

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

UNIFIED PATENTS, LLC  
Petitioner

v.

MEMORYWEB, LLC  
Patent Owner

IPR2021-01413  
U.S. PATENT 10,621,228

**DECLARATION OF BENJAMIN B. BEDERSON, PH.D.**

**TABLE OF CONTENTS**

I. INTRODUCTION .....	1
II. BACKGROUND AND QUALIFICATIONS .....	2
III. Summary of My Opinions .....	10
A. Overview .....	10
B. Bases of My Opinions and Materials Considered .....	11
C. Level of Skill in the Art .....	11
D. Instructions and Legal Framework .....	12
E. Effective Filing Dates and Prior Art Patents and Printed Publications ....	17
IV. BACKGROUND .....	18
V. U.S. PATENT 10,621,228 .....	19
VI. CLAIM CONSTRUCTION.....	27
VII. THE CHALLENGED CLAIMS ARE INVALID.....	27
A. Ground 1: Claims 1-7 are obvious under 35 U.S.C. § 103(a) over Okamura and Flora. ....	28
1. Okamura.....	28
2. Flora .....	33
3. Technical Concepts.....	35
B. Ground 2: Claims 1-7 are obvious under 35 U.S.C. § 103(a) over Okamura, Flora, and Wagner. ....	79
1. Wagner.....	79
2. Technical Concepts - Motivations to Combine Okamura, Flora, and Wagner.....	80
3. Other Technical Concepts.....	91

C.	Ground 3: Claims 1-7 are obvious under 35 U.S.C. § 103(a) over Okamura, Flora, and Gilley.....	91
1.	Gilley .....	92
2.	Technical Concepts - Motivations to Combine Okamura, Flora, and Gilley	93
3.	Other Technical Concepts.....	100
D.	Ground 4: Claims 1-7 are obvious under 35 U.S.C. § 103(a) over Okamura, Flora, Wagner, and Gilley.....	100
1.	Technical Concepts - Motivations to Combine Okamura, Flora, Wagner, and Gilley.....	100
2.	Other Technical Concepts.....	101
VIII.	SECONDARY CONSIDERATIONS .....	101
IX.	MAPPINGS OF THE PETITION .....	101
X.	CONCLUSION.....	102

I, Benjamin B. Bederson, declare as follows:

## I. INTRODUCTION

1. My name is Benjamin B. Bederson, and I am over 21 years and otherwise competent to make this Declaration. I make this Declaration based on facts and matters within my own knowledge and on information provided to me by others, and, if called as a witness, I could and would competently testify to the matters set forth herein.

2. I have been asked by Unified Patents, LLC (“Petitioner”) to provide technical assistance in connection with the *Inter Partes* Review of U.S. Patent 10,621,228 (which I refer to as the “’228 Patent”). I have been informed that, according to public records, MemoryWeb, LLC (“Patent Owner”) is the owner of the ’228 Patent.

3. I have reviewed, had input into, and endorse the technological discussions in the Petitioner’s Petition for *Inter Partes* Review of U.S. Patent 10,621,228 challenging claims 1-7, including the statements in the Petition regarding the ’228 Patent, the scope of the claims, the prior art’s disclosure of the claims, and the statements throughout the Petition regarding a person of ordinary skill in the art’s (POSITA’s) knowledge and understanding.

4. In addition, this declaration is a statement of my opinions on issues related to the patentability of claim 1-7 of the '228 Patent (collectively, the “Challenged Claims”).

5. My compensation is not based on the content of my opinions or the resolution of this matter. I have no financial interest in Petitioner or Patent Owner, and I have no other interest in the outcome of this matter.

## II. BACKGROUND AND QUALIFICATIONS

6. In formulating my opinions, I have relied on my knowledge, training, and experience in the relevant field, which I have summarized below. My curriculum vitae is included in **Attachment A**.

7. I hold Ph.D. (1992), M.S. (1989), and B.S. (1986) degrees in Computer Science. I also earned an undergraduate minor in electrical engineering. I received the Janet Fabri Memorial Award for Outstanding Doctoral Dissertation for my Ph.D. work in robotics and computer vision. I have combined my hardware and software skills throughout my career in Human-Computer Interaction research, building various interactive electrical and mechanical systems that couple with software to provide an innovative user experience.

8. Since 1998, I have been a Professor of Computer Science at the University of Maryland (“UMD”), where I have joint appointments at the Institute

# 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.