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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/284,085	02/25/2019	Ty Loren Carlson	AM2-1882USC2	4530
136607	7590	12/27/2019	EXAMINER	
Lee & Hayes P.C. 601 West Riverside Avenue Suite 1400 Spokane, WA 99201			KING, SIMON	
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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):

lhpto@leehayes.com

Notice of Pre-AIA or AIA Status

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Allowable Subject Matter

2. Claims 4, 13 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

4. Claim(s) 2, 3, 5-12, 14, 22, 23 and 25-28 are rejected under 35 U.S.C. 102(a)(2) as being anticipated by Visser et al. (US 2005/0060142 A1).

Claim 2. A system (**Fig.2**) comprising: one or more processors (**¶0062**); and one or more computer-readable media storing instructions (**¶0062**) that, when executed by the one or more processors, cause the one or more processors to perform operations comprising: receiving audio data that represents at least user speech and background noise (**Fig.2 and ¶0043, receive speech and noise sounds**); identifying the background noise represented by the audio data (**Fig.2, Separation Process**;

¶0021, noise and speech components forms a combination signal. The combination signal is filtered using a noise-reduction filter to identify, reduce or remove noise components); processing at least a portion of the audio data including the background noise to generate processed audio data with less of the background noise (**¶0021, the combination signal is filtered using a noise-reduction filter to identify, reduce or remove noise components);** and determining that the processed audio data represents the user speech (**¶0021 and ¶0043, generates speech output signal from separation process).**

Claims 3, 9 and 23, wherein processing the at least the portion of the audio data comprises removing at least a portion of the background noise from the at least the portion of the audio data to generate the processed audio data (see rejection for claim 2).

Claim 5 and 25, wherein identifying the background noise represented by the audio data comprises at least one of: identifying first background noise represented by the audio data, the first background noise being associated with media content; identifying second background noise represented by the audio data, the second background noise representing additional user speech; or identifying third background noise represented by the audio data, the third background noise representing sound output by a device (**¶0033, one of the significant noise sources may be the operational noise of the device itself).**

Claim 6, 12 and 26, the operations further comprising determining that the user speech includes at least one word associated with performing a function (**¶0063, the**

speech separation system is preferably incorporated into an electronic device that accepts speech input in order to control certain functions) (claim 34).

Claim 7, 14 and 27, the operations further comprising: identifying an electronic device based at least in part on the user speech; and sending the processed audio data to the electronic device (§0063, voice-activated control for electronic device).

Claim 8. A system comprising: one or more processors; and one or more computer-readable media storing instructions that, when executed by the one or more processors, cause the one or more processors to perform operations comprising: receiving audio data that represents at least user speech and background noise; identifying the user speech with respect to the background noise represented by the audio data; and processing at least a portion of the audio data including the user speech to generate processed audio data with less of the background noise (**see rejection for claim 2**).

Claim 10 and 28, wherein the audio data is generated by at least a first microphone, and wherein the operations further comprise: receiving additional audio data generated by at least a second microphone, the additional audio data representing at least a portion of the background noise, wherein processing the at least the portion of the audio data comprises processing, using the additional audio data, the at least the portion of the audio data including the user speech to generate the processed audio data (Fig.2 and §0043).

Claim 11, the operations further comprising determining, using the processed audio data, a location of a user associated with the user speech (claim 11, speech source location).

Claim 22. A method comprising: receiving audio data that represents at least user speech and background noise; identifying the background noise represented by the audio data; processing at least a portion of the audio data including the background noise to generate processed audio data with less of the background noise; and determining that the processed audio data represents the user speech (**see rejection for claim 2**).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SIMON KING whose telephone number is (571)270-1950. The examiner can normally be reached on Monday-Friday 8:00am-4:30pm.

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

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 571-272-7547. 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

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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.

December 21, 2019

/SIMON KING/
Primary Examiner, Art Unit 2653

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	Examiner SIMON KING		Art Unit 2653	Page 1 of 1

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NON-PATENT DOCUMENTS

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

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PTO-892 (Rev. 01-2001)

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Part of Paper No. 20191221