

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ECOBEE TECHNOLOGIES ULC

Petitioner

v.

ECOFACITOR, INC.

Patent Owner

Patent No. 8,596,550

DECLARATION OF DAVID M. AUSLANDER

TABLE OF CONTENTS

I.	ENGAGEMENT AND COMPENSATION	4
II.	QUALIFICATIONS	4
III.	SUMMARY OF OPINIONS.....	6
IV.	MATERIALS REVIEWED	6
V.	UNDERSTANDING OF THE RELEVANT LAW.....	8
	A. Anticipation.....	8
	B. Obviousness.....	8
VI.	LEVEL OF ORDINARY SKILL IN THE ART.....	11
VII.	RELEVANT TIMEFRAME FOR DETERMINING OBVIOUSNESS.....	12
VIII.	TECHNICAL INTRODUCTION	12
	A. The '550 Patent Disclosure	12
IX.	CLAIM INTERPRETATION	18
	A. BACKGROUND ON CLAIM INTERPRETATION.....	18
	B. CLAIM INTERPRETATION OF THE '550 PATENT	19
X.	GROUND 1: Claims 17-23 Are Obvious Over Ehlers '330 in view of Wruck.....	21
	A. Effective Prior Art Dates of Ehlers '330 and Wruck.....	21
	B. Overview of the Combination.....	21
	1. Overview of Ehlers '330.....	22
	2. Overview of Wruck.....	25
	3. Overview of the Combination.....	27
	C. Rationale (Motivation) Supporting Obviousness.....	28
	D. Reasonable Expectation of Success	28
	E. Analogous Art	29
	F. Claim Mapping.....	29
XI.	GROUND 2: Claims 17-23 Are Obvious Over Ols '725 in view of Boait and Wruck.....	59
	A. Effective Prior Art Dates of Ols '725, Boait, and Wruck.....	59
	B. Overview of the Combination.....	59

1.	Overview of Ols '725.....	60
2.	Overview of Boait.....	61
3.	Overview of Wruck.....	62
4.	Overview of the Combination.....	62
C.	Rationale (Motivation) Supporting Obviousness.....	63
D.	Reasonable Expectation of Success	64
E.	Analogous Art	64
F.	Claim Mapping.....	65
XII.	OATH	91

I. ENGAGEMENT AND COMPENSATION

1. My name is David M. Auslander. I have been retained by counsel for ecobee Technologies ULC, ecobee Ltd., and Generac Holdings Inc. (collectively, “ecobee”) for the purpose of providing my opinion with respect to the unpatentability of U.S. Patent No. 8,596,550 (“the ’550 patent”). I am being compensated for my time in preparing this declaration at my standard hourly rate, and my compensation is not dependent upon my opinions or the outcome of the proceedings. My curriculum vitae is attached as Ex. 1003.

II. QUALIFICATIONS

2. I received my Bachelors in Mechanical Engineering from The Cooper Union in 1961. From the Massachusetts Institute of Technology, I received a Master of Science (S.M.) in 1964 and a Doctor of Science (ScD) in 1966. I have over 50 years of experience in the study, research, teaching, and development in control system design and analysis, including energy management systems, real time software methodology, motion control, and dynamic system modeling and simulation.

3. My research areas focus on control system design and analysis, including energy management systems like those discussed in the ’550 patent. This area also includes issues of real time software design and dynamic system simulation, which are key areas for designing successful products that need to adapt

to changing environments. For example, I co-authored the “Real-Time Software for Implementation of Feedback Control,” chapter in *The Control Handbook*, published by CRC Press and IEEE Press in 1996. I also co-authored a textbook entitled *Control Software for Mechanical Systems: Object Oriented Design in a Real-Time World*, published by Prentice-Hall in 2002. I also authored a chapter regarding “Digital Controllers,” in the *Encyclopedia of Physical Science and Technology* (Third Edition), published by Academic Press in 2003, and co-authored a chapter entitled “Network Fundamentals,” in the *Handbook of Networked and Embedded Control Systems*, published in 2005.

4. Some relevant research papers for which I was a co-author are: “Multi-Sensor Single-Actuator Control of HVAC Systems” at the International Conference for Enhanced Building Operations in Richardson, TX (2002), “A Tale of Two Houses: the Human Dimension of Demand Response Enabling Technology from a Case Study of an Adaptive Wireless Thermostat” and “Demand Response-Enabled Residential Thermostat Controls” for the American Council for an Energy Efficient Economy (ACEEE, 2008), and “Developing Affordable Smart Thermostats” for Home Energy (2008).

5. I have taught classes in the areas of real time software and feedback control systems. I developed a measurement and instrumentation course and several courses in the areas of mechatronics.

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.