UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC, Petitioner

v.

ECOFACTOR, INC., Patent Owner

IPR2022-00538 Patent No. 9,194,597

DECLARATION OF JOHN A. PALMER, Ph.D. PURSUANT TO 37 C.F.R. § 1.68

DOCKET A L A R M Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

TABLE OF CONTENTS

I.	BACKGROUND		
II.	QUALIFICATIONS2		
III.	BACKGROUND OF THE '597 PATENT7		
IV.	LEGAL PRINCIPLES9		
V.	LEVEL OF A PERSON OF ORDINARY SKILL IN THE ART (POSITA)		
VI.	CLAI	M CONSTRUCTION PRINCIPLES	
VII.	GEN	ERAL COMMENTS ON THE SHAH REPORT19	
VIII.		UTTAL TO ALLEGATIONS REGARDING IOUSNESS	
A.	Int	troduction to Ehlers '330 Prior Art Reference	
B.	Int	troduction to Wruck Prior Art Reference	
IX.	GROUND 1:		
A.	The Combination of Ehlers '330, the Knowledge of a POSITA and Wruck Does Not Render Claims 1-24 Unpatentable		
	1.	Claim Element [1d] - "using the stored data to predict changes in temperature inside the structure in response to at least changes in outside temperatures"	
	2.	Claim Element [1e] - "calculating with at least one computer, scheduled programming of the thermostatic controller for one or more times to control the heating ventilation and air conditioning system, the scheduled programming comprising at least a first automated setpoint at a first time"	

Case Nos. IPR2022-00538 U.S. Patent No. 9,194,597

	3.	Dependent Claims 2-8	42
	4.	Independent Claim 9	42
	5.	Dependent Claims 10-16	45
	6.	Independent Claim 10	45
	7.	Dependent Claims 18-24	45
X.	DEC	LARATION	.46

<u>Exhibits</u>

Exhibit No.	Description
2001	Google, LLC f/k/a Google Inc. v. EcoFactor, Inc., 4-21-cv-03220
	(N.D. Cal. April 30, 2021), Dkt. 1 (Complaint)
2002	Google, LLC f/k/a Google Inc. v. EcoFactor, Inc., 4-21-cv-03220
	(N.D. Cal. Aug. 3, 2021), Dkt. 30 (Joint Case Management
	Statement)
2003	Google, LLC f/k/a Google Inc. v. EcoFactor, Inc., 4-21-cv-03220
	(N.D. Cal. April 7, 2022), Dkt. 72 (Amended Scheduling Order)
2004	Google, LLC f/k/a Google Inc. v. EcoFactor, Inc., 4-21-cv-03220
	(N.D. Cal. April 13, 2022), Dkt. 73 (Amended Scheduling Or-
	der)
2005	Google's Oct. 19, 2021, Invalidity Contentions in Google, LLC
	f/k/a Google Inc. v. EcoFactor, Inc., 4-21-cv-03220 (N.D. Cal.)
2006	"Silicon Valley's Home Court: Patent Trends in the Northern
	District of California." White & Case Newsflash (Mar. 18,
	2020).
2007	U.S. Patent No. 10,018,371
2008	Expert Declaration of John A. Palmer
2009	Curriculum Vitae of John A. Palmer
2010	April 6, 2021, Deposition Transcripts of Mr. Rajenda Shah,
	IPR2021-01218.
2011	337-TA-1258 International Trade Commission Investigation, Or-
	der No. 18 - Construing the Terms of the Asserted Claims
2012	October 10, 2022, Deposition Transcripts of Mr. Rajenda Shah,
	IPR2022-00538.
2013	October 13, 2022, Deposition Transcripts of Mr. Rajenda Shah,
	IPR2022-00473.

I. BACKGROUND

1. I have been retained as an expert in this case by EcoFactor, Inc. ("EcoFactor"). I have been asked to consider and opine on issues of validity regarding U.S. Patent No. 9,194,597 ("597 Patent"). More specifically, my opinions disclosed herein focus on the Petition for *Inter Partes* Review ("IPR") on the '597 Patent, along with the expert declaration of Rajendra Shah and all other materials referenced or cited in the IPR or Mr. Shah's declaration.

2. In forming my opinions, I have reviewed, considered, and had access to the patent specifications and claims, its prosecution history, the proposed claim constructions, the Petition, the Shah declaration, and documents cited in the Petition and the Shah declaration, as well as the transcripts from the deposition of Mr. Shah. I have also relied on my professional and academic experience. I reserve the right to consider additional materials as I become aware of them and to revise my opinions accordingly.

II. QUALIFICATIONS

3. My qualifications for forming the opinions set forth in this Declaration are summarized here and explained in more detail in my curriculum vitae, which is at-tached as Exhibit 2009.

4. As indicated therein, I have a Bachelor of Science degree in Electrical Engineering with a power option from Brigham Young University (1991), and Masters

DOCKET A L A R M



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.