

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

DECLARATION OF DR. HASSAN ZEINO, PH.D.

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I, Hassan Zeino, do hereby declare as follows:

I. INTRODUCTION

1. I have been retained as an expert on behalf of Patent Owner LS Cloud Storage Technologies, LLC (“Patent Owner” or “LS Cloud”) in this inter partes review (“IPR”) proceeding of U.S. Patent No. 10,154,092 (“the ’092 Patent”). I understand this proceeding was initiated by Petitioner Google, LLC (“Petitioner” or “Google”).

2. I have set forth my professional qualifications and relevant experience in Section II of this Declaration, and a copy of my curriculum vitae is included as Attachment A.

3. I have been asked to provide my expert opinions regarding the validity of claims 1-24 of the ’092 Patent.

4. I understand that Petitioner has asserted invalidity based on the following references:

Reference	Exhibit
Heil (U.S. Pat. No. 6,173,374)	1006
Nakayama (U.S. Pat. No. 5,920,893)	1007
Gulick (U.S. Pat. No. 5,692,211)	1008
Berman (U.S. Pat. No. 6,118,776)	1009

5. In particular, I understand that Petitioner has asserted the following five “Grounds” of invalidity based on these references:

Ground	Challenged Patent Claims	Anticipation/Obviousness	Reference(s)/Basis
1	Claims 1-3, 7-12, and 19-23	Anticipation	Heil
2	Claims 10-11	Anticipation	Heil
3	Claims 1-3 and 6-24	Obviousness	Heil and Nakayama
4	Claim 4	Obviousness	Heil, Nakayama, and Gulick
5	Claim 5	Obviousness	Heil, Nakayama, and Berman

6. As set forth in this Declaration, I do not agree that the identified references anticipate or render obvious any of the claims of the '092 Patent.

7. In forming the opinions I express in this Declaration, I have considered the '092 Patent (EXH1001) and its corresponding file history (EXH1002), Google's Petition for IPR (Paper 2), the file history of U.S. Patent No. 6,549,988 (EXH1003), the declaration of Dr. Paul Franzon (EXH1004), as well as the references (EXH1006-EXH1009) and other exhibits on which Petitioner and Dr. Franzon rely.

8. Additionally, I have relied on my own knowledge, training, and more than 25 years of experience in the computer science field.

9. I am being compensated for my time in connection with this IPR at my standard consulting rate; my compensation is not affected by the outcome of this

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