PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7403652

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	INTELLECTUAL PROPERTY SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
INTERACTIONS LLC	06/24/2022
INTERACTIONS CORPORATION	06/24/2022

RECEIVING PARTY DATA

Name:	RUNWAY GROWTH FINANCE CORP.	
Street Address:	205 N MICHIGAN AVE.,	
Internal Address:	SUITE 4200	
City:	CHICAGO	
State/Country:	ILLINOIS	
Postal Code:	60601	

PROPERTY NUMBERS Total: 120

Property Type	Number
Application Number:	16265668
Application Number:	17462889
Application Number:	17514958
Application Number:	16172115
Application Number:	17235804
Application Number:	17079384
Application Number:	17246250
Application Number:	16859938
Application Number:	17500834
Application Number:	16836487
Application Number:	17346071
Application Number:	16920347
Application Number:	16825856
Application Number:	09742779
Application Number:	10946259
Application Number:	12182182
Application Number:	13292436
Application Number:	14526933

PATENT REEL: 060445 FRAME: 0733

507356731

Property Type	Number
Application Number:	11769469
Application Number:	13171600
Application Number:	14082588
Application Number:	11857036
Application Number:	13300752
Application Number:	13648647
Application Number:	10173184
Application Number:	14458282
Application Number:	09904252
Application Number:	10970215
Application Number:	11904085
Application Number:	13291427
Application Number:	13485574
Application Number:	10902085
Application Number:	13767460
Application Number:	11549395
Application Number:	14176439
Application Number:	13875909
Application Number:	12257994
Application Number:	13567550
Application Number:	13943242
Application Number:	12264622
Application Number:	12895359
Application Number:	10162932
Application Number:	12607362
Application Number:	12888012
Application Number:	13847173
Application Number:	11834520
Application Number:	10942605
Application Number:	11809817
Application Number:	12750792
Application Number:	13644305
Application Number:	12328407
Application Number:	13302380
Application Number:	12264700
Application Number:	12343057
Application Number:	14139235
Application Number:	14554164

Property Type	Number		
Application Number:	11005494		
Application Number:	12618371		
Application Number:	13762978		
Application Number:	14018808		
Application Number:	14330739		
Application Number:	10917233		
Application Number:	12503586		
Application Number:	13760897		
Application Number:	14262192		
Application Number:	12633334		
Application Number:	10742854		
Application Number:	12414587		
Application Number:	13236167		
Application Number:	13442350		
Application Number:	13959351		
Application Number:	14551739		
Application Number:	10325296		
Application Number:	12634434		
Application Number:	10742466		
Application Number:	12644393		
Application Number:	13465659		
Application Number:	13914974		
Application Number:	12339989		
Application Number:	10329139		
Application Number:	13708264		
Application Number:	10839536		
Application Number:	12551864		
Application Number:	13935230		
Application Number:	14050658		
Application Number:	13070865		
Application Number:	13936440		
Application Number:	12985174		
Application Number:	14958833		
Application Number:	14805334		
Application Number:	15251868		
Application Number:	14805328		
Application Number:	14877709		
Application Number:	14796351		

Property Type	Number
Application Number:	14735035
Application Number:	14701535
Application Number:	14835670
Application Number:	15169271
Application Number:	16155813
Application Number:	15648385
Application Number:	10902076
Application Number:	11458256
Application Number:	11948364
Application Number:	13293919
Application Number:	15131833
Application Number:	16148884
Application Number:	15384275
Application Number:	16248433
Application Number:	15439801
Application Number:	10326629
Application Number:	11619325
Application Number:	09904253
Application Number:	16027202
Application Number:	09966081
Application Number:	11697935
Application Number:	13026900
Application Number:	13690636
Application Number:	15963915
Application Number:	15900687
Application Number:	16120182

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 3124564206

Email: rsiddiqui@sidley.com
Correspondent Name: RAZA SIDDIQUI

Address Line 1: ONE SOUTH DEARBORN
Address Line 2: SIDLEY AUSTIN LLP

Address Line 4: CHICAGO, ILLINOIS 60603

ATTORNEY DOCKET NUMBER: 100107-30130

NAME OF SUBMITTER: RAZA SIDDIQUI

SIGNATURE:	/razasiddiqui/		
DATE SIGNED:	06/27/2022		
Total Attachments: 10			
source=03 IPSA - Interactions (06.24.20	22) 282549993_1#page1.tif		
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INTELLECTUAL PROPERTY SECURITY AGREEMENT

This INTELLECTUAL PROPERTY SECURITY AGREEMENT (as amended, restated, supplemented or otherwise modified from time to time, this "Agreement") is entered into as of June 24, 2022, among INTERACTIONS LLC, a Delaware limited liability company ("Borrower Representative"), INTERACTIONS CORPORATION, a Delaware corporation, (collectively, "Grantors", and each, a "Grantor") and RUNWAY GROWTH FINANCE CORP., as collateral agent for Lenders (in such capacity, "Agent").

RECITALS

- A. Grantors, certain lenders from time to time party thereto (collectively "Lenders"), and Agent, as administrative agent and collateral agent for lenders, are entering into a Loan and Security Agreement as of the date hereof (as amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement"). Defined terms used herein without definition shall have the meanings set forth in the Loan Agreement.
- B. The Obligations are secured by the Collateral, as defined in the Loan Agreement, including without limitation, all of each Grantor's Intellectual Property.
- C. Grantors' execution and delivery of this Agreement is a condition to the effectiveness of the Loan Agreement.

AGREEMENT

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, each Grantor and Agent hereby agree:

- 1. To secure the Obligations, each Grantor grants Agent a security interest in all of such Grantor's right, title and interest in its Intellectual Property. Each Grantor hereby confirms that the attached schedules of such Grantor's copyright, patent and trademark applications and registrations, which are registered or filed with the United States Patent and Trademark Office or the United States Copyright Office, as applicable, attached hereto as Exhibits A. B and C hereto, respectively, are complete and accurate as of the date hereof.
- 2. Each Grantor hereby authorizes Agent to (a) upon prior notice to such Grantor, modify this Agreement unilaterally by amending the exhibits to this Agreement to include any Intellectual Property which such Grantor obtains subsequent to the date of this Agreement, and (b) file a duplicate of this Agreement containing amended exhibits reflecting such new Intellectual Property with the United States Patent and Trademark Office or the United States Copyright Office, as applicable.
- 3. This Agreement shall be exclusively (without regard to any rules or principles relating to conflicts of laws) governed by, enforced and construed in accordance with the laws of the state of New York and the federal laws of the United States applicable therein.
- 4. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement. The words "execution," "signed," "signature" and words of like import shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity and enforceability as a manually executed signature or the use of a paper-based recordkeeping systems, as the case may be, to the extent and as provided for in any applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act. Delivery of an executed counterpart of a signature page to this Agreement by electronic means including by email delivery of a ".pdf" format data file shall be effective as delivery of an original executed counterpart of this Agreement.
 - 5. This Agreement constitutes a Loan Document.

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[SIGNATURE PAGE TO INTELLECTUAL PROPERTY SECURITY AGREEMENT]

IN WITN WHEREOF, the undersigned have duly executed this Intellectual Property Security Agreement as of the first date written above.

Address of Grantors:	GRANTORS:
31 Hayward Street, Suite E Franklin, MA 02038 Attention: Joseph P. Gildea Email: jgildea@interactions.com	INTERACTIONS LLC By Joseph P. Gldta Name: Joseph P. Gildea Title: Senior Vice President of Finance and Administration
	INTERACTIONS CORPORATION By Joseph P. Gildea Name: Joseph P. Gildea Title: Senior Vice President of Finance and Administration
Address of Agent:	AGENT:
205 N Michigan Ave., Suite 4200 Chicago, IL 60601	RUNWAY GROWTH FINANCE CORP.
Attention: Legal Reporting Email: legalreporting@runwaygrowth.com	By: Name: Title:

[SIGNATURE PAGE TO INTELLECTUAL PROPERTY SECURITY AGREEMENT]

IN WITNESS WHEREOF, the undersigned have duly executed this Intellectual Property Security Agreement as of the first date written above.

Address of Grantors:	GRANTORS:
31 Hayward Street, Suite E Franklin, MA 02038	INTERACTIONS LLC
Attention: Joseph P. Gildea Email: jgildea@interactions.com	ByName:Title:
	INTERACTIONS CORPORATION
	ByName:Title:
Address of Agent:	AGENT:
205 N Michigan Ave., Suite 4200 Chicago, IL 60601 Attention: Legal Reporting Email: legalreporting@runwaygrowth.com	By:

EXHIBIT A

COPYRIGHTS

None.

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EXHIBIT B

No.	Title	Country	Patent No./	Issue Date/	Status	Current Owner
			Application No.	App. Date		
1.	Dialog management using knowledge graph-driven information state in a natural language processing system.	USA	11288457 16265668	2022-03-29 2019-02-01	Granted	Interactions LLC
2.	Annotating and Modeling Natural Language Semantics Through Annotation Conversion.	USA	17462889	2021-08-31	Pending	Interactions LLC
3.	Automated Workflow Selection for Agent Within an Electronic Conversation System.	USA	17514958	2021-10-29	Pending	Interactions LLC
4.	Extracting Natural Language Semantics From Speech Without the Use of Speech Recognition.	USA	16172115	2018-10-26	Pending	Interactions LLC
5.	Induction of Dialog Flow Within a Conversational Natural Language System.	USA	17235804	2021-04-21	Pending	Interactions LLC
6.	Intelligent Agent Assistant for Natural Language Understanding in a Customer Service System.	USA	17079384	2020-10-23	Pending	Interactions LLC
7.	Neural Network Based Conversation-Aware Automatic Speech Recognition.	USA	17/246,250	2021-04-30	Pending	Interactions LLC
8.	Universal Semi-Word Model for Vocabulary Contraction in Automatic Speech Recognition.	USA	16859938	2020-04-27	Pending	Interactions LLC
9.	Utterance Endpointing in Task-Oriented Conversational Systems.	USA	17500834	2021-10-13	Pending	Interactions LLC
10.	Virtual Assistant Architecture for Natural Language Understanding in a Customer Service System.	USA	16836487	2020-03-31	Pending	Interactions LLC
11.	Virtual Assistant Architecture for Natural Language Understanding in a Customer Service System.	USA	17346071	2021-06-11	Pending	Interactions LLC
12.	Zero Day Modeling for Real-time Intelligent Virtual Assistant.	USA	16920347	2020-07-02	Pending	Interactions LLC
13.	Accelerating agent performance in a natural language processing system.	USA	11314942 16825856	2022-04-26 2020-03-20	Granted	Interactions LLC
14.	Apparatus and method for phonetically screening predetermined character strings.	USA	6804650 09742779	2004-10-12 2000-12-20	Granted	Interactions LLC
15.	Apparatus and method for phonetically screening predetermined character strings.	USA	7337117 10946259	2008-02-26 2004-09-21	Granted	Interactions LLC
16.	Transparent voice registration and verification method and system.	USA	8077836 12182182	2011-12-13 2008-07-30	Granted	Interactions LLC
17.	Transparent voice registration and verification method and system.	USA	8406382 13292436	2013-03-26 2011-11-09	Granted	Interactions LLC
18.	Transparent voice registration and verification method and system.	USA	9369577 14526933	2016-06-14 2014-10-29	Granted	Interactions LLC
19.	Voice over IP based biometric authentication.	USA	7995995 11769 4 69	2011-08-09 2007-06-27	Granted	Interactions LLC
20.	Voice over IP based biometric authentication.	USA	8615219 13171600	2013-12-24 2011-06-29	Granted	Interactions LLC
21.	Voice over IP based voice biometric authentication.	USA	9118671 1 4 082588	2015-08-25 2013-11-18	Granted	Interactions LLC
22.	System and method of generating responses to text-based messages.	USA	8082151 11857036	2011-12-20 2007-09-18	Granted	Interactions LLC
23.	System and method of generating responses to text-based messages.	USA	8296140 13300752	2012-10-23 2011-11-21	Granted	Interactions LLC
24.	System and method of generating responses to text-based messages.	USA	8566096 13648647	2013-10-22 2012-10-10	Granted	Interactions LLC
25.	System and method of providing conversational visual prosody for talking heads.	USA	7136818 10173184	2006-11-1 4 2002-06-17	Granted	Interactions LLC
26.	System and method of providing conversational visual prosody for talking heads.	USA	8131551 1 44 58282	2012-03-06 2006-07-18	Granted	Interactions LLC
27.	Systems and methods for extracting meaning from multimodal inputs using finite-state devices.	USA	6868383 09904252	2005-03-15 2001-07-12	Granted	Interactions LLC

281042987v.7

No.	Title	Country	Patent No./ Application	Issue Date/ App. Date	Status	Current Owner
			No.			
28.	Systems and methods for extracting meaning from multimodal inputs using finite-state devices.	USA	7295975 10970215	2007-11-13 2004-10-21	Granted	Interactions LLC
29.	Systems and methods for extracting meaning from multimodal inputs using finite-state devices.	USA	8103502 1190 4 085	2012-01-24 2007-09-26	Granted	Interactions LLC
30.	Systems and methods for extracting meaning from multimodal inputs using finite-state devices.	USA	8214212 13291427	2012-07-03 2011-11-08	Granted	Interactions LLC
31.	Systems and methods for extracting meaning from multimodal inputs using finite-state devices.	USA	8355916 13485574	2013-01-15 2012-05-31	Granted	Interactions LLC
32.	Voice over IP based biometric authentication.	USA	7254383 10902085	2007-08-07 2004-07-30	Granted	Interactions LLC
33.	Transparent voice registration and verification method and system.	USA	8913720 13767460	2014-12-16 2013-02-14	Granted	Interactions LLC
34.	Method of active learning for automatic speech recognition.	USA	8650033 11549395	2014-02-11 2006-10-13	Granted	Interactions LLC
35.	Method of active learning for automatic speech recognition.	USA	8990084 14176439	2015-03-24 2014-02-10	Granted	Interactions LLC
36.	Methods, apparatus and articles of manufacture to manage routing in networks.	USA	9083606 13875909	2015-07-14 2013-05-02	Granted	Interactions LLC
37.	System and method for audibly presenting selected text.	USA	8239201 12257994	2012-08-07 2008-10-24	Granted	Interactions LLC
38.	System and method for audibly presenting selected text.	USA	8489400 13567550	2013-07-16 2012-08-06	Granted	Interactions LLC
39.	System and method for audibly presenting selected text.	USA	9117445 13943242	2015-08-25 2013-07-16	Granted	Interactions LLC
40.	System and method for blending synthetic voices.	USA	7966186 12264622	2011-06-21 2008-11-04	Granted	Interactions LLC
41.	System and method for combining speech recognition outputs from a plurality of domain-specific speech recognizers via machine learning.	USA	8812321 12895359	2014-08-19 2010-09-30	Granted	Interactions LLC
42.	System and method for configuring voice synthesis.	USA	7305340 10162932	2007-12-04 2002-06-05	Granted	Interactions LLC
43.	System and method for configuring voice synthesis.	USA	8086459 12607362	2011-12-27 2009-10-28	Granted	Interactions LLC
44.	System and method for enhancing voice-enabled search based on automated demographic identification.	USA	8401853 12888012	2013-03-19 2010-09-22	Granted	Interactions LLC
45.	System and method for enhancing voice-enabled search based on automated demographic identification.	USA	9189483 13847173	2015-11-17 2013-03-19	Granted	Interactions LLC
4 6.	System and method for facilitating call routing using speech recognition.	USA	7653549 11834520	2010-01-26 2007-08-06	Granted	Interactions LLC
4 7.	System and method for optimizing prompts for speechenabled applications.	USA	7043435 10942605	2006-05-09 2004-09-16	Granted	Interactions LLC
48.	System and method for processing speech.	USA	7720203 11809817	2010-05-18 2007-06-01	Granted	Interactions LLC
49.	System and method for processing speech.	USA	8306192 12750792	2012-11-06 2010-03-31	Granted	Interactions LLC
50.	System and method for processing speech.	USA	9112972 13644305	2015-08-18 2012-10-04	Granted	Interactions LLC
51.	System and method for pronunciation modeling.	USA	8073693 12328407	2011-12-06 2008-12-04	Granted	Interactions LLC
52.	System and method for pronunciation modeling.	USA	8862470 13302380	2014-10-14 2011-11-22	Granted	Interactions LLC
53.	System and method for providing a compensated speech recognition model for speech recognition.	USA	7996220 12264700	2011-08-09 2008-11-04	Granted	Interactions LLC
54.	System and method for recognizing speech with dialect grammars.	USA	8635068 12343057	2014-01-21 2008-12-23	Granted	Interactions LLC
55.	System and method for recognizing speech with dialect grammars.	USA	8924215 14139235	2014-12-30 2013-12-23	Granted	Interactions LLC

No.	Title	Country	Patent No./ Application No.	Issue Date/ App. Date	Status	Current Owner
56.	System and method for recognizing speech with dialect grammars.	USA	9082405 14554164	2015-07-14 2014-11-26	Granted	Interactions LLC
57.	System and method for speech recognition-enabled automatic call routing.	USA	7242751 11005494	2007-07-10 2004-12-06	Granted	Interactions LLC
58.	System and method for standardized speech recognition infrastructure.	USA	8374867 12618371	2013-02-12 2009-11-13	Granted	Interactions LLC
59.	System and method for standardized speech recognition infrastructure.	USA	8532992 13762978	2013-09-10 2013-02-08	Granted	Interactions LLC
60.	System and method for standardized speech recognition infrastructure.	USA	8781831 1 4 018808	2014-07-15 2013-09-05	Granted	Interactions LLC
61.	System and method for standardized speech recognition infrastructure.	USA	9053704 14330739	2015-06-09 2014-07-14	Granted	Interactions LLC
62.	System and method for targeted tuning module of a speech recognition system.	USA	7580837 10917233	2009-08-25 2004-08-12	Granted	Interactions LLC
63.	System and method for targeted tuning of a speech recognition system.	USA	8401851 12503586	2013-03-19 2009-07-15	Granted	Interactions LLC
64.	System and method for targeted tuning of a speech recognition system.	USA	8751232 13760897	2014-06-10 2013-02-06	Granted	Interactions LLC
65.	System and method for targeted tuning of a speech recognition system.	USA	9368111 14262192	2016-06-14 2014-04-25	Granted	Interactions LLC
66.	System and method for training adaptation-specific acoustic models for automatic speech recognition.	USA	8600749 12633334	2013-12-03 2009-12-08	Granted	Interactions LLC
67.	System and method for unsupervised and active learning for automatic speech recognition.	USA	7533019 10742854	2009-05-12 2003-12-23	Granted	Interactions LLC
68.	System and method for unsupervised and active learning for automatic speech recognition.	USA	8024190 12414587	2011-09-20 2009-03-30	Granted	Interactions LLC
69.	System and method for unsupervised and active learning for automatic speech recognition.	USA	8155960 13236167	2012-04-10 2011-09-19	Granted	Interactions LLC
70.	System and method for unsupervised and active learning for automatic speech recognition.	USA	8504363 13442350	2013-08-06 2012-04-09	Granted	Interactions LLC
71.	System and method for unsupervised and active learning for automatic speech recognition.	USA	8914283 13959351	2014-12-16 2013-08-05	Granted	Interactions LLC
72.	System and method for unsupervised and active learning for automatic speech recognition.	USA	9147394 14551739	2015-09-29 2014-11-24	Granted	Interactions LLC
73.	System and method of context-sensitive help for multi- modal dialog systems.	USA	7177815 10325296	2007-02-13 2002-12-19	Granted	Interactions LLC
74.	Evaluating prompt alternatives for speech-enabled applications.	USA	8112282 12634434	2012-02-07 2009-12-09	Granted	Interactions LLC
75.	Method and apparatus for automatically building conversational systems.	USA	7660400 10742466	2010-02-09 2003-12-19	Granted	Interactions LLC
76.	Method and apparatus for automatically building conversational systems.	USA	8175230 12644393	2012-05-08 2009-12-22	Granted	Interactions LLC
77.	Method and apparatus for automatically building conversational systems.	USA	8462917 13465659	2013-06-11 2012-05-07	Granted	Interactions LLC
78.	Method and apparatus for automatically building conversational systems.	USA	8718242 13914974	2014-05-06 2013-06-11	Granted	Interactions LLC
79.	Method and apparatus for managing routing in a network.	USA	7911976 12339989	2011-03-22 2008-12-19	Granted	Interactions LLC
80.	Method of active learning for automatic speech recognition.	USA	7149687 10329139	2006-12-12 2002-12-24	Granted	Interactions LLC
81.	Apparatus and method for processing service interactions	USA	8484042 13708264	2013-07-09 2012-12-07	Granted	Interactions LLC
82.	Apparatus and method for processing service interactions.	USA	7606718 10839536	2009-10-20 2004-05-05	Granted	Interactions LLC
83.	Apparatus and method for processing service interactions.	USA	8332231 12551864	2012-12-11 2009-09-01	Granted	Interactions LLC

Title	Country	Patent No./	Issue Date/	Status	Current Owner
		No.	App. Date		
Apparatus and method for processing service interactions.	USA	8626520 13935230	2014-01-07 2013-07-03	Granted	Interactions LLC
Automated recognition system for natural language understanding.	USA	9472185 14050658	2016-10-18 2013-10-10	Granted	Interactions LLC
Automated speech recognition proxy system for natural language understanding	USA	8484031 13070865	2013-07-09 2011-03-24	Granted	Interactions LLC
Automated speech recognition proxy system for natural language understanding	USA	9245525 13936440	2016-01-26 2013-07-08	Granted	Interactions LLC
Automated speech recognition system for natural language understanding.	USA	8560321 12985174	2013-10-15 2011-01-05	Granted	Interactions LLC
Automated speech recognition proxy system for natural language understanding.	USA	9741347 14958833	2017-08-22 2015-12-03	Granted	Interactions LLC
Voice over IP based biometric authentication.	USA	9614841 14805334	2017-04-04 2015-07-21	Granted	Interactions LLC
Automated recognition system for natural language understanding.	USA	10147419 15251868	2018-12-04 2016-08-30	Granted	Interactions LLC
System and method for audibly presenting selected text.	USA	9558737 14805328	2017-01-31 2015-07-21	Granted	Interactions LLC
System and method for enhancing voice-enabled search based on automated demographic identification.	USA	9697206 14877709	2017-07-04 2015-10-07	Granted	Interactions LLC
System and method for processing speech.	USA	9350862 14796351	2016-05-24 2015-07-10	Granted	Interactions LLC
System and method for recognizing speech with dialect grammars.	USA	9361880 14735035	2016-06-07 2015-06-09	Granted	Interactions LLC
System and method for standardized speech recognition infrastructure.	USA	9336773 14701535	2016-05-10 2015-05-01	Granted	Interactions LLC
System and method for unsupervised and active learning for automatic speech recognition.	USA	9378732 14835670	2016-06-28 2015-08-25	Granted	Interactions LLC
System and method for unsupervised and active learning for automatic speech recognition.	USA	98 4 2587 15169271	2017-12-12 2016-05-31	Granted	Interactions LLC
Automated recognition system for natural language understanding.	USA	10810997 16155813	2020-10-20 2018-10-09	Granted	Interactions LLC
Automated speech recognition proxy system for natural language understanding.	USA	10049676 15648385	2018-08-14 2017-07-12	Granted	Interactions LLC
Centralized biometric authentication.	USA	7107220 10902076	2006-09-12 2004-07-30	Granted	Interactions LLC
Centralized biometric authentication.	USA	7324946 11458256	2008-01-29 2006-07-18	Granted	Interactions LLC
Centralized biometric authentication.	USA	8082154 11948364	2011-12-20 2007-11-30	Granted	Interactions LLC
Centralized biometric authentication.	USA	8626513 13293919	2014-01-07 2011-11-10	Granted	Interactions LLC
Hierarchical speech recognition decoder.	USA	10096317 15131833	2018-10-09 2016-04-18	Granted	Interactions LLC
Hierarchical speech recognition decoder.	USA	10482876 16148884	2019-11-19 2018-10-01	Granted	Interactions LLC
Underspecification of intents in a natural language processing system.	USA	10216832 15384275	2019-02-26 2016-12-19	Granted	Interactions LLC
Underspecification of intents in a natural language processing system.	USA	10796100 16248433	2020-10-06 2019-01-15	Granted	Interactions LLC
Voice over IP based biometric authentication.	USA	10122712 15439801	2018-11-06 2017-02-22	Granted	Interactions LLC
System and method of handling problematic input during context-sensitive help for multi-modal dialog systems.	USA	7177816 10326629	2007-02-13 2002-12-19	Granted	Interactions LLC
	Apparatus and method for processing service interactions. Automated recognition system for natural language understanding. Automated speech recognition proxy system for natural language understanding. Automated speech recognition proxy system for natural language understanding. Automated speech recognition system for natural language understanding. Automated speech recognition proxy system for natural language understanding. Voice over IP based biometric authentication. Automated recognition system for natural language understanding. Voice over IP based biometric authentication. Automated recognition system for natural language understanding. System and method for audibly presenting selected text. System and method for enhancing voice-enabled search based on automated demographic identification. System and method for processing speech. System and method for recognizing speech with dialect grammars. System and method for recognizing speech with dialect grammars. System and method for unsupervised and active learning for automatic speech recognition. System and method for unsupervised and active learning for automatic speech recognition. Automated recognition system for natural language understanding. Automated speech recognition proxy system for natural language understanding. Centralized biometric authentication. Centralized biometric authentication. Centralized biometric authentication. Centralized biometric authentication. Underspecification of intents in a natural language processing system. Underspecification of intents in a natural language processing system. Voice over IP based biometric authentication.	Apparatus and method for processing service interactions. Automated recognition system for natural language understanding. Automated speech recognition proxy system for natural language understanding. Automated speech recognition proxy system for natural language understanding. Automated speech recognition system for natural language understanding. Automated speech recognition proxy system for natural language understanding. Automated speech recognition proxy system for natural language understanding. Voice over IP based biometric authentication. USA Automated recognition system for natural language understanding. System and method for audibly presenting selected text. System and method for enhancing voice-enabled search based on automated demographic identification. System and method for processing speech. USA System and method for standardized speech recognition infrastructure. System and method for unsupervised and active learning for automatic speech recognition. Automated recognition system for natural language understanding. Automated recognition system for natural language understanding. Centralized biometric authentication. USA Centralized biometric authentication. USA Centralized biometric authentication. USA Usa Underspecification of intents in a natural language processing system. Underspecification of intents in a natural language processing system. Voice over IP based biometric authentication. USA System and method of handling problematic input during context-sensitive help for multi-modal dialog	Application No. Apparatus and method for processing service interactions. Automated recognition system for natural language understanding. Automated speech recognition proxy system for natural language understanding. Automated speech recognition proxy system for natural language understanding. Automated speech recognition proxy system for natural language understanding. Automated speech recognition system for natural language understanding. Automated speech recognition system for natural unguage understanding. Voice over IP based biometric authentication. Voice over IP base	Application App. Date No.	Application No. Name N

No.	Title	Country	Patent No./ Application No.	Issue Date/ App. Date	Status	Current Owner
111.	System and method of handling problematic input during context-sensitive help for multi-modal dialog systems.	USA	7451088 11619325	2008-11-11 2007-01-03	Granted	Interactions LLC
112.	Systems and methods for extracting meaning from multimodal inputs using finite-state devices.	USA	7069215 09904253	2006-06-27 2001-07-12	Granted	Interactions LLC
113.	Real-time privacy filter.	USA	11210 4 61 16027202	2021-12-28 2018-07-03	Granted	Interactions LLC
114.	System and method for processing speech recognition results.	USA	7219058 09966081	2007-05-15 2001-10-01	Granted	Interactions LLC
115.	System and method for processing speech recognition.	USA	790 4 29 4 11697935	2011-03-08 2007-04-09	Granted	Interactions LLC
116.	System and method for processing speech recognition.	USA	8346550 13026900	2013-01-01 2011-02-14	Granted	Interactions LLC
117.	System and method for processing speech recognition.	USA	8571861 13690636	2013-10-29 2012-11-30	Granted	Interactions LLC
118.	Accelerating agent performance in a natural language processing system.	USA	10621282 15963915	2020-04-14 2018-04-26	Granted	Interactions LLC
119.	Bootstrapping multilingual natural language understanding via machine translation.	USA	10891 4 35 15900687	2021-01-12 2018-02-20	Granted	Interactions LLC
120.	Proxy for selective use of human and artificial intelligence in a natural language understanding system.	USA	10789943 16120182	2020-09-29 2018-08-31	Granted	Interactions LLC
121.	Methods, Apparatus and Articles of Manufacture to Manage Routing in Networks	USA	8451754 13026948	2013-05-28 2011-02-14	Granted	Interactions LLC
122.	System and Method for Configuring Voice Synthesis	USA	8620668 13690037	2013-12-31 2011-11-23	Granted	Interactions LLC
123.	System and Method for Configuring Voice Synthesis	USA	7624017 13303405	2009-11-24 2007-10-26	Granted	Interactions LLC
124.	System and Method for Configuring Voice Synthesis	USA	7624017 11924682	2009-11-24 2007-10-26	Granted	Interactions LLC

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EXHIBIT C

TRADEMARKS

Owner	Description	Registration/Serial	Registration/Application	
		Number	Date	
Interactions LLC	HELLOX	90767295	6/10/2021	
		(Intent to Use)		
Interactions LLC	INTERACTIONS	90848166	7/26/2021	
Interactions LLC	CURO	5049031	9/27/2016	

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RECORDED: 06/27/2022