### UNITED STATES PATENT AND TRADEMARK OFFICE

\_\_\_\_\_\_

BEFORE THE PATENT TRIAL AND APPEAL BOARD

\_\_\_\_\_

GOOGLE LLC, Petitioner,

V.

LS CLOUD STORAGE TECHNOLOGIES LLC, Patent Owner.

IPR2023-00120 Patent 10,154,092

\_\_\_\_\_

PATENT OWNER'S PRELIMINARY RESPONSE TO PETITION FOR *INTER PARTES* REVIEW



## TABLE OF CONTENTS

<u>I. INTRODUCTION</u>	1
II. THE '092 PATENT (EXH1001)	1
A. Overview	1
III. THE ASSERTED PRIOR ART	
A. Heil (EX1006)	6
B. Nakayama (EX1007)	
C. Gulick (EX1008)	
D. Berman (EXH1009)	
IV. LEVEL OF ORDINARY SKILL IN THE ART	
V. The Petition Fails to Demonstrate That There Is a R	
That Any Challenged Claim is Unpatentable	
1. Claim 1	
2. Claims 2-3 and 7-12	
3. Claim 19	
3. Claims 20-23	
B. Petitioner Fails to Establish in Ground 2 that Challe	
11 are Anticipated by Heil under 35 U.S.C. § 102(b	-
C. Petitioner Fails to Establish in Ground 3 that Challe	
6-24 are Obvious over Heil and Nakayama under 3	5 U.S.C. § 103(a)20
1. Claim 1	20
2. Claims 2-3 and 6-12	20
3. Claim 13	20
4. Claims 14-18	21
<u>5. Claim 19</u>	21
6. Claims 20-23	23
7. Claim 24	23
D. Petitioner Fails to Establish in Ground 4 that Challe	
Obvious over Heil, Nakayama, and Gulick under 3	<u>5 U.S.C. § 103(a)</u> 24
E. Petitioner Fails to Establish in Ground 5 that Challe	nged Claim 5 is
Obvious over Heil, Nakayama, and Berman under	35 U.S.C. § 103(a)24
VI. CONCLUSION	25



## TABLE OF AUTHORITIES

## Cases

In re Zletz, 893 F.2d 319, 321, 13USPQ2d 1320, 1322 (Fed. Cir. 1989)	5
Chef America, Inc. v. Lamb-Weston, Inc., 358 F.3d 1371, 1372, 69 USPQ2d 18	57
(Fed. Cir. 2004)	5
Graham v. John Deere Co., 383 U.S. 1, 17–18 (1966)	11
Statutes	
35 U.S.C. 282(b)	4
Rules	
37 C.F.R. § 42.100(b)	4



## **EXHIBIT LIST**

Exhibit No.	Exhibit Title
1001	Reed (U.S. Pat. No. 10,154,092)
1006	Heil (U.S. Pat. No. 6,173,374)
1007	Nakayama (U.S. Pat. No. 5,920,893)
1008	Gulick (U.S. Pat. No. 5,692,211)
1009	Berman (U.S. Pat. No. 6,118,776)
2001	Declaration of Dr. Hassan Zeino, Ph.D.



### I. INTRODUCTION

The Board should decline to institute IPR proceedings as to any Challenged claims 1-24 of U.S. Patent No. 10,154,092 ("the '092 Patent") because Petitioner has not demonstrated that any claim is likely to be found unpatentable.

Petitioner has not adequately explained how a person of ordinary skill in the art ("POSITA") would approach the problems in the art solved by the '092 Patent. Additionally, Petitioner has failed to demonstrate that the cited references anticipate or render obvious every element of any of the Challenged Claims. More specifically, the Petitioner has failed to cite a reference that teaches or suggest (and the primary reference teaches away from the element of "a first interface configured to receive input/output (I/O) traffic from a first host device via a dedicated I/O channel, the I/O traffic comprising a read command" and "a processor coupled to [a] cache memory, the processor coupled to [a] storage device via a communication path that is distinct from the dedicated I/O channel, the processor configured to access the cache memory during processing of the I/O traffic."

Accordingly, Patent Owner requests that the Board deny the petition for *inter* partes review.



# 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.

