

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ECOBEE TECHNOLOGIES ULC
Petitioner

v.

ECOFACTOR, INC.
Patent Owner

Case No. IPR2022-00983
Patent No. 8,596,550

REPLY TO PATENT OWNER RESPONSE

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Exhibit List

Exhibit No.	Description
1001	U.S. Patent No. 8,596,550 (“the ’550 patent”).
1002	Declaration of David M. Auslander.
1003	C.V. of David M. Auslander.
1004	U.S. Patent App. Pub. 2004/0117330 (“Ehlers ’330”).
1005	U.S. Patent App. Pub. 2005/0040250 A1 (“Wruck”).
1006	<i>Exhibit number not used.</i>
1007	<i>Exhibit number not used.</i>
1008	File History of Application No. 12/778,052.
1009	U.S. Patent App. Pub. 2005/0171645 (“Oswald”).
1010	U.S. Patent No. 5,934,554 (“Charles”).
1011	U.S. Patent No. 6,029,092 (“Stein”).
1012	ITC Inv. No. 337-TA-1258, Order No. 18, Construing the Terms of the Asserted Claims of the Patents at Issue (Sept. 1, 2021).
1013	<i>ecobee, Inc. v. EcoFactor, Inc.</i> , 1-21-cv-00323 (D. Del.), Answer (May 5, 2021).
1014	<i>ecobee, Inc. v. EcoFactor, Inc.</i> , 1-21-cv-00323 (D. Del.), Scheduling Order (October 14, 2021).
1015	Horan, T, <i>Control Systems and Applications for HVAC/R</i> , Prentice-Hall, Inc., 1997.

1016	Levenhagen, J, <i>HVAC Control and Systems</i> , McGraw-Hill, Inc., 1993.
1017	U.S. Patent No. 8,751,186 B2 (“the ’186 patent”).
1018	Excerpt from McDaniel, G, <i>IBM Dictionary of Computing</i> , McGraw-Hill, Inc., 1993, p. 165.
1019	U.S. Patent No. 7,784,704 (“Harter”).
1020	Excerpt from <i>Dictionary of Scientific and Technical Terms</i> , 5th ed., McGraw-Hill, Inc., 1994, p. 62.
1021	Excerpt from <i>The Industrial Electronics Handbook</i> , Irwin, J.D. ed. CRC Press and IEEE Press, 1997, pp. 59-60.
1022	Deposition transcript of John A. Palmer, Ph.D., April 11, 2023.
1023	Reply Declaration of David M. Auslander.

I. Introduction

In an attempt to rebut clear unpatentability, EcoFactor offers fanciful arguments that contradict the record. For example, with respect to the claimed use of data “to predict a rate of change of temperatures inside the structure in response to changes in outside temperatures,” as recited in independent claims 1 and 9, Ehlers’s Fig. 3D shows the tracking of changes in inside temperatures over time in response to different outside temperatures. While not disputing this fact, EcoFactor argues that the *terminology* Ehlers’ uses to describe what is shown—“thermal gain”—should be understood to mean something different than what is depicted. EcoFactor then asks the Board to ignore what is actually shown due to the disputed terminology. Remarkably, EcoFactor’s expert believes the terminology in the ’550 patent—“thermal mass”—is also wrong, but urges reliance on context to solve the issue, despite refusing to do so for Ehlers. Such contradictory positions are untenable.

Also, while Ehlers describes the calculation of a new setpoint that is “offset” from what a user sets, EcoFactor disputes that the calculated setpoint is “automated,” as claimed. Specifically, Ehlers’ system may operate within boundaries limiting how far from the original setpoint the automatically calculated setpoint may deviate. Due to the boundaries, EcoFactor concludes the new setpoint cannot count as automated. That position is illogical and EcoFactor’s own expert

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