

1 Reza Mirzaie
2 RUSS AUGUST & KABAT
3 12424 Wilshire Boulevard, 12th Floor
4 Los Angeles, California 90025
5 Telephone: (310) 826-7474
6 Facsimile: (310) 826-6991
7 Email: rmirzaie@raklaw.com
8
9 Counsel for EcoFactor, Inc.
10 *Additional Counsel at signature block*

Robert A. Van Nest – (SBN 84065)
rvannest@keker.com
Leo L. Lam – (SBN 181861)
llam@keker.com
KEKER, VAN NEST & PETERS LLP
633 Battery Street
San Francisco, CA 94111-1809
Telephone: 415-391-5400
Facsimile: 415-397-7188

Shamita D. Etienne-Cummings (SBN 202090)
PAUL HASTINGS LLP
2050 M Street, NW
Washington, DC 20036
Telephone: (202) 551-1700
Facsimile: (202) 551-1705
Email: shamitaetienne@paulhastings.com

Counsel for Google LLC
Additional Counsel at signature block

12 **UNITED STATES DISTRICT COURT**
13 **NORTHERN DISTRICT OF CALIFORNIA**

15 ECOFACTOR, INC.
16
17 Plaintiff,
18 vs.
19 GOOGLE LLC,
20 Defendant.

Case No. 4:24-cv-00175-JST

**JOINT CLAIM CONSTRUCTION AND
PREHEARING STATEMENT**

JURY DEMANDED

Date: January 27, 2025
Time: 2:00 pm
Ctrm: 6, 2nd Floor
Judge: Hon. Jon S. Tigar

GOOGLE EXHIBIT 1037

Pursuant to the June 25, 2024 Scheduling Order (Dkt. 54), and this Court’s Patent Local Rule 4-3, Plaintiff EcoFactor, Inc. (“EcoFactor”) and Defendant Google LLC (“Google”) (collectively, the “Parties”) submit this Joint Claim Construction Statement and Prehearing Statement with respect to the Asserted Patent and presently Asserted Claims:

- U.S. Patent No. 11,835,394 (“’394 Patent”) – Claims 1, 3, 4, 6, 10, 12, 13, and 15 (“Asserted Claims”)

I. Agreed Claim Constructions (Pat. L.R. 4-3(a))

The Parties stipulate to the following constructions for certain terms:

Claim No.	Claim Term	Agreed Construction
1, 10	“A method for controlling an environment inside a structure, comprising” / “A control system for an environment inside a structure, comprising”	Preamble is limiting
1, 10	“compares” / “comparing”	analyze/analyzing to determine one or more similarities or differences between

II. Proposed Constructions of Disputed Terms (Pat L.R. 4-3(b))

Appendix A sets forth proposed constructions of each disputed term, together with an identification of all references from the specification or prosecution history that support that construction, and an identification of any extrinsic evidence known to the party on which it intends to rely either to support its proposed construction or to oppose any proposed construction. Terms in Appendix A are not ranked in any fashion.

III. Terms Most Significant to Resolution of the Case (Pat L.R. 4-3(c))

The Parties have identified seven disputed terms for construction, as set forth in Appendix A. Three of those are indefiniteness disputes over terms that appear in each independent claim. The Parties agree that those indefiniteness disputes are case dispositive.

IV. Anticipated Length of Claim Construction Hearing (Pat L.R. 4-3(d))

The Parties anticipate the hearing will take no longer than 90 minutes.

V. **Witnesses at the Claim Construction Hearing (Pat L.R. 4-3(e))**

EcoFactor does not believe any witness testimony at the Claim Construction Hearing will be necessary or helpful. Google anticipates calling its expert Dr. Todd Rossi at the Claim Construction Hearing

VI. **Witnesses at the Claim Construction Hearing (Pat L.R. 4-3(f))**

The Parties do not request any factual findings from the Court related to claim construction, though the Parties recognize that the Court's legal determinations on indefiniteness will be based on underlying factual determinations.

Dated: October 22, 2024

By: /s/ Reza Mirzaie

Reza Mirzaie
Marc A. Fenster
Kristopher R. Davis
James N. Pickens
Minna Y. Chan
Jason M. Wietholter
RUSS AUGUST & KABAT
12424 Wilshire Boulevard, 12th Floor Los
Angeles, California 90025
Tel: 310/826-7474
Fax: 310/826-6991

Counsel for EcoFactor, Inc.

Dated: October 22, 2024

Respectfully submitted,

By: /s/ Shamita D. Etienne-Cummings

Shamita D. Etienne-Cummings
James P. Gagen (*pro hac vice*)
PAUL HASTINGS LLP
2050 M Street, NW
Washington, DC 20036
Telephone: (202) 551-1700
Facsimile: (202) 551-1705
Email: shamitaetienne@paulhastings.com
Email: jamesgagen@paulhastings.com

Grace I. Wang (*pro hac vice*)
PAUL HASTINGS LLP
200 Park Avenue
New York, NY 10166
Telephone: (212) 318-6000
Facsimile: (212) 319-4090

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Email: gracewang@paulhastings.com

KEKER, VAN NEST & PETERS LLP
Robert A. Van Nest (SBN 84065)
rvannest@keker.com
Leo L. Lam (SBN 181861)
llam@keker.com
Eugene M. Paige (SBN 202849)
epaige@keker.com
R. Adam Lauridsen (SBN 243780)
alauridsen@keker.com
Edward A. Bayley (SBN 267532)
ebayley@keker.com
Kristin Hucek (SBN 321853)
khucek@keker.com
633 Battery Street
San Francisco, CA 94111-1809
Telephone: (415) 391-5400
Facsimile: (415) 397-7188

Counsel for Google LLC

ATTESTATION

Pursuant to Civil Local Rule 5-1(i)(3) regarding signatures, I attest that concurrence in the filing of this document has been obtained from the other signatories.

Dated: October 22, 2024

/s/ Reza Mirzaie
Reza Mirzaie

CERTIFICATE OF SERVICE

I hereby certify that on October 22, 2024, I caused a true and correct copy of the foregoing to be filed in this Court's CM/ECF system, which will send notification of such filing to all parties who have appeared in this matter.

Dated: October 22, 2024

/s/ Reza Mirzaie
Reza Mirzaie

APPENDIX A

APPENDIX A – DISPUTED TERMS

Claim Term, Phrase or Clause	EcoFactor’s Proposed Construction and Supporting Evidence	Google’s Proposed Construction and Supporting Evidence
[1] “temperature profile(s)” (claims 1, 6, 10, 15)	No construction necessary; plain and ordinary meaning. Intrinsic Evidence: ’394 Patent, 1:40-45, 1:48-2:26, 2:30-3:9, 3:10-5:62, 6:43-7:43, 7:44-8:5, 8:5-56, 8:57-10:18 (Figs. 8a vs. 8b and accompanying text), 10:19-46, 11:33-12:34, 12:35-13:2, Figs. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, Claims, File History (E.g., May 14, 2023 non-final action rejecting claims 1-20 filed 2/1/23), 7/27/23 Notice of Allowance) Extrinsic Evidence: EcoFactor 2008 Field Study with foreword by David Auslander, Remote Optimization of HVAC for Efficiency and Demand Response, 2007-2008 Global Field Trial Results of EcoFactor’s Integrated Demand Side Management Solution ECO-GOOG_0002913: Ito, H., Nakahara, N. Simplified Calculation Model of Room Air Temperature Profile in Under-Floor Air-Conditioning System, Int’l Symposium on Room Air Convention and Ventilation Effectiveness, Univ. of Tokyo (1992) ECO-GOOG_0002946: Bhat, P., Varpe, M.K. (2022). A Simplified Thermal Model to Predict Temperature Profile and Heat Generation of Cylindrical Lithium-Ion Cells. In: Krishna, V., Seetharamu, K.N., Joshi, Y.K. (eds) Recent Advances in Hybrid and Electric Automotive Technologies.	“temperatures over time” Intrinsic Evidence: ’394 Patent, 9:1-13:61, FIGs. 6-13, cls 3, 7, 12, 16. Extrinsic Evidence: Testimony of Dr. Todd Rossi on the understanding by one of ordinary skill in the art at the time of the alleged invention as to the meaning of this term, and the relevance of certain extrinsic evidence Prior testimony of named inventor Scott Douglass Hublou

Claim Term, Phrase or Clause	EcoFactor's Proposed Construction and Supporting Evidence	Google's Proposed Construction and Supporting Evidence
	Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-2091-2_2 ECO-GOOG_0002966: Fredman, T.P., Saxén, H. Model for temperature profile estimation in the refractory of a metallurgical ladle. Metall Mater Trans B 29, 651–659 (1998). https://doi.org/10.1007/s11663-998-0100-4 ECO-GOOG_0002959: Diefenderfer, B. K., Al-Qadi, I. L., & Diefenderfer, S. D. (2006). Model to predict pavement temperature profile: Development and validation. Journal of Transportation Engineering, 132(2), 162-167. https://doi.org/10.1061/(ASCE)0733-947X(2006)132:2(162) ECO-GOOG_0002870: https://www.energystar.gov/sites/default/files/tools/DataTrends_All_20150129_508.compressed.pdf (Energy Star Portfolio Manager Data Trends) ECO-GOOG_0002850: https://www.energystar.gov/sites/default/files/asset/document/ES_server_case_study.pdf (Energy Star: Energy Savings from Energy Star-Qualified Servers) ECO-GOOG_0002820: https://www.energystar.gov/sites/default/files/Indow_Attachment_Characterization%20of%20Energy%20Savings%20and%20Thermal%20Comfort%20Improvements.pdf (Knox, Widder, Sept. 2013, US Dept. of Energy, Characterization of Energy Savings and Thermal Comfort Improvements Derived From Using Interior Storm Windows) ECO-GOOG_0002919: https://datacenters.lbl.gov/sites/default/files/FINAL%20Ther	

Claim Term, Phrase or Clause	EcoFactor's Proposed Construction and Supporting Evidence	Google's Proposed Construction and Supporting Evidence
	mal%20Guidelines%20and%20Temp%20Measurements%209-15-2020.pdf (Center of Expertise for Energy Efficiency in Data Centers, Berkeley Lab, Thermal Guidelines and Temperature Measurements in Data Centers, Sept. 15, 2020) Prior testimony of named inventor Scott Douglass Hublou, to the extent needed to rebut any use of such testimony by Google	
[2] “operating profile” (claims 1, 3, 10, 12)	No construction necessary; plain and ordinary meaning. Intrinsic Evidence: ’394 Patent, 1:40-45, 1:48-2:26, 2:30-3:9, 3:10-5:62, 6:43-7:43, 7:44-8:5, 8:5-56, 8:57-10:18, 10:19-46, 11:33-12:34, 12:35-13:2, Figs. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, Claims, File History (E.g., May 14, 2023 non-final action rejecting claims 1-20 filed 2/1/23), 7/27/23 Notice of Allowance) Extrinsic Evidence: EcoFactor 2008 Field Study with foreword by David Auslander, Remote Optimization of HVAC for Efficiency and Demand Response, 2007-2008 Global Field Trial Results of EcoFactor’s Integrated Demand Side Management Solution ECO-GOOG_0002913: Ito, H., Nakahara, N. Simplified Calculation Model of Room Air Temperature Profile in Under-Floor Air-Conditioning System, Int’l Symposium on Room Air Convention and Ventilation Effectiveness, Univ. of Tokyo (1992)	Indefinite Intrinsic Evidence: ’394 Patent, 9:1-13:61, FIGs. 6-13, cls 6, 7, 15, 16 Extrinsic Evidence: Proceedings of <i>EcoFactor, Inc. v. Google LLC</i>, 6:20-cv-00075-ADA (W.D. Tex.) (e.g., PRIOR_ART_00006620-33); <i>Ex Parte</i> Re-examination and IPR Proceedings of EcoFactor patents (e.g., Control No. 90/014,916, PRIOR_ART_00003387-919) Testimony of Dr. Todd Rossi on the understanding by one of ordinary skill in the art at the time of the alleged invention as to the meaning of this term, the relevance of certain extrinsic evidence, and that the term, read in light of the intrinsic evidence, fails to

Claim Term, Phrase or Clause	EcoFactor's Proposed Construction and Supporting Evidence	Google's Proposed Construction and Supporting Evidence
	ECO-GOOG_0002946: Bhat, P., Varpe, M.K. (2022). A Simplified Thermal Model to Predict Temperature Profile and Heat Generation of Cylindrical Lithium-Ion Cells. In: Krishna, V., Seetharamu, K.N., Joshi, Y.K. (eds) Recent Advances in Hybrid and Electric Automotive Technologies. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-2091-2_2 ECO-GOOG_0002966: Fredman, T.P., Saxén, H. Model for temperature profile estimation in the refractory of a metallurgical ladle. Metall Mater Trans B 29, 651–659 (1998). https://doi.org/10.1007/s11663-998-0100-4 ECO-GOOG_0002959: Diefenderfer, B. K., Al-Qadi, I. L., & Diefenderfer, S. D. (2006). Model to predict pavement temperature profile: Development and validation. Journal of Transportation Engineering, 132(2), 162-167. https://doi.org/10.1061/(ASCE)0733-947X(2006)132:2(162) ECO-GOOG_0002870: https://www.energystar.gov/sites/default/files/tools/DataTrends_All_20150129_508.compressed.pdf (Energy Star Portfolio Manager Data Trends) ECO-GOOG_0002850: https://www.energystar.gov/sites/default/files/asset/document/ES_server_case_study.pdf (Energy Star: Energy Savings from Energy Star-Qualified Servers) ECO-GOOG_0002820: https://www.energystar.gov/sites/default/files/Indow_Attachment_Characterization%20of%20Energy%20Savings%20and%20Thermal%20Comfort%20Improvements.pdf (Knox, Widder, Sept. 2013, US Dept. of Energy, Characterization of	inform with reasonable certainty those skilled in the art about the scope of the claimed invention Prior testimony of named inventor Scott Douglass Hublou

Claim Term, Phrase or Clause	EcoFactor's Proposed Construction and Supporting Evidence	Google's Proposed Construction and Supporting Evidence
	Energy Savings and Thermal Comfort Improvements Derived From Using Interior Storm Windows) ECO-GOOG_0002919: https://datacenters.lbl.gov/sites/default/files/FINAL%20Thermal%20Guidelines%20and%20Temp%20Measurements%209-15-2020.pdf (Center of Expertise for Energy Efficiency in Data Centers, Berkeley Lab, Thermal Guidelines and Temperature Measurements in Data Centers, Sept. 15, 2020) Prior testimony of named inventor Scott Douglass Hubblou, to the extent needed to rebut any use of such testimony by Google	
[3] “compares a portion of the current operating profile for the climate control device with a stored temperature profile” / “comparing... a portion of the current operating profile for the climate control device with a stored temperature profile” (claims 1, 10)	Not indefinite. No construction necessary; plain and ordinary meaning. Intrinsic Evidence: ’394 Patent, 1:40-45, 1:48-2:26, 2:30-3:9, 3:10-5:62, 6:43-7:43, 7:44-8:5, 8:5-56, 8:57-10:18, 10:19-46, 11:33-12:34, 12:35-13:2, Figs. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, Claims, File History (E.g., May 14, 2023 non-final action rejecting claims 1-20 filed 2/1/23), 7/27/23 Notice of Allowance) Extrinsic Evidence: EcoFactor 2008 Field Study with foreword by David Auslander, Remote Optimization of HVAC for Efficiency and Demand Response, 2007-2008 Global Field Trial Results of EcoFactor’s Integrated Demand Side Management Solution	Indefinite Intrinsic Evidence: ’394 Patent, 9:1-13:61, FIGs. 6-13 Extrinsic Evidence: Proceedings of <i>EcoFactor, Inc. v. Google LLC</i>, 6:20-cv-00075-ADA (W.D. Tex.) (e.g., PRIOR_ART_00006620-33); <i>Ex Parte</i> Re-examination and IPR Proceedings of EcoFactor patents (e.g., Control No. 90/014,916, PRIOR_ART_00003387-919) Testimony of Dr. Todd Rossi on the understanding by one of ordinary skill in the art at the time of the alleged invention as to

Claim Term, Phrase or Clause	EcoFactor's Proposed Construction and Supporting Evidence	Google's Proposed Construction and Supporting Evidence
	ECO-GOOG_0002913: Ito, H., Nakahara, N. Simplified Calculation Model of Room Air Temperature Profile in Under-Floor Air-Conditioning System, Int'l Symposium on Room Air Convention and Ventilation Effectiveness, Univ. of Tokyo (1992) ECO-GOOG_0002946: Bhat, P., Varpe, M.K. (2022). A Simplified Thermal Model to Predict Temperature Profile and Heat Generation of Cylindrical Lithium-Ion Cells. In: Krishna, V., Seetharamu, K.N., Joshi, Y.K. (eds) Recent Advances in Hybrid and Electric Automotive Technologies. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-2091-2_2 ECO-GOOG_0002966: Fredman, T.P., Saxén, H. Model for temperature profile estimation in the refractory of a metallurgical ladle. Metall Mater Trans B 29, 651–659 (1998). https://doi.org/10.1007/s11663-998-0100-4 ECO-GOOG_0002959: Diefenderfer, B. K., Al-Qadi, I. L., & Diefenderfer, S. D. (2006). Model to predict pavement temperature profile: Development and validation. Journal of Transportation Engineering, 132(2), 162-167. https://doi.org/10.1061/(ASCE)0733-947X(2006)132:2(162) ECO-GOOG_0002870: https://www.energystar.gov/sites/default/files/tools/DataTrends_All_20150129_508.compressed.pdf (Energy Star Portfolio Manager Data Trends) ECO-GOOG_0002850: https://www.energystar.gov/sites/default/files/asset/document/	the meaning of this term, the relevance of certain extrinsic evidence, and that the term, read in light of the intrinsic evidence, fails to inform with reasonable certainty those skilled in the art about the scope of the claimed invention Prior testimony of named inventor Scott Douglass Hublou

Claim Term, Phrase or Clause	EcoFactor's Proposed Construction and Supporting Evidence	Google's Proposed Construction and Supporting Evidence
	ES_server_case_study.pdf (Energy Star: Energy Savings from Energy Star-Qualified Servers) ECO-GOOG_00028220: https://www.energystar.gov/sites/default/files/Indow_Attachment_Characterization%20of%20Energy%20Savings%20and%20Thermal%20Comfort%20Improvements.pdf (Knox, Widder, Sept. 2013, US Dept. of Energy, Characterization of Energy Savings and Thermal Comfort Improvements Derived From Using Interior Storm Windows) ECO-GOOG_0002919: https://datacenters.lbl.gov/sites/default/files/FINAL%20Thermal%20Guidelines%20and%20Temp%20Measurements%209-15-2020.pdf (Center of Expertise for Energy Efficiency in Data Centers, Berkeley Lab, Thermal Guidelines and Temperature Measurements in Data Centers, Sept. 15, 2020) Prior testimony of named inventor Scott Douglass Hublou, to the extent needed to rebut any use of such testimony by Google	
[4] “temperature profile that represents a previous operating profile” (claims 1, 10)	Not indefinite. No construction necessary; plain and ordinary meaning. Intrinsic Evidence: ’394 Patent, 1:40-45, 1:48-2:26, 2:30-3:9, 3:10-5:62, 6:43-7:43, 7:44-8:5, 8:5-56, 8:57-10:18 (Figs. 8a vs. 8b and accompanying text), 10:19-46, 11:33-12:34, 12:35-13:2, Figs. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, Claims, File History (E.g.,	Indefinite Intrinsic Evidence: ’394 Patent, 9:1-13:61, FIGs. 6-13 Extrinsic Evidence: Proceedings of <i>EcoFactor, Inc. v. Google LLC</i>, 6:20-cv-00075-ADA (W.D. Tex.) (e.g.,

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	May 14, 2023 non-final action rejecting claims 1-20 filed 2/1/23), 7/27/23 Notice of Allowance) Extrinsic Evidence: EcoFactor 2008 Field Study with foreword by David Auslander, Remote Optimization of HVAC for Efficiency and Demand Response, 2007-2008 Global Field Trial Results of EcoFactor's Integrated Demand Side Management Solution ECO-GOOG_0002913: Ito, H., Nakahara, N. Simplified Calculation Model of Room Air Temperature Profile in Under-Floor Air-Conditioning System, Int'l Symposium on Room Air Convention and Ventilation Effectiveness, Univ. of Tokyo (1992) ECO-GOOG_0002946: Bhat, P., Varpe, M.K. (2022). A Simplified Thermal Model to Predict Temperature Profile and Heat Generation of Cylindrical Lithium-Ion Cells. In: Krishna, V., Seetharamu, K.N., Joshi, Y.K. (eds) Recent Advances in Hybrid and Electric Automotive Technologies. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-2091-2_2 ECO-GOOG_0002966: Fredman, T.P., Saxén, H. Model for temperature profile estimation in the refractory of a metallurgical ladle. Metall Mater Trans B 29, 651–659 (1998). https://doi.org/10.1007/s11663-998-0100-4 ECO-GOOG_0002959: Diefenderfer, B. K., Al-Qadi, I. L., & Diefenderfer, S. D. (2006). Model to predict pavement temperature profile: Development and validation. Journal of	PRIOR_ART_00006620-33); <i>Ex Parte</i> Re-examination and IPR Proceedings of EcoFactor patents (<i>e.g.</i>, Control No. 90/014,916, PRIOR_ART_00003387-919) Testimony of Dr. Todd Rossi on the understanding by one of ordinary skill in the art at the time of the alleged invention as to the meaning of this term, the relevance of certain extrinsic evidence, and that the term, read in light of the intrinsic evidence, fails to inform with reasonable certainty those skilled in the art about the scope of the claimed invention Prior testimony of named inventor Scott Douglass Hublou

Claim Term, Phrase or Clause	EcoFactor's Proposed Construction and Supporting Evidence	Google's Proposed Construction and Supporting Evidence
	Transportation Engineering, 132(2), 162-167. https://doi.org/10.1061/(ASCE)0733-947X(2006)132:2(162) ECO-GOOG_0002870: https://www.energystar.gov/sites/default/files/tools/DataTrends_All_20150129_508.compressed.pdf (Energy Star Portfolio Manager Data Trends) ECO-GOOG_0002850: https://www.energystar.gov/sites/default/files/asset/document/ES_server_case_study.pdf (Energy Star: Energy Savings from Energy Star-Qualified Servers) ECO-GOOG_0002820: https://www.energystar.gov/sites/default/files/Indow_Attachment_Characterization%20of%20Energy%20Savings%20and%20Thermal%20Comfort%20Improvements.pdf (Knox, Widder, Sept. 2013, US Dept. of Energy, Characterization of Energy Savings and Thermal Comfort Improvements Derived From Using Interior Storm Windows) ECO-GOOG_0002919: https://datacenters.lbl.gov/sites/default/files/FINAL%20Thermal%20Guidelines%20and%20Temp%20Measurements%209-15-2020.pdf (Center of Expertise for Energy Efficiency in Data Centers, Berkeley Lab, Thermal Guidelines and Temperature Measurements in Data Centers, Sept. 15, 2020) Prior testimony of named inventor Scott Douglass Hublou, to the extent needed to rebut any use of such testimony by Google	

Claim Term, Phrase or Clause	EcoFactor's Proposed Construction and Supporting Evidence	Google's Proposed Construction and Supporting Evidence
[5] "a database" / "the database" (claims 1, 6, 10, 15)	No construction necessary; plain and ordinary meaning. Intrinsic Evidence: '394 Patent, 1:40-45, 4:3-5:62, 6:3-22, 6:43-7:43, 7:44-8:25, 8:26-44 (databases), 8:45-67, 9:1-10:18, 10:19-46, 11:33-13:2, Figs. 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, Claims, File History Extrinsic Evidence: EcoFactor 2008 Field Study with foreword by David Auslander, Remote Optimization of HVAC for Efficiency and Demand Response, 2007-2008 Global Field Trial Results of EcoFactor's Integrated Demand Side Management Solution Prior testimony of named inventor Scott Douglass Hublou, to the extent needed to rebut any use of such testimony by Google	"a collection of data with a given structure for accepting, storing, and providing, on demand, data" / "the collection of data with the given structure for accepting, storing, and providing, on demand, the data" Intrinsic Evidence: '394 Patent, 4:22-5:30, 6:8-9, 7:6-60, 8:5-34, 9:35-49, FIGs. 2, 4, 5 Extrinsic Evidence: <i>Ex Parte</i> Re-examination and IPR Proceedings of EcoFactor patents (e.g., Proceedings of IPR2021-01218, including but not limited to Paper 12 (Patent Owner's Response) and Paper 21 (Hearing Transcript)) McGraw-Hill. (1994). IBM Dictionary of Computing (10th ed.). McGraw-Hill. (GOOG-ECOF-NDCA4-00000363-65) Newton, H. (2006). Newton's Telecom Dictionary (21st ed.). CMP Books. (GOOG-ECOF-NDCA4-00000366-68) Collin, S. M. H. (2004). Dictionary of Computing (5th ed.). Bloomsbury. (GOOG-ECOF-NDCA4-00000350-52)

Claim Term, Phrase or Clause	EcoFactor's Proposed Construction and Supporting Evidence	Google's Proposed Construction and Supporting Evidence
		Testimony of Dr. Todd Rossi on the understanding by one of ordinary skill in the art at the time of the alleged invention as to the meaning of this term, and the relevance of certain extrinsic evidence Prior testimony of named inventor Scott Douglass Hublou
[6] "operational efficiency" (claims 1, 3, 6, 10, 12, 15)	Plain and ordinary meaning, an example of which is energy or time required to change inside temperature by a given amount for a set of indoor and outdoor conditions Intrinsic Evidence: '394 Patent, 1:40-45, 1:48-2:26, 2:30-3:9, 3:10-5:62, 6:43-7:43, 7:44-8:5, 8:5-56, 8:57-10:18 (Figs. 8a vs. 8b and accompanying text), 10:19-46, 11:33-12:34, 12:35-13:2, Figs. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, Claims, File History. Extrinsic Evidence¹²:	"the ratio of the energy output to the energy input during operation" Intrinsic Evidence: '394 Patent, 1:40-5:58, 6:17-35, 7:61-8:44, 9:17-14:2, FIGs. 5, 7a-7b, 8a-8b, 9-12, cls. 8, 12, 17 Extrinsic Evidence: Nayler, G. H. F. (1996). Dictionary of Mechanical Engineering (4th ed.). Society of

¹ **Google's Position:** EcoFactor's identification of DDE-323 Exs. 10, 15, 16, or 36 is untimely, as it only identified these exhibits to Google on the same date of filing of this Joint Claim Construction and Prehearing Statement, which is the same date as service of Google's claim construction expert report. To the extent that EcoFactor relies on these exhibits or other evidence not previously identified to Google, Google reserves the right to provide additional testimony from its expert to rebut any use of the evidence.

² **EcoFactor's Position:** EcoFactor's identification is in no way untimely. In its September 27, 2024 PR 4-2 disclosure, EcoFactor explicitly noted—in the same words used in this table—that it would rely upon "Apr. 5, 2023 Markman Order, Dkt. 112, *Ecobee, Inc. v. EcoFactor, Inc.*, Case No. 21-cv-323 (D. Del.) and briefing/evidence therein." The only thing EcoFactor added to this table are the four bullets, which are simply specific exhibits that were attached to the Markman briefing in that case. In other words, this is not an identification of any new document—it is simply a more

Claim Term, Phrase or Clause	EcoFactor's Proposed Construction and Supporting Evidence	Google's Proposed Construction and Supporting Evidence
	<i>EcoFactor, Inc. v. Resideo Techs, Inc.</i>, Case 6:23-cv-00061-ADA (W.D. Tex.), Markman Order (Gilliland, J.), Dkt. 43 (11/28/23) and briefing/evidence therein; <i>EcoFactor, Inc. v. ecobee, Inc.</i>, Case No. 6:22-cv-00033 (W.D. Tex.) Markman Order (Albright, J.), Dkt. 67 (12/8/22) and briefing/evidence therein; Apr. 5, 2023 Markman Order, Dkt. 112, <i>Ecobee, Inc. v. EcoFactor, Inc.</i>, Case No. 21-cv-323 (D. Del.) and briefing/evidence therein, including: • <i>Certain Smart Thermostat Systems, Smart HVAC Systems, Smart HVAC Control Systems, and Components Thereof</i>, Inv. No. 337-TA-1258, Commission Opinion, dated July 19, 2022 (DDE-323 Ex. 10) • ECODCT_0232707 “Categories and Functionality of Smart Home Technology for Energy Management” by Rebecca Ford et al. (DDE-323 Ex. 15) • ECODCT_0232741 “Long-term trends in connected thermostat performance” by Alan Meier et al., pub. Aug 1 2022 (DDE-323 Ex. 16) • Energy Star FAQ Webpage available at https://www.energystar.gov/products/heating_cooling/smart_thermostats/smart_thermostat_faq (DDE-323 Ex. 36) EcoFactor 2008 Field Study with foreword by David Auslander, Remote Optimization of HVAC for Efficiency and	Automotive Engineers; Butterworth-Heinemann. (GOOGECOF-NDCA4-00000360-62) McGraw-Hill. (2003). McGraw-Hill Dictionary of Engineering (2nd ed.). McGraw-Hill. (GOOGECOF-NDCA4-00000356-59) Walker, P.M.B. (1999). Chambers Dictionary of Science and Technology. Chambers. (GOOGECOF-NDCA4-00000353-55) Kreider, J. F. (2001). Handbook of Heating, Ventilation, and Air Conditioning. CRC Press LLC. (PRIOR_ART_00000045-00000712) Testimony of Dr. Todd Rossi on the understanding by one of ordinary skill in the art at the time of the alleged invention as to the meaning of this term, and the relevance of certain extrinsic evidence Prior testimony of named inventor Scott Douglass Hublou

specific identification of already disclosed material. To the extent Google takes issue with the level of specificity EcoFactor previously provided, the bulleted materials have been available to Google for more than a year and Google never asked for any further specificity in response to EcoFactor's disclosure. Notably, Google also purports to rely upon deposition testimony of named inventor Scott Hublou but does not identify any specific portion of his testimony that it believes is relevant, nor does Google even specify which case(s) and which deposition(s) of Mr. Hublou that it is relying upon. Thus, any complaint about specificity (which EcoFactor has provided now even though Google still has not) rings hollow.

Claim Term, Phrase or Clause	EcoFactor's Proposed Construction and Supporting Evidence	Google's Proposed Construction and Supporting Evidence
	Demand Response, 2007-2008 Global Field Trial Results of EcoFactor's Integrated Demand Side Management Solution Prior testimony of named inventor Scott Douglass Hublou, to the extent needed to rebut any use of such testimony by Google	
[7] "a processor" / "the processor" (claims 1, 6, 10, 12, 15)	Plain and ordinary meaning, which is one or more processors, at least one of which is configured to perform [1b] and [1d] / one or more processors, at least one of which is configured to perform [10a], [10b], [10c], [10d], [10e], and [10f]³ Intrinsic Evidence: '394 Patent, 1:40-45, 1:48-2:26, 2:30-3:9, 3:10-5:62, 6:43-7:43, 7:44-8:5 (Fig. 2 illustrates a control system), 8:5-67, 9:1-10:18, 10:19-46, 11:33-12:34, 12:35-13:2, Figs. 1-13, Claims, File History. Extrinsic Evidence: EcoFactor 2008 Field Study with foreword by David Auslander, Remote Optimization of HVAC for Efficiency and Demand Response, 2007-2008 Global Field Trial Results of EcoFactor's Integrated Demand Side Management Solution Prior testimony of named inventor Scott Douglass Hublou, to the extent needed to rebut any use of such testimony by Google	"one or more processors, at least one of which is configured to perform the receiving of [1b1], comparing of [1b2], calculating of [1b2], comparing of [1d1], evaluating of [1d1], and outputting of [1d2] functions" / "one or more processors, at least one of which is configured to perform the receiving of [10a], receiving of [10b], comparing of [10c], storing of [10d], comparing of [10e], evaluating of [10e], and outputting of [10f] functions" Intrinsic Evidence: '394 Patent, 6:43-8:25, FIGs. 1-4, cls. 8, 9, 17, 18; Ex Parte Re-examination and IPR Proceedings of EcoFactor patents (e.g., Proceedings of IPR2021-00054) Extrinsic Evidence: Testimony of Dr. Todd Rossi on the understanding by one of ordinary skill in the art at the time of the alleged invention as to

³ The numbering conventions used in this construction are found in Appendix B.

Claim Term, Phrase or Clause	EcoFactor’s Proposed Construction and Supporting Evidence	Google’s Proposed Construction and Supporting Evidence
		the meaning of this term, and the relevance of certain extrinsic evidence Prior testimony of named inventor Scott Douglass Hublou

APPENDIX B

APPENDIX B – CLAIM LIMITATION NUMBERING

Claim 1

[1Pre] A control system for an environment inside a structure, comprising:

[1a] a climate control device in the structure that receives first temperatures from inside the structure;

[1b] a processor that: [1b1] receives second temperatures from outside the structure from at least one source outside the structure; and [1b2] compares the first temperatures and the second temperatures over time to calculate a current operating profile for the climate control device; and

[1c] a database that stores the current operating profile for the climate control device,

[1d] wherein the processor (a) [1d1] compares a portion of the current operating profile for the climate control device with a stored temperature profile that represents a previous operating profile for the climate control device calculated at a different time to evaluate whether an operational efficiency of the climate control device has decreased over time, and (b) [1d2] outputs a result of the evaluation, [1d3] wherein: the portion of the current operating profile for the climate control device is limited to a specified first time interval, and the stored temperature profile is limited to a specified earlier second time interval.

Claim 10

[10Pre] A method for controlling an environment inside a structure, comprising:

[10a] receiving, with a processor, first temperatures inside the structure from a climate control device inside the structure;

[10b] receiving, with the processor, second temperatures outside the structure from at least one source outside the structure;

[10c] comparing, with the processor, the first temperatures and the second temperatures over time to calculate a current operating for the climate control device; and

[10d] storing, with the processor, the current operating profile for the climate control device in a database,

[10e] comparing, with the processor, a portion of the current operating profile for the climate control device with a stored temperature profile that represents a previous operating profile for the climate control device calculated at a different time to evaluate whether an operational efficiency of the climate control device has decreased over time, and

[10f] outputting, with the processor, a result of the evaluation, wherein: the portion of the current operating profile for the climate control device is limited to a specified first time interval, and the stored temperature profile is limited to a specified earlier second time interval.