Notice of References Cited	Application/Control No. 13/795,933	Applicant(s)/Patent Under Reexamination Ganong et al.	
	Examiner HUY C HO	Art Unit 2644	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20120034904-A1	02-2012	LeBeau; Michael J.	H04M1/72569	455/414.1
*	B	US-8977255-B2	03-2015	Freeman; Daniel	H04M1/72522	455/425
	C					
	D					
	E					
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Bibliographic Data

Application No: 13/795,933

Foreign Priority claimed: ○ Yes ◉ No

35 USC 119 (a-d) conditions met: ☐ Yes ☑ No ☐ Met After Allowance

Verified and Acknowledged: _____ _____

Examiner's Signature | Initials

Title: METHODS AND APPARATUS FOR DETECTING A VOICE COMMAND

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
03/12/2013	455	2644	0013359USU1/4705A
RULE			

APPLICANTS

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Vladimir Sejnoha Lexington, MA, UNITED STATES

Glen Wilson Maynard, MA, UNITED STATES

CONTINUING DATA

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

04/02/2013

STATE OR COUNTRY

UNITED STATES

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One Landmark Square, 10th Floor
Stamford, CT 06901
UNITED STATES

FILING FEE RECEIVED

$1,740

FORM PTO-1449/A and B (modified PTO/SB/08)	APPLICATION NO.: 13/795,933	ATTY. DOCKET NO.: N0484.71090US01
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	FILING DATE: March 12, 2013	CONFIRMATION NO.: 2321
	FIRST NAMED INVENTOR: William F. Ganong, III	
Sheet 1 of 1	GROUP ART UNIT: 2644	EXAMINER: H. C. Ho

U.S. PATENT DOCUMENTS

Examiner's Initials #	Cite No.	U.S. Patent Document Number	Kind Code	Name of Patentee or Applicant of Cited Document	Date of Publication or Issue of Cited Document MM-DD-YYYY
		9,940,936	B2	Sejnoha et al.	04-10-2018
		2016-0189706	A1	Zopf et al.	06-30-2016
		2014-0365225	A1	Haiut	12-11-2014
		2014-0249817	A1	Hart et al.	09-04-2014

FOREIGN PATENT DOCUMENTS

Examiner's Initials #	Cite No.	Foreign Patent Document Office/ Country	Number	Kind Code	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Translation (Y/N)
		CN	101650943	A	Chinese Acad Inst Acoustics	02-17-2010	Y
		CN	103021409	A	Anhui Ustc Iflytek Co	04-03-2013	Y
		CN	103632668	A	Beijing Baidu Netcom Sci and Tec.	03-12-2014	Y
		CN	104575504	A	Univ Shanghai	04-29-2015	Y
		CN	105575395	A	Zte corp	05-11-2016	Y
		CN	106098059	A	Univ Shanghai Jiaotong	11-09-2016	Y
		EP	2 899 955	A1	Huawei Device	07-29-2015	
		WO	2014/066192	A1	Microsoft Corp.	05-01-2014	

OTHER ART — NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
		International Search Report and Written Opinion for International Application No. PCT/CN2016/105343 mailed September 21, 2017 (N0484.71177WO00).	
		International Search Report and Written Opinion for International Application No. PCT/US2016/037495 mailed December 05, 2016 (N0484.71178WO00).	
		International Preliminary Report on Patentability for International Application No. PCT/US2016/037495 mailed December 27, 2018 (N0484.71178WO00).	

[NOTE – No copies of U.S. patents, published U.S. patent applications, or pending, unpublished patent applications stored in the USPTO's Image File Wrapper (IFW) system, are included. See 37 CFR § 1.98 and 1287OG163. Copies of all other patent(s), publication(s), unpublished, pending U.S. patent applications, or other information listed are provided as required by 37 CFR § 1.98 unless 1) such copies were provided in an IDS in an earlier application that complies with 37 CFR § 1.98, and 2) the earlier application is relied upon for an earlier filing date under 35 U.S.C. § 120.]

EXAMINER:	DATE CONSIDERED:
/HUY C HO/	10/29/2019

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

7243442.1

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.C.H/

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/795,933	03/12/2013	William F. Ganong III	0013359USU1/4705A	2321

157176 7590 11/01/2019

Ohlandt Greeley Ruggiero & Perle, L.L.P.-Cerence
One Landmark Square, 10th Floor
Stamford, CT 06901

EXAMINER
HO, HUY C

ART UNIT	PAPER NUMBER
2644	

MAIL DATE	DELIVERY MODE
11/01/2019	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 13/795,933	Applicant(s) Ganong et al.	
	Examiner HUY C HO	Art Unit 2644	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 27 March 2017.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL.** 2b) ☑ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☑ Claim(s) 1-2 and 4-20 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☐ Claim(s) ____ is/are allowed.

7) ☑ Claim(s) 1-2 and 4-20 is/are rejected.

8) ☐ Claim(s) _____ is/are objected to.

9) ☐ Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☑ The drawing(s) filed on 12 March 2013 is/are: a)☑ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. ____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☑ Notice of References Cited (PTO-892)

2) ☑ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date 05/22/2019.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

4) ☐ Other: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **04/25/2017** has been entered.

Response to Arguments

3. Applicant’s arguments, filed on 03/27/2019, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made as in the followings.

Claim Rejections - 35 USC § 103

4. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

5. The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under pre-AIA 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under pre-AIA 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the

contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of pre-AIA 35 U.S.C. 103(c) and potential pre-AIA 35 U.S.C. 102(e), (f) or (g) prior art under pre-AIA 35 U.S.C. 103(a).

8. Claims 1, 2 and 4-20 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Freeman et al. (U.S. Publication No. 8,977,255) and further in view of LeBeau et al. (U.S. Publication. No. 2012/0034904).

Regarding claim 1, (Currently Amendment) Freeman teaches a method of monitoring an acoustic environment of a mobile device for voice commands when the mobile device is operating in the idle mode (*Freeman, the Abstract*), the method comprising:

receiving acoustic input from the environment of the mobile device while the mobile device is operating in the idle mode (*Freeman, Figures 4 and 5, Col. 6 Lines 22-67, Col. 7 Lines 1-10*); and

detecting whether the acoustic input includes a voice command at least by:

performing a plurality of processing stages on the acoustic input, wherein at least one of the plurality of processing stages is performed while the mobile device is operating in the idle mode (*Freeman, Figures 4 and 5, Col. 6 Lines 22-67, Col. 7 Lines 1-10*).

Freeman does not teach "using at least one contextual cue to assist in detecting whether the acoustic input includes a voice command while the mobile device is operating in the idle mode, the at least one contextual cue comprising information other than content of the acoustic input and comprising a time the acoustic input was received, motion of the mobile device, location of the mobile device, occurrence of an event on the mobile device, recent activity on the mobile device, a stored sample of the acoustic environment of the mobile device and/or a power source of the mobile device."

LeBeau teaches "using at least one contextual cue to assist in detecting whether the acoustic input includes a voice command while the mobile device is operating in the idle mode, the at least one contextual cue comprising information other than content of the acoustic input and comprising a time the acoustic input was received, motion of the mobile device, location of the mobile device, occurrence of an event on the mobile device, recent activity on the mobile device, a stored sample of the acoustic environment of the mobile device and/or a power source of the mobile device." (*LeBeau, Figure 1B, pp [41]-[43]).*

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Freeman by incorporating the teachings of LeBeau, method and system for automatically monitoring ambient sounds

for voice commands based on context hints to provide appropriate performances for a mobile computing device thus providing a high advancement for monitoring audio inputs from environment surrounding a mobile computing device besides the conventional monitoring manners such as user's manual special key inputs to cause proper operations for the mobile computing device and therefore, equipping the mobile computing device with the best capability to obtain the most sufficient surrounding information from the environment in order to respond with the most effective and appropriate manner.

Regarding claim 19, (Currently Amendment) Freeman teaches at least one non-transitory computer readable medium encoded with instructions that, when executed on at least one processor, perform a method of monitoring an acoustic environment of a mobile device to receive acoustic input from the environment of the mobile device while the mobile device is operating in the idle mode (*Freeman, the Abstract, Figures 4 and 5, Col. 6 Lines 22-67, Col. 7 Lines 1-10*), the method comprising:

detecting whether the acoustic input includes a voice command at least by:

performing a plurality of processing stages on the acoustic input, wherein at least one of the plurality of processing stages is performed while the mobile device is operating in the

idle mode (*Freeman, Figures 4 and 5, Col. 6 Lines 22-67, Col. 7 Lines 1-10)*.

Freeman does not teach "using at least one contextual cue to assist in detecting whether the acoustic input includes a voice command while the mobile device is operating in the idle mode, the at least one contextual cue comprising information other than content of the acoustic input and comprising a time the acoustic input was received, motion of the mobile device, location of the mobile device, occurrence of an event on the mobile device, recent activity on the mobile device, a stored sample of the acoustic environment of the mobile device and/or a power source of the mobile device."

LeBeau teaches "using at least one contextual cue to assist in detecting whether the acoustic input includes a voice command while the mobile device is operating in the idle mode, the at least one contextual cue comprising information other than content of the acoustic input and comprising a time the acoustic input was received, motion of the mobile device, location of the mobile device, occurrence of an event on the mobile device, recent activity on the mobile device, a stored sample of the acoustic environment of the mobile device and/or a power source of the mobile device." (*LeBeau, Figure 1B, pp [41]-[43])*.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made

to modify Freeman by incorporating the teachings of LeBeau, method and system for automatically monitoring ambient sounds for voice commands based on context hints to provide appropriate performances for a mobile computing device thus providing a high advancement for monitoring audio inputs from environment surrounding a mobile computing device besides the conventional monitoring manners such as user's manual special key inputs to cause proper operations for the mobile computing device and therefore, equipping the mobile computing device with the best capability to obtain the most sufficient surrounding information from the environment in order to respond with the most effective and appropriate manner.

Regarding claim 20, (Currently Amendment) Freeman teaches a mobile device (*Freeman, the Abstract*), comprising:

at least one input to receive acoustic input from an environment of the mobile device (*Freeman, Figures 4 and 5, Col. 6 Lines 22-67, Col. 7 Lines 1-10*);

at least one processor configured to:

detect whether the acoustic input includes a voice command at least by:

performing a plurality of processing stages on the acoustic input, wherein at least one of the plurality of processing stages is performed while the mobile device is operating in the

idle mode (*Freeman, Figures 4 and 5, Col. 6 Lines 22-67, Col. 7 Lines 1-10)*.

Freeman does not teach "using at least one contextual cue to assist in detecting whether the acoustic input includes a voice command while the mobile device is operating in the idle mode, the at least one contextual cue comprising information other than content of the acoustic input and comprising a time the acoustic input was received, motion of the mobile device, location of the mobile device, occurrence of an event on the mobile device, recent activity on the mobile device, a stored sample of the acoustic environment of the mobile device and/or a power source of the mobile device."

LeBeau teaches "using at least one contextual cue to assist in detecting whether the acoustic input includes a voice command while the mobile device is operating in the idle mode, the at least one contextual cue comprising information other than content of the acoustic input and comprising a time the acoustic input was received, motion of the mobile device, location of the mobile device, occurrence of an event on the mobile device, recent activity on the mobile device, a stored sample of the acoustic environment of the mobile device and/or a power source of the mobile device." (*LeBeau, Figure 1B, pp [41]-[43])*.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made

to modify Freeman by incorporating the teachings of LeBeau, method and system for automatically monitoring ambient sounds for voice commands based on context hints to provide appropriate performances for a mobile computing device thus providing a high advancement for monitoring audio inputs from environment surrounding a mobile computing device besides the conventional monitoring manners such as user's manual special key inputs to cause proper operations for the mobile computing device and therefore, equipping the mobile computing device with the best capability to obtain the most sufficient surrounding information from the environment in order to respond with the most effective and appropriate manner.

Regarding claim 2, (Previously Presented) Freeman, as modified by LeBeau, teaches the method of claim 1, further comprising transitioning the mobile device from the idle mode to an active mode when it is detected that the acoustic input includes a voice command (*Freeman, Figure 5, Col. 6 Lines 48-67, Col. 7 Lines 1-30*).

Regarding claim 4, (Previously Presented) Freeman, as modified by LeBeau, teaches the method of claim 1, wherein the at least one contextual cue includes the time the acoustic input was received, the method further comprising influencing evaluation of at least one of the plurality of processing stages

based on the time the acoustic input was received (*LeBeau, Figure 1B, pp [41]-[43]).*

Regarding claim 5, (Previously Presented) Freeman, as modified by LeBeau, teaches the method of claim 1, wherein the at least one contextual cue includes recent activity on the mobile device, the method further comprising influencing evaluation of at least one of the plurality of processing stages based on at least one of how recently the user activated the mobile device, how recently the user issued a voice command and how recently the user performed at least one action on the mobile device (*LeBeau, pp [82]-[83]).*

Regarding claim 6, (Previously Presented) Freeman, as modified by LeBeau, teaches the method of claim 1, wherein the at least one contextual cue includes an occurrence of an event on the mobile device, the method further comprising influencing evaluation of at least one of the plurality of processing stages based on whether the acoustic input is received proximate in time with the occurrence of the event (*LeBeau, Figure 1B, pp [41]-[43]; Figures 3A, 3B and 3C, pp [82]-[83], [85]-[87]).*

Regarding claim 7, (Previously Presented) Freeman, as modified by LeBeau, teaches the method of claim 1, wherein the at least one contextual cue includes motion of the mobile device received as an input from an accelerometer of the mobile device, the method further comprising influencing evaluation of at least

one of the plurality of processing stages based on an assessment of whether the user moved the mobile device proximate in time with receiving the acoustic input based, at least in part, on the input from the accelerometer (*LeBeau, pp [21]-[22]).*

Regarding claim 8, (Previously Presented) Freeman, as modified by LeBeau, teaches the method of claim 1, wherein the at least one contextual cue includes the location of the mobile device, the method further comprising influencing evaluation of at least one of the plurality of processing stages based on determining whether the mobile device is located in at least one of a vehicle, a home or a place of work of the user of the mobile device (*LeBeau, Figure 1B, pp [41]-[43]; Figures 3A, 3B and 3C, pp [82]-[83], [85]-[87]).*

Regarding claim 9, (Previously Presented) Freeman, as modified by LeBeau, teaches the method of claim 1, wherein the at least one contextual cue includes the power source of the mobile device, the method further comprising influencing evaluation of at least one of the plurality of processing stages based on at least one of determining whether the mobile device is being powered using the battery or connected to wall power, and a state of the battery if the mobile device is being powered using the battery (*LeBeau, Figure 1B, pp [41]-[43]; Figures 3A, 3B and 3C, pp [82]-[83], [85]-[87]).*

Regarding claim 10, (Previously Presented) Freeman, as

modified by LeBeau, teaches the method of claim 1, wherein the at least one contextual cue includes the sample of the acoustic environment obtained by the mobile device by storing acoustic input previously received by the mobile device and determined not to include a voice command, the method further comprising subtracting the sample of the acoustic environment from the acoustic input (*LeBeau, Figure 1B, pp [41]-[43]).*

Regarding claim 11, (Original) Freeman, as modified by LeBeau, teaches the method of claim 1, wherein a sequence of performing the plurality of processing stages is determined, at least in part, by the at least one contextual cue (*Freeman, Figures 4 and 5, Col. 6 Lines 22-67, Col. 7 Lines 1-10; and LeBeau Figures 3A, 3B and 3C, pp [82]-[83], [85]-[87]).*

Regarding claim 12, (Original) Freeman, as modified by LeBeau, teaches the method of claim 1, wherein the mobile device includes a primary processor and a secondary processor, and wherein at least one first processing stage of the plurality of processing stages is performed by the secondary processor prior to engaging the primary processor to process the acoustic input (*LeBeau, Figure 5, pp [127], [133]).*

Regarding claim 13, (Original) Freeman, as modified by LeBeau, teaches the method of claim 12, wherein at least one second processing stage of the plurality of processing stages is performed by the primary processor only after the at least one

first processing stage is performed and neither concludes that the acoustic input includes a voice command nor concludes that the acoustic input is the result of spurious acoustic activity (*Freeman, Figures 4, 5 and 6, Col. 6 Lines 15-67, Col. 7 Lines 1-45; LeBeau Figures 3A, 3B and 3C, pp [82]-[83], [85]-[87]).*

Regarding claim 14, (Previously presented) Freeman, as modified by LeBeau, teaches the method of claim 12, wherein performing the at least one first processing stage includes performing at least one voice activity detection processing stage including performing at least one of spectral analysis on the acoustic input to evaluate whether a spectrum of the acoustic input is indicative of voice activity, periodicity analysis to evaluate whether signal periodicity of the acoustic input is indicative of voice activity, and phone loop analysis to evaluate whether the acoustic input includes speech (*Freeman, Figures 4, 5 and 6, Col. 6 Lines 15-67, Col. 7 Lines 1-45; and LeBeau, pp [36], [44], [58]).*

Regarding claim 15, (Original) Freeman, as modified by LeBeau, teaches the method of claim 12, wherein performing the at least one first processing stage comprises performing limited vocabulary automatic speech recognition on the acoustic input to detect whether the acoustic input includes an explicit voice trigger (*Freeman, Figures 4 and 5, Col. 6 Lines 22-67, Col. 7 Lines 1-10).*

Regarding claim 16, (Original) Freeman, as modified by LeBeau, teaches the method of claim 12, wherein performing the at least one second processing stage comprises performing at least one speech processing stage including at least one of automatic speech recognition on the acoustic input and at least one natural language processing stage to understand the meaning of the voice command (*Freeman, Figures 4 and 5, Col. 6 Lines 22-67, Col. 7 Lines 1-10*).

Regarding claim 17, (Original) Freeman, as modified by LeBeau, teaches the method of claim 1, wherein the mobile device is capable of connecting to at least one server via a network, the method further comprising transmitting at least a portion of the acoustic information to the at least one server via the network for processing by the at least one server (*LeBeau, pp [26], [39], [47]*).

Regarding claim 18, (Original) Freeman, as modified by LeBeau, teaches the method of claim 1, further comprising performing one or more default actions when a specific task could not be ascertained from the acoustic input (*LeBeau, pp [23]-[24], [43], [53], [64]*).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY C HO

whose telephone number is (571)270-1108. The examiner can normally be reached on M-F 8AM-5PM.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, KATHY WANG-HURST can be reached on (571)270-5371. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HUY C HO/
Primary Examiner, Art Unit 2644

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
		(H04W52/0251 | H04M1/72519 | 20130101 | G10L15/02 | H04W52/0261 | H04W40/005 | G10L15/30 | G10L15/22 | H04W52/0254 | H04M2250/74 | G10L2015/226 | G10L2015/223 | H04W88/02).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/12 09:56
		(H04W52/0251 | H04M1/72519 | 20130101 | G10L15/02 | H04W52/0261 | H04W40/005 | G10L15/30 | G10L15/22 | H04W52/0254 | H04M2250/74 | G10L2015/226 | G10L2015/223 | H04W88/02).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/12 09:54
		(H04W52/0251 | H04M1/72519 | 20130101 | G10L15/02 | H04W52/0261 | H04W40/005 | G10L15/30 | G10L15/22 | H04W52/0254 | Y02D70/00 | H04M2250/74 | G10L201 5/228 | G10L2015/223 | H04W88/02 | Y02D70/164 | Y02D70/142 | Y02D70/144) cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/12 09 54
		(379/88.01-88.02 | H04W52/0251 | H04M1/72519 | 20130101 | G10L15/02 | H04W52/0261 | H04W40/005 | G10L15/30 | G10L15/22 | H04W52/0254 | Y02D70/00 | H04M2250/74 | G10L2015/226 | G10L2015/223 | H04W88/02 | Y02D70/164 | Y02D70/142 | Y02D70/144) ccls,cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/12 09:53
		(379/88.01-88.02 | H04W52/0251 | H04M1/72519 20130101 | G10L15/02 | H04W52/0261 | H04W40/005 | G10L15/30 | G10L15/22 | H04W52/0254 | Y02D70/00 | H04M2250/74 | G10L2015/226 | G10L2015/223 | H04W88/02 | Y02D70/164 | Y02D70/142 | Y02D70/144) ccls,cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/12 09 53
		(379/88.01-88.02 | H04W52/0251 | H04M1/72519 20130101 | G10L15/02 | H04W52/0261 H04W40/005 G10L15/30 G10L15/22 H04W52/0254 Y02D70/00 H04M2250/74 G10L2015/226 G10L2015/223 H04W88/02 Y02D70/164 Y02D70/142 | Y02D70/144) ccls,cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/12 09 52
L1	2	("20140224"."PD.") PN	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/04/12 09 47
L2	120858	(H04W52/0251 | H04M1/72519 | G10L15/02 | H04W52/0261 | H04W40/005 | G10L15/30 | G10L15/22 | H04W52/0254 | H04M2250/74 | G10L2015/226 | G10L2015/223 | H04W88/02).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/12 09 56
L4	201998	(H04W52/0251 | H04M1/72519 | G10L15/02 | H04W52/0261 | H04W40/005 | G10L15/30 | G10L15/22 | H04W52/0254 | Y02D70/00 | H04M2250/74 | G10L2015/226 | G10L2015/223 | H04W88/02 | Y02D70/164 | Y02D70/142 | Y02D70/144).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/12 09 56
L4	204975	(379/88.01-88.02 | H04W52/0251 | H04M1/72519 | G10L15/02 | H04W52/0261 | H04W40/005 | G10L15/30 | G10L15/22 | H04W52/0254 | Y02D70/00 | H04M2250/74 | G10L2015/226 | G10L2015/223 | H04W88/02 | Y02D70/164 | Y02D70/142 | Y02D70/144).ccls,cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/12 09 56
L5	8349	L4 and ((speech voice audio) near8 (order command trigger) near8 (recognize recognition realize)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/04/12 10:01
L6	5190	L5 and ((speech voice audio) near4 (order command trigger) near4 (recognize recognition realize)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/04/12 10 02
L7	3583	L6 and (@ad<"20130312" @rlad<"20130312")	US-PGPUB; USPAT;	OR	OFF	2018/04/12 10 02

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
L8	883	7 and ((time location environment event) near4 (factor value parameter cue hint context))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/12 10:02
L9	38	8 and ((idl$3 low$power$2) near4 (mode state))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/04/12 10:03
S1	84	("20100185448" | "20110054899" | "20130080167" | "20130080171" | "20130289994" | "20130339028" | "20140012573" | "20140012588" | "5428707" | "5774859" | "5802305" | "5983188" | "6070140" | "6092043" | "6397186" | "6408396" | "6411926" | "6449496" | "6594630" | "6756700" | "6941265" | "6985786" | "7114090" | "7587827" | "7720683" | "7774204" | "8056070" | "8181046" | "8190420" | "8285545" | "8886751").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/11 15:08
S2	1	"US 20140274203"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2014/09/25 13:39
S3	6	"8094838"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/25 13:54
S4	6	"8094838"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/25 13:54
S5	6	"8094838"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/25 14:38
S6	36	(jacoby near2 keith) in	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/25 14:39
S7	3	"US 20080172221"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2014/09/25 14:39
S8	3	"20140012573"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 17:24
S9	5	"20030040339"	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 19:50
S10	5	"20030040339"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 19:50
S11	903	455/563.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 20:36
S12	239	S11 and (voice near3 command)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 20:37
S13	182	S12 and (GPS location)	US-PGPUB; USPAT;	OR	OFF	2014/09/29 20:38

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S14	18	S13 and (acceleration accelerometer)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 20:39
S15	14	S14 and (@ad< "20130312" @rlad< "20130312")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 20:39
S16	4	S15 and (vehicle vehicular automobile car)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 20:40
S17	10186	379/88.01-88.2.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 21:23
S18	1003	S17 and (voice near3 command)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 21:23
S19	367	S18 and (voice near3 recognit$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 21:24
S20	7	S19 and (acceleration accelerometer)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 21:24
S21	253	S19 and (GPS location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 21:24
S22	8	S15 and (vehicle vehicular automobile car home office)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 21:25
S23	211	S21 and (vehicle vehicular automobile car home office)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 21:25
S24	211	S23 and (@ad< "20130312" @rlad< "20130312")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 21:25
S25	13	S24 and (low$2 near3 (power energy))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 21:26
S26	2	"20130289994"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 23:54
S27	2	"20130080171"	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2014/09/29 23:54

			EPO; JPO; DERWENT; IBM_TDB				
S28	55	((William) near2 (Ganong)).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2014/09/29 23:55	
S29	5	((Paul) near2 ("Van Mulbregt")).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2014/09/29 23:55	
S30	31	((Vladimir) near2 (Sejnoha)).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2014/09/29 23:55	
S31	25	((Glen) near2 (Wilson)).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2014/09/29 23:55	
S32	2	"US 20140274203"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/04/12 23:29	
S33	2	"US 20140274203"	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2015/07/23 09:19	
S34	3	"20070129949"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/23 09:21	
S35	2	"US 20140274203"	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2015/07/24 17:00	
S36	1	detect$3 with (voice near3 command) with (cue hint) with (motion move) with (device apparatus)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/24 17:09	
S37	1	S36 and (@ad<"20130312" @rlad<"20130312")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/24 17:10	
S38	1	detect$3 with ((speech voice) near3 command) with (cue hint) with (motion move) with (device apparatus)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/24 17:13	
S39	25	detect$3 same ((speech voice) near3 command) same (cue hint) same (motion move) same (device apparatus)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/24 17:14	
S40	21	S39 and (@ad<"20130312" @rlad<"20130312")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/24 17:14	
S41	2	"US 20140274203"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/10/05 14:08	
S42	1571	(voice near3 command) and ((id)$3 inactive) near3 (mode state))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/11/14 16:18	
S43	1440	S42 and (@ad<"20130312" @rlad<"20130312")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/11/14 16:18	
S44	0	S43 and (accoustic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/11/14 16:19	
S45	322	S43 and (acoustic)	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2015/11/14 16:19	

			EPO; JPO; DERWENT; IBM_TDB				
S46	194	S45 and (sensor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/11/14 16:19
S47	278	(voice near3 command) same ((idl$3 inactive power$saving low$power) same (mode status state mood))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/11/24 00:42
S48	237	S47 and (@ad< "20130312" @rlad< "20130312")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/11/24 00:42
S49	113	S48 and ((mobile cellular) near5 (device equipment phone telephone))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/11/24 00:43
S50	9	S49 and (hint cue)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/11/24 00:43
S51	22	S49 and (acoustic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/11/24 00:44
S52	2	"US 20140274203"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/12/20 22:35
S53	119	("6397186" | "6411926" | "6449496" | "6285545" | "20110054899" | "6070140" | "7567827" | "8181046" | "8190420" | "20100124896" | "20130080171" | "20140012586" | "5428707" | "5774859" | "5983186" | "6965786" | "20140278435" | "20130080167" | "20140012573" | "6594630" | "20030040339" | "20100289994" | "20130339028" | "6408396" | "7114090" | "7774204" | "20100185448" | "20130289994" | "7720683" | "8666751" | "20140274211" | "20070129949" | "7574361" | "8092043" | "6756700" | "6941265" | "8058070" | "8620389" | "5802305" | "20100009719" | "8548176" | "20120329389").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/12/20 22:38
S54	2	"US 20140274203"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2016/06/12 23:25
S55	4	"8977255"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/12 23:42
S56	3459	379/88.01-88.03.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/13 00:03
S57	3267	S56 and (@ad< "20130312" @rlad< "20130312")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/13 00:03
S58	514	S57 and (voice near3 recogniz$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/13 00:03
S59	220	S58 and (voice near3 command)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/13 00:03
S60	4	S59 and (device near5 (moving motion))	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2016/06/13 00:05

			EPO; JPO; DERWENT; IBM_TDB				
S61	6	"8977255"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/11/05 23:44
S62	14	"9112984"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/11/05 23:59
S63	2	"US 20140274203"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2016/11/05 23:59
S64	6	"9361885"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/11/06 00:00
S65	24843	(379/88.01-88.02|G10L15/20|G10L15/22|G10L15/24|G10L15/25|G10L2015/223|G10L2015/228|H04M2250/74).cols,cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/04/10 21:15
S66	18788	S65 and (@ad<"20130312" @rlad<"20130312")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/04/10 21:22
S67	2890	S66 and ((acoustic sound noise) near4 (environment input surround$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/04/10 21:26
S68	641	S67 and (voice near3 command)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/04/10 21:27
S69	818	S67 and ((voice speech) near3 command)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/04/10 21:27
S70	2	("20140274203").PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2017/04/10 21:28
S71	10	S68 and (non$acoustic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/04/10 21:37
S72	10	S68 and ((cue hint) near5 (command))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/04/10 21:47
S73	142	S68 and ((trigger$3 indicat$3 sign$2) near8 (activit$3 location time day motion event) near8 (device phone telephone))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/10 21:48
S74	117	S68 and ((trigger$3 indicat$3 sign$2) near8 (activit$3 location time day motion event) near8 (device phone telephone))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/10 21:49
S75	6	S74 and ((low$2 saving) near8 (power battery energy) near8 (mode status state))	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2017/04/10 21:50

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			EPO, JPO; DERWENT; IBM_TDB				
S76	25	S74 and ((low$2 saving idl$3 sleep$3 in$active) near6 (mode status state))	US-PGPUB, USPAT, USOCR; FPRS, EPO, JPO; DERWENT; IBM_TDB	OR	ON	2017/04/10 21:53	
S77	967	("20010047264" | "20020002461" | "20020010584" | "20020031282" | "20020032564" | "20020035474" | "20020042707" | "20020048025" | "20020059066" | "20020059068" | "20020067308" | "20020069063" | "20020077817" | "20020091511" | "20020099552" | "20020103641" | "20020111671" | "20020116185" | "20020116189" | "20020128827" | "20020133347" | "20020135555" | "20020138265" | "20020143551" | "20020154160" | "20020164000" | "20020184189" | "20020198714" | "20030078786" | "20030088414" | "20030097210" | "20030099335" | "20030120494" | "20030135740" | "20030167335" | "20030190074" | "20030212961" | "20030233230" | "20030234824" | "20040054535" | "20040054690" | "20040085162" | "20040106432" | "20040135701" | "20040145607" | "20040162741" | "20040178958" | "20040186714" | "20040193420" | "20040199387" | "20040220798" | "20040236778" | "20050002507" | "20050015772" | "20050027385" | "20050033582" | "20050045373" | "20050049880" | "20050055403" | "20050058438" | "20050071332" | "20050080625" | 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S81	18782	S80 and (@ad<"20130312" @rlad<"20130312")	US-PGPUB, USPAT, USOCR, FPRS, EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2017/04/19 13:26	
S82	2893	S81 and (((acoustic$ sound$ n oise$) near4 (enviro$ nm ent input surround$3)))	US-PGPUS, USPAT, USOCR, FPRS, EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2017/04/19 13:26	
S83	543	S82 and (voice near3 command)	US-PGPUB, USPAT, USOCR, FPRS, EPO, JPO; DERWENT;	OR	OFF	2017/04/19 13:26	

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S85	69	S84 and (device near4 ((movement$1 sens$3 event activit$3 time night day hour))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/19 13:28
S86	33	S85 and (gestur$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/19 13:40
S87	3	"9646610"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/13 20:06
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S89	23	"9112984"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/13 20:19
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S93	10845	S92 and ((voice audio acoustic sound) near3 (input recogniz$5))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/13 20:41
S94	1247	S93 and ((voice speech) near5 (command) near6 (recogniz$5 determin$5))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/13 20:42
S95	15	S94 and ((low power) near5 (saving save) near5 (mode status state stage))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/13 20:42
S96	0	S94 and ((low idle idling inactive) near6 (power energy battery) near6 (saving save))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/13 20:43
S97	110	S94 and ((low idle idling inactive) near6 (power energy battery))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/13 20:44
S98	0	S97 and ((hint cue) same (motion date time activity location) same (event trigger$3))	US-PGPUB; USPAT; USOCR;	OR	OFF	2017/09/13 20:45

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S99	10	S97 and ((hint cue) same (eventtrigger$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/13 20:45
S100	3	S97 and (hint cue)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/13 20:46
S101	54	S97 and ((motion date time activity location) same (event trigger$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/13 20:48
S102	2	"20030216905"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/03/08 21:45
S103	2	("20140274203").PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/03/08 2:03
S104	2	("20140274203").PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/04/11 8:36
S105	2	"20030216905"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/04/11 19:35
S106	3	"20150340042"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/04/11 19:38
S107	31	"9112984"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/04/11 19:39
S108	36513	((speech voice audio) near6 (order command trigger) near6 (recogniz$5 recognition realliz$5))	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/04/11 21:03
S109	27698	((speech voice audio) near4 (order command trigger) near4 (recogniz$5 recognition realliz$5))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/04/11 21:04
S110	71	((speech voice audio) near4 (order command trigger) near4 (recogniz$5 recognition realliz$5)) same (((xl)$3 low$power$2) near4 (mode state))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/04/11 21:05
S111	46	S110 and (@ad< "20130312" @rlad< "20130312")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/11 21:06
S112	15	S111 and ((time location environment event) near4 (factor value parameter cue hint context))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/11 21:07

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13/795,933	Ganong et al.
	Examiner	Art Unit
	HUY C HO	2644

CPC - Searched*		
Symbol	Date	Examiner

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner
455	563	9/25/2014	HH

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
EAST Database Search	9/25/2014	HH
Inventor Search	9/25/2014	HH
Search update	4/12/2015	HH
Search update	7/24/2015	HH
Search update	12/27/2015	HH
Search update	6/12/2016	HH
Search update	11/18/2016	HH
Search update	9/13/2017	HH
Search update	4/11/2018	HH
Search update	10/30/2019	HH

/HUY C HO/ Primary Examiner.Art Unit 2644	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13/795,933	Ganong et al.
	Examiner	Art Unit
	HUY C HO	2644

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
455	79	9/25/2014	HH
379	88.01, 88.02	9/25/2014	HH

/HUY C HO/ Primary Examiner.Art Unit 2644	

Petitioner Exhibit 1004, Page 1120 of 1518

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/795,933	03/12/2013	William F. Ganong III	0013359USU1/4705A

CONFIRMATION NO. 2321

157176
Ohlandt Greeley Ruggiero & Perle, L.L.P.-Cerence
One Landmark Square, 10th Floor
Stamford, CT 06901

POWER OF ATTORNEY NOTICE

OC000000112379686

Date Mailed: 11/05/2019

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 10/31/2019.

- The Power of Attorney to you in this application has been revoked by the applicant. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/yteferra/

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
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Alexandria, Virginia 22313-1450
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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/795,933	03/12/2013	William F. Ganong III	0013359USU1/4705A

CONFIRMATION NO. 2321

91337
Nuance Communications, Inc.
c/o Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, MA 02210-2206

POA ACCEPTANCE LETTER

OC000000112379696

Date Mailed: 11/05/2019

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 10/31/2019.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/yteferra/

Doc Code: ECOMM.AUTH/ECOMM.WTDW
Doc Description: Internet Communications Authorized/Internet Communications Authorization Withdrawn

PTO/SB/439 (11-15)

AUTHORIZATION FOR INTERNET COMMUNICATIONS IN A PATENT APPLICATION OR REQUEST TO WITHDRAW AUTHORIZATION FOR INTERNET COMMUNICATIONS

Application No.	13/795,933
Filing Date	March 12, 2013
First Named Inventor	William F. Ganong, III
Art Unit	2644
Examiner Name	H.C. Ho
Practitioner Docket No.	N0484.71090US01

To: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

I. To authorize permission for Internet Communications.

◉ Recognizing that Internet communications are not secure, I hereby authorize the USPTO to communicate with the undersigned and practitioners in accordance with 37 CFR 1.33 and 37 CFR 1.34 concerning any subject matter of this application via video conferencing, instant messaging, or electronic mail. I understand that a copy of these communications will be made of record in the application file. (MPEP 502.03)

II. To withdraw authorization for Internet Communications.

○ The authorization given on _____, to the USPTO to communicate with the undersigned and any practitioner in accordance with 37 CFR 1.33 and 37 CFR 1.34 concerning any subject matter of this application via Internet communications such as video conferencing, instant messaging, or electronic mail is hereby withdrawn. I understand that the withdrawal is effective when approved rather than when received.

I am the

○ applicant.

◉ attorney or agent of record. Registration number 72,100.

○ attorney or agent acting under 37 CFR 1.34. Registration number _____.

/David S. Gesner/ — Signature

January 30,2020 — Date

David S. Gesner — Typed or printed name

617-646-8437 — Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Juristic entities must be represented by a patent practitioner (see 37 CFR 1.31, which is applicable to any paper filed on or after September 16, 2012, that is presented on behalf of a juristic entity, regardless of application filing date). Submit multiple forms if more than one signature is required, see below*.

☐ * Total of _____ forms are submitted.

Certificate of Electronic Filing under 37 C.F.R. § 1.8

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office's electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).

Dated: January 30, 2020 Electronic Signature for Patricia A. Nadeau: /Patricia A. Nadeau/

Electronic Acknowledgement Receipt

EFS ID:	38445704
Application Number:	13795933
International Application Number:	
Confirmation Number:	2321
Title of Invention:	METHODS AND APPARATUS FOR DETECTING A VOICE COMMAND
First Named Inventor/Applicant Name:	William F. Ganong
Customer Number:	91337
Filer:	David Scott Gesner/Patricia Nadeau
Filer Authorized By:	David Scott Gesner
Attorney Docket Number:	N0484.71090US01
Receipt Date:	30-JAN-2020
Filing Date:	12-MAR-2013
Time Stamp:	14:02:02
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	N048471090US01-TRN-DSG.pdf	75942 d5a5b0fa7899d3cfb92acc288db318236c71dedf	no	1

Warnings:

Information:					
2	Internet Communications Authorized	NO48471090US01-INTAUT-DSG.pdf	77554 b75c9e2b7342ea90f14a689cb0ab39ef18b59fde	no	1
Warnings:					
Information:					
			Total Files Size (in bytes):	153496	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Doc Code: TRAN.LET
Document Description: Transmittal Letter

USED IN LIEU OF PTO/SB/21 (07-09)

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	13/795,933-Conf. #2321
Filing Date	March 12, 2013
First Named Inventor	William F. Ganong
Art Unit	2644
Examiner Name	H. C. Ho
Total Number of Pages in This Submission	
Attorney Docket Number	N0484.71090US01

ENCLOSURES (*Check all that apply*)

- [ ] Fee Transmittal Form
  - [ ] Fee Attached
- [ ] Amendment/Reply
  - [ ] After Final
  - [ ] Affidavits/declaration(s)
- [ ] Extension of Time Request
- [ ] Express Abandonment Request
- [ ] Information Disclosure Statement
- [ ] Certified Copy of Priority Document(s)
- [ ] Reply to Missing Parts/ Incomplete Application
  - [ ] Reply to Missing Parts under 37 CFR 1.52 or 1.53
- [ ] Drawing(s)
- [ ] Licensing-related Papers
- [ ] Petition
- [ ] Petition to Convert to a Provisional Application
- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
- [ ] Request for Refund
- [ ] CD, Number of CD(s) _____
  - [ ] Landscape Table on CD
- [ ] After Allowance Communication to TC
- [ ] Appeal Communication to Board of Appeals and Interferences
- [ ] Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- [ ] Proprietary Information
- [ ] Status Letter
- [x] Other Enclosure(s) (please Identify below):

  Authoritzation for Internet Communications

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	WOLF, GREENFIELD & SACKS, P.C.		
Signature	/David S. Gesner/		
Printed name	David S. Gesner		
Date	January 30, 2020	Reg. No.	72,100

Certificate of Electronic Filing under 37 C.F.R. § 1.8

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office's electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).

Dated: January 30, 2020 Electronic Signature for Patricia A. Nadeau: /Patricia A. Nadeau/

7909810.1

UNITED STATES PATENT AND TRADEMARK OFFICE

USPTO Automated Interview Request (AIR)

Jan 30 2020

This paper requesting to schedule and/or conduct an interview is appropriate because:

I have previously submitted an authorization for internet communications in a patent application. See form SB/0439.

Name(s):
David Gesner

S-signature:
/David Gesner/

Registration Number:
72100

U.S. Application Number:
13795933

Confirmation Number:
2321

E-mail Address:
david.gesner@wolfgreenfield.com

Phone Number:
+1 6176468437

Proposed Time of Interview:
2-6-2020 2:00 PM ET

Alternative Proposed Time(s) of Interview:
2-10-2020 2:00 PM ET

Alternative Proposed Time(s) of Interview:
2-12-2020 2:00 PM ET

Prefered Interview Type:
Telephonic

I am the applicant or applicant's representative for this application.

Topic for Discussion:
See proposed agenda to follow. Topics for discussion include proposed amendments to independent claims.

uspto UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/795,933	03/12/2013	William F. Ganong III	N0484.71090US01	2321

91337 7590 02/25/2020

Nuance Communications, Inc.
c/o Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, MA 02210-2206

EXAMINER
HO, HUY C

ART UNIT	PAPER NUMBER
2644	

NOTIFICATION DATE	DELIVERY MODE
02/25/2020	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

IP.Inbox@nuance.com
N0484_eOfficeAction@WolfGreenfield.com
Patents_eOfficeAction@wolfgreenfield.com

Applicant-Initiated Interview Summary	**Application No.** 13/795,933	**Applicant(s)** Ganong et al.	
	Examiner HUY C HO	**Art Unit** 2644	**AIA (FITF) Status** No

All participants (applicant, applicants representative, PTO personnel):

(1) HUY C. HO. (3) ____.

(2) DAVID S. GESNER (Reg. No. 72,100). (4) ____.

Date of Interview: 10 February 2020.

Type: ☑ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☑ No.
If Yes, brief description: ____.

Issues Discussed ☐101 ☐112 ☐102 ☑103 ☑Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 1 and 19-20.

Identification of prior art discussed: Freeman and LeBeau.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Some amendments were proposed for claim 1 to provide clearer language to the claim to distinguish the claimed language over the prior art. Next office action will be provided per the official filing of the response to the current Non-Final rejection 11/01/2019..

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/HUY C HO/ Primary Examiner, Art Unit 2644	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiners responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicants correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,-
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicants record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiners version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, Interview Record OK on the paper recording the substance of the interview along with the date and the examiners initials.

Electronic Patent Application Fee Transmittal

Application Number:	13795933
Filing Date:	12-Mar-2013
Title of Invention:	METHODS AND APPARATUS FOR DETECTING A VOICE COMMAND
First Named Inventor/Applicant Name:	William F. Ganong
Filer:	David Scott Gesner/Casey O'Connor
Attorney Docket Number:	N0484.71090US01

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 1 month with $0 paid	1251	1	200	200
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	1806	1	240	240
		Total in USD ($)		**440**

FORM PTO-1449/A and B (modified PTO/SB/08)	APPLICATION NO.: 13/795,933	ATTY. DOCKET NO.: N0484.71090US01
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	FILING DATE: March 12, 2013	CONFIRMATION NO.: 2321
	FIRST NAMED INVENTOR: William F. Ganong	
Sheet 1 of 1	GROUP ART UNIT: 2644	EXAMINER: H. C. Ho

U.S. PATENT DOCUMENTS

Examiner's Initials #	Cite No.	U.S. Patent Document Number	U.S. Patent Document Kind Code	Name of Patentee or Applicant of Cited Document	Date of Publication or Issue of Cited Document MM-DD-YYYY
		6,006,175	A	Holzrichter	12-21-1999
		6,859,776	B1	Cohen et al.	02-22-2005
		9,087,520	B1	Salvador	07-21-2015
		9,558,749	B1	Secker-Walker et al.	01-31-2017
		9,747,899	B2	Pogue et al.	08-29-2017
		10,332,525	B2	Secker-Walker et al.	06-25-2019
		2012-0281885	A1	Syrdal et al.	11-08-2012
		2014-0039888	A1	Taubman et al.	02-06-2014
		2014-0163978	A1	Basye et al.	06-12-2014
		2015-0006176	A1	Pogue et al.	01-01-2015
		2015-0053779	A1	Adamek et al.	02-26-2015
		2016-0078869	A1	Syrdal et al.	03-17-2016
		2019-0073999	A1	Premont et al.	03-07-2019
		2019-0287526	A1	Ren et al.	09-19-2019
		2019-0311715	A1	Pfeffinger et al.	10-10-2019
		2019-0355365	A1	Kim et al.	11-21-2019

FOREIGN PATENT DOCUMENTS

Examiner's Initials #	Cite No.	Foreign Patent Document Office/ Country	Foreign Patent Document Number	Foreign Patent Document Kind Code	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Translation (Y/N)

OTHER ART – NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
		International Preliminary Report on Patentability for International Application No. PCT/CN2016/105343 mailed May 23, 2019 (N0484.71177WO00).	

[NOTE – No copies of U.S. patents, published U.S. patent applications, or pending, unpublished patent applications stored in the USPTO's Image File Wrapper (IFW) system, are included. See 37 CFR § 1.98 and 1287OG163. Copies of all other patent(s), publication(s), unpublished, pending U.S. patent applications, or other information listed are provided as required by 37 CFR § 1.98 unless 1) such copies were provided in an IDS in an earlier application that complies with 37 CFR § 1.98, and 2) the earlier application is relied upon for an earlier filing date under 35 U.S.C. § 120.]

EXAMINER:	DATE CONSIDERED:

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

7977476.1

Electronic Acknowledgement Receipt

EFS ID:	38739936
Application Number:	13795933
International Application Number:	
Confirmation Number:	2321
Title of Invention:	METHODS AND APPARATUS FOR DETECTING A VOICE COMMAND
First Named Inventor/Applicant Name:	William F. Ganong
Customer Number:	91337
Filer:	David Scott Gesner/Casey O'Connor
Filer Authorized By:	David Scott Gesner
Attorney Docket Number:	N0484.71090US01
Receipt Date:	02-MAR-2020
Filing Date:	12-MAR-2013
Time Stamp:	14:31:20
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$440
RAM confirmation Number	E202032E31440873
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	N048471090US01-TRN-DSG.pdf	26192 837a193290891df9b7494cfdbfe3cfc204bafc38	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	N048471090US01-FEE-DSG.pdf	32704 538b163ac1f01d7705701e1c0ef790e77bb9f57a	no	1
Warnings:					
Information:					
3	Extension of Time	N048471090US01-EXT-DSG.pdf	24358 1056ab6f03e0e711a496bdfbe425f18c632d0c7c	no	1
Warnings:					
Information:					
4		N048471090US01-AMN-DSG.pdf	60777 a6a11c12c12f339337549c58e07d86b73e3ebdbd	yes	13

Multipart Description/PDF files in .zip description

Document Description	Start	End
Amendment/Req. Reconsideration-After Non-Final Reject	1	1
Claims	2	7
Applicant Arguments/Remarks Made in an Amendment	8	13

Warnings:					
Information:					
5	Miscellaneous Incoming Letter	N048471090US01-CIA-DSG.pdf	141830 56464e177dbebbf7db588a779826b9393b524367	no	4

Warnings:					
Information:					
6		N048471090US01-IDS-DSG.pdf	57655 668a77931fc2fb2bc75703e6acc1b51a6a48fec9	yes	4
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Transmittal Letter		1	3	
	Information Disclosure Statement (IDS) Form (SB08)		4	4	
Warnings:					
Information:					
7	Non Patent Literature	N048471177WO00_IPRP_Mailed_05-23-2019.pdf	229934 272c61976195a4f379de3b487dd23070ac8ab8f8	no	6
Warnings:					
Information:					
8	Fee Worksheet (SB06)	fee-info.pdf	32627 fd999a5ee0fb14b9d119364a41a9515c3472afb8	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	606077		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Doc Code: TRAN.LET
Document Description: Transmittal Letter

USED IN LIEU OF PTO/SB/21 (07-09)

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	13/795,933-Conf. #2321
Filing Date	March 12, 2013
First Named Inventor	William F. Ganong
Art Unit	2644
Examiner Name	H. C. Ho
Attorney Docket Number	N0484.71090US01

Total Number of Pages in This Submission

ENCLOSURES (*Check all that apply*)

- [x] Fee Transmittal Form
- [ ] Fee Attached
- [x] Amendment/Reply
- [ ] After Final
- [ ] Affidavits/declaration(s)
- [x] Extension of Time Request
- [ ] Express Abandonment Request
- [x] Information Disclosure Statement
- [ ] Certified Copy of Priority Document(s)
- [ ] Reply to Missing Parts/ Incomplete Application
- [ ] Reply to Missing Parts under 37 CFR 1.52 or 1.53
- [ ] Drawing(s)
- [ ] Licensing-related Papers
- [ ] Petition
- [ ] Petition to Convert to a Provisional Application
- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
- [ ] Request for Refund
- [ ] CD, Number of CD(s) _____
- [ ] Landscape Table on CD
- [ ] After Allowance Communication to TC
- [ ] Appeal Communication to Board of Appeals and Interferences
- [ ] Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- [ ] Proprietary Information
- [ ] Status Letter
- [x] Other Enclosure(s) (please Identify below):

Form PTO - 1449

Copy of Cited Reference

Copy of Proposed Agenda for Telephone Interview dated 2.6.20

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	WOLF, GREENFIELD & SACKS, P.C.		
Signature	/David S. Gesner/		
Printed name	David S. Gesner		
Date	March 2, 2020	Reg. No.	72,100

Certificate of Electronic Filing under 37 C.F.R. § 1.8

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office's electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).

Dated: Dated: March 2, 2020 Signature: /Casey O'Connor/ (Casey O'Connor)

7977475.1

FEE TRANSMITTAL

Complete if known	
Application Number	13/795,933-Conf. #2321
Filing Date	March 12, 2013
First Named Inventor	William F. Ganong
Examiner Name	H. C. Ho
Art Unit	2644
Practitioner Docket No.	N0484.71090US01

☐ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29. Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

TOTAL AMOUNT OF PAYMENT ($)440.00

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☒ Deposit Account Deposit Account Number: 23/2825 Deposit Account Name: Wolf, Greenfield & Sacks, P.C.

For the above-identified deposit account, the Director is hereby authorized to (check all that apply):

☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, **except for the filing fee**

☒ Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17, **except for any excess claims fees or multiple dependent claim fee** ☐ Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17

☒ Credit any overpayment of fee(s)

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES (U = undiscounted fee; S = small entity fee; M = micro entity fee)

	FILING FEES			SEARCH FEES			EXAMINATION FEES			
Application Type	**U ($)**	**S ($)**	**M ($)**	**U ($)**	**S ($)**	**M ($)**	**U ($)**	**S ($)**	**M ($)**	**Fees Paid ($)**
Utility	300	150*	75	660	330	165	760	380	190	
Design	200	100	50	160	80	40	600	300	150	
Plant	200	100	50	420	210	105	620	310	155	
Reissue	300	150	75	660	330	165	2,200	1,100	550	
Provisional	280	140	70	0	0	0	0	0	0	

* The $150 small entity status filing fee for a utility application is further reduced to $75 for a small entity status applicant who files the application via EFS-Web.

2. EXCESS CLAIM FEES

Fee Description	**Undiscounted Fee ($)**	**Small Entity Fee ($)**	**Micro Entity Fee ($)**
Each claim over 20 (including Reissues)	100	50	25
Each independent claim over 3 (including Reissues)	460	230	115
Multiple dependent claims	820	410	205

Total Claims	**Extra Claims**	**Fee ($)**	**Fee Paid ($)**
_____ - 20 or HP =	_____ x	_____ =	_____

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims	**Extra Claims**	**Fee ($)**	**Fee Paid ($)**
_____ - 3 or HP =	_____ x	_____ =	_____

HP = highest number of independent claims paid for, if greater than 3.

Multiple Dependent Claims	
Fee ($)	**Fee Paid ($)**

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is $400 ($200 for small entity) ($100 for micro entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	**Extra Sheets**	**Number of each additional 50 or fraction thereof**	**Fee ($)**	**Fee Paid ($)**
_____ - 100 =	_____ /50 =	_____ (round **up** to a whole number) x	_____ =	

4. OTHER FEE(S)

	Fees Paid ($)
Non-English specification, $130 fee (no small or micro entity discount)	
Non-electronic filing fee under 37 CFR 1.16(t) for a utility application, $400 fee ($200 small or micro entity)	
Other (e.g., late filing surcharge): 1806 Submission of an Information Disclosure Statement	240.00
1251 Extension for response within first month	200.00

SUBMITTED BY

Signature	/David S. Gesner/	Registration No. (Attorney/Agent)	72,100	Telephone	617.646.8000
Name (Print/Type)	David S. Gesner			Date	March 2, 2020

Certificate of Electronic Filing under 37 C.F.R. § 1.8

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office's electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).

Dated: March 2, 2020 Signature: /Casey O'Connor/ (Casey O'Connor)

7977474.1

PATENT COOPERATION TREATY

ADVANCE E-MAIL

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)
(PCT Rule 44bis.1(c))

To:

CCPIT PATENT AND TRADEMARK LAW OFFICE
8th Floor, Vantone New World Plaza
2 Fuchengmenwai Street, Xicheng District
Beijing 100037
CHINE

Date of mailing *(day/month/year)* 23 May 2019 (23.05.2019)	
Applicant's or agent's file reference IEE160077PCT	**IMPORTANT NOTICE**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/CN2016/105343	10 November 2016 (10.11.2016)	

Applicant

NUANCE COMMUNICATIONS, INC.

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Xiaofan Tang
Facsimile No. +41 22 338 82 70	e-mail: pct.team2@wipo.int

Form PCT/IB/326 (January 2004)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference IEE160077PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/CN2016/105343	International filing date *(day/month/year)* 10 November 2016 (10.11.2016)	Priority date *(day/month/year)*
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant NUANCE COMMUNICATIONS, INC.		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 14 May 2019 (14.05.2019)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Xiaofan Tang e-mail: pct.team2@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To:
100037
China 8th Floor, Vantone New World Plaza, 2
Fuchengmenwai Street, Xicheng District, Beijing

CCPIT PATENT AND TRADEMARK LAW OFFICE

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	**04 August 2017**
Applicant's or agent's file reference **IEE160077PCT**	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/CN2016/105343	**10 November 2016**	

International Patent Classification (IPC) or both national classification and IPC
G10L 15/02(2006.01)i; G10L 15/06(2013.01)i; G10L 15/22(2006.01)i; G06F 1/32(2006.01)i

Applicant
NUANCE SOFTWARE TECHNOLOGY (BEIJING) CO., LTD.

1. This opinion contains indications relating to the following items:

- [x] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [x] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/	Date of completion of this opinion	Authorized officer
STATE INTELLECTUAL PROPERTY OFFICE OF THE P.R.CHINA **China 6, Xitucheng Rd., Jimen Bridge, Haidian District, Beijing 100088**	**31 July 2017**	**KANG,Dandan**
Facsimile No. **(86—10) 62019451**		Telephone No. **(86-10)61648170**

Form PCT/ISA/237 (Cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/CN2016/105343

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:
   - [x] the international application in the language in which it was filed.
   - [ ] a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. [ ] This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a)).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:
   a. (means)
      - [ ] on paper
      - [ ] in electronic form
   b. (time)
      - [ ] in the international application as filed
      - [ ] together with the international application in electronic form
      - [ ] subsequently to this Authority for the purposes of search

4. [ ] In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

Petitioner Exhibit 1004, Page 1142 of 1518

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/CN2016/105343

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-20	YES
	Claims	None	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

2. Citations and explanations :

[1] D1: US 2016189706 A1

[2] D2: CN 101650943 A

[3] D1 discloses a wake up phrase detection method and an electronic device(see description paragraphs [0030]-[0032], [0049]-[0070],[0086]-[0092], figures 2-5,8): electronic device may comprise a smart phone; FIG.4 depicts a training system 400, a user is prompted to utter their custom wake-up phrase(WUP), the utterances are captured as user training sequences 402(corresponding to "receiving acoustic input of a user speaking a wake-up word"); user training sequences 402 is provided to VAD 404, then to feature extraction component 406 to derive the feature vectors 408(corresponding to "acoustic features derived from the acoustic input"); the extracted features 408 are decoded by concatenated phoneme ASR engine 410 using phoneme model DB 414 which is implemented in a memory or storage medium and store phoneme models 206, and produce a phoneme transcription of the WUP, a Hidden Markov Model(HMM) is trained offline to generate a phoneme model 206(corresponding to "acoustic model"); based on the results produced by ASR 410, phoneme model concatenation component 416 determines the best phonemes models and concatenates them to produce an initial WUP model consist of the concatenated phoneme models(corresponding to "a sequence of speech units corresponding to the wake-up word spoken by the user" and "a first sequence of speech units" in claim 9 or "a second sequence of speech units" in claim 16); the WUP model used for WUP detector is stored in WUP model DB 418 which is implemented in a memory or storage medium ; FIG.5 depicts a user-specific wake up phrase detection system 500, a low-power processor is included and operates in a stand-by mode of the electronic device, receiving a wake-up phrase 514 as an input by a user(corresponding to "receiving acoustic input from the user speaking while the user device is operating in a low-power mode"), WUP 514 is provided to VAD 504 and then to feature extractor and WUP detector(WUPD) component 506 to detect the presence of the WUP in the captured audio by comparing the feature extracted to the WUP model stored in a non-volatile RAM; the presence of the WUP triggers the device to wake up, or come out of a stand-by mode or a sleep mode into a normal mode of operation(corresponding to "exiting the low-power mode if it is determined that the user spoke the wake-up word").

[4] D2 discloses a non-native speech recognition system and method (see description page 5 line 3 – page 6 line 9 , figures 1-3): a native language(corresponding to "the source language") model is provided for the native state decoding module, the non-native language(corresponding to "the target language") speech is decoded by the native state decoding module using the native language model, thus obtaining a native state decode sequence "b aa zh " (see figure 3).

[5] **Novelty and Inventive step**

[6] Claim 1 differs from D1 in: (1) the acoustic input of a user is spoken in a target language, and the acoustic model is trained in a source language different than the target language.

[7] Claim 5 differs from D1 in the above (1), and (2) at least one microphone configured to obtain acoustic information from the environment of the user device.

[8] Claim 9 differs from D1 in the above (1), (2) and (3) applying acoustic features derived from the acoustic input to the acoustic model to obtain a second sequence of speech units; determining if the user spoke the wake-up word at least in part by comparing the first sequence of speech units to the second sequence of speech units.

Petitioner Exhibit 1004, Page 1143 of 1518

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement**

[9] Claim 16 differs from D1 in the above (1) and (3).

[10] Therefore, claims 1-20 are novel (PCT Article 33(2)).

[11] The feature (1) has already been disclosed by D2. The person skilled in the art would easily acquire the technical feature of D2 to decode the acoustic input.

[12] The feature (2) of obtaining acoustic information by microphone is general solution in the art.

[13] As to the feature (3), it is common practice for the person skilled in the art to determine the wake-up word by comparing the first sequence of speech units to the second sequence of speech units which is obtained by applying acoustic features derived from the acoustic input to the acoustic model instead of the WUP model.

[14] Therefore, claims 1,5,9, 16 do not involve an inventive step (PCT Article 33 (3)).

[15] Dependent claims 2-4,6-8,10-15,17-20 do not involve an inventive step (PCT Article 33 (3)).

[16] As to claims 2,6,10,17,4,8,13,18, it is common practice to adapt the acoustic model using the acoustic input and the sequence, and associate at least one task with the wake-up word and initiate performance of the task based on the wake-up detection.

[17] As to claims 3,7,11,12,14,15,19,20, those additional features have been disclosed by D1.

[18] **Industrial applicability**

[19] Claims 1-20 can find industrial applicability in the technical field of wake-up detecting (PCT Article 33 (4)).

Petitioner Exhibit 1004, Page 1144 of 1518

PTO/AIA/22 (03-13)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)	Docket Number (Optional) N0484.71090US01
Application Number 13/795,933-Conf. #2321	Filed March 12, 2013
For METHODS AND APPARATUS FOR DETECTING A VOICE COMMAND	
Art Unit 2644	Examiner H. C. Ho

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

	Fee	Small Entity Fee	Micro Entity Fee	
[X] One month (37 CFR 1.17(a)(1))	$200	$100	$50	$ 200.00
[ ] Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$
[ ] Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$
[ ] Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
[ ] Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

[ ] Applicant asserts small entity status. See 37 CFR 1.27.

[ ] Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

[ ] A check in the amount of the fee is enclosed.

[X] Payment by credit card. ~~Form PTO-2038 is attached~~.

[ ] The Director has already been authorized to charge fees in this application to a Deposit Account.

[X] The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 23/2825 .

[X] Payment made via EFS-Web.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

[ ] applicant.

[X] attorney or agent of record. Registration number 72,100 .

[ ] attorney or agent acting under 37 CFR 1.34. Registration number _____ .

/David S. Gesner/	March 2, 2020
Signature	Date
David S. Gesner	617.646.8000
Typed or printed name	Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

[ ] * Total of 1 forms are submitted.

Certificate of Electronic Filing under 37 C.F.R. § 1.8

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office's electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).

Dated: March 2, 2020 Signature: /Casey O'Connor/ (Casey O'Connor)

8003069.1

Docket No.: N0484.71090US01
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor:	William F. Ganong, III
Application No.:	13/795,933
Confirmation No.:	2321
Filed:	March 12, 2013
For:	METHODS AND APPARATUS FOR DETECTING A VOICE COMMAND
Examiner:	H. C. Ho
Art Unit:	2644

PROPOSED AGENDA FOR TELEPHONE INTERVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The undersigned thanks Examiner Ho for the courtesies extended in granting the telephone interview which is scheduled for Monday, February 10, 2020 at 11:00 AM EST. During the telephone interview, the undersigned would like to discuss the rejection of each of independent claim 1, 19 and 20 as purportedly being obvious over U.S. Patent No. 8,977,255 to Freeman et al. (hereinafter "Freeman") in view of U.S. Patent Publication No. 2012/0034904 to LeBeau et al. (hereinafter "LeBeau"). Proposed amendments to independent claim 1 are included in Appendix A.

Currently pending claim 1 includes limitations directed to receiving acoustic input from an environment of a mobile device while the mobile device is operating in an idle mode; and detecting whether the acoustic input includes a voice command, by, *inter alia*, performing a plurality of processing stages on the acoustic input while the mobile device is operating in the idle mode, and using at least one contextual cue to assist in detecting whether the acoustic input includes a voice command while the mobile device is operating in the idle mode.

The Office Action indicates a belief that (1) Freeman satisfies all of the limitations of claim 1 except for those which are directed to using at least one contextual cue to assist in detecting

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whether acoustic input includes a voice command while the mobile device is operating in idle mode, (2) LeBeau satisfies those remaining limitations, and (3) one skilled in the art would have found it obvious to modify Freeman according to the teachings of LeBeau.

The undersigned respectfully disagrees, and requests that the Examiner reconsider his position. In the portions of LeBeau which are cited by the Office Action (i.e., Fig. 1B and ¶¶[0041]-[0043]), LeBeau discloses a procedure whereby a device's context is used to determine whether the device should expend the power necessary to monitor audio signals. If the device's context suggests that the user is more likely to supply voice commands, then the device turns on its microphone, so that the device is then capable of receiving acoustic input (¶[0044]). Only after the microphone is activated is the device capable of monitoring acoustic input to determine whether it includes a user command (¶¶[0046]-[0047]). Thus, in the process of LeBeau, a device uses contextual cues ***to determine whether or not to enable itself to receive acoustic input*** (i.e., by turning on its microphone).

By contrast, in the method of claim 1, at least one contextual cue is used to assist in detecting whether acoustic input ***which has already been received*** includes a voice command. Neither LeBeau nor Freeman are believed to say anything about using a contextual cue to assist in detecting whether a voice command is included in acoustic input which has already been received.

Moreover, modifying Freeman's technique according to the teachings of LeBeau seemingly would render the technique unsatisfactory for its intended purpose (i.e., of detecting whether acoustic input includes a voice command). In this respect, if one assumes *arguendo* that Freeman discloses receiving acoustic input and detecting whether the acoustic input includes a voice command by performing a plurality of processing stages on the acoustic input, then adding the step purportedly taught by LeBeau of using contextual cues to determine whether to turn on the microphone would result in the microphone being turned on ***only after the acoustic input should have already been received.*** This modification would seemingly result in acoustic input being missed, thereby rendering the technique entirely ineffectual.

Notwithstanding the foregoing, Appendix A reflects proposed amendments to claim 1 which make even clearer that at least one contextual cue is used to assist in detecting whether a voice

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command is included in an acoustic input ***which has already been received***. These proposed amendments make even clearer the patentable distinctions over the asserted combination.

The undersigned looks forward to discussing these points with the Examiner during the telephone interview. The Examiner is invited to contact the undersigned prior to the scheduled time for the telephone interview if he has any questions concerning the foregoing.

Dated: February 6, 2020

Respectfully submitted,

By_/David S. Gesner/_____
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COPY

APPENDIX A

PROPOSED AMENDMENTS TO CLAIM 1
FOR DISCUSSION PURPOSES ONLY – NOT FOR ENTRY

1. (Currently amended) A method of monitoring an acoustic environment of a mobile device for voice commands when the mobile device is operating in an idle mode, the method comprising:

receiving acoustic input from the environment of the mobile device while the mobile device is operating in the idle mode; and

detecting whether the received acoustic input includes a voice command at least by:

performing a plurality of processing stages on the received acoustic input, wherein at least one of the plurality of processing stages is performed while the mobile device is operating in the idle mode; and

using at least one contextual cue to assist in detecting whether the received acoustic input includes a voice command while the mobile device is operating in the idle mode, the at least one contextual cue comprising information other than content of the acoustic input and comprising a time the acoustic input was received, motion of the mobile device, location of the mobile device, occurrence of an event on the mobile device, recent activity on the mobile device, a stored sample of the acoustic environment of the mobile device and/or a power source of the mobile device.

Docket No.: N0484.71090US01
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor:	William F. Ganong, III
Application No.:	13/795,933
Confirmation No.:	2321
Filed:	March 12, 2013
For:	METHODS AND APPARATUS FOR DETECTING A VOICE COMMAND
Examiner:	H. C. Ho
Art Unit:	2644

Certificate of Electronic Filing under 37 C.F.R. § 1.8
I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office's electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).

Dated: Dated: March 2, 2020 Signature: /Casey O'Connor/ (Casey O'Connor)

RESPONSE TO NON-FINAL OFFICE ACTION

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INTRODUCTORY COMMENTS

In response to the Office Action dated November 1, 2019, please amend the above-identified U.S. patent application as follows:

Claim Amendments are reflected in the claim listing which begins on page 2 of this paper.

Remarks/Arguments begin on page 8 of this paper.

CLAIMS

1. (Currently amended) A method of monitoring an acoustic environment of a mobile device for voice commands when the mobile device is operating in an idle mode, the method comprising:

receiving acoustic input from the environment of the mobile device while the mobile device is operating in the idle mode; and

detecting whether the received acoustic input includes a voice command at least by:

performing a plurality of processing stages on the received acoustic input, wherein at least one of the plurality of processing stages is performed while the mobile device is operating in the idle mode; and

using at least one contextual cue to assist in detecting whether the received acoustic input includes a voice command while the mobile device is operating in the idle mode, the at least one contextual cue comprising information other than content of the acoustic input and comprising a time the acoustic input was received, motion of the mobile device, location of the mobile device, occurrence of an event on the mobile device, recent activity on the mobile device, a stored sample of the acoustic environment of the mobile device and/or a power source of the mobile device.

2. (Currently amended) The method of claim 1, further comprising transitioning the mobile device from the idle mode to an active mode ~~when it is detected~~ in response to detecting that the acoustic input includes a voice command.

3. (Canceled)

4. (Currently amended) The method of claim 1, wherein the at least one contextual cue includes the time the acoustic input was received, and the method ~~further comprising~~ comprises influencing evaluation of at least one of the plurality of processing stages based on the time the

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acoustic input was received.

5. (Currently amended) The method of claim 1, wherein the at least one contextual cue includes recent activity on the mobile device, and the method ~~further comprising~~ comprises evaluation of at least one of the plurality of processing stages based on at least one of how recently the user activated the mobile device, how recently the user issued a voice command and how recently the user performed at least one action on the mobile device.

6. (Currently amended) The method of claim 1, wherein the at least one contextual cue includes an occurrence of an event on the mobile device, and the method ~~further comprising~~ comprises influencing evaluation of at least one of the plurality of processing stages based on whether the acoustic input is received proximate in time with the occurrence of the event.

7. (Currently amended) The method of claim 1, wherein the at least one contextual cue includes motion of the mobile device received as an input from an accelerometer of the mobile device, and the method ~~further comprising~~ comprises influencing evaluation of at least one of the plurality of processing stages based on an assessment of whether the user moved the mobile device proximate in time with receiving the acoustic input based, at least in part, on the input from the accelerometer.

8. (Currently amended) The method of claim 1, wherein the at least one contextual cue includes the location of the mobile device, and the method ~~further comprising~~ comprises influencing evaluation of at least one of the plurality of processing stages based on determining whether the mobile device is located in at least one of a vehicle, a home or a place of work of the user of the mobile device.

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9. (Currently amended) The method of claim 1, wherein the at least one contextual cue includes the power source of the mobile device, and the method ~~further comprising~~ comprises influencing evaluation of at least one of the plurality of processing stages based on at least one of determining whether the mobile device is being powered using the battery or connected to wall power, and a state of the battery if the mobile device is being powered using the battery.

10. (Currently amended) The method of claim 1, wherein the at least one contextual cue includes the sample of the acoustic environment obtained by the mobile device by storing acoustic input previously received by the mobile device and determined not to include a voice command, and the method ~~further comprising~~ comprises subtracting the sample of the acoustic environment from the acoustic input.

11. (Original) The method of claim 1, wherein a sequence of performing the plurality of processing stages is determined, at least in part, by the at least one contextual cue.

12. (Original) The method of claim 1, wherein the mobile device includes a primary processor and a secondary processor, and wherein at least one first processing stage of the plurality of processing stages is performed by the secondary processor prior to engaging the primary processor to process the acoustic input.

13. (Original) The method of claim 12, wherein at least one second processing stage of the plurality of processing stages is performed by the primary processor only after the at least one first processing stage is performed and neither concludes that the acoustic input includes a voice command nor concludes that the acoustic input is the result of spurious acoustic activity.

14. (Previously presented) The method of claim 12, wherein performing the at least one first

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processing stage includes performing at least one voice activity detection processing stage including performing at least one of spectral analysis on the acoustic input to evaluate whether a spectrum of the acoustic input is indicative of voice activity, periodicity analysis to evaluate whether signal periodicity of the acoustic input is indicative of voice activity, and phone loop analysis to evaluate whether the acoustic input includes speech.

15. (Original) The method of claim 12, wherein performing the at least one first processing stage comprises performing limited vocabulary automatic speech recognition on the acoustic input to detect whether the acoustic input includes an explicit voice trigger.

16. (Original) The method of claim 12, wherein performing the at least one second processing stage comprises performing at least one speech processing stage including at least one of automatic speech recognition on the acoustic input and at least one natural language processing stage to understand the meaning of the voice command.

17. (Currently amended) The method of claim 1, wherein the mobile device is capable of connecting to at least one server via a network, and the method ~~further comprising~~ comprises transmitting at least a portion of the acoustic information to the at least one server via the network for processing by the at least one server.

18. (Currently amended) The method of claim 1, ~~further~~ comprising performing one or more default actions when a specific task could not be ascertained from the acoustic input.

19. (Currently amended) At least one non-transitory computer readable medium encoded with instructions that, when executed ~~on at least one processor~~ in a mobile device configured to receive an acoustic input, causes the mobile device to perform a method of monitoring an acoustic

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environment, ~~of a mobile device to receive acoustic input from the environment of the mobile device while the mobile device is operating in an idle mode;~~ the method comprising:

in response to the mobile device receiving acoustic input from the environment while operating in the idle mode, detecting whether the received acoustic input includes a voice command at least by:

performing a plurality of processing stages on the received acoustic input, wherein at least one of the plurality of processing stages is performed while the mobile device is operating in the idle mode; and

using at least one contextual cue to assist in detecting whether the received acoustic input includes a voice command while the mobile device is operating in the idle mode, the at least one contextual cue comprising information other than content of the acoustic input and comprising a time the acoustic input was received, motion of the mobile device, location of the mobile device, occurrence of an event on the mobile device, recent activity on the mobile device, a stored sample of the acoustic environment of the mobile device and/or a power source of the mobile device.

20. (Currently amended) A mobile device comprising:

~~at least one input to receive acoustic input from an environment of the mobile device while the mobile device is operating in an idle mode; and~~

at least one processor configured to:

in response to the mobile device receiving acoustic input from the environment while operating in the idle mode, detect whether the received acoustic input includes a voice command at least by:

performing a plurality of processing stages on the received acoustic input, wherein at least one of the plurality of processing stages is performed while the mobile device is operating in the idle mode; and

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using at least one contextual cue to assist in detecting whether the received acoustic input includes a voice command while the mobile device is operating in the idle mode, the at least one contextual cue comprising information other than content of the acoustic input and comprising a time the acoustic input was received, motion of the mobile device, location of the mobile device, occurrence of an event on the mobile device, recent activity on the mobile device, a stored sample of the acoustic environment of the mobile device and/or a power source of the mobile device.

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DOCKET NO.: N0484.71090US01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor:	William F. Ganong
Application No.:	13/795,933
Confirmation No.:	2321
Filed:	March 12, 2013
For:	METHODS AND APPARATUS FOR DETECTING A VOICE COMMAND
Examiner:	H. C. Ho
Art Unit:	2644

Certificate of Electronic Filing under 37 C.F.R. § 1.8
I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office's electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).

Dated: Dated: March 2, 2020 Signature: /Casey O'Connor/ (Casey O'Connor)

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

STATEMENT FILED PURSUANT TO THE DUTY OF DISCLOSURE UNDER 37 C.F.R. §§ 1.56, 1.97 AND 1.98

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. §§ 1.56, 1.97 and 1.98, the undersigned requests consideration of this Information Disclosure Statement.

PART I: Compliance with 37 C.F.R. § 1.97

This Information Disclosure Statement has been filed more than three months after the filing date of this application and after the mailing date of a first Office Action, but before the mailing date of any of a Final Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution in this application.

Please charge our Credit Card in the amount of $240.00 covering the fee set forth in 37 C.F.R. § 1.17(p).

PART II: Information Cited

The undersigned hereby makes of record in the above-identified application the information listed on the attached form PTO-1449 (modified PTO/SB/08). The order of presentation of the references should not be construed as an indication of the importance of the references.

The undersigned hereby makes the following additional information of record in the above-identified application.

The undersigned would like to bring to the Examiner's attention the following co-pending application that may contain subject matter related to this application:

Serial No.	Filing Date	Inventor(s)	Docket No.
*15/238,238	08-16-2016	Ganong et al.	N0484.71090US04

*A copy of this reference is not provided as the Office has waived the requirement under 37 C.F.R. § 1.98(a)(2)(iii) for submitting a copy of a cited U.S. patent application if it is scanned to the Image File Wrapper system and is available on Private PAIR .

The undersigned would like to bring to the Examiner's attention the enclosed search report or other communication from a corresponding or related International or Foreign National Application:

Serial No.	Date of Mailing	Type(s) of Communication	Docket No.
PCT/CN2016/105343	**05-23-2019**	**International Preliminary Report on Patentability**	**N0484.71177WO00**

PART III: Remarks

Documents cited anywhere in the Information Disclosure Statement are enclosed unless otherwise indicated. It is respectfully requested that:

1. The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims;

2. The enclosed form PTO-1449 (modified PTO/SB/08) be signed by the Examiner to evidence that the cited information has been fully considered by the United States Patent and Trademark Office during the examination of this application;

3. The citations for the information be printed on any patent which issues from this application.

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By submitting this Information Disclosure Statement, the undersigned makes no representation that a search has been performed, of the extent of any search performed, or that more relevant information does not exist.

By submitting this Information Disclosure Statement, the undersigned makes no representation that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

By submitting this Information Disclosure Statement, the undersigned makes no representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. § 102.

Notwithstanding any statements by the undersigned, the Examiner is urged to form his or her own conclusion regarding the relevance of the cited information.

An early and favorable action is hereby requested.

The Director is hereby authorized to charge any deficiency or credit any overpayment in the fees occasioned by the filing of this Information Disclosure Statement to our Deposit Account No. 23/2825 under Docket No. N0484.71090US01 from which the undersigned is authorized to draw.

Respectfully submitted,

By:__/David S. Gesner/_____
David S. Gesner
Registration No.: 72,100
WOLF, GREENFIELD & SACKS, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
617.646.8000

Docket No.: N0484.71090US01
Date: March 2, 2020

REMARKS

In response to the Office Action dated November 1, 2019, reconsideration is respectfully requested. To further the prosecution of this application, amendments have been made in the claims, and each of the rejections set forth in the Office Action has been carefully considered and is addressed below. The claims as presented are believed to be in condition for allowance.

Claims 1-2 and 4-20 were previously pending in this application. Claims 1-2, 4-10 and 17-20 are amended herein. No claims are added or cancelled. As a result, claims 1-2 and 4-20 remain pending for examination, with claims 1, 19, and 20 being independent. No new matter has been added.

Telephone Interview With Examiner

The undersigned thanks Examiner Ho for the courtesies extended in granting and conducting the telephone interview which occurred on February 10, 2020. The substance of the telephone interview is summarized herein. A proposed agenda for the discussion was e-mailed to Examiner Ho prior to the telephone interview. A copy of the proposed agenda is submitted herewith.

Claim Rejections under 35 U.S.C. §103

Each of independent claims 1, 19 and 20 is rejected under 35 U.S.C. §103(a) as purportedly being obvious over U.S. Patent No. 8,977,255 to Freeman et al. (hereinafter "Freeman") in view of U.S. Patent Publication No. 2012/0034904 to LeBeau et al. (hereinafter "LeBeau"). The rejection of each of independent claims 1, 19 and 20 is respectfully traversed.

A. Rejection Of Independent Claim 1

Claim 1 recites a method of monitoring an acoustic environment of a mobile device for voice commands when the mobile device is operating in an idle mode. The method comprises receiving acoustic input from the environment of the mobile device while the mobile device is

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operating in the idle mode; and detecting whether the received acoustic input includes a voice command at least by: performing a plurality of processing stages on the received acoustic input, wherein at least one of the plurality of processing stages is performed while the mobile device is operating in the idle mode; and using at least one contextual cue to assist in detecting whether the received acoustic input includes a voice command while the mobile device is operating in the idle mode, the at least one contextual cue comprising information other than content of the acoustic input and comprising a time the acoustic input was received, motion of the mobile device, location of the mobile device, occurrence of an event on the mobile device, recent activity on the mobile device, a stored sample of the acoustic environment of the mobile device and/or a power source of the mobile device.

During the telephone interview, it was pointed out that the rejection of claim 1 is improper, because even if one assumed for argument's sake that Freeman and LeBeau could properly be combined in the manner asserted (which the Assignee does not concede), the result of the combination would not satisfy all of the limitations of claim 1.

The Office Action contends that Freeman satisfies all of the limitations of claim 1 except for those which are directed to using at least one contextual cue to assist in detecting whether acoustic input includes a voice command while a mobile device is operating in idle mode. Freeman discloses a procedure for processing acoustic input to a mobile device (col. 6, line 22-col. 7, line 10). In the procedure, when the mobile device receives acoustic input, it processes the input to determine whether it includes one of a limited set of commands which the device is capable of recognizing while in a particular operational mode (col. 6, lines 28-32). Freeman discloses that because the set of commands is limited, this determination can be made quickly, and without excessive computation or power consumption (col. 6, lines 32-37).

LeBeau is relied upon as purportedly satisfying the claim 1 limitations directed to using at least one contextual cue to assist in detecting whether acoustic input includes a voice command while a mobile device is operating in idle mode. LeBeau discloses a procedure whereby context is used to determine whether a mobile device should expend the power necessary to monitor audio signals in the environment (Fig. 1B; ¶¶[0041]-[0043]). Specifically, LeBeau discloses that if the

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context suggests that the user is more likely to supply voice commands to the device, the device turns on its microphone, so that it can receive acoustic input (¶[0044]). LeBeau also discloses that the device is only capable of monitoring acoustic input after its microphone has been activated (¶¶[0046]-[0047]). Thus, in the procedure of LeBeau, a device uses contextual cues to determine ***whether or not to enable itself to receive acoustic input*** (i.e., by turning on its microphone).

During the telephone interview, it was pointed out that the result of combining Freeman and LeBeau in the manner asserted would not satisfy all of the limitations of claim 1. Specifically, claim 1 recites using at least one contextual cue to assist in detecting whether acoustic input ***which has already been received*** includes a voice command. LeBeau discloses using contextual cues to determine whether or not to turn on a device's microphone, so that it is ***then capable of receiving acoustic input***. LeBeau says nothing about using at least one contextual cue to assist in detecting whether acoustic input ***which has already been received*** includes a voice command, as claim 1 recites. In fact, at the time when LeBeau discloses using contextual cues, the microphone has not yet been turned on, meaning that, by definition, acoustic input has not already been received.

As the Office Action concedes, Freeman also says nothing about using at least one contextual cue to assist in detecting whether acoustic input which has already been received includes a voice command, as claim 1 recites. As a result, even if the references were combined in the manner asserted, the result of the combination would not satisfy all of the limitations recited by claim 1.

The Examiner evidenced an appreciation for these points during the telephone interview. Nevertheless, amendments to claim 1 were also discussed, to make even clearer that the contextual cue(s) is (are) used to assist in detecting whether a voice command is included in an acoustic input which has already been received. The Examiner agreed that these amendments would make the patentable distinctions over the prior art of record even clearer.

In view of the foregoing, withdrawal of the rejection of claim 1 as purportedly being obvious over Freeman in view of LeBeau is respectfully requested.

Claims 2 and 4-18 depend from claim 1 and are allowable for at least the same reasons as claim 1.

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B. Rejection Of Independent Claim 19

Claim 19 recites at least one non-transitory computer readable medium encoded with instructions that, when executed in a mobile device configured to receive an acoustic input, cause the mobile device to perform a method of monitoring an acoustic environment. The method comprises: in response to the mobile device receiving acoustic input from the environment while operating in the idle mode, detecting whether the received acoustic input includes a voice command at least by: performing a plurality of processing stages on the acoustic input, wherein at least one of the plurality of processing stages is performed while the mobile device is operating in the idle mode; and using at least one contextual cue to assist in detecting whether the acoustic input includes a voice command while the mobile device is operating in the idle mode, the at least one contextual cue comprising information other than content of the acoustic input and comprising a time the acoustic input was received, motion of the mobile device, location of the mobile device, occurrence of an event on the mobile device, recent activity on the mobile device, a stored sample of the acoustic environment of the mobile device and/or a power source of the mobile device.

It should be appreciated from the discussion above regarding claim 1 that, even if Freeman and LeBeau could properly be combined in the manner asserted (which the Assignee does not concede), the result of the combination would not satisfy the claim 19 limitations directed to using at least one contextual cue to assist in detecting whether received acoustic input includes a voice command. Accordingly, withdrawal of the rejection of claim 19 as purportedly being obvious over Freeman in view of LeBeau is respectfully requested.

C. Rejection Of Independent Claim 20

Claim 20 recites a mobile device comprising: at least one processor configured to: in response to the mobile device receiving acoustic input from the environment while operating in the idle mode, detect whether the received acoustic input includes a voice command at least by: performing a plurality of processing stages on the acoustic input, wherein at least one of the plurality of processing stages is performed while the mobile device is operating in the idle mode; and using at least one contextual cue to assist in detecting whether the acoustic input includes a

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voice command while the mobile device is operating in the idle mode, the at least one contextual cue comprising information other than content of the acoustic input and comprising a time the acoustic input was received, motion of the mobile device, location of the mobile device, occurrence of an event on the mobile device, recent activity on the mobile device, a stored sample of the acoustic environment of the mobile device and/or a power source of the mobile device.

It should be appreciated from the discussion above regarding claim 1 that, even if Freeman and LeBeau could properly be combined in the manner asserted (which the Assignee does not concede), the result of the combination would not satisfy the claim 20 limitations directed to using at least one contextual cue to assist in detecting whether received acoustic input includes a voice command. Accordingly, withdrawal of the rejection of claim 20 as purportedly being obvious over Freeman in view of LeBeau is respectfully requested.

General Comments on Dependent Claims

As each of the dependent claims depends from a base claim that is believed to be in condition for allowance, Applicant believes that arguing the further distinguishing features of all of the dependent claims is unnecessary at this time. However, Applicant does not necessarily concur with the interpretation of the dependent claims as set forth in the Office Action, nor does Applicant concur that the basis for the rejection of any of the dependent claims is proper. Therefore, Applicant reserves the right to specifically address in the future the further patentability of the dependent claims not specifically addressed herein.

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CONCLUSION

In view of the foregoing, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this response, the application is not in condition for allowance, the Examiner is requested to call the undersigned at the telephone number indicated below to discuss any outstanding issues.

Applicant believes no fee is due with this Amendment. However, if a fee is due with this Amendment, please charge our Deposit Account No. 23/2825, under Docket No. N0484.71090US01 from which the undersigned is authorized to draw.

Dated: March 2, 2020

Respectfully submitted,

Electronic signature: /David S. Gesner/
David S. Gesner
Registration No.: 72,100
WOLF, GREENFIELD & SACKS, P.C.
600 Atlantic Avenue
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Petitioner Exhibit 1004, Page 1165 of 1518

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/795,933	Filing Date 03/12/2013	☐ To be Mailed

ENTITY: ☑ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $62 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $250 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT	03/02/2020	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 19	Minus	** 20	= 0		x $100 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0		x $460 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	0

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=		x $0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $0 =	
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.	LIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	/ALLYSON PURNELL/
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Patent Application Fee Transmittal

Application Number:	13795933
Filing Date:	12-Mar-2013
Title of Invention:	METHODS AND APPARATUS FOR DETECTING A VOICE COMMAND
First Named Inventor/Applicant Name:	William F. Ganong
Filer:	David Scott Gesner/Miranda Stopa
Attorney Docket Number:	N0484.71090US01

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	1806	1	240	240
		Total in USD ($)		**240**

Electronic Acknowledgement Receipt

EFS ID:	38942932
Application Number:	13795933
International Application Number:	
Confirmation Number:	2321
Title of Invention:	METHODS AND APPARATUS FOR DETECTING A VOICE COMMAND
First Named Inventor/Applicant Name:	William F. Ganong
Customer Number:	91337
Filer:	David Scott Gesner/Miranda Stopa
Filer Authorized By:	David Scott Gesner
Attorney Docket Number:	N0484.71090US01
Receipt Date:	23-MAR-2020
Filing Date:	12-MAR-2013
Time Stamp:	16:41:15
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$240
RAM confirmation Number	E20203MG41394680
Deposit Account	232825
Authorized User	Miranda Stopa

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.17 (Patent application and reexamination processing fees)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	N048471090US01-TRN-DSG.pdf	26423 a60f271eaa2812f7854a00c50de1125685d0 1bfe	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	N048471090US01-FEE-DSG.pdf	32620 bba27958e654adf94840979bf6fb96a3842 d3085	no	1
Warnings:					
Information:					
3	Transmittal Letter	N048471090US01-IDSBODY-DSG.pdf	34150 c54d86e5f616dfb31a11b06095007f867358 978b	no	4
Warnings:					
Information:					
4	Information Disclosure Statement (IDS) Form (SB08)	N048471090US01-IDSSB08-DSG.pdf	22550 1b495091608d25101166d34c475b58f1ef0 e3737	no	1
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
5	Foreign Reference	EP1511010A1.pdf	729001 ead4b4ef6aa4830d9af0195d4694bc54392 799b9	no	14
Warnings:					
Information:					
6	Other Reference-Patent/App/Search documents	N048471176WO00_IPRP_mailed_08-23-2018.pdf	217029 3803a030c7771a33c779daa4f0212780001 6e689	no	7
Warnings:					

Information:					
7	Other Reference-Patent/App/Search documents	N048471176WO00_ISRWO_mailed_05-12-2016.PDF	1028806 9acf358d2fae3caef656fafef816e729ecd72e64	no	10
Warnings:					
Information:					
8	Fee Worksheet (SB06)	fee-info.pdf	30673 dab7ae06d0da287e23c8f919aba932bd1b8b64fe	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	2121252		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

FORM PTO-1449/A and B (modified PTO/SB/08)	APPLICATION NO.: 13/795,933	ATTY. DOCKET NO.: N0484.71090US01
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	FILING DATE: March 12, 2013	CONFIRMATION NO.: 2321
	FIRST NAMED INVENTOR: William F. Ganong	
Sheet 1 of 1	GROUP ART UNIT: 2644	EXAMINER: H. C. Ho

U.S. PATENT DOCUMENTS

Examiner's Initials #	Cite No.	U.S. Patent Document Number	Kind Code	Name of Patentee or Applicant of Cited Document	Date of Publication or Issue of Cited Document MM-DD-YYYY
		2008-0118080	A1	Gratke et al.	05-22-2008
		2009-0055178	A1	Coon	02-26-2009
		2012-0197637	A1	Gratke et al.	08-02-2012
		2012-0310646	A1	Hu et al.	12-06-2012
		2015-0106085	A1	Lindahl	04-16-2015
		2016-0039356	A1	Talwar et al.	02-11-2016
		2017-0116983	A1	Furukawa et al.	04-27-2017

FOREIGN PATENT DOCUMENTS

Examiner's Initials #	Cite No.	Foreign Patent Document Office/ Country	Number	Kind Code	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Translation (Y/N)
		EP	1511010	A1	Daimler Chrysler Ag	03-02-2005	Y-Abstract Only

OTHER ART – NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
		International Preliminary Report on Patentability for International Application No. PCT/US2016/017317 mailed August 23, 2018 (N0484.71176WO00).	
		International Search Report and Written Opinion for International Application No. PCT/US2016/017317 mailed May 12, 2016 (N0484.71176WO00).	

[NOTE – No copies of U.S. patents, published U.S. patent applications, or pending, unpublished patent applications stored in the USPTO's Image File Wrapper (IFW) system, are included. See 37 CFR § 1.98 and 1287OG163. Copies of all other patent(s), publication(s), unpublished, pending U.S. patent applications, or other information listed are provided as required by 37 CFR § 1.98 unless 1) such copies were provided in an IDS in an earlier application that complies with 37 CFR § 1.98, and 2) the earlier application is relied upon for an earlier filing date under 35 U.S.C. § 120.]

EXAMINER:	DATE CONSIDERED:

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

8061296.1

Doc Code: TRAN.LET
Document Description: Transmittal Letter

USED IN LIEU OF PTO/SB/21 (07-09)

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	13/795,933-Conf. #2321
Filing Date	March 12, 2013
First Named Inventor	William F. Ganong
Art Unit	2644
Examiner Name	H. C. Ho
Attorney Docket Number	N0484.71090US01

Total Number of Pages in This Submission

ENCLOSURES (*Check all that apply*)

- [x] Fee Transmittal Form
- [ ] Fee Attached
- [ ] Amendment/Reply
- [ ] After Final
- [ ] Affidavits/declaration(s)
- [ ] Extension of Time Request
- [ ] Express Abandonment Request
- [x] Information Disclosure Statement
- [ ] Certified Copy of Priority Document(s)
- [ ] Reply to Missing Parts/ Incomplete Application
- [ ] Reply to Missing Parts under 37 CFR 1.52 or 1.53
- [ ] Drawing(s)
- [ ] Licensing-related Papers
- [ ] Petition
- [ ] Petition to Convert to a Provisional Application
- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
- [ ] Request for Refund
- [ ] CD, Number of CD(s) _____
- [ ] Landscape Table on CD
- [ ] After Allowance Communication to TC
- [ ] Appeal Communication to Board of Appeals and Interferences
- [ ] Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- [ ] Proprietary Information
- [ ] Status Letter
- [x] Other Enclosure(s) (please Identify below):

Form PTO - 1449

Copies of Cited References

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	WOLF, GREENFIELD & SACKS, P.C.		
Signature	/David S. Gesner/		
Printed name	David S. Gesner		
Date	March 23, 2020	Reg. No.	72,100

Certificate of Electronic Filing under 37 C.F.R. § 1.8

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office's electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).

Dated: March 23, 2020 Signature: /Miranda W. Stopa/ (Miranda W. Stopa)

8061295.1

PATENT COOPERATION TREATY

ADVANCE E-MAIL

PCT

From the INTERNATIONAL BUREAU

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)
(PCT Rule 44bis.1(c))

To:

JOHANNES, Marc, S.
Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, MA 02210-2206
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)* 23 August 2018 (23.08.2018)	
Applicant's or agent's file reference N0484.71176	**IMPORTANT NOTICE**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2016/017317	10 February 2016 (10.02.2016)	

Applicant
NUANCE COMMUNICATIONS, INC.

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Agnès Wittmann-Regis

e-mail: pct.team6@wipo.int

Form PCT/IB/326 (January 2004)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference N0484.71176	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2016/017317	International filing date *(day/month/year)* 10 February 2016 (10.02.2016)	Priority date *(day/month/year)*
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant NUANCE COMMUNICATIONS, INC.		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 14 August 2018 (14.08.2018)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Agnès Wittmann-Regis e-mail: pct.team6@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2016/017317	10.02.2016	

International Patent Classification (IPC) or both national classification and IPC
INV. G10L15/32 ADD. G10L21/0216

Applicant
NUANCE COMMUNICATIONS, INC.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA:	Date of completion of this opinion	Authorized Officer
European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Fax: +49 89 2399 - 4465	see form PCT/ISA/210	Zimmermann, Elko Telephone No. +49 89 2399-0

Form PCT/ISA/237 (Cover Sheet) (January 2015)

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing:

   a. ☐ forming part of the international application as filed:

      ☐ in the form of an Annex C/ST.25 text file.

      ☐ on paper or in the form of an image file.

   b. ☐ furnished together with the international application under PCT Rule 13*ter*.1(a) for the purposes of international search only in the form of an Annex C/ST.25 text file.

   c. ☐ furnished subsequent to the international filing date for the purposes of international search only:

      ☐ in the form of an Annex C/ST.25 text file (Rule 13*ter*.1(a)).

      ☐ on paper or in the form of an image file (Rule 13*ter*.1(b) and Administrative Instructions, Section 713).

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that forming part of the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	2-17, 19, 20
	No:	Claims	1, 18
Inventive step (IS)	Yes:	Claims	6, 11, 13, 15
	No:	Claims	1-5, 7-10, 12, 14, 16-20
Industrial applicability (IA)	Yes:	Claims	1-20
	No:	Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1 The subject-matter of claim 1 is not new (Article 33(2) PCT), because EP 1 511 010 A1 discloses a system for detecting a designated wake-up word ("das Wort 'ich'", column 6, line 13), the system comprising:

a plurality of microphones ("Mikrofonanordnung 12" of figure 1, column 5, line 3) to detect acoustic information from a physical space having a plurality of acoustic zones ("Raumrichtungen", see figure 2 and paragraph [0025]);

at least one processor configured to:

receive a first acoustic signal representing the acoustic information received by the plurality of microphones ("Mikrofonanordnung 12");

process ("Optimierungseinheit 10" of figure 1, column 7, line 20) the first acoustic signal to identify content of the first acoustic signal originating from each of the plurality of acoustic zones ("Raumrichtungen");

provide a plurality of second acoustic signals ("vorverarbeitete Mikrofonsignale", column 6, line 33), each of the plurality of second acoustic signals substantially corresponding to the content identified as originating from a respective one of the plurality of acoustic zones ("aus unterschiedlichen Raumrichtungen", column 6, line 35); and

performing automatic speech recognition ("Spracherkenner 11" of figure 1, column 6, line 24) on each of the plurality of second acoustic signals to determine whether the designated wake-up word ("das Wort 'ich'") was spoken (see column 6, lines 13-23).

2 The objection raised against claim 1 is accordingly raised against corresponding claim 18.

3 The features of claims 1 and 2 could serve as basis for a new claim that meets the requirements of Articles 33(2) and (3) PCT.

In order to clarify the difference with respect to the prior art cited above the "wake-up word" claimed in claim 1 should be defined more precisely in the new claim, for example in view of the last three lines of page 1 and the first two lines of page 2, which teach that unless and until the system detects the wake-up word, the system assumes that the acoustic input received from the environment is not directed or intended for the system and will not process the acoustic input further, and once the wake-up word has been detected, the system begins recognizing subsequent speech spoken by the user.

Further, the additional steps of claim 2 should be defined more precisely in the new claim, for example in view of the last sentence of paragraph [0021], which teaches that once a first acoustic zone has been selected, the system performs speech recognition on sounds produced from the selected acoustic zone whilst excluding sounds produced from other acoustic zones.

4 Claim 18 could be amended accordingly.

FEE TRANSMITTAL

Complete if known	
Application Number	13/795,933-Conf. #2321
Filing Date	March 12, 2013
First Named Inventor	William F. Ganong
Examiner Name	H. C. Ho
Art Unit	2644
Practitioner Docket No.	N0484.71090US01

[ ] Applicant asserts small entity status. See 37 CFR 1.27.

[ ] Applicant certifies micro entity status. See 37 CFR 1.29. Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

TOTAL AMOUNT OF PAYMENT ($)240.00

METHOD OF PAYMENT (check all that apply)

[ ] Check [X] Credit Card [ ] Money Order [ ] None [ ] Other (please identify): _____

[X] Deposit Account Deposit Account Number: 23/2825 Deposit Account Name: Wolf, Greenfield & Sacks, P.C.

For the above-identified deposit account, the Director is hereby authorized to (check all that apply):

[ ] Charge fee(s) indicated below

[ ] Charge fee(s) indicated below, **except for the filing fee**

[X] Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17, **except for any excess claims fees or multiple dependent claim fee**

[ ] Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17

[X] Credit any overpayment of fee(s)

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES (U = undiscounted fee; S = small entity fee; M = micro entity fee)

	FILING FEES			SEARCH FEES			EXAMINATION FEES			
Application Type	**U ($)**	**S ($)**	**M ($)**	**U ($)**	**S ($)**	**M ($)**	**U ($)**	**S ($)**	**M ($)**	**Fees Paid ($)**
Utility	300	150*	75	660	330	165	760	380	190	
Design	200	100	50	160	80	40	600	300	150	
Plant	200	100	50	420	210	105	620	310	155	
Reissue	300	150	75	660	330	165	2,200	1,100	550	
Provisional	280	140	70	0	0	0	0	0	0	

* The $150 small entity status filing fee for a utility application is further reduced to $75 for a small entity status applicant who files the application via EFS-Web.

2. EXCESS CLAIM FEES

Fee Description	**Undiscounted Fee ($)**	**Small Entity Fee ($)**	**Micro Entity Fee ($)**
Each claim over 20 (including Reissues)	100	50	25
Each independent claim over 3 (including Reissues)	460	230	115
Multiple dependent claims	820	410	205

Total Claims	**Extra Claims**	**Fee ($)**	**Fee Paid ($)**
_____ - 20 or HP =	_____ x	_____ =	_____

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims	**Extra Claims**	**Fee ($)**	**Fee Paid ($)**
_____ - 3 or HP =	_____ x	_____ =	_____

HP = highest number of independent claims paid for, if greater than 3.

Multiple Dependent Claims	
Fee ($)	**Fee Paid ($)**

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is $400 ($200 for small entity) ($100 for micro entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	**Extra Sheets**	**Number of each additional 50 or fraction thereof**	**Fee ($)**	**Fee Paid ($)**
_____ - 100 =	_____ /50 =	_____ (round **up** to a whole number) x	_____ =	

4. OTHER FEE(S)

	Fees Paid ($)
Non-English specification, $130 fee (no small or micro entity discount)	
Non-electronic filing fee under 37 CFR 1.16(t) for a utility application, $400 fee ($200 small or micro entity)	
Other (e.g., late filing surcharge): 1806 Submission of an Information Disclosure Statement	240.00

SUBMITTED BY

Signature	/David S. Gesner/	Registration No. (Attorney/Agent)	72,100	Telephone	617.646.8000
Name (Print/Type)	David S. Gesner			Date	March 23, 2020

Certificate of Electronic Filing under 37 C.F.R. § 1.8

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office's electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).

Dated: March 23, 2020 Signature: /Miranda W. Stopa/ (Miranda W. Stopa)

8061294.1

DOCKET NO.: N0484.71090US01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor:	William F. Ganong
Application No.:	13/795,933
Confirmation No.:	2321
Filed:	March 12, 2013
For:	METHODS AND APPARATUS FOR DETECTING A VOICE COMMAND
Examiner:	H. C. Ho
Art Unit:	2644

Certificate of Electronic Filing under 37 C.F.R. § 1.8

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office's electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).

Dated: March 23, 2020 Signature: /Miranda W. Stopa/ (Miranda W. Stopa)

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

STATEMENT FILED PURSUANT TO THE DUTY OF DISCLOSURE UNDER 37 C.F.R. §§ 1.56, 1.97 AND 1.98

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. §§ 1.56, 1.97 and 1.98, the undersigned requests consideration of this Information Disclosure Statement.

PART I: Compliance with 37 C.F.R. § 1.97

This Information Disclosure Statement has been filed more than three months after the filing date of this application and after the mailing date of a first Office Action, but before the mailing date of any of a Final Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution in this application.

Please charge our Credit Card in the amount of $240.00 covering the fee set forth in 37 C.F.R. § 1.17(p).

PART II: Information Cited

The undersigned hereby makes of record in the above-identified application the information listed on the attached form PTO-1449 (modified PTO/SB/08). The order of presentation of the references should not be construed as an indication of the importance of the references.

The undersigned hereby makes the following additional information of record in the above-identified application.

The undersigned would like to bring to the Examiner's attention the following co-pending application that may contain subject matter related to this application:

Serial No.	Filing Date	Inventor(s)	Docket No.
*16/074,953	08-02-2018	Prémont et al.	N0484.71176US00

*A copy of this reference is not provided as the Office has waived the requirement under 37 C.F.R. § 1.98(a)(2)(iii) for submitting a copy of a cited U.S. patent application if it is scanned to the Image File Wrapper system and is available on Private PAIR .

The undersigned would like to bring to the Examiner's attention the enclosed search reports or other communications from corresponding or related International or Foreign National Applications:

Serial No.	Date of Mailing	Type(s) of Communication	Docket No.
PCT/US2016/017317	**08-23-2018**	**International Preliminary Report on Patentability**	**N0484.71176WO00**
PCT/US2016/017317	**05-12-2016**	**International Search Report and Written Opinion**	**N0484.71176WO00**

PART III: Remarks

Documents cited anywhere in the Information Disclosure Statement are enclosed unless otherwise indicated. It is respectfully requested that:

1. The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims;

2. The enclosed form PTO-1449 (modified PTO/SB/08) be signed by the Examiner to evidence that the cited information has been fully considered by the United States Patent and Trademark Office during the examination of this application;

Petitioner Exhibit 1004, Page 1183 of 1518

3. The citations for the information be printed on any patent which issues from this application.

By submitting this Information Disclosure Statement, the undersigned makes no representation that a search has been performed, of the extent of any search performed, or that more relevant information does not exist.

By submitting this Information Disclosure Statement, the undersigned makes no representation that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

By submitting this Information Disclosure Statement, the undersigned makes no representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. § 102.

Notwithstanding any statements by the undersigned, the Examiner is urged to form his or her own conclusion regarding the relevance of the cited information.

An early and favorable action is hereby requested.

Petitioner Exhibit 1004, Page 1184 of 1518

The Director is hereby authorized to charge any deficiency or credit any overpayment in the fees occasioned by the filing of this Information Disclosure Statement to our Deposit Account No. 23/2825 under Docket No. N0484.71090US01 from which the undersigned is authorized to draw.

Respectfully submitted,

By:__/David S. Gesner/_____
David S. Gesner
Registration No.: 72,100
WOLF, GREENFIELD & SACKS, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
617.646.8000

Docket No.: N0484.71090US01
Date: March 23, 2020

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To:
Johannes, Marc S.
WOLF, GREENFIELD & SACKS, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
ETATS-UNIS D'AMERIQUE

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT AND THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

Applicant's or agent's file reference N0484.71176	Date of mailing *(day/month/year)* 12 May 2016 (12-05-2016)
International application No. PCT/US2016/017317	**FOR FURTHER ACTION** See paragraphs 1 and 4 below
Applicant NUANCE COMMUNICATIONS, INC.	International filing date *(day/month/year)* 10 February 2016 (10-02-2016)

1. [X] The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

   Filing of amendments and statement under Article 19:
   The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

   When? The time limit for filing such amendments is normally two months from the date of transmittal of the International Search Report.

   How? Directly to the International Bureau of WIPO, 34 chemin des Colombettes 1211 Geneva 20, Switzerland, Fascimile No.: (41-22) 338.82.70

   For more detailed instructions, see *PCT Applicant's Guide,* International Phase, paragraphs 9.004 - 9.011.

2. [ ] The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.

3. [ ] **With regard to any protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

   [ ] the protest together with the decision thereon has been transmitted to the International Bureau together with any applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

   [ ] no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

   The applicant may **submit comments on an informal basis on the written opinion of the International Searching Authority** to the International Bureau. These comments will be made available to the public after international publication. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established.

   Shortly after the expiration of **18 months from the priority date, the international application will be published** by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau before the completion of the technical preparations for international publication (Rules 90*bis*.1 and 90*bis*.3).

   Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase **until 30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for **entry into the national phase** before those designated Offices. In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months. For details about the applicable time limits, Office by Office, see www.wipo.int/pct/en/texts/time_limits.html and the *PCT Applicant's Guide*, National Chapters.

   Within **19 months from the priority date, the applicant may request that a supplementary international search be carried out** by a different International Searching Authority that offers this service (Rule 45*bis*.1). The procedure for requesting supplementary international search is described in the *PCT Applicant's Guide*, International Phase, paragraphs 8.006-8.032.

Name and mailing address of the International Searching Authority European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040 Fax: (+31-70) 340-3016	Authorized officer WAGNER, Judit Tel: +49 (0)89 2399-8023

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Wolf, Greenfield & Sacks, P.C.
MAY 19 2016

Form PCT/ISA/220 (July 2014)

Docketed ___ Already Docketed ___
Not Required ___
Initials 1st ___ 2nd ___

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	**FOR FURTHER ACTION**	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
N0484.71176		
International application No.	International filing date *(day/month/year)*	(Earliest) Priority Date *(day/month/year)*
PCT/US2016/017317	10 February 2016 (10-02-2016)	
Applicant		
NUANCE COMMUNICATIONS, INC.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

[X] It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**
   a. With regard to the **language,** the international search was carried out on the basis of:
      [X] the international application in the language in which it was filed
      [ ] a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))
   b. [ ] This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6*bis*(a)).
   c. [ ] With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. [ ] **Certain claims were found unsearchable** (See Box No. II)

3. [ ] **Unity of invention is lacking** (see Box No III)

4. With regard to the **title,**
   [X] the text is approved as submitted by the applicant
   [ ] the text has been established by this Authority to read as follows:

5. With regard to the **abstract,**
   [X] the text is approved as submitted by the applicant
   [ ] the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings,**
   a. the figure of the **drawings** to be published with the abstract is Figure No. 1
      [X] as suggested by the applicant
      [ ] as selected by this Authority, because the applicant failed to suggest a figure
      [ ] as selected by this Authority, because this figure better characterizes the invention
   b. [ ] none of the figures is to be published with the abstract

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2016/017317

A. CLASSIFICATION OF SUBJECT MATTER
INV. G10L15/32
ADD. G10L21/0216

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
G10L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 511 010 A1 (DAIMLER CHRYSLER AG [DE]) 2 March 2005 (2005-03-02)	1-5, 7-10,12, 14,16-20
A	paragraph [0018] - paragraph [0026]; figures 1,2	6,11,13, 15
A	US 2015/106085 A1 (LINDAHL ARAM M [US]) 16 April 2015 (2015-04-16) abstract; figure 3 paragraph [0002] - paragraph [0010]	1-20
A	US 2012/310646 A1 (HU JWU-SHENG [TW] ET AL) 6 December 2012 (2012-12-06) abstract; figure 1 paragraph [0008]	1-20

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
3 May 2016	12/05/2016

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Zimmermann, Elko

3

Form PCT/ISA/210 (second sheet) (April 2005)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2016/017317

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1511010 A1	02-03-2005	DE 10339973 A1	17-03-2005
		EP 1511010 A1	02-03-2005
		JP 2005079098 A	24-03-2005
		US 2005049864 A1	03-03-2005
US 2015106085 A1	16-04-2015	NONE	
US 2012310646 A1	06-12-2012	TW 201250670 A	16-12-2012
		US 2012310646 A1	06-12-2012

Information on Search Strategy - Pilot phase (see OJ 2015, A86)
The type of information contained in this sheet may change during the pilot for improving the usefulness of this new service.

Application Number
PCT/US2016/017317

TITLE: TECHNIQUES FOR SPATIALLY SELECTIVE WAKE-UP WORD RECOGNITION AND RELATED SYSTEMS AND METHODS

APPLICANT: NUANCE COMMUNICATIONS, INC.

IPC CLASSIFICATION: G10L15/32, G10L21/0216

EXAMINER: Zimmermann, Elko

CONSULTED DATABASES: WPI, DOSYS

CLASSIFICATION SYMBOLS DEFINING EXTENT OF THE SEARCH:

IPC:

CPC: G10L15/32, G10L2021/02166

FI/F-TERMS:

KEYWORDS OR OTHER ELEMENTS FEATURING THE INVENTION:
Once a wake-up word has been detected in one of a plurality of acoustic zones, sounds from this acoustic zone are speech recognized.

EPO FORM P04A42