



Quality Insights

Quality Insights Annotation Report

Ancora Technologies, Inc. v. Google, LLC

WDTX-6-21-cv-00735

Focus on: U.S. Pat. No. 6,411,941

Filing date: July 16, 2021

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Claim Construction and § 112 Invalidity

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Map claims to specification and file wrapper

Map claims to specification - '941

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

24 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 of **restricting software operation** within a **license** for use with a **computer** including an **erasable, non-volatile memory area** of a BIOS of the **computer**,

and a **volatile memory area**,

the method comprising the steps of:

selecting a program residing in the **volatile memory**, using an **agent** to set up a **verification structure** in the **erasable, non-volatile memory** of the BIOS,

the **verification structure accommodating data** that includes at least one **license record**, **verifying** the **program** using at least the **verification structure** from the **erasable non-volatile memory** of the BIOS,

and **acting** on the **program** according to the **verification**.



Claim Analysis finds these terms in the spec:

"erasable", "processor", "non-volatile memory area", "volatile memory area"

as well as other terms that are highlighted in red.

Map claims to specification - '941

Which claim terms are or are not in the specification?

24 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 of **restricting software operation** within a license for use with a **computer** including an **erasable, non-volatile memory area** of a BIOS of the **computer**,

and a **volatile memory area**;

the method comprising the steps of:

selecting a program residing in the volatile memory, using an **agent** to set up a verification structure in the **erasable, non-volatile memory** of the BIOS,

the verification structure accommodating data that includes at least one **license record**, verifying the program using at least the **verification structure**

[Select Terms](#)

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

Selected elements of '941 Claim 1

Selected elements of Claim 1 in Spec

Figures of '941

Select Text

erasable, non-volatile, memory, area

The selected clause includes the following keywords:

- non-volatile** * (16)
- memory** * (25)
- area** * (16)
- erasable** * (0)

Content

[0032] A schematic diagram of a computer and a license bureau is shown in FIG. 1. Thus, a computer processor (1) is associated with input operations (2) and with output operations (3). This computer (processor) internally contains a first **non-volatile memory area** (4) (e.g. the ROM section of the BIOS), a second **non-volatile memory area** (5) (e.g. the E.sup.2 PROM section of the BIOS), and a volatile **memory area** (6) (e.g. the internal RAM **memory** of the computer).

[0044] Setting up (18) the verification structure includes the steps of: establishing or certifying the existence of a pseudo-unique key in the first **non-volatile memory area**; and establishing at least one license-record location in the first or the second nonvolatile **memory area**.

Map claims to specification and Complaint - '941

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

Select Text

erasable, non-volatile, memory, area

The selected clause includes the following keywords:

non-volatile (16)

memory (25)

area (16)

erasable (0)

Content

[0032] A schematic diagram of a computer and a license bureau is shown in FIG. 1. Thus, a computer processor (1) is associated with input operations (2) and with output operations (3). This computer (processor) internally contains a first non-volatile memory area (4) (e.g. the NCM section of the BIOS), a second non-volatile memory area (5) (e.g. the E sup 2 PROM section of the BIOS), and a volatile memory area (6) (e.g. the internal RAM memory of the computer).

[0044] Setting up (18) the verification structure includes the steps of: establishing or certifying the existence of a pseudo-unique key in the first non-volatile memory area, and establishing at least one license-record location

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?

46. During this process, one or more OTA servers owned or controlled by Google set up a verification structure in the erasable, non-volatile memory of the BIOS of the Pixelbook by transmitting to the device an OTA update, which the Pixelbook is configured by Google to save to the erasable, non-volatile memory of its BIOS. As noted previously, on information and belief, such BIOS areas include what Google refers to as the target slot or inactive partition.

Map claims to the file wrapper - '941

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%	100%	87%	100%
<input checked="" type="checkbox"/> #18	33%	77%	33%	77%

Confirm

Claim# 1
A method of restricting software operation within a license for use with a computer including an erasable, non-volatile memory area of a BIOS of the computer, and a volatile memory area; the method comprising the steps of:
selecting a program residing in the volatile memory, using an agent to set up a verification structure in the erasable, non-volatile memory of the BIOS, the verification structure accommodating data that includes at least one license record, verifying the program using at least the verification structure from the erasable non-volatile memory of the BIOS, and acting on the program according to the verification

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 3 4 5 6 7 8 9 10 11 [Next 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. (7)					
	US5692900	US5684951	US5479639	US6189146	US5490216	OTHER REFERENCE
#1.01 [A] (100%)	100%	100%	100%	100%	0%	0%
#1.02 [N/A]	N/A	N/A	N/A	N/A	N/A	N/A
#1.03 [N/A]	N/A	N/A	N/A	N/A	N/A	N/A
#1.04 [A] (100%)	83%	83%	83%	83%	66%	66%
#1.05 [A] (100%)	66%	66%	66%	66%	66%	66%
#1.06 [A] (100%)	100%	100%	100%	100%	0%	0%

Disclosure Rate by Prior Art

Map claims terms to the file wrapper - '941

How was this patent challenged during Prosecution?

Claims	Prior Art Ref. n					
	US5892900	US5684951	US5796939	US5189146	US5482216	OTHER REFERENCE
#1.01 (A) (100%)	100%	100%	100%	100%	0%	0%
#1.02 (N/A)	N/A	N/A	N/A	N/A	N/A	N/A
#1.03 (N/A)	N/A	N/A	N/A	N/A	N/A	N/A
#1.04 (A) (100%)	83%	83%	83%	83%	65%	65%
#1.05 (A) (100%)	65%	65%	65%	65%	65%	65%
#1.06 (A) (100%)	100%	100%	100%	100%	0%	0%

✍ All of the limitations of this asserted claim element in '941 were 100% known by Goldman (US5684951) and Ginter (US5892900) .

Answer the questions:

How was this patent challenged during Prosecution?

Claim Insights Summary Table > Claim Table (Claim# 1) > Claim Element Page (Claim# 1.01) > US5892900 | Select A Claim 1

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

1.01 1.02 1.03 1.04 1.05 1.06

Claim Element

#1.01 A method of restricting **software** **operation** within a **license** for use with a **computer** including an erasable, **non-volatile memory** area of a **BIOS** of the **computer**.

Find 5 Result(s) Find More Result(s)

Rejection from Examiner

Prior Art Ref. [A] Goldman [US5684951] Ginter [US5892900]

20001220-CTNE Prosecution History 35 U.S.C. § 103

Rejection

as per claim 7, ginter et al teach of a method and system for electronic rights protection comprising of volatile memory, **non-volatile memory**, **license** records location and licensed **software** programs(column 5, lines 29-41;column 6, lines 2965;column 15, lines 10-34;column/line 63/67-64/15 ; column/line 65/55-66-47;column 70, lines 12-27;column 96, lines 37-41;column/line 278/40-281/44).

ginter et al also use encryption keys(column 206, lines 57-65).

however, ginter et al do not make use of pseudo unique keys in their system.

goldman et al teach of a method and system for user authorization over a multi-user **computer** system through the use of pseudo unique keys(abstract, lines 19-23).

Remarks from Applicant 20010521-REM

Remarks

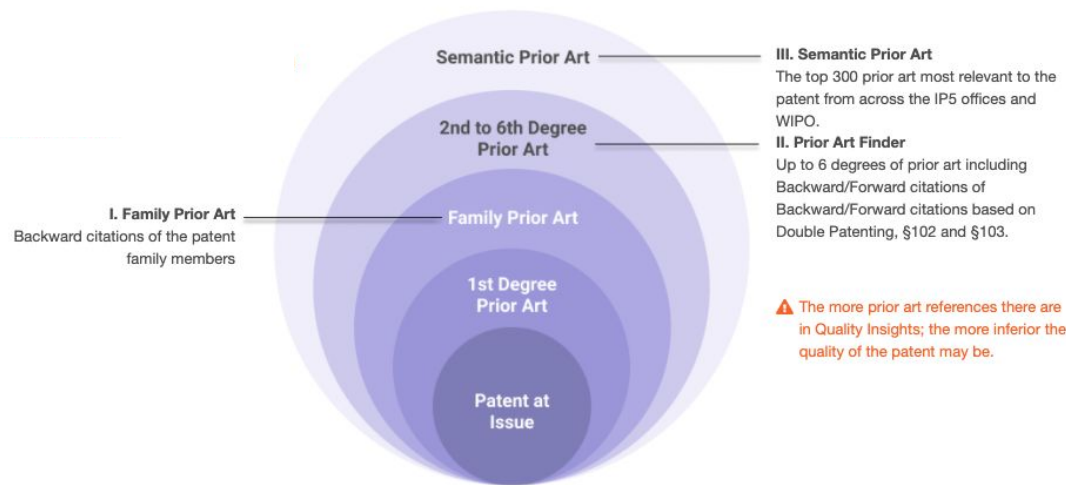
there no specific discussion as to how the functionality is performed and whether it is actually has something to do with protecting **software**. in contrast to ginter et al., the present invention provides a system and method which not only enables free distribution of the **software** such as happens in retail stores, and **software** companies that ship millions of copies), that overcomes the problems with the stationary object in ginter et al., but also does not suffer from the limitations of incorporating the key in the distributed data as is the case with the traveling object of ginter et al.moreover, the steps of setting up a verification structure and using that structure for verification are clearly recited in the rejected claims for example, independent claim 1 recites a method of restricting **software** **operation** within a **license** limitation. the method is useful for a **computer** including a first, non-erasable, **non-volatile memory** area, a second, erasable, **non-volatile memory** area, and a volatile memory area. the first **non-volatile memory** accommodates data that includes unique key. according to 9-amendment '1) ' the method of the invention, a program residing in the volatile memory is selected.a verification structure is set up in the second **non-volatile memory**, the verification structure accommodates data that include at least one **license** record.

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How does Quality Insights generate prior art?



Semantic Prior Art

Semantic Prior Art of '941

Review potential prior art ranked by concept similarity

Across IP5 and WIPO thanks to Patentcloud's proprietary algorithm

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"/>		Ranking	Patent No.		★	Title	Legal Status ?	Appl. Date	Pub./Issue Date	Assignee (Std)	Applicability
<input type="checkbox"/>		1	WO1998/015082A1			SECURE BIOS	Abandoned	1997-07-30	1998-04-09	INTEL CORP	(Pre-AIA) § 102(a)
<input type="checkbox"/>		2	US5844986A			Secure BIOS	Expired	1996-09-30	1998-12-01	INTEL CORP	(Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		3	US5802592A			System and method for protecting integrit...	Expired	1996-05-31	1998-09-01	IBM CORP	(Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		4	US6253281B1			Method for updating firmware of a comput...	Expired	1998-06-15	2001-06-26	US PHILIPS CORP	(Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		5	US4791565A			Apparatus for controlling the use of comp...	Abandoned	1984-06-20	1988-12-13	EFFECTIVE SECURITY SY...	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		6	CN1146813A			Proboot protection for a data security syst...	Abandoned	1995-03-01	1997-04-02	INTEGRATED TECHNOLO...	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b)
<input type="checkbox"/>		7	US6438432B1			Process for the protection of stored progr...	Abandoned	1999-05-05	2002-08-20	ROBERT BOSCH GMBH	(Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		8	EP0657820A1			Method for preventing unauthorised data ...	PGPub - Granted	1994-12-01	1995-06-14	SIEMENS AG	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b)
<input type="checkbox"/>		9	US5930504A			Dynamic nonvolatile memory update in a ...	Expired	1996-07-22	1999-07-27	INTEL CORP	(Pre-AIA) § 102(e)(2)

Semantic Prior Art of '941

Review potential prior art ranked by concept similarity

Expired

US6411941B1


Method of restricting software operation within a license limitation

[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](#)

+ 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 method of restricting software operation within a license for use with a computer including an erasable, non-volatile memory area of a BIOS of the computer, and a volatile memory area; the method comprising the steps of: selecting a program residing in the volatile memory, using an agent to set up a verification structure in the erasable, non-volatile memory of the BIOS, the verification structure accommodating data that includes at least one license record, verifies the program using at least the verification structure from the erasable non-

Add



adding text from claims to find more related Prior Art

Source: Quality Insights

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Prior Art Finder

Prior Art Finder for '941

Review cited and citing patents of '941 from the first to the sixth degree

Filter by:

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

1st Degree Art

9

2nd Degree Art

361

N Degree Art

89

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) |



US6411941B1

1st Degree List | Selected 0/20 Patent(s) [Select top 20 patents in list](#) [Confirm](#)

	⌵	#	Patent No.	Title	Legal Status ?	Appl. Date	Pub./Issue Date	Assignee (Std)	Applicability
<input type="checkbox"/>		1	US6153835A	 System and method for an electronic post...	Expired	1995-06-07	2000-11-28	ASCOM HASLER MAILING...	(Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		2	US5734819A	 Method and apparatus for validating syste...	Lapsed	1994-10-12	1998-03-31	IBM CORP	(Pre-AIA) § 102(a) (Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		3	US5892900A	 Systems and methods for secure transacti...	Expired	1996-08-30	1999-04-06	INTERTRUST TECHNOLO...	(Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		4	US4658093A	 Software distribution system	Expired	1983-07-11	1987-04-14	HELLMAN MARTIN E	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		5	US6189146B1	 System and method for software licensing	Expired	1998-03-18	2001-02-13	MICROSOFT CORP	(Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		6	US5935243A	 Licensee notification system	Expired	1996-07-01	1999-08-10	FUJITSU LTD	(Pre-AIA) § 102(e)(2)
<input type="checkbox"/>		7	US20110167498A1	 Software License Management	PGPub - Granted	2007-12-26	2011-07-07	WILSON KELCE S	Not Applicable

2nd Degree (20)

3rd Degree (20)

4th Degree (20)

5th Degree (20)

Up to 6th Degree
Prior Art List

Family Prior Art

Family Prior Art of '941

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

Simple Family

2

Backward Citation: Patent

47

Backward Citation: Non-Patent Literature

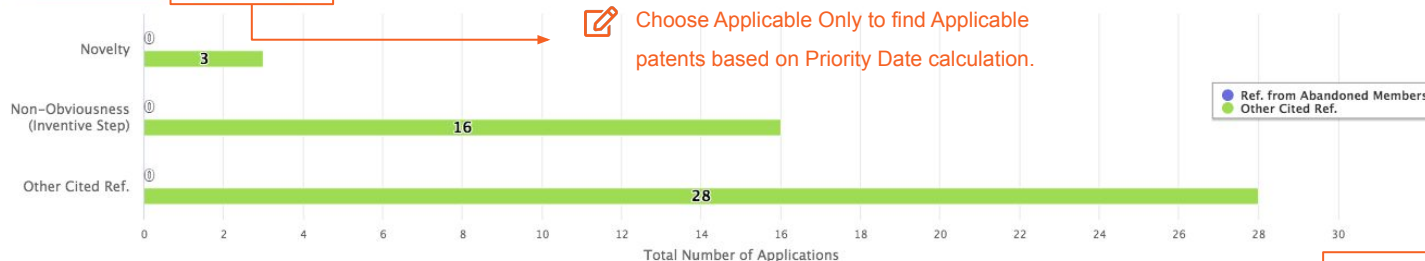
1

Backward Citation: Patent

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

All References (47)

Applicable Only (45)



Choose Applicable Only to find Applicable patents based on Priority Date calculation.

Prior Art List

KEEP mode

Ranked By : Appl. Date

	<input type="checkbox"/>	#	Patent No.	Title	Legal Status	Appl. Date	Pub./Issue Date	Assignee (Std)	Applicability
	<input type="checkbox"/>	1	US4658093A	Software distribution system	Expired	1983-07-11	1987-04-14	HELLMAN MARTIN E	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)
	<input type="checkbox"/>	2	US4903296A	Implementing a shared higher level of privi...	Lapsed	1986-11-12	1990-02-20	IBM CORP	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)
	<input type="checkbox"/>	3	US4866769A	Hardware assist for protecting PC software	Lapsed	1987-08-05	1989-09-12	IBM CORP	(Pre-AIA) § 102(a) (Pre-AIA) § 102(b) (Pre-AIA) § 102(e)(2)

Comparison tools

Prior Art Comparison (claim chart format)

What does this prior art say about the critical elements?

→ Disclosure Rate of Prior Art

1.01
1.02
1.03
1.04
1.05
1.06

Find **27** Result(s) | Disclosure Rate: 66%

Claim Element

#1.01 A method of restricting software operation within a license for use with a computer including an erasable, non-volatile memory area of a BIOS of the computer.

Keyword List ⓘ

- 🔍 computer (32) FW PA
- 🔍 non-volatile memory (21) FW PA
- 🔍 operation (9) FW PA
- 🔍 software (1) FW PA
- license (0) FW
- bios (0) FW

US6253281B1 Content

Specification

[10] 3) . requesting the host computer to supply updated program code ,

[12] 5) . erasing program code from at least a selected portion of the unprotected area of the non - volatile memory , and

[14] The method according to the invention has the advantage that if the transfer of the updated code is not satisfactorily executed , for example because of a power supply interruption at a critical stage , the drive is able to recover and repeat the attempt to transfer the updated code . This is achieved by including enough program code in protected memory to enable a check to be made as to the success in transferring the code , i.e. to perform an integrity check on the stored program code , and to control the writing of program code to the unprotected area of the non - volatile memory .

[15] Thus if the transfer of updated code is not successful a visible or audible warning may be produced which will inform the user that a further attempt to read the program code from the host computer should be made . Although the main purpose of this procedure is to enable recovery of the disc drive if a faulty transfer of updated program code is made it can also be used to recover the correct program code if it should become corrupted for any other reason .

[16] The invention further provides a disc drive comprising a micro controller for controlling the operation of the disc drive in response to program code stored in a non volatile memory , the non volatile memory comprising a first protected area where code is protected from erasure and a second non - protected area where code can be re - written under the control of the micro controller , said first area containing program code to enable the micro controller to verify the integrity of the program code in the second area , means for requesting updated program code from a host computer to which the disc drive is connected , and means for writing the received updated program code into a random access memory (RAM) , wherein the micro controller comprises program code stored in read only memory which enables the microcontroller to erase and re - write code into the second area of the non - volatile memory , the micro controller being arranged , in response to a user request and the program code in

Answer the question:

What does this prior art say about the Claim elements: “non-volatile memory”?

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 - '281	3rd Degree Citation Prior Art - B
1	A method of restricting software operation within a license for use with a computer including an erasable, non-volatile memory area of a BIOS of the computer,	Refer to Claim Analysis results	66%	.....
	and a volatile memory area;	.....	N/A	.....
	the method comprising the steps of:	.....	N/A	
	selecting a program residing in the volatile memory, using an agent to set up a verification structure in the erasable, non-volatile memory of the BIOS,	.....	42%	.....
	the verification structure accommodating data that includes at least one license record, verifying the program using at least the verification structure from the erasable non-volatile memory of the BIOS,	.....	0%	.....
	and acting on the program according to the verification.	.....	0%	.....

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

#	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...	Abandoned	1994-05-31	1993-02-23	NEC CORP	



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 - '941

1 Prosecution & 9 Post-Grant

Event History

10

Family Status

2 Applications

Prior Art Status

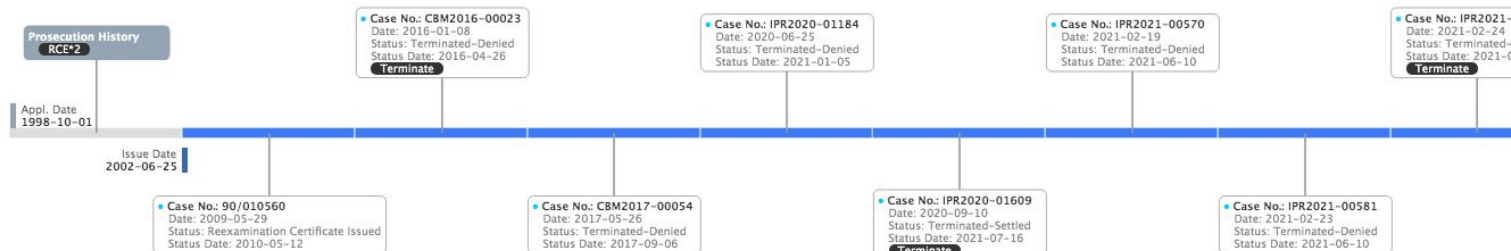
686 Applications / 8 NPL References

Event History | 1 Prosecution History / 9 Post-Grant

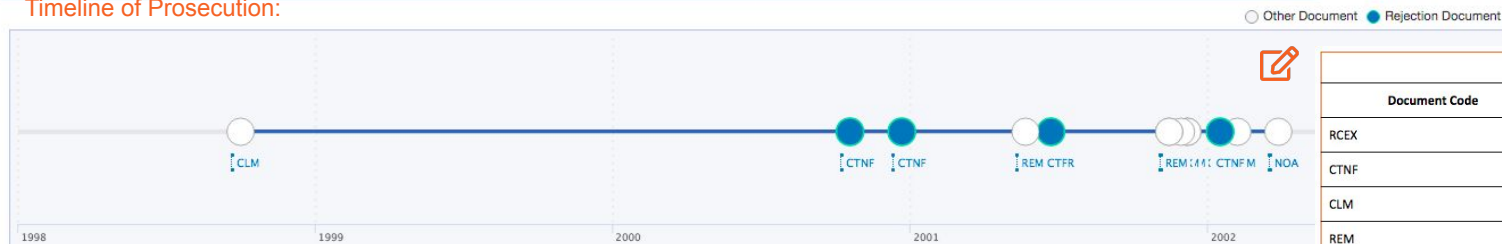
Validity challenges to a patent in its prosecution history and post-grant events

of Family Counterparts and Legal Status

of Highly Relevant Prior Art References



Timeline of Prosecution:



Legend	
Document Code	Document Description
RCEX	Request for Continued Examination
CTNF	Non-final rejection
CLM	Claims
REM	Remarks

Key Events - '941

Prosecution History

09/164777 Prior Art Ref. | **6** Ref.

Check prior art cited and the legal basis of these challenges

Double Patenting | **0** Ref.

§ 102 | **1** Ref.

[US5892900](#)
Ginter

§ 103 | **5** Ref.

[US6189146](#) (1st) Misra
[US5892900](#) (1st) Ginter
[US5684951](#) Goldman
[US5479639](#) Ewertz
[US5490216](#) Richardson

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

Summary of 09/164777 History | **13** Event(s)

Direct links to Grounds,

Claims Highlighted and Prior Art Details

Data Last Updated on: 2021-07-28

Descriptions (Code)	Date	Prior Art Ref.
Notice of Allowance (NOA)	2002-03-28	
Applicant Arguments/Remarks Made in an Amendment (REM) Claims (CLM)	2002-02-05	
Non-Final Rejection (CTNF)	2002-01-15	Grounds 2 ^
Legal Basis	Claims	Prior Art Ref.
35 U.S.C. § 103	claim 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23	Misra US6189146 (1st) Goldman US5684951 Ewertz US5479639
35 U.S.C. § 112	claim 11,12,15,16,20,21	
Request for Continued Examination (RCEX)	2001-12-06	

Key Events - '941

Post-Grant History

Event History

10

Family Status

2 Applications

Prior Art Status

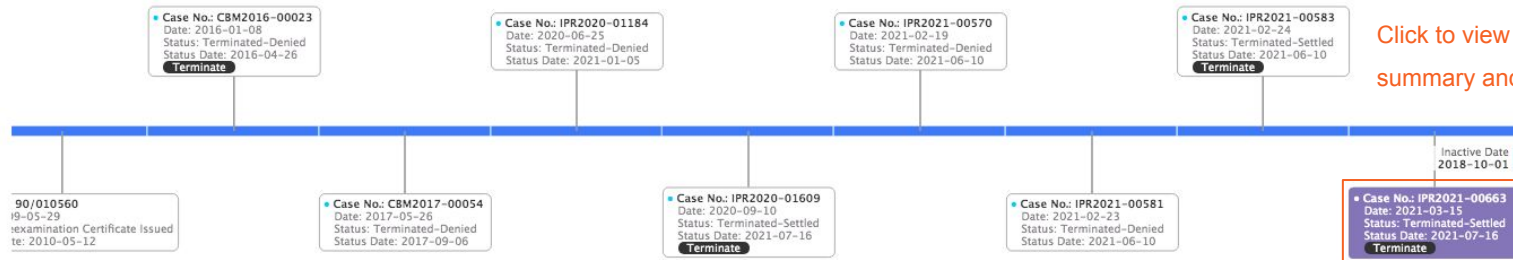
686 Applications / **8** NPL References

Event History | 1 Prosecution History / 9 Post-Grant

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

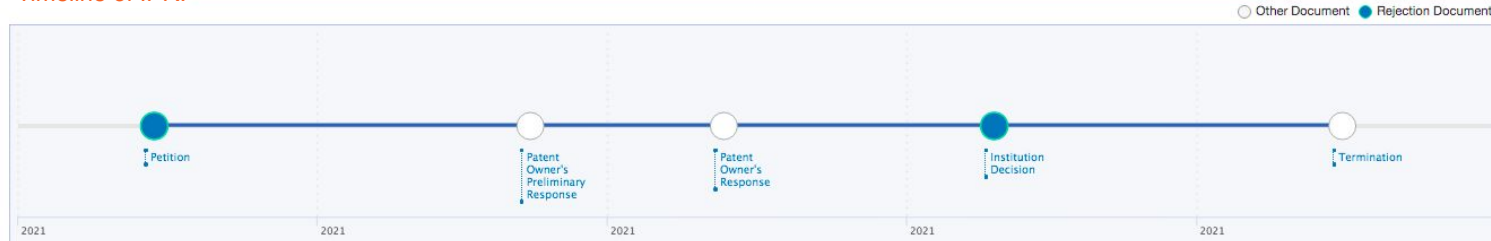
of Family Counterparts and Legal Status

of Highly Relevant Prior Art References



Click to view each event in summary and details of IPR

Timeline of IPR:



Key Events - '941

Post-Grant History

IPR2021-00663 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.

[US4658093](#) (1st)
Hellman

[US5933498](#)
Schneck

[US5892906](#)
Chou

Order

ORDERED that, pursuant to 35 U.S.C. § 314(a), an inter partes review is hereby instituted for the following grounds of unpatentability: Claims Challenged 35 U.S.C. § References 1, 2, 11, 13 103(a) Hellman, Chou 1-3, 6-14, 16 103(a) Hellman, Chou, Schneck
 FURTHER ORDERED that Petitioner Sony's Motion for Joinder with IPR2020-01609 is granted; and Petitioner Sony is joined as a party to IPR2020-01609;
 FURTHER ORDERED that the grounds on which trial in IPR2020-01609 were instituted are unchanged, and no other grounds are added in IPR2020-01609;
 FURTHER ORDERED that the Scheduling Order entered in IPR2020-01609 (Paper 8) and schedule changes agreed to by the parties in IPR2021-00663 IPR2020-01609 (pursuant to the Scheduling Order) shall govern the trial schedule in IPR2020-01609;
 FURTHER ORDERED that, throughout the trial, all filings in IPR2020-01609 will be consolidated, and no filing by Petitioner Sony alone will be considered without prior authorization by the Board;
 FURTHER ORDERED that a copy of this Decision will be entered into the record of IPR2020-01609;
 FURTHER ORDERED that the instant proceeding is terminated under 37 C.F.R. § 42.72 and all further filings shall be made in IPR2020-01609; and
 FURTHER ORDERED that the case caption in IPR2020-01609 shall be changed to reflect joinder with the instant proceeding in accordance with the attached example.

Summary of IPR2021-00663 History | 5 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: 2021-07-30

Descriptions (Code)	Date	Prior Art Ref.
Termination	2021-07-16	
Institution Decision	2021-06-10	Grounds 2
Patent Owner's Response	2021-05-13	
Patent Owner's Preliminary Response	2021-04-23	
Petition	2021-03-15	Grounds 2

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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

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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 (23) Clear All

☒ flexible substrate (1)

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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).

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

Application/Control Number: 13/284,674 Page 4
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 2010/0045614 (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).

... PAGE 6 ...

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 [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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