

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

In the Matter of
CERTAIN AUDIO PLAYERS AND
CONTROLLERS, COMPONENTS
THEREOF, AND PRODUCTS
CONTAINING THE SAME

Investigation No. 337-TA-1191

COMMISSION OPINION

TABLE OF CONTENTS

I.	INTRODUCTION	2
II.	BACKGROUND	2
	A. Procedural History	2
	B. The Asserted Patents.....	9
	C. The Products at Issue	10
	1. Networked Audio Players	10
	2. Controllers.....	11
III.	COMMISSION REVIEW OF THE FINAL ID.....	12
IV.	ANALYSIS.....	13
	A. Infringement by the '258 and '953 Accused Products at the Time of Importation	14
	1. Background.....	14
	2. The ID.....	17
	3. Analysis.....	18
	B. Correction of Typographical Errors.....	22
V.	REMEDY, THE PUBLIC INTEREST, AND BONDING.....	22
	A. Limited Exclusion Order.....	22
	B. Cease and Desist Order.....	26
	C. Public Interest	28
	1. Public Health and Welfare	29
	2. Competitive Conditions in the United States.....	31
	3. The Production of Like or Directly Competitive Articles in the United States.....	32
	4. United States Consumers	32
	D. Bond.....	33
VI.	CONCLUSION.....	34

I. INTRODUCTION

On November 19, 2021, the Commission determined to review in part the final initial determination (“ID”) issued on August 13, 2021, by the presiding chief administrative law judge (“CALJ”). 86 Fed. Reg. 67492 (Nov. 26, 2021). On review, the Commission affirms the ID’s findings that there is a violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337 (“Section 337”), with respect to U.S. Patent Nos. 9,195,258 (“the ’258 patent”) and 10,209,953 (“the ’953 patent”), for the reasons stated in the ID, as supplemented herein. The Commission further affirms the ID’s findings that there is a violation of Section 337 with respect to U.S. Patent Nos. 8,588,949 (“the ’949 patent”), 9,219,959 (“the ’959 patent”), and 10,439,896 (“the ’896 patent”), for the reasons stated in the ID. The Commission also corrects two typographical errors on pages 24 and 84 of the ID.

The Commission has determined to issue a limited exclusion order (“LEO”) and cease and desist order (“CDO”) against respondent Google LLC (“Google”), and it finds the public interest does not preclude issuing such a remedy. The Commission has also determined to set a bond in the amount of 100 percent of the entered value of subject imports during the period of Presidential review. This opinion sets forth the Commission’s reasoning in support of its final determination.

II. BACKGROUND

A. Procedural History

On January 7, 2020, complainant Sonos, Inc. (“Sonos”) filed a complaint with the Commission alleging violations of Section 337 in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain audio players and controllers, components thereof, and products containing the same. *See* 85 Fed. Reg. 2147-48 (Jan. 14, 2020). On January 21-22, 2020, the Commission received nine submissions on the

public interest from members of the public in response to the Commission's *Federal Register* notice. *See id.* at 2148.¹

On February 11, 2020, the Commission instituted this investigation based on the complaint filed by Sonos to determine:

[W]hether there is a violation of subsection (a)(1)(B) of section 337 in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain products identified in paragraph (2) by reason of infringement of one or more of claims 17, 21-24, and 26 of the '258 patent; claims 7, 12-14, and 22-24 of the '953 patent; claims 1, 2, 4, and 5 of the '949 patent; claims 5, 9, 10, 29, and 35 of the '959 patent; and claims 1, 3, 5, 6, and 12 of the '896 patent, and whether an industry in the United States exists as required by subsection (a)(2) of section 337[.]

85 Fed. Reg. 7783 (Feb. 11, 2020).

The notice of investigation named two respondents: Google and Alphabet Inc., both of Mountain View, California. *Id.* The Office of Unfair Import Investigations ("OUII") is also named as a party to this investigation. *Id.*

On September 21, 2020, the Commission terminated the investigation as to Alphabet Inc. based on withdrawal of the allegations in the complaint directed to Alphabet Inc. Order No. 18 (Sept. 1, 2020), *unreviewed by* Comm'n Notice (Sept. 21, 2020). On November 24, 2020, the Commission determined that the importation requirement has been satisfied. Order No. 27 (Oct. 27, 2020), *unreviewed by* Comm'n Notice (Nov. 24, 2020). On February 2, 2021, the Commission determined that the technical prong of the domestic industry ("DI") requirement has

¹ *See* EDIS Doc. IDs 699706 (Submission of Champions Community Foundation); 699787 (Submission of United Spinal Association ("USA Sub.)); 699838 (Submission of Center for Democracy & Technology); 699918 (Submission of William & Deborah Weis); 699942 (Submission of R Street Institute); 699955 (Submission of Champions Community Foundation); 699962 (Submission of American Foundation for the Blind); 699975 (Submission of American Council of the Blind); and 699976 (Submission of Computer & Communications Industry Association).

been satisfied as to the '949 patent. Order No. 32 (Jan. 4, 2021), *unreviewed by* Comm'n Notice (Feb. 2, 2021). On February 16, 2021, the Commission determined that the economic prong of the DI requirement has been satisfied as to all Asserted Patents.² Order No. 35 (Jan. 14, 2021), *reviewed and aff'd by* Comm'n Notice (Feb. 16, 2021).

On March 12, 2021, the Commission partially terminated the investigation based on withdrawal of the allegations in the complaint as to the following asserted claims: claims 22 and 23 of the '258 patent; claims 12 and 13 of the '953 patent; claims 5, 9, 29, and 35 of the '959 patent; and claim 3 of the '896 patent. Order No. 58 (Feb. 23, 2021), *unreviewed by* Comm'n Notice (Mar. 12, 2021).

On July 23, 2020, the parties submitted a joint proposed claim construction chart. On September 25, 2020, the CALJ issued a *Markman* Order construing the claim terms in dispute. *See* Order No. 20 (Sept. 25, 2020).³

A five-day evidentiary hearing took place from February 22-26, 2021. *See* Tr. 1-1138. Sonos asserted the following claims at the hearing, each of which remains at issue in this investigation:

Asserted Patent	Remaining Asserted Claim(s)
'258 patent	17, 21, 24, and 26
'953 patent	7, 14, and 22-24
'959 patent	10
'949 patent	1, 2, 4, and 5
'896 patent	1, 5, 6, and 12

ID at 180-82; *see also id.* at 13, 56, 91, 120, 150.

² “Asserted Patents” refers, collectively, to the '258 patent, '953 patent, '959 patent, '949 patent, and '896 patent.

³ No *Markman* hearing was held due to the COVID-19 pandemic. Order No. 20 at 1.

On August 13, 2021, the CALJ issued the final ID, finding a violation of Section 337 with respect to all five Asserted Patents. *Id.* at 180-82. More specifically, the ID finds as follows:

- Regarding the '258 patent (ID at 180):
 - (i) the '258 Accused Products and '258 NIA⁴ Nos. 2 and 3 infringe each of asserted claims 17, 21, 24, and 26;
 - (ii) '258 NIA No. 1 does not infringe any asserted claim⁵;
 - (iii) the asserted claims are not invalid as obvious; and
 - (iv) Sonos satisfied the technical and economic prongs of the DI requirement with respect to the '258 patent.
- Regarding the '953 patent (ID at 180-81):
 - (i) the '953 Accused Products and '953 NIA Nos. 2 and 3 infringe each of asserted claims 7, 14, and 22-24;
 - (ii) '953 NIA No. 1 does not infringe any asserted claim⁶;

⁴ For each Asserted Patent, Google developed several redesign products (or alleged non-infringing alternatives (“NIAs”)) and submitted them for adjudication.

⁵ The ID finds that '258 NIA No. 1 does not practice limitations 17.2 and 17.7 of asserted claim 17 of the '258 patent, and thus does not practice any asserted claim of the patent. ID at 26-34. The ID finds that, as to the relevant modifications in '258 NIA No. 1, the parties agree that [REDACTED] *Id.* (citing CIPHB at 21-22; RIPHB at 31; SIPHB at 25). The ID also finds that the evidence shows that “[REDACTED]” *Id.* (citing RX-1470C at Q/As 62-63; JX-0466C at 244:14-21). Instead, the evidence shows that “[REDACTED]” *Id.* (citing JX-0466C at 245:10-22; RX-1522C at Q/A 70). Therefore, [REDACTED] *Id.* (citing RX-1522C at Q/A 70).

⁶ The ID finds that '953 NIA No. 1 does not practice limitations 7.7 and 7.8 of asserted claim 7 of the '953 patent, and thus does not practice any asserted claim of the patent. ID at 73-74. The ID finds that “Sonos does not assert that the '953 NIA No. 1 infringes the '953 patent.” *Id.* at 73. The ID also finds that, as to the relevant modifications in '953 NIA No. 1, the parties agree that

- (iii) the asserted claims are not invalid as obvious; and
 - (iv) Sonos satisfied the technical and economic prongs of the DI requirement with respect to the '953 patent.
- Regarding the '959 patent (ID at 180-81):
 - (i) the '959 Accused Products and '959 NIA No. 3 infringe asserted claim 10;
 - (ii) '959 NIA No. 4 does not infringe asserted claim 10⁷;
 - (iii) asserted claim 10 is not invalid as obvious or for improper inventorship; and
 - (iv) Sonos satisfied the technical and economic prongs of the DI requirement with respect to the '959 patent.
 - Regarding the '949 patent (ID at 129, 180-81):
 - (i) the accused Hub and Pixel Controllers installed with the Google Home application infringe asserted claims 1, 2, and 5;
 - (ii) Google induces the infringement of asserted claims 1, 2, and 5;
 - (iii) the accused Pixel Controllers installed with either the YouTube Music or Google Play Music application do not infringe asserted claims 1, 2, or 5;
 - (iv) none of the '949 Accused Products infringe asserted claim 4;
 - (v) Google's redesign products for the '949 patent do not infringe any asserted


"_____"
"_____." *Id.*
(citing CIPHB at 21-22; RIPHB at 31; SIPHB at 25). Therefore, "
"_____." *Id.* (citing *id.* § VI.B.3.a).

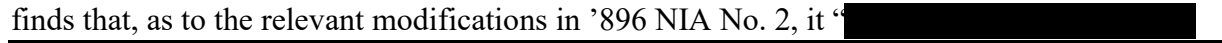
⁷ The ID finds that '959 NIA No. 4 does not practice limitations 10.8 and 10.9 of asserted claim 10 of the '959 patent. ID at 107-08. The ID finds that, as to the relevant modifications in '959 NIA No. 4, it "
"_____." *Id.* at 108; *see id.* at 107 ("
"_____
"_____
"_____
"_____
"_____
"_____").

claim⁸;

- (vi) the asserted claims are not invalid as anticipated or obvious;
 - (vii) the asserted claims are not directed to patent-ineligible subject matter; and
 - (viii) Sonos satisfied the technical and economic prongs of the DI requirement with respect to the '949 patent.
- Regarding the '896 patent (ID at 180-82):
 - (i) the '896 Accused Products and '896 NIA No. 3 infringe each of asserted claims 1, 5, 6, and 12;
 - (ii) Google induces the infringement of asserted claims 1, 5, 6, and 12,
 - (iii) '896 NIA No. 2 does not infringe any asserted claim⁹;
 - (iv) the asserted claims are not invalid as anticipated, as obvious, or for improper inventorship;
 - (v) Sonos satisfied the technical and economic prongs of the DI requirement with respect to the '896 patent.

The recommended determination (“RD”) recommends that, should the Commission determine that a violation of Section 337 occurred, the Commission should: (i) issue an LEO against Google’s infringing products; (ii) issue a CDO against Google; and (iii) set a 100 percent

⁸ The ID finds that Google’s redesign products for the '949 patent do not practice any asserted claim of the '949 patent. ID at 132; *id.* at 132 n.69 (noting that “Google does not provide names for the[se] redesigned products, as it does for the other patents”); *id.* at 181 (referring to these redesigns collectively as “The 949 NIAs”). The ID notes that Google explains that it “” *Id.* at 132 (citing RPHB at 166). The ID also notes that neither Sonos nor OUII disputes that Google’s redesign products “remove the infringing functionality” present in the '949 Accused Products. *Id.* The ID also finds that “the evidence shows that the redesigned products do not infringe the '949 patent.” *Id.* (citing RX-1520C at Q/As 161-172).

⁹ The ID finds that '896 NIA No. 2 does not practice limitation 1.7 of asserted claim 1 of the '896 patent, and thus does not practice any asserted claim of the patent. ID at 162-65. The ID finds that, as to the relevant modifications in '896 NIA No. 2, it “” *Id.* at 164 (citing RX-1521C at Q/A 503).

bond for any importations of infringing products during the period of Presidential review. *Id.* at 182-88. The Commission did not direct the CALJ to take public interest evidence or provide findings and recommendations concerning the public interest (*see* 85 Fed. Reg. at 7783), and the RD does not address the public interest (*see* ID at 182-88).

On August 27, 2021, Sonos and Google each filed a petition seeking review of certain findings in the ID.¹⁰ On September 7, 2021, Sonos and Google filed responses to each other's petitions, and OUII filed a joint response to both petitions.¹¹

On September 13, 2021, the Commission received eight submissions on the public interest from members of the public in response to the Commission's *Federal Register* notice. *See* 86 Fed. Reg. 46715 (Aug. 19, 2021).¹² The Commission did not receive submissions on the public interest from the parties pursuant to Commission Rule 210.50(a) (4) (19 C.F.R. 210.50(a) (4)).

On November 19, 2021, the Commission determined to review the ID in part with respect to the ID's analysis of whether the products accused of infringing the '258 and '953 patents are articles that infringe at the time of importation. 86 Fed. Reg. at 67492. The Commission also

¹⁰ Complainant Sonos Inc.'s Petition and Contingent Petition for Review of the Initial Determination on Violation of Section 337 (Aug. 27, 2021); Respondent Google's Petition for Review of the Initial Determination on Violation of Section 337 (Aug. 27, 2021) ("RPet.").

¹¹ Complainant Sonos Inc.'s Response to Respondent's Petition for Review of the Initial Determination on Violation of Section 337 (Sept. 7, 2021); Google's Response to Complainant's Petition for Review of the Initial Determination on Violation of Section 337 (Sept. 7, 2021) ("RPRsp."); Response of the Office of Unfair Import Investigations to the Private Parties' Petitions for Review of the Initial Determination on Violation of Section 337 (Sept. 7, 2021).

¹² *See* EDIS Doc. IDs 751551 (Submission of Seattle Musicians Access to Sustainable Healthcare); 751556 (Submission of Sound Board Engineers); 751560 (Submission of Project: Music Heals Us); 751562 (Submission of U.S. Startups & Inventors for Jobs); 751563 (Submission of Innovation Alliance ("IA Sub.)); 751564 (Submission of Urban Arts Partnership); 751565 (Submission of Centripetal Networks, Inc.); and 751568 (Submission of American Economic Liberties Project ("AELP Sub.)).

determined to correct two typographical errors on pages 24 and 84 of the ID. *Id.* The Commission did not request briefing on any issue under review. The Commission’s notice also requested written submissions from the parties, interested government agencies, and interested persons on remedy, the public interest, and bonding. *Id.*

On December 2, 2021, Sonos, Google, and OUII each filed initial submissions on remedy, the public interest, and bonding.¹³ That same day, the Commission also received four additional submissions on the public interest from members of the public in response to the Commission’s *Federal Register* notice.¹⁴ On December 10, 2021, Sonos, Google, and OUII each filed reply submissions on remedy, the public interest, and bonding.¹⁵

B. The Asserted Patents

The technology at issue relates to audio systems built from a network of playback devices (*e.g.*, speakers) and controllers through which users interact with those systems (*e.g.*, mobile phones, tablets, and laptops). ID at 2. The five Asserted Patents concern techniques relating to syncing audio playback among multiple audio devices (’258 and ’953 patents); pairing audio

¹³ Complainant Sonos, Inc.’s Initial Written Submission on Remedy, Bonding, Public Interest, and Requested Information (Dec. 2, 2021) (“CRemBr.”); Respondent Google’s Submission on Remedy, Bond, and Public Interest (Dec. 2, 2021) (“RRemBr.”); and Response of the Office of Unfair Import Investigations to the Commission’s Request for Written Submissions on Remedy, the Public Interest, and Bonding (Dec. 2, 2021) (“ORemBr.”).

¹⁴ *See* EDIS Doc. IDs 757760 (Submission of American Foundation for the Blind (“AFB Sub.”)); 757762 (Submission of Computer & Communications Industry Association (“CCIA Sub.”)); 757769 (Submission of Software & Information Industry Association); and 757782 (Submission of Computer & Communications Industry Association (“CCF Sub.”)).

¹⁵ Complainant Sonos, Inc.’s Reply to Initial Written Submissions on Remedy, Bonding, Public Interest, and Requested Information (Dec. 10, 2021) (“CReplyRemBr.”); Respondent Google’s Reply Submission on Remedy, Bond, and Public Interest (Dec. 10, 2021) (“RReplyRemBr.”); and Reply Submission of the Office of Unfair Import Investigations to the Private Parties’ Written Submissions on Remedy, the Public Interest, and Bonding (Dec. 10, 2021) (“OReplyRemBr.”).

devices to generate different listening environments ('959 patent); user interfaces for volume control of multiple audio devices ('949 patent); and setting up devices on wireless networks ('896 patent).

C. The Products at Issue

At issue are (1) “networked audio players” and (2) “controllers,” devices—*e.g.*, mobile phones, tablets, and laptops—capable of controlling players. 85 Fed. Reg. at 7783.

1. Networked Audio Players

The '258, '953, and '959 patents are directed to networked audio players (also referred to as “smart speakers”). For each patent, the following chart lists: (i) Google’s players (*i.e.*, “Chromecast-enabled audio players”) accused of practicing the asserted claims; (ii) Google’s NIA/redesign products submitted for adjudication as to the asserted claims; and (iii) Sonos’ players upon which it relies to satisfy the technical prong of DI:

Patent (Asserted Claims)	Google’s Accused Products	Google’s NIAs	Sonos’ DI Products
'258 patent (claims 17, 21, 24, and 26)	Home Mini, Nest Mini, Home, Nest Audio, Home Max, Home Hub, Nest Hub, Nest Hub Max, Nest Wifi Point, Chromecast, Chromecast Audio, Chromecast Ultra, and Chromecast with Google TV (“the '258 Accused Products”)	'258 NIA No. 1 '258 NIA No. 2 '258 NIA No. 3	Play:1, Play:3, Play:5, One, One SL, Move, Five, Playbar, Playbase, Beam, Arc, Connect, Connect:Amp, Port, Amp, SYMFONISK table lamp WiFi speaker, and SYMFONISK bookshelf WiFi speaker
'953 patent (claims 7, 14, and 22-24)	Home Mini, Nest Mini, Home, Nest Audio, Home Max, Home Hub, Nest Hub, Nest Hub Max, Nest Wifi Point, Chromecast, Chromecast Audio, Chromecast Ultra, and Chromecast with Google TV (“the '953 Accused Products”)	'953 NIA No. 1 '953 NIA No. 2 '953 NIA No. 3	Play:1, Play:3, Play:5, One, One SL, Move, Five, Playbar, Playbase, Beam, Arc, Sub, Connect, Connect:Amp, Port, Amp, SYMFONISK table lamp WiFi speaker, and SYMFONISK bookshelf WiFi speaker

'959 patent (claim 10)	Home Max ¹⁶ and Nest Audio (“the ’959 Accused Products”)	'959 NIA No. 3 '959 NIA No. 4	Play:1, Play:3, Play:5, One, One SL, Move, Five, Playbar, Playbase, Beam, Arc, SYMFONISK table lamp, WiFi speaker, and SYMFONISK bookshelf WiFi speaker
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ID at 2-3.

2. Controllers

The ’949 and ’896 patents are directed to controllers that are configured in a particular manner (*e.g.*, via the installation of one or more apps). For each patent, the following chart lists:

(i) Google’s configured controllers accused of practicing the asserted claims; (ii) Google’s NIA/redesign products submitted for adjudication as to the asserted claims; and (iii) Sonos’ players upon which it relies to satisfy the technical prong of DI:

¹⁶ According to the ID, Google discontinued the Home Max in the fourth quarter of 2018, and the device is no longer available for sale through Google’s online store. ID at 2 n.2. Thus, any remedy to which Sonos is entitled against the Home Max “will be of no consequence.” *Id.*

Patent (Asserted Claims)	Google’s Accused Products	Google’s NIAs	Sonos’ DI Products
'949 patent (claims 1, 2, 4, and 5)	(i) Pixel smartphones (<i>i.e.</i> , Pixel 3, Pixel 3 XL, Pixel 3a, Pixel 3a XL, Pixel 4, Pixel 4 XL, and Pixel 4a phones) ¹⁷ ; (ii) the Pixel Slate tablet; (iii) Pixel computers (<i>i.e.</i> , the Pixelbook and Pixelbook Go laptops installed with the Google Home application, the YouTube Music application, and/or the Google Play Music application); and (iv) Google’s Hub displays (<i>i.e.</i> , the Home Hub, Nest Hub, and Nest Hub Max installed with Home/Nest software) (“the ’949 Accused Products”)	The ’949 NIAs	Computing devices (such as smartphones, tablets, or computers) installed with the Sonos S1 or S2 application for iOS, Android, FireOS, macOS, or Windows (“the ’949 DI Products” and “the ’896 DI Products”)
'896 patent (claims 1, 5, 6, and 12)	(i) Pixel smartphones (<i>i.e.</i> , The Pixel 3, Pixel 3 XL, Pixel 3a, Pixel 3a XL, Pixel 4, Pixel 4 XL, and Pixel 4a phones); (ii) the Pixel Slate tablet; and (iii) Pixel computers (<i>i.e.</i> , the Pixelbook and Pixelbook Go laptops installed with the Google Home application) (“the ’896 Accused Products”)	'896 NIA No. 2 '896 NIA No. 3	

ID at 2-3.

III. COMMISSION REVIEW OF THE FINAL ID

When the Commission reviews an initial determination, in whole or in part, it reviews the determination *de novo*. *Certain Soft-Edged Trampolines & Components Thereof*, Inv. No. 337-TA-908, Comm’n Op. at 4 (May 1, 2015). Upon review, the “Commission has ‘all the powers

¹⁷ According to the ID, although Sonos included the Pixel 4a (5G) and Pixel 5 smartphones in its list of accused products for the ’949 patent, Sonos’ infringement expert did not offer testimony on these products. ID at 3 n.3 (citing CX-0012C at Q/A 26).

which it would have in making the initial determination,’ except where the issues are limited on notice or by rule.” *Certain Flash Memory Circuits & Prods. Containing Same*, Inv. No. 337-TA-382, USITC Pub. No. 3046, Comm’n Op. at 9-10 (July 1997) (quoting *Certain Acid-Washed Denim Garments & Accessories*, Inv. No. 337-TA-324, Comm’n Op. at 5 (Nov. 1992)) . With respect to the issues under review, “the Commission may affirm, reverse, modify, set aside or remand for further proceedings, in whole or in part, the initial determination of the administrative law judge.” 19 C.F.R. § 210.45(c). The Commission also “may take no position on specific issues or portions of the initial determination,” and “may make any finding or conclusions that in its judgment are proper based on the record in the proceeding.” *Id.*; see also *Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1423 (Fed. Cir. 1984).

IV. ANALYSIS

For the reasons set forth below, the Commission has determined to affirm the ID’s finding of violation with respect to claims 17, 21, 24, and 26 of the ’258 patent; claims 7, 14, and 22-24 of the ’953 patent; claim 10 of the ’959 patent; claims 1, 2, and 5 of the ’949 patent; and claims 1, 5, 6, and 12 of the ’896 patent. In particular, the Commission affirms, with supplemental reasoning, the ID’s rejection of Google’s argument that the products accused of infringing the ’258 and ’953 patents are “not capable of infringing at the time of importation” and that they “are not capable of infringement if used without another accused product present and configured for allegedly infringing use.” ID at 16-17, 58. The Commission has also determined to correct two typographical errors on pages 24 and 84 of the ID. The Commission otherwise affirms and adopts the ID’s findings, conclusions, and supporting analyses that are not inconsistent with this opinion.

A. Infringement by the '258 and '953 Accused Products at the Time of Importation

The Commission determined to review the ID with respect to only its analysis of whether the products accused of infringing the '258 and '953 patents are articles that infringe at the time of importation. ID at 16-17, 58; 86 Fed. Reg. at 67492. The Commission did not request further briefing from the parties on this issue. See 86 Fed. Reg. at 67491-93.

1. Background

The '258 patent relates generally to “the field of arrangements that synchronize output generated by a number of output generators, including audio output, video output, combinations of audio and video, as well as other types of output . . . provided by a common channel.” '258 patent, 1:44-49.

Sonos asserted a single independent claim (claim 17) of the '258 patent against Google, which recites as follows:

Claim 17 of the '258 Patent	
17.0 ¹⁸	A first zone player comprising:
17.1	a network interface configured to interface the first zone player with at least a local area network (LAN);
17.2	a device clock configured to generate clock time information for the first zone player;
17.3	one or more processors; and
17.4	a tangible, non-transitory computer-readable memory having instructions stored thereon that, when executed by the one or more processors, cause the first zone player to:
17.5	receive control information from any one of a plurality of controllers over the LAN via the network interface, wherein the received control

¹⁸ Reference numbers follow from the ID.

	information comprises a direction for the first zone player to enter into a synchrony group with at least a second zone player;
17.6	in response to the direction, enter into the synchrony group with the second zone player,
17.7	wherein in the synchrony group, the first and second zone players are configured to playback audio in synchrony based at least in part on (i) audio content, (ii) playback timing information associated with the audio content, wherein the playback timing information is generated by one of the first or second zone players, and (iii) clock time information for the one of the first or second zone players, and wherein the generated playback timing information and the clock time information are transmitted from the one of the first or second zone players to the other of the first or second zone players, wherein the first and second zone players remain independently clocked while playing back audio in synchrony; and
17.8	transmit status information to at least one of the plurality of controllers over the LAN via the network interface, wherein the status information comprises an indication of a status of the synchrony group.

Id., 39:59--40:25. Sonos also asserted dependent claims 21, 24, and 26 of the '258 patent.

ID at 13.

The '953 patent relates generally to “the field of digital data processing devices, and more particularly to systems and method for synchronizing operations among a plurality of independently-clocked digital data processing devices.” '953 patent, 1:30-34.

Sonos asserted a single independent claim (claim 7) from the '953 patent against Google, which recites as follows:

Claim 7 of the '953 Patent	
7.0	A first zone player comprising:
7.1	a network interface that is configured to provide an interconnection with at least one data network;
7.2	a clock that is configured to provide a clock time of the first zone player;
7.3	at least one processor;

PUBLIC VERSION

7.4	a tangible, non-transitory computer-readable medium; and program instructions stored on the tangible, non-transitory computer-readable medium that are executable by the at least one processor to cause the first zone player to perform functions comprising:
7.5	receiving a request to enter into a synchrony group with at least a second zone player that is communicatively coupled with the first zone player over a local area network (LAN);
7.6	in response to receiving the request to enter into the synchrony group, entering into the synchrony group with the second zone player, wherein the first zone player is selected to begin operating as a slave of the synchrony group and the second zone player is selected to begin operating as a master of the synchrony group, and wherein the clock time of the first zone player differs from a clock time of the second zone player; after beginning to operate as the slave of the synchrony group:
7.7	receiving, from the second zone player over the LAN, clock timing information that comprises at least one reading of the clock time of the second zone player;
7.8	based on the received clock timing information, determining a differential between the clock time of the first zone player and the clock time of the second zone player;
7.9	receiving, from the second zone player over the LAN, (a) audio information for at least a first audio track and (b) playback timing information associated with the audio information for the first audio track that comprises an indicator of a first future time, relative to the clock time of the second zone player, at which the first and second zone players are to initiate synchronous playback of the audio information for the first audio track;
7.10	updating the first future time to account for the determined differential between the clock time of the first zone player and the clock time of the second zone player; and
7.11	when the clock time of the first zone player reaches the updated first future time, initiating synchronous playback of the received audio information with the second zone player.

Id., 39:37–40:21. Sonos also asserted dependent claims 14 and 22-24 of the '953 patent. ID at 56.

2. The ID

Before the CALJ, Google asserted that the '258 and '953 Accused Products do not infringe as imported. RIPHB at 24, 75. With respect to the '258 Accused Products, Google argued:

The Accused Products are imported into the United States as *standalone devices*. RX-1522C.6 (Schonfeld) at Q25. Claim 17 (and claims 21, 24, and 26, which depend from claim 17) *require a “first zone player” that enters into a synchrony group with a “second zone player” as well as a “plurality of controllers.”* As such, the Accused Products are not capable of infringing at the time of importation. Nor are they capable of infringement if used without another Accused Product present and configured for allegedly infringing use.

Id. at 24 (emphasis added). Google’s post-hearing brief included a similar paragraph with respect to the '953 Accused Products:

The Accused Products are imported into the United States as *standalone devices*. RX- 1522C (Schonfeld) at Q107. Claim 7 (and claims 14, 22, 23, and 24, which depend from claim 7) *require a “first zone player” that is caused to enter into a synchrony group with a “second zone player.”* As such, the Accused Products are not capable of infringing at the time of importation. Nor are they capable of infringement if used without another Accused Product present and configured for allegedly infringing use.

Id. at 75 (emphasis added).

Sonos asserted that infringement need not take place at the time of importation. CRPHB at 1. In addition, Sonos argued that Google’s Accused Products are capable of infringement (and do infringe) at the time of importation because they have software installed rendering them “functionally capable of carrying out the operations recited in the Asserted Claims.” *Id.* Sonos explained that the claims in the '258 and '953 patents are apparatus claims that recite computer-readable memory having instructions stored thereon that, when executed, cause the apparatus to engage in the recited operations. *Id.* at 1-2. Sonos therefore asserted that, like the products at issue in *Finjan*, “the Accused Products include the software necessary to carry out the functions

recited by the claims,” and thus infringe. *Id.* at 3 (citing *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1204-05 (Fed. Cir. 2010)).

OUII submitted that “[t]he Commission has previously recognized that the [Federal Circuit] already twice rejected a time-of-importation requirement.” ORPHB at 1 n.1. OUII, therefore, asserted that Google’s “time-of-importation” argument should also be rejected. *Id.*

The ID’s finding on this issue with respect to the ’258 Accused Products is as follows:

The Federal Circuit has rejected the argument that there is no violation because products are not articles that infringe at the time of importation. *See Suprema, Inc. v. Int’l Trade Comm’n*, 796 F.3d 1338, 1348-1352 (Fed. Cir. 2015) (en banc); *Comcast Corp. v. Int’l Trade Comm’n*, 951 F.3d 1301, 1308-09 (Fed. Cir. 2020) (“The Commission correctly held that Section 337 applies to articles that infringe after importation.”); *see also Certain Blood Cholesterol Testing Strips*, Inv. No. 337-TA-1116, Comm’n Op. at 25-26 (May 1, 2020). The undersigned therefore rejects Google’s argument that there is no violation because the ’258 Accused Products are not capable of infringing at the time of importation.

ID at 16-17. The ID refers back to this finding when rejecting Google’s same “time-of-importation” argument with respect to the ’953 Accused Products:

Google argues that the ’953 Accused Products do not infringe because they are imported as standalone devices. RIB at 75. As previously discussed with respect to the ’258 patent, the undersigned rejects this argument. *See supra* at Section VI.B.1.

Id. at 58.

3. Analysis

In its petition for review of the final ID, Google argued that the ID errs by rejecting Google’s argument that there is no violation with respect to the ’258 and ’953 patents because the ’258 and ’953 Accused Products “are not capable of infringing at the time of importation.” RPet. at 94-96. More specifically, Google argued:

For the ’258 [and ’953] Accused Products, the products are imported as standalone devices, incapable of infringing at the time of importation, and incapable of infringing ***unless used with another Accused Product that has been configured by an end-user for allegedly infringing use.*** The ID’s ruling is also

erroneous because the evidence shows that the vast majority of imported accused devices are never incorporated into an allegedly infringing system and thus do not infringe even after importation.

Id. at 94-95 (emphasis added).

We find Google’s argument to be legally meritless. As a threshold matter, Google fails to articulate how the Commission is to evaluate this argument, *e.g.*, as a question of infringement versus statutory construction. Regardless, as properly construed, the ’258 and ’953 Accused Products meet the limitations of the asserted claims consistent with the requirements of Section 337. Thus, we reject Google’s argument that the ’258 and ’953 Accused Products are not capable of infringing at the time of importation. We provide supplemental reasoning to explain that Google’s argument lacks merit because it is inconsistent with the language of the Asserted Patents.

The core of Google’s time-of-importation arguments regarding the ’258 and ’953 Accused Products is that they are “standalone devices, incapable of infringing at the time of importation, and incapable of infringing unless used with another Accused Product that has been configured by an end-user for allegedly infringing use.” RPet. at 94-95. Specifically, Google argues that, to infringe the asserted claims of the ’258 and ’953 patents, “one or more additional Accused Products [must be purchased] and us[ed] in combination.” *Id.* at 96. These arguments rely on Google’s representation of (i) asserted independent claim 17 of the ’258 patent—which, per Google, requires “a ‘first zone player’ that enters into a synchrony group with a ‘second zone player’ as well as a ‘plurality of controllers’” (*see* RIPHB at 24), and (ii) asserted independent claim 7 of the ’953 patent—which, per Google, requires “a ‘first zone player’ that is caused to enter into a synchrony group with a ‘second zone player’” (*see id.* at 75).

The Commission disagrees with Google’s characterization of claim 17 of the ’258 patent and claim 7 of the ’953 patent. Claim 17 of the ’258 patent requires a “first zone player” (*i.e.*,

the accused device) with “tangible, non-transitory computer-readable memory *having instructions stored thereon that, when executed . . . cause the first zone player to*” perform the required steps, including interacting with a “second zone player” in a synchrony group. ’258 patent, 39:59–40:25 (emphasis added). The same is true with respect to the “plurality of controllers” element of claim 17 of the ’258 patent: a “first zone player” need only have “*instructions stored thereon that, when executed*” cause the device to “receive control information from any one of a plurality of controllers” and “transmit status information to at least one of the plurality of controllers.” *See* ’258 patent, 39:65–40:2, 40:22-23 (emphasis added). Similarly, claim 7 of the ’953 patent requires a “first zone player” (*i.e.*, the accused device) with “program *instructions stored on the tangible, non-transitory computer-readable medium that are executable . . . to cause the first zone player to perform functions,*” including interacting with a “second zone player” in a synchrony group. ’953 patent, 39:37–40:21 (emphasis added).

In other words, these claims are directed to a device that is programmed to be able to perform certain functions; the actual presence of, and interaction with, a “second zone player” is not required for the “first zone player” to practice these claims. *See Finjan*, 626 F.3d at 1204 (“[T]o infringe a claim that recites capability and not actual operation, an accused device need only be capable of operating in the described mode.”) (quotations omitted). Nor is there any limitation of the asserted dependent claims that recites actual operation, rather than mere capability. In addition, Google does not dispute that the ’258 and ’953 Accused Products, when imported into the United States, are pre-installed with software that the ID finds reads on the claim language at issue (ID at 16-24, 58-72). *See* RPet. at 94-96.

Finally, with respect to Google’s time-of-importation arguments, the Federal Circuit has found:

Section 337 contemplates that infringement may occur *after* importation. The statute defines as unlawful “the sale within the United States after importation . . . of articles that—(i) infringe . . .” § 337(a)(1)(B)(i). The statute thus distinguishes the unfair trade act of importation from infringement by defining as unfair the importation of an article that will infringe, *i.e.*, be sold, “after importation.” *Id.* Section 337(a)(1)(B)’s “sale . . . after importation” language confirms that the Commission is permitted to focus on post-importation activity to identify the completion of infringement.

Suprema, 796 F.3d at 1349 (emphasis and ellipses in original). The Commission has found a Section 337 violation in its investigations consistent with this precedent, and whether an imported article is an article that infringes is based on the facts of each investigation and the asserted type(s) of infringement. *See, e.g., Certain Digital Video Receivers & Hardware & Software Components Thereof*, Inv. No. 337-TA-1001, Comm’n Op., 2017 WL 11249982 at *12 (Dec. 6, 2017), *aff’d*, *Comcast Corp. v. Int’l Trade Comm’n*, 951 F.3d 1301, 1308 (Fed. Cir. 2020); *Certain Blood Cholesterol Testing Strips*, Inv. No. 337-TA-1116, Comm’n Op. at 25-32 (May 1, 2020). Neither Section 337 nor Federal Circuit precedent supports Google’s blanket assertion that articles must be “capable of infringing” at the time of importation in order to be subject to Section 337.

The Commission thus affirms, with the supplemental reasoning set forth above, the ID’s rejection of Google’s argument that there can be no violation with respect to the ’258 and ’953 patents because the ’258 and ’953 Accused Products are not capable of infringing at the time of importation.

As all limitations of the asserted claims are met with respect to claims 17, 21, 24, and 26 of the ’258 patent; claims 7, 14, and 22-24 of the ’953 patent; claim 10 of the ’959 patent; claims 1, 2, and 5 of the ’949 patent; and claims 1, 5, 6, and 12 of the ’896 patent, and Sonos has proven

all other required elements of a Section 337 violation, the Commission affirms the ID's finding of a violation of Section 337 by Google.

B. Correction of Typographical Errors

The Commission has determined to correct the following two typographical errors in the ID as indicated:

- (i) In the 16th line of page 24 of the ID, inserting the following underlined text:
“Accordingly, the undersigned finds that the ’258 Accused Products infringe claims 17, 21, 24, and 26.”
- (ii) In the 8th line of page 84 of the ID, inserting the following underlined text:
“According, the undersigned finds that the ’953 DI Products, except the Sonos Sub, meet the limitations of claim 23.”

V. REMEDY, THE PUBLIC INTEREST, AND BONDING

Having found a violation of Section 337 in this investigation, the Commission provides its determinations as to the appropriate remedy to address the violation found, how the public interest considerations may be affected, and the amount of bond to be imposed on infringing imports during the period of Presidential review. The Commission has “broad discretion in selecting the form, scope, and extent of the remedy.” *Viscofan, S.A. v. Int’l Trade Comm’n*, 787 F.2d 544, 548 (Fed. Cir. 1986).

A. Limited Exclusion Order

Section 337(d)(1) provides that “[i]f the Commission determines, as a result of an investigation under this section, that there is a violation of this section, it shall direct that the articles concerned, imported by any person violating the provision of this section, be excluded

from entry into the United States, unless, after considering the [public interest], it finds that such articles should not be excluded from entry.” 19 U.S.C. § 1337(d)(1).

Google agrees that an LEO is the appropriate remedy, but requests several modifications to the Commission’s standard LEO. RRemBr. at 11-17; RReplyRemBr. at 4-7. Sonos and OUII both submit that the Commission should issue its standard LEO. CRemBr. at 2-12; CReplyRemBr. at 3-13; ORemBr. at 5; OReplyRemBr. at 1-3.

The Commission, having found a violation of Section 337 with respect to each of the Asserted Patents, has determined to issue an LEO precluding the importation of audio players and controllers, components thereof, and products containing the same that infringe one or more of claims 17, 21, 24, and 26 of the ’258 patent; claims 7, 14, and 22-24 of the ’953 patent; claim 10 of the ’959 patent; claims 1, 2, and 5 of the ’949 patent; and claims 1, 5, 6, and 12 of the ’896 patent, pursuant to Section 337(d)(1).

The Commission is including in the LEO an exemption for Google’s redesign products that were adjudicated in this investigation and found to be non-infringing as to a particular Asserted Patent, specifically:

- As to the ’258 patent, the redesign ’258 NIA No. 1;
- As to the ’953 patent, the redesign ’953 NIA No. 1;
- As to the ’959 patent, the redesign ’959 NIA No. 4;
- As to the ’949 patent, the redesigns submitted for adjudication by Google with respect to the ’949 patent; and
- As to the ’896 patent, the redesign ’896 NIA No. 2.

ID at 26-34, 73-74, 107-08, 132, 162-65; *Certain Elec. Devices Including Streaming Players, Televisions, Set Top Boxes, Remote Controllers, & Components Thereof* (“Streaming Players”),

PUBLIC VERSION

Inv. No. 337-TA-1200, Comm'n Op. at 36 (Dec. 3, 2021) (exempting two revised Roku products that were adjudicated and found to be non-infringing).

The Commission is also including in the LEO a certification provision allowing U.S. Customs and Border Protection ("CBP"), at its discretion, to require an importer seeking to import to certify that, to the best of its knowledge and after having obtained a determination from the Commission, that the articles it seeks to import are not excluded from entry under the LEO. The Commission recognizes Sonos' valid concerns regarding the possible difficulty CBP may have in identifying Google's redesign products that were adjudicated and found to be non-infringing. *See* CReplyRemBr at 8. Accordingly, the Commission is including in the LEO the following language to address these concerns:

At the discretion of CBP and pursuant to the procedures it establishes, persons seeking to import audio players and controllers, components thereof, and products containing the same that are potentially subject to this Order may be required to certify that they are familiar with the terms of this Order, that they have made appropriate inquiry, and thereupon state that, to the best of their knowledge and belief, the products being imported are not excluded from entry under paragraph 1 of this Order, including because the products incorporate the features or functionalities of a redesigned product adjudicated by the Commission in the violation investigation not to infringe, and thus such products do not fall within the scope of this Order. At its discretion, CBP may require persons who have provided the certification described in this paragraph to furnish such records or analyses as are necessary to substantiate the certification.

The Commission, as is customary, does not limit the LEO to covered products that were actually adjudicated to infringe the Asserted Patents, thus ensuring that the exclusion order affords Sonos "complete relief" and cannot be "easily circumvented." *Streaming Players*, Inv. No. 337-TA-1200, Comm'n Op. at 36 (citing *Certain Graphics Sys., Components Thereof, & Consumer Prods. Containing Same*, Inv. No. 337-TA-1044, Comm'n Op. at 66 (Sept. 18, 2018) (LEO covers any of respondents' products that infringe the patent at issue and is not limited to particular models); *Certain Human Milk Oligosaccharides & Methods of Producing Same*

(“*Human Milk Oligosaccharides*”), Comm’n Op. at 19-20, 2020 WL 3073788 at *11 (June 20, 2020) (redesigned products may still fall within the scope of the remedial orders even if they were not adjudicated for infringement in the original investigation), *aff’d*, *Jennewein Biotechnologie GmbH v. Int’l Trade Comm’n*, 2021 WL 4250784 (Fed. Cir. Sept. 17, 2021) (unpublished); *Certain Hardware Logic Emulation Sys. & Components Thereof*, Inv. No. 337-TA-383, Comm’n Op. at 15-17, 1998 WL 307240 at *9 (March 1998) (Commission’s remedial orders typically extend to products covered by the patent claims at issue and are not limited only to specific models selected for the infringement analysis in order to avoid easy circumvention)).¹⁹

The Commission declines Google’s request to include in the LEO an exemption for warranty, repair, and replacement of the Accused Products sold prior to the effective date of the remedial orders. “The Commission has granted such exemptions when unopposed, in view of the public interest, or upon some showing of a need for service and repair.” *Certain Robotic Vacuum Cleaning Devices*, Inv. No. 337-TA-1057, Comm’n Op. at 58-59 (Feb. 1, 2019); *see id.* at nn.25-27 (collecting cases). Sonos opposes Google’s request. CRemBr. at 7. Google further failed to provide evidence that the public interest supports this request, or that there otherwise is

¹⁹ A Commission order is typically not limited to the accused products, but includes all products within the scope of the investigation that are covered by the patent claims as to which a violation has been found. *See Certain Road Construction Machines & Components Thereof*, Inv. No. 337-TA-1088 (Modification), Comm’n Op. at 22-34 (Aug. 31, 2020). Where a product has not been accused by the complainant, it is incumbent upon a respondent to put a particular product at issue during discovery, and in its substantive arguments before the ALJ, if it wants a particular product to be explicitly adjudicated as not infringing. *Human Milk Oligosaccharides*, Inv. No. 337-TA-1120, Comm’n Op. at 18-19. To the extent that Google seeks to import a product that has not been adjudicated as non-infringing in this proceeding, Google may take advantage of procedures offered by the Commission to obtain such an adjudication under Commission Rules 210.76 (modification) and 210.79 (advisory opinion) or may request a ruling from CBP under 19 C.F.R. Part 177. Google cannot utilize the certification provision in the order for non-accused products because it applies only to products that have been explicitly adjudicated to be non-infringing.

a need for such a provision. In addition, the necessity for such a provision in order for Google to comply with its warranty obligations is questionable given the existence of adjudicated non-infringing redesigns and Google’s apparent ability to comply with its warranty obligations by replacing an infringing product with a functionally equivalent product or refunding the purchase price of the infringing product. CReplyRemBr. at 11 (citing <https://support.google.com/product-documentation/troubleshooter/3070579#ts=11052496> (Google has the “sole discretion . . . [to] replace your Google Product with a new or refurbished Google Product functionally at least equivalent to yours, or accept the return of your Google Product in exchange for a refund of the purchase price you paid for your Google Product.”)).

B. Cease and Desist Order

Section 337(f)(1) provides that in addition to, or in lieu of, the issuance of an exclusion order, the Commission may issue a CDO as a remedy for violation of Section 337. *See* 19 U.S.C. § 1337(f)(1). CDOs are generally issued when, with respect to the imported infringing products, respondents maintain commercially significant inventories in the United States or have significant domestic operations that could undercut the remedy provided by an exclusion order.²⁰ *See, e.g., Certain Table Saws Incorporating Active Injury Mitigation Tech. & Components Thereof* (“Table Saws”), Inv. No. 337-TA-965, Comm’n Op. at 4-6 (Feb. 1, 2017); *Certain Protective Cases & Components Thereof*, Inv. No. 337-TA-780, USITC Pub. No. 4405, Comm’n Op. at 28 (Nov. 19, 2012). Complainants bear the burden on this issue. “A complainant seeking

²⁰ When the presence of infringing domestic inventory or domestic operations is asserted as the basis for a CDO under Section 337(f)(1), Commissioner Schmidlein does not adopt the view that the inventory or domestic operations needs to be “commercially significant” in order to issue the CDO. *See, e.g., Certain Magnetic Tape Cartridges & Components Thereof*, Inv. No. 337-TA-1058, Comm’n Op. at 65, n.24 (Mar. 25, 2019); *Table Saws*, Inv. No. 337-TA-965, Comm’n Op. at 6-7, n.2. In Commissioner Schmidlein’s view, the presence of some infringing domestic inventory or domestic operations, regardless of its commercial significance, provides a basis to issue a CDO. *Id.*

a cease and desist order must demonstrate, based on the record, that this remedy is necessary to address the violation found in the investigation so as to not undercut the relief provided by the exclusion order.” *Table Saws*, Inv. No. 337-TA-965, Comm’n Op. at 5 (collecting cases); *see also* H.R. REP. No. 100-40, at 160 (1987).

The Commission has determined to issue a CDO directed to respondent Google, with the standard language and the exemption noted above for the Google redesigned products adjudicated to be non-infringing. The Commission finds that a CDO is warranted in view of Google’s domestic inventory of [REDACTED] units of products that infringe the Asserted Patents as of October 1, 2020. RD at 184-85.

Google does not dispute that its domestic inventory of accused products is “commercially significant.” For the first time in these proceedings, however, Google argues that any CDO should include an exemption “that permits Google to donate to non-profit organizations Accused Products that are still in domestic inventory as of the effective date of the order.” RRemBr. at 18. Per Google, such an exemption “would greatly benefit the public at no cost or harm to Sonos” and “forcing Google to dispose of these products is wasteful, serves no public interest purpose, and would needlessly deprive at-need communities from free and very much needed access to these products.” *Id.*

The Commission declines to include an exemption to permit Google to donate to non-profit organizations the infringing products in its domestic inventory as of the CDO’s effective date. Sonos raises a number of questions regarding the scope of the requested exemption that remain unanswered because Google did not request this exemption until remedy briefing before the Commission. CReplyRemBr. at 13-14. On the sparse record available at this stage, the Commission agrees with Sonos that the proposed, unbounded exemption could enable Google to

flood the market with infringing devices, thus inflicting harm on Sonos notwithstanding the LEO and CDO, and Google has failed to provide any evidence to support its assertion that the exemption it seeks would result in “no cost or harm to Sonos.” *See id.*

The Commission also declines, as with the LEO, to limit the CDO to covered products that were actually adjudicated to infringe the Asserted Patents, or to include an exemption for the warranty, repair, and replacement of the covered products sold prior to the effective date of the remedial orders.

C. Public Interest

Section 337 requires the Commission, upon finding a violation of Section 337, to issue an LEO “unless, after considering the effect of such exclusion upon the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers, it finds that such articles should not be excluded from entry.” 19 U.S.C. § 1337(d)(1). The Commission must also consider these public interest factors before issuing a CDO. 19 U.S.C. § 1337(f)(1).

Under appropriate facts and circumstances, the Commission may determine that no remedy should issue because of the adverse impacts on the public interest. *See, e.g., Certain Fluidized Supporting Apparatus & Components Thereof*, Inv. Nos. 337-TA-182/188, USITC Pub. 1667, Comm’n Op. at 1-2, 23-25 (Oct. 1984) (finding that the public interest warranted denying complainant’s requested relief). Moreover, when the circumstances of a particular investigation so require, the Commission has tailored its relief in light of the statutory public interest factors.

The statute requires the Commission to consider and make findings on the public interest in every case in which a violation is found regardless of the quality or quantity of public interest information supplied by the parties. 19 U.S.C. § 1337(d)(1), (f)(1). The Commission publishes a

notice inviting the parties as well as interested members of the public and interested government agencies to gather and present evidence on the public interest at multiple junctures in the proceeding.²¹ *See, e.g.*, 19 C.F.R. § 210.50(a)(4); 86 Fed. Reg. 67491-93 (Nov. 26, 2021).

In this investigation, the Commission received comments on the public interest from Google, Sonos, and OUII.²² The Commission also received comments on the public interest from 17 third parties.²³ The Commission finds that neither the parties nor the third parties raise concerns that would preclude the issuance of relief in this investigation.

1. Public Health and Welfare


The first public interest factor is the effect of the remedy on “the public health and welfare.” 19 U.S.C. § 1337(d)(1), (f)(1). The Commission has historically examined a remedy’s effect on the public health and welfare by looking to whether “an exclusion order would deprive the public of products necessary for some important health or welfare need[.]” *Spansion, Inc. v. Int’l Trade Comm’n*, 629 F.3d 1331, 1360 (Fed. Cir. 2010). Google contends that excluding its infringing products would harm the health and welfare of people with disabilities, such as blind or paralyzed individuals, whose daily activities are improved by the “unaccused functionality” of the accused products that “allow[s] users to control . . . actions on compatible smart home devices using voice commands.” RReplyRemBr. at 9. Similar concerns were expressed by several third parties. *See, e.g.*, AFB Sub. at 2, EDIS Doc. ID 757760 (“Smart home devices, including speakers, still serve as a tool for improving daily living opportunities and access to the

²¹ The Commission did not ask the CALJ to make findings regarding the public interest when it instituted the investigation. *See* 85 Fed. Reg. at 7783.

²² RRemBr. at 4-11; RReplyRemBr. at 9-11; CRemBr. at 18-22; CReplyRemBr. at 20-32; ORemBr. at 6-8; OReplyRemBr. at 4-7.

²³ *See supra* notes 1, 12, and 14.

home environment for people who are blind or have low vision.”); CCF Sub. at 2, EDIS Doc. ID 757782 (“[A]ny action that would impact the availability of [Google’s] products would have a negative impact on the public welfare of the young adults we serve, as well as the many thousands of young adults with physical disabilities living in the United States.”); CCIA Sub. at 2, EDIS Doc. ID 757762 (“[S]mart speakers are used as part of home control systems for disabled people, allowing them to control their physical environment via voice and helping mitigate their disabilities. Excluding these devices directly impacts the health and welfare of disabled individuals.”); USA Sub. at 1, EDIS Doc. ID 699787 (“[T]he alleged Infringing Products have enhanced and become part of the lifestyles of tens of thousands of people with disabilities. Many tasks easily performed by those without disabilities can be performed without assistance by people with disabilities, eliminating the need for personal assistance and emancipating the users.”).

However, there is no evidence of record to suggest that Google’s devices are uniquely capable of assisting people with disabilities. *See* CReplyRemBr. at 26 (“Google does not even attempt to argue that the supposed benefits offered by its infringing devices are distinct from those offered by competitors like Apple, Amazon, Nokia, Motorola, and HTC. . . . [And] there is no dispute that, like countless other devices from competing manufacturers, Sonos speakers incorporate voice assistant technologies, including Google’s voice assistant, and can thus also operate lights, locks, thermostats, *etc.*”); *cf. Table Saws*, Inv. No. 337-TA-965, Comm’n Op. at 9 (“[P]roducts need not be identical to serve as reasonable substitutes for each other.”). Nor does Google contend that the adjudicated non-infringing redesigns are insufficient in this respect. In fact, in September 2021, Google represented that it “



3. The Production of Like or Directly Competitive Articles in the United States

The third public interest factor is the effect of the remedy on “the production of like or directly competitive articles in the United States.” 19 U.S.C. § 1337(d)(1), (f)(1). No party has argued that this factor weighs against issuing a remedy, and, as OUII notes, “[n]o party disputes the absence of evidence that the requested remedial orders would have a negative effect on the production of like or directly competitive articles in the United States.” OReplyRemBr. at 6. Accordingly, the Commission finds that the evidence of record as to this factor does not counsel against issuing a remedy.

4. United States Consumers

The fourth and final public interest factor is the effect of the remedy on “United States consumers.” 19 U.S.C. § 1337(d)(1), (f)(1). Google’s only argument as to the effect of the exclusion of its products on U.S. consumers is that the price of Sonos’ speakers is “higher than any Google or other home speaker products” and “puts them beyond the reach of many Americans.” RRemBr. at 9. Importantly, however, Google does not provide evidence of a direct price comparison between and among the competing home speaker products in the United States to support this argument. Nor could it, given the testimony of its own economic expert, Ms. Mulhern, in this investigation. Google’s expert testified that she agreed with Sonos’ expert that no price differential between the Google and Sonos products can be made on the basis of the record evidence in this investigation, thus undermining Google’s price argument as to the Sonos products here. *See* RX-1524C at Q/A 88-95. Moreover, the evidence shows that consumers have available many choices in competitive products other than those produced by Sonos, *see* OReplyRemBr. at 6, including Google’s adjudicated non-infringing redesigns. The Commission

thus finds that the evidence of record as to this factor does not weigh against the issuance of a remedy.

D. Bond

If the Commission enters an exclusion order or a cease and desist order, a respondent may continue to import and sell its products during the 60-day period of Presidential review under a bond in an amount determined by the Commission to be “sufficient to protect the complainant from any injury.” 19 U.S.C. § 1337(j)(3); *see also* 19 C.F.R. § 210.50(a)(3).

When reliable price information is available in the record, the Commission has often set the bond in an amount that would eliminate the price differential between the domestic product and the imported, infringing product. *See Certain Microsphere Adhesives, Processes for Making Same, & Prods. Containing Same, Including Self-stick Repositionable Notes*, Inv. No. 337-TA-366, USITC Pub. No. 2949, Comm’n Op. at 24 (Jan. 16, 1996). The Commission has also used a reasonable royalty rate to set the bond amount where a reasonable royalty rate could be ascertained from the evidence in the record. *See, e.g., Certain Audio Digital-to-Analog Converters & Prods. Containing Same*, Inv. No. 337-TA-499, Comm’n Op. at 25 (Mar. 3, 2005). Where the record establishes that the calculation of a price differential is impractical or there is insufficient evidence in the record to determine a reasonable royalty, the Commission has imposed a 100 percent bond. *See, e.g., Certain Liquid Crystal Display Modules, Prods. Containing Same, & Methods Using the Same (“Liquid Crystal Display Modules”)*, Inv. No. 337-TA-634, Comm’n Op. at 6-7 (Nov. 24, 2009). The complainant bears the burden of establishing the need for a bond. *Certain Rubber Antidegradants, Components Thereof & Prods. Containing Same*, Inv. No. 337-TA-533, USITC Pub. No. 3975, Comm’n Op. at 40 (July 21, 2006).

The Commission has determined to impose a bond in the amount of 100 percent of entered value during the period of Presidential review. The RD finds, and the Commission

agrees, that “Google’s continued importation of infringing goods during the presidential review period would injure Sonos” because the record indicates that (i) Sonos competes with Google in the relevant product market and (ii) “Google offers lower priced speaker offerings that can adversely affect Sonos’ ability to counter price erosion.” RD at 186.

With respect to determining the bond amount, “[b]oth parties’ economic experts agree that a bond rate cannot be based on a price differential between the infringing and domestic industry products.” *Id.* at 187. Furthermore, the Commission agrees with the RD’s finding that neither of the two Sonos portfolio license agreements in the record provides a basis to calculate a bond. *See id.* at 187-88; CReplyRemBr. at 20 (discussing issues with proposed “industry royalty rate” of 4.5%). Absent the ability to determine a price differential or a reasonable royalty, imposition of a bond of 100 percent is appropriate. *See Liquid Crystal Display Modules, Inv. No. 337-TA-634, Comm’n Op.* at 6-7 (“We see no reason to deviate from our practice of imposing a 100 percent bond where there is insufficient evidence in the record to determine a reasonable royalty rate, and the record indicates that the calculation of a price differential is impractical.”).

VI. CONCLUSION

For the reasons set forth herein and in the ID, the Commission determines that Sonos has established a violation of Section 337 by Google with respect to claims 17, 21, 24, and 26 of the ’258 patent; claims 7, 14, and 22-24 of the ’953 patent; claim 10 of the ’959 patent; claims 1, 2, and 5 of the ’949 patent; and claims 1, 5, 6, and 12 of the ’896 patent. Accordingly, the investigation is terminated with a finding of violation of Section 337. The Commission determines that the appropriate remedy is a limited exclusion order and cease and desist order, and further finds that the public interest does not preclude issuance of a remedy. The

PUBLIC VERSION

Commission sets a bond in the amount of 100 percent of the entered value of imports during the Presidential review period.

By order of the Commission.

Issued: February 1, 2022.

A handwritten signature in black ink, appearing to read 'Lisa R. Barton', written in a cursive style.

Lisa R. Barton,
Secretary to the Commission.