Patentcloud Quality Insights Annotation Report

Shenzhen Smoore Technology Limited v. Solis Supply et al.

ITC -337-3571 (Pending Institution)

Focus on: U.S. Pat. No. 10,357,623

Filing date: Oct. 04, 2021

Table of contents

Click on a page number to read

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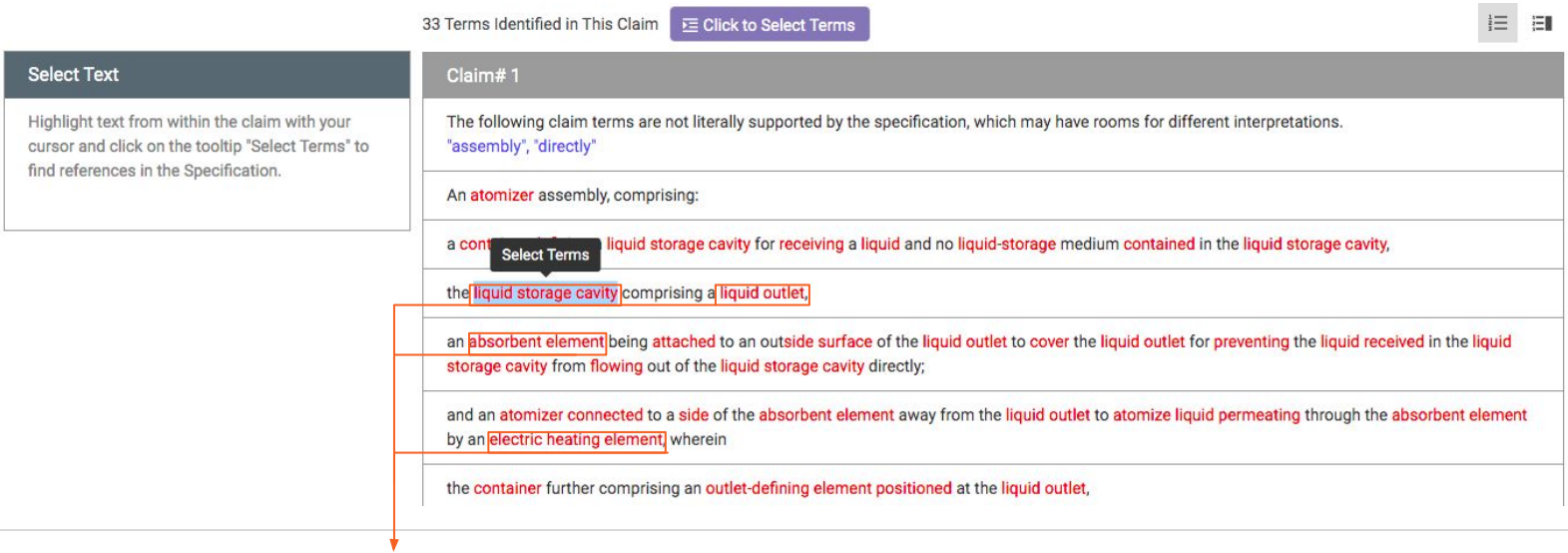
Map claims to specification and file wrapper

Map claims to specification - ‘623

Which claim terms are or are not in the specification?

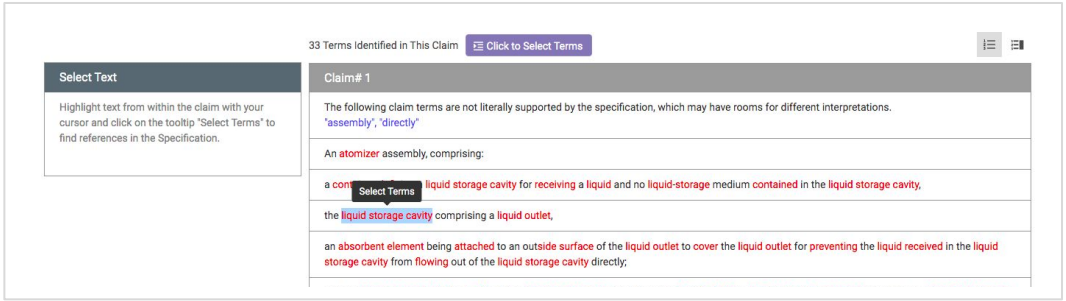


Claim Analysis **finds** these terms in the spec:
”**liquid storage cavity**”, ”**liquid outlet**”, **“absorbent element“**,**“electric heating element,”** as well as other terms that are highlighted in red.

Source: Quality Insights

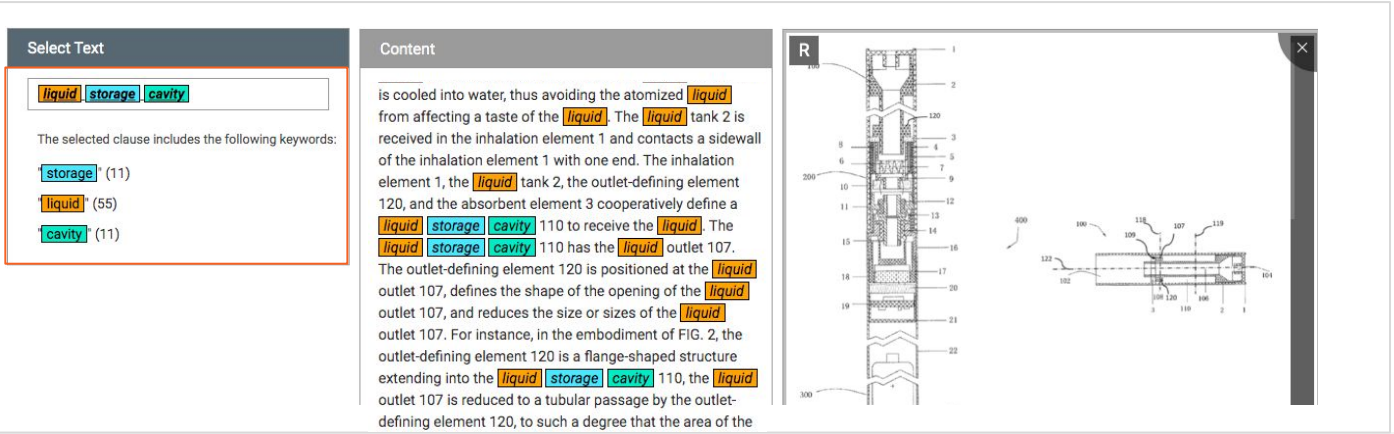
Map claims to specification - ‘623

Which claim terms are or are not in the specification?



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

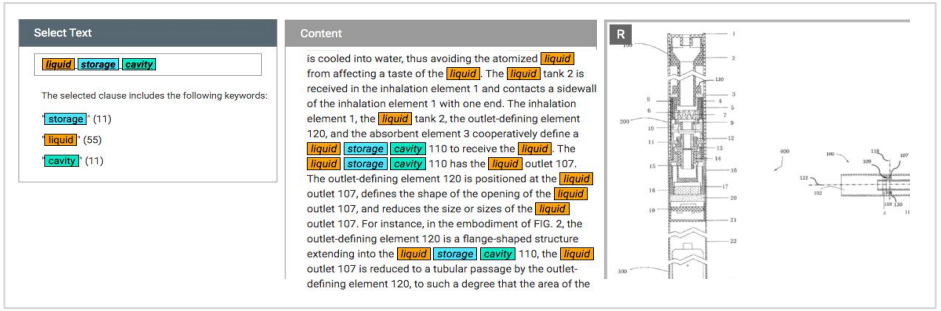
Selected elements of ‘623 Claim 1 | Selected elements of Claim ‘1 in Spec | Figures of ‘623



Source: Quality Insights

Map claims to specification and Complaint - ‘623

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



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?

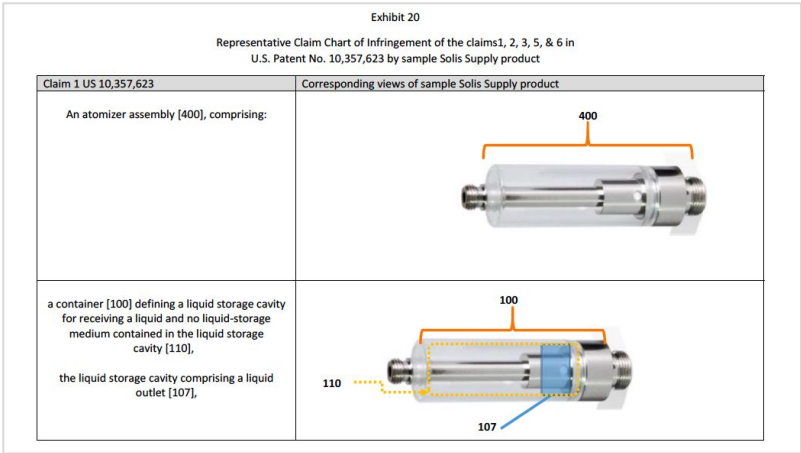


Exhibit 20

Representative Claim Chart of Infringement of the claims1, 2, 3, 5, & 6 in U.S. Patent No. 10,357,623 by sample Solis Supply product

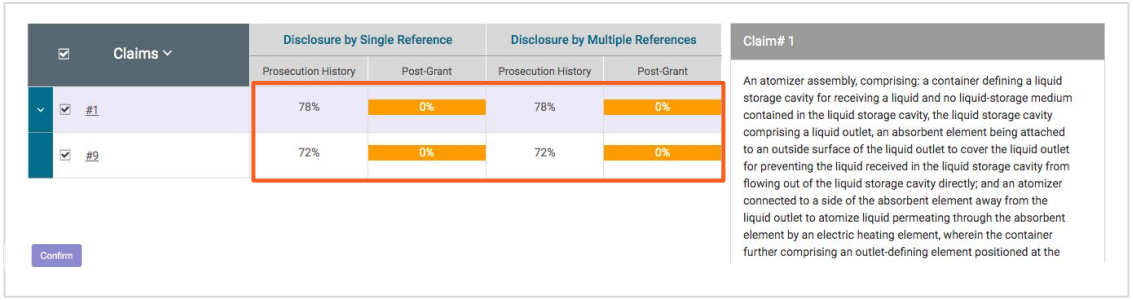
Claim 1 US 10,357,623	Corresponding views of sample Solis Supply product
An atomizer assembly [400], comprising:	400
a container [100] defining a liquid storage cavity for receiving a liquid and no liquid-storage medium contained in the liquid storage cavity [110], the liquid storage cavity comprising a liquid outlet [107],	100 110 107

Source: Quality Insights

Map claims to the file wrapper - ‘623

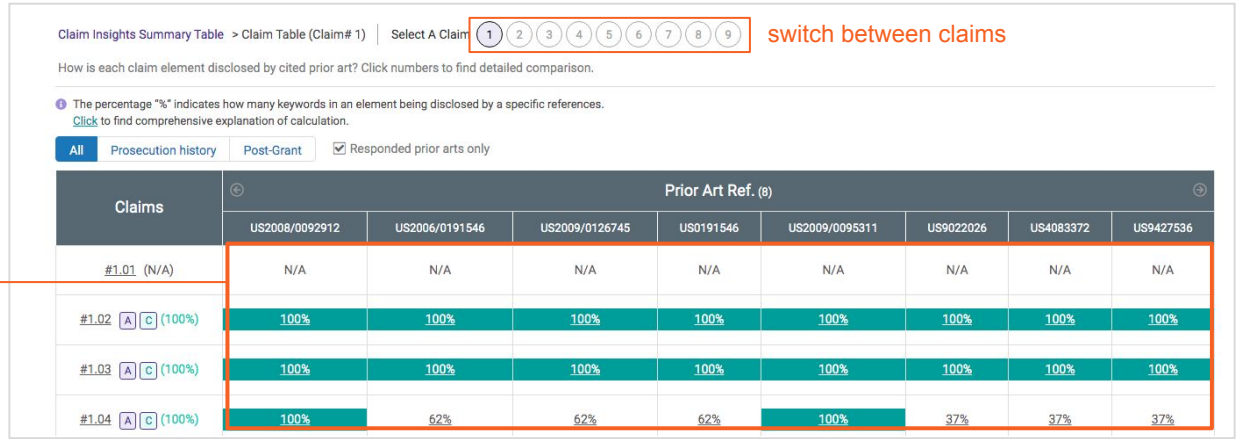
Which claim terms are in the file wrapper(i.e. examiner’s opinion) ?

Disclosure Rate by Prior Art



From ***Claim Insights***, 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.

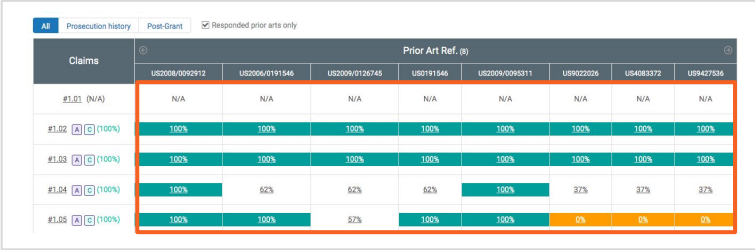


Disclosure Rate by Prior Art

Source: Quality Insights

Map claims terms to the file wrapper - ‘623

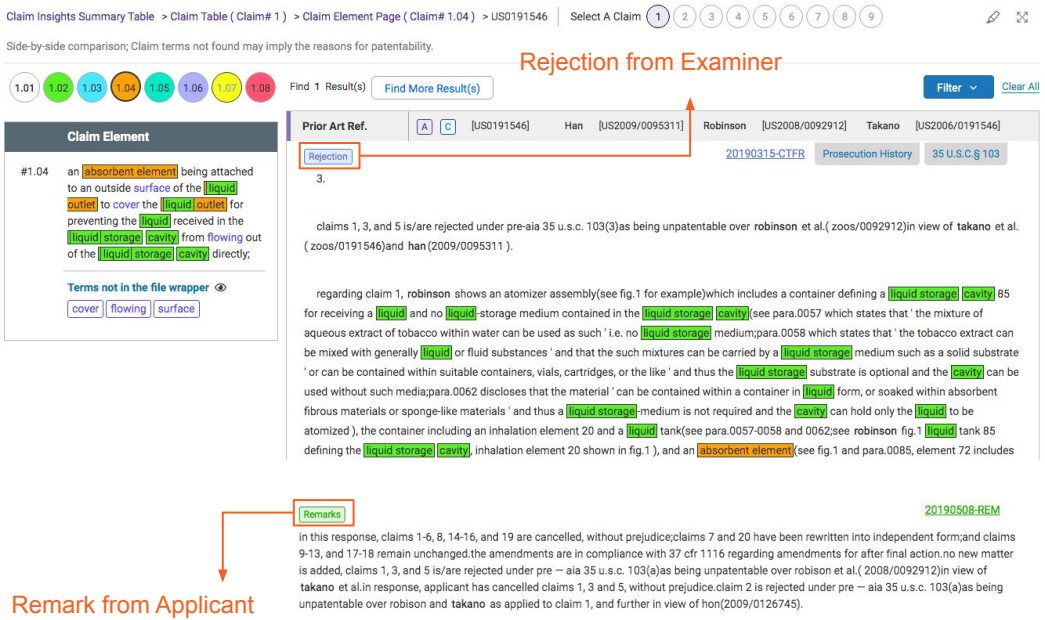
Why was this patent granted? Which claims were amended and how did the scope change?



All of the limitations of this asserted claim element in ‘623 were 62% known by (US0191546), Han(US2009/0095311), Robinson(US2008/0092912) and Takano(US2006/0191546).

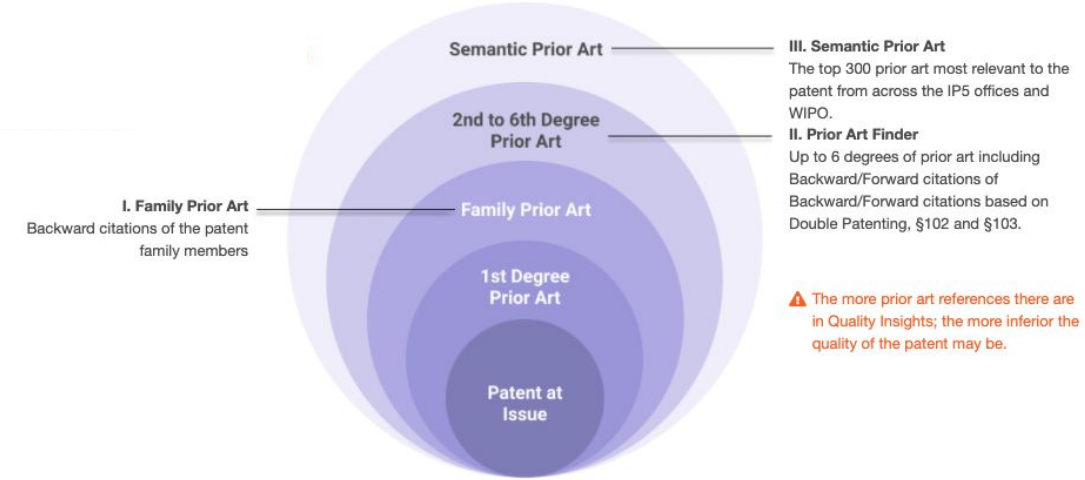
Answer the question:

Why was this patent granted?



Source: Quality Insights

How does Quality Insights generate prior art?



Source: Quality Insights

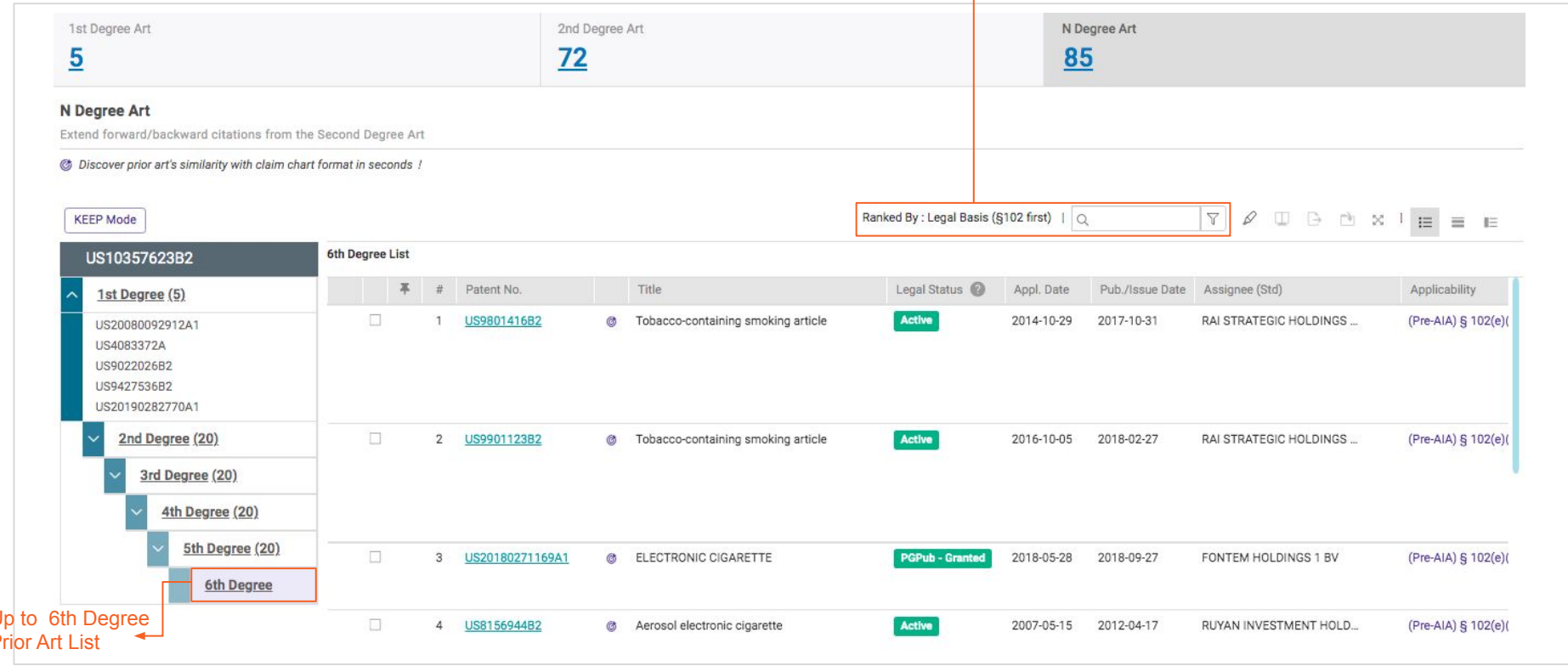
← Go back to the outline

Prior Art Finder

Prior Art Finder for ‘623

Review cited and citing patents of ‘623 from the first to the sixth degree

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



Up to 6th Degree Prior Art List

Source: Quality Insights

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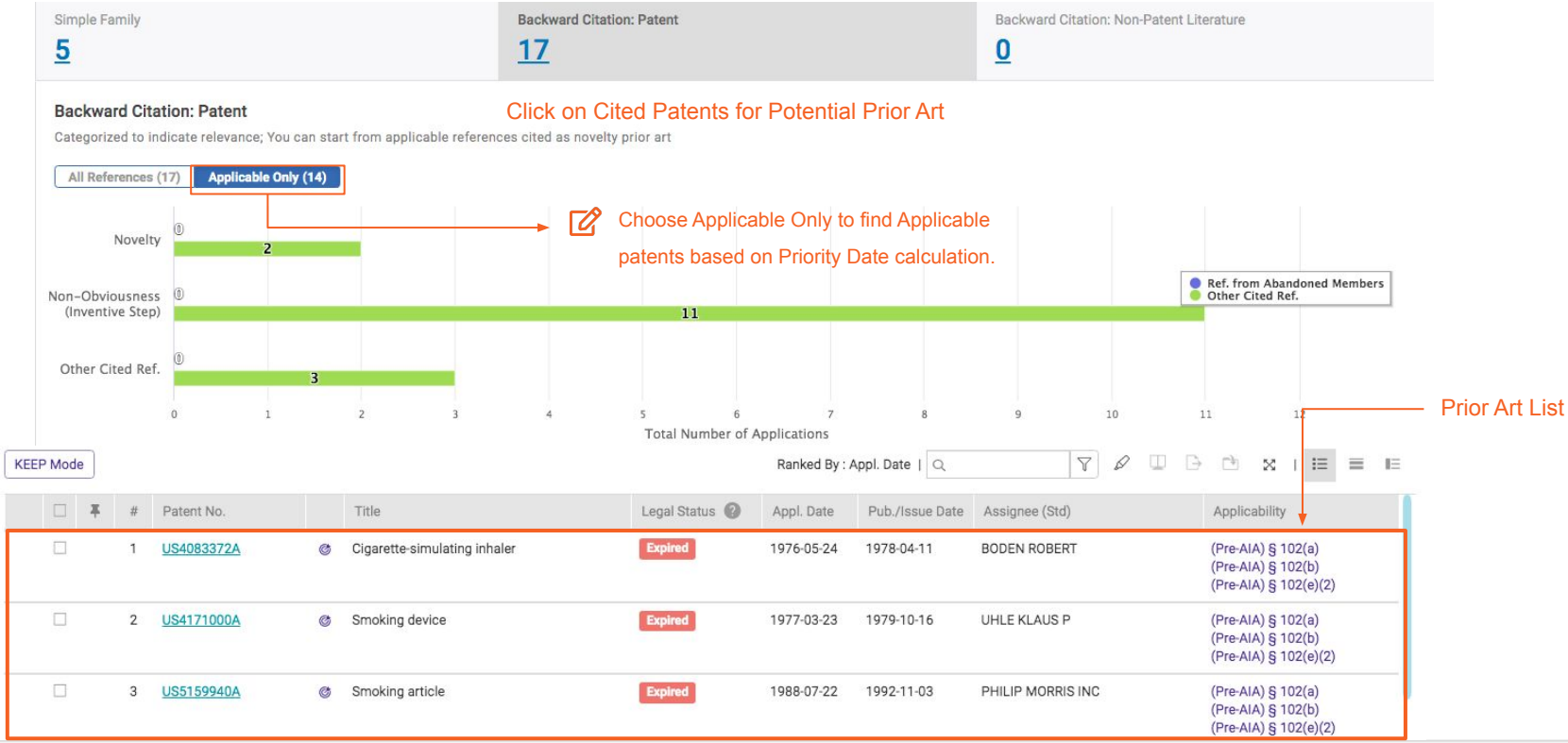
Family Prior Art

Family Prior Art of ‘623

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



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Semantic Prior Art

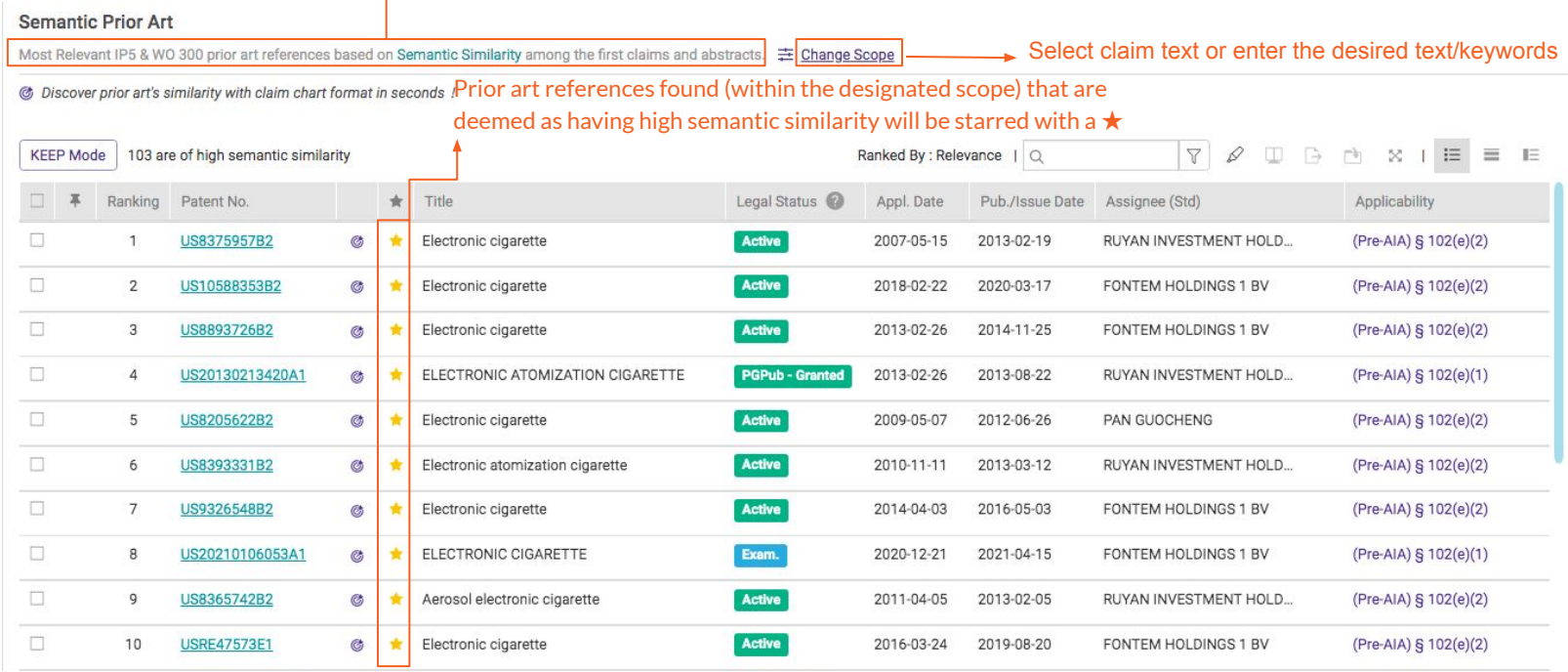
Semantic Prior Art of ‘623

Review potential prior art ranked by concept similarity

Across IP5 and WIPO thanks to Patentcloud’s proprietary algorithm

Select claim text or enter the desired text/keywords

Prior art references found (within the designated scope) that are deemed as having high semantic similarity will be starred with a ★



Semantic Prior Art

Most Relevant IP5 & WO 300 prior art references based on Semantic Similarity among the first claims and abstracts. Change Scope

Discover prior art's similarity with claim chart format in seconds !

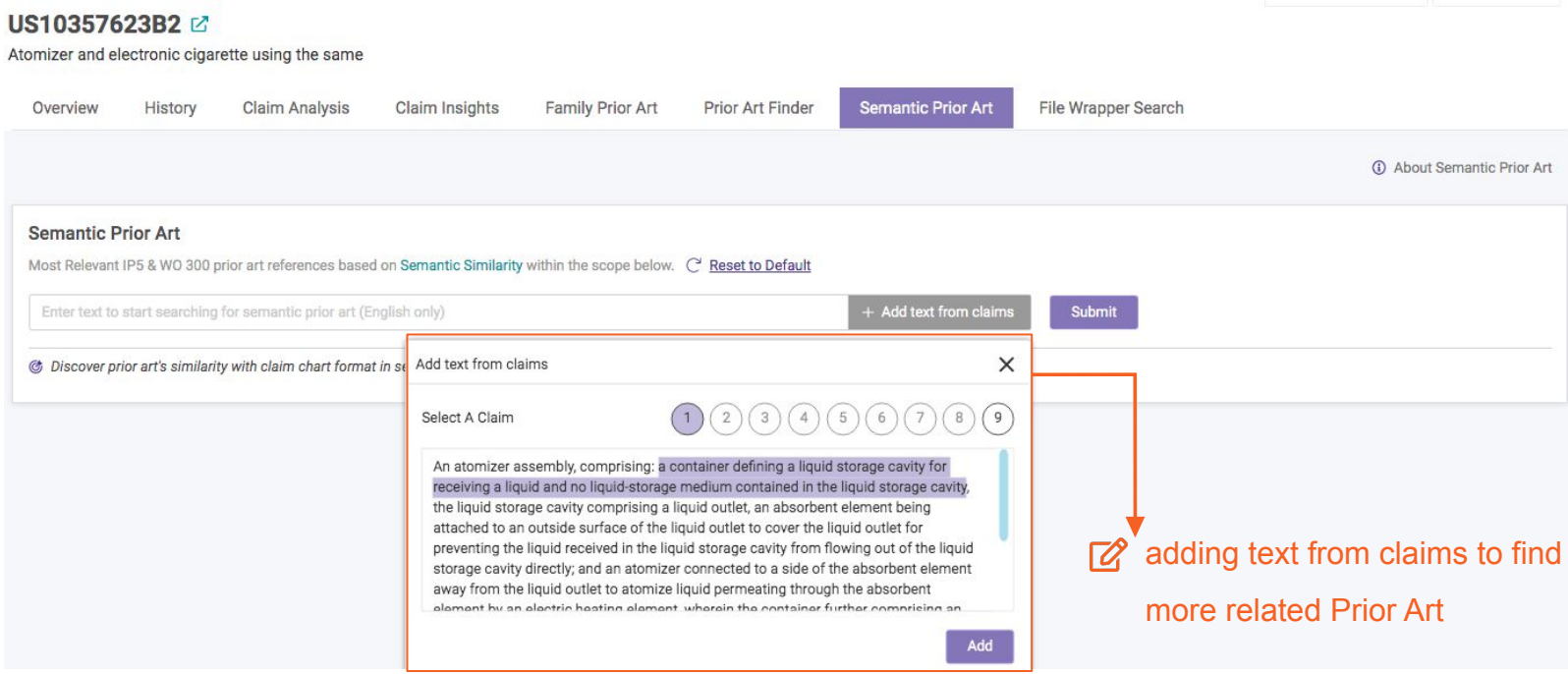
KEEP Mode | 103 are of high semantic similarity | Ranked By : Relevance

Ranking	Patent No.		Title	Legal Status	Appl. Date	Pub./Issue Date	Assignee (Std)	Applicability
1	US8375957B2		Electronic cigarette	Active	2007-05-15	2013-02-19	RUYAN INVESTMENT HOLD...	(Pre-AIA) § 102(e)(2)
2	US10588353B2		Electronic cigarette	Active	2018-02-22	2020-03-17	FONTEM HOLDINGS 1 BV	(Pre-AIA) § 102(e)(2)
3	US8893726B2		Electronic cigarette	Active	2013-02-26	2014-11-25	FONTEM HOLDINGS 1 BV	(Pre-AIA) § 102(e)(2)
4	US20130213420A1		ELECTRONIC ATOMIZATION CIGARETTE	PGPub - Granted	2013-02-26	2013-08-22	RUYAN INVESTMENT HOLD...	(Pre-AIA) § 102(e)(1)
5	US8205622B2		Electronic cigarette	Active	2009-05-07	2012-06-26	PAN GUOCHENG	(Pre-AIA) § 102(e)(2)
6	US8393331B2		Electronic atomization cigarette	Active	2010-11-11	2013-03-12	RUYAN INVESTMENT HOLD...	(Pre-AIA) § 102(e)(2)
7	US9326548B2		Electronic cigarette	Active	2014-04-03	2016-05-03	FONTEM HOLDINGS 1 BV	(Pre-AIA) § 102(e)(2)
8	US20210106053A1		ELECTRONIC CIGARETTE	Exam.	2020-12-21	2021-04-15	FONTEM HOLDINGS 1 BV	(Pre-AIA) § 102(e)(1)
9	US8365742B2		Aerosol electronic cigarette	Active	2011-04-05	2013-02-05	RUYAN INVESTMENT HOLD...	(Pre-AIA) § 102(e)(2)
10	USRE47573E1		Electronic cigarette	Active	2016-03-24	2019-08-20	FONTEM HOLDINGS 1 BV	(Pre-AIA) § 102(e)(2)

Source: Quality Insights

Semantic Prior Art of ‘623

Review potential prior art ranked by concept similarity



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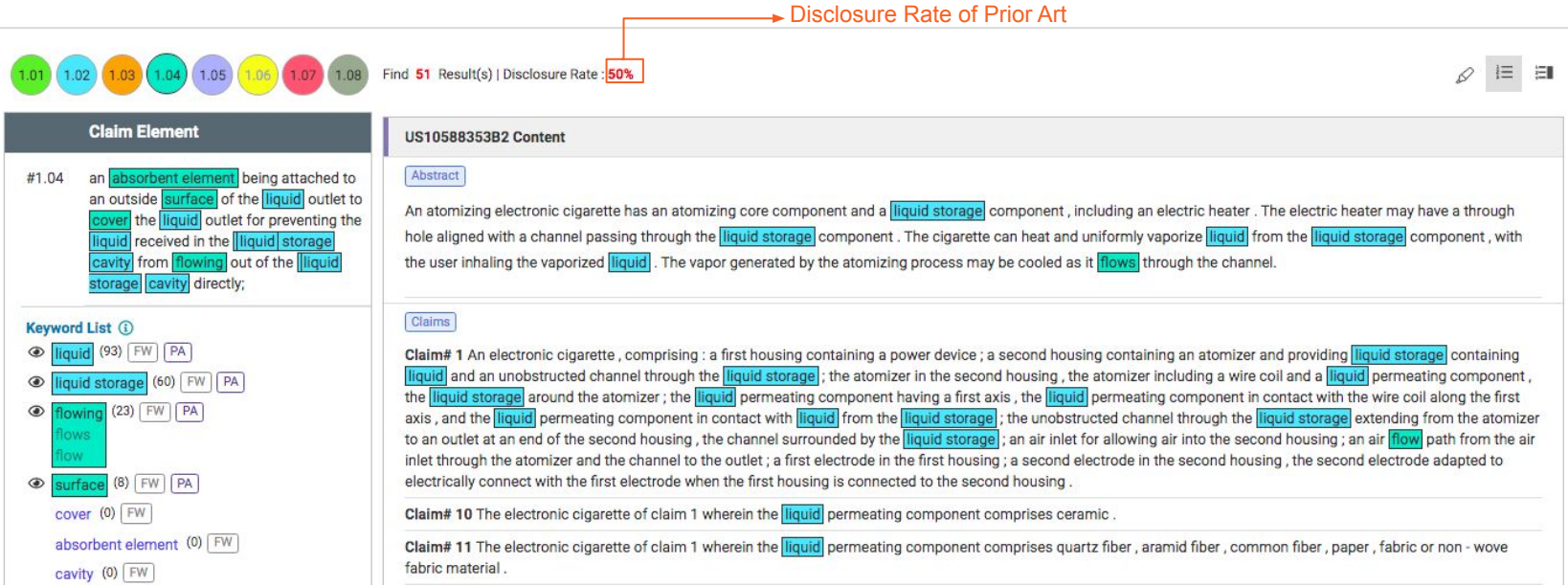
Comparison tools

Prior Art Comparison (claim chart format)

What does this prior art say about the critical elements?



Answer the question:

What does this prior art say about the Claim elements: "liquid storage" ?

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

Source: Quality Insights

Prior Art Comparison (sample output)

Easily generate a table like below

Claim		Claim-Term Interpretation	Semantic Prior Art - '353	3rd Degree Citation Prior Art - B
1	An atomizer assembly, comprising:	Refer to Claim Analysis results	N/A	……
	a container defining a liquid storage cavity for receiving a liquid and no liquid-storage medium contained in the liquid storage cavity,		33%	……
	the liquid storage cavity comprising a liquid outlet,	……	33%	……
	an absorbent element being attached to an outside surface of the liquid outlet to cover the liquid outlet for preventing the liquid received in the liquid storage cavity from flowing out of the liquid storage cavity directly;	……	50%	……
	and an atomizer connected to a side of the absorbent element away from the liquid outlet to atomize liquid permeating through the absorbent element by an electric heating element, wherein	……	57%	
	the container further comprising an outlet-defining element positioned at the liquid outlet,	……	0%	……
	and the absorbent element attached to an outside surface of the outlet-defining element and covering an opening of the liquid outlet for preventing the liquid received in the liquid storage cavity from flowing out of the liquid storage cavity directly;	……	40%	
	wherein the outlet-defining element defines a shape and reduces a size of the liquid outlet.	……	20%	

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

Source: Quality Insights

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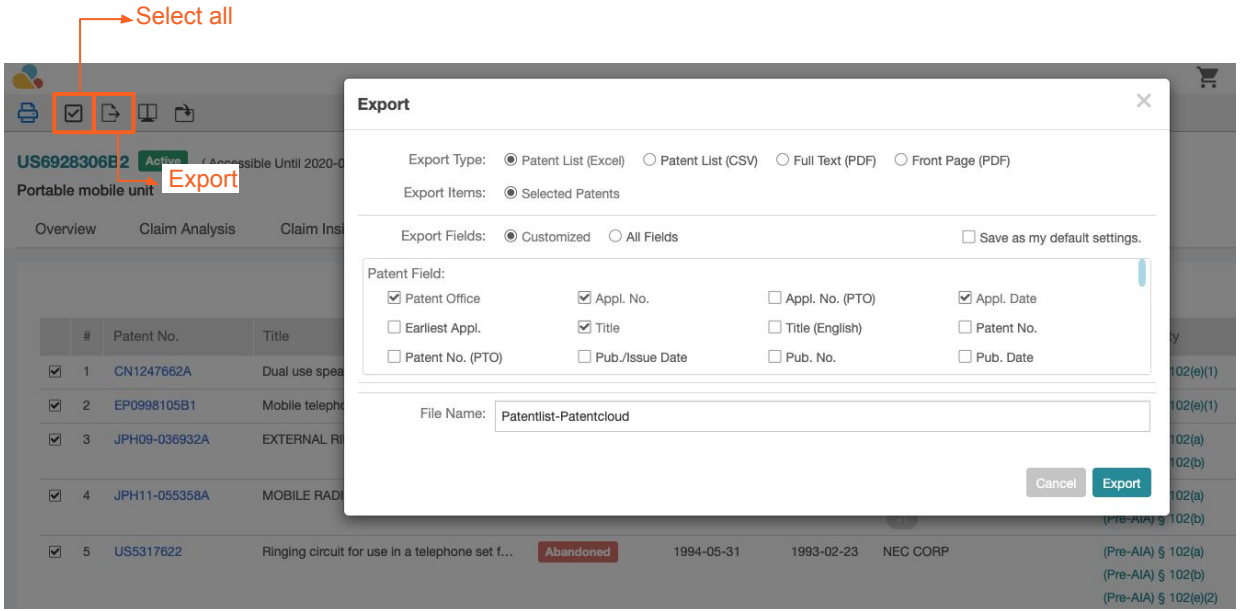
Prior Art downloads

Prior Art downloads



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

Source: Quality Insights

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Prosecution and PTAB History Key Events

Key Events - ‘623

1 Prosecution & 0 Post-Grant*

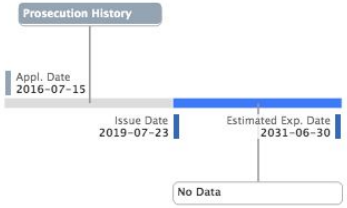
Event History	Family Status	Prior Art Status
1	5 Applications	384 Applications / 0 NPL References

# of Family Counterparts and Legal Status

# of Highly Relevant Prior Art References

Event History | 1 Prosecution History / 0 Post-Grant

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



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

Timeline of Prosecution:

*This complaint/petition is still pending institution. After institution, this case will appear under the Key Event tab.

Source: Quality Insights

Key Events - ‘623

Prosecution History

15/211032 Prior Art Ref. | 6 Ref.

Check prior art cited and the legal basis of these challenges

Double Patenting 4 Ref.

US4083372 Boden | US20080092912 Robinson | US9022026 | US9427536

§ 102 1 Ref.

US20080092912 Robinson

§ 103 7 Ref.

US20080092912 (1st) Robinson | US9022026 (1st) | US9427536 (1st)

US20090126745 Hon | US4083372 Boden | US20060191546 Takano | US20090126745 Han

Direct links to Grounds,

Claims Highlighted and Prior Art Details

Summary of 15/211032 History | 7 Event(s)

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

Data Last Updated on: 2021-09-12

Descriptions (Code)	Date	Prior Art Ref.
Notice of Allowance (NOA)	2019-05-23	
Applicant Arguments/Remarks Made in an Amendment (REM) Claims (CLM)	2019-05-08	
Final Rejection (CTFR)	2019-03-15	Grounds 13

Legal Basis	Claims	Prior Art Ref.
35 U.S.C.§ 103	claim 16	US9022026 (1st) Robinson US20080092912 Boden US4083372

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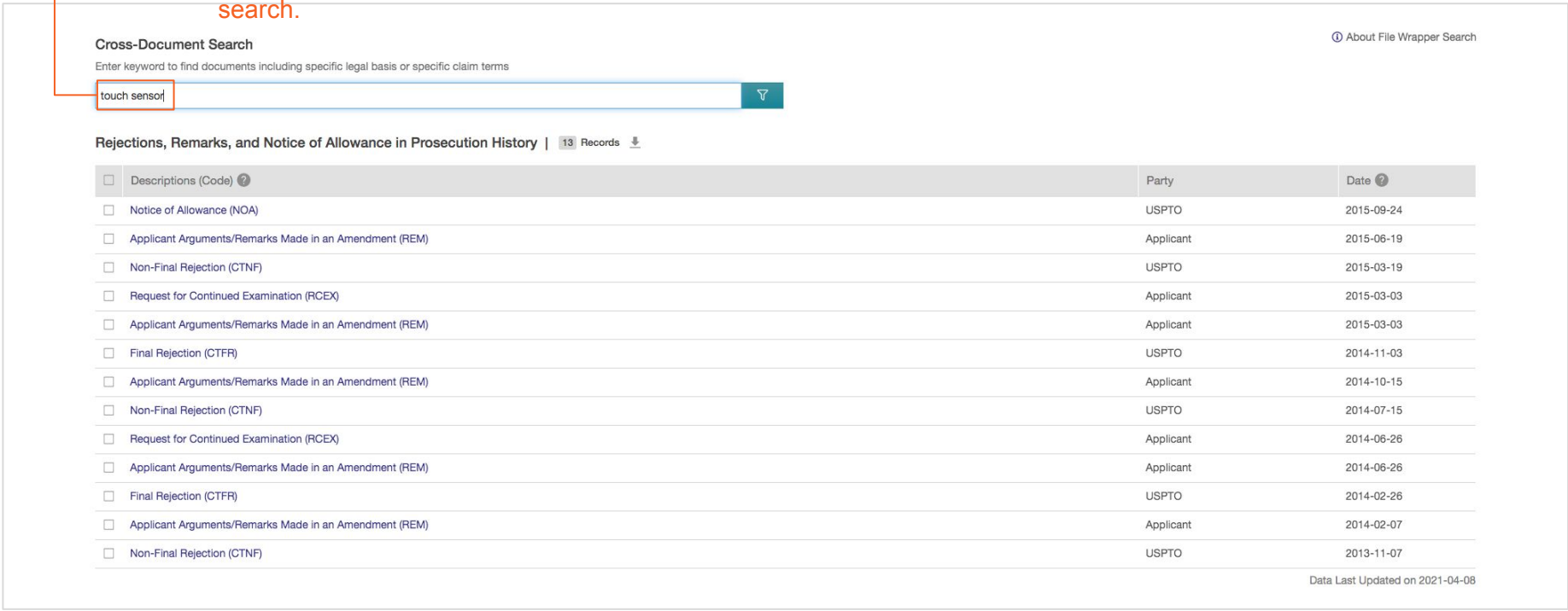
Prosecution and PTAB History Search

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

touch sensor

About File Wrapper Search

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

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

Data Last Updated on 2021-04-08

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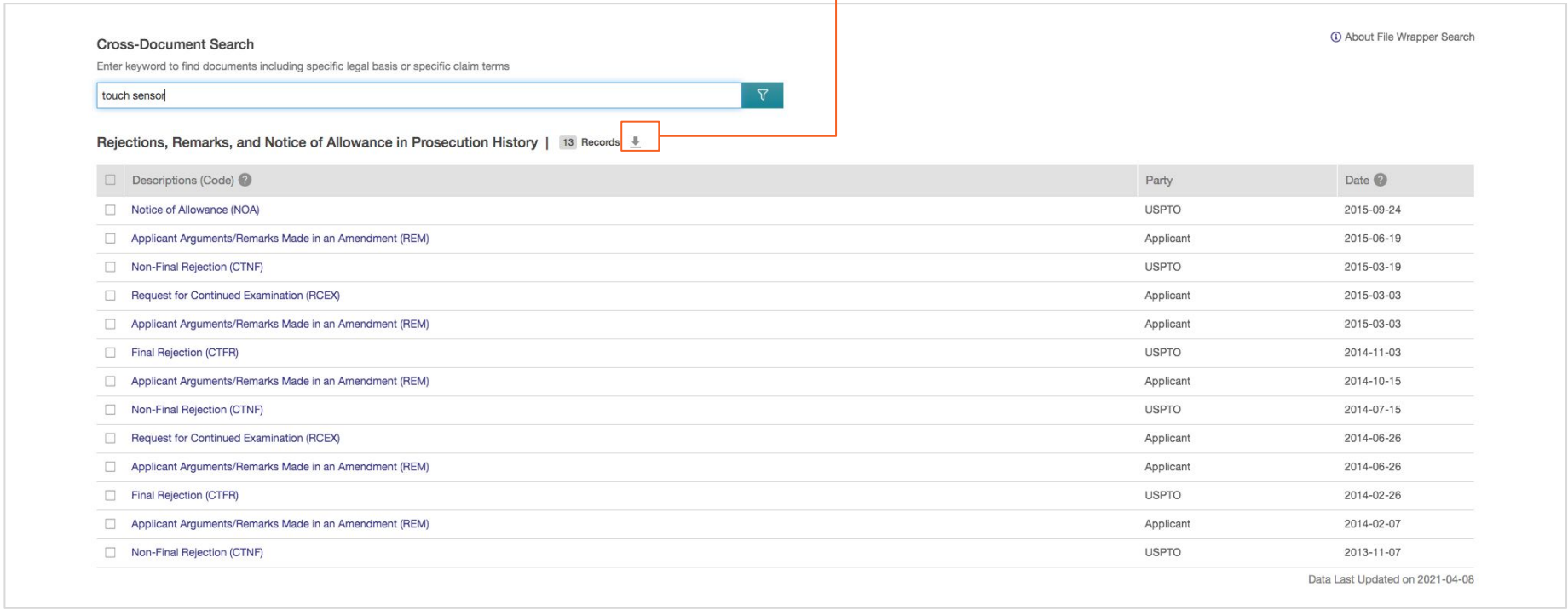
Prosecution and PTAB History PDF Downloads

PDF Downloads

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



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

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Applicant Arguments/Remarks Made in an Amendment (REM)	Applicant	2015-06-19
Non-Final Rejection (CTNF)	USPTO	2015-03-19
Request for Continued Examination (RCEX)	Applicant	2015-03-03
Applicant Arguments/Remarks Made in an Amendment (REM)	Applicant	2015-03-03
Final Rejection (CTFR)	USPTO	2014-11-03
Applicant Arguments/Remarks Made in an Amendment (REM)	Applicant	2014-10-15
Non-Final Rejection (CTNF)	USPTO	2014-07-15
Request for Continued Examination (RCEX)	Applicant	2014-06-26
Applicant Arguments/Remarks Made in an Amendment (REM)	Applicant	2014-06-26
Final Rejection (CTFR)	USPTO	2014-02-26
Applicant Arguments/Remarks Made in an Amendment (REM)	Applicant	2014-02-07
Non-Final Rejection (CTNF)	USPTO	2013-11-07

Data Last Updated on 2021-04-08

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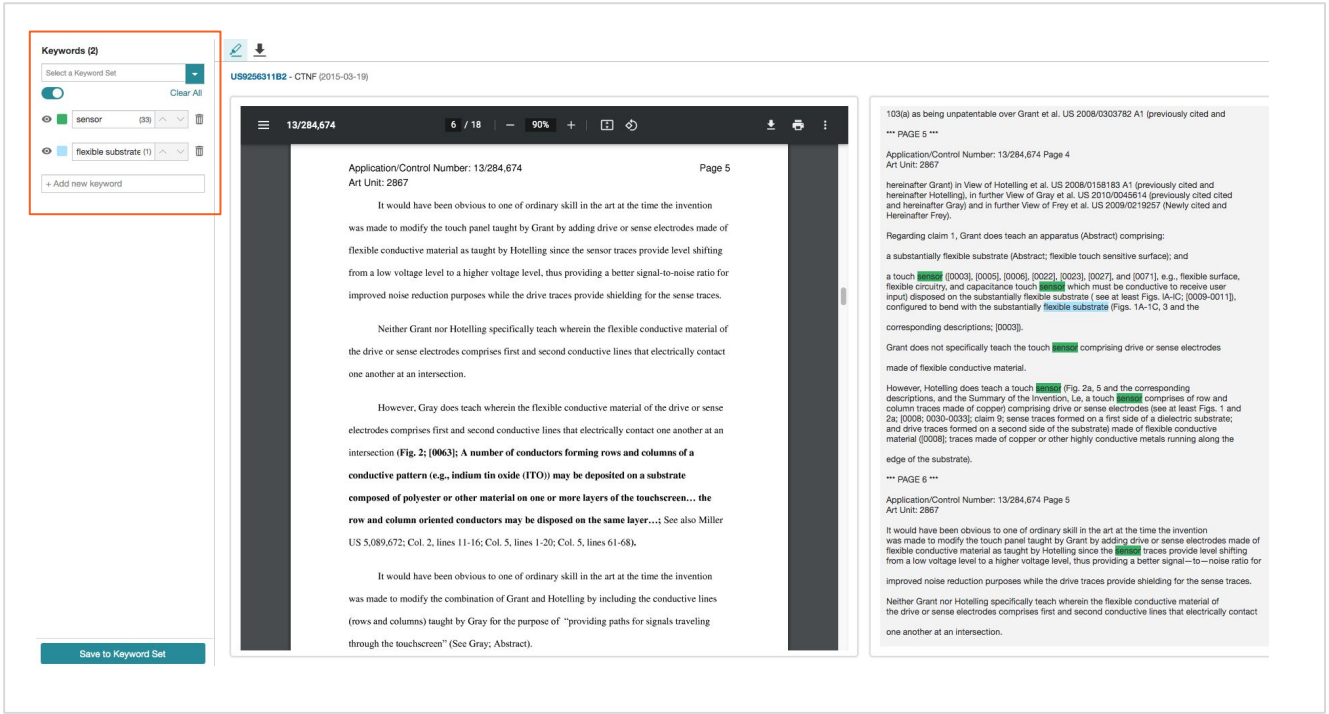
Prosecution and PTAB History Side-by-side PDF and OCR

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.



Source: Quality Insights

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QI is a Game Changer

- Take control of a patent at issue with its comprehensive Overview
- Discover claim construction issues and define the claim scope
- Find more relevant prior art references
- Save time to increase productivity for a pitch and win