

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,

Petitioner,

v.

NETLIST, INC.,

Patent Owner

IPR2022-00996

Patent 11,016,918 B2

**PETITIONER'S REPLY
TO PATENT OWNER'S RESPONSE**

TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
II. ARGUMENT.....	1
A. There was no improper incorporation by reference (POR 1)	1
B. Construction of “memory module” (POR 1-3).....	1
C. Grounds 1-3 (POR 3-44).....	2
1. Ground 1 (<u>Harris</u> + <u>FBDIMM Standards</u>) discloses edge connections to receive power from the host system (POR 3-11)	2
2. <u>Harris</u> discloses receiving “ <i>data, address, and control signals</i> ” from the host (POR 11-15)	7
3. <u>Harris</u> and the <u>FBDIMM Standards</u> render obvious using <i>four</i> converters (POR 15-31)	9
a) <u>Harris</u> is not limited to one or two buck converters (POR 17-21).....	10
b) It was obvious to use different converters for voltages that have different functions (POR 21-27)	13
c) It was obvious to use a third buck converter for V_{TT} (POR 27-30).....	15
d) It was obvious to use a buck converter for V_{DDSPD} (POR 30-31).....	18
4. It was obvious to combine <u>Amidi</u> ’s battery backup with <u>Harris</u> (POR 31-38).....	18
5. Grounds 1-3 disclose “ <i>pre-regulated input voltage</i> ” (POR 38)	20
6. Overvoltage protection in claims 5, 16, 24 and dependents (POR 38-42).....	20
7. Non-volatile memory for claims 10-11, 15, 22 (POR 43).....	23
8. Write operation for claims 11-12, 18-19, 25-26 (POR 43-44)	23
D. Grounds 4-5 (POR 44-76).....	23
1. <u>Spiers</u> ’s PCI card is a “ <i>memory module</i> ” (POR 44-48).....	23

2.	<u>Spiers+Amidi</u> renders obvious four regulated voltages (POR 48-59).....	26
a)	<u>Spiers</u> is not limited to older SDR SDRAM memory (POR 48-52).....	26
b)	It would be obvious to use newer, more efficient DDR2/DDR3 memory (POR 53-69).....	27
3.	It would be obvious to use four buck converters with <u>Spiers+Amidi</u> (POR 60-69)	29
a)	Buck converter for V_{TT} (POR 60-63).....	29
b)	Multiple 1.8V buck converters (POR 63-64)	30
c)	Two buck converters for 1.5V and 1.8V (POR 64-65) ..	30
d)	Buck converter for 5V-to-3.3V (POR 65-69)	31
4.	Grounds 4-5 disclose pre-regulated input voltage (POR 69-71)	33
5.	Claim 23 (POR 71-72).....	33
6.	Claim 13 (POR 72-73).....	34
7.	Claims 5-7, 9-13, 16-22, 24-27 (POR 73-75).....	35
8.	Registered plurality of C/A signals for claims 8, 14 (POR 75-76	37
III.	CONCLUSION.....	37

TABLE OF AUTHORITIES

Page(s)

Cases

Baldwin Graphic Sys., Inc. v. Siebert, Inc.,
512 F.3d 1338 (Fed. Cir. 2008).....11

Dome Pat. L.P. v. Lee,
799 F.3d 1372 (Fed. Cir. 2015)..... 7, 18, 30

Intel Corp. v. PACT XPP Schweiz AG,
61 F.4th 1373 (Fed. Cir. 2023)..... 29, 30

Intel Corp. v. Qualcomm Inc.,
21 F.4th 784 (Fed. Cir. 2021).....28

Kaufman v. Microsoft Corp.,
34 F.4th 1360 (Fed. Cir. 2022).....9

EXHIBIT LIST

Exhibit #	Description
1001	U.S. Patent No. 11,016,918
1002	File History of U.S. Patent No. 11,016,918
1003	Declaration of Dr. Andrew Wolfe
1004	Curriculum Vitae of Dr. Andrew Wolfe
1005	File History of U.S. Provisional Application No. 60/941,586
1006	File History of U.S. Patent Application No. 12/131,873
1007	File History of U.S. Patent Application No. 12/240,916
1008	File History of U.S. Provisional Application No. 61/512,871
1009	File History of U.S. Patent Application No. 13/559,476
1010	File History of U.S. Patent Application No. 14/489,269
1011	File History of U.S. Patent Application No. 14/840,865
1012	File History of U.S. Patent Application No. 15/934,416
1013	[Intentionally Omitted]
1014	<i>SanDisk Corp. v. Netlist, Inc.</i> , IPR2014-00994, Paper No. 1 (PTAB June 20, 2014) (833 Patent IPR Petition)
1015	<i>SanDisk Corp. v. Netlist, Inc.</i> , IPR2014-00994, Paper No. 8 (PTAB Dec. 16, 2014) (833 Patent Institution Decision)
1016	<i>Smart Modular Techs. Inc. v. Netlist, Inc.</i> , IPR2014-01370, Paper No. 8 (PTAB Sept. 22, 2014) (833 Patent IPR Corrected Petition)
1017	<i>Smart Modular Techs. Inc. v. Netlist, Inc.</i> , IPR2014-01370, Paper No. 13 (PTAB Mar. 13, 2015) (833 Patent Institution Decision)

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.