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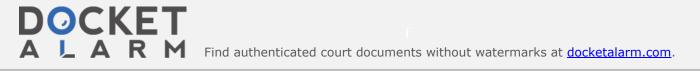
UNIFIED PATENTS INC. Petitioner

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VILOX TECHNOLOGIES LLC. Patent Owner

> Case IPR2018-00044 Patent No. 7,302,423

DECLARATION OF WESLEY W. CHU, PH.D.



# Table of Contents

I.			3	
II.	QUALIFICATIONS AND PROFESSIONAL EXPERIENCE			
III.	Level of Ordinary Skill in the Art and Relevant Legal Standards10		. 10	
IV.	U.S. PATENT 7,302,423 (THE '423 PATENT)		.13	
	Α.	Specification and Prosecution History	.13	
	1	. Specification	.13	
	2	Prosecution History	. 17	
۷.			. 23	
	Α.	U.S. Patent 5,701,453 to Maloney ( <i>Maloney</i> , Ex. 1006)	.23	
		1. <i>Maloney</i> Does Not Disclose or Suggest a Processor Determines a Database Schema		
	2. Maloney Does Not Disclose or Suggest Other '423 Patent Claim		. 25	
		. Some Features of <i>Maloney</i> Would Be Rendered Inoperable If Combined with Sertram	.26	
	В.	U.S. Patent 7,168,039 to Bertram ( <i>Bertram</i> , Ex. 1007)	.30	
	С.	Excel 2000 Bible ( <i>Excel,</i> Ex. 1009 and Excel II, Ex. 2004)	. 34	
	D.	U.S. Patent 6,300,947 to Kanevsky	. 35	
	Ε.	Excel 2000 Bible ( <i>Excel II</i> ) (Ex. 2004)	. 35	
	F.	Maloney in View of Bertram	. 38	
	G.	Excel 2000 Bible (Both Excel and Excel II) in View of Bertram	. 39	
VI.	P	<b>PETITION</b>		
	Α.	Overview and Summary	.40	
	В.	Challenge 1: Claims 1 – 4, 7 – 9, and 13	.40	
	C.	Challenge 2: Claims 1 – 4, 7 – 9, and 13	.45	
	D.	Challenge 3: Claims 5 and 6	.51	
	Ε.	Challenge 4: Claims 5 and 6	.51	
VII.	C	ONCLUSION	. 52	

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#### I. INTRODUCTION

1. I make this Declaration at the request of Vilox Technologies, LLC regarding my opinions as an independent expert regarding issues raised in the matter of Petition IPR2018-00044 ("Petition").

2. I am being compensated for this work, and my compensation is not dependent on the outcome of this matter.

3. In preparation for this Declaration, I studied Exhibits 1001 – 1010 provided by Petitioner as well as the Petition. Also, I studied these additional materials:

Exhibit 2003, Declaration of Dr. Joseph L. De Bellis;

Exhibit 2004, Excel 2000 Bible;

Exhibit 2005, U.S. Patent 6,593,949 to Chew;

Exhibit 2006, Webster's New Collegiate Dictionary

4. In preparing this Declaration, I relied, in addition to the above Exhibits, on my knowledge and experience gained through 56 years as an engineer, professor, and consultant.

# II. QUALIFICATIONS AND PROFESSIONAL EXPERIENCE

5. My Curriculum Vitae is provided as Exhibit 2002. Following is a summary of my education and relevant experience.

I am Emeritus Distinguished Professor at the University of California, Los Angeles.
I received a Bachelor of Science degree in electrical engineering from the University of
Michigan in 1960 and a Master of Science degree in electrical engineering from the

University of Michigan in 1961. I received a Ph.D. in electrical engineering from Stanford University in 1966.

7. From 1961 to 1962, I worked at General Electric (now Honeywell) in Phoenix, Arizona with a focus on electrical switching circuits for computers. From 1964 to 1966, I worked on the design of large-scale computers at IBM in San Jose, California. From 1966 to 1969, I worked at Bell Laboratories in Holmdel, New Jersey with a focus on computer communications and distributed databases.

8. I joined the faculty of the of California, Los Angles in 1969 in the Computer Science Department. I served as Department Chair from 1988 to 1991, as Distinguished Professor since 1998, and as Emeritus Distinguished Professor since 2009.

9. From 1982 to 2005, I worked as a consultant for several large computer companies:

- 1982 1984, Western Union Corporation, Upper Saddle River, New Jersey, Executive Consultant to VP Engineering and Member of the Technical Review Board with duties that included:
  - Evaluating and planning for the Western Union Packet Switched Network, Easylink, and other value-added services.
  - Developing transition plans for network modernization, integration with existing networks and for future network growth.
  - Critiquing on going and proposed enhancement plans and compare with other viable alternatives for effectiveness.

- 1983 1986, Titan Systems Inc., Inglewood California, Consultant, with duties that included developing, evaluating and validating the SENTRY Distributed Data Base System.
- 1985 1988, Unisys SDC Corp., Huntsville, Alabama, Consultant, with duties that included designing and developing a real time distributed database system for missile defense applications.
- 1995 2005, Xerox Corporation, El Segundo, California, Consultant, fault tolerant computing, with duties that included designing and developing word processing systems.

10. Early in my career, my research focus was on computer communication and networks, distributed databases, memory management, real-time distributed processing systems, and statistical multiplexing - the latter contributing to the development of ATM networks. My pioneering work in file allocation and directory design for distributed databases aided the design and development of domain name servers for the web and current cloud computing systems. I was named an IEEE Fellow for my contributions in these areas.

11. Over the past two decades, my research interests evolved to include intelligent (knowledge-based) information systems and knowledge acquisition for large information systems. Using my methodology for relaxing query constraints, I led the development of CoBase, a cooperative database system for structured data, and KMed, a knowledge-based multimedia medical image system.

12. Under the KMed project, I developed a Medical Digital Library that provides approximate content-matching and navigation; the library will serve as a cornerstone for

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