



*Quality Insights*

## Patentcloud Quality Insights Annotation Report

Elastic NV v. Guada Technologies LLC

PTAB-IPR2021-00875

Focus on: U.S. Pat. No. 7,231,379

Filing date: May 03, 2021

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Click on a page number to read

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# Map claims to specification and file wrapper

# Map claims to specification - '379

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

18 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 method **performed** in a system having **multiple navigable nodes interconnected** in a **hierarchical arrangement** comprising:

at a first **node**, **receiving** an **input** from a **user** of the system,

the **input** containing at least one word **identifiable** with at least one **keyword** from among **multiple keywords**, **identifying** at least one **node**, other than the first **node**, that is not **directly connected** to the first **node** but is associated with the at least one **keyword**,

and **jumping to the at least one node**.

Select Terms

 **Claim Analysis finds** these terms in the spec: **"hierarchical arrangement", "multiple keywords", "jumping, & "node" as well as other terms that are highlighted in red**

# Map claims to specification - '379

Which claim terms are or are not in the specification?

Select Text

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

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

Claim# 1

A method performed in a system having multiple navigable nodes interconnected in a hierarchical arrangement comprising:

at a first node, receiving an input from a user of the system,

the input containing at least one word identifiable with at least one keyword from among multiple keywords, identifying at least one node, other than the first node, that is not directly connected to the first node but is associated with the at least one keyword,

and jumping to the at least one node.

Select Terms

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

Selected elements of '379 claim 1

Selected elements of Claim 1 in Spec

Figures of '379

Select Text

**jumping** to the at least one **node**

The selected clause includes the following keywords:

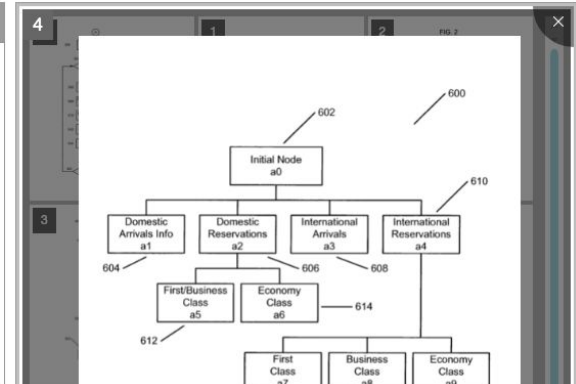
**jumping** (2)

**node** (26)

Content

[0159] While it is true that some more advanced interactive voice response systems available today allow for natural language interactions, they are highly constrained natural language interactions with relatively little or no intervention by a human operator. However, unlike with systems using the invention, those systems still require direct path traversal through the hierarchy (i.e. **jumping** to non-connected **node**s is not contemplated or possible, let alone allowed). Moreover, such systems still typically use a limited list of keywords, which the caller is required to use to correctly traverse to the next connected **node**.

[0013] FIG. 2 is an example portion of a graph used to illustrate **jumping** among **node**s in accordance with one variant of the invention;



# Map claims to specification - '379

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

**Select Text**

jumping to the at least one node

The selected clause includes the following keywords:

- jumping (2)
- node (26)

**Content**

[0159] While it is true that some more advanced interactive voice response systems available today allow for natural language interactions, they are highly constrained natural language interactions with relatively little or no intervention by a human operator. However, unlike with systems using the invention, those systems still require direct path traversal through the hierarchy (i.e. jumping to non-F connector node is not contemplated or possible, let alone allowed). Moreover, such systems still typically use a limited list of keywords, which the caller is required to use to correctly traverse to the next connected node.

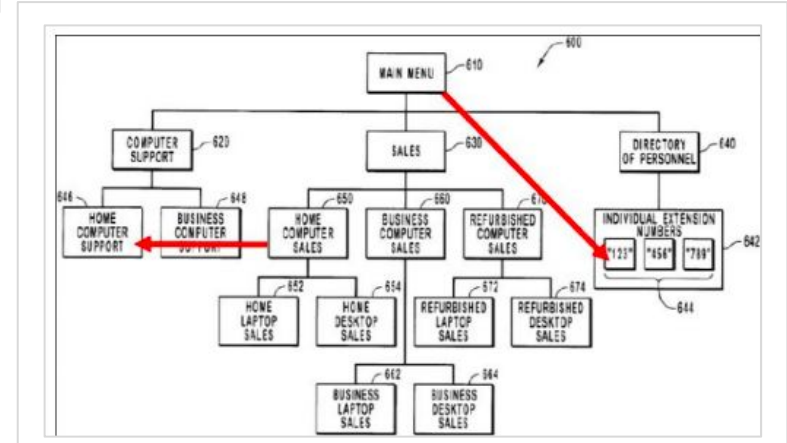
[0013] FIG. 2 is an example portion of a graph used to illustrate jumping among nodes in accordance with one variant of the invention;

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

Answer the question:

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

recognize. EX1007 ¶51. Wesemann then “enables a user to jump from one menu state to another menu state without having to enter input for every ‘in between’ menu state.” *Id.* Just like the '379 patent, Wesemann matches the users' spoken keywords with the menu prompt of the appropriate menu state. EX1007 ¶51. So, although Wesemann can involve a transition across multiple connected nodes, it additionally describes a jump directly from one node to another. EX1007 ¶51.



# Map claims to the file wrapper - '379

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	
		Prosecution History	Post-Grant	Prosecution History	Post-Grant
<input checked="" type="checkbox"/>	#1	75%	75%	75%	75%
<input checked="" type="checkbox"/>	#7	0%	100%	0%	100%

Confirm

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.

Claim Insights Summary Table > Claim Table (Claim# 1) | Select A Claim

1 2 3 4 5 6 7

switch between claims

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

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

All Prosecution history Post-Grant ☐ Responded prior arts only

Claims	Prior Art Ref. (3)		
	US7539656	US6731724	US6366910
#1.01 (100%)	100%	100%	0%
#1.02 (0%)	0%	0%	0%
#1.03 (100%)	100%	100%	80%
#1.04 (100%)	100%	100%	100%

Disclosure Rate by Prior Art

# Map claims terms to the file wrapper - '379

How was this patent challenged during Prosecution & IPR?

Claims	Prior Art Ref. (s)	
	US7539856	US6731724
#1.01 (100%)	100%	100%
#1.02 (0%)	0%	0%
#1.03 (100%)	100%	100%
#1.04 (100%)	100%	100%

All of the limitations of this asserted claim element in '379 were 100% known by Wesemann (US6731724) & Rajaraman (US6366910).

**Answer the questions:**

**How was this patent challenged during IPR?**

Decision from examiner

1.01 1.02 1.03 1.04

Claim Element

#1.04 and **jumping** to the at least one **node**.

Find 8 Result(s)

Prior Art Ref.

Wesemann [US6731724] Rajaraman [US6366910]

Decision

20200123-Institution Decision IPR2019-01304 35 U.S.C. § 102 35 U.S.C. § 103

d.

petitioner asserts **wesemann** discloses all of the limitations of claims 1, 2, and 7, and that **wesemann** in combination with **rajaraman** renders obvious all of the limitations of claims 3-6 .. pet.16-30.

patent owner focuses its arguments on the limitations '**jumping** to the at least one **node**,' as recited in claim, 1 and '**jumping** to the vertex,' as recited in claim 7 .. see prelim .. resp.1-8 .. as stated above with respect to claim construction of these terms, patent owner argues that these terms should be construed to mean 'the system **jumping** to the[at least one **node**/vertex'],' id. at 2 n.1 .. also, patent owner asserts that it presumes petitioner agrees with this construction, but provides no other argument supporting its proposed construction .. i d .. patent owner argues that **wesemann** does not teach '**jumping** to the[at least one **node**/vertex]' under its proposed construction because **wesemann** teaches the system navigating through intermediate, connected **nodes** to '**jump**' to the indirectly connected **node** .. id. at 2-5;ex.1004, 3:50:56).. according to patent owner, **wesemann** 's '**jump**' merely spares the user from entering input while the user interface transitions between the intermediate **nodes** but does not allow the system to transition between non- connected **nodes** .. prelim .. resp.6 .. petitioner asserts that **wesemann** discloses '**jumping** to the at least one **node**,' and '**jumping** to the vertex ' by disclosing lateral and vertical **jumping** within the menu tree .. see pet.26-28, 39-40 .. petitioner asserts the lateral and vertical '**jumping**' action is done automatically upon receiving the appropriate voice commands, or keywords, without requiring the user to select different menu items from a display or navigate through the hierarchical menu.'

Petition

20190711-Petition IPR2019-01304 35 U.S.C. § 103 35 U.S.C. § 102

b.

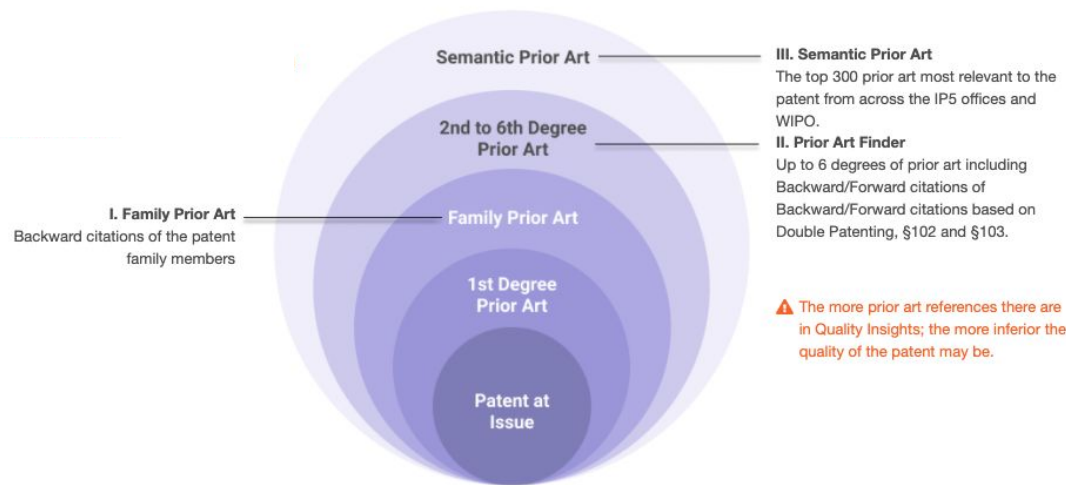
ground 2: **wesemann** in view of **rajaraman** renders claims 3-6 obvious ..... 40

b.

Petition from Applicant



# How does Quality Insights generate prior art?



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# Semantic Prior Art

# Semantic Prior Art of '379

Review potential prior art ranked by concept similarity

## Semantic Prior Art

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 !](#)

**KEEP mode** 0 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	<a href="#">US20030115289A1</a>		Navigation in a voice recognition system	Abandoned	2001-12-14	2003-06-19	CHINN GARRY	(Pre-AIA) § 102(e)(1)
<input type="checkbox"/>		2	<a href="#">US20020051020A1</a>		Scalable hierarchical data-driven navigatio...	PGPub - Granted	2001-09-21	2002-05-02	FERRARI ADAM	(Pre-AIA) § 102(a) (Pre-AIA) § 102(e)(1)
<input type="checkbox"/>		3	<a href="#">US7617184B2</a>		Scalable hierarchical data-driven navigatio...	Active	2001-09-21	2009-11-10	ENDECA TECHNOLOGIES...	(Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		4	<a href="#">US20070083505A1</a>		Hierarchical data-driven search and navig...	PGPub - Granted	2006-04-20	2007-04-12	FERRARI ADAM J	(Pre-AIA) § 102(e)(1)
<input type="checkbox"/>		5	<a href="#">US7062483B2</a>		Hierarchical data-driven search and navig...	Expired	2001-10-31	2006-06-13	ENDECA TECHNOLOGIES...	(Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		6	<a href="#">US20020083039A1</a>		Hierarchical data-driven search and navig...	PGPub - Granted	2001-10-31	2002-06-27	FERRARI ADAM J	(Pre-AIA) § 102(a) (Pre-AIA) § 102(e)(1)
<input type="checkbox"/>		7	<a href="#">US7567957B2</a>		Hierarchical data-driven search and navig...	Expired	2006-04-20	2009-07-28	ENDECA TECHNOLOGIES...	(Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		8	<a href="#">JPH11-213097A</a>		WORD RECOGNITION DEVICE, ITS MET...	Abandoned	1998-01-23	1999-08-06	RICOH CO LTD	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b)
<input type="checkbox"/>		9	<a href="#">US7035864B1</a>		Hierarchical data-driven navigation syste...	Expired	2000-05-18	2006-04-25	ENDECA TECHNOLOGIES...	(Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		10	<a href="#">US20080134100A1</a>		HIERARCHICAL DATA-DRIVEN NAVIGATI...	PGPub - Granted	2007-10-31	2008-06-05	ENDECA TECHNOLOGIES...	(Pre-AIA) § 102(e)(1)

# Semantic Prior Art of '379

Review potential prior art ranked by concept similarity

Active

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**US7231379B2**
[🔗](#)

Navigation in a hierarchical structured transaction processing system

[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](#)

+ Add text from claims

Submit

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


Add text from claims

1 2 3 4 5 6 7

Select A Claim

A method performed in a system having multiple navigable nodes interconnected in a hierarchical arrangement comprising: at a first node, receiving an input from a user of the system, the input containing at least one word identifiable with at least one keyword from among multiple keywords, identifying at least one node, other than the first node, that is not directly connected to the first node but is associated with the at least one keyword, and jumping to the at least one node.

Add



adding text from claims to find more related Prior Art

---

# Prior Art Finder

# Prior Art Finder for '379

Review cited and citing patents of '379 from the first to the sixth degree

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

1st Degree Art <a href="#">6</a>	2nd Degree Art <a href="#">103</a>	N Degree Art <a href="#">86</a>
-------------------------------------	---------------------------------------	------------------------------------

## 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) |

US7231379B2
1st Degree (6)
2nd Degree (20)
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	<a href="#">US20050102202A1</a>	Content personalization based on actions ...	PQPub - Granted	2004-12-10	2005-05-12	LINDEN GREGORY D	(Pre-AIA) § 102(e)(1)
<input type="checkbox"/>	2	<a href="#">US20050021423A1</a>	Computerized, multimedia, network, real ti...	PQPub - Granted	2004-05-26	2005-01-27	NAHAN KENNETH	(Pre-AIA) § 102(e)(1)
<input type="checkbox"/>	3	<a href="#">US7076453B2</a>	System and method for designing and op...	Lapsed	2002-06-04	2006-07-11	MICROSOFT CORP	(Pre-AIA) § 102(e)(2)
<input type="checkbox"/>	4	<a href="#">US8515823B2</a>	System and method for enabling and main...	Active	2008-12-23	2013-08-20	VOLT INFORMATION SCIE...	(Pre-AIA) § 102(e)(2)
<input type="checkbox"/>	5	<a href="#">US20070192205A1</a>	Method, device, and computer product for...	Abandoned Appl.	2006-08-31	2007-08-16	NAHAN KENNETH	(Pre-AIA) § 102(e)(1)
<input type="checkbox"/>	6	<a href="#">US20050182688A1</a>	Wish list	PQPub - Granted	2005-04-07	2005-08-18	MICROSOFT CORP	(Pre-AIA) § 102(e)(1)
<input type="checkbox"/>	7	<a href="#">US6519572B1</a>	Method and system for collecting and pro...	Lapsed	2000-04-10	2003-02-11	RIORDAN JOHN	(Pre-AIA) § 102(e)(2)
<input type="checkbox"/>	8	<a href="#">US8515323B2</a>	Sheet wrapping avoidable fixing apparatu...	Active	2009-11-06	2013-08-20	RICOH CO LTD	(Pre-AIA) § 102(e)(2)
<input type="checkbox"/>	9	<a href="#">US5845265A</a>	Consignment nodes	Expired	1995-11-07	1998-12-01	MERCExchange LLC	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)

Up to the 6th Degree List

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# Family Prior Art

# Family Prior Art of '379

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

Simple Family

[6](#)

Backward Citation: Patent

[12](#)

Backward Citation: Non-Patent Literature

[1](#)

## Backward Citation: Patent

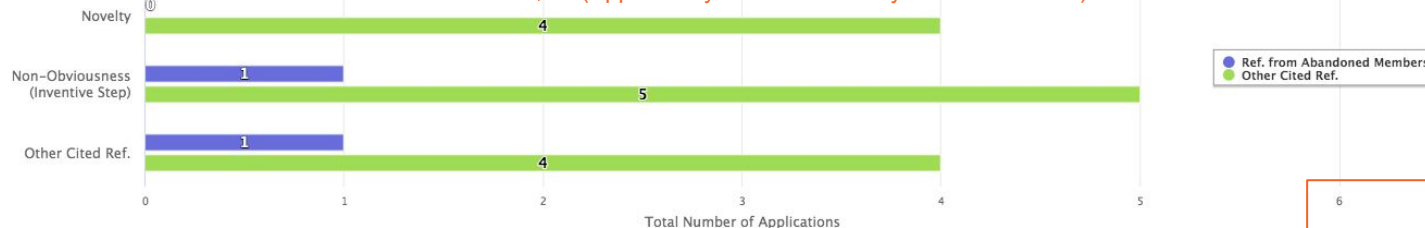
Categorized to indicate relevance; You can start from applicable references cited as novelty prior art

All References (12)

**Applicable Only (12)**

Choose Applicable Only

(Applicability based on Priority Date calculation)



Prior Art List

KEEP mode

Ranked By : Appl. Date

	#	Patent No.	Title	Legal Status	Appl. Date	Pub./Issue Date	Assignee (Std)	Applicability
<input type="checkbox"/>	1	<a href="#">US5812134A</a>	User interface navigational system & meth...	Expired	1996-03-28	1998-09-22	CRITICAL THOUGHT INC	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)
<input type="checkbox"/>	2	<a href="#">US6038560A</a>	Concept knowledge base search and retri...	Expired	1997-05-21	2000-03-14	ORACLE CORP	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)
<input type="checkbox"/>	3	<a href="#">US6405188B1</a>	Information retrieval system	Expired	1998-07-31	2002-06-11	GENUITY INC	(Pre-AIA) § 102(a) (Pre-AIA) § 102(e)(2)



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# Comparison tools

# Prior Art Comparison (claim chart format)

What does this prior art say about the critical elements?

1.01 1.02 1.03 1.04

Find 17 Result(s) | Disclosure Rate : 50%

Claim Element

#1.04 and **jumping** to the at least one **node**.

Keyword List ⓘ

node (97) FW PA

nodes

jumping (0) FW

US7617184B2 Content

Claims

**Claim# 21** The computer - readable storage medium of claim 13, wherein the method further comprises storing the attribute - value pairs in a graph data structure including **nodes** and edges between **nodes**, the **nodes** representing navigation states, the edges representing transitions.

**Claim# 33** The system of claim 25, wherein the attribute - value pairs are stored in a graph data structure including **nodes** and edges between **nodes**, the **nodes** representing navigation states, the edges representing transitions.

**Claim# 9** The method of claim 1, further comprising storing the attribute - value pairs in a graph data structure including **nodes** and edges between **nodes**, the **nodes** representing navigation states, the edges representing transitions.

Specification

**[0007]** A third type of information navigation system is a tree - based directory. In a tree - based directory, the user generally starts at the root **node** of the tree and specifies a query by successively selecting refining branches that lead to other **nodes** in the tree. Shopping.yahoo.com uses a tree - based directory, for example. In a typical implementation, the hard - coded tree is stored in a data structure, and the same or another data structure maps documents to the **node** or **nodes** of the tree where they are located. A particular document is typically accessible from only one or, at most, a few, paths through the tree. The collection of navigation states is

✍

Answer the question:  
**What does this prior art say about the Claim elements: "nodes" ?**

✍

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

Source: Quality Insights

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# Prior Art Comparison (sample output)

Easily generate a table like below

Claim		Claim-Term Interpretation	Semantic Prior Art - '184	3rd Degree Citation Prior Art - B
1	A method performed in a system having multiple navigable nodes interconnected in a hierarchical arrangement comprising:	Refer to Claim Analysis results	100%	.....
	at a first node, receiving an input from a user of the system,	.....	N/A	.....
	the input containing at least one word identifiable with at least one keyword from among multiple keywords, identifying at least one node, other than the first node, that is not directly connected to the first node but is associated with the at least one keyword,	.....	60%	.....
	and jumping to the at least one node.	.....	50%.	

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

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# Prior art downloads

# Prior art downloads

Select all

Export

#	Patent No.	Title	Abandoned	1994-05-31	1993-02-23	NEC CORP	(Pre-AIA) § 102(a)	(Pre-AIA) § 102(b)	(Pre-AIA) § 102(e)(1)	(Pre-AIA) § 102(e)(2)
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...	Abandoned	1994-05-31	1993-02-23	NEC CORP	(Pre-AIA) § 102(a)	(Pre-AIA) § 102(b)	(Pre-AIA) § 102(e)(1)	(Pre-AIA) § 102(e)(2)



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

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# Prosecution and PTAB History

## Key Events

# Key Events - '379

1 Prosecution & 5 Post-Grant

Overview **History** Claim Analysis Claim Insights Family Prior Art Prior Art Finder Semantic Prior Art File Wrapper Search

[About Event Histo](#)

Event History

**6**

Family Status

**6** Applications

Prior Art Status

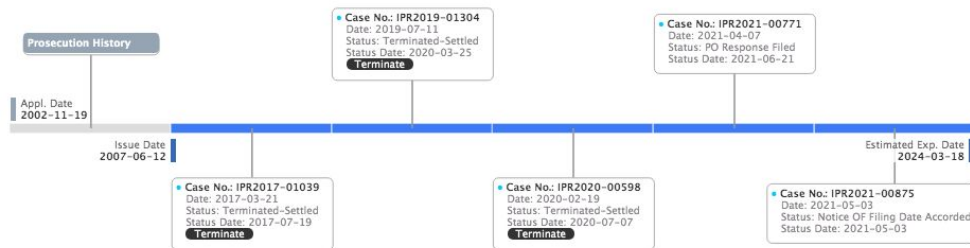
**371** Applications / **2** NPL References

Event History | **1** Prosecution History / **5** Post-Grant

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

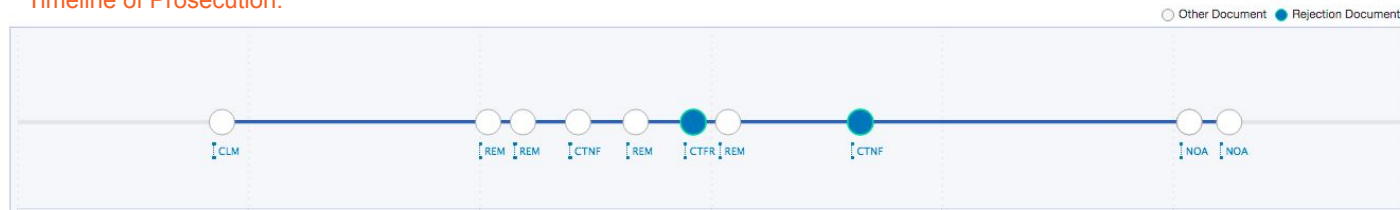
# of Family Counterparts and Legal Status

# of Highly Relevant Prior Art References



Legend	
Document Code	Document Description
CTFR	Final rejection
CTNF	Non-final rejection
CLM	Claims
REM	Remarks

Timeline of Prosecution:



# Key Events - '379

## Prosecution History

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

10/299359 Prior Art Ref. | 3 Ref.

Check prior art cited and the legal basis of these challenges

Double Patenting 0 Ref.

§ 102 0 Ref.

§ 103 3 Ref.

US6675159 (1st) Lin  
US5812134 Pooser  
US6408290 Thiesson

Summary of 10/299359 History | 11 Event(s)

Data Last Updated on: 2021-06-23

Descriptions (Code)	Date	Prior Art Ref.
Notice of Allowance (NOA)	2007-03-30	
Notice of Allowance (NOA)	2007-01-25	
Notice of Allowance (NOA)	2007-01-25	
Non-Final Rejection (CTNF)	2005-08-24	<div> Grounds 1 ^ </div>
Legal Basis	Claims	Prior Art Ref.
35 U.S.C. § 103	claim 1,2,3,4,5,6,7	<div> Lin US6675159 (1st) Pooser US5812134 </div>
Applicant Arguments/Remarks Made in an Amendment (REM)	2005-01-27	

Direct links to Grounds,  
Claims Highlighted and Prior Art Details



# Key Events - '379

Post-Grant

Overview **History** Claim Analysis Claim Insights Family Prior Art Prior Art Finder Semantic Prior Art File Wrapper Search

[About Event History](#)

Event History

**6**

Family Status

**6** Applications

Prior Art Status

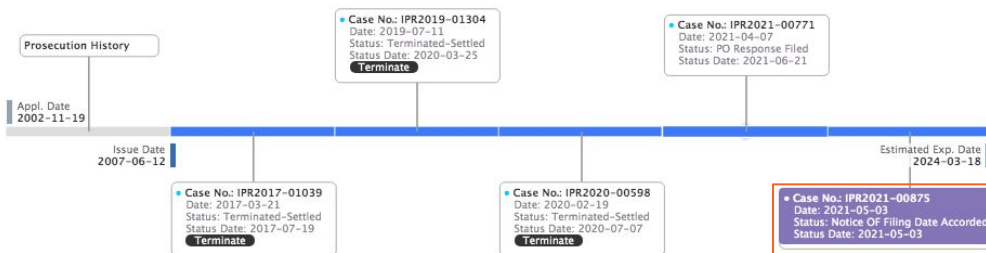
**371** Applications / **2** NPL References

Event History | **1** Prosecution History / **5** Post-Grant

# of Family Counterparts and Legal Status

# of Highly Relevant Prior Art References

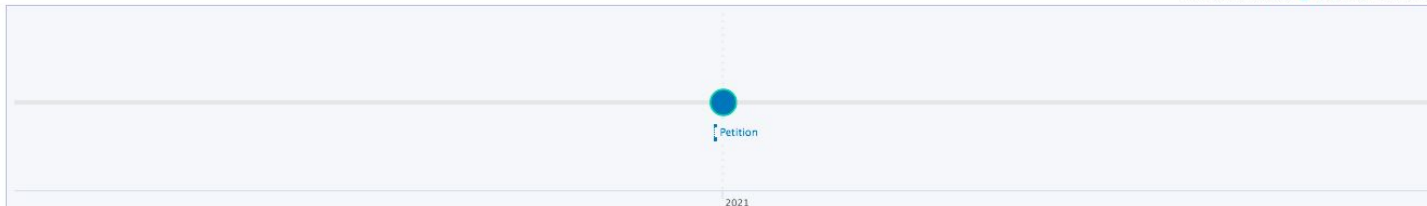
Validity challenges to a patent in its prosecution history and post-grant events



Click to view each event in summary and details of IPR

Timeline of IPR:

☐ Other Document ☒ Rejection Document



# Key Events - '379

Post-Grant

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

## IPR2021-00875 Prior Art Ref. | 7 Ref.

Check prior art cited and the legal basis of these challenges

**Double Patenting**

0 Ref.

**§ 102**

3 Ref.

[US6731724](#)

Wesemann

[US6366910](#)

Rajaraman

[US7539656](#)

Fratkina

**§ 103**

4 Ref.

other (1st)

reference

POSITA

[US7539656](#) (1st)

Fratkina

[US6731724](#)

Wesemann

[US6366910](#)

Rajaraman

## Summary of IPR2021-00875 History | 1 Event(s)

Direct links to Grounds,  
Claims Highlighted and Prior Art Details

Data Last Updated on: 2021-05-23

Descriptions (Code)	Date ↓	Prior Art Ref.
Petition	2021-05-03	Grounds 5 ^
Legal Basis	Claims	Prior Art Ref.
35 U.S.C. § 103	claim 6	POSITA (other reference) (1st) Wesemann <a href="#">US6731724</a> Rajaraman <a href="#">US6366910</a>
35 U.S.C. § 102 35 U.S.C. § 103	claim 3,4,5,6	Wesemann <a href="#">US6731724</a> Rajaraman <a href="#">US6366910</a>
35 U.S.C. § 103	claim 3,4,5,6	Fratkina <a href="#">US7539656</a> (1st) Rajaraman <a href="#">US6366910</a>

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# 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

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touch sensor



## 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
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# Prosecution and PTAB History Side-by-side PDF and OCR

# Side by Side: PDF & OCR




Conduct a keyword search in a single document to identify the claim scope quickly and easily. You can even search additional claim terms within rejections.

**Keywords (2)**

Select a Keyword Set

☒ sensor (23)

☒ flexible substrate (1)



US9256311B2 - CTNF (2015-03-19)

13/284,674 6 / 18 90% +

Application/Control Number: 13/284,674 Page 5  
Art Unit: 2867

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).

Save to Keyword Set

103(a) as being unpatentable over Grant et al. US 2008/0303782 A1 (previously cited and  
... PAGE 5 ...

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Art Unit: 2867

hereinafter Grant) in View of Hotelling et al. US 2008/0158183 A1 (previously cited and hereinafter Hotelling), in further View of Gray et al. US 2010/00451614 (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).

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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 [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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