UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ECOBEE TECHNOLOGIES, ULC, Petitioner

v.

ECOFACTOR, INC., Patent Owner

IPR2022-00969 Patent No. 8,596,550

PATENT OWNER'S RESPONSE



Table of Contents

| I. | Introduction |
|--------|---|
| II. | Background of the '550 Patent |
| III. | Level of a Person of Ordinary Skill in the Art (POSITA) |
| IV. | Claim Construction |
| V. | Overview of the Asserted Prior Art |
| A | . Introduction to Ehlers '330 |
| В | . Introduction to Wruck |
| C | . Introduction to Ols |
| D | . Introduction to Boait |
| VI. | General Comments on the Petition and the Auslander Declaration |
| VII. | Rebuttal To Allegations Regarding Obviousness |
| A U | . Ground 1: The Combination of Ehlers '330 and Wruck Does Not Render Claims 17-23 npatentable |
| | 1. No Motivation to Combine Ehlers '330 and Wruck |
| | 2. Claim Element [17f] – "computer hardware comprising one or more computer processors configured to use the stored data to predict a rate of change of temperatures inside the structure in response to changes in outside temperatures;" |
| | 3. Claim element [17g] "the one or more computer processors configured to calculate scheduled setpoint programming of the programmable communicating thermostat for one or more times based on the predicted rate of change, the scheduled programming comprising one or more automated setpoints;" |
| | 4. Claim element [17h] - "at least a database that stores the one or more automated setpoints associated with the scheduled programming for said programmable communicating thermostat" |
| | 5. Claim element [17j] - "the one or more computer processors configured to compare the one or more automated setpoints associated with said scheduled setpoint programming with said actual setpoint programming." |
| | 6. Dependent Claims 18-23 |
| B U | . Ground 2: The Combination of Ols, Boait, and Wruck Does Not Render Claims 18-23 npatentable |
| | 1. There is No Motivation to Combine Ols and Boait |
| | 2. Claim element [17f] – "computer hardware comprising one or more computer processors configured to use the stored data to predict a rate of change of temperatures inside the structure in response to changes in outside temperatures;" |



| | sche mor | 3. Claim element [17g] - "the one or more computer processors configured to calculate scheduled setpoint programming of the programmable communicating thermostat for one or more times based on the predicted rate of change, the scheduled programming comprising one or more automated setpoints;" | | |
|------|-------------|---|-----|--|
| | setp | Claim element 17h – "at least a database that stores the one or more automated oints associated with the scheduled programming for said programmable municating thermostat;" | 57 | |
| | one | Claim element 17j – "the one or more computer processors configured to compare the or more automated setpoints associated with said scheduled setpoint programming with actual setpoint programming." | ith | |
| | 6. | Dependent Claims 18-23 | 62 | |
| VIII | .Sec | ondary considerations | 62 | |
| IX | Con | clusion | 64 | |



Exhibits

| Exhibit No. | Description |
|-------------|--|
| 2001 | Ecobee, Inc. v. EcoFactor, Inc., 1-21-cv-00323 (D. Del. March |
| | 2, 2012), Dkt. 20 (Ecobee's Motion to Dismiss) |
| 2002 | Ecobee, Inc. v. EcoFactor, Inc., 1-21-cv-00323 (D. Del. March |
| | 2, 2012), Dkt. 1 (Complaint) |
| 2003 | Ecobee, Inc. v. EcoFactor, Inc., 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 Ecobee, Inc. v. EcoFactor, Inc., 1-21-cv-00323 |
| 2005 | Ecobee, Inc. v. EcoFactor, Inc., 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 | Smart Thermostat Systems, Smart HVAC Systems, Smart HVAC |
| | Control Systems, and Components Thereof, 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") |



I. Introduction

The Petition challenges claims 17-23 of U.S. Patent No. 8,596,550 (Ex. 1001) under two grounds of unpatentability.

However, this challenge demonstrates a fundamental misunderstanding of the Ehlers '330 reference and its teachings regarding thermal gain. Thermal gain is the addition of thermal heat, not the increase of an inside temperature. Thus, the Ehlers '330 reference and its system teach away from the claimed invention of the '550 patent. Petitioner and its expert ignore this, and instead use improper hindsight to create the claims of the '550 patent out of the prior art.

With respect to Ground 1, Petitioner and its expert further fail to show that the combination of Ehlers '330 and Wruck teaches calculating automated setpoints. Ehlers '330 shows ramping and recovery time, but not calculating automated setpoints. Petitioner and its expert fail to map what in Ehlers '330 they consider the "automated setpoint at a first time" as claimed by the '550 patent. Further, there is no comparison of setpoints in Ehlers '330 or Wruck. Because this comparison is the reason for allegedly combining Ehlers '330 and Wruck, Petitioner has failed to provide a motivation to combine these two references.

With respect to Ground 2, Petitioner fails to show a motivation to combine Ols and Boait. Further, the combination of Ols and Boait does not disclose (1), predicting a rate of change of inside temperatures in response to changes in outside



DOCKET

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.

