

**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)**

Investigation No. 337-TA-1330

**COMPLAINANT’S SIXTH SUPPLEMENTAL OBJECTIONS AND RESPONSES TO
RESPONDENT’S FIRST SET OF INTERROGATORIES (NOS. 1-44)**

Pursuant to Commission Rules 210.27 and 210.29 and Ground Rule 4.4, Complainant Google LLC (“Google” or “Complainant”) hereby supplements its objections and responses as follows to Respondent Sonos, Inc.’s (“Respondent” or “Sonos”) First Set of Interrogatories (Nos. 1-44).

GENERAL RESPONSES

Complainant bases its objections and responses upon information presently available, and Complainant reserves the right to supplement or amend these objections and responses as discovery progresses and as permitted by 19 C.F.R. § 210.27. Discovery is ongoing, and Complainant continues to investigate and analyze the facts and law pertaining to this Investigation. Complainant’s objections and responses are therefore made without prejudice to Complainant’s right to subsequently add, modify, or otherwise change or amend its objections and/or responses. Complainant reserves the right to make any use of, or to introduce at any hearing, information and/or documents responsive to Respondent’s First Set of Interrogatories identified subsequent to the date of these responses. Complainant reserves all objections and other questions as to the competency, relevance, materiality, privilege, or admissibility of

19 C.F.R. § 210.27(f) or as may be warranted in light of ongoing discovery, to the extent any non-privileged, relevant information responsive to this Interrogatory is located.

INTERROGATORY NO. 41:

To the extent You contend that any Asserted Claim or Domestic Industry Claim is not invalid under 35 U.S.C. §§ 101, 102, 103, or 112, state the factual and legal bases for Your contention, including:

(a) an identification and explanation of any element or limitation that You contend is not expressly or inherently disclosed in any Prior Art reference asserted by Respondents in this Investigation;

(b) an explanation of what You contend to be (i) the scope and content of the Prior Art at the time of the alleged invention, (ii) the differences between the Prior Art and the alleged invention, (iii) the level of skill in the art at the time of the alleged invention, (iv) the presence or absence of a rationale or motivation to combine or modify the Prior Art, (v) the presence or absence of a reasonable expectation of success, and (vi) the presence or absence of any secondary considerations/objective indicia supporting a finding of obviousness;

(c) an identification and explanation of where each claim element or limitation is allegedly supported in the patent written description;

(d) an identification and explanation of why a person of ordinary skill in the art allegedly could have made and used the full scope of the claimed invention without undue experimentation. State how each of the following factors allegedly supports Your contention: (i) the breadth of the claims; (ii) the nature of the invention; (iii) the state of the Prior Art; (iv) the level of one of ordinary skill; (v) the level of predictability in the art; (vi) the amount of direction provided by the inventor; (vii) the existence of working examples; and (viii) the quantity of experimentation needed to make or use the invention based on the content of the disclosure;

(e) an identification and explanation of why a person of ordinary skill in the art would not lack reasonable certainty concerning the scope and meaning of the claim.

RESPONSE TO INTERROGATORY NO. 41:

Google incorporates by reference all of its General Objections as if fully set forth herein. Google objects to this Interrogatory as premature on the grounds that it seeks contentions and/or expert discovery prior to the deadlines in the procedural schedule to be entered in this Investigation, the relevant Ground Rules, and/or any agreement between the parties. Google objects to this Interrogatory on the grounds that it seeks information that is not relevant to any claims or defenses and/or is not proportional to the needs of the Investigation to the extent that it seeks Google's contentions concerning potential validity challenges that are not set forth in any

Sonos's contentions concerning purported invalidity of any Asserted Claim or Domestic Industry Claim when such contentions are served. Google objects to this Interrogatory to the extent that it seeks information protected by the attorney-client privilege, work-product protection, and/or by any other applicable privilege or protection.

Subject to and without waiving the foregoing objections, Google responds as follows: Google will provide contention interrogatory responses and expert reports, opinions and testimony on the dates agreed upon by the parties, and/or as ordered by the Administrative Law Judge.

Google is continuing to investigate the subject matter of this Interrogatory and reserves the right to supplement, amend, or revise its response to this Interrogatory pursuant to 19 C.F.R. § 210.27(f) or as may be warranted in light of ongoing discovery, to the extent that any non-privileged, relevant information responsive to this Interrogatory is located.

FIRST SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 41 (1/9/2023):

Google incorporates by reference its prior response. Subject to the foregoing general and specific objections, Google provides the following additional information.

Google incorporates by reference its prior responses and objections to this Interrogatory as if set forth in full herein. Google further objects to this Interrogatory to the extent it seeks to place on Google the burden of proving validity of the asserted claims of the patents-in-suit without Sonos having presented a prima facie case of invalidity for any such claims. Subject to, and without waiving the foregoing objections, Google further responds as follows:

Google supplements its responses with the information available to it and found after a reasonable search. It is Sonos's burden to prove by clear and convincing evidence that any of the Asserted Claims or Domestic Industry Claims are invalid. Setting aside Sonos's failures to

prior art, reading of the prior art, or theory of invalidity that has been impacted by Google's Initial Infringement Contentions, Initial Domestic Industry Contentions, Final Infringement Contentions, or Final Domestic Industry contentions. Google therefore considers Sonos's Final Invalidity Contentions the last word on its invalidity positions. Furthermore, to the extent that Sonos seeks to again supplement, modify or amend its invalidity contentions (and to the extent such supplementation is permitted), Google correspondingly reserves its right to supplement, modify or amend its response or otherwise to move to strike any further Sonos modifications.

I. '748 PATENT

A. The Asserted Claims and the Domestic Industry Claims Are Not Invalid Under 35 U.S.C. § 101.

Sonos has not shown that the claims of the '748 patent are not eligible under § 101. The framework for establishing eligibility under § 101 is set forth in *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014). To show that the claims of the '748 patent are not patent eligible under § 101, Sonos first needs to prove that the claims as a whole are "abstract" and "directed to a patent-ineligible concept." *Alice*, 134 S. Ct. at 2355-57. Next, even if Sonos could show that the claims are directed to an abstract idea, it must then show that the claims lack an "inventive concept." *Id.* at 2357. But Sonos has not shown, nor can it show, that either of these requirements is met.

First, the Asserted Claims are not directed to an abstract idea. The claims of the '748 patent are directed to improvements to the functionality of specialized computers, rather than an idea merely carried out by a computer. Specifically, the '748 patent is directed to an improvement to the operation of voice-controlled computing devices, particularly when they are operating in a system with other voice-controlled computing devices. The '748 patent explains that a problem with existing speech recognition systems is that, when there are "two or more

response arbitration, and the '376 patent is directed to determining whether an utterance was made by a particular *user* by analyzing audio inputs from multiple devices, not a technique for determining whether to perform speech recognition on spoken audio input and designating a particular computing device for doing so. None of those patents' claims require the claimed devices, "responsive to determining that the first computing device should perform speech recognition on the spoken audio input," "send[ing], to at least a second computing device from a plurality of computing devices, a command to temporarily refrain from performing speech recognition" as claimed by the '748 patent's independent claims. Nor do they base any determination whether to perform speech recognition on spoken audio input at least in part on current context, such as "a location of the first computing device, a current time as defined by the first computing device, one or more applications installed at the first computing device, one or more applications currently executing at the first computing device," and other criteria recited in dependent claims 3 and 10.

C. The Asserted Claims and the Domestic Industry Claims Are Not Invalid Under 35 U.S.C. § 112.

Sonos's contentions set forth several claim elements for the '748 patent that Sonos summarily contends "lack enablement and/or written description." Invalidity Contentions at 26. Google advised Sonos that its written-description and lack-of-enablement contentions are inadequate in correspondence dated January 13, 2023, specifically noting that "several of Sonos's assertions are based on Sonos's (or what Sonos contends to be Google's) apparent interpretation of the claims, rather than the claim language." Google also advised Sonos that Sonos's invalidity contentions "group its lack of enablement and lack of written description arguments together, providing no independent grounds or basis for alleging either theory," and therefore fail to provide sufficient notice to Google of its theories. In Sonos's Final Invalidity

Contentions, Sonos nonetheless applies what it understands to be Google's interpretation of the claims for purposes of alleged invalidity under § 112, and groups its written-description and lack-of-enablement arguments together. *See* Sonos Final Invalidity Contentions, Attachment A at 26-28 ("By way of example, the following limitations of the Asserted Claims of the '748 Patent lack enablement and/or written description: . . . Dependent claims 2-4, 9-10, 12, and 14-15 are invalid for at least the same reasons."). Google also advised Sonos in the January 13 correspondence that Sonos's assertions improperly indicated that "Sonos may later assert additional grounds for arguing that the claims lack § 112 support or are invalid under § 101, such as by stating that the asserted claims are invalid for 'at least' the reasons provided." Sonos has not clarified whether its Final Invalidity Contentions reflect its final position on § 112 issues, and its boilerplate language that there may be other, undisclosed grounds for invalidity are improper. Sonos's contentions remain inadequate and fail to explain with any particularity how or why Sonos contends that these elements do not have written description support, why those of ordinary skill in the art would not have been able to implement the claimed inventions without undue experimentation, and/or how or why the claim is indefinite. Google denies these contentions and specifically denies that any of the identified terms are indefinite, lack written description support, or are not enabled. Sonos has not, and cannot establish with clear and convincing evidence that any claim of any Asserted Patent is invalid for failure to comply with 35 U.S.C. § 112.

Nevertheless, to the extent it is able, Google responds to Sonos's assertions below. In the event that Sonos is later permitted to add contentions or supplement these contentions under § 112, Google reserves the right to respond more fully. Google also notes that the USPTO is responsible, prior to issuance of a patent, for reviewing the claims with an eye toward the

requirements of §112. *See generally* MPEP §§ 2163-64, 2173. Thus, the USPTO has already confirmed that these requirements are satisfied, as demonstrated by the prosecution history of the '748 patent.

1. Sonos Has Not Shown That The Identified Claim Terms of the '748 Patent Lack Written Description Support.

Given the subject matter of the Asserted Claims and the contents of the '748 patent, Sonos has not shown and cannot show that the identified claim terms lack written description support.³⁰ Compliance with the written description requirement is a question of fact. *See Certain Windshield Wiper Devices & Components Thereof*, Inv. No. 337-TA-881 (May 8, 2014); *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). In fact, the written description requirement will necessarily vary depending on the context, including, for example, the nature and scope of the claims and the complexity and predictability of the relevant technology. *Certain Windshield Wiper Devices & Components Thereof*, USITC Inv. No. 337-TA-881 (May 8, 2014). Indeed, it is unnecessary to describe (and preferable to omit) that which is already known in the art. *See, e.g., Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1386 (Fed. Cir. 1999).

Determining sufficiency of the written description in a patent requires “an objective inquiry into the four corners of the specification,” which “must describe an invention understandable to that skilled artisan and show that the inventor actually invented the invention claimed.” *Certain Windshield Wiper Devices & Components Thereof*, Inv. No. 337-TA-881 (May 8, 2014) (quoting *Ariad Pharm., Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1351 (Fed. Cir.

³⁰ Google addresses enablement separately below in Section I.C.2, as Sonos did in its Invalidity Contentions. Sonos Invalidity Contentions at 22-23.

2010)). In other words, the test “is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Indivior Inc. v. Dr. Reddy's Labs., S.A.*, 930 F.3d 1325, 1347 (Fed. Cir. 2019) (quoting *AriadPharm*, 598 F.3d at 1351). The written description requirement does not require the specification of a patent to provide the exact language support for the claim limitations. *See, e.g., Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1345 (Fed. Cir. 2016) (no “*in haec verba*” requirement). Nor does the written description requirement demand examples or an actual reduction to practice. *See, e.g., Centrak, Inc. v. Sonitor Techs., Inc.*, 915 F.3d 1360, 1366–67 (Fed. Cir. 2019). The written description requirement also does not demand the specification to spell out every little detail of the invention. *See, e.g., Certain Windshield Wiper Devices & Components Thereof*, Inv. No. 337-TA-881 (May 8, 2014) (“unnecessary to spell out every detail of the invention.”) (quoting *Falkner v. Inglis*, 448 F.3d 1357, 1366 (Fed. Cir. 2006)).

Sonos’s arguments in this section, taken together, amount to an assertion that *all but two* limitations in *all* of the independent claims are not enabled and/or described in the specification. This strains credulity, particularly in view of the ample support in the specification for each of these limitations, as discussed below.

- (a) **“determine ... whether the first computing device should perform speech recognition on the spoken audio input,”
“responsive to determining that the first computing device should perform speech recognition on the spoken audio input:
... send ... perform ... determine” (’748 patent)**

Sonos contends that independent claims 1, 7, and 11 of the ’748 patent, along with their dependent claims, are invalid for lack of enablement “and/or” written description based on the claims’ recitation of “determine ... whether the first computing device should perform speech

module 38 determines that the audio input includes a predetermined audio command, monitoring and execution module 38 may, in some examples, perform the associated action.”);

’748 patent at 19:41-56 (“In some examples, the particular computing device may determine whether the audio input includes a predetermined audio command to which any of the plurality of computing devices is configured to respond. . . .”);

’748 patent at Figs. 1-2.

Accordingly, contrary to Sonos’s assertions, the ’748 patent provides ample support for the above terms.

(b) **“a command to temporarily refrain from performing speech recognition” (’748 patent)**

Sonos contends that independent claims 1, 7, and 11 of the ’748 patent, along with their dependent claims, are invalid for lack of enablement and/or written description based on the claims’ recitation of “a command to temporarily refrain from performing speech recognition.” In support, Sonos summarily asserts that “there is no disclosure of ‘a command to temporarily refrain from performing speech recognition.’” Sonos Invalidity Contentions at 26. Sonos also states that “Google has interpreted this limitation such that the limitation can be met by a message that does not cause the recipient to ‘temporarily refrain from performing speech recognition,’” and that “the specification lacks support for such a message.” *Id.* at 26-27.

First, enablement and written description are two distinct legal theories, and Sonos fails to explain how this claim term fails under each theory is itself insufficient to establish a prima facie case under either theory. Sonos proves Google’s point by referring to “enablement . . . support,” whose meaning is unclear. Enablement requires that a patent specification provide sufficient disclosure to enable a POSITA to make and use the claimed invention, whereas the written-description requirement requires a finding that the inventors had possession of the claimed inventions.

Second, contrary to Sonos's argument, the specification sets forth several ways that a person of ordinary skill in the art may implement a first computing device that, "responsive to determining that the first computing device should perform speech recognition on the spoken audio input," sends "a command to temporarily refrain from performing speech recognition." For example, the specification provides that, in some examples, (1) the computing device that designates the particular computing device to monitor for and/or process audio input may temporarily deactivate the audio input modules in the non-designated devices; (2) the designated particular computing device may output instructions to the non-designated devices to cause the non-designated devices to temporarily deactivate their audio input modules; (3) the non-designated computing devices may temporarily deactivate their own audio input modules based on the designation; or (4) the computing device that designates the particular computing device to monitor for and/or process audio input may send indications of the designation to the non-designated computing devices, in response to which the non-designated devices deactivate their own audio input modules. These disclosures include at least the following:

'748 patent at 9:18-44 ("Responsive to designating the particular computing device to monitor for and/or process audio input, the techniques of the present disclosure may include temporarily deactivating, for each respective computing device from the plurality of computing devices other than the particular computing device, the respective module included in the respective computing device. . . . [1] In some examples, the same computing device or devices that designate the particular computing device may temporarily deactivate the audio input modules that are included in computing devices other than the particular computing device. [2] In some examples, the designated particular computing device may output instructions to computing devices other than the particular computing device to cause the respective computing devices other than the particular computing device to temporarily deactivate respective audio input modules. [3] In some examples, each computing device other than the particular computing device may temporarily deactivate its own audio input module based on the designation.");

'748 patent at 18:16-19:2 ("[4] In the example of FIG. 2, negotiation module 40 may send an indication of the designation (e.g., via communication units 4A) to

the respective negotiation module of computing devices 2B and 2C. That is, a computing device that designates (or computing devices that designate) a particular computing device from a plurality of computing devices to monitor for and/or process audio input may, in some examples, send indications of the designation to others of the plurality of computing devices. In some examples, the computing device that is designated as the particular computing device may send indications of the designation. That is, in some examples, responsive to being designated as the particular computing device, the particular computing device may send at least an indication of the designation to each respective computing device from the plurality of computing devices other than the particular computing device. In this way, each of the plurality of computing devices may receive an indication of the designation.

Negotiation module 40, in the example of FIG. 2, may also be operable by processors 20 to temporarily deactivate a module for monitoring and/or processing audio input. . . .”).

As described in the above excerpts from the specification, the “command to temporarily refrain” can be implemented in several ways; some of which involve causing the non-designated computing devices to refrain from performing speech recognition, and others involve sending a message or instruction to the non-designated devices, in response to which the non-designated devices may deactivate their own audio input modules. Additional relevant disclosure was identified in Section I.C.1.(a) (i.e., “responsive to determining that the first computing device should perform speech recognition on the spoken audio input: ... *send* ...”). Sonos’s argument that the specification lacks support for an interpretation “such that the limitation can be met by a message that does not cause the recipient to ‘temporarily refrain from performing speech recognition’” mischaracterizes the claim language—as Google explained in its Rebuttal Markman Brief, Sonos reads in a limitation into the claim that would restrict the operation of the claimed “first computing device” based on characteristics of the rest of the plurality of devices, which are not part of the claims. Reading operations of other computing devices into claims focused on the operation of a “first computing device” would be improper. *See, e.g.*, ’748 at cl. 7 (“A first computing device, comprising...”); *see also id.*, cl. 1 (“receiving,” “determining,”

“sending,” “performing,” etc., all “by [a/the] first computing device”), cl. 11. To determine whether a first computing device practices the claim, the behavior of other computing devices of the plurality of computing devices need not be assessed. *See* Google’s Rebuttal Markman Brief at 6-8.

Third, the specification provides ample support for the limitation, “a command to temporarily refrain from performing speech recognition” as discussed above in Section I.C.1.(a).

Sonos did not respond to these arguments in its Final Invalidity Contentions. Instead, Sonos merely points to Google’s Initial Infringement Contentions,

Sonos

Final Invalidity Contentions at 27. Sonos argues that “the plain language of the claim and the ’748 specification requires that the recipient refrain from performing *any and all* speech recognition, which includes hotword/wakeword detection,” citing Sonos’s *Markman* brief.³¹ *Id.* Google already showed that Sonos’s construction requiring cessation of “any and all” speech recognition is incorrect during the *Markman* process. Complainant’s Initial *Markman* Brief at 15-17; Complainant’s Rebuttal *Markman* Brief at 8-9. Moreover, Sonos’s requirement that the other computing devices in the plurality must “temporarily cease any and all speech recognition” in order for the limitation that the first computing device “send[s] a command to temporarily

³¹ Sonos argues that the “*plain language* of the claim and the ’748 specification requires that the recipient refrain from performing any and all speech recognition.” Sonos Invalidity Contentions, Attachment A at 27. This is inconsistent with its position during the *Markman* process, during which it offered that language as a construction, not the plain meaning. Sonos should be precluded from introducing an argument that the plain and ordinary meaning of “a command to temporarily refrain from performing speech recognition” is consistent with its construction.

refrain from performing speech recognition” to be met is improper. Whether the first computing device sends a “command to temporarily refrain from performing speech recognition” should be determined by the command itself, not by the effect it has on some other device.

Next, Sonos’s argument that “the specification lacks enablement and written description support for such a message that merely causes the recipient to refrain from performing some speech recognition but not other speech recognition” both fails to accurately characterize the claims and the law. Claims 1, 7, and 11 of the ’748 patent require the first computing device to send “a command to temporarily refrain from performing speech recognition.” Whether a device that sends a command, after which the receiving device “perform[s] some speech recognition but not other speech recognition” (as Sonos puts it) practices the claims is a question for infringement or the technical prong of domestic industry; it is not a written-description issue. Indeed, the specification need not disclose every possible embodiment of the claims, such as the precise operation of the Accused Products or Domestic Industry Products, for the claims to have § 112 support.

Accordingly, contrary to Sonos’s assertions, the ’748 patent provides ample support for the term “a command to temporarily refrain from performing speech recognition.”

- (c) **“determine, based at least in part on information received from the one or more additional computing devices, whether the first computing device should perform speech recognition on the spoken audio input ... responsive to determining that the first computing device should perform speech recognition on the spoken audio input: ... perform speech recognition on the spoken audio input” (’748 patent)**

Sonos contends that independent claims 1, 7, and 11 of the ’748 patent, along with their dependent claims, are invalid for lack of enablement and/or written description based on the claims’ recitation of “determine, based at least in part on information received from the one or

Subject to and without waiving the foregoing objections, Google responds as follows:
Google will identify experts and provide expert reports, opinions and testimony on the dates
agreed upon by the parties, and/or as ordered by the Administrative Law Judge.

Respectfully submitted,

Dated: February 15, 2023

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