

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD AND DELL TECHNOLOGIES INC.

Petitioners

v.

MYPAQ HOLDINGS LTD.

Patent Owner

Case No. IPR2022-00311

U.S. Patent No. 8,477,514

EX. 2018

DECLARATION OF DR. FRANK FERRESE

MyPAC Exhibit 2018

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
II. QUALIFICATIONS	1
III. BASES OF OPINIONS	6
A. APPLICABLE LEGAL STANDARDS.....	7
1. Ordinary Skill in the Art.....	7
2. Claim Construction.....	8
3. Obviousness (35 U.S.C. § 103)	8
B. OVERVIEW OF THE '514 PATENT AND THE STATE OF THE ART.....	12
1. '514 Patent Invention.....	12
2. Technology Background.....	17
3. Level of Ordinary Skill.....	18
C. CLAIM CONSTRUCTION	20
IV. THE CITED REFERENCES DO NOT TEACH OR SUGGESTS EVERY LIMITATION OF ANY CHALLENGED CLAIM.....	20
A. Ground 1A: Claims 1-12, 14-17 and 19-20 are not anticipated by Chagny	20
1. Chagny does not teach or suggest a “power converter controller configured to receive a signal from said load indicating a system operation operational state of said load” as required by independent claim 1	20

2. **Chagny does not teach or suggest a “power system controller configured to provide a signal characterizing a power requirement” as required by independent Claim 627**
3. **Chagny does not teach “a power system controller configured to enable operation of components of a processor system to establish a state of power drain thereof” as required by Claims 11 and 1629**
4. **Chagny does not teach or suggest enabling operation of components of a processor system to establish a state of power drain thereof32**
5. **Chagny does not teach or suggest a “power system controller” as required by independent claims 6 and 1134**
6. **Chagny does not teach or suggest claims 2-5, 7-10, 12, 14-15, 17 or 19-2038**
7. **Chagny does not teach or suggest a “power converter as recited in claim 1 wherein said power converter controller is further configured to provide another signal to control said duty cycle of said power switch as a function of said output characteristic and in accordance with said signal” as required by Claims 2, 7, 12 and 1738**
8. **Chagny does not teach or suggest “[t]he power converter as recited in claim 1 wherein said power converter controller is configured to adjust said internal operating characteristic over a period of time” as required by Claims 3, 8, 14 and 1939**
9. **Chagny does not teach or suggest a “power converter as recited in claim 1 wherein said load is a processor and said system operational state is dependent on one of a core state and a performance state of said processor” as required by Claims 4 and 9.....44**

B.	Ground 1B: Claims 1-20 are not rendered obvious by Chagny in view of the knowledge of a POSITA	47
C.	Ground 2A: Claims 1-10, 16-17 and 19-20 are not anticipated by Hwang	48
1.	Hwang does not disclose “a power converter controller configured to receive a signal from said load indicating a system operational state of said load” as required by independent Claim 1	48
2.	Hwang does not disclose a “a power system controller configured to provide a signal characterizing a power requirement of a processor system” as required by independent Claim 6	53
3.	Hwang does not teach or suggest “enabling operation of components of a processor system to establish a state of power drain thereof” as required by claim 16.....	54
4.	Hwang does not teach or suggest a “power system controller”	56
5.	Hwang does not sense a power level of said state of power drain in response to said signal	59
6.	Hwang does not teach or suggest claims 2-5, 7-10, 17 or 19-20	60
7.	Hwang does not disclose or suggest a power converter “wherein said power converter controller is further configured to provide another signal to control said duty cycle of said power switch as a function of said output characteristic and in accordance with said signal” as required by Claim 2, 7, 12 and 17.....	60
8.	Hwang does not disclose a power converter “wherein said power converter controller is configured to adjust said internal operating characteristic over a period of time” as required by Claims 3, 8, 14 and 19.....	62

9.	Hwang does not disclose a power converter, “wherein said load is a processor and said system operational state is dependent on one of a core state and a performance state of said processor” as required by claims 4 and 9	65
D.	Ground 2B: Hwang in view of Chagny does not render Claims 11-12, 14-17 and 19-20 obvious	68
1.	Hwang in view of Chagny does not render claim 11 obvious.....	68
2.	Hwang in view of Chagny does not render claims 12, 14-17 or 19-20 obvious	71
E.	Ground 2C: Hwang in view of the knowledge of a POSITA does not render obvious claim 18.....	72
F.	Ground 2D: Hwang in view of Chagny does not render obvious claims 13 and 18	74
V.	CONCLUSION	74

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.