UNITED STATES PATENT AND TRADEMARK OFFICE —————— BEFORE THE PATENT TRIAL AND APPEAL BOARD ———————

ECOBEE, INC.

Petitioner

v.

ECOFACTOR, INC.

(record) Patent Owner

Inter Partes Review No.: (Unassigned)
Patent No. 8,498,753

PETITION FOR INTER PARTES REVIEW UNDER 35 U.S.C. §§ 311-319 AND 37 C.F.R. § 42.100 ET. SEQ



TABLE OF CONTENTS

EXH	IBIT LI	ST	ii
NOT	ICE OF	LEAD AND BACKUP COUNSEL	1
NOT	ICE OF	THE REAL-PARTIES-IN-INTEREST	1
NOT	ICE OF	RELATED MATTERS	1
NOT	ICE OF	SERVICE INFORMATION	3
GRO	UNDS	FOR STANDING	3
STA	ΓΕΜΕΝ	T OF PRECISE RELIEF REQUESTED	3
THR	ESHOL	D REQUIREMENT FOR INTER PARTES REVIEW	4
I.			
	A.	The '753 Patent Disclosure	4
II.	CLAIM CONSTRUCTION		
	A.	Claim Constructions in Co-pending Litigations	11
	B.	Claims 3, 4, 10, 16— "heating, ventilation, and air conditioning system"	12
III.	DET	AILED EXPLANATION OF THE REASONS FOR UNPATENTABILITY	13
Grou	nd 1. C	laims 1-20 are obvious over Wedekind in view of Ehlers.	13
	A.	Effective Prior Art Dates	13
	B.	Overview of the Combination	14
	C.	Overview of Wedekind	14
	D.	Overview of Ehlers	18
	E.	Rationale (Motivation) Supporting Obviousness	22
	F.	Graham Factors	23
	G.	Reasonable Expectation of Success	24
	H.	Analogous Art	24
	I.	Claim Mapping	24
IV.	CONCLUSION		73



EXHIBIT LIST

Exhibit No.	Description
1001	U.S. Patent No. 8,498,753 ("the '753 patent").
1002	Declaration of Rajendra Shah.
1003	C.V. of Rajendra Shah.
1004	U.S. Pat. No. 5,454,511 ("Van Ostrand").
1005	U.S. Pat. No. 6,480,803 (" Pierret ").
1006	U.S. Pat. No. 5,197,666 ("Wedekind")
1007	Joint Claim Construction Chart in Smart HVAC Systems, and Components Thereof, 337-TA-1185 (ITC March 6, 2020).
1008	U.S. Pat. No. 6,216,956 ("Ehlers").
1009	Redline comparison of claims 1, 9 and 15.
1010	File History of U.S. App. Ser. No. 12/773,690 (the application that issued as the '753 patent).
1011	Horan, T, Control Systems and Applications for HVAC/R, Prentice-Hall, Inc., 1997.
1012	Levenhagen, J, HVAC Control and Systems, McGraw-Hill, Inc., 1993.
1013	U.S. Pat. No. 6,957,690 (" Raaijmakers ").
1014	ITC Notice dated December 15, 2020 regarding termination of the investigation as to the asserted claims of U.S. Patent No. 8,498,753.
1015	Comparison Document - Google Petition filed in IPR2020-01504 vs. Present Petition



Petitioner respectfully requests *inter partes* review under 35 U.S.C. § 311 of claims 1-20 of U.S. Pat. No. 8,498,753 ("the '753 patent").

NOTICE OF LEAD AND BACKUP COUNSEL

Lead Counsel	Back-up Counsel
Scott W. Cummings (Reg. No. 41,567)	Catherine N. Taylor (Reg. No. 78,518)
scott.cummings@dentons.com	catherine.taylor@dentons.com
1900 K Street, N.W.	233 South Wacker Drive
Washington, DC 20006	Suite 5900
Tel.: (202) 496-7500	Chicago, IL 60606-6361
Fax: (202) 496-7756	Tel.: (312) 876-8000
	Fax: (312) 876-7934

NOTICE OF THE REAL-PARTIES-IN-INTEREST

The real-parties-in-interest are ecobee, Inc. and ecobee Ltd.

NOTICE OF RELATED MATTERS

The '753 patent has also been asserted in the following litigations:

- EcoFactor, Inc. v. Google LLC, 1-19-cv-12322 (D. Mass. Nov. 12, 2019);
- EcoFactor, Inc. v. Alarm.com Inc. et al., 1-19-cv-12323 (D. Mass. Nov. 12, 2019);
- EcoFactor, Inc. v. Daikin Industries, Ltd. et al., 1-19-cv-12324 (D. Mass. Nov. 12, 2019)¹;

¹ This case has been voluntarily dismissed.



- EcoFactor, Inc. v. Ecobee, Inc. et al., 1-19-cv-12325 (D. Mass. Nov. 12, 2019);
- EcoFactor, Inc. v. Schneider Electric USA, Inc. et al., 1-19-cv-12326 (D. Mass. Nov. 12, 2019)²;
- EcoFactor, Inc. v. Vivint, Inc., 1-19-cv-12327 (D. Mass. Nov. 12, 2019); and
- *Smart HVAC Systems, and Components Thereof*, 337-TA-1185 (ITC)³.

 The following case is pending before the Board involving the '753 patent:
- Google LLC f/k/a Google Inc. v. EcoFactor, Inc., IPR2020-01504.

This Petition is being submitted concurrently with a Motion for Joinder. Specifically, Petitioner requests institution and joinder with IPR2020-01504, which the Board instituted on March 9, 2021. Petitioner has spoken with counsel of record for Google, and Google does not oppose joinder to the IPR2019-01504 petition.

Whereas the present Petition is a "me-too" or "copycat" petition, wherein Petitioner agrees to assume a "passive understudy role," the *General Plastic* factors are "effectively neutraliz[ed]." *Apple Inc. v. Uniloc 2017 LLC*, IPR2018-00580, Paper 13 at 10 (Aug. 21, 2018). Furthermore, there are no active parallel proceedings involving the '753 patent. The district court litigations listed above have either been stayed or terminated, and the ITC investigation has been

³ The investigation has been terminated with respect to the '753 patent.



² This case has been voluntarily dismissed.

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.

