to represent said at least one detected condition, said varying parameters derived, at least in part, from said monitored input signals.

# 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.