

**UNITED STATES INTERNATIONAL TRADE COMMISSION  
WASHINGTON, D.C.**

**Before the Honorable Cameron R. Elliot  
Administrative Law Judge**

**IN THE MATTER OF CERTAIN  
AUDIO PLAYERS AND  
COMPONENTS THEREOF II**

**Inv. No. 337-TA-1330**

**COMPLAINANT GOOGLE'S PRE-HEARING BRIEF**

**TABLE OF CONTENTS**

I.	INTRODUCTION.....	1
A.	Procedural History.....	2
B.	The Parties .....	3
1.	Complainant Google LLC .....	3
2.	Respondent Sonos, Inc. ....	3
C.	Overview of the Technology.....	3
1.	Voice Assistants and Smart Devices .....	3
2.	Speech Processing.....	4
3.	Device Commissioning.....	7
D.	The Patents at Issue .....	8
1.	U.S. Patent No. 9,632,748 .....	8
2.	U.S. Patent No. 11,024,311 .....	9
3.	U.S. Patent No. 11,050,615 .....	10
E.	The Products at Issue .....	12
II.	JURISDICTION.....	12
III.	U.S. PATENT NO. 9,632,748.....	12
A.	Claim Construction .....	12
1.	Level of Ordinary Skill in the Art .....	12
2.	Terms Addressed at Markman Hearing.....	13
3.	“[perform/performing] speech recognition” (Claims 1, 7) .....	13
B.	Infringement.....	15
1.	Independent Claims 1 and 7.....	15
2.	Dependent Claims 2 and 9.....	24
3.	Dependent Claims 3 and 10 .....	26
4.	Indirect Infringement .....	27
C.	Alleged Redesigns .....	31
1.	.....	31
2.	Eligibility for Adjudication.....	32
3.	.....	34
4.	.....	34
5.	.....	37
6.	.....	38
D.	Domestic Industry – “Technical Prong” .....	39

[REDACTED]	
1. Independent Claims 1 and 7.....	39
2. Dependent Claims 2 and 9.....	48
3. Dependent Claims 3 and 10.....	49
E. Validity .....	50
1. Anticipation Under 35 U.S.C. § 102 .....	50
2. Obviousness Under 35 U.S.C. § 103 .....	65
3. Validity Under 35 U.S.C. § 112.....	73
IV. U.S. PATENT NO. 11,024,311.....	80
A. Claim Construction .....	80
1. Level of Ordinary Skill in the Art.....	80
2. Terms Addressed at Markman Hearing.....	80
3. Additional Disputed Claim Terms .....	81
B. Infringement.....	83
1. Independent Claims 1, 10, and 16.....	83
2. Dependent Claim 17.....	88
3. Dependent Claim 18.....	89
4. Dependent Claim 19.....	90
5. Dependent Claim 20.....	91
6. Indirect Infringement .....	91
C. Alleged Redesigns .....	92
1. [REDACTED] .....	92
2. [REDACTED] .....	92
3. [REDACTED] .....	94
4. [REDACTED] .....	96
5. [REDACTED] .....	96
D. Domestic Industry – “Technical Prong” .....	96
1. Independent Claims 1, 10, and 16.....	96
2. Dependent Claim 11.....	108
3. Dependent Claim 17.....	111
4. Dependent Claim 20.....	112
E. Validity .....	112
1. Anticipation Under 35 U.S.C. § 102 .....	112
2. Obviousness Under 35 U.S.C. § 103 .....	126
3. Written Description, Enablement, and Definiteness Under 35 U.S.C. § 112.....	135
F. Patent Eligibility Under 35 U.S.C. § 101 .....	140

V. U.S. PATENT NO. 11,050,615.....	143
A. Claim Construction .....	143
B. Infringement of the '615 Patent.....	144
1. Independent Claims 1, 11, 16.....	145
2. Dependent Claim 2 .....	152
3. Dependent Claim 3 .....	152
4. Dependent Claim 5 .....	152
5. Dependent Claims 6 and 19 .....	152
6. Dependent Claims 9 and 17 .....	153
7. Dependent Claims 10, 12, and 18.....	153
8. Dependent Claim 15.....	154
9. Indirect Infringement .....	154
C. Sonos's Alleged Redesigns.....	155
D. Technical Domestic Industry.....	155
1. Independent Claims 1, 11, 16.....	155
2. Dependent Claim 2 .....	164
3. Dependent Claim 3 .....	164
4. Dependent Claim 5 .....	164
5. Dependent Claims 6 and 19 .....	165
6. Dependent Claims 9 and 17 .....	165
7. Dependent Claims 10, 12, and 18.....	166
8. Dependent Claim 15.....	167
E. Validity Under 35 U.S.C. §§ 102, 103.....	167
1. Suumäki: Anticipation and Obviousness.....	167
2. Roberts: Anticipation and Obviousness.....	171
3. Sonos v1.0 alone or in view of Asokan.....	175
4. Millington Obviousness: Alone or in view of Asokan and/or Sonos v1.0 .....	179
F. Secondary Consideration of Non-Obviousness .....	186
G. Validity Under 35 U.S.C. § 112 – Written Description.....	188
1. Claims 1, 11, 16: “receiving a request to initiate a commissioning process with the target device” .....	189
2. Claims 1, 11, 16: “in response to receiving the request, receiving one or more network configuration packets from the wireless device via the short-range signal transmission path”.....	189
H. Validity Under 35 U.S.C. § 112 – Enablement.....	190
1. Claims 1, 11, 16: “in response to receiving the request, receiving one or more network configuration packets from the wireless device via the short-range signal transmission path”.....	191

I. Validity Under 35 U.S.C. § 112 – Indefiniteness.....	193
1. Claims 10, 12, 18: “an application that includes a sequence of program instructions directed towards commissioning the target device onto the communication network” .....	193
J. Enforceability.....	194
1. Factual Background: Sonos Provides No Contentions .....	194
2. Legal Standard: Sonos’s Burden on Inequitable Conduct.....	195
3. Sonos Cannot Meet Its High Burden On Materiality.....	195
4. Sonos Cannot Meet Its High Burden On Specific Intent to Deceive.....	196
VI. DOMESTIC INDUSTRY – ECONOMIC PRONG.....	198
VII. REMEDY AND BONDING.....	198
A. Limited Exclusion Order.....	198
B. Cease and Desist Order.....	199
C. Bond.....	199
VIII. CONCLUSION .....	200

[REDACTED]

3. *Dependent Claim 18*

(a) 18.1

As explained in Section IV.A.3, detection is a process that distinguishes voice inputs from non-voice inputs. JX-1, 5:65-6:9. Thus, a “confidence level of detection” is a measure reflecting the confidence that the audio input is voice. JX-1, 30:44-46. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Sonos's expert, Dr. Johnson, argues that the specification limits "confidence level of detection" to "the quality or closeness of the match between a voice model and the voice input" [REDACTED] JX-17C ¶¶ 619-22. This overly narrow interpretation is unsupported by the specification. The portion of the specification Dr. Johnson cites describes a "confidence level" for a "match between a voice model and [a] voice input" being used to identify *whether a particular person spoke* an audio input, not a confidence level of *detection* used for a voice arbitration. JX-1, 24:42-48; JX-12C ¶ 851-52. Dr. Johnson's interpretation is also inconsistent with his own opinions on validity—he opines that a signal-to-noise ratio, volume information, and detection time are all "confidence levels of detection." JX-20C ¶¶ 1743-46.

Dr. Johnson also argues that [REDACTED] is the "opposite" of a confidence level because the higher [REDACTED], the less likely the audio is to be voice. JX-17C ¶¶ 623-25. Again, Dr. Johnson's interpretation is too narrow. The [REDACTED] need only change to reflect the likelihood that the audio input is voice. JX-1, 21:11-30. For example, the '311 describes the levels of "noise" or "distortion" (which are lower when the audio is higher quality) as measures of quality. JX-1, 21:24-30. [REDACTED]

[REDACTED] At a minimum, [REDACTED] variable (which is [REDACTED] and thus is higher when the audio input is more likely to be voice), is a confidence level of detection.

#### 4. *Dependent Claim 19*

##### (a) 19.1

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Dated: May 31, 2023

Respectfully submitted,

/s/ Nina S. Tallon

S. Alex Lasher

Jeff Gerchick

Nina S. Tallon

Quinn Emanuel Urquhart & Sullivan, LLP

1300 I Street, NW, Suite 900

Washington, DC 20005

Tel.: (202) 538-8000

David A. Nelson

Quinn Emanuel Urquhart & Sullivan, LLP

191 N. Wacker Dr., Suite 2700

Chicago, IL 60606

Tel.: (312) 705-7400

Patrick D. Curran

Quinn Emanuel Urquhart & Sullivan, LLP

111 Huntington Ave, Suite 520

Boston, MA 02199

Tel.: (617) 712-7100

Elizabeth A. DiMarco

Gregory F. Corbett

WOLF, GREENFIELD & SACKS, P.C.

600 Atlantic Avenue

Boston, MA 02210

Tel.: 617.646.8000

*Counsel for Complainant Google LLC*