

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

ECOBEE TECHNOLOGIES, ULC,  
Petitioner

v.

ECOFACITOR, INC.,  
Patent Owner

---

IPR2022-00969  
Patent No. 8,596,550

---

**PATENT OWNER'S SUR-REPLY**

## Table of Contents

I.	Introduction.....	1
II.	Level of a Person of Ordinary Skill in the Art (POSITA) .....	2
III.	Petitioner’s Argument Are Incorrect. ....	3
A.	No Motivation to Combine Ehlers and Wruck .....	3
B.	Petitioner Incorrectly Characterizes Ehlers. ....	3
1.	Thermal Gain Rate .....	3
2.	Figs. 3D, 3E, and 3F of Ehlers.....	6
3.	Predicted Rate of Change of Inside Temperatures Inside the Structure in Response to Changes in Outside Temperatures .....	12
4.	Calculate Scheduled Setpoint Programming ... for One or More Times Based on the Predicted Rate of Change, the Scheduled Programming Comprising at Least a First Automated Setpoint .....	14
5.	Comparing the One or More Automated Setpoints Associated with Said Scheduled Setpoint Programming with Said Actual Setpoint Programming .....	16
6.	Wruck.....	17
C.	Ols, Boait, and Wruck Does Not Render Claims 17-23 Unpatentable.....	21
1.	There is No Motivation to Combine Ols and Boait .....	21
2.	Predict a Rate of Change of Temperatures Inside the Structure in Response to Changes in Outside Temperatures .....	22
3.	Calculate Scheduled Setpoint Programming ... for One or More Times Based on the Predicted Rate of Change, the Scheduled Programming Comprising One or More Automated Setpoints .....	26
4.	Compare the One or More Automated Setpoints Associated with said Scheduled Setpoint Programming with said Actual Setpoint Programming.” .....	27
IV.	Secondary Considerations.....	27
V.	Conclusion .....	29

## Table of Authorities

### **Cases**

<i>BlephEx, LLC v. Myco Indus., Inc.</i> , 24 F.4th 1391 (Fed. Cir. 2022) .....	3
<i>Molins PLC v. Textron, Inc.</i> , 48 F.3d 1172 (Fed. Cir. 1995).....	3
<i>Stone Basket Innovations, LLC v. Cook Med. LLC</i> , 892 F.3d 1175 (Fed. Cir. 2018).....	3

Exhibits

Exhibit No.	Description
2001	<i>Ecobee, Inc. v. EcoFactor, Inc.</i> , 1-21-cv-00323 (D. Del. March 2, 2012), Dkt. 20 (Ecobee's Motion to Dismiss)
2002	<i>Ecobee, Inc. v. EcoFactor, Inc.</i> , 1-21-cv-00323 (D. Del. March 2, 2012), Dkt. 1 (Complaint)
2003	<i>Ecobee, Inc. v. EcoFactor, Inc.</i> , 1-21-cv-00323 (D. Del. March 2, 2012), Dkt. 18 (ecobee Opposition to Motion to Stay)
2004	Ecobee's Disclosure of Initial Invalidity Contentions, March 17, 2022 in <i>Ecobee, Inc. v. EcoFactor, Inc.</i> , 1-21-cv-00323
2005	<i>Ecobee, Inc. v. EcoFactor, Inc.</i> , 1-21-cv-00323 (D. Del. March 2, 2012), Dkt. 26 (Order Denying EcoFactor's Motion to Stay)
2006	Expert Declaration of John A. Palmer
2007	Curriculum Vitae of John A. Palmer
2008	February 2, 2023, Deposition Transcripts of Dr. David Auslander, IPR2022-00983.
2009	<i>Smart Thermostat Systems, Smart HVAC Systems, Smart HVAC Control Systems, and Components Thereof</i> , U.S. Int'l Trade Comm'n, 337-TA-1258 1258 Investigation, Order No. 18 - Construing the Terms of the Asserted Claims, at 1
2010	U.S. Pat. No. 7,130,719 ("Ehlers '719")
2011	June 7, 2023, Deposition Transcripts of Dr. David Auslander, IPR2022-00969 and IPR2022-00983.

## **I. Introduction**

Petitioner continues to fundamentally misunderstand Ehlers and its teachings regarding thermal gain. Petitioner and its expert continue to ignore this, and instead use improper hindsight to create the claims of the '550 patent out of the prior art.

Petitioner further fails to demonstrate that the combination of Ehlers '330 and Wruck teaches calculating automated setpoints. Ehlers '330 shows ramping and recovery time, but not calculating automated setpoints. With these automated setpoints, there can be no comparison with anything else. Instead, Petitioner identifies an unexplained term cited just once in Wruck and the creates an unsupported story to argue that it meets this comparison. Finally, Petitioner does not contest that there is no motivation to combine Ehlers '330 and Wruck.

With respect to Ground 2, Petitioner continues to provide nothing beyond conclusory statements to explain a person of ordinary skill in the art ("POSITA") would combine Ols and Boait. After recognizing that the equation relied upon in Boait does not address changes in outside temperature, Petitioner has to provide, for the first time, an argument that changes in temperature from one day until the next meet the claim limitations. This argument should be rejected as both new and incorrect.

For these reasons, Petitioner has failed to demonstrate that the claims of the '550 patent are invalid.

# 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.