

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Chang Kwon, et al.
U.S. Patent No.: 8,063,674 Attorney Docket No.: 39521-0053IP2
Issue Date: November 22, 2011
Appl. Serial No.: 12/365,559
Filing Date: February 4, 2009
Title: MULTIPLE SUPPLY-VOLTAGE POWER-UP/DOWN
DETECTORS

Mail Stop Patent Board

Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

**PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT
NO. 8,063,674 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42**

TABLE OF CONTENTS

I.	37 C.F.R. § 42.104 REQUIREMENTS	1
	A. Standing (42.104(a))	1
	B. Grounds (42.104(b))	1
II.	SUMMARY OF THE '674 PATENT	2
	A. Brief Description.....	2
	B. Claim Construction	4
	1. “signal processor” (8 and 17).....	5
	2. Means-Plus-Function Terms (17-20)	5
III.	MANNER OF APPLYING CITED PRIOR ART	9
	A. [GROUND 1] – Steinacker in view of Doyle and Park Render Claims 8, 9, 12, 13, and 16-22 Obvious.....	10
	1. Overview of Steinacker	10
	2. Overview of Doyle	12
	3. Overview of Park.....	14
	4. The Combination of Steinacker, Doyle, and Park	15
	5. Motivation to Combine Steinacker, Doyle, and Park	20
	6. Claims 8 and 17	21
	7. Claims 9 and 13	36
	8. Claim 12	38
	9. Claims 16 and 22.....	40
	10. Claim 18	41
	11. Claims 19 and 20.....	42
	12. Claim 21	44
	B. [GROUND 2a] – Applicant’s Admitted Prior Art in view of Majcherczak Renders Claims 8, 9, 12, 13, 17-21 Obvious	45
	1. Overview of AAPA.....	45
	2. Overview Majcherczak.....	47
	3. Combination of AAPA and Majcherczak	51
	4. Motivation to Combine AAPA and Majcherczak.....	53
	5. Claims 8 and 17	54
	6. Claims 9 and 13	63
	7. Claim 12	66
	8. Claim 18	68
	9. Claims 19 and 20.....	70
	10. Claim 21	73
	C. [GROUND 2b] – AAPA, Majcherczak, and Matthews Render Claims 16 and 22 Obvious	74

IV. CONCLUSION.....76

V. MANDATORY NOTICES UNDER 37 C.F.R § 42.8(a)(1).....76

A. Real Party-In-Interest Under 37 C.F.R. § 42.8(b)(1).....76

B. Related Matters Under 37 C.F.R. § 42.8(b)(2).....76

C. Lead And Back-Up Counsel Under 37 C.F.R. § 42.8(b)(3).....77

D. Service Information77

EXHIBITS

- APPLE-1001 U.S. Patent No. 8,063,674 to Kwon *et al.* (“the ’674 patent”)
- APPLE-1002 Excerpts from the Prosecution History of the ’674 Patent (“the Prosecution History”)
- APPLE-1003 Declaration of Dr. Robert Horst
- APPLE-1004 Curriculum Vitae of Dr. Robert Horst
- APPLE-1005 U.S. Patent No. 7,279,943 to Steinacker (“Steinacker”)
- APPLE-1006 U.S. Patent No. 4,717,836 to Doyle (“Doyle”)
- APPLE-1007 Jun Cheol Park and Vincent J. Mooney, *Sleepy Stack Leakage Reduction*, 14 IEEE Transactions On Very Large Scale Integration (VLSI) Systems 1251 (2006) (“Park”)
- APPLE-1008 U.S. Pat. Appl. Pub. No. 2002/0163364 to Majcherczak *et al.* (“Majcherczak”)
- APPLE-1009 U.S. Patent No. 6,646,844 to Matthews (“Matthews”)
- APPLE-1010 G. W. Griffiths, “A Review of Semiconductor Packaging and Its Role in Electronics Manufacturing,” 8th IEEE/CHMT International Conference on Electronic Manufacturing Technology Symposium (1990)
- APPLE-1011 Wang-Chang Albert Gu, “RF Front-End Modules in Cellular Handsets,” 2004 IEEE Compound Semiconductor Integrated Circuit Symposium (2005)
- APPLE-1012 Kaushik Roy *et al.*, “Leakage current mechanisms and leakage reduction techniques in deep-submicrometer CMOS circuits,” 91 Proceedings of the IEEE 2, pp. 305-327 (Apr. 2003) (“Roy”)

- APPLE-1013 Yangyang Ye *et al.*, “A new technique for standby leakage reduction in high-performance circuits,” 1998 Symposium on VLSI Circuits. Digest of Technical Papers (Cat. No.98CH36215), Honolulu, HI, USA, 1998, pp. 40-41 (“Borkar”)
- APPLE-1014 U.S. Patent No. 7,049,865 to Parker *et al.* (“Parker”)
- APPLE-1015 Qadeer A. Khan *et al.*, “A Sequence Independent Power-on-Reset Circuit for Multi-Voltage Systems,” 2006 IEEE International Symposium on Circuits and Systems (Sep. 2006)
- APPLE-1016 Declaration of Jacob Munford (with attachments)

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.