



Quality Insights

Quality Insights Annotation Report

Freshub, Inc. et al v. Amazon.Com Inc. et al

WDTX-6-21-cv-00511

Focus on: U.S. Pat. No. 9,908,153

Filing date: June 24, 2019

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Claim Construction and § 112 Invalidity

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Map claims to specification and file wrapper

Map claims to specification - '153

Which claim terms are or are not in the specification?

Claim Analysis > Claim# 1

Find relevant specification content as intrinsic evidence for claim term interpretation

41 Terms Identified in This Claim [Click to Select Terms](#)

Select Text

Highlight text from within the claim with your cursor and click on the tooltip "Select Terms" to find references in the Specification.

Claim# 1

A **voice processing** system comprising:

a first system configured to **receive user spoken** words comprising:

a **microphone**;

a **wireless network interface**;

a **digitizer** coupled to the microphone, wherein

the **digitizer** is configured to **convert spoken** words into a **digital representation**;

a first **computer**;

Select Terms



Claim Analysis finds these terms in the spec:
"wireless network interface," "digitizer," "convert spoken",
as well as other terms that are highlighted in red

Map claims to specification - '153

Which claim terms are or are not in the specification?

Select Text	Claim# 1
Highlight text from within the claim with your cursor and click on the tooltip "Select Terms" to find references in the Specification.	A voice processing system comprising:
	a first system configured to receive user spoken words comprising:
	a microphone ;
	a wireless network interface ;
	a digitizer coupled to the microphone , wherein
	the digitizer is configured to convert spoken words into a digital representation ;
	a first computer ;

Review the selected claim element and see how it is defined in the patent specification and related figures.

Selected elements of '153 claim 1

Selected elements of '153 claim 1

Figures of '153

Select Text

convert **spoken**

The selected clause includes the following keywords:

- convert** (2)
- spoken** (5)

Content

[0078] For example, the user can speak the order to the microphone 203, illustrated in FIG. 2. The system then digitizes and records the **spoken** order in a file. At state 804, the system transmits the digitized verbal order to a remote system, such as remote system 214. At state 806, the remote system performs voice recognition on the order in order to interpret the **spoken** order and **convert**s the **spoken** order into text. By way of example, the remote system can use grammar constrained recognition and/or natural language recognition. The voice recognition system optionally uses training. At state 808, the remote system transmits the text version of the order to the user so that the user can verify if text version is an accurate interpretation of the **spoken** order. For example, the remote system can transmit the text version to the system 202 or another user computer for display to the user. Optionally, if the user determines that the order was not

R

```

graph TD
    802[DIGITIZE AND RECORD SPOKEN ORDER] --> 804[TRANSMIT ORDER TO REMOTE SERVER]
    804 --> 806[PERFORM VOICE RECOGNITION]
    806 --> 808[DISPLAY TEXT VERSION OF VOICE ORDER TO USER FOR VERIFICATION]
    808 --> 810[TRANSMIT ORDER TO ONE OR MORE PROVIDERS]
    810 --> 812[RECEIVE QUOTE AND PROVIDE QUOTES TO]
            
```

Map claims to specification - '153

Does the allegedly infringing product element fall within or outside the patent's scope?

Select Text

convert spoken

The selected clause includes the following keywords:

- convert (2)
- spoken (6)

Content

[0078] For example, the user can speak the order to the microphone 203, illustrated in FIG. 2. The system then digitizes and records the spoken order in a file. At state 804, the system transmits the digitized verbal order to a remote system, such as remote system 214. At state 806, the remote system performs voice recognition on the order in order to interpret the spoken order and convert the spoken order into text. By way of example, the remote system can use grammar constrained recognition and/or natural language recognition. The voice recognition system optionally uses training. At state 808, the remote system transmits the text version of the order to the user so that the user can verify if text version is an accurate interpretation of the spoken order. For example, the remote system can transmit the text version to the system 202 or another user computer for display to the user.

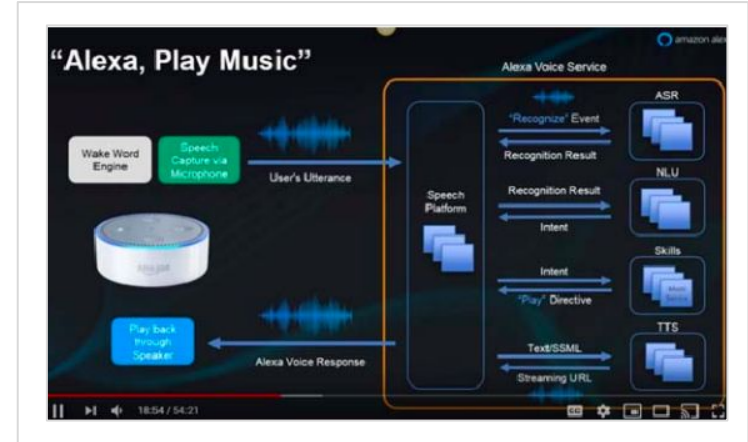
FIG. 2: If the user determines that the order was not

With the claim scope interpretation from Claim Analysis, verify your findings against the complaint.

Answer the question:

Does the alleged Invention element fall within or outside the patent's scope?

53. The '153 Accused Products, as shown in the below image and in the video cited, utilize Alexa Voice Service computers/servers in the cloud (a second computer) to receive a user's spoken words and will convert those words into an action associated with the user.



Map claims to the file wrapper - '153

Which claim terms are in the file wrapper(i.e. examiner's opinion) ?

Disclosure Rate by Prior Art

Claims	Disclosure by Single Reference		Disclosure by Multiple References		Claim# 1
	Prosecution History	Post-Grant	Prosecution History	Post-Grant	
<input checked="" type="checkbox"/> #1	0%	34%	0%	34%	A voice processing system comprising: a first system configured to receive user spoken words comprising: a microphone; a wireless network interface; a digitizer coupled to the microphone, wherein the digitizer is configured to convert spoken words into a digital representation; a first computer; non-transitory memory that stores instructions that when executed by the first computer cause the first system to perform operations comprising: receive via the digitizer a verbal order, comprising at least one item, from a user, wherein the verbal order was captured by the microphone and analyzed by the digitizer; immediately thereafter, cause the
<input checked="" type="checkbox"/> #2	0%	50%	0%	50%	
<input type="checkbox"/> #3	0%	25%	0%	25%	
<input type="checkbox"/> #4	0%	50%	0%	50%	

Review how the asserted claims were disclosed by the prior art found by the examiner during prosecution and post-grant proceedings.

A higher percentage means more claim elements were disclosed by the prior art.

Disclosure Rate by Prior Art

Claim Insights Summary Table > Claim Table (Claim# 1) | Select A Claim 1 2 3 4 5 6 7 8 9 10 switch between claims

How is each claim element disclosed by cited prior art? Click numbers to find detailed comparison.

The percentage "%" indicates how many keywords in an element being disclosed by a specific references. [Click to find comprehensive explanation of calculation.](#)

☒ Prosecution history ☐ Post-Grant ☐ Responded prior arts only

Claims	Prior Art Ref. (s)					
	US2002/0194604	US2001/0056330	US6543052	US7376586	US6757362	US2003/0235282
#1.09 (66%)	66%	66%	66%	0%	0%	0%
#1.10 (50%)	50%	50%	50%	0%	0%	0%
#1.11 (0%)	0%	0%	0%	0%	0%	0%
#1.12 (100%)	100%	100%	100%	0%	66%	66%
#1.13 (N/A)	N/A	N/A	N/A	N/A	N/A	N/A
#1.14 (N/A)	N/A	N/A	N/A	N/A	N/A	N/A

Map claims terms to the file wrapper - '153

Why was this patent challenged? How were the claims challenged?

Claims	Prior Art Ref		
	US2002/0194604	US2001/0056390	US6543052
#1.09 (86%)	86%	86%	86%
#1.10 (80%)	50%	50%	50%
#1.11 (0%)	0%	0%	0%
#1.12 (100%)	100%	100%	100%
#1.13 (N/A)	N/A	N/A	N/A
#1.14 (N/A)	N/A	N/A	N/A

All of the limitations of this asserted claim element in '956 were 85% known by Ogasawara (US6543052).

Claim Insights Summary Table > Claim Table (Claim# 1) > Claim Element Page (Claim# 1.12) > US2002/0194604 | Select A Claim (1) (2) (3) (4) (6) (7) (8) (9) (10)

Side-by-side comparison; Claim terms not found may imply the reasons for patentability.

Petition from Challenger

Find 2 Result(s) [Find More Result\(s\)](#)

Prior Art Ref. Sanchez [US2002/0194604] Calderone [US2001/0056390] Ogasawara [US6543052] Cooper [US6757362]

[20200622-Petition](#) [IPR2020-01145](#) [35 U.S.C. § 103](#)

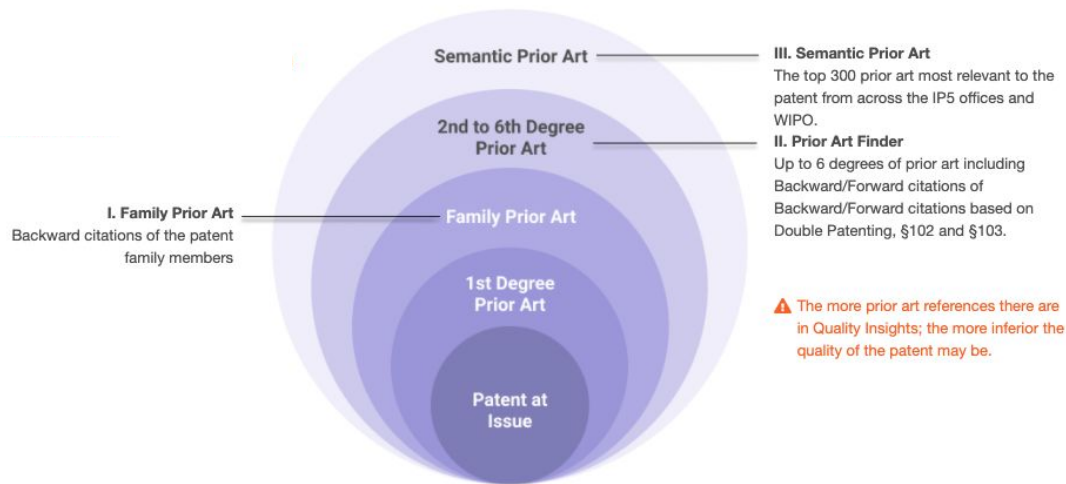
1.

claim 4: [the system of claim 1] wherein a separate digital file is used to store respective **digitized** item descriptions from the user.' calderone discloses that 'the system may record the speech sample representing the purchase request onto mass storage 'to 'provide verification that a purchase request was made, should a user dispute their intent to purchase.' ex.1003,[0165]. because the recordings are evidence of specific transactions, it would have been obvious to store each recording in a separate file associated with each transaction .. ex.1002, 1131 .. as described in sections [X.a.i].5 and [1.8], the recordings contain **digitized** item descriptions: the speech command received by the central speech recognition system of calderone is **digitized** and includes an item description, such as the name of a movie or other shopping content .. ex.1003,[0048][0130]-[0132][0137]. the cooper system fundamentally operates with separate sound files for each spoken utterance .. the speech recognition server ' receives sound files from other components, attempts to recognize them as speech, and returns the recognized text.' ex.1007, 8:20-22 .. the system stores these ' utterance files ' and 'temporary speech files ' on a primary server .. id. at 10:37-46, 18:61-66 .. this architecture, based on processing individual utterance files, provides the flexibility patent no.9,908,153 7 petition for inter partes review to change the server ' to a different platform brand without requiring the entire va platform to be modified.' id. at 8:20-28; ex.1002, 11132 .. thus, a posita would have been motivated to use separate sound files to store user utterances .. ex.1002, 11133 .. to the extent calderone does not already disclose this limitation, a posita would modify the system to store the **digitized** speech recordings in the form of separate digital files, as disclosed by cooper .. id.

2.

claim 8: [the system of claim 1] wherein the **computer system** is configured to cause the list to be provided to the user via a short messaging system.' calderone discloses sending information to the user using cable tv networks and the internet .. ex.1003,[0039][0197]., ogasawara discloses communication over satellite, cable, or a telephone subscriber line .. ex.1004, 3:61-65 .. sanchez teaches communication via telephone line, the internet, satellite, cable, or terrestrial broadcast .. ex.1005,[0035]. cooper discloses communication over the world wide web, telephone network, wireless communications network, through email, and fax .. ex.1007, 4:37-43, 5:21, 7:58-65

How does Quality Insights generate prior art?



Semantic Prior Art

Semantic Prior Art of '153

Review potential prior art ranked by concept similarity

Across IP5 and WIPO thanks to Patentcloud's proprietary algorithm

Most Relevant IP5 & WO 300 prior art references based on **Semantic Similarity** among the first claims and abstracts. [Change Scope](#) Select claim text or enter the desired text/keywords

Discover prior art's similarity with claim chart format in seconds / Prior art references found (within the designated scope) that are deemed as having high semantic similarity will be starred with a ★

KEEP mode 2 are of high semantic similarity

Ranked By : Relevance

<input type="checkbox"/>	<input type="checkbox"/>	Ranking	Patent No.	<input type="checkbox"/>	★ Title	Legal Status ?	Appl. Date	Pub./Issue Date	Assignee (Std)	Applicability
<input type="checkbox"/>		1	US20030088409A1	<input checked="" type="checkbox"/>	★ Speech recognition system including man...	PGPub - Granted	2002-12-20	2003-05-08	IBM CORP	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(1)
<input type="checkbox"/>		2	US6671668B2	<input checked="" type="checkbox"/>	★ Speech recognition system including man...	Expired	2002-12-20	2003-12-30	IBM CORP	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		3	US20060195324A1	<input checked="" type="checkbox"/>	Voice input interface	Abandoned	2003-11-12	2006-08-31	BIRK CHRISTIAN	(Pre-AIA) § 102(e)(1)
<input type="checkbox"/>		4	US6496799B1	<input checked="" type="checkbox"/>	End-of-utterance determination for voice ...	Expired	2000-06-13	2002-12-17	IBM CORP	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		5	JP2003-099092A	<input checked="" type="checkbox"/>	VOICE INPUT SYSTEM USING PORTABL...	Abandoned	2001-09-21	2003-04-04	CHUO JOHO KAIHATSU KK	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b)
<input type="checkbox"/>		6	US5036538A	<input checked="" type="checkbox"/>	Multi-station voice recognition and proces...	Abandoned	1989-11-22	1991-07-30	TELEPHONICS CORP	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		7	US8379802B2	<input checked="" type="checkbox"/>	System and method for transmitting voice...	Active	2010-07-02	2013-02-19	INTELLISIST INC	(Pre-AIA) § 102(e)(2)

Semantic Prior Art of '153

Review potential prior art ranked by concept similarity

Active

US9908153B2 [🔗](#)

Systems and methods for scanning information from storage area contents

[Download Report](#)

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Overview

History

Claim Analysis

Claim Insights

Family Prior Art

Prior Art Finder

Semantic Prior Art

File Wrapper Search

[About Semantic Prior Art](#)

Semantic Prior Art

Most Relevant IP5 & WO 300 prior art references based on [Semantic Similarity](#) within the scope below. [Reset to Default](#)

Enter text to start searching for semantic prior art (English only)

[+ Add text from claims](#)

[Submit](#)

[Discover prior art's similarity with claim chart format in s](#)

Add text from claims

×

Select A Claim

1

2

3

4

5

6

7

8

9

10

[Next 10](#)

A voice processing system comprising: a first system configured to receive user spoken words comprising: a microphone; a wireless network interface; a digitizer coupled to the microphone, wherein the digitizer is configured to convert spoken words into a digital representation; a first computer; non-transitory memory that stores instructions that when executed by the first computer cause the first system to perform operations comprising: receive via the digitizer a verbal order, comprising at least one item, from a user, wherein the verbal order was captured by the microphone and digitized by the digitizer immediately transmit, using the wireless network,

[Add](#)



adding text from claims

Prior Art Finder

Prior Art Finder for '153

Review cited and citing patents of '153 from the first to the sixth degree

Filter by:
 Applicability
 Legal Basis (102 or 103)
 Patent Office
 Legal Status

1st Degree Art
1

2nd Degree Art
10

N Degree Art
71

N Degree Art
 Extend forward/backward citations from the Second Degree Art
 Discover prior art's similarity with claim chart format in seconds !

KEEP mode

Ranked By : Legal Basis (§102 first) |

US9908153B2
 1st Degree (1)
 US20010056350A1
 2nd Degree (10)
 3rd Degree (20)
 4th Degree (20)
 5th Degree (20)
6th Degree

6th Degree List

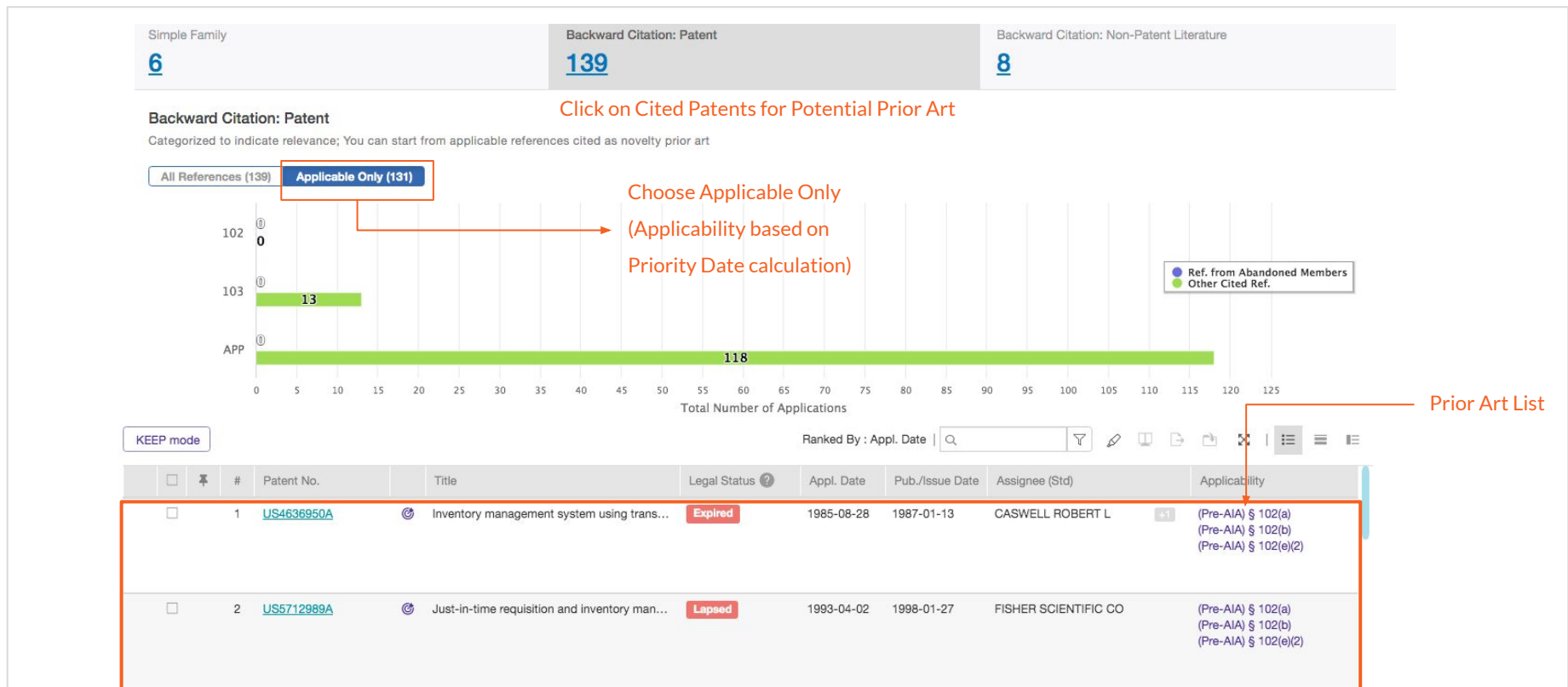
	#	Patent No.	Title	Legal Status	Appl. Date	Pub./Issue Date	Assignee (Std)	Applicability
<input type="checkbox"/>	1	US4902120A	Eyeglass headphones	Lapsed	1988-11-22	1990-02-20	WEYER FRANK M	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)
<input type="checkbox"/>	2	US5701451A	Method for fulfilling requests of a web bro...	Expired	1995-06-07	1997-12-23	IBM CORP	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)
<input type="checkbox"/>	3	US6154766A	System and method for automatic transmi...	Expired	1999-06-30	2000-11-28	MICROSTRATEGY INC	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)
<input type="checkbox"/>	4	US5892564A	Eyeglass headphone combination	Lapsed	1997-08-19	1999-04-06	RAHN HENRY J	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)
<input type="checkbox"/>	5	US20170230314A1	ROUTING AND DISPLAYING MESSAGES ...	Abandoned Appl.	2017-04-24	2017-08-10	GOOGLE LLC	(Pre-AIA) § 102(e)(1)
<input type="checkbox"/>	6	US6359970B1	Communications control method and app...	Lapsed	1999-04-16	2002-03-19	MAVERICK CONSULTING ...	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b)

Up to the 6th
Degree List

Family Prior Art

Family Prior Art of '153

Review prior art cited by and cited against the family counterparts when available



Comparison tools

Prior Art Comparison (claim chart format)

What does this prior art say about the critical elements?

Disclosure Rate of Prior Art



Find 3 Result(s) Disclosure Rate : 50%

US6671668B2 Content

Specification

[25] The audio input , now represented as a sequence of vector labels , is then passed into a decoder unit 420 , which is responsible for **converting** this sequence into recognised text . The decoder functionality can be broken down into two main components , audio modelling 425 , and language modelling 430 . The purpose of the audio modeller is produce a variety of candidate word strings which may match the input sequence of vector labels ; the purpose of the language modeller is then to select which of these word strings is the overall best fit to the audio input .

[41] The probability calculations outlined above can be used in the audio modeller of FIG . 2 to discriminate between different candidate words in a speech recognition system . For example , U.S. Re - issue No . 33,597 describes a recognition system in which an HMM is used to recognise a limited set of individual words (such as the digits from " one " to " nine ") . An HMM model having 5 states is provided for each word in the set , each HMM model being associated with one digit to be recognised . The audio signals for each digit are represented as successive audio vectors , with a set of 64 possible different audio vectors . Thus for each state , the B matrix contains the output probabilities for all of these 64 different vectors (of course , some vectors may perhaps have zero output probability from some states) . For each model (i.e. , for each digit) , the state sequence most likely to produce the sequence of audio vectors is determined , along with its corresponding probability . This is analogous to selecting Route 1 from Model 1 and Route 2 for Model 2 for the output XX in the example described above . Note that there are well - known algorithms available for performing this calculation quickly and efficiently . This results in a set of probabilities , one probability for each possible digit / model , representing the probability of the most likely sequence through that model to produce the specified output . The system then identifies the **spoken word** with the digit / model which has the highest associated probability .

[55] The initial training of the HMM is accomplished by obtaining a corpus of training data , comprising a set of audio recordings for each word / manner combination to be recognised . The number of recordings in each set should be quite large (e.g. , 800 +) , by different speakers . Also the recordings should be made in the same environment as intended application in order to minimise the effect any distortions ; thus for use in a telephony system , recordings should be made over the telephone . Each recording

Answer the question:
What does this prior art say about the Claim elements: convert, spoken words?

Discover prior art similarity with keywords (includes keyword stemming) mapped to the selected prior art reference Abstract, Claims, and Specification.

Prior Art Comparison (sample output)

Easily generate a table like below

Claim		Claim-Term Interpretation	Semantic Prior Art - '668	3rd Degree Citation Prior Art - B
1	A voice processing system comprising:.....	Refer to Claim Analysis results	0%	.....
	digitizer is configured to convert spoken words into a digital representation;	.....	50%	.....
	a first computer;	.....	N/A	
	non-transitory memory that stores instructions that when executed by the first computer cause the first system to perform operations comprising:.....	.....	.....	.....
	a networks interface;	.....	100%	.....
	.....including the identified item, to be displayed via a user display.	.....	.....	.....

System-identified keywords and key phrases
(highlighting of other keywords is available)

Results from claim to
specification and file
wrapper mapping

Results from prior art comparison by
claim element

Prior art downloads

Prior art downloads

Select all

Export

The screenshot shows the InQuartik interface with a table of patents. The 'Export' dialog box is open, showing options for Export Type, Export Items, Export Fields, and a File Name field. The 'Export' button is highlighted.

#	Patent No.	Title
1	CN1247662A	Dual use spe
2	EP0998105B1	Mobile teleph
3	JPH09-036932A	EXTERNAL R
4	JPH11-055358A	MOBILE RAD
5	US5317622	Ringin circuit for use in a telephone set f...



Download patent data in Excel or PDF format for Family Prior Art, Second Degree Prior Art, and/or Semantic Prior Art.

Prosecution and PTAB History

Key Events

Key Events - '153

1 Prosecution & 1 Post-Grant

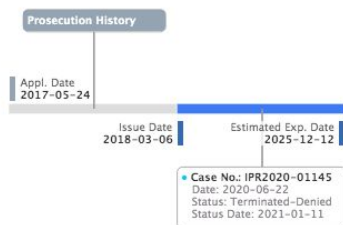
Event History 2	Family Status 6 Applications	Prior Art Status 405 Applications / 8 NPL References
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Event History | 1 Prosecution History / 1 Post-Grant

Validity challenges to a patent in its prosecution history and post-grant events

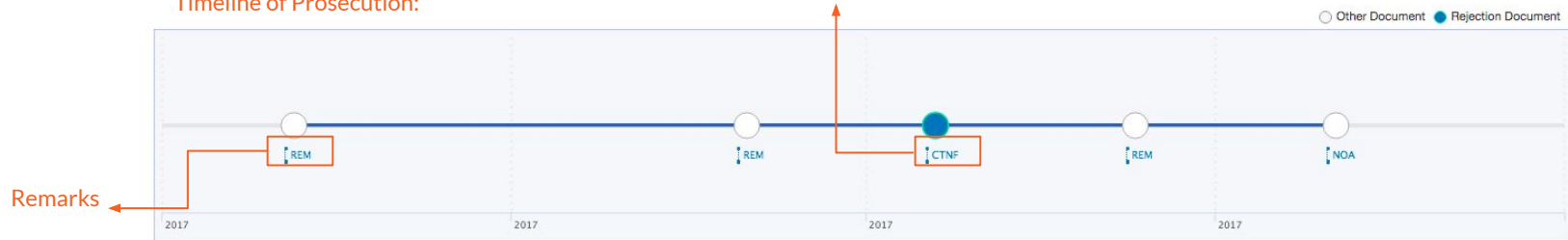
of Family Counterparts and Legal Status

of Highly Relevant Prior Art References



Timeline of Prosecution:

Non-final rejection



Key Events - '153

Prosecution History

Clickable events for original OAs and their OCR version when available.

15/604422 Prior Art Ref. | 0 Ref.

Check prior art cited and the legal basis of these challenges

Double Patenting | 0 Ref.

§ 102 | 0 Ref.

§ 103 | 0 Ref.

Summary of 15/604422 History | 5 Event(s)

Direct links to Grounds,
Claims Highlighted and Prior Art Details Data Last Updated on: 2021-02-03

Descriptions (Code)	Date	Prior Art Ref.
Notice of Allowance (NOA)	2017-11-22	
Applicant Arguments/Remarks Made in an Amendment (REM) Claims (CLM)	2017-10-18	
Non-Final Rejection (CTNF)	2017-09-13	Grounds 1 ▾
Applicant Arguments/Remarks Made in an Amendment (REM) Claims (CLM)	2017-08-11	
Applicant Arguments/Remarks Made in an Amendment (REM) Claims (CLM)	2017-05-24	

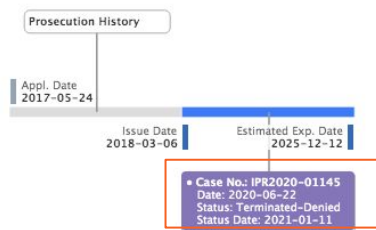
Key Events - '153

Post-Grant

Event History <u>2</u>	Family Status <u>6</u> Applications	Prior Art Status <u>405</u> Applications / <u>8</u> NPL References
----------------------------------	---	--

Event History | 1 Prosecution History / 1 Post-Grant
 Validity challenges to a patent in its prosecution history and post-grant events

of Family Counterparts and Legal Status # of Highly Relevant Prior Art References



Click to view each event in summary and details of IPR

Timeline of IPR:



Key Events - '153

Post-Grant

Clickable events for original OAs and their OCR version when available.

IPR2020-01145 Prior Art Ref. | 6 Ref.

Check prior art cited and the legal basis of these challenges

Double Patenting | 0 Ref.

§ 102 | 0 Ref.

§ 103 | 6 Ref.

[US20010056350 \(1st\)](#)
 Calderone
[US20020194604](#)
 Sanchez
[US6543052](#)
 Ogasawara
[US6757362](#)
 Cooper
[US7376586](#)
 Partovi
[US20030235282](#)
 Sichelman

Order

ORDERED that the Petition is denied as to all challenged claims of the '153 patent and no inter partes review is instituted, the '153 patent and no inter partes review is instituted.

Summary of IPR2020-01145 History | 4 Event(s)

Data Last Updated on: 2021-06-29

Direct links to Grounds,

Claims Highlighted and Prior Art Details

Descriptions (Code)	Date	IF	Prior Art Ref.
Institution Decision (Denied)	2021-01-11		Grounds 4 ^
Legal Basis		Claims	Prior Art Ref.
35 U.S.C. § 103		claim 6,7,10	Calderone US20010056350 (1st) Sanchez US20020194604 Ogasawara US6543052 Partovi US7376586
35 U.S.C. § 103		claim 4,8,10	Calderone US20010056350 (1st) Sanchez US20020194604 Ogasawara US6543052 Cooper US6757362

Prosecution and PTAB History Search

Patent File Wrapper Search

 Directly discover details in the prosecution history and post-grant proceeding across all documents via a keyword search.

Cross-Document Search

Enter keyword to find documents including specific legal basis or specific claim terms

[① About File Wrapper Search](#)



Rejections, Remarks, and Notice of Allowance in Prosecution History | 13 Records

<input type="checkbox"/> Descriptions (Code) 	Party	Date 
<input type="checkbox"/> Notice of Allowance (NOA)	USPTO	2015-09-24
<input type="checkbox"/> Applicant Arguments/Remarks Made in an Amendment (REM)	Applicant	2015-06-19
<input type="checkbox"/> Non-Final Rejection (CTNF)	USPTO	2015-03-19
<input type="checkbox"/> Request for Continued Examination (RCEX)	Applicant	2015-03-03
<input type="checkbox"/> Applicant Arguments/Remarks Made in an Amendment (REM)	Applicant	2015-03-03
<input type="checkbox"/> Final Rejection (CTFR)	USPTO	2014-11-03
<input type="checkbox"/> Applicant Arguments/Remarks Made in an Amendment (REM)	Applicant	2014-10-15
<input type="checkbox"/> Non-Final Rejection (CTNF)	USPTO	2014-07-15
<input type="checkbox"/> Request for Continued Examination (RCEX)	Applicant	2014-06-26
<input type="checkbox"/> Applicant Arguments/Remarks Made in an Amendment (REM)	Applicant	2014-06-26
<input type="checkbox"/> Final Rejection (CTFR)	USPTO	2014-02-26
<input type="checkbox"/> Applicant Arguments/Remarks Made in an Amendment (REM)	Applicant	2014-02-07
<input type="checkbox"/> Non-Final Rejection (CTNF)	USPTO	2013-11-07

Data Last Updated on 2021-04-08


Prosecution and PTAB History PDF Downloads


PDF Downloads

 Download the complete set or just part of the PDF files in the File Wrapper Search.



Cross-Document Search

Enter keyword to find documents including specific legal basis or specific claim terms



Rejections, Remarks, and Notice of Allowance in Prosecution History | 13 Records 

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<input type="checkbox"/> Descriptions (Code) 	Party	Date 
<input type="checkbox"/> Notice of Allowance (NOA)	USPTO	2015-09-24
<input type="checkbox"/> Applicant Arguments/Remarks Made in an Amendment (REM)	Applicant	2015-06-19
<input type="checkbox"/> Non-Final Rejection (CTNF)	USPTO	2015-03-19
<input type="checkbox"/> Request for Continued Examination (RCEX)	Applicant	2015-03-03
<input type="checkbox"/> Applicant Arguments/Remarks Made in an Amendment (REM)	Applicant	2015-03-03
<input type="checkbox"/> Final Rejection (CTFR)	USPTO	2014-11-03
<input type="checkbox"/> Applicant Arguments/Remarks Made in an Amendment (REM)	Applicant	2014-10-15
<input type="checkbox"/> Non-Final Rejection (CTNF)	USPTO	2014-07-15
<input type="checkbox"/> Request for Continued Examination (RCEX)	Applicant	2014-06-26
<input type="checkbox"/> Applicant Arguments/Remarks Made in an Amendment (REM)	Applicant	2014-06-26
<input type="checkbox"/> Final Rejection (CTFR)	USPTO	2014-02-26
<input type="checkbox"/> Applicant Arguments/Remarks Made in an Amendment (REM)	Applicant	2014-02-07
<input type="checkbox"/> Non-Final Rejection (CTNF)	USPTO	2013-11-07

Data Last Updated on 2021-04-08

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Keywords (2)

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☐ sensor (33)

☐ flexible substrate (1)

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US9256311B2 - CTNF (2015-03-19)

13/284,674 6 / 18 90%

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the touch panel taught by Grant by adding drive or sense electrodes made of flexible conductive material as taught by Hotelling since the sensor traces provide level shifting from a low voltage level to a higher voltage level, thus providing a better signal-to-noise ratio for improved noise reduction purposes while the drive traces provide shielding for the sense traces.

Neither Grant nor Hotelling specifically teach wherein the flexible conductive material of the drive or sense electrodes comprises first and second conductive lines that electrically contact one another at an intersection.

However, Gray does teach wherein the flexible conductive material of the drive or sense electrodes comprises first and second conductive lines that electrically contact one another at an intersection (Fig. 2; [0063]: **A number of conductors forming rows and columns of a conductive pattern (e.g., indium tin oxide (ITO)) may be deposited on a substrate composed of polyester or other material on one or more layers of the touchscreen... the row and column oriented conductors may be disposed on the same layer...**; See also Miller US 5,089,672; Col. 2, lines 11-16; Col. 5, lines 1-20; Col. 5, lines 61-68).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Grant and Hotelling by including the conductive lines (rows and columns) taught by Gray for the purpose of "providing paths for signals traveling through the touchscreen" (See Gray; Abstract).

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103(a) as being unpatentable over Grant et al. US 2008/0303782 A1 (previously cited and hereinafter Grant), in further View of Gray et al. US 2010/0045814 (previously cited and hereinafter Gray) and in further View of Frey et al. US 2009/0219257 (newly cited and hereinafter Frey).

Regarding claim 1, Grant does teach an apparatus (Abstract) comprising: a substantially flexible substrate (Abstract: flexible touch sensitive surface); and a touch [0003], [0005], [0006], [0022], [0023], [0027], and [0071], e.g., flexible surface, flexible circuitry, and capacitance touch [0003] which must be conductive to receive user input) disposed on the substantially flexible substrate (see at least Figs. 1A-1C; [0009-0011], configured to bend with the substantially flexible substrate (Figs. 1A-1C, 3 and the corresponding descriptions; [0003]).

Grant does not specifically teach the touch [0003] comprising drive or sense electrodes made of flexible conductive material.

However, Hotelling does teach a touch [0003] (Fig. 2a, 5 and the corresponding descriptions, and the Summary of the Invention, i.e., a touch [0003] comprises of row and column traces made of copper) comprising drive or sense electrodes (see at least Figs. 1 and 2a; [0008, 0030-0033]; claim 9; sense traces formed on a first side of a dielectric substrate; and drive traces formed on a second side of the substrate) made of flexible conductive material ([0008]; traces made of copper or other highly conductive metals running along the edge of the substrate).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the touch panel taught by Grant by adding drive or sense electrodes made of flexible conductive material as taught by Hotelling since the [0003] traces provide level shifting from a low voltage level to a higher voltage level, thus providing a better signal-to-noise ratio for improved noise reduction purposes while the drive traces provide shielding for the sense traces.

Neither Grant nor Hotelling specifically teach wherein the flexible conductive material of the drive or sense electrodes comprises first and second conductive lines that electrically contact one another at an intersection.



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