

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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GOOGLE LLC,  
Petitioner

v.

ECOFACITOR, INC.,  
Patent Owner

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IPR2022-00538  
Patent No. 9,194,597

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**PATENT OWNER'S RESPONSE**

ECOBEE Exhibit 1028  
ECOBEE - ECOFACTOR

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        1. Claim [9e] – “calculating scheduled programming of setpoints in the thermostatic controller based on the predicted rate of change, the scheduled programming comprising at least a first automated setpoint at a first time and a second automated setpoint at a second time to control the heating ventilation and air conditioning system” ..... 31

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Exhibits

Exhibit No.	Description
2001	<i>Google, LLC f/k/a Google Inc. v. EcoFactor, Inc.</i> , 4-21-cv-03220 (N.D. Cal. April 30, 2021), Dkt. 1 (Complaint)
2002	<i>Google, LLC f/k/a Google Inc. v. EcoFactor, Inc.</i> , 4-21-cv-03220 (N.D. Cal. Aug. 3, 2021), Dkt. 30 (Joint Case Management Statement)
2003	<i>Google, LLC f/k/a Google Inc. v. EcoFactor, Inc.</i> , 4-21-cv-03220 (N.D. Cal. April 7, 2022), Dkt. 72 (Amended Scheduling Order)
2004	<i>Google, LLC f/k/a Google Inc. v. EcoFactor, Inc.</i> , 4-21-cv-03220 (N.D. Cal. April 13, 2022), Dkt. 73 (Amended Scheduling Order)
2005	Google's Oct. 19, 2021, Invalidity Contentions in <i>Google, LLC f/k/a Google Inc. v. EcoFactor, Inc.</i> , 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 Transcript of Mr. Rajenda Shah, IPR2021-01218.
2011	337-TA-1258 International Trade Commission Investigation, Order No. 18 - Construing the Terms of the Asserted Claims
2012	October 10, 2022, Deposition Transcript of Mr. Rajenda Shah, IPR2022-00538.
2013	October 13, 2022, Deposition Transcript of Mr. Rajenda Shah, IPR2022-00473.

## I. INTRODUCTION

The Petition challenges claims 1-24 of U.S. Patent No. 9,194,597 (the ‘597 patent) (Ex. 1001) under one ground 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 ‘597 patent. Petitioner and its expert ignore this, and instead use improper hindsight to create the claims of the ‘597 patent out of the prior art.

Petitioner and its expert further fail to show that the combination of Ehlers ‘330, the knowledge of a person of ordinary skill in the art (“POSITA”), 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 ‘597 patent.

Finally, Petitioner’s mapping of various claim limitations is inconsistent. Petitioner points to certain features of Ehlers ‘330 as being the “automated setpoint at a first time” for claim element [1e], but points to entirely different features of Ehlers ‘330 as being the “setpoint at the first time” for claim element [1h].

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