

**UNITED STATES INTERNATIONAL TRADE COMMISSION**

**Washington, D.C.**

**In the Matter of**

**CERTAIN SMART THERMOSTAT  
SYSTEMS, SMART HVAC SYSTEMS,  
SMART HVAC CONTROL SYSTEMS,  
AND COMPONENTS THEREOF**

**Investigation No. 337-TA-1258**

**NOTICE OF COMMISSION DECISION TO REVIEW IN PART A FINAL INITIAL  
DETERMINATION; COMMISSION FINAL DETERMINATION FINDING NO  
VIOLATION OF SECTION 337; TERMINATION OF INVESTIGATION**

**AGENCY:** U.S. International Trade Commission.

**ACTION:** Notice.

**SUMMARY:** Notice is hereby given that the U.S. International Trade Commission has determined to review in part a final initial determination (“FID”) of the presiding Administrative Law Judge (“ALJ”). On review, the Commission affirms the FID’s finding of no violation of section 337 of the Tariff Act of 1930 (“section 337”), as amended, in this investigation. The investigation is terminated.

**FOR FURTHER INFORMATION CONTACT:** Houda Morad, Office of the General Counsel, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436, telephone (202) 708-4716. Copies of non-confidential documents filed in connection with this investigation may be viewed on the Commission’s electronic docket (EDIS) at <https://edis.usitc.gov>. For help accessing EDIS, please email [EDIS3Help@usitc.gov](mailto:EDIS3Help@usitc.gov). General information concerning the Commission may also be obtained by accessing its Internet server at <https://www.usitc.gov>. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission’s TDD terminal on (202) 205-1810.

**SUPPLEMENTARY INFORMATION:** On April 2, 2021, the Commission instituted this investigation under section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337 (“section 337”), based on a complaint filed by EcoFactor, Inc. of Palo Alto, California (“Complainant”). *See* 86 FR 17402-03 (Apr. 2, 2021). The complaint, as amended and supplemented, alleges a violation of section 337 based upon the importation into the United States, the sale for importation, and the sale within the United States after importation of certain smart thermostat systems, smart HVAC systems, smart HVAC control systems, and components thereof by reason of infringement of certain claims of U.S. Patent Nos. 8,423,322 (“the ’322 patent”); 8,019,567 (“the ’567 patent”); 10,612,983 (“the ’983 patent”); 8,596,550 (“the ’550 patent”); and 8,886,488 (“the ’488 patent”). *See id.* The notice of investigation names the following respondents: ecobee Ltd. and ecobee, Inc. of Toronto, Canada (collectively, “ecobee”); Google LLC of

Mountain View, California (“Google”); Carrier Global Corporation of Palm Beach Gardens, Florida (“Carrier”); Emerson Electric Co. of St. Louis, Missouri (“Emerson”); Honeywell International Inc. of Charlotte, North Carolina (“Honeywell”); Resideo Technologies, Inc. of Austin, Texas (“Resideo”); Johnson Controls International, PLC of Cork, Ireland (“JCP”); and Siemens Industry, Inc. of Buffalo Grove, Illinois and Siemens AG of Munich, Germany (collectively, “Siemens”). *See id.* The Office of Unfair Import Investigations is not a party to the investigation. *See id.*

The Commission previously terminated the investigation as to respondents Emerson, Siemens, Honeywell, Resideo, and Carrier based on the withdrawal of the allegations in the complaint as to those respondents. *See* Order No. 3 (Apr. 12, 2021), *unreviewed by* Comm’n Notice (Apr. 29, 2021); Order No. 7 (May 13, 2021), *unreviewed by* Comm’n Notice (May 24, 2021); Order No. 13 (July 16, 2021), *unreviewed by* Comm’n Notice (July 30, 2021).

On May 11, 2021, the Commission amended the complaint and notice of investigation to add respondent Johnson Controls Inc. (“JCI”) and to terminate respondent JCP. *See* Order No. 4 (Apr. 20, 2021), *unreviewed by* Comm’n Notice (May 11, 2021). On August 6, 2021, the Commission terminated the investigation as to JCI based on settlement. *See* Order No. 17 (Aug. 6, 2021), *unreviewed by* Comm’n Notice (Aug. 18, 2021). Respondents ecobee and Google (hereinafter, “Respondents”) remain in this investigation.

On August 18, 2021, the Commission terminated the investigation as to the ’322 patent based on the withdrawal of the allegations in the complaint as to that patent. *See* Order No. 16 (Aug. 5, 2021), *unreviewed by* Comm’n Notice (Aug. 18, 2021). On December 8, 2021, the Commission terminated the investigation as to the ’567 and ’983 patents based on the withdrawal of the allegations in the complaint as to those patents. *See* Order No. 26 (Nov. 8, 2021), *unreviewed by* Comm’n Notice (Dec. 8, 2021). Claims 9 and 17 of the ’550 patent and claims 1 and 2 of the ’488 patent (collectively, “the Asserted Patents”) remain in this investigation.

On September 1, 2021, the ALJ issued a claim construction order construing certain terms disputed by the parties before the ALJ. *See* Order No. 18 (Sept 1, 2021). In addition, the ALJ determined that the asserted claims of the ’567 patent were invalid as indefinite. *See id.*

On April 4, 2022, the ALJ issued the FID finding no violation of section 337. In particular, the FID finds that Complainant failed to establish infringement of any of the asserted claims of the ’550 and ’488 patents by the Respondents. In addition, the FID finds all of the asserted claims to be invalid as follows: (1) claims 9 and 17 of the ’550 patent and claims 1 and 2 of the ’488 patent lack written description under 35 U.S.C. 112 (section 112); and (2) claim 9 (but not claim 17) of the ’550 patent and claims 1 and 2 of the ’488 patent are patent ineligible under 35 U.S.C. 101 (section 101). The FID also finds that claims 9 and 17 of the ’550 patent and claims 1 and 2 of the ’488 patent are not invalid as anticipated or obvious under 35 U.S.C. 102 or 103 (section 102 or 103). Furthermore, the FID finds that the technical prong is not satisfied with respect to any of the asserted claims. The FID also finds that the economic prong of the domestic industry requirement is satisfied with respect to both Asserted Patents.

The ALJ's Recommended Determination ("RD") recommends, should the Commission find a violation of section 337, that the Commission issue a limited exclusion order against smart thermostat systems, smart HVAC systems, smart HVAC control systems, and components thereof imported by or on behalf of the Respondents. The RD does not recommend issuance of a cease and desist order against any of the Respondents. In addition, the RD recommends that the Commission decline to set a bond during the period of Presidential review.

On April 18, 2022, both Complainant and Respondents filed petitions for Commission review of the FID. Complainant petitions for Commission review of the FID's findings on: (1) certain claim constructions; (2) non-infringement; (3) invalidity for lack of written description under section 112; and (4) patent ineligibility under section 101 of claim 9 of the '550 patent and claims 1 and 2 of the '488 patent. Respondents contingently petition for Commission review of the FID's findings on: (1) certain infringement findings; (2) validity of claims 1 and 2 of the '488 patent under section 102 or 103; (3) patent eligibility of claim 17 of the '550 patent under section 101; and (4) the economic prong of the domestic industry requirement. On April 26, 2022, the parties filed responses to each other's petition.

Having examined the record of this investigation, including the FID and the parties' submissions, the Commission has determined to review in part and, upon review, to affirm the FID's determination of no violation of section 337. Specifically, as explained in the Commission Opinion issued concurrently herewith, the Commission has determined to: (1) modify the FID's claim construction findings with respect to the terms "measurement" and "operational efficiency"; (2) affirm with modifications the FID's non-infringement findings as to both Asserted Patents; (3) take no position as to the FID's finding that the technical prong of the domestic industry requirement is not satisfied as to both Asserted Patents; (4) take no position as to the FID's invalidity findings for lack of written description and patent ineligibility as to both Asserted Patents; (5) take no position as to the FID's finding that claim 1 of the '488 patent is not anticipated by U.S. Patent No. 6,478,233 ("Shah") and that claim 2 of the '488 patent is not obvious over Shah in view of U.S. Patent No. 6,789,739 ("Rosen"); and (6) take no position as to the economic prong of the domestic industry requirement. The Commission adopts all findings in the FID that are not inconsistent with the Commission's determination.

The investigation is terminated.

The Commission's vote for this determination took place on June 22, 2022.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. 1337), and in part 210 of the Commission's Rules of Practice and Procedure (19 CFR part 210).

By order of the Commission.



Lisa R. Barton  
Secretary to the Commission

Issued: June 22, 2022