Patentcloud ***Quality Insights*** Annotation Report

Qualcomm Incorporated v. Monterey Research, LLC

PTAB-IPR2020-00130

Focus on: U.S. Pat. No.6,459,625

Filing date: Nov. 05, 2021

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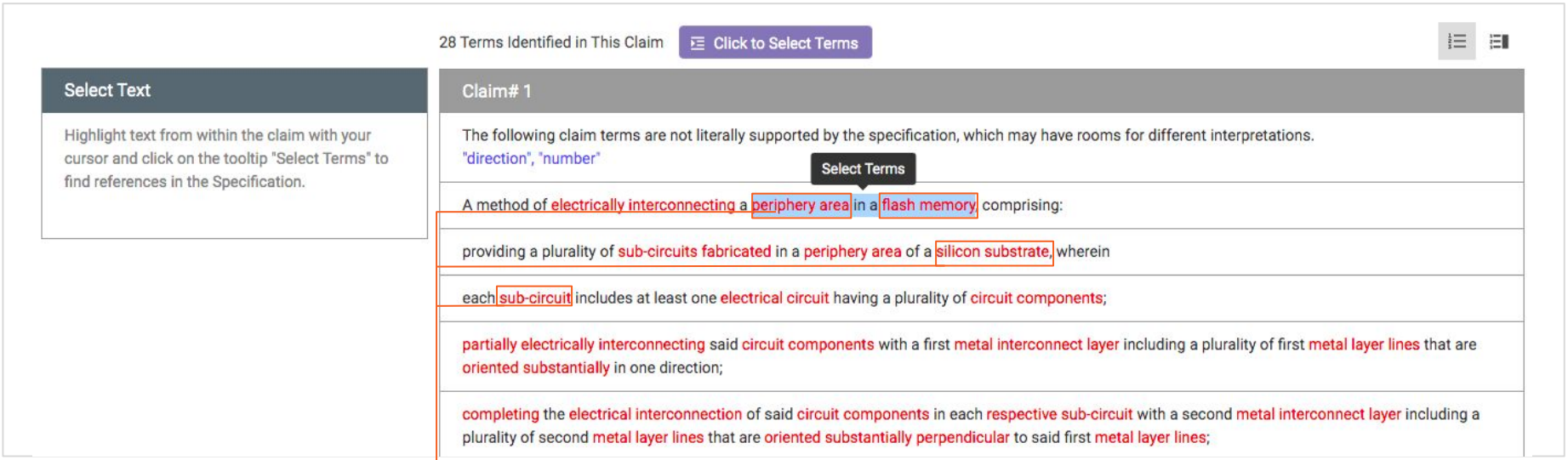
Map claims to specification and file wrapper

Map claims to specification - ‘625

Which claim terms are or are not in the specification?

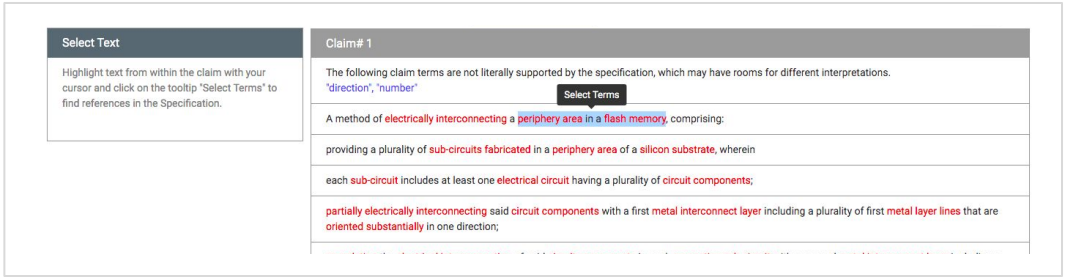


Claim Analysis finds these terms in the spec:
“periphery area”, “**flash memory**”, “**silicon substrate**”, “**sub-circuit**”, as well as other terms that are highlighted in red.

Source: Quality Insights

Map claims to specification - ‘625

Which claim terms are or are not in the specification?

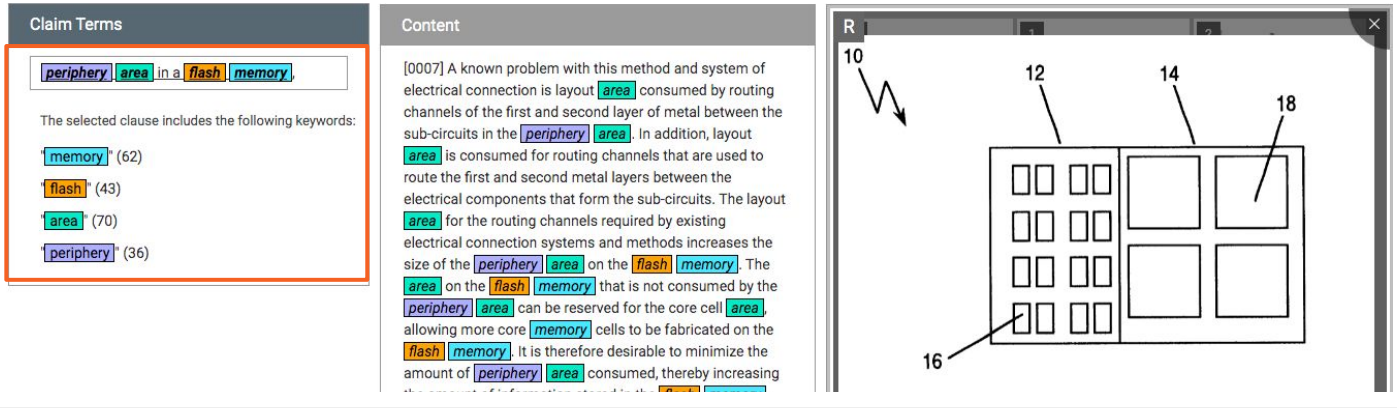


Review the selected claim element and see how it is defined in the patent specification and related figures.

Selected elements of ‘625 claim 1

Selected elements of ‘625 in Spec

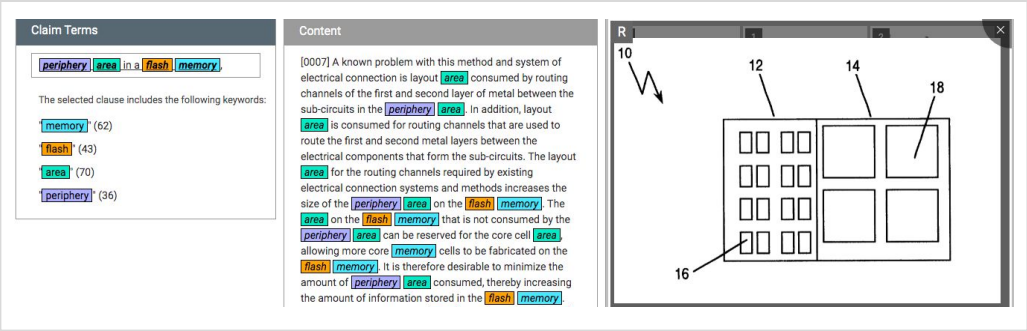
Figures of ‘625



Source: Quality Insights

Map claims to specification - ‘625

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 petition.

Answer the question:

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

Claim	Preamble	Body
1	“a periphery area in a flash memory”	“a periphery area of a silicon substrate”
6	“in a flash memory”	“a periphery area of a silicon substrate”
10	“a periphery area in a memory device”	“a periphery area of a silicon substrate”

Petitioner argues that the phrase “a periphery area of a silicon substrate,” as recited in the body of each of claims 1, 6, and 10, should be construed as limited by the preamble of each respective claim. Pet. 20–23. According to Petitioner, “Claims 1 and 6 should be limited to periphery areas of flash memory, and Claim 10 should be limited to periphery areas of a memory device.” *Id.* at 22; *see id.* at 20–21. In support of this argument, Petitioner contends that, similar to *Deere v. Bush Hog*,

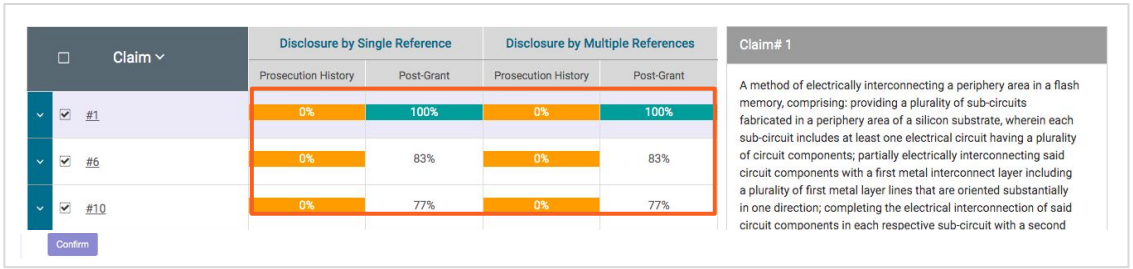
Source: Quality Insights

Map claims to the file wrapper - '625

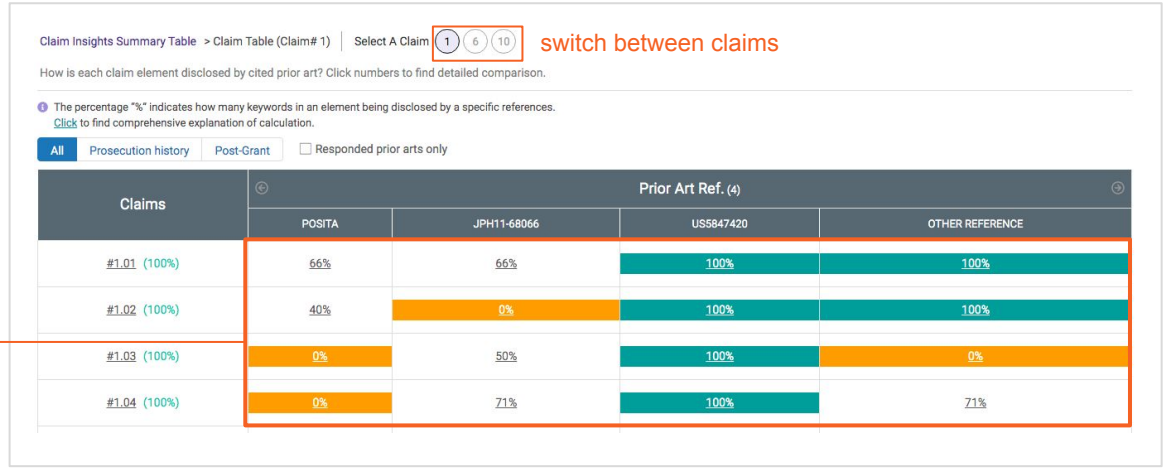
Which claim terms are in the file wrapper(i.e. examiner's opinion) ?

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

Disclosure Rate by Prior Art



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



Disclosure Rate by Prior Art

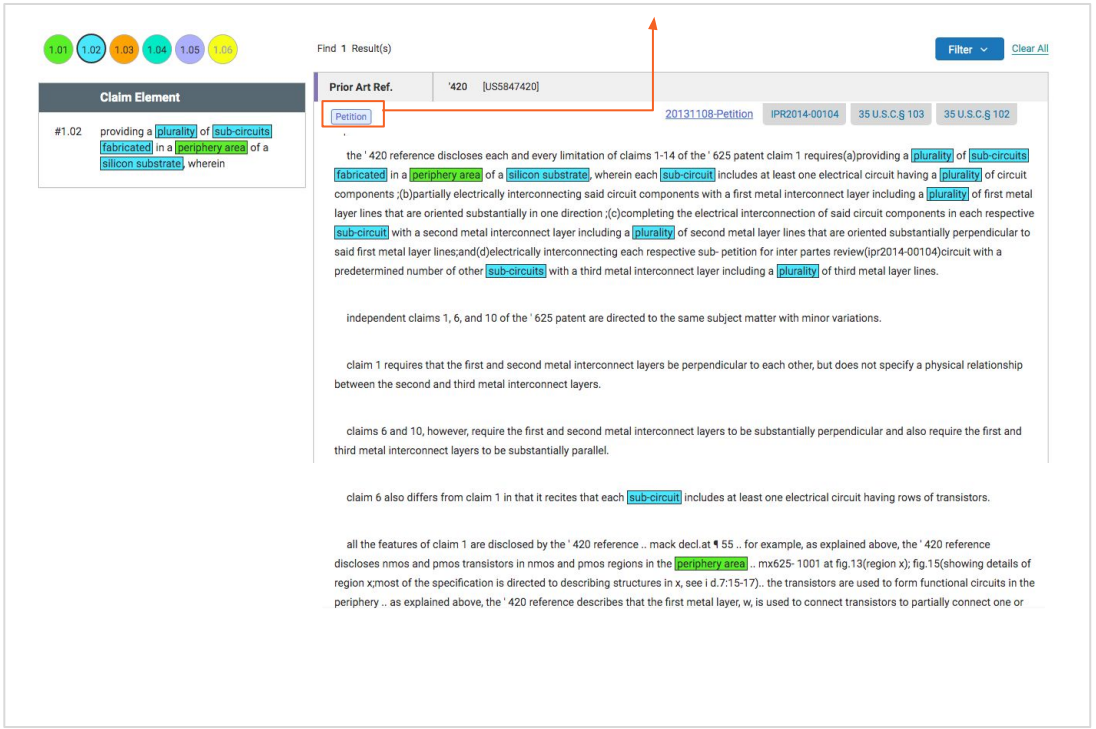
Source: Quality Insights

Map claims terms to the file wrapper - ‘625

How was this patent challenged during Prosecution & IPR?

Claims	Prior Art Ref. (4)		
	POSITA	JPH11-68066	US5847420
#1.01 (100%)	66%	66%	100%
#1.02 (100%)	40%	0%	100%
#1.03 (100%)	0%	50%	100%
#1.04 (100%)	0%	71%	100%
#1.05 (100%)	0%	50%	100%
#1.06 (100%)	0%	44%	100%

Petition from Applicant



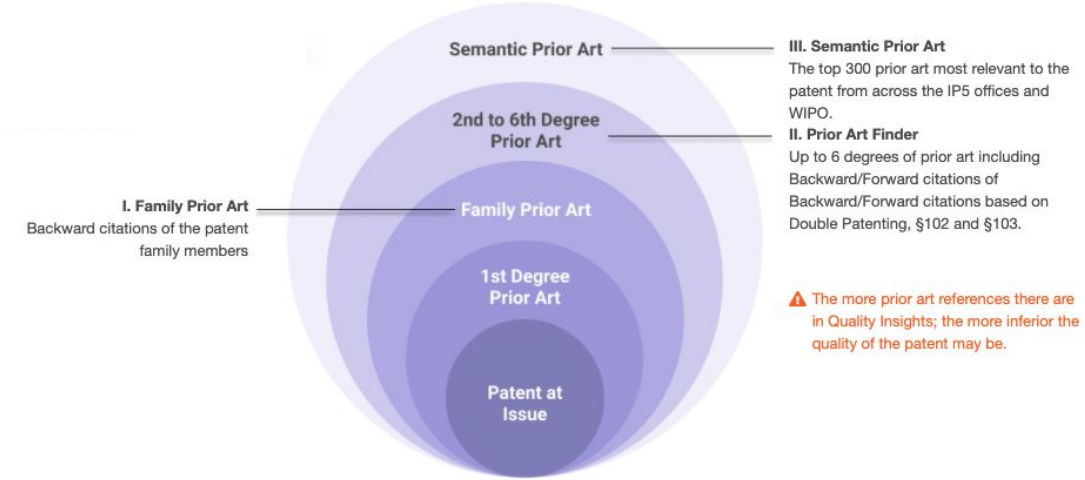
All of the limitations of this asserted claim element in ‘625 were 100% known by (US5847420).

Answer the questions:

How was this patent challenged during IPR?

Source: Quality Insights

How does Quality Insights generate prior art?



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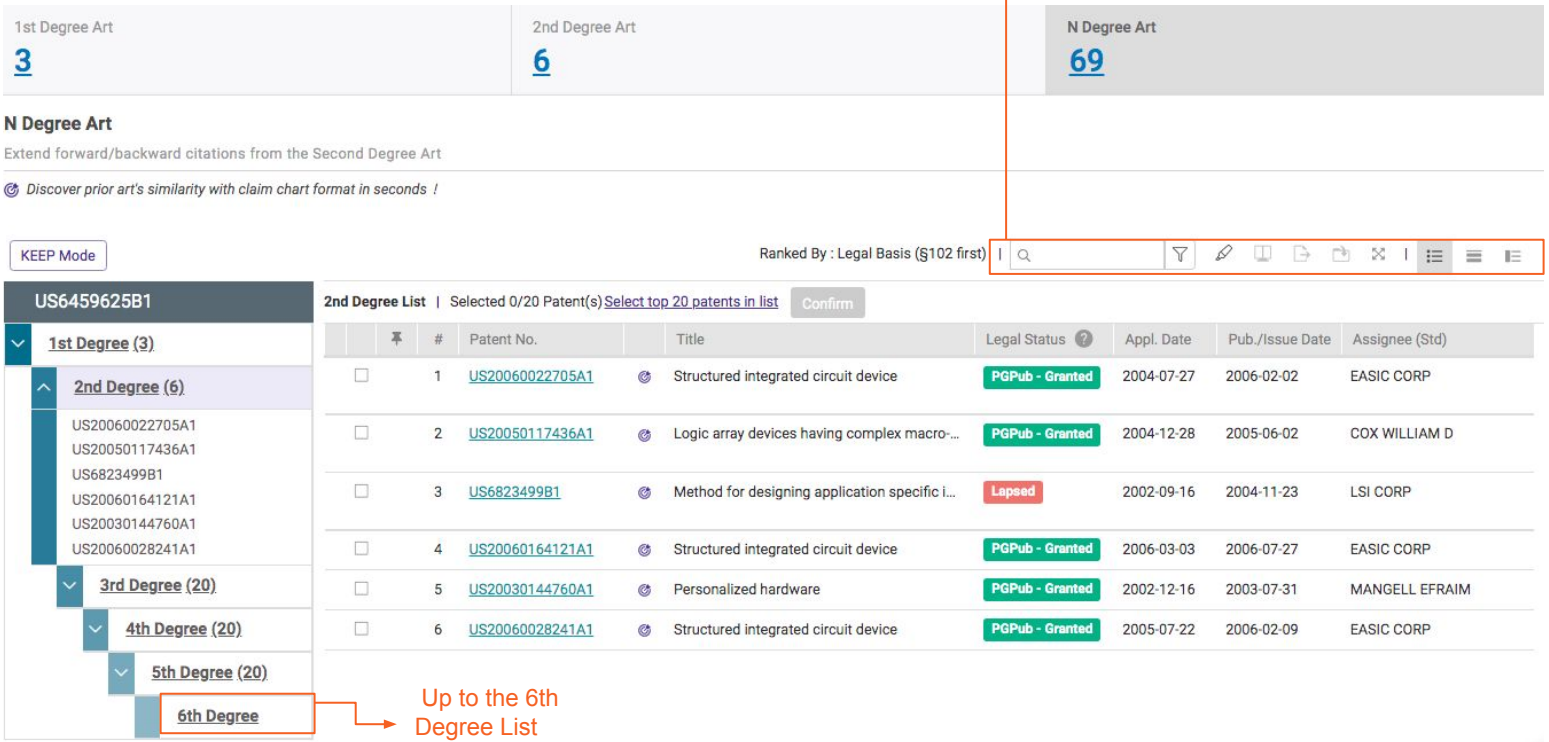
Prior Art Finder

Prior Art Finder for ‘625

Review cited and citing patents of ‘625 from the first to the sixth degree

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



Up to the 6th Degree List

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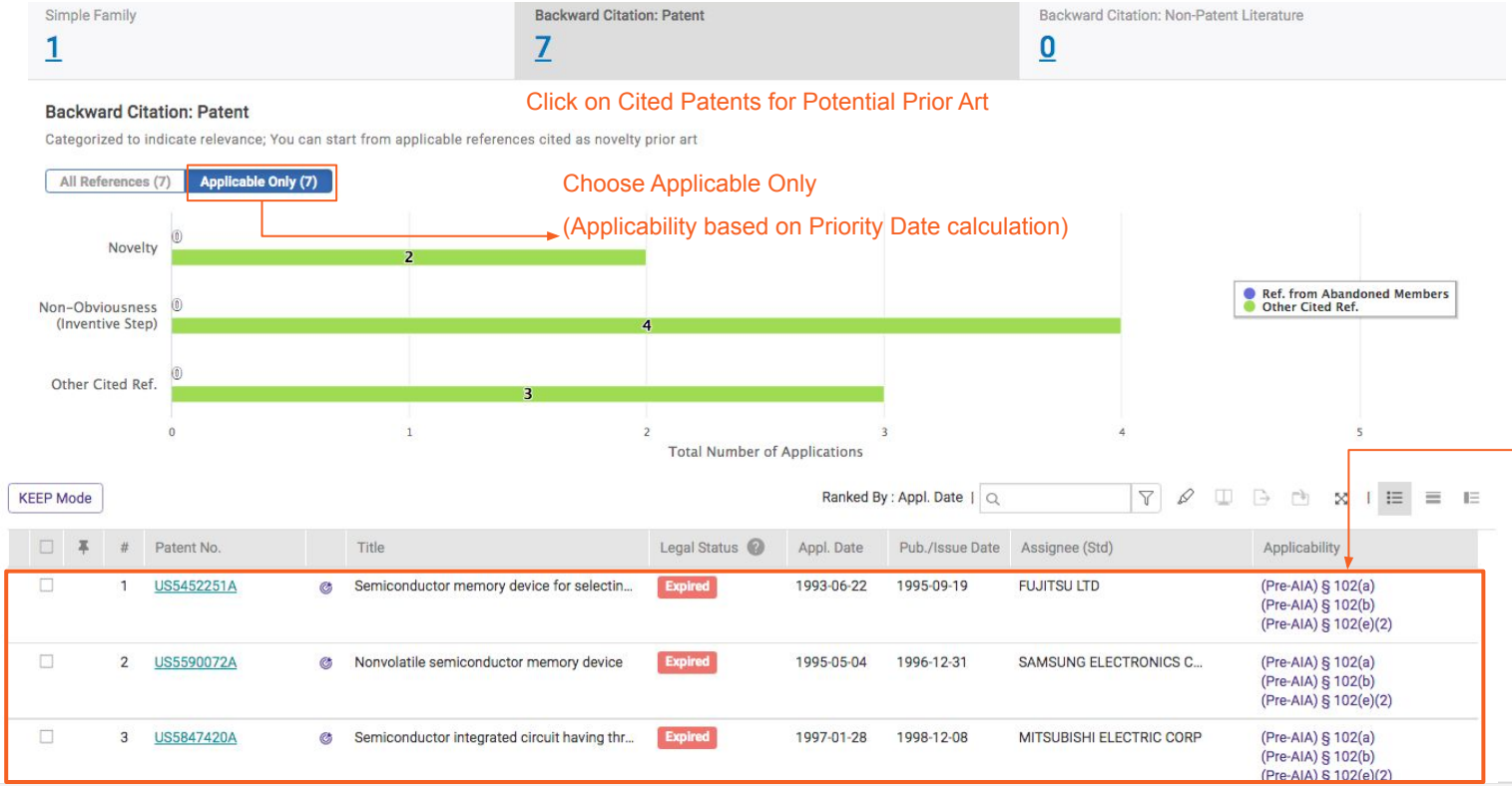
Family Prior Art

Family Prior Art of ‘625

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



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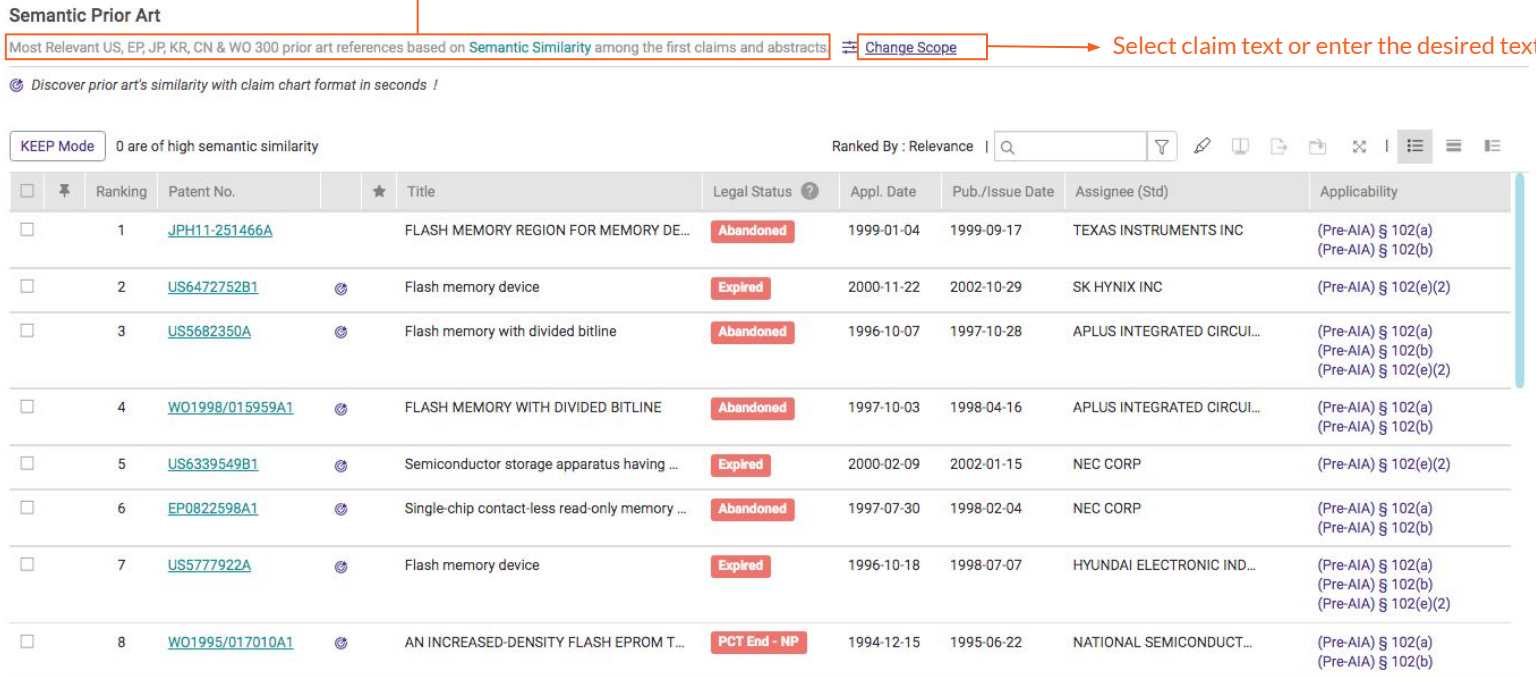
Semantic Prior Art

Semantic Prior Art of ‘625

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



Semantic Prior Art

Most Relevant US, EP, JP, KR, CN & 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 !

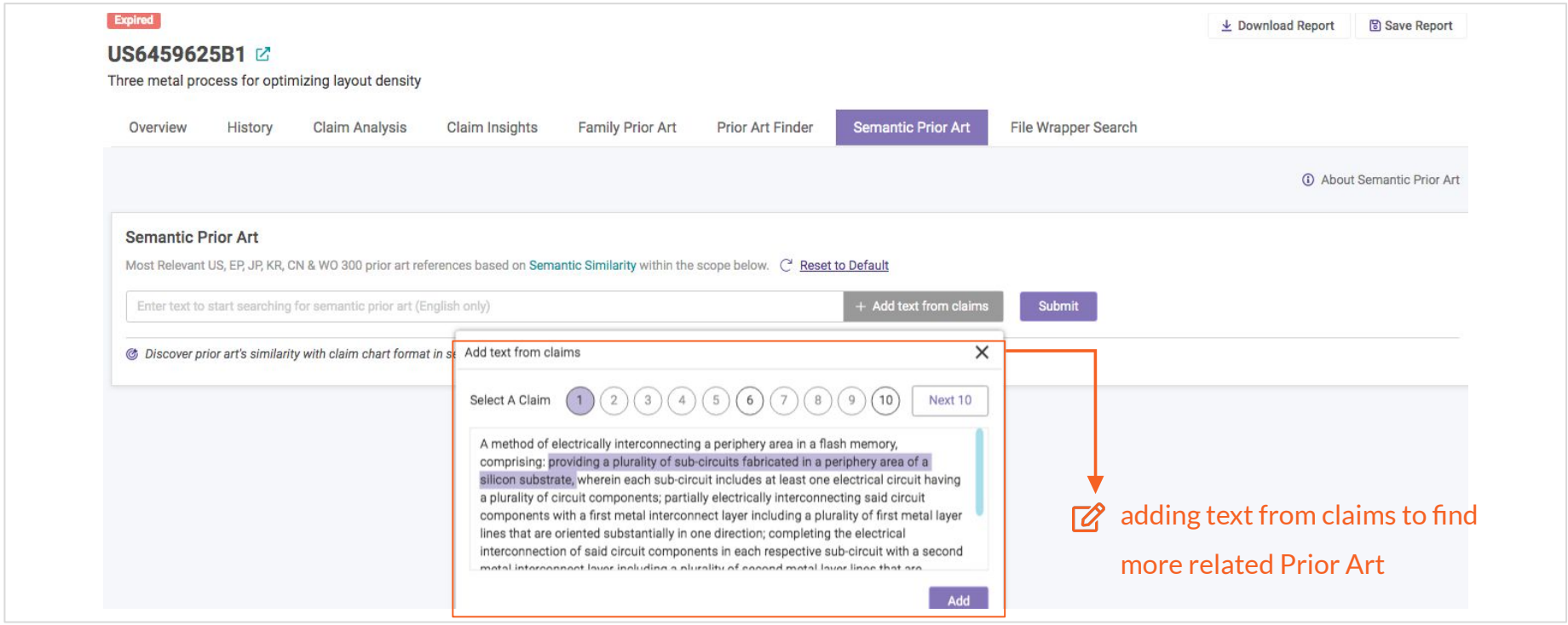
KEEP Mode | 0 are of high semantic similarity | Ranked By : Relevance

Ranking	Patent No.	Title	Legal Status	Appl. Date	Pub./Issue Date	Assignee (Std)	Applicability
1	JPH11-251466A	FLASH MEMORY REGION FOR MEMORY DE...	Abandoned	1999-01-04	1999-09-17	TEXAS INSTRUMENTS INC	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b)
2	US6472752B1	Flash memory device	Expired	2000-11-22	2002-10-29	SK HYNIX INC	(Pre-AIA) § 102(e)(2)
3	US5682350A	Flash memory with divided bitline	Abandoned	1996-10-07	1997-10-28	APLUS INTEGRATED CIRCUI...	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)
4	WO1998/015959A1	FLASH MEMORY WITH DIVIDED BITLINE	Abandoned	1997-10-03	1998-04-16	APLUS INTEGRATED CIRCUI...	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b)
5	US6339549B1	Semiconductor storage apparatus having ...	Expired	2000-02-09	2002-01-15	NEC CORP	(Pre-AIA) § 102(e)(2)
6	EP0822598A1	Single-chip contact-less read-only memory ...	Abandoned	1997-07-30	1998-02-04	NEC CORP	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b)
7	US5777922A	Flash memory device	Expired	1996-10-18	1998-07-07	HYUNDAI ELECTRONIC IND...	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)
8	WO1995/017010A1	AN INCREASED-DENSITY FLASH EPROM T...	PCT End - NP	1994-12-15	1995-06-22	NATIONAL SEMICONDUCT...	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b)

Source: Quality Insights

Semantic Prior Art of ‘625

Review potential prior art ranked by concept similarity



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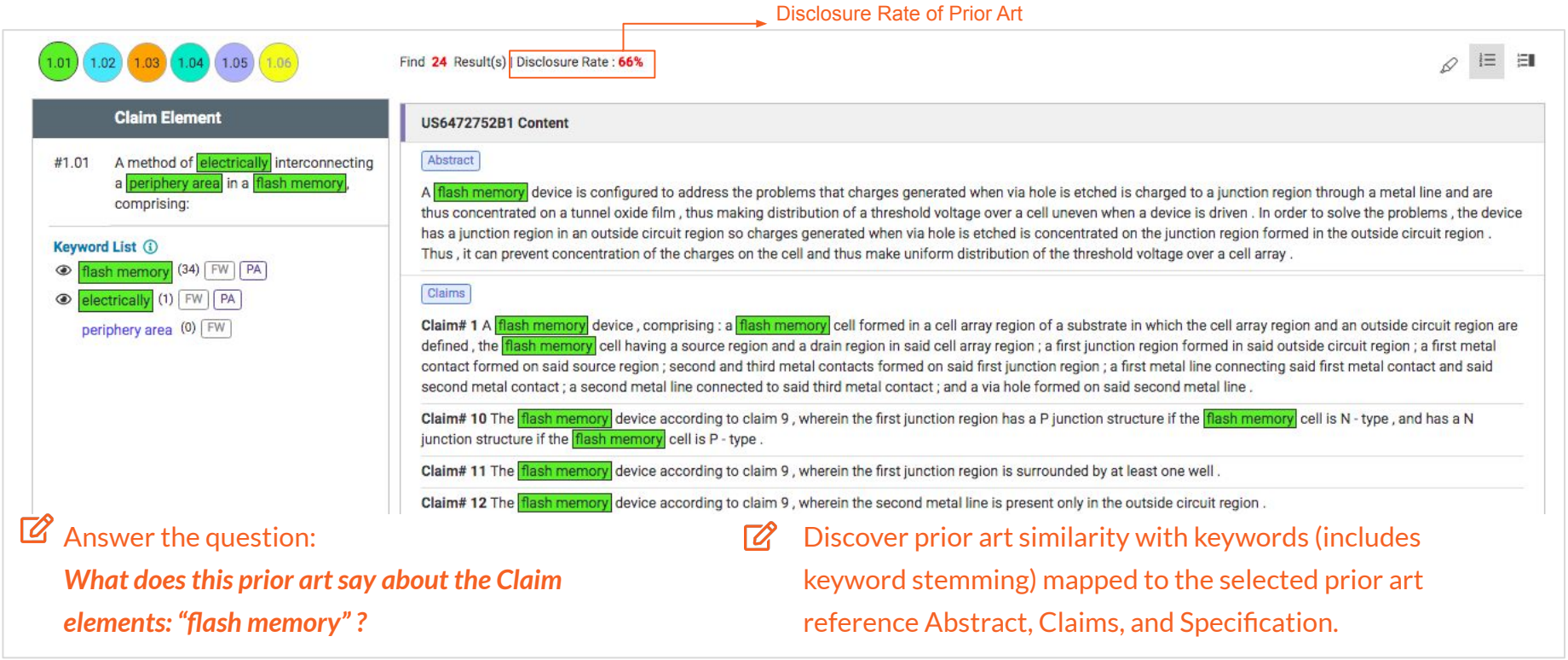
Comparison tools

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: "flash memory" ?

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 - 752‘	3rd Degree Citation Prior Art - B
1	A method of electrically interconnecting a periphery area in a flash memory, comprising:	Refer to Claim Analysis results	N/A	……
	providing a plurality of sub-circuits fabricated in a periphery area of a silicon substrate, wherein	……	N/A	……
	each sub-circuit includes at least one electrical circuit having a plurality of circuit components;	……	66%	
	partially electrically interconnecting said circuit components with a first metal interconnect layer including a plurality of first metal layer lines that are oriented substantially in one direction;	……	80%	……
	completing the electrical interconnection of said circuit components in each respective sub-circuit with a second metal interconnect layer including a plurality of second metal layer lines that are oriented substantially perpendicular to said first metal layer lines;	……	60%	……
	and electrically interconnecting each respective sub-circuit with a predetermined number of other sub-circuits with a third metal interconnect layer including a plurality of third metal layer lines.		N/A	

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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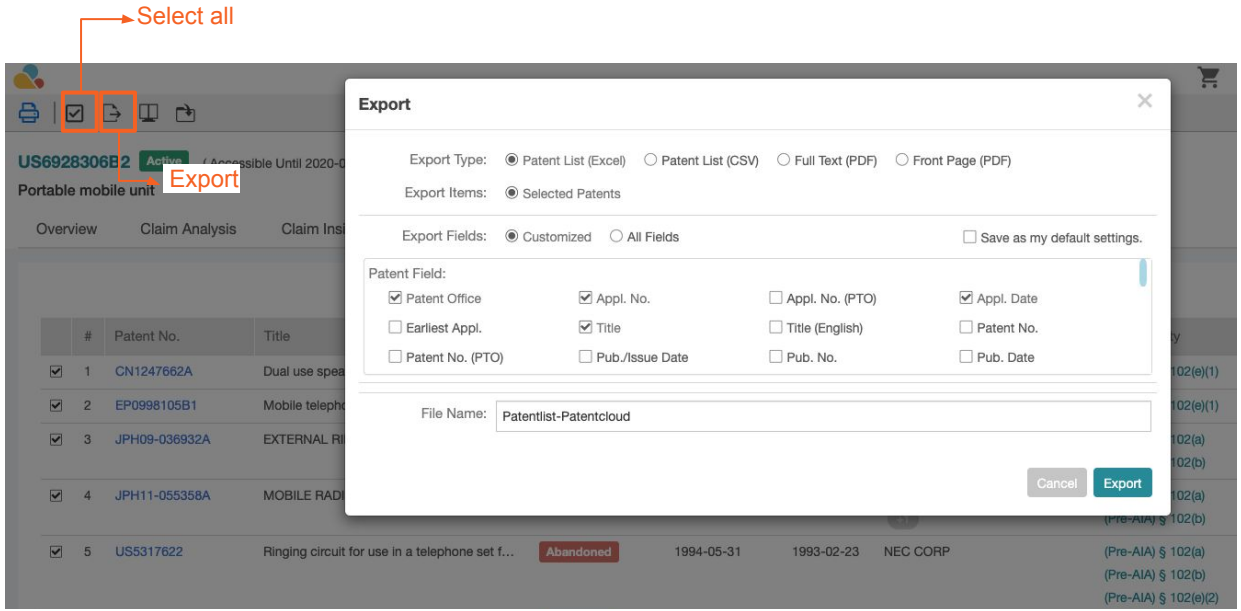
Prior art downloads

Prior art downloads



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 - ‘625

1 Prosecution & 5 Post-Grant

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Key Events - ‘625

Prosecution History

09/767341 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 09/767341 History | 1 Event(s)

Data Last Updated on: 2021-11-04

Descriptions (Code)	Date	Prior Art Ref.
Claims (CLM)	2001-01-23	

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

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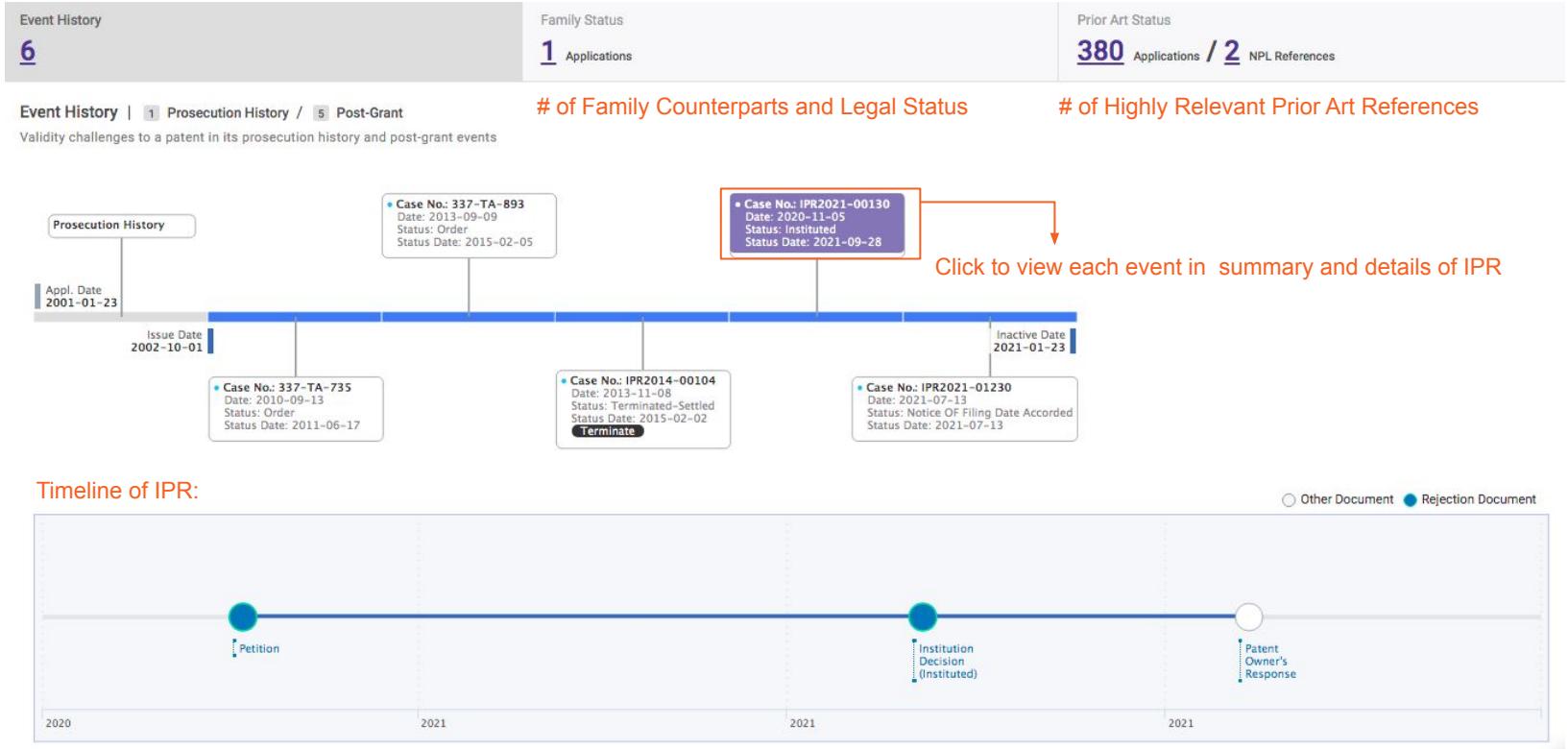
Key Events - ‘625

Post-Grant



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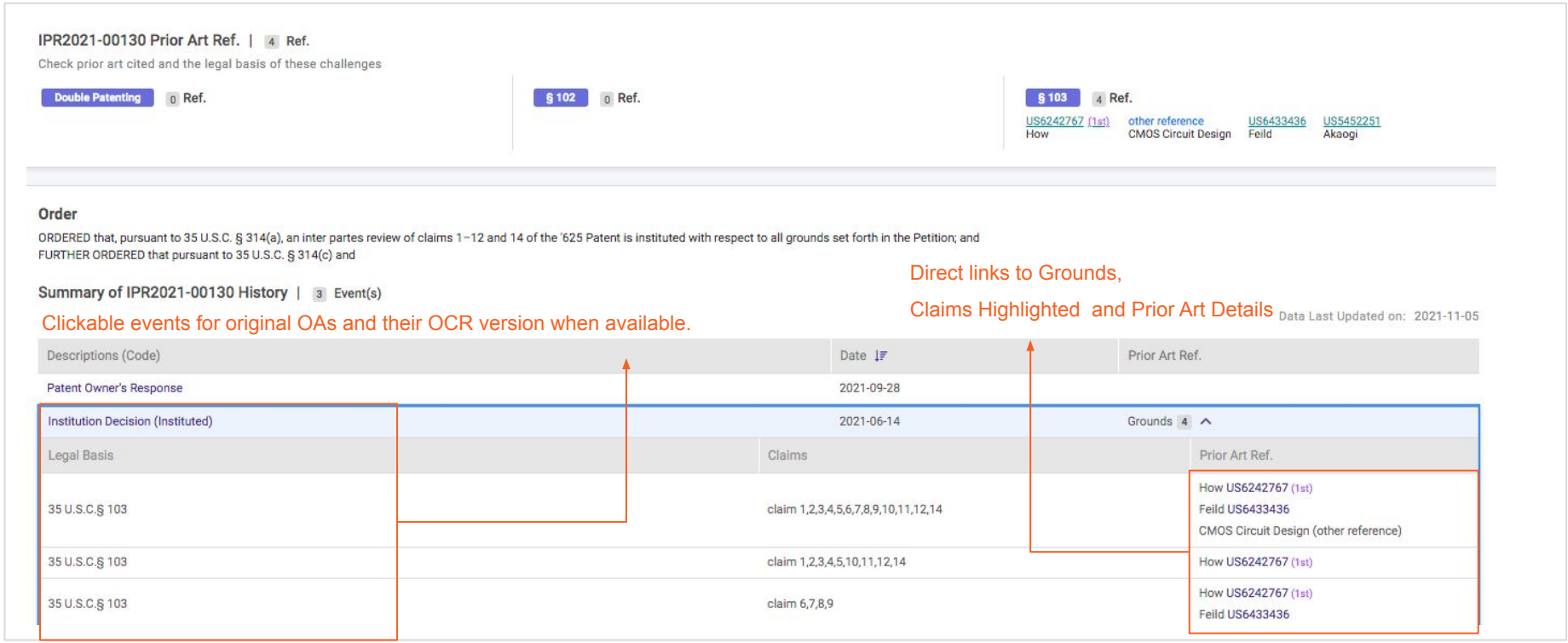
Key Events - ‘625

Post-Grant



IPR2021-00130 Prior Art Ref. | 4 Ref.

Check prior art cited and the legal basis of these challenges

Double Patenting 0 Ref.

§ 102 0 Ref.

§ 103 4 Ref.

US6242767 (1st) How | other reference CMOS Circuit Design | US6433436 Feild | US5452251 Akaogi

Order

ORDERED that, pursuant to 35 U.S.C. § 314(a), an inter partes review of claims 1–12 and 14 of the '625 Patent is instituted with respect to all grounds set forth in the Petition; and
FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and

Summary of IPR2021-00130 History | 3 Event(s)

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

Direct links to Grounds,

Claims Highlighted and Prior Art Details

Data Last Updated on: 2021-11-05

Descriptions (Code)	Date	Prior Art Ref.
Patent Owner's Response	2021-09-28	
Institution Decision (Instituted)	2021-06-14	Grounds 4

Legal Basis	Claims	Prior Art Ref.
35 U.S.C.§ 103	claim 1,2,3,4,5,6,7,8,9,10,11,12,14	How US6242767 (1st) Feild US6433436 CMOS Circuit Design (other reference)
35 U.S.C.§ 103	claim 1,2,3,4,5,10,11,12,14	How US6242767 (1st)
35 U.S.C.§ 103	claim 6,7,8,9	How US6242767 (1st) Feild US6433436

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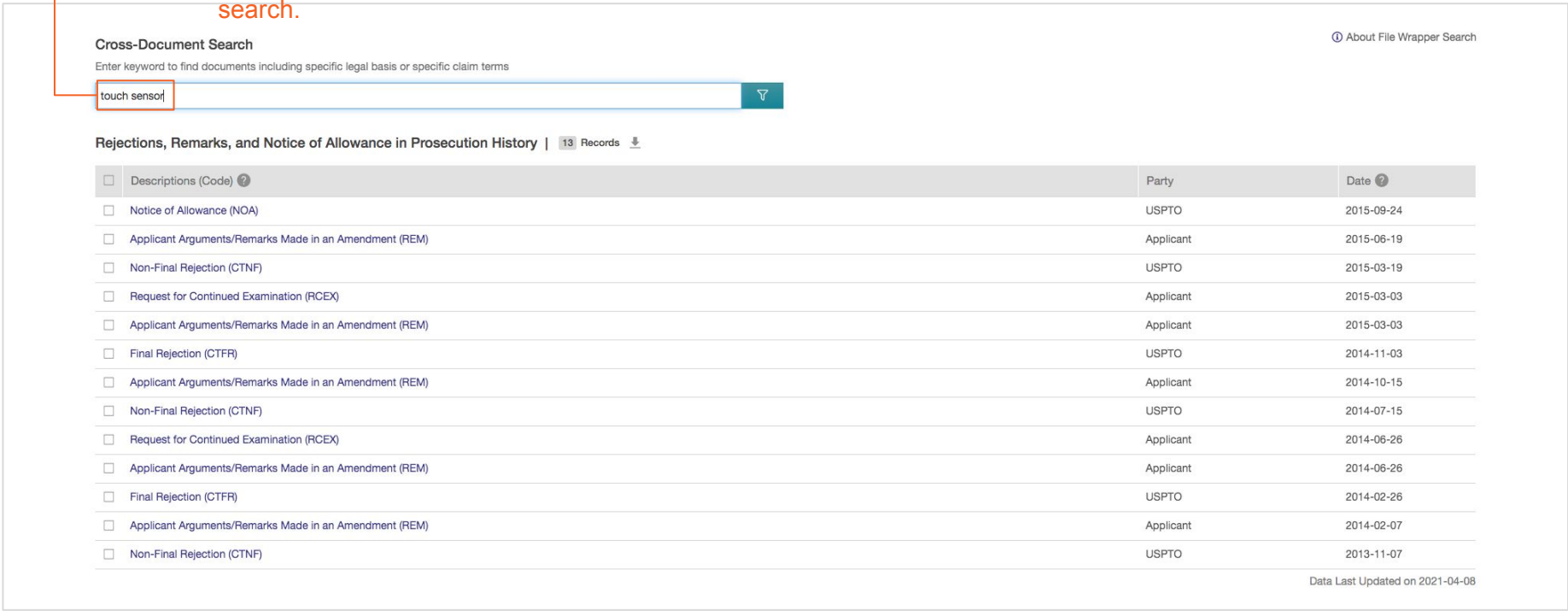
Prosecution and PTAB History Search

Patent File Wrapper Search

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



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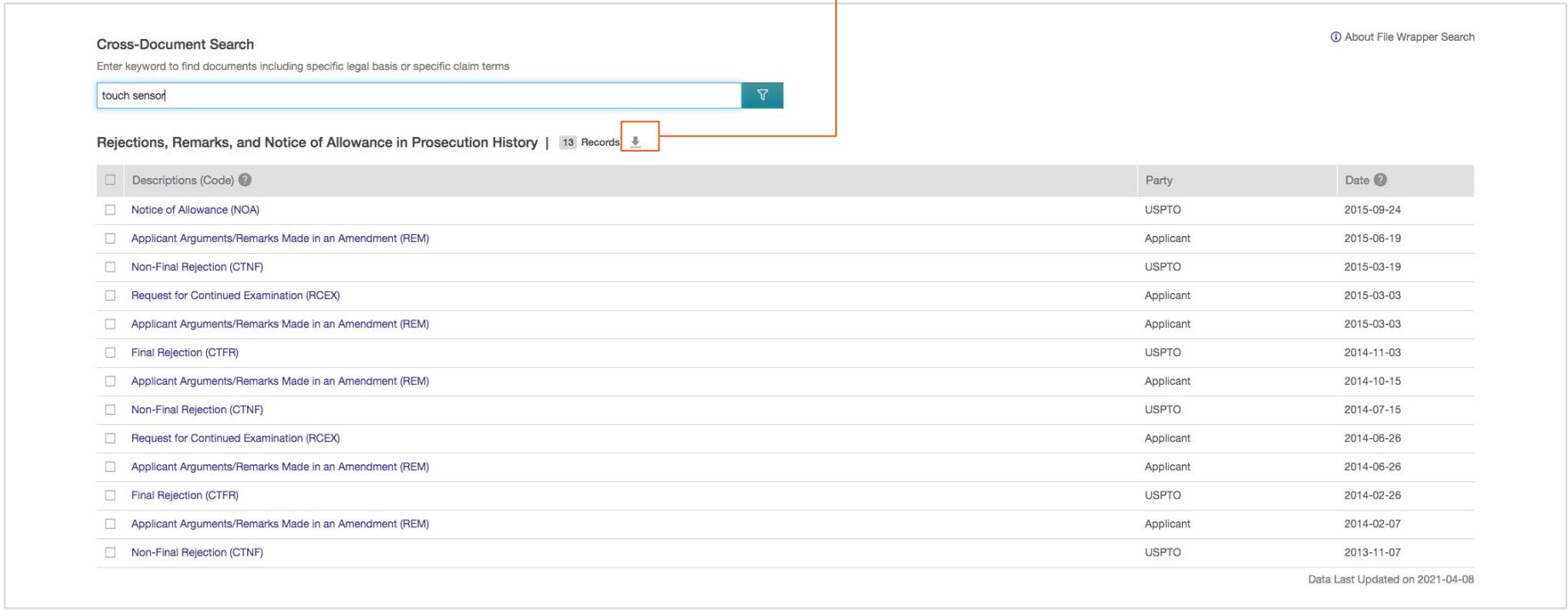
Prosecution and PTAB History PDF Downloads

PDF Downloads

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



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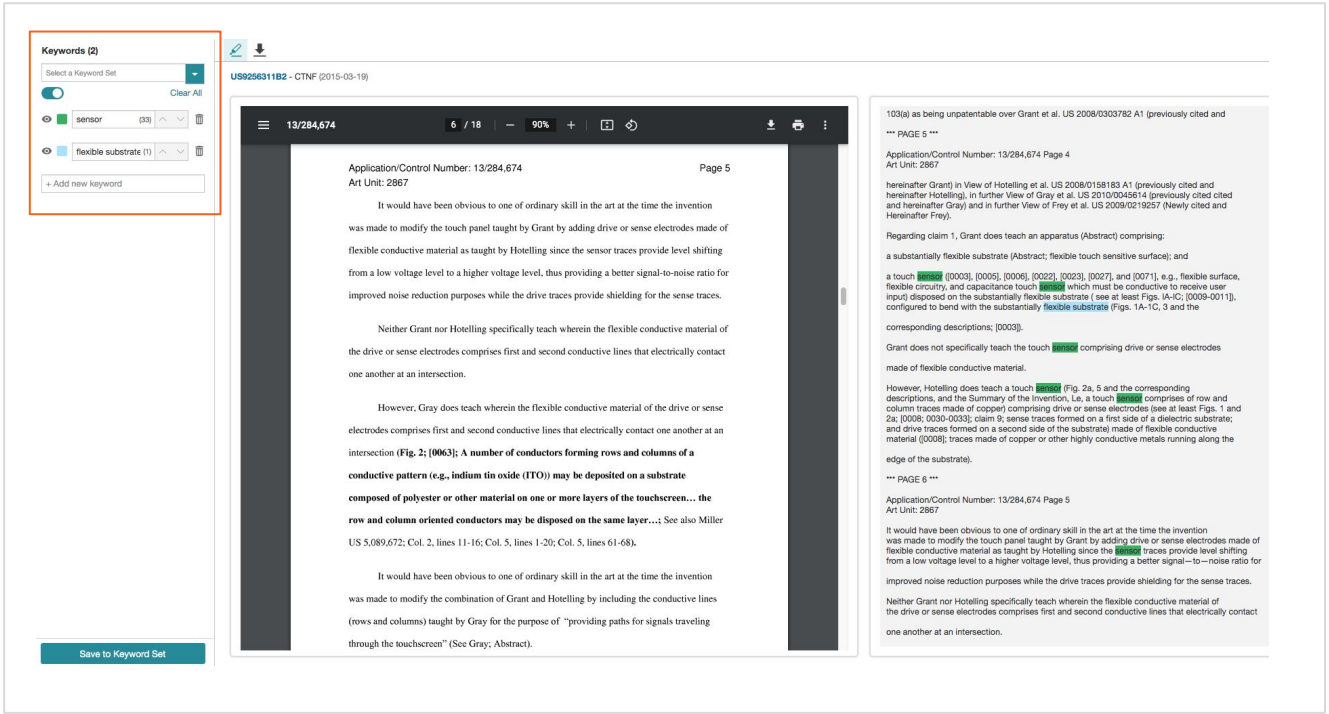
Prosecution and PTAB History Side-by-side PDF and OCR

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

Patentcloud
Quality Insights

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