Hung, as modified by Oh and Freeman, does not teach "the mobile device is capable of connecting to at least one server via a network".

Mozer teaches "the mobile device is capable of connecting to at least one server via a network" (*Mozer, Paragraph [24]).*

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 Hung, Oh and Freeman, by incorporating the teachings of Mozer a mobile device recognizes an acoustic input signal via recognizers, i.e., an always-on recognizer 102 and a second recognizer 104 (*Mozer, Figure 1B, recognizer 102),* wherein the always-on recognizer 102 may communicate with the second recognizer 104 over a network (*Mozer, Figure 1B, Paragraph [24]),* and the second recognizer 104 may be located in a server. The second recognizer is triggered for recognizing the acoustic input signal based on a selection of a classification.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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 Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Patrick Edouard can be reached on 571-272-7603. 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

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13795933	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

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

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

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L5	2	"US 20140274203"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/12/27 21:36
S1	84	("20100185448" | "20110054899" | "20130080167" | "20130080171" | "20130289994" | "20130339028" | "20140012573" | "20140012586" | "5428707" | "5774859" | "5802305" | "5983186" | "6070140" | "6092043" | "6397186" | "6408396" | "6411926" | "6449496" | "6594630" | "6756700" | "6941265" | "6965786" | "7114090" | "7567827" | "7720683" | "7774204" | "8056070" | "8181046" | "8190420" | "8285545" | "8666751").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/11 15:08
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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;	OR	OFF	2014/09/25 14:39

			USOCR; DERWENT			
S8	3	"20140012573"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 17:24
S9	5	"20030040339"	US-PGPUB; USPAT; 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	162	S12 and (GPS location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 20:38
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;	OR	OFF	2014/09/29 20:40

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S17	10166	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 recogniz$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	6	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
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S25	13	S24 and (low$2 near3 (power energy))	US-PGPUB;	OR	OFF	2014/09/29

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S26	2	"20130289994"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 23:54
S27	2	2013/0080171	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 23:54
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;	OR	OFF	2015/07/24 17:10

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
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 ((idl$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; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/11/14 16:19
S46	194	S45 and (sensor)	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/11/14 16:19

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
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	3	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" | "8285545" | "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" | "6092043" | "6756700" | "6941265" | "8056070" | "8620389" | "5802305" | "20100009719" | "8548176" | "20120329389").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/12/20 22:38

12/ 27/ 2015 10:30:59 PM
C:\ Users\ hho3\ Documents\ EAST\ Workspaces\ 13795933.wsp

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: Huy 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
		7,574,361	A1	Yeager et al.	04-05-2007
		2007-0129949	A1	Alberth, JR. et al.	06-07-2007
		2012-0329389	A1	Royston et al.	12-27-2012

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)

[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 Ho/ (12/20/2015)	

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.

4362782.1

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

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 CFR 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 electronic filing system in accordance with 37 CFR § 1.6(a)(4).

Dated: April 4, 2016 Electronic Signature: /Trish McDonald/

AMENDMENT AFTER FINAL ACTION UNDER 37 C.F.R. § 1.116

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

Dear Sir:

INTRODUCTORY COMMENTS

In response to the Office Action dated January 4, 2016, finally rejecting claims 1-20, please amend the above-identified U.S. patent application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 7 of this paper.

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, III
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*)

- [ ] Fee Transmittal Form
  - [ ] Fee Attached
- [X] Amendment/Reply
  - [X] 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
- [ ] Other Enclosure(s) (please Identify below):

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	WOLF, GREENFIELD & SACKS, P.C.		
Signature	/Thomas S. Chlebeck/		
Printed name	Thomas S. Chlebeck		
Date	2016-04-04	Reg. No.	70,616

Certificate of Electronic Filing Under 37 CFR 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 electronic filing system in accordance with 37 CFR § 1.6(a)(4).

Dated: April 4, 2016 Electronic Signature: /Trish McDonald/

4616233.1

REMARKS

In response to the Office Action mailed January 4, 2016, the Assignee of the present application (Nuance Communications, Inc.) respectfully requests reconsideration. Claims 1-20 were previously pending in this application. By this amendment, claims 1, 4-10, and 20 are amended. Claim 3 is canceled without prejudice or disclaimer. No claims are added. As a result, claims 1, 2 and 4-20 are currently pending for examination, with claims 1, 19, and 20 being independent. No new matter is added.

Telephone Interview

The Assignee's representatives, Thomas S. Chlebeck and Marc S. Johannes, thank Examiner Ho for his courtesy extended in granting and conducting a telephone interview on April 1, 2016. The substance of that interview is summarized herein.

Initially, Assignee's representatives discussed techniques described in the specification to provide examples of how one or more contextual cues may be used to assist in detecting whether acoustic input received by a mobile device in a low power mode includes a voice command. Assignee's representatives explained that for a mobile device to operate in an "always-on" mode where it continues to listen to the acoustic environment of the mobile device even when in a low power mode (e.g., an idle or sleep mode), techniques for delivering adequately low false positive and false negative rates may need to be employed to ensure sufficient responsiveness. In particular, an "always-on" mobile device should be able to accurately distinguish between spurious acoustic information in the environment of the mobile device from acoustic information that contains a voice command. To improve performance in this respect, the inventors developed techniques for using contextual cues to assist in detecting whether received acoustic input includes a voice command.

Assignee's representative then described some examples provided in the specification of how contextual cues (e.g., time, location, motion of the mobile device, recent activity, etc.) can be used to improve the mobile device's "always-on" performance. For example, the time at which acoustic input is received can be used as indication of whether acoustic input is a voice command (e.g., acoustic input received when people normally are sleeping, such as at 3 a.m.) is less likely to include a voice command than acoustic input received during waking hours. Location may also be

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used as a contextual cue since voice commands may be more likely to be spoken in some locations than others (e.g., at a loud sports arena). Contextual cues may be used alone or together, for example, if the mobile device is in a car it may make it more likely that acoustic input includes a voice command even if the time suggests otherwise (e.g., during a late drive). As another example, because a user often moves a mobile device prior to speaking to it (e.g., such as when a user raises the device towards the mouth, picks up the device, etc.), motion of the device may also be used as a contextual cue to assess whether acoustic input includes a voice command. Other examples are also provided in the specification.

Thereafter, the pending rejections in view of Hung (U.S. Patent Pub. No. 2014/0012573), Oh (U.S. Patent Pub. No. 2010/0009719), and Freeman (U.S. Patent No. 8.977,255) were discussed, and the Assignee's representatives identified differences between the claims and the references. In particular, Hung uses the content of the acoustic input itself to evaluate whether a voice command is present and therefore does not disclose "a contextual cue comprising information other than content of the acoustic input," as claimed and the Office Action concedes this point (see Office Action at Page 3). Regarding Oh, the hand gestures (which are not contextual cues but are commands themselves) are not utilized in an idle mode (as the Office Action concedes at Page 4), nor are they used to assist in detecting whether acoustic input includes a voice command. Instead, the hand gestures are gestural commands to instruct the device to activate voice recognition during a call.

The Examiner suggested that the claims be amended to recite specific contextual cues, such as those discussed as examples during the telephone conference. The claims are amended herein to recite specific contextual cues to advance the prosecution of this application.

Rejections Under 35 U.S.C. § 103

The Office Action rejects independent claims 1, 19, and 20 under 35 U.S.C. § 103(a) as purportedly being unpatentable over Hung (U.S. Patent Pub. No. 2014/0012573) and further in view of Oh (U.S. Patent Pub. No. 2010/0009719) and Freeman (U.S. Patent No. 8.977,255). The Assignee respectfully requests reconsideration.

Without conceding that the rejections of the claims as previously pending were proper, the Assignee has amended the claims herein to advance prosecution. Claim 1, as amended, recites a

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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 operating in the idle mode;
>
> detecting whether the acoustic input includes a voice command based on 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
>
> ***while the mobile device is operating in the idle mode, using at least one contextual cue comprising information other than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command,***
>
> ***wherein the at least one contextual cue comprises 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.***

Neither Hung, nor Oh, nor Freeman, alone or in any combination, disclose or suggest at least the above emphasized limitations in claim 1. Independent claims 19 and 20 also recite the above emphasized limitations.

The Office Action concedes that Hung does not disclose at least one contextual cue "comprising information other than content of the acoustic input" (Office Action at page 3). Oh does not cure this deficiency. The Office Action points to the hand gestures described in Oh as allegedly disclosing this limitation. However, the hand gestures in Oh are not contextual cues as claimed, are not used to assist in detecting whether acoustic input includes a voice command, and are not used in an idle mode. Specifically, the hand gestures in Oh are themselves commands that are recognized by the device, not contextual cues to assist in detecting commands. Moreover, the hand gestures are not used to assist in detecting whether the acoustic input includes a voice command, but are instead used as a gestural command to instruct the device to turn on speech recognition. Furthermore, even if the gestures in Oh are construed as contextual cues (which they are not), the gestures in Oh are not any of the contextual cues recited in the amended claims. Freeman does not cure this deficiency as Freeman also does not disclose or suggest any of the contextual cues recited in claims 1, 19 and 20. Therefore, even if one of ordinary skill in the art

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would have been motivated to combine Hung, Oh and Freeman (a contention with which the Assignee disagrees), the alleged combination fails to disclose or suggest the above emphasized limitations in claims 1, 19 and 20. Therefore, claims 1, 19, and 20 patentably distinguish over the alleged combination and are in allowable condition. Claims 2-18 depend from claim 1 and are allowable for at least the same reasons.

General Comments on Dependent Claims

Because each of the dependent claims depends from a base claim that is believed to be in condition for allowance, the Assignee believes that it is unnecessary at this time to argue the further distinguishing features of all of the dependent claims. However, the Assignee does not necessarily concur with the interpretation of the dependent claims as set forth in the Office Action, nor does the Assignee concur that the basis for the rejection of any of the dependent claims is proper. Therefore, the Assignee 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 amendments and remarks, the application is believed to be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes for any reason that the application is not in condition for allowance, he is requested to contact the undersigned to discuss any outstanding issues relating to the allowability of the application.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, the Assignee hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, the Director is hereby authorized to charge any deficiency or credit any overpayment in the fees filed, asserted to be filed or which should have been filed herewith to our Deposit Account No. 23/2825 under Docket No. N0484.71090US01 from which the undersigned is authorized to draw.

Dated: 2016-04-04

Respectfully submitted,

By /Thomas S. Chlebeck/
Thomas S. Chlebeck
Registration No.: 70,616
WOLF, GREENFIELD & SACKS, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
617.646.8000

Petitioner Exhibit 1004, Page 532 of 1518

Electronic Acknowledgement Receipt

EFS ID:	25394864
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:	Thomas Stephen Chlebeck/Trish McDonald
Filer Authorized By:	Thomas Stephen Chlebeck
Attorney Docket Number:	N0484.71090US01
Receipt Date:	04-APR-2016
Filing Date:	12-MAR-2013
Time Stamp:	19:47:10
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	Miscellaneous Incoming Letter	N048471090US01-TRN-TSC.pdf	24352 5a8b795f5505b2ad7e726b3858bc2f260aac74a4	no	1

Warnings:	
Information:	

2		N048471090US01-116AMN-TSC.pdf	57160 a2a07bdec8ada90a6f9a3276ea9730a033dc4d5a	yes	11

Multipart Description/PDF files in .zip description		
Document Description	**Start**	**End**
Response After Final Action	1	1
Claims	2	6
Applicant Arguments/Remarks Made in an Amendment	7	11

Warnings:	
Information:	
Total Files Size (in bytes):	81512

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.

AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below, with insertions indicated by underlining and deletions indicated by strikethrough and/or double brackets.

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;

detecting whether the acoustic input includes a voice command based on 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

while the mobile device is operating in the idle mode, using at least one contextual cue comprising information other than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command,

wherein the at least one contextual cue comprises 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. (Previously presented) 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.

3. (Canceled).

4. (Currently amended) The method of claim 1 [[3]], 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.

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5. (Currently amended) The method of claim 1 [[3]], 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.

6. (Currently amended) The method of claim 1 [[3]], 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.

7. (Currently amended) The method of claim 1 [[3]], 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.

8. (Currently amended) The method of claim 1 [[3]], 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.

9. (Currently amended) The method of claim 1 [[3]], 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.

Petitioner Exhibit 1004, Page 536 of 1518

10. (Currently amended) The method of claim 1 [[3]], 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.

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 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.

Petitioner Exhibit 1004, Page 537 of 1518

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. (Original) 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.

18. (Original) 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. (Previously presented) 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 an idle mode, the method comprising:

detecting whether the acoustic input includes a voice command based on 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

while the mobile device is operating in the idle mode, using at least one contextual cue comprising information other than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command,

wherein the at least one contextual cue comprises 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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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:

detect whether the acoustic input includes a voice command based on 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

while the mobile device is operating in the idle mode, use at least one contextual cue comprising information other than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command,

wherein the at least one contextual cue comprises 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.

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

	(Column 1)	(Column 2)		
FOR	NUMBER FILED	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 $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	x $ =	
☐ 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	04/04/2016	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 $80 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	x $420 =	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 $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x $ =	
	☐ 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.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** 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.

LIE
/STANLEY JORDAN/

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.

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
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 04/08/2016

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
04/08/2016	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):

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

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	13/795,933	GANONG ET AL.	
	Examiner	Art Unit	
	HUY C. HO	2644	

All participants (applicant, applicant's representative, PTO personnel):

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

(2) *THOMAS S. CHLEBECK (Reg. 70,616).* (4)____.

Date of Interview: *01 April 2016.*

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

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: *N/A.*

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.*

Identification of prior art discussed: *Hung, Oh and Freeman.*

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…)

Discussed the limitations, i.e., "the contextual cue comprising information other than content of the acoustic input…" over the references Oh and Freeman; some amendments were proposed. No agreement was reached at this time.

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 examiner's 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 applicant's 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 applicant's 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 examiner's 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 examiner's initials.

DO NOT ENTER: /H.H./ (04/21/2016)

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 CFR 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 electronic filing system in accordance with 37 CFR § 1.6(a)(4).

Dated: April 4, 2016 Electronic Signature: /Trish McDonald/

AMENDMENT AFTER FINAL ACTION UNDER 37 C.F.R. § 1.116

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

Dear Sir:

INTRODUCTORY COMMENTS

In response to the Office Action dated January 4, 2016, finally rejecting claims 1-20, please amend the above-identified U.S. patent application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 7 of this paper.

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 04/29/2016

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
04/29/2016	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):

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

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 13/795,933	**Applicant(s)** GANONG ET AL.	
	Examiner HUY C. HO	**Art Unit** 2644	**AIA (First Inventor to File) Status** No

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

THE REPLY FILED 04 April 2016 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

NO NOTICE OF APPEAL FILED

1. ☒ The reply was filed after a final rejection. No Notice of Appeal has been filed. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114 if this is a utility or plant application. Note that RCEs are not permitted in design applications. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires *3* months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action; or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
   c) ☐ A prior Advisory Action was mailed more than 3 months after the mailing date of the final rejection in response to a first after-final reply filed within 2 months of the mailing date of the final rejection. The current period for reply expires months from the mailing date of *the prior Advisory Action* or SIX MONTHS from the mailing date of the final rejection, whichever is earlier.
   Examiner Note: If box 1 is checked, check either box (a), (b) or (c). ONLY CHECK BOX (b) WHEN THIS ADVISORY ACTION IS THE FIRST RESPONSE TO APPLICANT'S FIRST AFTER-FINAL REPLY WHICH WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. ONLY CHECK BOX (c) IN THE LIMITED SITUATION SET FORTH UNDER BOX (c). See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) or (c) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on ___. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendments filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   b) ☐ They raise the issue of new matter (see NOTE below);
   c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.
   NOTE: ___. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): (a) ☒ will not be entered, or (b) ☐ will be entered, and an explanation of how the new or amended claims would be rejected is provided below or appended.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
9. ☐ The affidavit or other evidence filed after final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
10. ☐ The affidavit or other evidence filed after the date of filing the Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
11. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

12. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
13. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
14. ☐ Other: _____.

STATUS OF CLAIMS

15. The status of the claim(s) is (or will be) as follows:
    Claim(s) allowed: .
    Claim(s) objected to: .
    Claim(s) rejected: 1-20.
    Claim(s) withdrawn from consideration: .

/HUY C HO/
Primary Examiner, Art Unit 2644

Continuation of 12. does NOT place the application in condition for allowance because: With respect to the arguments that neither Hung, nor Oh, nor Freeman alone or in any combination, disclose or suggest at least the limitations, i.e., while the mobile device is operating in the idle mode, using at least one contextual cue comprising information other than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command, wherein the at least one contextual cue comprises 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.

The examiner respectfully disagrees because:

1) Hung teaches from the abstract, that a signal processing apparatus includes a speech recognition system and a voice activity detection unit. The voice activity detection unit is configured for detecting whether an audio signal is a voice signal and accordingly generating a voice activity detection result to the speech recognition system to control whether the speech recognition system should perform speech recognition upon the audio signal. Thus these teachings read on the claimed limitations, i.e., "using at least one contextual cue comprising information other than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command".

2) Freeman teaches from Figure 5, Column 6 lines 47-67 and Column 7 lines 1-3, that the voice command process activates a microphone. The device is also operated in a low power mode. If the device is substantially idle and no user input is being received, the electronic device can be placed in a low power mode to conserve battery energy. Decision 506 determines whether an audio pickup has been received. The device can receive an audio pickup even while in the low power mode. When decision 506 determines that an audio pickup has not been received, voice command process 500 awaits to receive an audio pickup. Once the decision 506 determines that an audio pickup has been received, the audio pickup is analyzed 508. When analyzing the audio pickup, the processing can be made efficient and more robust by taking into consideration context with which the audio pickup has been received. The context can pertain to the electronic device, such as a state of the electronic device. In other words, the audio pickup can be analyzed 508 in a context-sensitive manner.

Therefore, Freeman teaches and discloses the claimed limitations, i.e., while the mobile device is operating in the idle mode.

3) Oh teaches a sensing unit 140 may detect a current state of the mobile terminal, such as an open/close status of the mobile terminal 100, a change in a location of the mobile terminal 100, a presence or absence of user contact with the mobile terminal 100, the location of the mobile terminal 100, acceleration/deceleration of the mobile terminal 100, and the like, so as to generate a sensing signal for controlling the operation of the mobile terminal 100. For example, regarding a slide-type mobile terminal, the sensing unit 140 may sense whether a sliding portion of the mobile terminal is open or closed. Other examples include sensing functions, such as the sensing unit 140 sensing the presence or absence of power provided by the power supply 190, the presence or absence of a coupling or other connection between the interface unit 170 and an external device.

Therefore, these teachings read upon the claimed limitations, i.e., wherein the at least one contextual cue comprises 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.

In conclusion, the argued features were written such that they read upon the cited references. .

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, III
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
- [ ] 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):

  Request for Continued Examination

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	WOLF, GREENFIELD & SACKS, P.C.		
Signature	/Marc S. Johannes/		
Printed name	Marc S. Johannes		
Date	May 4, 2016	Reg. No.	64,978

Certificate of Electronic Filing Under 37 CFR 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 electronic filing system in accordance with 37 CFR § 1.6(a)(4).

Dated: May 4, 2016 Electronic Signature for: /Eileen M. MacKenzie/

4736243.1

PTO/SB/17 (03-13)
Approved for use through 01/31/2014. 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.

FEE TRANSMITTAL

Complete if known	
Application Number	13/795,933-Conf. #2321
Filing Date	March 12, 2013
First Named Inventor	William F. Ganong, III
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 ($) 1,900.00

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 ☒ 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	280	140*	70	600	300	150	720	360	180	
Design	180	90	45	120	60	30	460	230	115	
Plant	180	90	45	380	190	95	580	290	145	
Reissue	280	140	70	600	300	150	2,160	1,080	540	
Provisional	260	130	65	0	0	0	0	0	0	

* The $140 small entity status filing fee for a utility application is further reduced to $70 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)	80	40	20
Each independent claim over 3 (including Reissues)	420	210	105
Multiple dependent claims	780	390	195

Total Claims	**Extra Claims**	**Fee ($)**	**Fee Paid ($)**	**Multiple Dependent 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.

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): 1251 Extension for response within first month	200.00
1820 Request for continued examination (RCE) - 2nd and ...	1,700.00

SUBMITTED BY

Signature	/Marc S. Johannes/	Registration No. (Attorney/Agent)	64,978	Telephone	617.646.8000
Name (Print/Type)	Marc S. Johannes			Date	May 4, 2016

Certificate of Electronic Filing Under 37 CFR 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 electronic filing system in accordance with 37 CFR § 1.6(a)(4).

Dated: May 4, 2016 Electronic Signature for: /Eileen M. MacKenzie/

4736242.1

Electronic Acknowledgement Receipt

EFS ID:	25688947
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:	Marc S. Johannes/Eileen MacKenzie
Filer Authorized By:	Marc S. Johannes
Attorney Docket Number:	N0484.71090US01
Receipt Date:	04-MAY-2016
Filing Date:	12-MAR-2013
Time Stamp:	19:25:58
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$1900
RAM confirmation Number	5762
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-MSJ.pdf	24712 8dac691e17032b717eaf86a2da42ebdd6e7b2dcd	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	N048471090US01-FEE-MSJ.pdf	31691 9644e59b5a3e64f29740ead73a4134c4d462b6ad	no	1
Warnings:					
Information:					
3	Extension of Time	N048471090US01-EXT-MSJ.pdf	23004 b9f5ec8fc81e9a048550731d394ed5619d1ddefa	no	1
Warnings:					
Information:					
4	Request for Continued Examination (RCE)	N048471090US01-RCE-MSJ.pdf	27556 5454bf7c09e1ea842df8a287d96a8e14103e9b31	no	1
Warnings:					
This is not a USPTO supplied RCE SB30 form.					
Information:					
5		N048471090US01-AMN-MSJ.pdf	42187 6db9771757b51bf46c7e246910ba8c9810cd3136	yes	8

Multipart Description/PDF files in .zip description

Document Description	Start	End
Amendment Submitted/Entered with Filing of CPA/RCE	1	1
Claims	2	6
Applicant Arguments/Remarks Made in an Amendment	7	8

Warnings:	
Information:	

6	Fee Worksheet (SB06)	fee-info.pdf	32778 9d789fcfe04f2bb09fffa23a9d7438977c4d35da	no	2

Warnings:	
Information:	
Total Files Size (in bytes):	181928

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.

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

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Dated: May 4, 2016 Electronic Signature for: ____/Eileen M. MacKenzie/____

AMENDMENT FILED WITH REQUEST FOR CONTINUED EXAMINATION

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

Dear Sir:

INTRODUCTORY COMMENTS

In response to the Office Action dated January 4, 2016 and the Advisory Action dated April 29, 2016, and in connection with the Request for Continued Examination (RCE) filed herewith, please amend the above-identified U.S. patent application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page __ of this paper.

PTO/AIA/22 (03-13)
Approved for use through 7/31/2016. 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 64,978 .

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

/Marc S. Johannes/	May 4, 2016
Signature	Date
Marc S. Johannes	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 CFR 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 electronic filing system in accordance with 37 CFR § 1.6(a)(4).

Dated: May 4, 2016 Electronic Signature for: /Eileen M. MacKenzie/

4736528.1

PTO/SB/30 (07-14)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Request for Continued Examination (RCE) Transmittal		
Address to: Mail Stop RCE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	Application Number	13/795,933-Conf. #2321
	Filing Date	March 12, 2013
	First Named Inventor	William F. Ganong, III
	Art Unit	2644
	Examiner Name	H. C. Ho
	Attorney Docket Number	N0484.71090US01

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.

Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, to any international application that does not compy with the requirements of 35 U.S.C 371, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO on page 2.)

1. Submission required under 37 CFR 1.114 Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).
   - a. [ ] Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.
     - i. [ ] Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
     - ii. [ ] Other _____
   - b. [X] Enclosed
     - i. [X] Amendment/Reply
     - ii. [ ] Affidavit(s)/ Declaration(s)
     - iii. [ ] Information Disclosure Statement (IDS)
     - iv. [ ] Other _____
2. Miscellaneous
   - a. [ ] Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)
   - b. [ ] Other _____
3. Fees The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.
   - a. [ ] The Director is hereby authorized to charge the following fees, any underpayment of fees, or credit any overpayments, to Deposit Account No. 23/2825 .
     - i. [X] RCE fee required under 37 CFR 1.17(e)
     - ii. [ ] Extension of time fee (37 CFR 1.136 and 1.17)
     - iii. [ ] Other _____
   - b. [ ] Check in the amount of $ _____ enclosed
   - c. [X] Payment by credit card ~~(Form PTO-2038 enclosed)~~

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.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Signature	/Marc S. Johannes/	Date	May 4, 2016
Name (Print/Type)	Marc S. Johannes	Registration No.	64,978

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

Signature			
Name (Print/Type)		Date	

Certificate of Electronic Filing Under 37 CFR 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 electronic filing system in accordance with 37 CFR § 1.6(a)(4).

Dated: May 4, 2016 Electronic Signature for: /Eileen M. MacKenzie/

4736244.1

AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below, with insertions indicated by underlining and deletions indicated by strikethrough and/or double brackets.

1. (Previously presented) 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;

detecting whether the acoustic input includes a voice command based on 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

while the mobile device is operating in the idle mode, using at least one contextual cue comprising information other than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command,

wherein the at least one contextual cue comprises 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. (Previously presented) 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.

3. (Canceled).

4. (Previously presented) 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.

Petitioner Exhibit 1004, Page 556 of 1518

5. (Previously presented) 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.

6. (Previously presented) 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.

7. (Previously presented) 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.

8. (Previously presented) 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.

9. (Previously presented) 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.

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10. (Previously presented) 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.

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 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.

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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. (Original) 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.

18. (Original) 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. (Previously presented) 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 an idle mode, the method comprising:

detecting whether the acoustic input includes a voice command based on 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

while the mobile device is operating in the idle mode, using at least one contextual cue comprising information other than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command,

wherein the at least one contextual cue comprises 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. (Previously presented) 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:

detect whether the acoustic input includes a voice command based on 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

while the mobile device is operating in the idle mode, use at least one contextual cue comprising information other than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command,

wherein the at least one contextual cue comprises 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.

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:	Marc S. Johannes/Eileen MacKenzie
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 $0 paid	1251	1	200	200
Miscellaneous:				
RCE- 2nd and Subsequent Request	1820	1	1700	1700
		Total in USD ($)		**1900**

REMARKS

In response to the Final Office Action mailed January 4, 2016 and the Advisory Action dated April 29, 2016, and in connection with the Request for Continued Examination (RCE) filed herewith, the Assignee of the present application (Nuance Communications, Inc.) respectfully requests reconsideration. No new matter is added.

Response to Advisory Action

The Advisory Action contends that the amendments in the response to the Final Action do not place the application in condition of allowance and points to paragraph [0055] of Oh as allegedly teaching the additional limitations added to the independent claims regarding the contextual cue. However, while Oh may indeed provide a sensing unit 140 to detect the various properties of the mobile terminal described in paragraph [0055], this teaching irrelevant to the claim because Oh does not disclose or suggest using any of items sensed as a contextual cue "to assist in detecting whether the acoustic input includes a voice command," as required by the claims. Neither Hung or Freeman disclose or suggest doing so either. Accordingly, what is entirely missing from the alleged combination of Hung, Freeman or Oh is any teaching whatsoever to use the sensed properties described in paragraph [0055] of Oh as a contextual cue to assist in detecting whether the acoustic input includes a voice command. Thus, claims 1, 19 and 20 patentably distinguish over the alleged combination of Hung, Freeman and Oh.

General Comments on Dependent Claims

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

CONCLUSION

A Notice of Allowance is respectfully requested. If the Examiner believes, after considering the foregoing, that 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.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, the Assignee hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed payment, please charge any deficiency to Deposit Account No. 23/2825 under Docket No. N0484.71090US01, from which the undersigned is authorized to draw.

Dated: May 4, 2016

Respectfully submitted,
Nuance Communications, Inc.

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PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
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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 $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	x $ =	
☐ 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

AMENDMENT **05/04/2016**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 19	Minus	** 20	= 0	x $80 =	0
Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	x $420 =	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

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	x $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	x $ =	
☐ 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.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** 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.

LIE
/KIMBERLY PANNELL/

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.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	2	"US 20140274203"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2016/06/12 23:25
L3	4	"8977255"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/12 23:42
L4	3459	379/88.01-88.03.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/13 00:03
L5	3267	4 and (@ad<"20130312" @rlad<"20130312")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/13 00:03
L6	614	5 and (voice near3 recogniz$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/13 00:03
L7	220	6 and (voice near3 command)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/13 00:03
L8	4	7 and (device near5 (moving motion))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/13 00:05
S1	84	("20100185448" | "20110054899" | "20130080167" | "20130080171" | "20130289994" | "20130339028" | "20140012573" | "20140012586" |	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2014/09/11 15:08

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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"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 19:50
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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	162	S12 and (GPS location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 20:38
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	10166	379/88.01-88.2.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 21:23
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S19	367	S18 and (voice near3 recogniz$5)	US-PGPUB;	OR	OFF	2014/09/29

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S21	253	S19 and (GPS location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 21:24
S22	6	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
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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
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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
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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

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S42	1571	(voice near3 command) and ((idl$3 inactive) near3 (mode state))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/11/14 16:18
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S45	322	S43 and (acoustic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/11/14 16:19
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
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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	3	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
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6/13/2016 12:35:56 AM
C:\Users\hho3\Documents\EAST\Workspaces\13795933.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13795933	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

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

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

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BIB DATA SHEET

CONFIRMATION NO. 2321

SERIAL NUMBER	FILING or 371(c) DATE RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
13/795,933	03/12/2013	455	2644	N0484.71090US01

APPLICANTS

Nuance Communications, Inc., Burlington, MA;

INVENTORS

William F. Ganong III, Brookline, MA;
Paul Adrian Van Mulbregt, Wayland, MA;
Vladimir Sejnoha, Lexington, MA;
Glen Wilson, Maynard, MA;

**** CONTINUING DATA **************************

**** FOREIGN APPLICATIONS **************************

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ****
04/02/2013

Foreign Priority claimed ☐ Yes ☑ No 35 USC 119(a-d) conditions met ☐ Yes ☑ No Verified and Acknowledged /HUY C HO/ Examiner's Signature	☐ Met after Allowance HH Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
		MA	10	20	3

ADDRESS

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

TITLE

METHODS AND APPARATUS FOR DETECTING A VOICE COMMAND

FILING FEE RECEIVED		
1740	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13795933	GANONG ET AL.
	Examiner	Art Unit
	HUY C HO	2644

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	09/25/2014	04/12/2015	07/24/2015	12/27/2015	06/12/2016				
	1	✓	✓	✓	✓	✓				
	2	✓	✓	✓	✓	✓				
	3	✓	✓	✓	✓	-				
	4	✓	✓	✓	✓	✓				
	5	✓	✓	✓	✓	✓				
	6	✓	✓	✓	✓	✓				
	7	✓	✓	✓	✓	✓				
	8	✓	✓	✓	✓	✓				
	9	✓	✓	✓	✓	✓				
	10	✓	✓	✓	✓	✓				
	11	✓	✓	✓	✓	✓				
	12	✓	✓	✓	✓	✓				
	13	✓	✓	✓	✓	✓				
	14	✓	✓	✓	✓	✓				
	15	✓	✓	✓	✓	✓				
	16	✓	✓	✓	✓	✓				
	17	✓	✓	✓	✓	✓				
	18	✓	✓	✓	✓	✓				
	19	✓	✓	✓	✓	✓				
	20	✓	✓	✓	✓	✓				

UNITED STATES PATENT AND TRADEMARK OFFICE

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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	N0484.71090US01	2321

91337 7590 06/16/2016

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
06/16/2016	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):

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

Office Action Summary	Application No. 13/795,933	Applicant(s) GANONG ET AL.	
	Examiner HUY C. HO	Art Unit 2644	AIA (First Inventor to File) 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 *05/04/2016*.

☐ 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 *03/12/2013* 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 ____.

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 05/04/2016 has been entered.

Response to Arguments

3. Applicant's arguments filed 05/04/2016 have been fully considered but they are not persuasive because with respect to the arguments that reference Oh does not disclose or suggest using any items sensed as a contextual cue “to assist in detecting whether the acoustic input includes a voice command", in the context of the amended limitations, i.e., "wherein the at

least one contextual cue includes at least one of 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 a power source of the mobile device."

The examiner respectfully disagrees because Oh teaches and suggests from Paragraph [139] that, the device is configured to recognize user movements and to interpret the user movements as an instruction to help the device to activate the voice recognition function in order to recognize a voice command (*Oh, Paragraph [139], Figure 5, Boxes S101, S102 and S103).*

Therefore, Oh teaches and discloses the argued limitations "wherein the at least one contextual cue includes at least one of 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 a power source of the mobile device."

Claim Rejections - 35 USC § 103

4. 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 of this title, 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.

5. 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).

6. Claims 1, 2, 4-11 and 18-20 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Hung et al. (U.S. Pub. No. 2014/0012573) and further in views of Oh et al. (U.S. Pub. No. 2010/0009719) and Freeman et al. (U.S. Pub. No. 8,977,255).

Regarding claim 1, (Currently Amended) Hung teaches a method of monitoring an acoustic environment of a mobile device for voice commands (*Hung, the Abstract*), the method comprising:

receiving acoustic input from the environment of the mobile device (*Hung, Figure 1, Paragraph(s) [22]-[24]*);

detecting whether the acoustic input includes a voice

command based on performing a plurality of processing stages on the acoustic input, wherein at least one of the plurality of processing stages (*Hung, Figure 1, Paragraph(s) [22]-[24]);* and

using at least one contextual cue to assist in detecting whether the acoustic input includes a voice command (*Hung, Figure 3, Paragraph(s) [37]-[43], Step 308: performs speech recognition on the audio signal to determine whether the audio signal carries the predetermined command information).*

Hung does not teach "the contextual cue comprising information other than content of the acoustic input, wherein the at least one contextual cue includes at least one of 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 a power source of the mobile device."

Oh teaches "the contextual cue comprising information other than content of the acoustic input" (*Oh, Figure 6A, hand gestures such as hand movements approaching to the device causing the device to recognize the cue as the hand movement and cause the device to activate for voice recognition function*) and "wherein the at least one contextual cue includes at least one of 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 a power source of the mobile device." (*Oh, Paragraph [139], Figure 5, Boxes S101, S102 and S103: the device is configured to recognize user movements and to interpret the user movements as an instruction to help the device to activate the voice recognition function in order to recognize a voice command).*

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 Hung by incorporating teachings of Oh a device comprises sensors for recognizing not only voice input but also other than voice recognition contents such as body or hand motions that also causes the trigger for the device to interpret the motions to activate voice recognition function in the device, thus improving the voice recognition for mobile communication devices by taking to the next high and sophisticated level in developments for mobile communication devices in the wireless cellular technology.

Hung as modified by Oh, does not teach the mobile device operates in the idle mode.

Freeman teaches the mobile device operates in the idle mode the mobile device operates in the idle mode (*Freeman, Col. 6 Lines 48-67, Col. 7 Lines 1-14*).

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 Hung and Oh, by incorporating the teachings of Freeman that a multi-function portable device using voice activation is capable of recognize voice commands from audio pickups when the device is in the low power or in idle mode such that the device can conserve battery energy for real functioning when the device detects the voice commands in the audio pickups.

Regarding claim 19, (Currently Amended) Hung 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 (*Hung, the Abstract, Paragraph [4]*), the method comprising:

detecting whether the acoustic input includes a voice command based on performing a plurality of processing stages on the acoustic input, wherein at least one of the plurality of processing stages (*Hung, Figure 1, Paragraph(s) [22]-[24]*); and

using at least one contextual cue to assist in detecting

whether the acoustic input includes a voice command (*Hung, Figure 3, Paragraph(s) [37]-[43], Step 308: performs speech recognition on the audio signal to determine whether the audio signal carries the predetermined command information).*

Hung does not teach "the contextual cue comprising information other than content of the acoustic input, wherein the at least one contextual cue includes at least one of 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 a power source of the mobile device."

Oh teaches "the contextual cue comprising information other than content of the acoustic input" (*Oh, Figure 6A, hand gestures such as hand movements approaching to the device causing the device to recognize the cue as the hand movement and cause the device to activate for voice recognition function*) and "wherein the at least one contextual cue includes at least one of 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 a power source of the mobile device." (*Oh, Paragraph [139],*

Figure 5, Boxes S101, S102 and S103: the device is configured to recognize user movements and to interpret the user movements as an instruction to help the device to activate the voice recognition function in order to recognize a voice command).

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 Hung by incorporating teachings of Oh a device comprises sensors for recognizing not only voice input but also other than voice recognition contents such as body or hand motions that also causes the trigger for the device to interpret the motions to activate voice recognition function in the device, thus improving the voice recognition for mobile communication devices by taking to the next high and sophisticated level in developments for mobile communication devices in the wireless cellular technology.

Hung as modified by Oh, does not teach the mobile device operates in the idle mode.

Freeman teaches the mobile device operates in the idle mode the mobile device operates in the idle mode (*Freeman, Col. 6 Lines 48-67, Col. 7 Lines 1-14*).

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 Hung and Oh, by incorporating the teachings of Freeman

that a multi-function portable device using voice activation is capable of recognize voice commands from audio pickups when the device is in the low power or in idle mode such that the device can conserve battery energy for real functioning when the device detects the voice commands in the audio pickups.

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

at least one input to receive acoustic input from an environment of the mobile device (*Hung, Figure 1, Paragraph(s) [22]-[24]);*

at least one processor configured to:

detect whether the acoustic input includes a voice command based on performing a plurality of processing stages on the acoustic input, wherein at least one of the plurality of processing stages (*Hung, Figure 1, Paragraph(s) [22]-[24]);* and

use at least one contextual cue to assist in detecting whether the acoustic input includes a voice command (*Hung, Figure 3, Paragraph(s) [37]-[43], Step 308: performs speech recognition on the audio signal to determine whether the audio signal carries the predetermined command information).*

Hung does not teach "the contextual cue comprising information other than content of the acoustic input, wherein the at least one contextual cue includes at least one of 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 a power source of the mobile device."

Oh teaches "the contextual cue comprising information other than content of the acoustic input" (*Oh, Figure 6A, hand gestures such as hand movements approaching to the device causing the device to recognize the cue as the hand movement and cause the device to activate for voice recognition function*) and "wherein the at least one contextual cue includes at least one of 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 a power source of the mobile device." (*Oh, Paragraph [139], Figure 5, Boxes S101, S102 and S103: the device is configured to recognize user movements and to interpret the user movements as an instruction to help the device to activate the voice recognition function in order to recognize a voice command).*

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 Hung by incorporating teachings of Oh a device

comprises sensors for recognizing not only voice input but also other than voice recognition contents such as body or hand motions that also causes the trigger for the device to interpret the motions to activate voice recognition function in the device, thus improving the voice recognition for mobile communication devices by taking to the next high and sophisticated level in developments for mobile communication devices in the wireless cellular technology.

Hung as modified by Oh, does not teach the mobile device operates in the idle mode.

Freeman teaches the mobile device operates in the idle mode the mobile device operates in the idle mode (*Freeman, Col. 6 Lines 48-67, Col. 7 Lines 1-14*).

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 Hung and Oh, by incorporating the teachings of Freeman that a multi-function portable device using voice activation is capable of recognize voice commands from audio pickups when the device is in the low power or in idle mode such that the device can conserve battery energy for real functioning when the device detects the voice commands in the audio pickups.

Regarding claim 2, (Previously Presented) Hung, as modified by Oh and Freeman, 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 (*Hung, Figure 1, Step 212)*.

Regarding claim 4, (Currently Amended) Hung, as modified by Oh and Freeman, 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 (*Hung, Figure 1, Paragraph(s) [22]-[23])*.

Regarding claim 5, (Currently Amended) Hung, as modified by Oh and Freeman, 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 (*Hung, Paragraph(s) [21]-[23])*.

Regarding claim 6, (Currently Amended) Hung, as modified by Oh and Freeman, 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 (*Hung, Paragraph(s) [21]-[23]*).

Regarding claim 7, (Currently Amended) Hung, as modified by Oh and Freeman, 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 (*Oh, Figure 6A, Paragraph [55]*).

Regarding claim 8, (Currently Amended) Hung, as modified by Oh and Freeman, 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 (*Freeman, Figure 9E, Col. 10 Lines 60-67, Col. 11 Lines 1-23*).

Regarding claim 9, (Currently Amended) Hung, as modified by Oh and Freeman, 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 (*Hung, Paragraph(s) [4]-[6]*).

Regarding claim 10, (Currently Amended) Hung, as modified by Oh and Freeman, 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 (*Hung, Figure 3, Paragraph(s) [37]-[43]*).

Regarding claim 11, (Original) Hung, as modified by Oh and Freeman, 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 (*Hung, Paragraph(s) [21]-[23]*).

Regarding claim 18, (Original) Hung 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 (*Hung, Paragraph(s) [21]-[23]*).

7. Claims 12-16 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Hung et al. (U.S. Pub. No. 2014/0012573) and further in views of Oh et al. (U.S. Pub. No. 2010/0009719), Freeman et al. (U.S. Pub. No. 8,977,255) and Newman (U.S. Pub. No. 2013/0289994).

Regarding claim 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.

Hung, as modified by Oh and Freeman, does not teach "the mobile device includes a primary processor and a secondary processor".

Newman teaches "the mobile device includes a primary processor and a secondary processor" (*Newman, the Abstract, Paragraph [8]*).

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 Hung, Oh and Freeman, by incorporating teachings of Newman the technique used in an mobile communication device including two processing controllers, i.e., a main CPU controller and a secondary DSP controller, wherein the DSP controller is used for picking up voice and speech recognition at a lower power consumption to conserve battery power for the main CPU controller when the main controller is in inactive mode. The two processing controllers are configured to improve battery energy conservation for a mobile communication device during voice and speech recognition.

Regarding claim 13, (Original) Hung, as modified by Oh, Freeman and Newman, 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 (*Hung, Figure 3, Paragraph(s) [37]-[43]*).

Regarding claim 14, (Previously Presented) Hung, as modified by Oh, Freeman and Newman, 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 (*Hung, Figure 3, Paragraph(s) [37]-[43])*.

Regarding claim 15, (Original) Hung, as modified by Oh, Freeman and Newman, 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 (*Hung, Figure 3, Paragraph(s) [37]-[43], Step 308)*.

Regarding claim 16, (Original) Hung, as modified by Oh, Freeman and Newman, 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 (*Hung, Figure 3, Paragraph(s) [37]-[43])*.

8. Claim 17 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Hung et al. (U.S. Pub. No. 2014/0012573) and further in views of Oh et al. (U.S. Pub. No. 2010/0009719), Freeman et al. (U.S. Pub. No. 8,977,255) and Mozer et al. (U.S. Pub. No. 2013/0080171).

Regarding claim 17, (Original) 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.

Hung, as modified by Oh and Freeman, does not teach "the mobile device is capable of connecting to at least one server via a network".

Mozer teaches "the mobile device is capable of connecting to at least one server via a network" (*Mozer, Paragraph [24]).*

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 Hung, Oh and Freeman, by incorporating the teachings of Mozer a mobile device recognizes an acoustic input signal via recognizers, i.e., an always-on recognizer 102 and a second recognizer 104 (*Mozer, Figure 1B, recognizer 102),* wherein the always-on recognizer 102 may communicate with the second

recognizer 104 over a network (*Mozer, Figure 1B, Paragraph [24])*, and the second recognizer 104 may be located in a server. The second recognizer is triggered for recognizing the acoustic input signal based on a selection of a classification.

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 Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7603. 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

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:	Thomas Stephen Chlebeck/Kyle Spencer
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($)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
		Total in USD ($)		**180**

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, III
Art Unit	2644
Examiner Name	Huy 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

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	WOLF, GREENFIELD & SACKS, P.C.		
Signature	/Thomas S. Chlebeck/		
Printed name	Thomas S. Chlebeck		
Date	2016-07-18	Reg. No.	70,616

Certificate of Electronic Filing Under 37 CFR 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 electronic filing system in accordance with 37 CFR § 1.6(a)(4).

Dated: July 19, 2016 Signature: ___/Kyle D. Spencer/___ (Kyle D. Spencer)

4835671.1

Electronic Acknowledgement Receipt

EFS ID:	26384565
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:	Thomas Stephen Chlebeck/Kyle Spencer
Filer Authorized By:	Thomas Stephen Chlebeck
Attorney Docket Number:	N0484.71090US01
Receipt Date:	19-JUL-2016
Filing Date:	12-MAR-2013
Time Stamp:	09:20:38
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$180
RAM confirmation Number	8648
Deposit Account	232825
Authorized User	CHLEBECK,THOMAS S.

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

Charge any Additional Fees required under 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-TSC.pdf	24614 e8c411db477624753bb3fe7aa12a7d7f4abcb42c	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	N048471090US01-FEE-TSC.pdf	31485 0e3fe9a16cf1e5e13bcac33c4163a7315fe039f6	no	1
Warnings:					
Information:					
3		N048471090US01-IDS-TSC.pdf	28857 8ab650d158503f54f8dc5b494334537f15dz354c	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:					
4	Fee Worksheet (SB06)	fee-info.pdf	30885 afb34b0c0314f6fba1e3dbe376966f0d40e245b9	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	115841		

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.

PTO/SB/17 (03-13)
Approved for use through 01/31/2014. 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.

FEE TRANSMITTAL

Complete if known	
Application Number	13/795,933-Conf. #2321
Filing Date	March 12, 2013
First Named Inventor	William F. Ganong, III
Examiner Name	Huy 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 ($) 180.00

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 ☒ 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	280	140*	70	600	300	150	720	360	180	
Design	180	90	45	120	60	30	460	230	115	
Plant	180	90	45	380	190	95	580	290	145	
Reissue	280	140	70	600	300	150	2,160	1,080	540	
Provisional	260	130	65	0	0	0	0	0	0	

* The $140 small entity status filing fee for a utility application is further reduced to $70 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)	80	40	20
Each independent claim over 3 (including Reissues)	420	210	105
Multiple dependent claims	780	390	195

Total Claims		**Extra Claims**	**Fee ($)**		**Fee Paid ($)**	**Multiple Dependent Claims**	
	- 20 or HP =		x	=		**Fee ($)**	**Fee Paid ($)**
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.							

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	180.00

SUBMITTED BY

Signature	/Thomas S. Chlebeck/	Registration No. (Attorney/Agent)	70,616	Telephone	617.646.8000
Name (Print/Type)	Thomas S. Chlebeck			Date	2016-07-18

Certificate of Electronic Filing Under 37 CFR 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 electronic filing system in accordance with 37 CFR § 1.6(a)(4).

Dated: July 19, 2016 Signature: ___/Kyle D. Spencer/___ (Kyle D. Spencer)

4835670.1

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, 2016
For:	METHODS AND APPARATUS FOR DETECTING A VOICE COMMAND
Examiner:	Huy C. Ho
Art Unit:	2644

CERTIFICATE OF ELECTRONIC FILING UNDER 37 C.F.R. § 1.8

The undersigned hereby certifies that this paper, along with any paper referred to as being attached or enclosed, is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4), on the 19th day of July, 2016.

___/Kyle D. Spencer/___
Kyle D. Spencer

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 $180.00 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.

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.

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.

Petitioner Exhibit 1004, Page 606 of 1518

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: /Thomas S. Chlebeck/
Thomas S. Chlebeck, Reg. No. 70,616
Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
Telephone: (617) 646-8000

Docket No.: N0484.71090US01
Date: 2016-07-18
xNDDx

Petitioner Exhibit 1004, Page 607 of 1518

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, 2016	CONFIRMATION NO.: 2321
	FIRST NAMED INVENTOR: William F. Ganong	
Sheet 1 of 1	GROUP ART UNIT: 2644	EXAMINER: Huy C. Ho

U.S. PATENT DOCUMENTS

Examiner's Initials #	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication or Issue of Cited Document MM-DD-YYYY
		Number	Kind Code		
		8,977,255		Freeman et al.	03-10-2015
		9,112,984	B2	Sejnoha et al.	08-18-2015
		9,361,885		Ganong, III et al.	06-07-2016

FOREIGN PATENT DOCUMENTS

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

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)

[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.

4835632.1

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 09/16/2016

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
09/16/2016	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):

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

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	13/795,933	GANONG ET AL.	
	Examiner	Art Unit	
	HUY C. HO	2644	

All participants (applicant, applicant's representative, PTO personnel):

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

(2) *THOMAS CHLEBECK (Reg. No. 70,616).* (4)____.

Date of Interview: *13 September 2016.*

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

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: *N/A.*

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*.

Identification of prior art discussed: *Oh and Freeman.*

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...)

The limitations, i.e., "contextual cue 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 envirnment of the mobile device and/or a power source of the mobile device", was discussed for distinguishability over the prior art references above. However, no agreement was reached at this time.

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 examiner's 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 applicant's 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 applicant's 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 examiner's 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 examiner's initials.

Electronic Acknowledgement Receipt

EFS ID:	26955143
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:	Thomas Stephen Chlebeck/Eileen MacKenzie
Filer Authorized By:	Thomas Stephen Chlebeck
Attorney Docket Number:	N0484.71090US01
Receipt Date:	16-SEP-2016
Filing Date:	12-MAR-2013
Time Stamp:	17:45:30
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	Miscellaneous Incoming Letter	N048471090US01-TRN-TSC.pdf	24490 7116d6e9225db7d6388fd2714664e1ae53c516d9	no	1

Warnings:

Information:					
2		N048471090US01-AMN-TSC.pdf	60492 cb01938b83d2033fc1d97ae7e8c4f70b230a11a8	yes	11

Multipart Description/PDF files in .zip description		
Document Description	**Start**	**End**
Amendment/Req. Reconsideration-After Non-Final Reject	1	1
Claims	2	6
Applicant Arguments/Remarks Made in an Amendment	7	11

Warnings:	
Information:	
Total Files Size (in bytes):	84982

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.

AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below, with insertions indicated by underlining and deletions indicated by strikethrough and/or double brackets.

1. (Previously presented) 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;

detecting whether the acoustic input includes a voice command based on 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

while the mobile device is operating in the idle mode, using at least one contextual cue comprising information other than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command,

wherein the at least one contextual cue comprises 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. (Previously presented) 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.

3. (Canceled)

4. (Previously presented) 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.

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5. (Previously presented) 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.

6. (Previously presented) 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.

7. (Previously presented) 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.

8. (Previously presented) 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.

9. (Previously presented) 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.

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10. (Previously presented) 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.

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 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.

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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. (Original) 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.

18. (Original) 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. (Previously presented) 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 an idle mode, the method comprising:

detecting whether the acoustic input includes a voice command based on 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

while the mobile device is operating in the idle mode, using at least one contextual cue comprising information other than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command,

wherein the at least one contextual cue comprises 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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20. (Previously presented) 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:

detect whether the acoustic input includes a voice command based on 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

while the mobile device is operating in the idle mode, use at least one contextual cue comprising information other than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command,

wherein the at least one contextual cue comprises 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
(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 CFR 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 electronic filing system in accordance with 37 CFR § 1.6(a)(4).

Dated: September 16, 2016 Electronic Signature for: /Eileen M. MacKenzie/

AMENDMENT IN RESPONSE TO NON-FINAL OFFICE ACTION UNDER 37 C.F.R. § 1.111

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 June 16, 2016, please amend the above-identified U.S. patent application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 7 of this paper.

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, III
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*)

- [ ] Fee Transmittal Form
  - [ ] Fee Attached
- [x] 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
- [ ] Other Enclosure(s) (please Identify below):

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	WOLF, GREENFIELD & SACKS, P.C.		
Signature	/Thomas S. Chlebeck/		
Printed name	Thomas S. Chlebeck		
Date	2016-09-16	Reg. No.	70,616

Certificate of Electronic Filing Under 37 CFR 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 electronic filing system in accordance with 37 CFR § 1.6(a)(4).

Dated: September 16, 2016 Electronic Signature for: /Eileen M. MacKenzie/

4891084.1

REMARKS

In response to the Office Action dated June 16, 2016, Assignee respectfully requests reconsideration. Claims 1, 2, and 4-20 were previously pending in this application. By this amendment, no claims have been amended, added, or canceled. As a result, claims 1, 2, and 4-20 are pending for examination with claims 1, 19, and 20 being independent. No new matter has been added.

Telephone Interview

The Assignee's representative, Thomas S. Chlebeck, thanks Examiner Ho for his courtesy extended in granting and conducting a telephone interview on September 13, 2016. The substance of that interview is summarized herein.

Assignee's representative discussed how the claims have been narrowed and how they distinguish over the references. In particular, Assignee's representative discussed techniques described in the specification to provide examples of how one or more contextual cues (as recited in the claims) may be used to assist in detecting whether acoustic input received by a mobile device in a low power mode includes a voice command. Assignee's representative explained that for a mobile device to operate in an "always-on" mode where it continues to listen to the acoustic environment of the mobile device even when in a low power mode (e.g., an idle or sleep mode), techniques for delivering adequately low false positive and false negative rates may need to be employed to ensure sufficient responsiveness. In particular, an "always-on" mobile device should be able to accurately distinguish between spurious acoustic information in the environment of the mobile device from acoustic information that contains a voice command. To improve performance in this respect, the inventors developed techniques for using contextual cues to assist in detecting whether received acoustic input includes a voice command.

Assignee's representative also described some examples provided in the specification of how contextual cues (e.g., time, location, motion of the mobile device, recent activity, etc.) can be used to improve the mobile device's "always-on" performance. For example, the time at which acoustic input is received can be used as indication of whether acoustic input is a voice command (e.g., acoustic input received when people normally are sleeping, such as at 3 a.m.) is less likely to

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include a voice command than acoustic input received during waking hours. Location may also be used as a contextual cue since voice commands may be more likely to be spoken in some locations than others (e.g., at a loud airport or sports arena). Contextual cues may be used alone or together, for example, if the mobile device is in a car it may make it more likely that acoustic input includes a voice command even if the time suggests otherwise (e.g., during a late drive). As another example, because a user often moves a mobile device prior to speaking to it (e.g., such as when a user raises the device towards the mouth, picks up the device, etc.), motion of the device may also be used as a contextual cue to assess whether acoustic input includes a voice command. Other examples are also provided in the specification.

The pending rejections in view of Hung (U.S. Patent Pub. No. 2014/0012573), Oh (U.S. Patent Pub. No. 2010/0009719), and Freeman (U.S. Patent No. 8.977,255) were also discussed, and the Assignee's representative identified differences between the claims and the references. In particular, Hung uses the content of the acoustic input itself to evaluate whether a voice command is present and therefore does not disclose "a contextual cue comprising information other than content of the acoustic input," as claimed and the Office Action concedes this point (see Office Action at Page 5). Regarding Oh, the hand gestures (which are not contextual cues but are *commands themselves*) are not utilized in an idle mode (as the Office Action concedes at Page 6), nor are they used to assist in detecting whether acoustic input includes a voice command. Instead, the hand gestures are *gestural commands* to instruct the device to activate voice recognition during a call. Regarding Freeman, by *restricting available commands* based on a menu displayed to a user, the menu is not used to assist in detecting whether acoustic input *even includes* a voice command.

The Examiner suggested that this response explain these distinctions clearly and thoroughly so that he could review the references in more detail and verify these distinctions.

Rejections Under 35 U.S.C. § 103

The Office Action rejects independent claims 1, 19, and 20 under 35 U.S.C. § 103(a) as purportedly being unpatentable over Hung (U.S. Patent Publication No. 2014/0012573) and further in views of Oh (U.S. Patent Publication No. 2010/0009719) and Freeman (U.S. Patent No. 8,977,255). The Assignee respectfully requests reconsideration.

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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 operating in the idle mode;
>
> detecting whether the acoustic input includes a voice command based on 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
>
> ***while the mobile device is operating in the idle mode, using at least one contextual cue comprising information other than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command,***
>
> ***wherein the at least one contextual cue comprises 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.***

Neither Hung, nor Oh, nor Freeman, alone or in any combination, disclose or suggest at least the above emphasized limitations in claim 1. Independent claims 19 and 20 also recite the above emphasized limitations.

The Office Action concedes that Hung does not disclose at least one contextual cue "comprising information other than content of the acoustic input" (Office Action at page 5).

Oh does not cure this deficiency. The Office Action points to the hand gestures described in Oh as allegedly disclosing this limitation. However, the *hand gestures* in Oh are not *contextual cues* as claimed, are not used to assist in detecting whether acoustic input includes a voice command, and are not used in an idle mode. Specifically, the hand gestures in Oh are themselves *gestural commands* that are recognized by the device, not contextual cues to assist in detecting commands. Moreover, the hand gestures are not used *to assist in detecting whether the acoustic input includes a voice command*, but are instead *used as a gestural command* to instruct the device to turn on speech recognition. Furthermore, even if the gestures in Oh are construed as contextual cues (which they are not), the gestures in Oh are *not any of the contextual cues recited* in the amended claims ("motion of the mobile device, location of the mobile device, occurrence of an

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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").

Freeman does not cure this deficiency as Freeman also does not disclose or suggest any of the contextual cues recited in claims 1, 19, and 20. Rather, Freeman describes a portable electronic device that can use specific information to restrict available voice commands that may be executed by the device (Abstract; 4:27-44; 5:13-33; 5:50-6:9). This information includes the context of a graphical user interface, such as where in a menu the interface currently is (5:58-67). For example, if the current menu displayed to the user includes the menu items Artist, Album, Playlist, and Settings (as shown in FIG. 7A), the device can ignore any other recognized commands not included in that list of available commands (6:3-9).

Freeman's *restriction of available commands* based on a menu displayed to a user is not using the menu to assist in detecting whether acoustic input *even includes* a voice command. Rather, in an example like that shown in FIG. 7A of Freeman, the menu is simply used to execute *specific* allowed commands and ignore all other commands.

Therefore, even if one of ordinary skill in the art would have been motivated to combine Hung, Oh, and Freeman (a contention with which the Assignee disagrees), the alleged combination fails to disclose or suggest the above emphasized limitations in claims 1, 19, and 20. Therefore, claims 1, 19, and 20 patentably distinguish over the alleged combination and are in allowable condition. Claims 2 and 4-18 depend from claim 1 and are allowable for at least the same reasons.

General Comments on Dependent Claims

Because each of the dependent claims depends from a base claim that is believed to be in condition for allowance, the Assignee believes that it is unnecessary at this time to argue the further distinguishing features of all of the dependent claims. However, the Assignee does not necessarily concur with the interpretation of the dependent claims as set forth in the Office Action, nor does the Assignee concur that the basis for the rejection of any of the dependent claims is proper. Therefore, the Assignee 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 remarks, the application is believed to be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes for any reason that the application is not in condition for allowance, he is requested to contact the undersigned to discuss any outstanding issues relating to the allowability of the application.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, the Assignee hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, the Director is hereby authorized to charge any deficiency or credit any overpayment in the fees filed, asserted to be filed or which should have been filed herewith to our Deposit Account No. 23/2825 under Docket No. N0484.71090US01 from which the undersigned is authorized to draw.

Dated: 2016-09-16

Respectfully submitted,

By /Thomas S. Chlebeck/
Thomas S. Chlebeck
Registration No.: 70,616
WOLF, GREENFIELD & SACKS, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
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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
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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

	(Column 1)	(Column 2)		
FOR	NUMBER FILED	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 $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	x $ =	
☐ 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	09/16/2016	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 $80 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	x $420 =	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 $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x $ =	
	☐ 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.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** 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.

LIE
KIM P. DOZIER

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.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	84	("20100185448" | "20110054899" | "20130080167" | "20130080171" | "20130289994" | "20130339028" | "20140012573" | "20140012586" | "5428707" | "5774859" | "5802305" | "5983186" | "6070140" | "6092043" | "6397186" | "6408396" | "6411926" | "6449496" | "6594630" | "6756700" | "6941265" | "6965786" | "7114090" | "7567827" | "7720683" | "7774204" | "8056070" | "8181046" | "8190420" | "8285545" | "8666751").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;	OR	OFF	2014/09/29 17:24

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S9	5	"20030040339"	US-PGPUB; USPAT; 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	162	S12 and (GPS location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 20:38
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	10166	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 recogniz$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	6	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;	OR	OFF	2014/09/29 21:26

			DERWENT; IBM_TDB			
S26	2	"20130289994"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 23:54
S27	2	2013/0080171	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/29 23:54
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;	OR	OFF	2015/07/24 17:10

			IBM_TDB			
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 ((idl$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; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/11/14 16:19
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	3	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" | "8285545" | "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" | "6092043" | "6756700" | "6941265" | "8056070" | "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;	OR	OFF	2016/06/12 23:42

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
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	614	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; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/13 00:05
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;	OR	OFF	2016/11/06 00:00

			FPRS; EPO; JPO; DERWENT; IBM_TDB			

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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	N0484.71090US01	2321

91337 7590 11/25/2016

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EXAMINER
HO, HUY C

ART UNIT	PAPER NUMBER
2644	

NOTIFICATION DATE	DELIVERY MODE
11/25/2016	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):

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

Office Action Summary	Application No. 13/795,933	Applicant(s) GANONG ET AL.	
	Examiner HUY C. HO	Art Unit 2644	AIA (First Inventor to File) 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 *9/16/2013*.

☐ 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 *3/12/2013* 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 ____.

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.

Response to Arguments

2. Applicant's arguments filed 09/16/2016 have been fully considered but they are not persuasive for the following reasons:

With respect to the arguments that neither Hung, nor Oh, nor Freeman, alone or in any combination, disclose or suggest at least the emphasized limitations in claims 1, 19 and 20, i.e.,

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

detecting whether the acoustic input includes a voice command based on 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

while the mobile device is operating in the idle mode, using at least one contextual cue comprising information other

than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command,

wherein the at least one contextual cue comprises 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.

The examiner respectfully disagrees because:

a. Hung teaches:

receiving acoustic input from the environment of the mobile device while the mobile device is operating in the idle mode (*Hung, Figures 1 and 2, Paragraph(s) [12], [22]-[23]: teaching a signal processing apparatus 100 comprising three main units/circuitries, i.e., signal collection unit 102, speech recognition system 104 and voice activity detection unit 106. During the process of detecting a voice command or voice signals existing in audio signals or audio inputs, the system comprising the signal collection unit 102 and the speech recognition system 104 are in sleeping status or power saving mode. The voice activity detection unit 106 is enabled to detect voice command or voice signals existing in audio signals or audio inputs. Hung emphasizes on this configuration that even though the voice*

activity detection unit 106 is the only enable unit for detecting voice command, and the other two units are in sleeping status or power saving mode, the power of the system is majorly conserved).

detecting whether the acoustic input includes a voice command based on 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 (*Hung, Figures 1 and 2, Paragraph(s) [12], [22]-[23]: the same reasoning and explanations as above*); and

while the mobile device is operating in the idle mode ***(***Hung, Figures 1 and 2, Paragraph(s) [12], [22]-[23]).

b. Freeman teaches detect voice command from audio inputs process happens when a device is in low power mode. Until after a voice command is recognized, the device is operating in normal power mode (Freeman, Figure 5, Boxes 504, 506, 508 and 510: in low power mode, Boxes 510 and 512: once a command is recognized, the device turns to normal power mode).

Therefore, Freeman teaches and discloses “receiving acoustic input from the environment of the mobile device while the mobile device is operating in the idle mode”.

Hung does not teach ***"using at least one contextual cue comprising information other than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command, and wherein the at least one contextual cue comprises 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."***

c. Oh teaches ***"using at least one contextual cue comprising information other than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command, and wherein the at least one contextual cue comprises 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."*** (*Oh, Figures 5, Box S109 and S110, and Paragraph(s) [129]: if a voice command is found, then the device checks for a different occurrence to the device such as touching or button inputs actions that acts on the device, thus read upon the argued limitation, i.e.,* ***the at least one contextual cue comprises 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).

Therefore, the argued features were written such that they read upon the cited references as explained above.

Claim Rejections - 35 USC § 103

3. 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 of this title, 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.

4. 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).

5. Claims 1, 2, 4-11 and 18-20 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Hung et al. (U.S. Pub.

No. 2014/0012573) and further in views of Oh et al. (U.S. Pub. No. 2010/0009719) and Freeman et al. (U.S. Pub. No. 8,977,255).

Regarding claim 1, (Previously Presented) Hung teaches a method of monitoring an acoustic environment of a mobile device for voice commands (*Hung, the Abstract*), the method comprising:

receiving acoustic input from the environment of the mobile device (*Hung, Figure 1, Paragraph(s) [22]-[24]);*

detecting whether the acoustic input includes a voice command based on performing a plurality of processing stages on the acoustic input, wherein at least one of the plurality of processing stages (*Hung, Figure 1, Paragraph(s) [22]-[24]);* and

using at least one contextual cue to assist in detecting whether the acoustic input includes a voice command (*Hung, Figure 3, Paragraph(s) [37]-[43], Step 308: performs speech recognition on the audio signal to determine whether the audio signal carries the predetermined command information).*

Hung does not teach "the contextual cue comprising information other than content of the acoustic input, wherein the at least one contextual cue includes at least one of 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 a power source of the mobile device."

Oh teaches "the contextual cue comprising information other than content of the acoustic input" (*Oh, Figure 6A, hand gestures such as hand movements approaching to the device causing the device to recognize the cue as the hand movement and cause the device to activate for voice recognition function*) and "wherein the at least one contextual cue includes at least one of 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 a power source of the mobile device." (*Oh, Paragraph [139], Figure 5, Boxes S101, S102 and S103: the device is configured to recognize user movements and to interpret the user movements as an instruction to help the device to activate the voice recognition function in order to recognize a voice command).*

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 Hung by incorporating teachings of Oh a device comprises sensors for recognizing not only voice input but also other than voice recognition contents such as body or hand motions that also causes the trigger for the device to interpret

the motions to activate voice recognition function in the device, thus improving the voice recognition for mobile communication devices by taking to the next high and sophisticated level in developments for mobile communication devices in the wireless cellular technology.

Hung as modified by Oh, does not teach the mobile device operates in the idle mode.

Freeman teaches the mobile device operates in the idle mode the mobile device operates in the idle mode (*Freeman, Col. 6 Lines 48-67, Col. 7 Lines 1-14*).

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 Hung and Oh, by incorporating the teachings of Freeman that a multi-function portable device using voice activation is capable of recognize voice commands from audio pickups when the device is in the low power or in idle mode such that the device can conserve battery energy for real functioning when the device detects the voice commands in the audio pickups.

Regarding claim 19, (Previously Presented) Hung 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 (*Hung, the Abstract, Paragraph [4]*), the method comprising:

detecting whether the acoustic input includes a voice command based on performing a plurality of processing stages on the acoustic input, wherein at least one of the plurality of processing stages (*Hung, Figure 1, Paragraph(s) [22]-[24]*); and

using at least one contextual cue to assist in detecting whether the acoustic input includes a voice command (*Hung, Figure 3, Paragraph(s) [37]-[43], Step 308: performs speech recognition on the audio signal to determine whether the audio signal carries the predetermined command information).*

Hung does not teach "the contextual cue comprising information other than content of the acoustic input, wherein the at least one contextual cue includes at least one of 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 a power source of the mobile device."

Oh teaches "the contextual cue comprising information other than content of the acoustic input" (*Oh, Figure 6A, hand gestures such as hand movements approaching to the device causing the device to recognize the cue as the hand movement and*

cause the device to activate for voice recognition function) and "wherein the at least one contextual cue includes at least one of 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 a power source of the mobile device." (*Oh, Paragraph [139], Figure 5, Boxes S101, S102 and S103: the device is configured to recognize user movements and to interpret the user movements as an instruction to help the device to activate the voice recognition function in order to recognize a voice command).*

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 Hung by incorporating teachings of Oh a device comprises sensors for recognizing not only voice input but also other than voice recognition contents such as body or hand motions that also causes the trigger for the device to interpret the motions to activate voice recognition function in the device, thus improving the voice recognition for mobile communication devices by taking to the next high and sophisticated level in developments for mobile communication devices in the wireless cellular technology.

Hung as modified by Oh, does not teach the mobile device operates in the idle mode.

Freeman teaches the mobile device operates in the idle mode the mobile device operates in the idle mode (*Freeman, Col. 6 Lines 48-67, Col. 7 Lines 1-14*).

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 Hung and Oh, by incorporating the teachings of Freeman that a multi-function portable device using voice activation is capable of recognize voice commands from audio pickups when the device is in the low power or in idle mode such that the device can conserve battery energy for real functioning when the device detects the voice commands in the audio pickups.

Regarding claim 20, (Previously Presented) Hung teaches a mobile device (*Hung, the Abstract*), comprising:

at least one input to receive acoustic input from an environment of the mobile device (*Hung, Figure 1, Paragraph(s) [22]-[24]);*

at least one processor configured to:

detect whether the acoustic input includes a voice command based on performing a plurality of processing stages on the acoustic input, wherein at least one of the plurality of processing stages (*Hung, Figure 1, Paragraph(s) [22]-[24]);* and

use at least one contextual cue to assist in detecting whether the acoustic input includes a voice command (*Hung, Figure 3, Paragraph(s) [37]-[43], Step 308: performs speech recognition on the audio signal to determine whether the audio signal carries the predetermined command information).*

Hung does not teach "the contextual cue comprising information other than content of the acoustic input, wherein the at least one contextual cue includes at least one of 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 a power source of the mobile device."

Oh teaches "the contextual cue comprising information other than content of the acoustic input" (*Oh, Figure 6A, hand gestures such as hand movements approaching to the device causing the device to recognize the cue as the hand movement and cause the device to activate for voice recognition function*) and "wherein the at least one contextual cue includes at least one of 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 a power source of the mobile device." (*Oh, Paragraph [139], Figure 5, Boxes S101, S102 and S103: the device is configured to recognize user movements and to interpret the user movements as an instruction to help the device to activate the voice recognition function in order to recognize a voice command).*

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 Hung by incorporating teachings of Oh a device comprises sensors for recognizing not only voice input but also other than voice recognition contents such as body or hand motions that also causes the trigger for the device to interpret the motions to activate voice recognition function in the device, thus improving the voice recognition for mobile communication devices by taking to the next high and sophisticated level in developments for mobile communication devices in the wireless cellular technology.

Hung as modified by Oh, does not teach the mobile device operates in the idle mode.

Freeman teaches the mobile device operates in the idle mode the mobile device operates in the idle mode (*Freeman, Col. 6 Lines 48-67, Col. 7 Lines 1-14*).

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 Hung and Oh, by incorporating the teachings of Freeman that a multi-function portable device using voice activation is capable of recognize voice commands from audio pickups when the device is in the low power or in idle mode such that the device can conserve battery energy for real functioning when the device detects the voice commands in the audio pickups.

Regarding claim 2, (Previously Presented) Hung, as modified by Oh and Freeman, 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 (*Hung, Figure 1, Step 212)*.

Regarding claim 4, (Previously Presented) Hung, as modified by Oh and Freeman, 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 (*Hung, Figure 1, Paragraph(s) [22]-[23])*.

Regarding claim 5, (Previously Presented) Hung, as modified by Oh and Freeman, 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 (*Hung, Paragraph(s) [21]-[23]*).

Regarding claim 6, (Previously Presented) Hung, as modified by Oh and Freeman, 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 (*Hung, Paragraph(s) [21]-[23]*).

Regarding claim 7, (Previously Presented) Hung, as modified by Oh and Freeman, 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 (*Oh, Figure 6A, Paragraph [55]*).

Regarding claim 8, (Previously Presented) Hung, as modified by Oh and Freeman, 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 (*Freeman, Figure 9E, Col. 10 Lines 60-67, Col. 11 Lines 1-23)*.

Regarding claim 9, (Previously Presented) Hung, as modified by Oh and Freeman, 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 (*Hung, Paragraph(s) [4]-[6])*.

Regarding claim 10, (Previously Presented) Hung, as modified by Oh and Freeman, 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 (*Hung, Figure 3, Paragraph(s) [37]-[43])*.

Regarding claim 11, (Original) Hung, as modified by Oh and Freeman, 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 (*Hung, Paragraph(s) [21]-[23])*.

Regarding claim 18, (Original) Hung 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 (*Hung, Paragraph(s) [21]-[23])*.

6. Claims 12-16 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Hung et al. (U.S. Pub. No. 2014/0012573) and further in views of Oh et al. (U.S. Pub. No. 2010/0009719), Freeman et al. (U.S. Pub. No. 8,977,255) and Newman (U.S. Pub. No. 2013/0289994).

Regarding claim 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.

Hung, as modified by Oh and Freeman, does not teach "the mobile device includes a primary processor and a secondary processor".

Newman teaches "the mobile device includes a primary processor and a secondary processor" (*Newman, the Abstract, Paragraph [8]*).

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 Hung, Oh and Freeman, by incorporating teachings of Newman the technique used in an mobile communication device including two processing controllers, i.e., a main CPU controller and a secondary DSP controller, wherein the DSP controller is used for picking up voice and speech recognition at a lower power consumption to conserve battery power for the main CPU controller when the main controller is in inactive mode. The two processing controllers are configured to improve battery energy conservation for a mobile communication device during voice and speech recognition.

Regarding claim 13, (Original) Hung, as modified by Oh, Freeman and Newman, 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 (*Hung, Figure 3, Paragraph(s) [37]-[43]*).

Regarding claim 14, (Previously Presented) Hung, as modified by Oh, Freeman and Newman, 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 (*Hung, Figure 3, Paragraph(s) [37]-[43]*).

Regarding claim 15, (Original) Hung, as modified by Oh, Freeman and Newman, 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 (*Hung, Figure 3, Paragraph(s) [37]-[43], Step 308*).

Regarding claim 16, (Original) Hung, as modified by Oh, Freeman and Newman, 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 (*Hung, Figure 3, Paragraph(s) [37]-[43])*.

7. Claim 17 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Hung et al. (U.S. Pub. No. 2014/0012573) and further in views of Oh et al. (U.S. Pub. No. 2010/0009719), Freeman et al. (U.S. Pub. No. 8,977,255) and Mozer et al. (U.S. Pub. No. 2013/0080171).

Regarding claim 17, (Original) 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.

Hung, as modified by Oh and Freeman, does not teach "the mobile device is capable of connecting to at least one server via a network".

Mozer teaches "the mobile device is capable of connecting to at least one server via a network" (*Mozer, Paragraph [24]).*

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 Hung, Oh and Freeman, by incorporating the teachings of Mozer a mobile device recognizes an acoustic input signal via recognizers, i.e., an always-on recognizer 102 and a second recognizer 104 (*Mozer, Figure 1B, recognizer 102),* wherein the always-on recognizer 102 may communicate with the second recognizer 104 over a network (*Mozer, Figure 1B, Paragraph [24]),* and the second recognizer 104 may be located in a server. The second recognizer is triggered for recognizing the acoustic input signal based on a selection of a classification.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will

expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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 Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7603. 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

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13795933	GANONG ET AL.
	Examiner	**Art Unit**
	HUY C HO	2644

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	09/25/2014	04/12/2015	07/24/2015	12/27/2015	06/12/2016	11/18/2016			
	1	✓	✓	✓	✓	✓	✓			
	2	✓	✓	✓	✓	✓	✓			
	3	✓	✓	✓	✓	-	-			
	4	✓	✓	✓	✓	✓	✓			
	5	✓	✓	✓	✓	✓	✓			
	6	✓	✓	✓	✓	✓	✓			
	7	✓	✓	✓	✓	✓	✓			
	8	✓	✓	✓	✓	✓	✓			
	9	✓	✓	✓	✓	✓	✓			
	10	✓	✓	✓	✓	✓	✓			
	11	✓	✓	✓	✓	✓	✓			
	12	✓	✓	✓	✓	✓	✓			
	13	✓	✓	✓	✓	✓	✓			
	14	✓	✓	✓	✓	✓	✓			
	15	✓	✓	✓	✓	✓	✓			
	16	✓	✓	✓	✓	✓	✓			
	17	✓	✓	✓	✓	✓	✓			
	18	✓	✓	✓	✓	✓	✓			
	19	✓	✓	✓	✓	✓	✓			
	20	✓	✓	✓	✓	✓	✓			

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BIB DATA SHEET

CONFIRMATION NO. 2321

SERIAL NUMBER	FILING or 371(c) DATE RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
13/795,933	03/12/2013	455	2644	N0484.71090US01

APPLICANTS

Nuance Communications, Inc., Burlington, MA;

INVENTORS

William F. Ganong III, Brookline, MA;
Paul Adrian Van Mulbregt, Wayland, MA;
Vladimir Sejnoha, Lexington, MA;
Glen Wilson, Maynard, MA;

**** CONTINUING DATA **************************

**** FOREIGN APPLICATIONS **************************

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ****
04/02/2013

Foreign Priority claimed ☐ Yes ☑ No 35 USC 119(a-d) conditions met ☐ Yes ☑ No Verified and Acknowledged /HUY C HO/ Examiner's Signature	☐ Met after Allowance HH Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
		MA	10	20	3

ADDRESS

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

TITLE

METHODS AND APPARATUS FOR DETECTING A VOICE COMMAND

FILING FEE RECEIVED	FEES: Authority has been given in Paper	☐ All Fees
1740	No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

BIB (Rev. 05/07).

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13795933	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

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

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

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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	N0484.71090US01	2321

91337 7590 01/26/2017

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
01/26/2017	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):

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

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	13/795,933	GANONG ET AL.	
	Examiner	Art Unit	
	HUY C. HO	2644	

All participants (applicant, applicant's representative, PTO personnel):

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

(2) *THOMAS CHLEBCK (70,616).* (4)____.

Date of Interview: *20 January 2017.*

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

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: *N/A.*

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*.

Identification of prior art discussed: *Oh (2010/0009719).*

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...)

Discussion of limitations, i.e., "while the mobile device operating in the idle mode, using at least one contextual cue comprising information other than content of the acoustic input to assist in detecting whether the acoustic input includes a voice command," over reference Oh, i.e., Figures 5 and 6A. Discussion and suggestion for clarifying the claim language for the above limitations to help the claim overcome the reference Oh. A next office action will be provided accordingly based upon submission of a response from the Applicant.

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 examiner's 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 applicant's 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 applicant's 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 examiner's 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 examiner's initials.

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 CFR §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 CFR § 1.6(a)(4).

Dated: March 27, 2017 Electronic Signature for: /Gail Driscoll/

AMENDMENT AFTER FINAL ACTION UNDER 37 C.F.R. § 1.116

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

Dear Sir:

INTRODUCTORY COMMENTS

In response to the Office Action dated November 25, 2016, finally rejecting claims 1, 2, and 4-20, please amend the above-identified U.S. patent application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 7 of this paper.

PTO/SB/17 (03-13)
Approved for use through 01/31/2014. 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.

FEE TRANSMITTAL

Complete if known	
Application Number	13/795,933-Conf. #2321
Filing Date	March 12, 2013
First Named Inventor	William F. Ganong, III
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 ($) 200.00

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 ☒ 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	280	140*	70	600	300	150	720	360	180	
Design	180	90	45	120	60	30	460	230	115	
Plant	180	90	45	380	190	95	580	290	145	
Reissue	280	140	70	600	300	150	2,160	1,080	540	
Provisional	260	130	65	0	0	0	0	0	0	

* The $140 small entity status filing fee for a utility application is further reduced to $70 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)	80	40	20
Each independent claim over 3 (including Reissues)	420	210	105
Multiple dependent claims	780	390	195

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

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

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

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

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): 1251 Extension for response within first month	200.00

SUBMITTED BY

Signature	/Thomas S. Chlebeck/	Registration No. (Attorney/Agent)	70,616	Telephone	617.646.8000
Name (Print/Type)	Thomas S. Chlebeck			Date	2017-03-27

Certificate of Electronic Filing under 37 CFR §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 CFR § 1.6(a)(4).

Dated: March 27, 2017 Electronic Signature for: /Gail Driscoll/

5345819.1

PTO/AIA/22 (03-13)
Approved for use through 7/31/2016. 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.

[ ] attorney or agent of record. Registration number _____.

[X] attorney or agent acting under 37 CFR 1.34. Registration number 70,616.

/Thomas S. Chlebeck/ — Signature
2017-03-27 — Date

Thomas S. Chlebeck — Typed or printed name
617.646.8000 — 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 CFR §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 CFR § 1.6(a)(4).

Dated: March 27, 2017 Electronic Signature for: /Gail Driscoll/

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