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Slides on Pages 39-85 include Notes (below slides) - Buttons and Hyperlinks not active

Exploring Subject Matter Eligibility: Abstract Ideas

November 2017

A full transcript of this presentation can be found under the Notes Tab.

UNITED STATES
PATENT AND TRADEMARK OFFICE





Goals

- Reinforce the principles of a subject matter eligibility analysis for claims that are directed to abstract ideas
- Provide tips that will assist examiners in making an eligibility determination

[Click here for a copy of Example 35](#)



The Field of Technology

Customer with a smartphone and a bank card

Bank card has RFID tag

ATM has a customer interface with a key pad, display, deposit and dispenser slots, a bank card slot, network communicator, and a processor with software components for customer identification verification

ATM has RF reader

Financial institution stores customer information and provides authorized users with a bank card





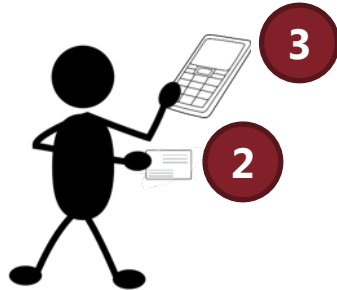
The Problem

- Although bank cards with RFID tags can prevent fraud based on skimming because the card is not inserted into the machine, they are not foolproof.
 - For instance, card information can still be obtained by use of an unauthorized RFID reader.
- There is a need to improve verification of an ATM customer's identity.

What Did Applicant Invent?

Applicant's system for verifying bank customer identity relies on the interaction of three components:

1. an ATM that is equipped with a memory, processor, and a customer interface having a radio frequency (RF) reader and an image reader;
2. a bank card having an RFID tag, which contains customer-specific information; and
3. a downloadable software module that operates on a customer's mobile communication device (e.g., a smartphone).

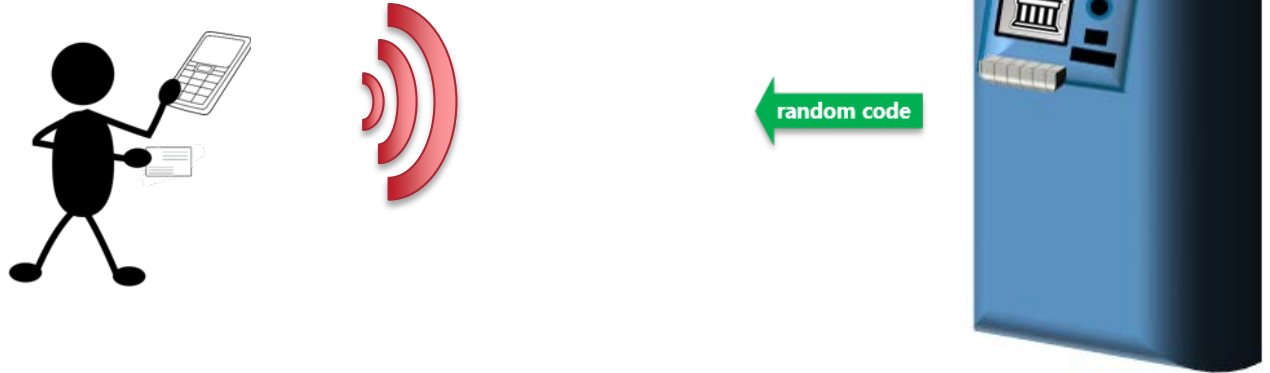


What Did Applicant Invent? (cont'd.)

The system operates in the following way.

The customer approaches the ATM with the bank card in hand. When the bank card is within proximity of the ATM, the RF reader obtains customer-specific information from the RFID tag on the bank card via RF communication.

The ATM uses the obtained customer-specific information to identify the customer's smartphone (based on information the customer previously provided to the bank), and then generates and transmits a random code to the smartphone via a wireless communication link.



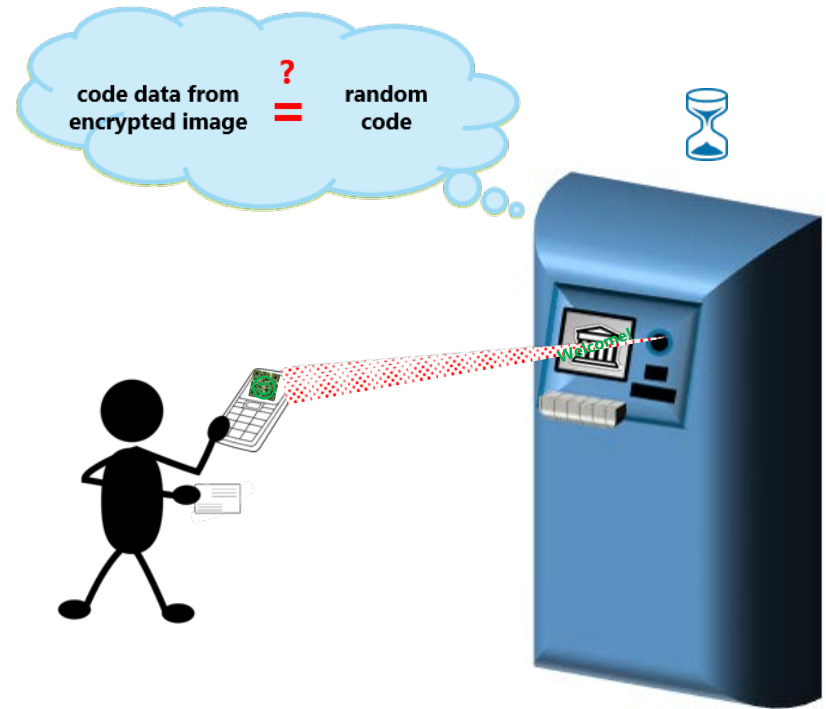
What Did Applicant Invent? (cont'd.)

The software module on the smartphone processes the random code, and uses it to generate an encrypted image including code data. The encrypted image is displayed on the smartphone.

The ATM reads the encrypted image from the customer's smartphone.

A verification component in the ATM then compares the code data from the image with the random code to determine if they match.

When a match from the comparison verifies the authenticity of the customer's identity, the ATM then determines whether the transaction should proceed.





What Did Applicant Claim?

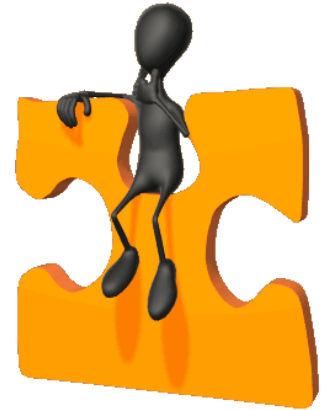
Now that we understand what applicant invented, let's look at what applicant claimed:

A method of conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising the steps of:

- obtaining customer-specific information from a bank card,
- comparing, by a processor, the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, and
- determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.

Claim Interpretation

- Using the broadest reasonable interpretation, understand the boundaries of the claimed invention.
 - Does this method need to be performed by a computer or any particular device?
 - What limits are imposed by the claim language on how the information is obtained from the bank card?
 - How is the comparison accomplished?
 - What is the result of a match from the comparison, e.g., when the identity is verified, what happens in terms of conducting the transaction?





Knowledge Check: Question 1



Which of the following statements is true regarding eligibility of the claim?

- A) The claim is eligible because it produces useful, concrete, tangible results of verifying a customer's identity when conducting a secure automated teller transaction.
- B) The claim is ineligible because it is a business method.
- C) The claim is eligible because similar claims were found eligible in a parent application, which was examined before the December 2014 Interim Eligibility Guidance (IEG) was issued.
- D) The claim is to a process and therefore passes Step 1, but requires further analysis to make an eligibility determination.

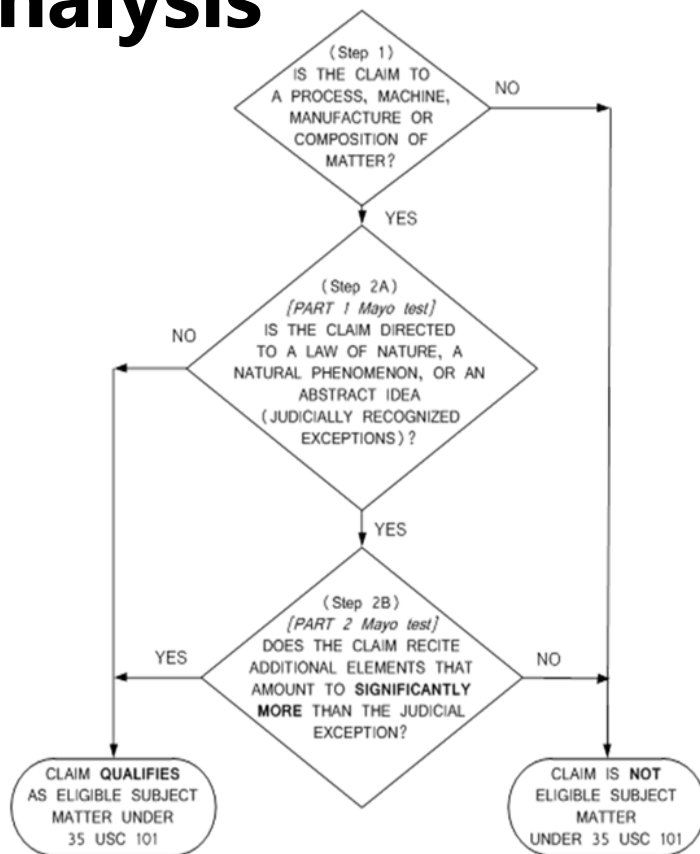
Subject Matter Eligibility Analysis

This is the only analysis for subject matter eligibility under 35 U.S.C. 101.

Note that eligibility should be a consideration for every claim under examination. However, claims that clearly do not seek to tie up an abstract idea do not need to be analyzed in detail using the framework.

Examiners are to:

- Use the broadest reasonable interpretation (BRI) of the claim
- Analyze the claim as a whole
- Practice compact prosecution by fully examining under 35 U.S.C. 102, 103, 112, and 101, including utility, inventorship, and double patenting, as well as non-statutory double patenting even when there is an eligibility rejection.





The Analysis: Steps 1 & 2A

- After establishing whether the claim falls within a statutory category in Step 1, determine whether the claim is “directed” to an abstract idea in Step 2A.
- The Step 2A determination compares the claimed concept to concepts the courts have previously identified as abstract ideas.
 - It is helpful to be familiar with court cases on technologies similar to the field of technology your work group examines.
 - The quick reference sheet or QRS describes common types of abstract ideas and groups court cases within these types for ease of reference.
 - The case law chart identifies the patents that have been litigated by title and classification.

Examiner TRAINING MATERIALS

Training Topics -

35 U.S.C. 101 Examination Guidance and Training Materials

2014 Interim Eligibility Guidance

This 2014 Interim Eligibility Guidance:

- Supplements the June 25, 2014 Preliminary Instructions
- Supersedes the March 4, 2014 Procedure for Subject Matter Eligibility Analysis of Claims Reciting or Involving Laws of Nature/Natural Principles, Natural Phenomena, and/or Natural Products
- See MPEP 2106

Materials Training Workshop I Workshop II Workshop III Life Sciences Workshop

Materials

- Federal Register Notice: 2014 Interim Guidance on Patent Subject Matter Eligibility [\(link is external\)](#)
 - 2014 Interim Eligibility Guidance Quick Reference Sheet [\(December 2014\)](#)
 - Nature-Based Product Examples [\(December 16, 2014\)](#)
 - Abstract Idea Examples [\(January 27, 2015\)](#)
- Federal Register Notice: July 2015 Update on Subject Matter Eligibility [\(link is external\)](#)
 - July 2015 Update: Subject Matter Eligibility [\(July 30, 2015\)](#)
 - July 2015 Update Appendix 1: Examples [\(July 30, 2015\)](#)
 - July 2015 Update Appendix 2: Index of Eligibility Examples [\(July 30, 2015\)](#)
 - July 2015 Update Appendix 3: Subject Matter Eligibility Court Decisions [\(updated Nov. 4, 2015\)](#)
 - July 2015 Update: Interim Eligibility Guidance Quick Reference Sheet [\(July 30, 2015\)](#)
- Federal Register Notice: May 2016 Subject Matter Eligibility Update [\(link is external\)](#)
 - May 2016 Update: Memorandum - Formulating a Subject Matter Eligibility Rejection and Evaluating the Applicant's Response to a Subject Matter Eligibility Rejection [\(May 4, 2016\)](#)
 - May 2016 Update: Subject Matter Eligibility Examples: Life Sciences [\(May 6, 2016\)](#)
 - May 2016 Update: Index of Eligibility Examples [\(May 6, 2016\)](#)
 - May 2016 Update: Subject Matter Eligibility Court Decisions (Formerly Appendix 3) [\(updated July 14, 2016\)](#)
- Memorandum - Recent Subject Matter Eligibility Decisions (Enfish, LLC v. Microsoft Corp. and TLI Communications LLC v. A.V. Automotive, LLC) [\(May 19, 2016\)](#)
- Memorandum - Recent Subject Matter Eligibility Rulings (Rapid Litigation Management v. CellzDirect and Sequenom v. Ariosa) [\(July 14, 2016\)](#)
- Memorandum - Recent Subject Matter Eligibility Decisions (McRO, Inc. dba Planet Blue v. Bandai Namco Games America Inc. and BASCOM Global Internet Services v. AT&T Mobility LLC) [\(November 2, 2016\)](#)
 - Subject Matter Eligibility Examples: Business Methods [\(December 15, 2016\)](#)
 - May 2017: Interim Eligibility Guidance Quick Reference Sheet [\(May 2017\)](#)
 - Subject Matter Eligibility Court Decisions Through May 26, 2017 [\(May 2017\)](#)

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Patent Automation Support Request Form

Patents POCs

Workshop Evaluation

Accessing the QRS & Case Law Chart

The microsite URL is

<http://ptoweb.uspto.gov/patents/exTrain/101.html>

[Click here for a copy of the QRS](#)

[Click here for a copy of the Case Law Chart](#)

[Click here for a quick reference sheet on how to retrieve case law.](#)



The QRS and Case Law Chart

“Certain Methods of Organizing Human Activity”

- Arbitration (*Comiskey*)
- Billing insurance companies and organizing patient health information (*Salwan*)†
- Budgeting (*Int. Ventures v. Cap One Bank ‘137 patent*)
- Cataloging labor data (*Shortridge*)†
- Classifying and storing digital images in an organized manner (*TLI Comms.*)
- Collecting information, analyzing it, and displaying certain results of the collection and analysis (*Electric Power Group*)
- Mitigating settlement risk (*Alice*)
- Organizing and manipulating information through mathematical correlations (*Digitech*)
- Processing loan information (*Dealertrack*)
- Receiving, screening, and distributing e-mail (*Int. Ventures v. Symantec ‘050 patent*)
- Selecting and sorting information by user interest or subject matter (*Evolutionary Intelligence*)†
- Structuring a sales force or marketing company (*Ferguson*)



Case Name	Decision Type	Citation	Decision Date	Patent(s) or App. No(s)	Title or General Subject Matter	Claim Type	Exception Type	Judicial Conclusion	Classification (USPC & CPC)
<i>Electric Power Group, LLC, v. Alstom</i>	Precedential	830 F.3d 1350, 119 U.S.P.Q.2d 1739 (Fed. Cir. 2016)	8/1/2016	8,401,710 8,060,259 7,233,843	Real-time monitoring of an electric power grid	Methods and systems	Abstract Idea	Ineligible '710: 9, 12 and 17 '259: 1, 5, 18, 21, 38, 49 and 53 '843: 4, 7, 9, 12, 19 and 24	700/291 G06F 19/00



The Claim – Directed to an Abstract Idea?

A method of conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising the steps of:

- obtaining customer-specific information from a bank card,
- comparing, by a processor, the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, and
- determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.



The Claim – Directed to an Abstract Idea?

A method of conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising the steps of:

obtaining customer-specific information from a bank card,

comparing, by a processor, **the obtained customer-specific information with customer information from the financial institution to verify the customer's identity**, and

determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.

Similar to Court-Identified Abstract Ideas?

Several candidate cases are found looking at the QRS:

Classen – collecting and comparing known information



CyberSource – obtaining and comparing intangible data

FairWarning – collecting and analyzing information to detect misuses and notifying a user when misuse is detected

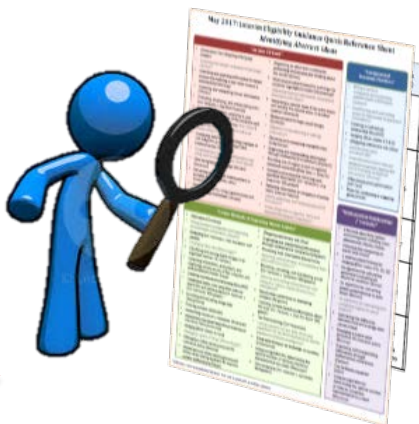
Dealertrack – processing loan information

IV v. Capital One Bank – tailoring content based on information about the user

Similar to Court-Identified Abstract Ideas?

The case law chart provides more information about the candidate cases:

Classen is a method for administering an early vaccine to protect against infectious diseases
(class 435/69.3; A61K39/295)



CyberSource is a method and system for detecting fraud in a credit card transaction over the internet
(class 705/44; G06Q20/027)

FairWarning is a method of collecting and analyzing information to detect misuses and notifying a user when misuse is detected
(class 726/26; G06F21/55)

Dealertrack is an automated credit application system
(class 705/38; G06Q20/10)

IV v. Capital One Bank is about administration of financial accounts
(class 235/380; G06Q20/12 and class 707/999.104; G06F17/30899)

Similar to Court-Identified Abstract Ideas?

Looking more closely, some of these cases are a better fit than others for applicant's invention:

Classen is a method for administering an early vaccine to protect against infectious diseases
(class 435/69.3; A61K39/295)



Class Name	Patent Class	Title or Brief Description	Class Type	Classification (IPC/CPC)
Method of... Page 100	625.000	Method and apparatus...	Methods, Systems and Computer-Related Methods	724.20 G06F 21/10
Method and... Page 100	645.010 645.020 673.000	Method and apparatus for... Method and apparatus for... Method and apparatus for...	Methods	451.912 463.000
Method and... Page 100	625.000	Method and apparatus for... Method and apparatus for... Method and apparatus for...	Methods	705.14 G06Q 1/10
Method and... Page 100	724.000	Method and apparatus for... Method and apparatus for... Method and apparatus for...	Methods	705.10 G06Q 1/10
Method and... Page 100	724.000	Method and apparatus for... Method and apparatus for... Method and apparatus for...	Methods	705.10 G06Q 1/10

CyberSource is a method and system for detecting fraud in a credit card transaction over the internet
(class 705/44; G06Q20/027)

FairWarning is a method of collecting and analyzing information to detect misuses and notifying a user when misuse is detected
(class 726/26; G06F21/55)

Dealertrack is an automated credit application system
(class 705/38; G06Q20/10)

IV v. Capital One Bank is about administration of financial accounts
(class 235/380; G06Q20/12 and class 707/999.104; G06F17/30899)

Similar to *CyberSource*?

Let's look at the *CyberSource* patent to determine if the concept is similar.

CyberSource claim 3. A method for verifying the validity of a credit card transaction over the Internet comprising the steps of:

- a) obtaining other transactions utilizing an Internet address that is identified with the credit card transaction;
- b) constructing a map of credit card numbers based upon the other transactions and;
- c) utilizing the map of credit card numbers to determine if the credit card transaction is valid.



CyberSource –
U.S. Patent 6,029,154
Claim 3

Similar to *CyberSource*? (cont'd.)

Yes, the *CyberSource* concept is similar to the concept in applicant's claim

CyberSource claim 3. A method for verifying the validity of a credit card transaction over the Internet comprising the steps of:

- a) obtaining other transactions utilizing an Internet address that is identified with the credit card transaction;
- b) constructing a map of credit card numbers based upon the other transactions and;
- c) utilizing the map of credit card numbers to determine if the credit card transaction is valid.



Applicant's claimed concept:
comparing the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, and determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.

The claim is directed to an abstract idea at Step 2A.



Other Similar Cases/Concepts?

- When identifying a claimed concept as an abstract idea, Office guidance indicates that examiners should rely on court identified abstract ideas similar to the claimed concept.
 - Because the courts are very active in the area of eligibility, there are new court cases identifying abstract ideas issuing on a regular basis.
 - The Abstract Idea QRS is updated regularly to add new cases.
- Examiners are **not** required to rely on the **most similar**, or **most recent**, court case when identifying an abstract idea.
 - For instance, a year ago, many examiners would have relied on *CyberSource* because it is similar to this applicant's claimed invention.
 - Today, many examiners would likely rely on *Smart Systems* instead – but it would still be permissible for an examiner to rely on *CyberSource* (or another case identifying a similar abstract idea).



Are There Additional Elements?

A method of conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising the steps of:

- obtaining customer-specific information from a bank card,
- comparing, by a processor, the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, and
- determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.



Yes, The Claim Recites Additional Elements

A method of conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising the steps of:

obtaining customer-specific information from a bank card,

comparing, **by a processor,** the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, and

determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.



Knowledge Check: Question 2



The claim recites a processor for performing the comparison step. Does this processor limitation alone render the claim eligible?

- A) Yes. The claim is eligible under the machine-or-transformation test (*In re Bilski*) because the processor is a “particular” machine performing the comparison step.
- B) Yes. The claim is eligible under the special purpose computer test (*In re Alappat*) because the processor is a “special purpose” programmed processor performing the comparison step.
- C) No. The claim is ineligible because in accordance with the broadest reasonable interpretation the claim requires software to perform the comparison.
- D) Both (A) and (B) are reasons to find the claim eligible.
- E) No. The claim is subject to analysis using the *Alice/Mayo* framework. Mere presence of a machine, in this case a processor, does not automatically render a claim eligible.

The Analysis: Step 2B

- In Step 2B, evaluate whether any additional element, or combination of additional elements, in the claim is sufficient to ensure that the claim amounts to **significantly more** than the judicial exception.
- Considerations that assist in this determination:

May provide “significantly more”

- Improvements to another technology or technical field
- Improvements to the functioning of the computer itself
- Applying the judicial exception with, or by use of, a particular machine
- Effecting a transformation or reduction of a particular article to a different state or thing
- Adding a specific limitation other than what is well-understood, routine and conventional in the field
- Adding unconventional steps that confine the claim to a particular useful application
- Other meaningful limitations beyond generally linking the use of the judicial exception to a particular technological environment

May not provide

- Generic computer performing generic computer function
- Words equivalent to “apply the exception”
- Mere instructions to implement a judicial exception on a computer
- Insignificant extra-solution activity, such as mere data gathering
- Generally linking the use of the judicial exception to a particular technological environment or field of use
- Merely appending well understood, routine, conventional activities previously known to the industry, specified at a high level of generality

[Click here for a Quick Reference Sheet discussing these considerations](#)



The Analysis: Inventive Concept

- The courts often refer to the significantly more analysis as a search for an “inventive concept.”
 - Many recent court decisions exclusively use the phrase “inventive concept” instead of “significantly more.”
 - Office guidance and training materials also refer to an “inventive concept,” for instance the materials for Abstract Idea Workshop II referred to the need for the additional elements to provide an “inventive concept” in Step 2B.
- The phrase “inventive concept” is a synonym for “significantly more.”
 - Even though the word “inventive” is used, this does not mean that the additional elements must be nonobvious or even novel.
 - Instead, an “inventive concept” means that the additional elements, when considered individually or as an ordered combination, amount to significantly more than the exception itself.



Evaluate the First Additional Element

What is the BRI of the step of obtaining data from a customer's bank card?

The specification does not indicate that this limitation would have a meaning that is different from the plain meaning of the words themselves as they would be interpreted by one of ordinary skill in the art. Therefore, the claim does not set any limits on how the data is read. This step covers methods known to those of ordinary skill in the art of obtaining data from a card, such as using a magnetic stripe, an RFID tag, a transponder device or microchip.

Does this step add significantly more?

No.

To use data in a verification process, the data must be obtained by some means. But this step doesn't recite any particular means that are used to obtain the data. Instead, this step is recited at a high level of generality. Courts have held that obtaining data at a high level of generality amounts to mere data gathering, which is a form of insignificant extra-solution activity.

Accordingly, this step does not impose any meaningful limits on practicing the abstract idea and thus does not add significantly more to the claimed invention.



Evaluate the Second Additional Element

What is the BRI of the step of using a processor to compare information?

Here, also, the processor should be interpreted in accordance with the plain meaning of the term since the specification does not provide a special definition. The processor is a generic device used in the claim to perform the function of processing data.

Does this step add significantly more?

No.

The processor is recited at a high level of generality, *i.e.*, as a generic processor performing a generic computer function of processing data. Thus, this step is no more than mere instructions to apply the exception on a generic computer. In addition, using a processor to process data has been well-understood, routine, conventional activity in the industry for many years.

Accordingly, this step does not impose any meaningful limits on practicing the abstract idea and thus does not add significantly more to the claimed invention.



Evaluate the Combination of Elements

Does the combination of the steps of obtaining data from a customer's bank card and using a processor to compare information add significantly more?

No.

The combination of these steps is no more than mere automation of verification processes that were in years past performed mentally by tellers when engaging with a bank customer. Thus, the combination of steps represent mere instructions to apply the exception on a generic computer using well-understood, routine, conventional activities in the industry.

Accordingly, even in combination, these steps do not impose any meaningful limits on practicing the abstract idea and thus do not add significantly more to the claimed invention.

The claim is **ineligible** at Step 2B.



Knowledge Check: Question 3



A system for conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising:

- a memory; and

- a processor coupled to the memory programmed with executable instructions, including,

 - a customer interface for obtaining customer-specific information; and

 - a verification component for

 - comparing the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, and

 - determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.

What if the claim is written as a system instead of a method - Is this system claim directed to the same abstract idea as the method claim?

A) Yes

B) No



Additional Elements of the System Claim

A system for conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising:

a memory; and

a processor coupled to the memory programmed with executable instructions, including,

a customer interface for obtaining customer-specific information; and

a verification component for comparing the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, and determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.

The claim is **ineligible**
at Step 2B.



Would Other Elements of the Invention Add Significantly More?

- What if the specification disclosed and the claims recited additional details, such as:
 - A particular ATM, for instance an ATM with a lockable keypad?
 - A non-routine feature of an ATM, such as a radio frequency reader?
 - Specific limitations about how the invention works, for instance specifying that the ATM generates a random number and transmits it to a customer's smart phone, and then reads an image from the smart phone that has been generated in response to receipt of the random code?



Making The Method Claim Eligible

A method of conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising the steps of:

obtaining customer-specific information from a bank card,

comparing, by a processor, the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, by

generating a random code and transmitting it to a mobile communication device that is registered to the customer associated with the bank card,

reading, by the automated teller machine, an image from the customer's mobile communication device that is generated in response to receipt of the random code, wherein the image includes encrypted code data,

decrypting the code data from the read image, and

analyzing the decrypted code data from the read image and the generated code to determine if the decrypted code data from the read image matches the generated code data, and

determining whether the transaction should proceed when a match from the analysis verifies the authenticity of the customer's identity.

The additional elements add significantly more. The claim is **eligible** at Step 2B.

Making the System Claim Eligible

A system for conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising:

a memory;

a downloadable software module that operates on a customer's mobile communication device, the software module including instructions for generating an encrypted image including code data in response to receipt of a random code, and displaying the encrypted image on the customer's mobile communication device, and

a processor coupled to the memory programmed with executable instructions, including,

a customer interface **including a radio frequency reader** for obtaining customer-specific information **from a customer bank card having a non-contact transponder when the bank card is within proximity to the radio frequency reader, wherein the customer interface transmits the random code to the mobile communication device, and wherein the obtaining customer-specific information further comprises the customer interface reading the encrypted image from the customer's mobile communication device;** and

a verification component for

comparing the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, **wherein the comparing further comprises analyzing the code data from the read image and the random code to determine if the code data matches the random code,** and

determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.

The additional elements add significantly more. The claim is **eligible** at Step 2B.

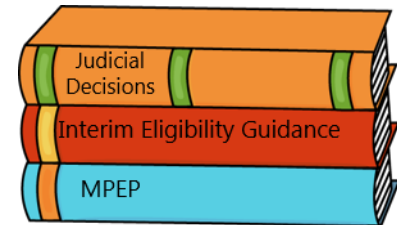


Reminders & Take-Aways

- Treat the claim as a whole – consider **all** of the recited limitations when determining eligibility.
- Eligibility is only an issue when a product or process claim is *directed* to an abstract idea – in many arts, eligibility will often be self-evident.
- The key inquiry should be whether the claim is attempting to cover an abstract idea itself, without any **significant** limits on the application of that idea.
- Familiarizing yourself with the types of abstract ideas common in your art will greatly facilitate making an eligibility determination.
- Practice compact prosecution – this includes addressing all statutory requirements (not just eligibility), and pointing applicants to eligible subject matter in the specification when possible.

Resources

- Guidance documents, training modules, and examples are available at:
 - PTOWeb under Examiner Training Materials on the [35 U.S.C. 101 Examination Guidance and Training Materials](#) microsite.
 - USPTO.gov on the [Subject Matter Eligibility](#) webpage.
- Remember to check for updates to the case law charts and abstract idea Quick Reference Sheet.





Questions?

- See your Technology Center subject matter eligibility resource specialist or your SPE.

**Please click here to complete a
brief course evaluation**

Exploring Subject Matter Eligibility: Abstract Ideas

November 2017

A full transcript of this presentation can be found under the Notes Tab.



Accessibility note: Recorded materials in this CBT do not always exactly match the contents of the slides in this presentation. A full transcript of this presentation can be found in the Notes tab.

Goals

- Reinforce the principles of a subject matter eligibility analysis for claims that are directed to abstract ideas
- Provide tips that will assist examiners in making an eligibility determination

[Click here for a copy of Example 35](#)

2

This presentation will discuss subject matter eligibility. More specifically, we will explore the principles of a subject matter eligibility analysis for claims that are directed to abstract ideas.

Subject Matter Eligibility Example 35, published on the USPTO website in Dec. 2016 will be used as the basis for this discussion. You may wish to have a copy of Example 35 available for your reference. It is posted on the subject matter eligibility microsite. Certain variations to the invention in Example 35 will be proposed for purposes of this informal discussion. For a more complete and formal analysis, please see the published example and other resource materials listed on slide 37.

This presentation will also provide tips to assist examiners in making an eligibility determination. Finally, there are several knowledge checks throughout the presentation to give you an opportunity to evaluate your understanding of the material.

The Field of Technology

Customer with a smartphone and a bank card

Bank card has RFID tag

ATM has a customer interface with a key pad, display, deposit and dispenser slots, a bank card slot, network communicator, and a processor with software components for customer identification verification

ATM has RF reader

Financial institution stores customer information and provides authorized users with a bank card



3

First, we will begin by explaining the field of technology of this hypothetical invention, which relates to conducting a banking transaction at an automated teller machine – an activity with which most everyone is familiar.

Financial institutions routinely provide automated teller machines, also known as ATMs, for customers to conduct banking transactions. Typical ATMs include a customer interface with a keypad, deposit and dispenser slots, a bank card slot, a display, a network communicator, and a processor with software components for customer identification verification. To conduct a transaction, a customer typically inserts a bank card into the bank card slot in the ATM and inputs a personal identification number or PIN using the keypad to verify that the user is an authorized user for the bank account associated with the bank card. The account data is read from the card using the reader in the ATM. The network communicator transmits the read data and PIN at the ATM to a remote computer at the financial institution, which then transmits instructions back to the ATM regarding authorization to carry out the requested transaction.

There are problems with theft and fraud in the use of ATMs to conduct banking business. Unauthorized users can steal a customer's card and PIN to gain access to funds in the account. Another problem associated with ATMs is "skimming" where a false card reader that appears to be a legitimate reader is affixed to an ATM to obtain an authorized user's account information and PIN. In skimming operations, an authorized user unwittingly presents their bank card to the skimming device on

the ATM and enters their PIN, which is then captured and stored for subsequent fraudulent activity.

To overcome skimming problems, some bank cards have been outfitted with non-contact transponders, such as radio frequency identification tags, known as RFID tags or smart labels, that allow account information to be transmitted to an ATM without inserting the card into the machine. To conduct a transaction using such a contactless card, the customer brings the card into range of a radio frequency, or RF, reader, which uses radio frequencies to interrogate the RFID tag to receive information about the customer. The customer can then start a transaction by, for example, pressing an enter key on the ATM.

The Problem

- Although bank cards with RFID tags can prevent fraud based on skimming because the card is not inserted into the machine, they are not foolproof.
 - For instance, card information can still be obtained by use of an unauthorized RFID reader.
- There is a need to improve verification of an ATM customer's identity.

4

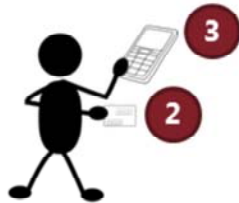
While RFID bank cards can prevent fraud based on skimming because the card is not inserted into the ATM machine, these non-contact cards have given rise to other security issues, such as allowing a malicious person to obtain card information by use of an unauthorized RFID reader.

Thus, there is a need in the art to improve verification of an ATM customer's identity.

What Did Applicant Invent?

Applicant's system for verifying bank customer identity relies on the interaction of three components:

1. an ATM that is equipped with a memory, processor, and a customer interface having a radio frequency (RF) reader and an image reader;
2. a bank card having an RFID tag, which contains customer-specific information; and
3. a downloadable software module that operates on a customer's mobile communication device (e.g., a smartphone).



5

Applicant has invented a more secure method of verifying a bank customer's identity when using a bank card having a RFID tag. When a customer is issued the bank card, the financial institution provides a downloadable verification software module to the customer to install on their mobile communication device, such as a smartphone. The software application is designed to communicate with a specially outfitted ATM.

Applicant's invention relies on the interaction of three components:

The first is an ATM that is equipped with a memory, processor, and a customer interface having an RF reader and an image reader.

The second is a bank card having an RFID tag, which contains customer-specific information.

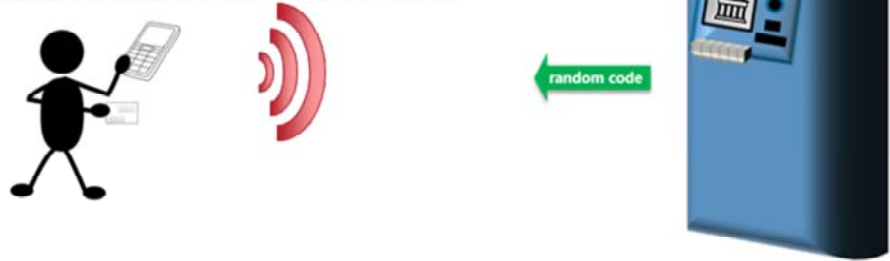
The third is a downloadable software module that operates on a customer's mobile communication device (e.g., smartphone).

What Did Applicant Invent? (cont'd.)

The system operates in the following way.

The customer approaches the ATM with the bank card in hand. When the bank card is within proximity of the ATM, the RF reader obtains customer-specific information from the RFID tag on the bank card via RF communication.

The ATM uses the obtained customer-specific information to identify the customer's smartphone (based on information the customer previously provided to the bank), and then generates and transmits a random code to the smartphone via a wireless communication link.



6

The system operates in the following way.

The customer approaches the ATM with the bank card in hand. When the bank card is within proximity of the ATM, the RF reader obtains customer-specific information from the RFID tag on the bank card via RF communication.

The ATM uses the obtained customer-specific information to identify the customer's smartphone (based on information the customer previously provided to the bank), and then generates and transmits a random code to the smartphone via a wireless communication link.

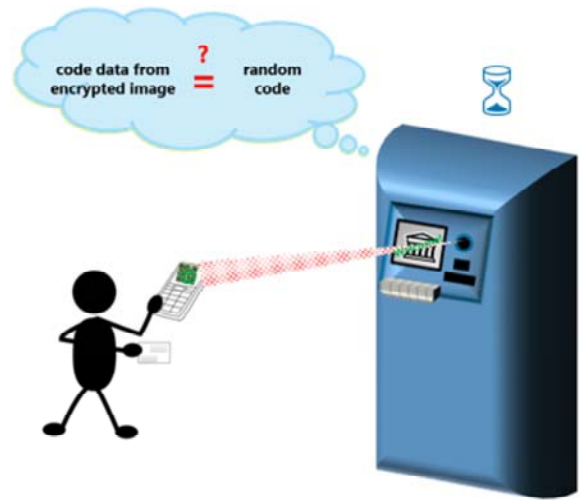
What Did Applicant Invent? (cont'd.)

The software module on the smartphone processes the random code, and uses it to generate an encrypted image including code data. The encrypted image is displayed on the smartphone.

The ATM reads the encrypted image from the customer's smartphone.

A verification component in the ATM then compares the code data from the image with the random code to determine if they match.

When a match from the comparison verifies the authenticity of the customer's identity, the ATM then determines whether the transaction should proceed.



7

The software module on the customer's smartphone processes the random code, and uses it to generate an encrypted image including code data. The encrypted image is displayed on the customer's smartphone.

The ATM reads the encrypted image from the customer's smartphone.

A verification component in the ATM then compares the code data from the image with the random code to determine if they match.

When a match from the comparison verifies the authenticity of the customer's identity, the ATM then determines whether the transaction should proceed.

What Did Applicant Claim?

Now that we understand what applicant invented, let's look at what applicant claimed:

A method of conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising the steps of:

- obtaining customer-specific information from a bank card,
- comparing, by a processor, the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, and
- determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.

8

Now that we understand what applicant invented, let's look at what applicant claimed. A hypothetical claim to applicant's invention is shown here. This is claim 1 from Example 35.

The claimed method includes three steps:

- 1) obtaining customer-specific information from a bank card,
- 2) comparing, by a processor, the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, and
- 3) determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.

This hypothetical claim would be classified in 705/44 and G06Q20/027.

Claim Interpretation

- Using the broadest reasonable interpretation, understand the boundaries of the claimed invention.
 - Does this method need to be performed by a computer or any particular device?
 - What limits are imposed by the claim language on how the information is obtained from the bank card?
 - How is the comparison accomplished?
 - What is the result of a match from the comparison, e.g., when the identity is verified, what happens in terms of conducting the transaction?



9

Prior to evaluating a claim for patentability, the first job of an examiner is to establish the broadest reasonable interpretation of the claim. Remember, the claim is given its broadest reasonable interpretation in view of the specification as it would be understood by one of ordinary skill in the art. It is noted that the terms in this claim are given their plain meaning in the art because no special definitions have been set forth.

Using the broadest reasonable interpretation of the claim, you should understand the boundaries of the claimed invention.

For this claim, it may be helpful to ask yourself these questions when determining the BRI. For example,

1) Does this method need to be performed by a computer or any particular device?

Here, the step of comparing is performed by a processor. The specification does not indicate that the processor would have a meaning that is different from the plain meaning. The processor is claimed as a generic device that performs the generic function of processing data.

2) What limits are imposed by the claim language on how the information is obtained from the bank card?

The claim does not set any limits on how the data is read. The specification does not alter the plain meaning of the step of obtaining data from a customer's bank card. This step covers methods known to those of ordinary skill in the art of obtaining data from a card, such as using a magnetic stripe, an RFID tag, a transponder device

or microchip.

3) How is the comparison accomplished?

The claim does not set any limits on how the comparison is accomplished. This step covers methods known to those of ordinary skill in the art of comparing obtained customer-specific information with customer information from a financial institution as performed by a processor, such as using a challenge-response mechanism, a biometric mechanism, or generating an image based on a random code and comparing the image with the random code.

4) What is the result of a match from the comparison, e.g., when the identity is verified, what happens in terms of conducting the transaction?

The claim does not set any limits on how the transaction should proceed when the identity is verified. This step covers methods known to those of ordinary skill in the art of ATM transactions after identity verification, such as unlocking or locking a keypad to the ATM.

Knowledge Check: Question 1



Which of the following statements is true regarding eligibility of the claim?

- A) The claim is eligible because it produces useful, concrete, tangible results of verifying a customer's identity when conducting a secure automated teller transaction.
- B) The claim is ineligible because it is a business method.
- C) The claim is eligible because similar claims were found eligible in a parent application, which was examined before the December 2014 Interim Eligibility Guidance (IEG) was issued.
- D) The claim is to a process and therefore passes Step 1, but requires further analysis to make an eligibility determination.

10

Which of the following statements is true regarding eligibility of the claim?

- A. The claim is eligible because it produces useful, concrete, tangible results (the UCT test) of verifying a customer's identity when conducting a secure automated teller transaction.
- B. The claim is ineligible because it is a business method.
- C. The claim is eligible because similar claims were found eligible in a parent application, which was examined before the December 2014 Interim Eligibility Guidance was issued.
- D. The claim is to a process and therefore passes Step 1, but requires further analysis to make an eligibility determination.

The correct answer is Answer Choice D. The claim is to a process because it recites a series of steps and therefore passes Step 1, but requires further analysis to make an eligibility determination.

Answer choice A is incorrect. Whether the claim produces a useful, concrete, tangible result is not a factor in the eligibility analysis. The so-called UCT test from *State Street Bank* is no longer a valid analysis for eligibility.

Answer choice B is incorrect. Business methods are not categorically ineligible. In fact, no technologies are categorically ineligible. Every claim that raises an eligibility issue must be evaluated on its individual merits using the *Alice/Mayo* framework seen on the next slide.

Answer choice C is incorrect. The December 2014 Interim Eligibility Guidance should be applied to all claims undergoing examination. This includes continuations or related cases currently undergoing examination where a parent application or related application was examined prior to the issuance of the IEG. Every claim that raises an eligibility issue must be evaluated on its individual merits using the *Alice/Mayo* framework seen on the next slide.

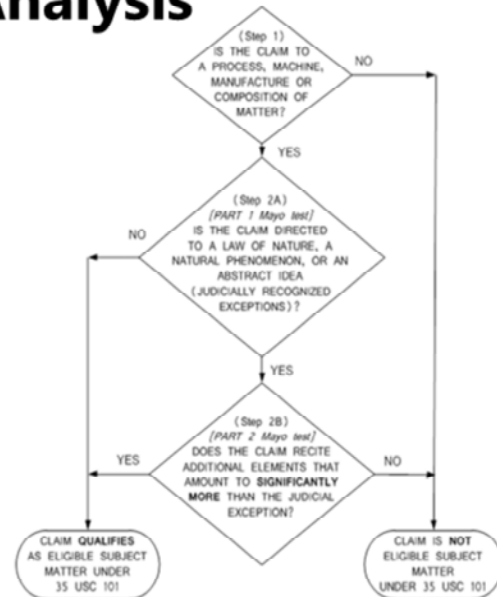
Subject Matter Eligibility Analysis

This is the only analysis for subject matter eligibility under 35 U.S.C. 101.

Note that eligibility should be a consideration for every claim under examination. However, claims that clearly do not seek to tie up an abstract idea do not need to be analyzed in detail using the framework.

Examiners are to:

- Use the broadest reasonable interpretation (BRI) of the claim
- Analyze the claim as a whole
- Practice compact prosecution by fully examining under 35 U.S.C. 102, 103, 112, and 101, including utility, inventorship, and double patenting, as well as non-statutory double patenting even when there is an eligibility rejection.



11

The analysis on this slide should be familiar to you. It is the *Alice/Mayo* framework. This is the only analysis that should be used when examining subject matter eligibility under 35 U.S.C. 101. Prior tests such as the special purpose computer test from the *Alappat* case and the useful, concrete, tangible results test from the *State Street* case are no longer to be used. Also, the machine-or-transformation test from the *Bilski* case is no longer the “stand-alone” test for subject matter eligibility and therefore should not be used. The *Alice/Mayo* framework incorporates the principles of the machine-or-transformation test and should be used instead.

Note that eligibility should be a consideration for every claim under examination. However, claims that clearly do not seek to tie up an abstract idea do not need to be analyzed in detail using this framework.

This flowchart illustrates the subject matter eligibility analysis that is to be used during examination for evaluating whether product and process claims are drawn to patent-eligible subject matter under 35 U.S.C. § 101.

There are three principles to keep in mind when performing this analysis. First, as discussed previously, prior to evaluating a claim for patentability, the broadest reasonable interpretation of the claim should be established. Second, the claim is to be analyzed as a whole. Third, in accordance with compact prosecution, along with determining eligibility, all claims are to be fully examined under each of the other patentability requirements: 35 U.S.C. 102, 103, 112, and 101, including utility,

inventorship, and double patenting, as well as non-statutory double patenting.

The two-step analysis for subject matter eligibility is depicted in the flowchart. In Step 1, which is represented in diamond (1) of the flowchart, the claimed invention “must be to one of the four statutory categories.” Step 1 is not the subject of this training. For further information on Step 1, see the discussion in MPEP 2106(I). Step 2, which is represented in diamonds (2A) and (2B) of the flowchart, ensures that the claimed invention is not wholly directed to subject matter encompassing a judicially recognized exception. Step 2 is the subject of the 2014 Interim Eligibility Guidance and follow-on memoranda, and represents the two-part Alice/Mayo framework for claims directed to laws of nature, natural phenomena, and abstract ideas.

The Analysis: Steps 1 & 2A

- After establishing whether the claim falls within a statutory category in Step 1, determine whether the claim is “directed” to an abstract idea in Step 2A.
- The Step 2A determination compares the claimed concept to concepts the courts have previously identified as abstract ideas.
 - It is helpful to be familiar with court cases on technologies similar to the field of technology your work group examines.
 - The quick reference sheet or QRS describes common types of abstract ideas and groups court cases within these types for ease of reference.
 - The case law chart identifies the patents that have been litigated by title and classification.

12

Step 1 of the eligibility analysis asks: Is the claim to a process, machine, manufacture or composition of matter? Step 1 is typically satisfied if the claim is to a process or product. The category in which a claim falls is not important. For example, a claim reciting a microprocessor will satisfy both the machine and manufacture categories. Claims that do not fall within a statutory category are usually intangible, such as a signal per se, data per se, or software per se. Here the claim is to a process because it recites a series of steps.

After establishing that the claim falls within a statutory category in Step 1, Step 2A of the eligibility analysis asks whether the claim is “directed” to an abstract idea. This is done by way of comparison based on concepts that the courts have previously found to qualify as abstract ideas. The guidance and training materials published by the Office are resources for examiners to use when identifying abstract ideas.

There are a few tips that will make the Step 2A analysis easier for you:

- First, it is helpful to be familiar with court cases on technologies similar to the field of technology your work group examines. They will help you identify which types of abstract idea concepts the courts have analyzed.
- Second, the quick reference sheet or QRS describes common types of abstract ideas and groups court cases within these types for ease of reference. It is also helpful to be familiar with the QRS. The QRS is updated periodically with new court cases.

- Third, the case law chart identifies the patents that have been litigated by title and classification. The QRS and case law chart will be discussed further in the next few slides.

Accessing the QRS & Case Law Chart

The microsite URL is

<http://ptoweb.uspto.gov/patents/exTrain/101.html>

[Click here for a copy of the QRS](#)

[Click here for a copy of the Case Law Chart](#)

[Click here for a quick reference sheet on how to retrieve case law.](#)

uspto PTOweb Patents Examiner Training Materials

Examiner TRAINING MATERIALS

Training Topics -

35 U.S.C. 101 Examination Guidance and Training Materials

2014 Interim Eligibility Guidance

This 2014 Interim Eligibility Guidance:

- Supplements the June 25, 2014 Preliminary Instructions
- Supersedes the March 4, 2014 Procedure for Subject Matter Eligibility Analysis of Claims Reciting or Involving Laws of Nature/Natural Principles, Natural Phenomena, and/or Natural Products
- See MPEP 2106

Materials Training Workshop I Workshop II Workshop III Life Sciences Workshop

Support

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571.272.9000
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[Patent Automation Support Request Form](#)

Patents POCs
Workshop Evaluation

Materials

- Federal Register Notice: 2014 Interim Guidance on Patent Subject Matter Eligibility (in a external)
- 2014 Interim Eligibility Guidance Quick Reference Sheet (in a external) (December 16, 2014)
- Nature-Based Product Examples (in a external) (December 16, 2014)
- Abstract Idea Examples (in a external) (January 27, 2015)
- Federal Register Notice: July 2015 Update on Subject Matter Eligibility (in a external)
- July 2015 Update: Subject Matter Eligibility (in a external) (July 30, 2015)
- July 2015 Update Appendix 1: Examples (in a external) (July 30, 2015)
- July 2015 Update Appendix 2: Index of Eligibility Examples (in a external) (July 30, 2015)
- July 2015 Update Appendix 3: Subject Matter Eligibility Court Decisions (in a external) (Updated Nov. 4, 2016)
- July 2015 Update: Interim Eligibility Guidance Quick Reference Sheet (in a external) (July 30, 2015)
- Federal Register Notice: May 2016 Subject Matter Eligibility Update (in a external)
- May 2016 Update: Memorandum - Formulating a Subject Matter Eligibility Rejection and Evaluating the Applicant's Response to a Subject Matter Eligibility Rejection (in a external) (May 4, 2016)
- May 2016 Update: Subject Matter Eligibility Examples: Life Sciences (in a external) (May 6, 2016)
- May 2016 Update: Index of Eligibility Examples (in a external) (May 6, 2016)
- May 2016 Update: Subject Matter Eligibility Court Decisions (Formerly Appendix 3) (in a external) (Updated July 14, 2016)
- Memorandum - Recent Subject Matter Eligibility Decisions (Enfish, LLC v. Microsoft Corp. and TLI Communications LLC v. A.V. Automotive, LLC) (in a external) (May 19, 2016)
- Memorandum - Recent Subject Matter Eligibility Rulings (Rapid Litigation Management v. CellDirect and Sepamun v. Arosol) (in a external) (July 14, 2016)
- Memorandum - Recent Subject Matter Eligibility Decisions (MRG, Inc. dba Planet Blue v. Benda Hemo Games America Inc. and BASCOM Global Internet Services v. AT&T Mobility LLC) (in a external) (November 2, 2016)
- Subject Matter Eligibility Examples: Business Methods (in a external) (December 15, 2016)
- May 2017 Interim Eligibility Guidance Quick Reference Sheet (in a external)
- Subject Matter Eligibility Court Decisions Through May 26, 2017 (in a external)

You can access the QRS and Case Law Chart on the subject matter eligibility microsite. This site contains all of the 101 Examination Guidance and Training Materials, including the 101 workshop materials and the published examples. For example, Subject Matter Eligibility Example 35, which is the basis for this presentation, is located here. It is found in the Business Methods examples published on December 15, 2016.

The URL for the microsite is on the top left side of the slide.

Also provided on this slide are links to the QRS and the Case Law Chart. Because these documents are updated frequently, the linked documents may not reflect cases that were decided after July 2017. You can obtain the most recent versions of the QRS and Case Law Chart from the subject matter eligibility microsite. The cases mentioned in these documents are available to examiners via the BNA IP Search Page. Information about how to retrieve case law is included in the hyperlinked Quick Reference Sheet, and also posted on the microsite.

The QRS and Case Law Chart

Case Name	Decision Type	Citation	Decision Date	Patent(s) or App. No(s)	Title or General Subject Matter	Claim Type	Exception Type	Judicial Conclusion	Classification (USPC & CPC)
<i>Electric Power Group, LLC, v. Alstom</i>	Precedential	830 F.3d 1350, 119 U.S.P.Q.2d 1739 (Fed. Cir. 2016)	8/1/2016	8,401,710 8,060,259 7,233,843	Real-time monitoring of an electric power grid	Methods and systems	Abstract Idea	Ineligible '710: 9, 12 and 17 '259: 1, 5, 18, 21, 38, 49 and 53 '843: 4, 7, 9, 12, 19 and 24	700/291 G06F 19/00

- “Certain Methods of Organizing Human Activity”**
- Arbitration (*Comiskey*)
 - Billing insurance companies and organizing patient health information (*Salwan*)†
 - Budgeting (*Int. Ventures v. Cap One Bank* '137 patent)
 - Cataloging labor data (*Shortridge*)†
 - Classifying and storing digital images in an organized manner (*TLI Comms.*)
 - Collecting information, analyzing it, and displaying certain results of the collection and analysis (*Electric Power Group*)
 - Mitigating settlement risk (*Alice*)
 - Organizing and manipulating information through mathematical correlations (*Digitech*)
 - Processing loan information (*Dealertrack*)
 - Receiving, screening, and distributing e-mail (*Int. Ventures v. Symantec* '050 patent)
 - Selecting and sorting information by user interest or subject matter (*Evolutionary Intelligence*)†
 - Structuring a sales force or marketing company (*Ferguson*)



This is an example of the information available for the *Electric Power Group* case available through the QRS and Case Law Chart. The *Electric Power Group* case is about real-time monitoring of an electric power grid. It involves three patents classified in class 700/291 and G06F 19/00. The claims are directed to an abstract idea of collecting information, analyzing it, and displaying certain results of the collection and analysis. In other words, it can be characterized as a certain method of organizing human activity. For those examiners that examine in this technology or a closely related technology, it would be useful to take a look at the patents and the claims involved in this case to be familiar with the types of claims that raise eligibility issues. Also, note on the QRS that some concepts are typed in gray font. These indicate non-precedential court decisions and should only be relied upon if the facts of your application uniquely match the facts at issue in these decisions.

The Claim – Directed to an Abstract Idea?

A method of conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising the steps of:

- obtaining customer-specific information from a bank card,
- comparing, by a processor, the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, and
- determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.

15

Looking back at this hypothetical claim, are there any elements that describe an abstract idea that is similar to a concept found abstract by the courts?

This claim deals with conducting a secure transaction by authenticating a customer's identity and includes several steps that can be performed mentally or represent mental steps that can be automated by a general purpose computer. The steps include obtaining customer-specific information from a bank card, authenticating a customer's identity by comparing the customer-specific information with customer information from the financial institution, and determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity. These steps should be scrutinized closely to determine if they are describing an abstract idea.

The Claim – Directed to an Abstract Idea?

A method of conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising the steps of:

obtaining customer-specific information from a bank card,

comparing, by a processor, **the obtained customer-specific information with customer information from the financial institution to verify the customer's identity**, and

determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.

16

The comparing and determining steps together describe fraud prevention by comparing one type of information with another type of information and then determining whether the transaction should proceed based on the comparison. Looking at the chart and the QRS, several cases seem like they address similar concepts.

Similar to Court-Identified Abstract Ideas?

Several candidate cases are found looking at the QRS:

Classen – collecting and comparing known information



CyberSource – obtaining and comparing intangible data

FairWarning – collecting and analyzing information to detect misuses and notifying a user when misuse is detected

Dealertrack – processing loan information

IV v. Capital One Bank – tailoring content based on information about the user

17

Several candidate cases are found when you look at the QRS, for example:

- Classen concerned a concept of collecting and comparing known information.
- FairWarning concerns a concept of collecting and analyzing information to detect misuses and notifying a user when misuse is detected.
- Dealertrack concerned a concept of processing loan information.
- IV versus Capital One Bank concerns a concept of tailoring content based on information about the user.
- CyberSource concerned a concept of obtaining and comparing intangible data.

Similar to Court-Identified Abstract Ideas?

The case law chart provides more information about the candidate cases:

Classen is a method for administering an early vaccine to protect against infectious diseases
(class 435/69.3; A61K39/295)



CyberSource is a method and system for detecting fraud in a credit card transaction over the internet
(class 705/44; G06Q20/027)

FairWarning is a method of collecting and analyzing information to detect misuses and notifying a user when misuse is detected
(class 726/26; G06F21/55)

Dealertrack is an automated credit application system
(class 705/38; G06Q20/10)

IV v. Capital One Bank is about administration of financial accounts
(class 235/380; G06Q20/12 and class 707/999.104; G06F17/30899)

18

While these concepts initially seem relevant to the claimed concept, let's look more closely at these cases using the case law chart to see if they are actually similar to what is claimed here. Looking at the subject matter and classification of each case in the case law chart, we see that *Classen* concerns a method and composition for an early vaccine to protect against both common infectious diseases and chronic immune mediated disorders, which is classified in 435/69.3 and A61K39/295. Similarly, *Dealertrack* concerns an automated credit application system classified in 705/38 and G06Q20/10, and *IV versus Capital One Bank* is about the administration of financial accounts.

Similar to Court-Identified Abstract Ideas?

Looking more closely, some of these cases are a better fit than others for applicant's invention:

Classen is a method for administering an early vaccine to protect against infectious diseases
(class 435/69.3; A61K39/295)



CyberSource is a method and system for detecting fraud in a credit card transaction over the internet
(class 705/44; G06Q20/027)

FairWarning is a method of collecting and analyzing information to detect misuses and notifying a user when misuse is detected
(class 726/26; G06F21/55)

Dealertrack is an automated credit application system
(class 705/38; G06Q20/10)

IV v. Capital One Bank is about administration of financial accounts
(class 235/380; G06Q20/12 and class 707/999.104; G06F17/30899)

19

The information on the case law chart indicates that some of these cases are a better fit than others for applicant's invention. For instance, *Classen* is not the best fit for applicant's invention because it relates to different subject matter – a method and composition for an early vaccine to protect against both common infectious diseases and chronic immune mediated disorders. While *FairWarning*, *Dealertrack*, and *IV v. Capital One Bank* are about financial activities, *CyberSource* looks to be the most relevant case since it involves fraud detection of a financial transaction just like the instant claim. In addition, *CyberSource* is classified in an area – 705/44 and G06Q20/027 – that is the same as the area in which this hypothetical claim is classified.

Similar to *CyberSource*?

Let's look at the *CyberSource* patent to determine if the concept is similar.

CyberSource claim 3. A method for verifying the validity of a credit card transaction over the Internet comprising the steps of:

- a) obtaining other transactions utilizing an Internet address that is identified with the credit card transaction;
- b) constructing a map of credit card numbers based upon the other transactions and;
- c) utilizing the map of credit card numbers to determine if the credit card transaction is valid.



CyberSource –
U.S. Patent 6,029,154
Claim 3

20

If you are still not sure whether the claimed concept is indeed similar to a court case, it is a good idea to look at the patent that was at issue in the court case. The Case Law Chart provides the patent number to quickly look up the patent at issue.

Here, let's look more closely at *CyberSource* to determine if it is indeed similar to the claimed concept. The Case Law Chart indicates that patent 6,029,154 was at issue in *CyberSource*, and that this patent relates to a method and system for detecting fraud in a credit card transaction over the Internet. The chart also tells us that claim 3 is the pertinent claim that was analyzed by the court.

Similar to *CyberSource*? (cont'd.)

Yes, the *CyberSource* concept is similar to the concept in applicant's claim

CyberSource claim 3. A method for verifying the validity of a credit card transaction over the Internet comprising the steps of:

- a) obtaining other transactions utilizing an Internet address that is identified with the credit card transaction;
- b) constructing a map of credit card numbers based upon the other transactions and;
- c) utilizing the map of credit card numbers to determine if the credit card transaction is valid.



Applicant's claimed concept: comparing the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, and determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.

The claim is directed to an abstract idea at Step 2A.

21

You can see claim 3 of the *CyberSource* patent on the left. And here on the right is applicant's claimed concept regarding fraud prevention by authenticating a customer's identity. Looking at the claim in *CyberSource* confirms that applicant's claim describes an idea that is similar to the concept found abstract by the courts in *CyberSource*.

Applicant's claim is directed to an abstract idea at Step 2A.

Other Similar Cases/Concepts?

- When identifying a claimed concept as an abstract idea, Office guidance indicates that examiners should rely on court identified abstract ideas similar to the claimed concept.
 - Because the courts are very active in the area of eligibility, there are new court cases identifying abstract ideas issuing on a regular basis.
 - The Abstract Idea QRS is updated regularly to add new cases.
- Examiners are **not** required to rely on the **most similar**, or **most recent**, court case when identifying an abstract idea.
 - For instance, a year ago, many examiners would have relied on *CyberSource* because it is similar to this applicant's claimed invention.
 - Today, many examiners would likely rely on *Smart Systems* instead – but it would still be permissible for an examiner to rely on *CyberSource* (or another case identifying a similar abstract idea).

22

As you have seen, *CyberSource* identifies a concept similar to applicant's claimed concept as an abstract idea. But *CyberSource* is not the only case identifying a similar concept. Because the courts are very active in the area of eligibility, there are new court cases identifying abstract ideas issuing on a regular basis. One of these new cases is *Smart Systems*, which issued in October 2017. The Abstract Idea QRS is updated regularly to add these new cases.

Just because a new case has issued does not mean the examiner must rely on it. Remember that Office guidance indicates that examiners should rely on court-identified abstract ideas similar to the claimed concept when identifying a claimed concept as an abstract idea. Similarity is fact-dependent, and thus will vary for different claims and different applications. It may also vary over time. For instance, a year ago, many examiners would have identified *CyberSource* as a good fit for this applicant's claimed invention. Today, however, many examiners would likely rely on *Smart Systems* instead. But even though some might consider *Smart Systems* a better fit to the facts here, it would still be permissible for an examiner to rely on *CyberSource* (or another case identifying a similar abstract idea) in the Step 2A analysis.

Are There Additional Elements?

A method of conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising the steps of:

- obtaining customer-specific information from a bank card,
- comparing, by a processor, the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, and
- determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.

23

Now that you have determined that the claim is directed to an abstract idea, the next step, Step 2B, in the eligibility analysis asks "Does the claim recite additional elements that amount to significantly more than the judicial exception?".

First, you must identify any additional elements recited in the claim beyond the identified judicial exception.

Yes, The Claim Recites Additional Elements

A method of conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising the steps of:

obtaining customer-specific information from a bank card,

comparing, **by a processor**, the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, and

determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.

24

Yes, the claim recites the additional elements of:
Obtaining customer specific information from a bank card,
and using a processor to perform the comparing step.

Knowledge Check: Question 2



The claim recites a processor for performing the comparison step. Does this processor limitation alone render the claim eligible?

- A) Yes. The claim is eligible under the machine-or-transformation test (*In re Bilski*) because the processor is a “particular” machine performing the comparison step.
- B) Yes. The claim is eligible under the special purpose computer test (*In re Alappat*) because the processor is a “special purpose” programmed processor performing the comparison step.
- C) No. The claim is ineligible because in accordance with the broadest reasonable interpretation the claim requires software to perform the comparison.
- D) Both (A) and (B) are reasons to find the claim eligible.
- E) No. The claim is subject to analysis using the *Alice/Mayo* framework. Mere presence of a machine, in this case a processor, does not automatically render a claim eligible.

25

The claim recites a processor for performing the comparison step. Does this limitation alone render the claim eligible?

- A) Yes. The claim is eligible under the machine-or-transformation test (*In re Bilski*) because the processor is a “particular” machine performing the comparison step.
- B) Yes. The claim is eligible under the special purpose computer test (*In re Alappat*) because the processor is a “special purpose” programmed processor performing the comparison step.
- C) No. The claim is ineligible because in accordance with the broadest reasonable interpretation the claim requires software to perform the comparison.
- D) Both (A) and (B) are reasons to find the claim eligible.
- E) No. The claim is subject to analysis using the *Alice/Mayo* framework. Mere presence of a machine, in this case a processor, does not automatically render a claim eligible.

The correct answer is Answer Choice E. The claim is subject to analysis using the *Alice/Mayo* framework. Mere presence of a machine, in this case a generic processor, does not automatically render a claim eligible.

Answer Choices A and B as well as D are incorrect. Mere presence of a machine, in

this case a processor, does not automatically render a claim eligible. This is true even when the machine is “particular” or is a “special purpose” programmed processor. Eligibility must be determined using the *Alice/Mayo* framework, not the machine-or-transformation test (*In re Bilski*) or special purpose machine test (*In re Alappat*).

Answer Choice C is incorrect. The presence of software in a claim is not a reason for finding ineligibility. Software is not categorically ineligible.

The Analysis: Step 2B

- In Step 2B, evaluate whether any additional element, or combination of additional elements, in the claim is sufficient to ensure that the claim amounts to **significantly more** than the judicial exception.
- Considerations that assist in this determination:

May provide "significantly more"	May <u>not</u> provide
<ul style="list-style-type: none">➤ Improvements to another technology or technical field➤ Improvements to the functioning of the computer itself➤ Applying the judicial exception with, or by use of, a particular machine➤ Effecting a transformation or reduction of a particular article to a different state or thing➤ Adding a specific limitation other than what is well-understood, routine and conventional in the field➤ Adding unconventional steps that confine the claim to a particular useful application➤ Other meaningful limitations beyond generally linking the use of the judicial exception to a particular technological environment	<ul style="list-style-type: none">➤ Generic computer performing generic computer function➤ Words equivalent to "apply the exception"➤ Mere instructions to implement a judicial exception on a computer➤ Insignificant extra-solution activity, such as mere data gathering➤ Generally linking the use of the judicial exception to a particular technological environment or field of use➤ Merely appending well understood, routine, conventional activities previously known to the industry, specified at a high level of generality

[Click here for a Quick Reference Sheet discussing these considerations](#)

26

Now that you have determined that the claim is directed to an abstract idea, proceed to the next step in the eligibility analysis, which is Step 2B.

In this step, evaluate whether any additional element, or combination of additional elements, in the claim is sufficient to ensure that the claim amounts to significantly more than the judicial exception. The courts have identified a number of considerations that assist in this determination, which are summarized on this slide. If you want to refresh yourself on these considerations, you can refer back to the 2014 Interim Eligibility Guidance (IEG) as well as the training materials on the microsite.

The Analysis: Inventive Concept

- The courts often refer to the significantly more analysis as a search for an “inventive concept.”
 - Many recent court decisions exclusively use the phrase “inventive concept” instead of “significantly more.”
 - Office guidance and training materials also refer to an “inventive concept,” for instance the materials for Abstract Idea Workshop II referred to the need for the additional elements to provide an “inventive concept” in Step 2B.
- The phrase “inventive concept” is a synonym for “significantly more.”
 - Even though the word “inventive” is used, this does not mean that the additional elements must be nonobvious or even novel.
 - Instead, an “inventive concept” means that the additional elements, when considered individually or as an ordered combination, amount to significantly more than the exception itself.

27

It is important for you to be aware of the phrase “inventive concept,” which you may see in court decisions and USPTO guidance and training materials in connection with Step 2B of the Alice/Mayo eligibility framework.

Many recent court decisions exclusively use the phrase “inventive concept” instead of “significantly more,” and describe the Step 2B analysis as a search for an “inventive concept.” Similarly, Office guidance and training materials also refer to an “inventive concept,” for instance the materials for Abstract Idea Workshop II used this phrase when discussing the Step 2B analysis.

Note that the phrase “inventive concept” is a synonym for “significantly more.” Even though the word “inventive” is used in this phrase, this does not mean that the additional elements must be nonobvious or even novel. Instead, an “inventive concept” means that the additional elements, when considered individually or as an ordered combination, amount to significantly more than the exception itself.

Evaluate the First Additional Element

What is the BRI of the step of obtaining data from a customer's bank card?

The specification does not indicate that this limitation would have a meaning that is different from the plain meaning of the words themselves as they would be interpreted by one of ordinary skill in the art. Therefore, the claim does not set any limits on how the data is read. This step covers methods known to those of ordinary skill in the art of obtaining data from a card, such as using a magnetic stripe, an RFID tag, a transponder device or microchip.

Does this step add significantly more?

No.

To use data in a verification process, the data must be obtained by some means. But this step doesn't recite any particular means that are used to obtain the data. Instead, this step is recited at a high level of generality. Courts have held that obtaining data at a high level of generality amounts to mere data gathering, which is a form of insignificant extra-solution activity.

Accordingly, this step does not impose any meaningful limits on practicing the abstract idea and thus does not add significantly more to the claimed invention.

28

First, let's look at the additional element of obtaining data from a customer's bank card. In determining the significance of this limitation, you must consider its broadest reasonable interpretation.

The specification does not indicate that this limitation would have a meaning that is different from the plain meaning of the words themselves as they would be interpreted by one of ordinary skill in the art. Therefore, the claim does not set any limits on how the data is read. This step covers methods known to those of ordinary skill in the art of obtaining data from a card, such as using a magnetic stripe, an RFID tag, a transponder device or microchip.

Next, you must determine whether this step adds significantly more.

To use data in a verification process, the data must be obtained by some means. But this step doesn't recite any particular means that are used to obtain the data. Instead, this step is recited at a high level of generality. Courts have found that a step of obtaining data recited at a high level of generality amounts to mere data gathering, which is a form of insignificant extra-solution activity.

Accordingly, this step does not impose any meaningful limits on practicing the abstract idea and thus does not add significantly more to the claimed invention. Gathering data for use in performance of an abstract idea does not add significantly more, otherwise known as an inventive concept, to this claim.

While this discussion focused on the insignificant extra-solution activity aspects of this step, there are other considerations that may indicate that this step fails to add significantly more.

For example, this step may also fail to add significantly more because it represents well-understood, routine, conventional activity in the industry. That is, obtaining data from a bank card using any known method is widely prevalent in the banking industry.

When examining, you should consider all relevant considerations before concluding that an element fails to add significantly more.

Evaluate the Second Additional Element

What is the BRI of the step of using a processor to compare information?

Here, also, the processor should be interpreted in accordance with the plain meaning of the term since the specification does not provide a special definition. The processor is a generic device used in the claim to perform the function of processing data.

Does this step add significantly more?

No.

The processor is recited at a high level of generality, *i.e.*, as a generic processor performing a generic computer function of processing data. Thus, this step is no more than mere instructions to apply the exception on a generic computer. In addition, using a processor to process data has been well-understood, routine, conventional activity in the industry for many years.

Accordingly, this step does not impose any meaningful limits on practicing the abstract idea and thus does not add significantly more to the claimed invention.

29

Now, let's consider whether the additional element of using a processor to compare information adds significantly more.

As discussed on the previous slide, you must consider the broadest reasonable interpretation of this limitation. Here, also, the processor should be interpreted in accordance with the plain meaning of the term since the specification does not provide a special definition. The processor is a generic device used in the claim to perform the generic function of processing data.

Next, you must determine whether this step adds significantly more.

The processor is recited at a high level of generality, in other words, as a generic processor performing a generic computer function of processing data. Thus, this step is no more than mere instructions to apply the exception on a generic computer. In addition, using a processor to process data has been well-understood, routine, conventional activity in the industry for many years.

Accordingly, this step does not impose any meaningful limits on practicing the abstract idea and thus does not add significantly more to the claimed invention. Using a processor to process data for the performance of this abstract idea does not add significantly more to this claim.

Evaluate the Combination of Elements

Does the combination of the steps of obtaining data from a customer's bank card and using a processor to compare information add significantly more?

No.

The combination of these steps is no more than mere automation of verification processes that were in years past performed mentally by tellers when engaging with a bank customer. Thus, the combination of steps represent mere instructions to apply the exception on a generic computer using well-understood, routine, conventional activities in the industry.

Accordingly, even in combination, these steps do not impose any meaningful limits on practicing the abstract idea and thus do not add significantly more to the claimed invention.

The claim is **ineligible** at Step 2B.

30

Finally, let's consider whether the combination of the steps of obtaining data from a customer's bank card and using a processor to compare information adds significantly more that would result in an inventive concept.

The combination of these steps is no more than mere automation of verification processes that were in years past performed mentally by tellers when engaging with a bank customer. Thus, the combination of steps represent mere instructions to apply the exception on a generic computer using well-understood, routine, conventional activities in the industry.

Accordingly, even in combination, these steps do not impose any meaningful limits on practicing the abstract idea and thus do not add significantly more to the claimed invention.

The claim is **ineligible** at STEP 2B.

In some instances, a combination of conventional additional elements can add significantly more, because the combination of elements work together to add a meaningful limit on the application of an abstract idea and result in an inventive concept. This point is illustrated by several cases, including *Diehr* and *BASCOM*, which are exemplified in Examples 25 and 34, respectively.

When examining, you should consider all of the additional elements **in**

combination, as well as individually, before concluding that the additional elements fail to add significantly more.

Knowledge Check: Question 3



A system for conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising:

a memory; and

a processor coupled to the memory programmed with executable instructions, including,

a customer interface for obtaining customer-specific information; and

a verification component for

comparing the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, and

determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.

What if the claim is written as a system instead of a method - Is this system claim directed to the same abstract idea as the method claim?

A) Yes

B) No

31

It is important to remember that the category of claim alone does not necessarily determine its eligibility. For example, a system or product claim that recites an abstract idea must be analyzed in the same manner as a method claim. In this case, consider the following system claim. Is this claim directed to the same abstract idea as the method claim?

Yes. The step 2A analysis is the same for the method claim as for the system claim and the result is no different. This claim is directed to the same abstract idea as the method claim, namely fraud prevention by authenticating a user's identity. The additional hardware elements in this system claim will be considered in the Step 2B analysis.

Additional Elements of the System Claim

A system for conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising:

a memory; and

a processor coupled to the memory programmed with executable instructions, including,

a customer interface for obtaining customer-specific information; and

a verification component for comparing the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, and determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.

The claim is **ineligible**
at Step 2B.

32

Now let's consider the system claim again. This claim is directed to the same abstract idea as the method claim discussed above. The additional elements are a memory, a processor, a customer interface, and a verification component. These elements add hardware (the memory and the processor) and software (the customer interface and verification component).

These additional elements must be considered individually and in combination to determine if they add meaningful limits on the abstract idea. We know from the method claim analysis that merely adding hardware such as a memory to store gathered data or processor to process the data does not meaningfully limit a claim. However, this claim adds a customer interface and verification component – could they add significantly more?

The customer interface is recited for the function of obtaining customer specific information. It is recited at a high level of generality and covers such things as a keypad, which is a well-understood, routine, conventional way to obtain customer information at an ATM. The verification component is a software module that adds some more complexity to the system and makes the processor more specific. Nevertheless, in this case, the software simply specifies that the steps of the idea are performed by the processor with no indication of how the steps are performed. Merely specifying computer instructions to perform an abstract idea does not meaningfully limit the performance of this abstract idea. Even looking at

the combination of additional elements does not lend an inventive concept because to perform the comparison and determination it would be necessary to gather information and process that information. These elements amount to no more than “apply the abstract idea on a computer.”

Accordingly, the claim is **ineligible** at STEP 2B.

Would Other Elements of the Invention Add Significantly More?

- What if the specification disclosed and the claims recited additional details, such as:
 - A particular ATM, for instance an ATM with a lockable keypad?
 - A non-routine feature of an ATM, such as a radio frequency reader?
 - Specific limitations about how the invention works, for instance specifying that the ATM generates a random number and transmits it to a customer's smart phone, and then reads an image from the smart phone that has been generated in response to receipt of the random code?

33

When looking at eligibility, it is important to look beyond the independent claims and consider other details of the disclosed invention that could be claimed in such a way as to add an inventive concept.

Let's consider a few hypotheticals for purposes of improving your understanding of the Step 2B analysis.

(1) What if the invention was claimed to include a particular ATM such as an ATM with a lockable keypad or a keypad with a movable cover? In this case, adding an ATM to a method of conducting a financial transaction would be merely adding a field of use that does not meaningfully limit the claim. Specifying that the ATM is particular – even specifying what type of ATM – would also not add any limits to the method of verification. Further, ATMs typically have keypads so that information can be input – these are conventional data gathering devices, so adding a keypad would merely be adding extra-solution, in this case pre-solution, activity as a known means to gather data. Adding a movable cover narrows the claim, but there is no indication of what triggers the movable cover. If it is just a sliding cover to keep out the rain, it would not limit the abstract idea in any meaningful way. If it was claimed to be responsive to an action in the method, that might go further. However, in this case, at this level of generality, none of these particulars would tip the claim toward eligibility. Remember, simply adding a machine, even a particular machine, to a claim does not automatically make it eligible.

(2) What if the ATM had a radio frequency reader? This makes the ATM more particular and non-routine, but just adding an RF reader does not sufficiently limit the claim without specific steps of using the RF for more than its generic functionality. That might be a different case if there were specific features on the ATM that were integrated into the method of verification.

(3) What if the claim recited specifics about what information is compared and how the information is conveyed to and from the customer? For instance, what if the ATM generates a random number, transmits the random number to the customer's smartphone, reads an image from the smartphone that has been generated in response to receipt of the random code, and uses the information in that image to perform the claimed comparison step? These specific features, if meaningfully integrated into the claim, would likely tip the claim toward eligibility. Let's see how they could be meaningfully integrated.

Making The Method Claim Eligible

A method of conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising the steps of:

obtaining customer-specific information from a bank card,

comparing, by a processor, the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, by

generating a random code and transmitting it to a mobile communication device that is registered to the customer associated with the bank card,

reading, by the automated teller machine, an image from the customer's mobile communication device that is generated in response to receipt of the random code, wherein the image includes encrypted code data,

decrypting the code data from the read image, and

analyzing the decrypted code data from the read image and the generated code to determine if the decrypted code data from the read image matches the generated code data, and

determining whether the transaction should proceed when a match from the analysis verifies the authenticity of the customer's identity.

The additional elements add significantly more. The claim is **eligible** at Step 2B.

34

Narration:

This slide shows how specific limitations about how the invention works can be added to the method claim to make it eligible.

For example, here is a hypothetical claim, which is claim 2 from Example 35. Although some elements on their own may be conventional or generic, **when combined** they do more than generic processing and are more than conventional activity engaged in by those in this field. The combination of components and their corresponding functions amount to a practical application of fraud prevention to address the unique problems associated with bank cards and ATMs.

The claimed combination of additional elements presents a specific, discrete implementation of the abstract idea and meaningfully limit the step of comparing information. These features add significantly more, thus providing an inventive concept to the claim. With these types of limitations, the claim would recite significantly more than the abstract idea and be eligible.

Making the System Claim Eligible

A system for conducting a secure automated teller transaction with a financial institution by authenticating a customer's identity, comprising:

a memory;

a downloadable software module that operates on a customer's mobile communication device, the software module including instructions for generating an encrypted image including code data in response to receipt of a random code, and displaying the encrypted image on the customer's mobile communication device, and

a processor coupled to the memory programmed with executable instructions, including,

a customer interface **including a radio frequency reader for obtaining customer-specific information from a customer bank card having a non-contact transponder when the bank card is within proximity to the radio frequency reader, wherein the customer interface transmits the random code to the mobile communication device, and wherein the obtaining customer-specific information further comprises the customer interface reading the encrypted image from the customer's mobile communication device;** and

a verification component for

comparing the obtained customer-specific information with customer information from the financial institution to verify the customer's identity, **wherein the comparing further comprises analyzing the code data from the read image and the random code to determine if the code data matches the random code,** and

determining whether the transaction should proceed when a match from the comparison verifies the authenticity of the customer's identity.

The additional elements add significantly more. The claim is **eligible** at Step 2B.

35

This slide shows how specific limitations about how the invention works can be added to the system claim to make it eligible.

For example, here is a hypothetical system claim. Although some elements on their own may be conventional or generic, **when combined** they do more than generic processing and are more than conventional activity engaged in by those in this field. The combination of components and their corresponding functions amount to a practical application of fraud prevention to address the unique problems associated with bank cards and ATMs.

The claimed combination of additional elements presents a specific, discrete implementation of the abstract idea and meaningfully limit the step of comparing information. These elements add significantly more, thus providing an inventive concept to the claim because they go beyond mere implementation of the abstract idea on a computer. With these types of limitations, the claim would recite significantly more than the abstract idea and be eligible.

Reminders & Take-Aways

- Treat the claim as a whole – consider **all** of the recited limitations when determining eligibility.
- Eligibility is only an issue when a product or process claim is *directed* to an abstract idea – in many arts, eligibility will often be self-evident.
- The key inquiry should be whether the claim is attempting to cover an abstract idea itself, without any **significant** limits on the application of that idea.
- Familiarizing yourself with the types of abstract ideas common in your art will greatly facilitate making an eligibility determination.
- Practice compact prosecution – this includes addressing all statutory requirements (not just eligibility), and pointing applicants to eligible subject matter in the specification when possible.

36

A few reminders and take-aways from this training.

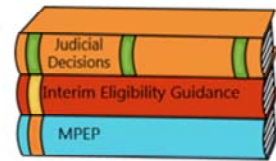
First, the claim should be treated as a whole. Make sure to consider all of the recited limitations when determining eligibility.

Remember, eligibility is only an issue when a product or process claim is directed to an abstract idea. In many arts, eligibility will often be self-evident. For example, a claim to a mechanical coupling or a robotic arm assembly having a control system that operates using certain mathematical relationships will not require a full analysis to determine eligibility. The key inquiry to keep in mind is whether the claim is attempting to cover an abstract idea itself, without any significant limits on the application of that idea. Do the elements added to the abstract idea provide an inventive concept?

It is important to familiarize yourself with the types of abstract ideas common in your art. This will greatly facilitate making an eligibility determination. Finally, practice compact prosecution. This means you should address all statutory requirements and not just eligibility when examining, and you should point applicants to eligible subject matter in the specification when possible.

Resources

- Guidance documents, training modules, and examples are available at:
 - PTOWeb under Examiner Training Materials on the [35 U.S.C. 101 Examination Guidance and Training Materials](#) microsite.
 - USPTO.gov on the [Subject Matter Eligibility](#) webpage.
- Remember to check for updates to the case law charts and abstract idea Quick Reference Sheet.



37

There are many resources available on subject matter eligibility. Guidance documents, training modules, and examples are available at the subject matter eligibility microsite, which was shown on slide 13, or through the USPTO.gov website. In addition, remember to check for updates to the case law charts and Abstract Idea Quick Reference Sheet.

Questions?

- See your Technology Center subject matter eligibility resource specialist or your SPE.

**Please click here to complete a
brief course evaluation**

38

Now that you have viewed every slide, please click on the link to complete a brief course evaluation. Once you have completed the evaluation, you will be marked as complete for this training.