

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS, LLC,
Petitioner,

v.

MEL NAVIP, LLC,
Patent Owner.

IPR2023-00083
Patent 8,060,368 B2

Before KEVIN F. TURNER, LYNNE E. PETTIGREW, and
MINN CHUNG, *Administrative Patent Judges*.

TURNER, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

A. *Background*

Unified Patents, LLC (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting institution of *inter partes* review of claims 1–5 (“the challenged claims”) of U.S. Patent No. 8,060,368 B2 (Ex. 1001, “the ’368 Patent”). Mel NavIP, LLC (“Patent Owner”) filed a Preliminary Response (Paper 8, “Prelim. Resp.”). With respect to discretionary denial issues, we permitted additional briefing by Petitioner, resulting in the filing of a Petitioner’s Preliminary Reply Brief (Paper 11, “Prelim. Reply”).

An *inter partes* review may be instituted only if “the information presented in the petition . . . and any [preliminary] response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). For the reasons given below, Petitioner has established a reasonable likelihood that it would prevail in showing the unpatentability of at least one of the challenged claims of the ’368 Patent. Accordingly, we institute an *inter partes* review of the challenged claims of the ’368 Patent on the grounds of unpatentability raised in the Petition.

B. *Related and Prior Proceedings*

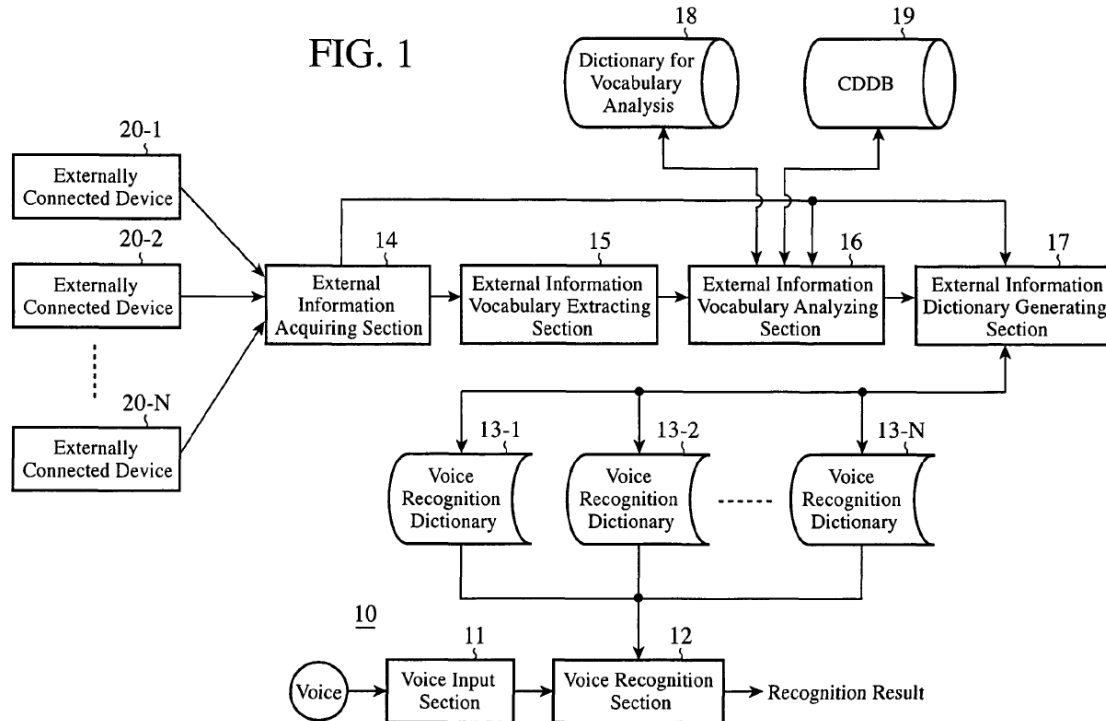
Petitioner and Patent Owner identify the following related matter: *Mel NavIP, LLC v. Toyota Motor North America, Inc.*, No. 2-22-cv-00152 (E.D. Tex.). Pet. 3; Paper 4, 1.

C. *Overview of the ’368 Patent*

The ’368 Patent relates to a speech recognition apparatus that has a plurality of speech recognition dictionaries corresponding to externally connected devices. Ex. 1001, 1:5–10. The ’368 Patent discloses the use of

an apparatus which has an “external information acquiring section 14 [which] acquires data (such as a received mail message in the case of the mobile phone, or a title, artist name and album name in the case of the iPod) stored in the externally connected device[s 20-1 to] 20-N.” *Id.* at 4:14–18.

Figure 1 is reproduced below:



Id. at Fig. 1. The above figure depicts a block diagram showing a configuration of a speech recognition apparatus connected to external devices. *Id.* at 2:54–57. After acquiring data from the externally connected devices, they are delivered to the external information vocabulary analyzing section 16, where they are analyzed, and subsequently delivered to the external information dictionary generating section 17. *Id.* at 4:25–52. The apparatus creates dictionaries 13-1 to 13-N corresponding to the externally connected devices 20-1 to 20-N, such that the corresponding dictionary is used for the connected device. *Id.* at 4:53–58. To carry out the speech

recognition, voice recognition section 12 receives a voice input via voice input section 11, recognizes the input voice by referring to one of dictionaries 13-1 to 13-N, and outputs a speech recognition result. *Id.* at 3:58–65.

D. Challenged Claims

Petitioner challenges claims 1–5 of the '368 Patent. Pet. 5. Claim 1 is the sole independent claim, with the remaining claims ultimately dependent on that claim. Independent claim 1 is illustrative of the claimed subject matter and is reproduced below:

1. A speech recognition apparatus comprising:

[1[a]] an external information acquiring section configured to acquire, from an externally connected device connected to the speech recognition apparatus, a device type of the externally connected device, and for acquiring data recorded in said externally connected device;

[1[b]] a vocabulary extracting analyzing section configured to extract a vocabulary item as an extracted vocabulary item form¹ the data acquired by the external information acquiring section, and to produce analysis data by providing the extracted vocabulary item with pronunciation obtained through analysis of said extracted vocabulary item;

[1[c]] a dictionary generating section for configured to generate speech recognition dictionaries according to device types of externally connected devices by storing the analysis data produced by the vocabulary extracting analyzing section into a speech recognition dictionary corresponding to the device type acquired by the external information acquiring section; and

[1[d]] a speech recognition section configured to carry out speech recognition of input speech by referring to a speech

¹ Petitioner asserts that the recitation of “form” is a typographical error and should be read as “from;” Patent Owner does not state otherwise (*see* Prelim. Resp.), and we adopt that representation.

recognition dictionary out of the speech recognition dictionaries generated by the dictionary generating section, and to output a result of said speech recognition, where the speech recognition dictionary to be used for said speech recognition corresponds to the device type acquired by the external information acquiring section.

Ex. 1001, 8:45–9:5 (annotated to include Petitioner’s identification of limitations).

E. Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability (Pet. 5), supported by the declaration of Mr. Bruce McNair (Ex. 1003) in support of its contentions:

Claims Challenged	35 U.S.C. §	References
1–3	103(a)	Niemoeller ² , Nishizaki ³ , Yamamoto ⁴
4, 5	103(a)	Niemoeller, Nishizaki, Yamamoto, Keely ⁵

Patent Owner’s Preliminary Response is supplemented by a declaration of Dr. Fang Qui (Ex. 2001).

II. ANALYSIS

A. Discretion Under §§ 314(a), 325(d)

Institution of *inter partes* review is discretionary. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is

² U.S. Patent Publication No. US 2003/0182132 A1, published September 25, 2003 (Ex. 1005, “Niemoeller”).

³ Japanese Patent Appln. Pub. P2005-266192 A, published September 29, 2005 (Ex. 1006, “Nishizaki”).

⁴ U.S. Patent Publication No. US 2004/0153312 A1, published August 5, 2004 (Ex. 1007, “Yamamoto”).

⁵ U.S. Patent Publication No. US 2003/0216913 A1, published November 20, 2003 (Ex. 1008, “Keely”).

permitted, but never compelled, to institute an IPR proceeding.”); 35 U.S.C. § 314(a) (2018).

1. *Discretion Under § 314(a)*

The Board has held that the advanced state of a parallel district court action is a factor that may weigh in favor of denying a petition under § 314(a). *See NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential); Patent Trial and Appeal Board, Consolidated Trial Practice Guide, 58 & n.2 (Nov. 2019), available at <https://www.uspto.gov/sites/default/files/documents/tpgnov.pdf>. We consider the following factors to assess “whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of an earlier trial date in the parallel proceeding”:

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
2. proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision;
3. investment in the parallel proceeding by the court and the parties;
4. overlap between issues raised in the petition and in the parallel proceeding;
5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
6. other circumstances that impact the Board’s exercise of discretion, including the merits.

Apple Inc. v. Fintiv, Inc., IPR2020-00019, Paper 11 at 5–6 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”). In evaluating these factors, we “take[] a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Id.* at 6.

Patent Owner argues that the *Fintiv* factors favor discretionary denial under § 314(a). Prelim. Resp. 6–13. Petitioner responds to those arguments.

Prelim. Reply 1–4. We consider the parties’ arguments regarding each factor below.

With respect to *Fintiv* factor (1), Patent Owner cites to the above-cited pending district court litigation involving the instant patent, “as well as 3 other patents asserted by Patent Owner against Toyota.” Prelim. Resp. 7. Patent Owner argues that a stay of the proceeding is unlikely, and that there is no evidence that the district court would stay the parallel litigation if one of the four patents is subject to the instant proceeding. *Id.* at 7–8. Petitioner responds that it is not a party to the district court litigation, and cannot request a stay, such that the factor is neutral. Prelim. Reply 1.

As *Fintiv* notes, the Board generally disfavors discretionary denial when litigation did not involve the petitioner, unless “the issues are the same as, or substantially similar to those already or about to be litigated, or other circumstances weigh against redoing the work of another tribunal.” *Fintiv* at 13–14. Given that we have no indication the litigation is or will be stayed pending an IPR, we decline to speculate as to the possibility of a stay. Thus, this factor is neutral as to discretionary denial.

With respect to *Fintiv* factor (2), Patent Owner argues that the district court has scheduled the parallel litigation’s final pretrial conference for December 4, 2023, where the Board is unlikely to issue a final written decision before April 2024, such that the expected trial date weighs heavily for denial.⁶ Prelim. Resp. 8. Petitioner asserts that the latest time-to-trial statistics for the Eastern District of Texas would result in a mid-February

⁶ Patent Owner also states that “this factor weighs against discretionary denials,” but this appears to be a typographical error, in view of Patent Owner’s arguments.

2024 trial date, such that this factor should weigh at most slightly in favor of discretionary denial. Prelim. Reply 1–2. We agree with the parties that the district court trial likely will commence before the issuance of a final written decision in this proceeding, but we are not persuaded that it will issue long after that commencement. As such, we find factor (2) weighs slightly in favor of discretionary denial.

With respect to *Fintiv* factor (3), Patent Owner argues that it submitted infringement contentions, the litigation opponent submitted its invalidity contentions, and the Markman hearing will occur in July 2023. Prelim. Resp. 9. Patent Owner also argues that the expenditure of resources, which it asserts to be significant, was avoidable because Petitioner waited five months from the filing of the complaint in the litigation, and this factor weighs in favor of discretionary denial. *Id.* at 9–10.

Petitioner asserts that the Board often measures diligence by considering the time period between infringement contentions and petition filing, which here was less than two months, and additionally asserts that the Petition was filed prior to the filing of invalidity contentions in the parallel litigation. Prelim. Reply 2. Petitioner also asserts that the litigation is still in the “early stage” and will remain so at the time of institution, and this factor should weigh heavily against discretionary denial. *Id.*

We view the present stage of litigation as involving only a moderate investment by the parties in the litigation. Looking at the timeframes when the infringement and invalidity contentions were filed, we determine that Petitioner’s timing for filing the Petition was reasonable. Overall, we conclude this factor is neutral with respect to discretionary denial.

With respect to *Fintiv* factor (4), Patent Owner argues that this factor weighs in favor of discretionary denial because it asserts that there is significant overlap between the grounds of unpatentability in the instant Petition and the invalidity contentions in the parallel litigation. Prelim. Resp. 10. Petitioner disputes this, given that Petitioner is not a party to the litigation and has no opportunity to challenge the claims in district court. Prelim. Reply 2. Petitioner also argues that there are “numerous secondary references not at issue in this proceeding” that are found in the invalidity contentions, and that given the early stage of the district court case, it is premature to assess overlap between that case and this proceeding. *Id.* at 2–3.

We determine that although the Petition’s grounds are part of the litigation defendant’s invalidity contentions, that does not mean the litigation will necessarily resolve those assertions at trial. That said, although the overlap between the litigation and the Petition is not complete, it still weighs in favor of discretionary denial.

With respect to *Fintiv* factor (5), Patent Owner acknowledges that Toyota, the litigation opponent, is not a real party-in-interest for the instant proceeding, but argues that Petitioner has Toyota as a member, such that “a bona fide question exists regarding the ‘Real Party-in-Interest’ in this proceeding.” Prelim. Resp. 11. Nonetheless, Patent Owner acknowledges this factor to be neutral. *Id.* Petitioner also asserts that it is not a party to any district court litigation involving the challenged patent, and argues that this factor weighs against discretionary denial. Prelim. Reply 3. With respect to Patent Owner’s “bona fide question,” Petitioner asserts that the Board has rejected “nearly identical arguments,” determining that

Petitioner's membership is insufficient to make that member a real party-in-interest. *Id.* (citing *Unified v. Arigna Tech. Ltd.*, IPR2022-00285, Paper 10 at 6–7 (PTAB June 17, 2022); *Unified v. Intellectual Ventures II, LLC*, IPR2022-00429, Paper 12 at 11 (PTAB Aug. 11, 2022); *Unified v. Barkan Wireless*, IPR2018-01186, Paper 56 at 4–12 (Dec. 4, 2019); *Unified v. American Patents*, IPR2019-00482, Paper 122 at 8 (rehearing denial) (PTAB Dec. 3, 2020)).

We agree with Petitioner that, at this time, Patent Owner has not offered sufficient evidence to show that its litigation opponent, Toyota, acted to have the instant Petition be filed, such that Toyota could be considered a real party-in-interest in the instant proceeding. As such, because the litigation does not involve Petitioner as a party, the identity of the parties here as compared to the litigation weighs strongly against discretionary denial.

With respect to *Fintiv* factor (6), Patent Owner asserts that the weakness of the proposed grounds in the Petition weighs against institution. Prelim. Resp. 11–12. Patent Owner cites to its arguments against the instant grounds of unpatentability that we discuss below, and asserts that “the merits of the proposed grounds aren’t ‘sufficiently strong to override the concerns about duplication of effort by the Board and the district court.’” *Id.* at 12 (citing *Immersion Systems LLC v. Midas Green Technologies, LLC*, PGR2021-00104, Paper 15 at 16 (Jan. 31, 2022)). Petitioner responds that the merits of its proffered grounds are compelling, arguing that Patent Owner's substantive arguments do not properly address claims, focusing instead on “unclaimed ideas.” Prelim. Reply 4.

We determine that the merits of Petitioner’s challenge appear strong based on the present record, as discussed below. As such, we determine the merits of Petitioner’s challenge to weigh against discretionary denial.⁷

In sum, we conclude that, on balance, the *Fintiv* factors weigh against discretionary denial here. We determine that in view of the efficiency and integrity of the system, these factors are best served by declining to exercise our discretion to deny institution of review under 35 U.S.C. § 314(a).

2. *Discretion Under § 325(d)*

Petitioner contends that we should not exercise our discretion to deny institution under 35 U.S.C. § 325(d). Pet. 72. Petitioner asserts that no proceeding involving the ’368 Patent has been previously brought before the Office, and that none of the references cited herein was before the Examiner during prosecution. *Id.* Patent Owner does not argue otherwise. *See* Prelim. Resp. As such, we decline to exercise our discretion to deny institution of review under 35 U.S.C. § 325(d).

B. *Level of Ordinary Skill in the Art*

Petitioner asserts that a person of ordinary skill in the art “would have had at least a bachelor’s degree in electrical or computer engineering, or an equivalent field, and at least two years of work experience involving telecommunications, signal processing, or speech recognition technology.” Pet. 6; *see* Ex. 1003 ¶ 17. Petitioner further asserts that “[m]ore education

⁷ Because we determine *Fintiv* factors 1–5 weigh against discretionary denial, we need not consider the compelling merits question. *See CommScope Techs. LLC v. Dali Wireless, Inc.*, IPR2022-01242, Paper 23 at 6 (Feb. 27, 2023) (“The Board should first assess *Fintiv* factors 1–5; if that analysis supports discretionary denial, the Board should engage the compelling merits question.”) (precedential).

can supplement practical experience and vice versa.” Pet. 6. Patent Owner provides a generally commensurate statement in the Preliminary Response, supported by its declarant. Prelim. Resp. 6 (citing Ex. 1003 ¶¶ 9–11).

Because we do not discern any substantive difference in the parties’ formulations, we adopt Petitioner’s assessment for purposes of this Decision.

C. Claim Construction

In this *inter partes* review, claims are construed using the same claim construction standard that would be used to construe the claims in a civil action under 35 U.S.C. § 282(b). *See* 37 C.F.R. § 42.100(b) (2020). The claim construction standard includes construing claims in accordance with the ordinary and customary meaning of such claims as understood by one of ordinary skill in the art at the time of the invention. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc). In construing claims in accordance with their ordinary and customary meaning, we take into account the specification and prosecution history. *Phillips*, 415 F.3d at 1315–17.

Petitioner asserts that “[n]o formal claim constructions are necessary in this proceeding because ‘claim terms need only be construed to the extent necessary to resolve the controversy.’” Pet. 12 (citing *Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011)). Petitioner also asserts that because no claim terms use the term “means,” there is a rebuttable presumption that § 112 ¶ 6 does not apply, but Petitioner provides charts identifying the specific portions of the specification that describe the corresponding structure for each such potential limitation, should we decide the presumption is overcome and § 112 ¶ 6 applies. *Id.* at 12–18.

Patent Owner agrees with Petitioner “that no formal claim construction is necessary in this proceeding and that no terms in the Challenged Claims use the terms ‘means’ to recite any means-plus-function limitations.” Prelim. Resp. 6. For purposes of this Decision, we determine that no claim term in the challenged claims of the ’368 Patent requires specific construction. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (holding that only claim terms in controversy need to be construed, and only to the extent necessary to resolve the controversy (citing *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))). Similarly, because no claim recites an explicit “means” limitation, and because neither party deems construction under § 112 ¶ 6 necessary, we construe all limitations of the challenged claims in accordance with their ordinary and customary meaning.

D. Legal Standards – Obviousness

The U.S. Supreme Court sets forth the framework for applying the statutory language of 35 U.S.C. § 103 in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966):

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

As explained by the Supreme Court in *KSR International Co. v. Teleflex Inc.*,

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit.

550 U.S. 398, 418 (2007) (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”)).

“Whether an ordinarily skilled artisan would have been motivated to modify the teachings of a reference is a question of fact.” *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1327 (Fed. Cir. 2016) (citations omitted).

“[W]here a party argues a skilled artisan would have been motivated to combine references, it must show the artisan ‘would have had a reasonable expectation of success from doing so.’” *Arctic Cat Inc. v. Bombardier Recreational Prods. Inc.*, 876 F.3d 1350, 1360–61 (Fed. Cir. 2017) (quoting *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1068–69 (Fed. Cir. 2012)).

E. Obviousness over Niemoeller, Nishizaki, and Yamamoto

Petitioner contends that claims 1–3 of the ’368 Patent are unpatentable under 35 U.S.C. § 103(a) as obvious over Niemoeller, in view of Nishizaki and Yamamoto, relying on the Declaration of Mr. McNair for support. Pet. 25–55 (citing Ex. 1003). Patent Owner disagrees, arguing that

Petitioner has not shown that the cited references teach or suggest every limitation of independent claim 1. Prelim. Resp. 13–21. For the reasons discussed below, we determine that the evidence presented demonstrates a reasonable likelihood that Petitioner would prevail in showing that the challenged claims are unpatentable for obviousness over Niemoeller, Nishizaki, and Yamamoto. We begin with a brief discussion of the cited references, and then consider Petitioner’s arguments with respect to the references’ teachings applied to the instant claims, as well as Patent Owner’s arguments asserting deficiencies in this ground of unpatentability.

1. Overview of Niemoeller

Niemoeller relates to a voice-controlled arrangement whereby a plurality of devices are controlled through recognition of an input voice.

Ex. 1005 ¶ 1. Figure 1 of Niemoeller is reproduced below:

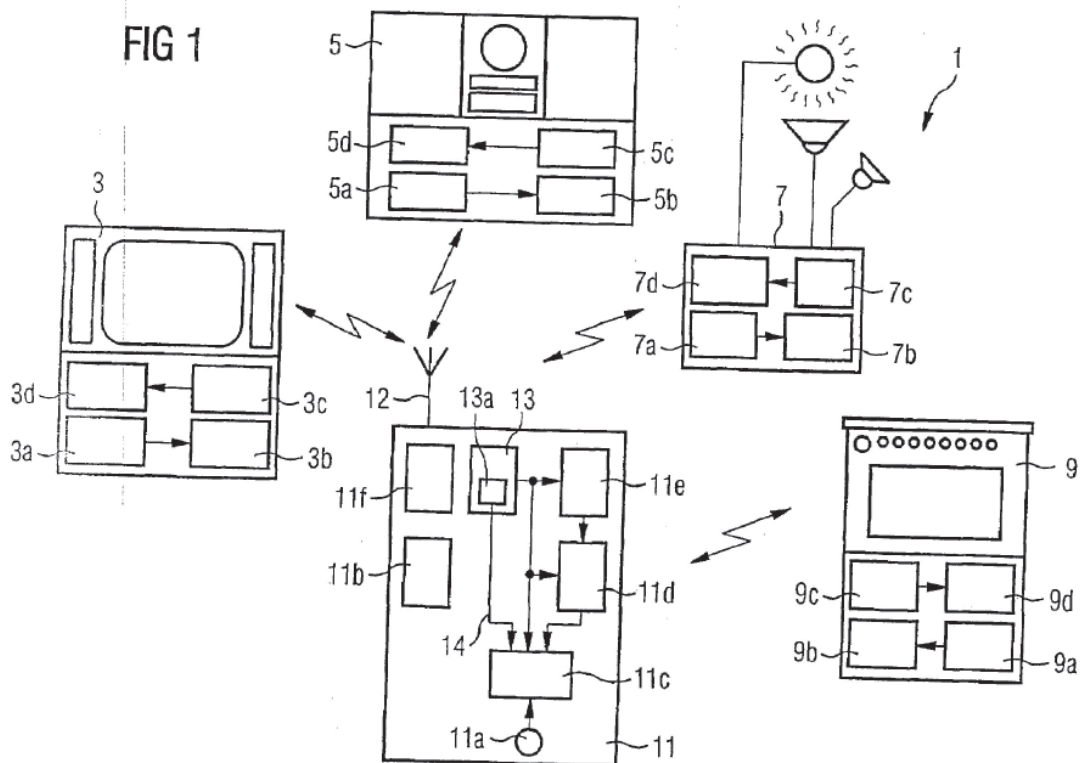


Figure 1 of Niemoeller illustrates a functional block diagram of a device configuration having a plurality of voice-controlled devices. Mobile voice control terminal 11 is described as being compatible with any number of devices, and in Figure 1, the plurality of devices 3, 5, 7, and 9 comprise a TV, an audio system, a lighting unit, and a cooker hob, respectively.

Ex. 1005 ¶ 33. Each connected device has a “vocabulary memory for storing a device-specific vocabulary and a vocabulary transmission unit for transmitting the stored vocabulary to the voice input unit,” with the voice input unit having a vocabulary reception unit for receiving the vocabulary transmitted by a device. *Id.* ¶¶ 7, 33, Fig. 1.

Niemoeller also discloses that “selection means for selecting vocabularies to be loaded into the voice input unit are provided in the voice input unit,” where, if the voice input unit is in telecommunications range of a device, using for example Bluetooth technology, the voice input unit will receive the stored vocabulary from the device. Ex. 1005 ¶¶ 7–8, 11–20. The voice input unit of Niemoeller additionally assesses a level of signals received from a device, thereby creating a hierarchy, or priority level, of devices that are in range. *Id.* Niemoeller also discloses that a plurality of device vocabularies can be loaded simultaneously into the voice input unit, but also explains, that in the interest of limiting storage capabilities of the voice input unit, device vocabularies may be replaced if the voice input unit is in range of other devices with higher priority. *Id.* ¶¶ 15–17.

2. *Overview of Nishizaki*

Nishizaki is directed to a speech recognition device and a speech recognition method in which multiple pieces of equipment coordinate with each other. Ex. 1006 ¶ 1. In Nishizaki, equipment, such as household

appliances, a personal computer, etc., have speech recognition capabilities and communicate with one another via a wireless network. *Id.* at Abstr. Each piece of equipment stores profile information, such as manufacturer name, model number, IP address, etc., of the other equipment connected to the network. *Id.* ¶¶ 14, 104–105, 139–145. A speech recognition device of a particular piece of equipment uses the profile information of other connected equipment to determine whether other equipment is connected to the network and to communicate with that equipment if connected. *Id.* ¶¶ 16, 110. Nishizaki also provides for different dictionary files and language models, corresponding to various domains, such as for television, for ticket retrieval, and for e-mail writing. *Id.* ¶ 104.

3. *Overview of Yamamoto*

Yamamoto is directed to a speech recognition dictionary creation method, including creating such dictionaries for speech-controlled replies to email. Ex. 1007 ¶¶ 5–8, 47, Abstr. Such a process is illustrated in Figure 2 of Yamamoto, reproduced below:

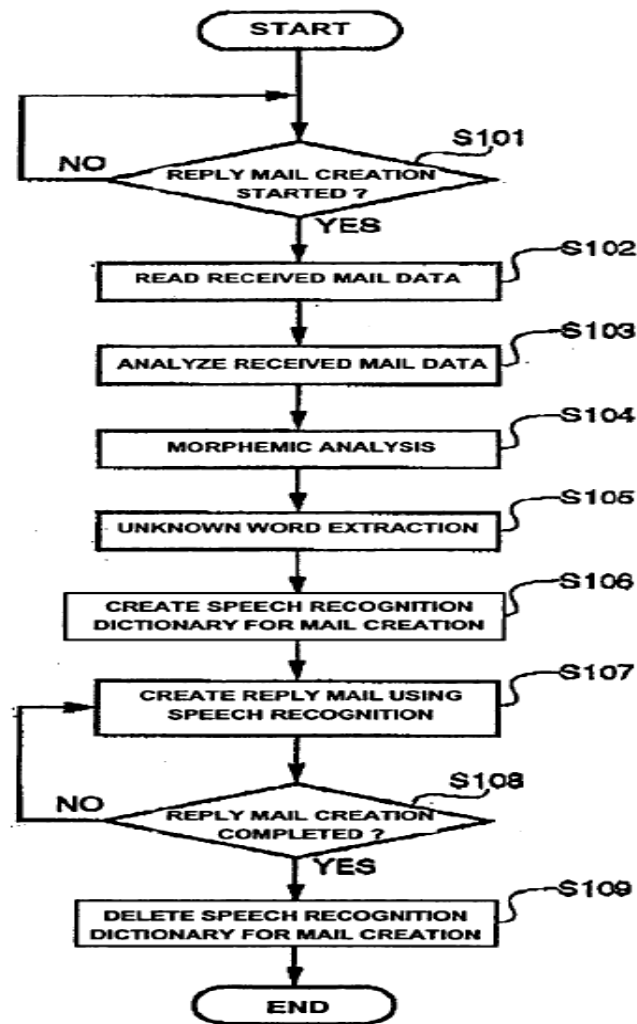


Figure 2 of Yamamoto provides a flowchart of operations of the speech recognition system applicable to electronic mail. Yamamoto discloses that when a user selects an email to be replied to, it extracts any unknown words from the text, appends pronunciation to the extracted words, and adds them to the speech recognition dictionary. *Id.* ¶ 6, Fig. 2. Yamamoto also details that a check is performed to determine whether a specific speech recognition dictionary exists, and creates a new dictionary if none exists, or adds unknown words to an existing dictionary. *Id.* ¶¶ 67–68, Fig. 9.

4. *Independent Claim 1*

a. *Preamble*

With respect to the preamble of claim 1, Petitioner asserts that Niemoeller discloses the preamble, to the extent that it is limiting. Pet. 25 (citing Ex. 1003 ¶ 55). Petitioner asserts that Niemoeller states that is directed to “a method for inputting and recognizing a voice. *Id.* (citing Ex. 1005 ¶ 1, Fig. 1). Patent Owner does not advance any arguments regarding the preamble. *See generally* Prelim. Resp.

We determine that, for purposes of this Decision, Petitioner shows sufficiently that Niemoeller teaches the preamble of claim 1. We need not resolve the issue of whether the preamble is limiting at this stage because Petitioner has shown, sufficiently for purposes of institution, that the preamble is satisfied by the prior art.

b. *Limitation 1[a]*

This limitation recites an external information acquiring section, that is configured to acquire, from an externally connected device connected to the speech recognition apparatus, a device type of the externally connected device, and to acquire data recorded in the externally connected device. Ex. 1001, 8:46–50.

Petitioner cites to multiple formulations of how this aspect of claim 1 is taught or suggested. Pet. 26–31. First, Petitioner asserts that Niemoeller discloses a mobile voice control terminal 11, which is connected to a plurality of devices 3, 5, 7, and 9. *Id.* at 26–27 (citing Ex. 1005 ¶¶ 33–34, Fig. 1). Each of the plurality of devices has a vocabulary memory and a vocabulary transmission unit, with the latter used to transmit vocabularies to a vocabulary reception unit 11e of the mobile voice control terminal, where

they are stored. *Id.* at 27–28 (citing Ex. 1005 ¶¶ 35, 38–39, Fig. 1).

Petitioner posits that based on the disclosure in the '368 Patent, one of ordinary skill in the art would have understood that claimed device type includes a device ID. *Id.* at 28 (citing Ex. 1001, 3:55–65, 4:7–13; Ex. 1003 ¶ 61). Petitioner further cites to Niemoeller's mobile voice control terminal pairing with the other devices through Bluetooth pairing, such that one of ordinary skill in the art would have understood that each device would have its own authentication number, which would have been communicated to the mobile voice control terminal, satisfying the acquiring of a device type aspect of this limitation. *Id.* at 28–29 (citing Ex. 1005 ¶ 34; Ex. 1003 ¶ 62).

Secondly, Petitioner asserts that limitation 1[a] would have been obvious in view of the combination of Niemoeller and Nishizaki. Pet. 29–31. Petitioner asserts that in Nishizaki's network of appliances, a user can speak into a speech recognition device of any appliance, and that appliance is able to assess whether it needs to communicate with other devices on the network to achieve proper speech recognition. *Id.* at 29 (citing Ex. 1006 ¶¶ 44–52). Information stored about other appliances includes ID-type information, including manufacturer name, model number, IP address, etc. Ex. 1006 ¶¶ 104–105, 139–145. Petitioner asserts that persons of ordinary skill in the art would have had reason to combine, with a reasonable expectation of success, transmitting a device ID, as shown in Nishizaki, with Niemoeller, because the systems are analogous, seeking to solve the same problems, because Nishizaki supplies an implementation detail of which they would have known, and because it would have been routine. Pet. 30–31 (citing Ex. 1003 ¶¶ 63–68).

Patent Owner disputes Petitioner's assertions, arguing that the cited art "misses the scope of Claim 1 and the '368 Patent entirely." Prelim. Resp. 18. Patent Owner argues that rather than a central apparatus performing vocabulary extraction of acquired data from externally connected devices, Niemoeller teaches that each externally connected device has already extracted the vocabulary and stores it in vocabulary memory to send to a central voice control terminal. *Id.* Similarly, Patent Owner argues that Nishizaki discloses a system where each external device has its own speech recognition unit and stored speech information. *Id.* at 19. Patent Owner contrasts these references with claim 1, arguing that "claim 1 is not claiming acquiring extracted vocabulary from each externally connected unit by the central apparatus," but rather, the external information acquiring section of claim element 1[a] acquires "data recorded in the externally connected device." *Id.* Such data, Patent Owner argues, include data exemplified in the Specification of the '368 Patent as "received mail message in the case of the mobile phone, or a title, artist name and album name in the case of the iPod." *Id.* at 19–20 (citing Ex. 1001, 4:14–17).

We do not agree with Patent Owner's arguments. This limitation of claim 1 recites, in part, "acquiring *data* recorded in said externally connected device." This limitation does not recite "raw data," or "unanalyzed data," or exclude extracted vocabulary therefrom. Although the Specification recites particular types of data, i.e., messages, titles, etc., being used, we are not persuaded that claim 1 should be limited only to the examples provided in the Specification. "Though understanding the claim language may be aided by explanations contained in the written description, it is important not to import into a claim limitations that are not part of the claim. For example, a

particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.”

Superguide Corp. v. DirecTV Enterprises, Inc., 358 F.3d 870, 875 (Fed. Cir. 2004). Therefore, although the Specification of the ’368 Patent makes clear that specific types of data are obtained from the externally connected devices, the claims are not so limited. As such, the fact that Niemoeller and Nishizaki provide different types of data from their external devices, including “processed” vocabularies, does not distinguish their processes from those recited in limitation 1[a] of independent claim 1.

For at least these reasons, we determine that, for purposes of this Decision, Petitioner shows sufficiently that Niemoeller, or the combination of Niemoeller and Nishizaki, teaches or suggests this limitation.

c. Limitation 1[b]

This limitation recites a vocabulary extracting analyzing section, configured to extract a vocabulary item as an extracted vocabulary item from the data acquired by the external information acquiring section, and to produce analysis data by providing the extracted vocabulary item with pronunciation obtained through analysis of the extracted vocabulary item. Ex. 1001, 8:51–57.

Petitioner relies on Niemoeller, where vocabularies received from devices contain “instruction words or phrases in orthographic or phonetic transcription and possibly additional information for the voice recognition,” such that it discloses that the acquired data include certain pronunciations with the vocabulary items. Pet. 32–33 (quoting Ex. 1005 ¶ 22; citing Ex. 1003 ¶ 71). Petitioner also relies on Yamamoto where it teaches creating a speech recognition dictionary for use with speech-controlled

replies to email, where unknown words are extracted from a text, and pronunciations are appended to the extracted words, which are then added to a speech recognition dictionary. *Id.* at 33 (citing Ex. 1007 ¶¶ 5–8, 47, Abstr.). Petitioner also identifies Yamamoto’s document data analysis section 25, language processing section 26, and language processing dictionary 32 as corresponding to the claimed vocabulary extracting analyzing section. *Id.* at 35. Petitioner further asserts that one of ordinary skill in the art would have been motivated to use Yamamoto’s vocabulary extracting analyzing section with Niemoeller because doing so would have eliminated the need for connected devices to carry their own language modeling information with their text data, and therefore would increase the number of devices with which Niemoeller would be compatible, and would have improved efficiency. *Id.* at 35–37 (citing Ex. 1003 ¶¶ 76–77).

Patent Owner argues that Niemoeller fails to disclose “a vocabulary extracting analyzing section” which extracts vocabulary items from the data acquired from the externally connected device,” because “[i]n Niemoeller’s decentralized system, each external connected device creates its own vocabulary.” Prelim. Resp. 20. This argument is related to Patent Owner’s argument, discussed above, asserting that vocabulary data cannot be data acquired from the externally connected device, of which we are not persuaded. This limitation of claim 1 provides that vocabulary items are extracted from the data, but it does not preclude the data from being vocabulary data or entries. We do not agree with Patent Owner’s assertion that “extraction is unnecessary since each external device . . . has their own speech recognition unit [] and stored speech information.” *Id.* A dictionary can be supplied with entries from another dictionary in a process that would

be covered by “extraction,” i.e., extracting dictionary entries for one dictionary from another. Again, we acknowledge that the Specification of the ’368 Patent provides for a different process, but it does not limit this limitation of claim 1 to only that process.

Patent Owner also argues that Nishizaki fails to teach the extraction of vocabulary items from the data acquired from the externally connected device (Prelim. Resp. 20), but such an argument is inapposite to the discussion provided in the Petition; the Petition relies on the teachings of Niemoeller and Yamamoto, and does not rely on Nishizaki for this limitation.

For at least these reasons, we determine that, for purposes of this Decision, Petitioner shows sufficiently that Niemoeller and Yamamoto teach or suggest this limitation.

d. Limitation 1[c]

This limitation recites a dictionary generating section, configured to generate speech recognition dictionaries, according to device types of externally connected devices, by storing the analysis data produced by the vocabulary extracting analyzing section into a speech recognition dictionary corresponding to the device type acquired by the external information acquiring section. Ex. 1001, 8:58–64.

For limitation 1[c], Petitioner begins by asserting that a person of ordinary skill in the art would have understood that generating speech recognition dictionaries in the ’368 Patent can occur by storing analysis data in memory. Pet. 38 (citing Ex. 1001, 4:45–52; Ex. 1003 ¶ 80). Petitioner then points to Niemoeller for its teaching of “specific vocabularies,” corresponding to externally connected devices, which are “loaded into the

voice input unit.” *Id.* at 38–39 (quoting Ex. 1007 ¶¶ 11, 22). Based on this, Petitioner asserts that the combination of Niemoeller and Yamamoto would perform language analysis and append pronunciations to dictionary terms to create analysis data in a speech recognition apparatus, where those analysis data would be stored in memory. *Id.* at 39 (citing Ex. 1003 ¶ 81). Petitioner also cites to Niemoeller for its teaching of prioritization of which vocabularies will remain in storage, and to perform such prioritization the system knows which vocabulary is associated with which device. *Id.* (citing Ex. 1007 ¶¶ 16–17).

Patent Owner argues that neither Niemoeller nor Nishizaki discloses this limitation because both disclose externally connected devices which have their own vocabulary or speech recognition systems. Prelim. Resp. 20–21. As discussed above, we are not persuaded by this argument. For both Niemoeller and Nishizaki, the “centralized” portions of each, i.e., not the “external devices,” have equivalents to a dictionary generating section, per Petitioner’s analysis, and we continue to find nothing in claim 1 that precludes the externally connected devices from having their own vocabulary dictionaries and/or speech recognition systems.

For at least these reasons, we determine that, for purposes of this Decision, Petitioner shows sufficiently that Niemoeller and Yamamoto teach or suggest this limitation.

e. Limitation 1[d]

This limitation requires a speech recognition section, configured to carry out speech recognition of input speech by referring to a particular speech recognition dictionary, and to output a result of the speech recognition, where the speech recognition dictionary to be used corresponds

to the device type acquired by the external information acquiring section.
Ex. 1001, 8:65–9:5.

Petitioner cites to Niemoeller for its disclosure of the mobile voice control terminal which has a voice recognition stage that performs speech recognition on commands spoken by a user by accessing the appropriate vocabulary, and outputs a result. Pet. 42 (citing Ex. 1005 ¶¶ 35, 37, Fig. 1). Petitioner also asserts that Niemoeller makes clear that it uses the particular dictionary for speech recognition corresponding to the acquired device type by being within range of that device, so that its vocabulary and device ID are loaded into the speech recognition apparatus, and by determining that the commands spoken by a user are associated with that device. *Id.* (citing Ex. 1005 ¶¶ 50–54). Petitioner asserts that ordinarily skilled artisans would have understood and found it obvious that the vocabulary to be used for a given speech recognition in Niemoeller corresponds to the device ID of the appropriate externally connected device so that the appropriate device can be controlled by the speech recognition output. *Id.* at 43 (citing Ex. 1003 ¶¶ 88–89).

At this juncture, Patent Owner does not advance any arguments regarding this limitation. We determine that, for purposes of this Decision, Petitioner shows sufficiently that Niemoeller teaches limitation 1[d].

f. Conclusion for Independent Claim 1

For the reasons explained above, Petitioner makes a sufficient showing for purposes of institution that the combination of Niemoeller, Nishizaki, and Yamamoto teaches or suggests every element of independent claim 1 and that a person of ordinary skill in the art would have combined the references as asserted in the Petition. Accordingly, we determine that

the information presented shows a reasonable likelihood that Petitioner would prevail in establishing that claim 1 is unpatentable as obvious over Niemoeller, Nishizaki, and Yamamoto.

5. *Dependent Claim 2*

Claim 2 depends from claim 1 and further recites that the dictionary generating section includes a type deciding section, to determine whether the external device corresponding dictionary is present or not; a dictionary creating section, to create a corresponding speech recognition dictionary if not present and store the analysis data therein; and a dictionary updating section, to store the analysis data in an existing dictionary if already present. Ex. 1001, 9:6–25.

Petitioner contends that in Yamamoto, when a user selects an email to reply to, Yamamoto's method checks to see whether a speech recognition dictionary corresponding to that particular email already exists, and creates a speech recognition dictionary if one does not exist, or updates an existing dictionary. Pet. 44–52 (citing Ex. 1007 ¶¶ 69–72, 75–77, Figs. 2, 9). Petitioner also asserts that one of ordinary skill in the art would have been motivated to use the disclosed steps of Yamamoto in Niemoeller to avoid loading duplicate dictionaries and to allow for efficient updating of an existing dictionary. *Id.* (citing Ex. 1003 ¶¶ 97–98, 104, 110–111).

Patent Owner does not traverse this ground with respect to claim 2, other than the arguments raised against independent claim 1. *See* Prelim. Resp. 21 (arguing the combination only discloses the requirements of claim 2 being performed at each externally connected device). We address Patent Owner's argument, above, in the context of its arguments traversing this ground with respect to independent claim 1, and need not repeat them

here. We determine that, for purposes of this Decision, Petitioner shows sufficiently that the combination of Niemoeller, Nishizaki, and Yamamoto teaches or suggests the limitations of claim 2.

6. *Dependent Claim 3*

Claim 3 depends from claim 1 and further recites that the speech recognition apparatus includes a speech recognition dictionary control section configured to activate only the speech recognition dictionary corresponding to the device type acquired by the external information acquiring section. Ex. 1001, 9:26–10:2.

Petitioner contends that Niemoeller’s speech recognition apparatus has “selection means” for deciding which device vocabularies are loaded onto the mobile voice control terminal, such that Niemoeller activates only a vocabulary which corresponds to a desired device by analyzing whether the user has pointed the mobile voice control terminal in the direction of the device, the particular words the user utters, and a calculation of probabilities that that device is the one that the user means to control. Pet. 53 (citing Ex. 1005 ¶¶ 12–19, 21). Petitioner further contends that Niemoeller and Nishizaki disclose which dictionary is activated upon input, where it would have been obvious to combine the teachings of the references to transmit the device type. *Id.* at 54.

Patent Owner does not traverse this ground with respect to claim 3, other than the arguments raised against independent claim 1. *See* Prelim. Resp. We determine that, for purposes of this Decision, Petitioner shows sufficiently that the combination of Niemoeller, Nishizaki, and Yamamoto teaches or suggests the limitations of claim 3.

7. *Conclusion*

For purposes of institution, we have reviewed the Petitioner's arguments and assertions concerning the combination and found them to be persuasive with respect to claims 1–3. Accordingly, the information presented shows a reasonable likelihood that Petitioner would prevail in establishing that claims 1–3 are unpatentable as obvious over Niemoeller, Nishizaki, and Yamamoto.

F. Obviousness over Niemoeller, Nishizaki, Yamamoto, and Keely

Petitioner asserts that the combination of Niemoeller with Nishizaki, Yamamoto, and Keely would have rendered the subject matter of dependent claims 4 and 5 obvious to one of ordinary skill in the art at the time of the invention. Pet. 55–71. Patent Owner traverses this ground of unpatentability, arguing that the Petition has failed to establish the obviousness of claim 1, and the addition of Keely likewise teaches away and fails to render claims 4 and 5 obvious. Prelim. Resp. 22. We begin with a brief discussion of Keely, and then consider Petitioner's arguments with respect to the references' teachings applied to the instant claims, as well as Patent Owner's counter arguments.

1. *Overview of Keely*

Keely is directed to a recognition tool for more accurately recognizing a natural input such as speech or handwriting. Ex. 1008 ¶ 18. Keely's recognition tool allows for correction of speech recognition output, by identifying the closest alternatives stored in a dictionary, and providing those alternatives to the user for selection. *Id.* ¶¶ 7–8, 122–123, Fig. 4.

2. *Petitioner's Assertions Regarding the Combination*

a. *Claim 4*

Claim 4 depends from claim 1 and further recites that the vocabulary extracting analyzing section includes an analysis dictionary; a resembling vocabulary deciding section, that determines whether a vocabulary item similar to the extracted vocabulary item is present in said analysis dictionary, when there is a match in the analysis dictionary; and a vocabulary candidate presenting section to exhibit the similar vocabulary item as a vocabulary candidate. Ex. 1001, 10:3–18.

Petitioner asserts that the combination of Niemoeller, Nishizaki and Yamamoto teaches or suggests the analysis dictionary through Yamamoto's language processing dictionary, which Yamamoto describes as “a dictionary that describes information necessary for the language processing section 26 to perform the morphemic analysis on the words to find parts of speech an[d] pronunciations to be added to the respective words.” Pet. 57–59 (quoting Ex. 1007 ¶ 35). Petitioner asserts that persons of ordinary skill in the art would have been motivated to incorporate Yamamoto's language processing dictionary into Niemoeller for the same reasons described above with respect to the vocabulary extracting analyzing section. *Id.* at 58–59.

With respect to the resembling vocabulary deciding section, the Petition cites to Keely, which “provides various tools for correcting inaccurately recognized text.” Pet. 59 (citing Ex. 1008 ¶¶ 1, 18, 27, Abstr.). Petitioner cites Keely's recognition module 213, with a natural input recognition dictionary, that is configured to identify one or more text candidates corresponding to the input, if an exact match for the input speech does not exist in the natural input recognition dictionary. *Id.* at 59–60 (citing

Ex. 1008 ¶ 122). Petitioner further asserts that persons of ordinary skill in the art would have been motivated to add Keely's recognition module to the Niemoeller-Nishizaki-Yamamoto combination because doing so would have improved the combination's speech recognition capabilities, such that instead of giving the user an error, the modified system would allow the user to choose the most appropriate word or to alter the speech input. *Id.* at 62–63 (citing Ex. 1003 ¶¶ 131–132).

With respect to the vocabulary candidate presenting section, the Petition cites to Keely that discloses that when an input word or words does not directly correlate to a word in the natural input recognition dictionary, it identifies similar words in that dictionary and then displays them to a user of the recognition tool. Pet. 64 (citing Ex. 1008 ¶¶ 133–137, Fig. 4). Petitioner asserts that persons of ordinary skill in the art would have been motivated to add Keely's vocabulary candidate presenting section to the Niemoeller-Nishizaki-Yamamoto combination because it would facilitate more accurate speech recognition. *Id.* at 65–66 (citing Ex. 1003 ¶¶ 136, 138).

b. Claim 5

Claim 5 depends from claim 4 and further recites that the system includes a vocabulary candidate selecting section, which recognizes one of the vocabulary candidates as selected, and analysis data, produced by the vocabulary extracting analyzing section by providing the selected vocabulary item with the pronunciation thereof. Ex. 1001, 10:19–27.

With respect to the vocabulary candidate selecting section, the Petition cites to Keely, with its correction interface where a user can select from similar vocabulary candidates to a word or words uttered by a user, such that “[i]f the user determines that an alternate text choice 411

accurately corresponds to the natural input object, the user may select that correct alternate text choice 411.” Pet. 66–68 (citing Ex. 1008 ¶¶ 133–137, quoting *id.* ¶ 135). Petitioner asserts that persons of ordinary skill in the art would have been motivated to add Keely’s vocabulary candidate selecting section into the Niemoeller-Nishizaki-Yamamoto combination because it would have facilitated more accurate speech recognition. *Id.* at 68–69 (citing Ex. 1003 ¶¶ 143–144).

With respect to the provision of the selected vocabulary item with the pronunciation thereof, the Petition cites to Yamamoto’s disclosure of appending received data with pronunciation data before the received data are stored in a speech recognition dictionary, where the received data would be the selected vocabulary item taught by Keely. Pet. 66–68. Petitioner asserts that persons of ordinary skill in the art would have understood that any additional words to be added into Niemoeller’s vocabularies would be provided with pronunciation data so that voice recognition stage 13c of Niemoeller would be able to associate the new words with new inputs. *Id.* at 71 (citing Ex. 1003 ¶ 148).

3. *Patent Owner’s Arguments Regarding the Combination*

Patent Owner argues that this ground of unpatentability fails to show the obviousness of claims 4 and 5 because the Petition fails to establish the obviousness of claim 1, from which the former claims depend. Prelim. Resp. 22. As discussed above, the information presented shows a reasonable likelihood that Petitioner would prevail in establishing the obviousness of independent claim 1 over the combination of Niemoeller, Nishizaki, and Yamamoto. Patent Owner also argues that Keely likewise teaches away and fails to render claims 4 and 5 obvious. *Id.* Patent Owner does not, however,

expand on those propositions, merely stating that Keely teaches away and fails, but does not provide any reasons or rationale. As such, we are not persuaded by Patent Owner's conclusions without any supporting arguments.

4. *Conclusion*

For purposes of institution, we have reviewed the Petitioner's arguments and assertions concerning the combination and find them to be persuasive. Accordingly, the information presented shows a reasonable likelihood that Petitioner would prevail in establishing that claims 4 and 5 are unpatentable as obvious over Niemoeller, Nishizaki, Yamamoto, and Keely.

III. CONCLUSION

For the foregoing reasons, Petitioner has demonstrated a reasonable likelihood that it would prevail in showing that at least one challenged claim of the '368 Patent is unpatentable.

IV. ORDER

Accordingly, it is:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review is hereby instituted as to claims 1–5 of the '368 Patent on the following asserted grounds:

Claims 1–3 under 35 U.S.C. § 103(a) as unpatentable over Niemoeller in view of Nishizaki and Yamamoto; and

Claims 4 and 5 under 35 U.S.C. § 103(a) as unpatentable over Niemoeller in view of Nishizaki, Yamamoto, and Keely; and

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FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial, the trial commencing on the entry date of this Decision.

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