

Technology Center 2600

WELCOME

TC 2600 Customer Partnership

Chasing Electrons Since 1790

The Office of the Commissioner for Patents



Drew Hirschfeld – Commissioner for Patents



Andy Faile – Deputy Commissioner for Patent Operations



Jack Harvey – Assistant Deputy Commissioner for Patent Operations

Meet the TC 2600 Directors



John LeGuyader
Director
2610 | 2660



John Barlow
Director
2620 | 2690



Diego Gutierrez
Director
2630 | 2640 | 2670



Derris Banks
Director
2650 | 2680

TC 2600 Management

- **SPE: 77 QAS: 6 SME: 4**
- Average 10.5 years as a Examiner
- Average 9.5 years as a SPE
- Average 12 years as QAS

Total Degrees Held by SPE/QAS/SME

- Bachelor's 65
- Master's 16
- PhD 2
- JD 4

Workgroup 2610

Director John LeGuyader

Computer Graphic Processing, 3D Animation, Display Color Attribute, Object Processing, Hardware and Memory

Bachelor's – 3
Master's – 4
JD – 2



Kee Tung
Art Unit 2611



Ke Xiao
Art Unit 2612



Xiao Wu
Art Unit 2613



Ulka Chauhan
Art Unit 2614



Gregory Morse
Art Unit 2615



Devona Faulk
Art Unit 2616



Greg Tryder
Art Unit 2617



Barry Drennan
Art Unit 2618



Mark Zimmerman
Art Unit 2619

Workgroup 2660

Digital Cameras; Image Analysis; Applications; pattern Recognition; Color & Compression; Enhancement & Transformation

Bachelor's – 11

Director John LeGuyader



Sinh Tran
Art Unit 2661



Roberto Velez
Art Unit 2662



Twyler Haskins
Art Unit 2663



Lin Ye
Art Unit 2664



Bhavesh Mehta
Art Unit 2665



Stephen Koziol
Art Unit 2665



Kim Vu
Art Unit 2666



Sumati Lefkowitz
Art Unit 2666



Matthew Bella
Art Unit 2667



Vu Le
Art Unit 2668



Chan Park
Art Unit 2669

TC 2600 Customer Partnership

Workgroup 2620

Selective Visual Display Systems

Director John Barlow

Bachelor's – 6

Master's – 1

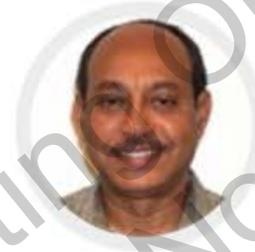
JD – 1



Amr Awad
Art Unit 2621



Ilana Spar
Art Unit 2622



Amare Mengistu
Art Unit 2623



Kent Chang
Art Unit 2624



Willie Boddie
Art Unit 2625



Claire Pappas
Art Unit 2626



Jennifer Mehmood
Art Unit 2627



Nitin K. Patel
Art Unit 2628

Workgroup 2690

Selective Visual Display Systems

Director John Barlow

Bachelor's – 7



Chanh Nguyen
Art Unit 2691



Lun Yi Lao
Art Unit 2692



Benjamin Lee
Art Unit 2693



Patrick Edouard
Art Unit 2694



Srilakshmi Kumar
Art Unit 2695



Temesghen
Ghebretinsae
Art Unit 2696



Alexander Eisen
Art Unit 2697

Workgroup 2630

Digital & Optical Communications

Bachelor's – 1

Master's – 3

JD – 2

PhD – 2

Director Diego Gutierrez



Shuwang Liu
Art Unit 2631



Chieh Fan
Art Unit 2632



Sam Ahn
Art Unit 2633



Daniel Washburn
Art Unit 2634



Ken Vanderpuye
Art Unit 2636



David Payne
Art Unit 2637

Workgroup 2640

Director Diego Gutierrez

Telecommunications: Analog Radio Telephone; Satellite & Power Control; Transceivers, Measuring & Testing; Bluetooth; Receivers & Transmitters; Equipment Details

Bachelor's – 10
Master's – 3



Charles Appiah
Art Unit 2641



Vladimir Magloir
Art Unit 2641



Rafael Perez-Gutierrez
Art Unit 2642



Jinsong Hu
Art Unit 2643



Kathy Wang-Hurst
Art Unit 2644



Anthony Addy
Art Unit 2645



George Eng
Art Unit 2645



Kamran Afshar
Art Unit 2646



Les Kincaid
Art Unit 2646



Nay Maung
Art Unit 2647



Wesley Kim
Art Unit 2648



Kevin (Yuwen) Pan
Art Unit 2649



Ed Urban
Art Unit 2649

Workgroup 2670

Director Diego Gutierrez

Facsimile; Printer; Color; Halftone; Scanner; Computer Graphic Processing; 3-D Animation; Display Color; Attributes; Object Processing; Hardware & Memory

Bachelor's – 6



Mohammad Ghayour
Art Unit 2672



Vincent Rudolph
Art Unit 2673



Benny Tieu
Art Unit 2674



King Poon
Art Unit 2675



Marivelisse Santiago
Cordero
Art Unit 2676



Tammy Paige Goddard
Art Unit 2677

Workgroup 2650

Director Derris Banks

Videophones & Telephonic Communications; Audio Signals; Digital Audio Data Processing; Linguistics; Speech Processing & Audio Compression

Bachelor's – 7
Master's – 2



Duc Nguyen
Art Unit 2651



Ahmad Matar
Art Unit 2652



Fan Tsang
Art Unit 2653



Vivian Chin
Art Unit 2654



Davetta Goins
Art Unit 2655



Curt Kuntz
Art Unit 2656



Dave Hudspeth
Art Unit 2657



Richemond Dorvil
Art Unit 2658



Pierre-Louis Desir
Art Unit 2659

Workgroup 2680

Director Derris Banks

Telephony & Code Generation; Vehicle & system Alarms; Selective Communication; Dynamic Storage Systems; Mechanical Part of Disk Drives; Signal & Control Processing in Disk Drives

Bachelor's – 6

Master's – 2



George Bugg
Art Unit 2682



Brian Zimmerman
Art Unit 2683



Quan-Zhen Wang
Art Unit 2684



Hai Phan
Art Unit 2685



Steven Lim
Art Unit 2686



Firmin Backer
Art Unit 2687



Wayne Young
Art Unit 2688



Joe Feild
Art Unit 2689

Subject Matter Experts

Bachelor's - 4



Matt Anderson

Employee Relations



Jason Chan

Data Analysis



Dave Ometz

Quality & QAS Supervisor



Dwayne Bost

Tech Fair & Quality

Quality Assurance Specialists

Bachelor's – 5

Master's - 1



Wellington Chin



John Peng



Ken Wieder



Mike Horabik



Doris To



Daniel Swerdlow

Partnership Meeting Only -
Further Dissemination Not Intended

TC 2600 Examiners

- Examiner Total of 991.

Work Group 2610 - 107	Work Group 2620/90 – 183
Work Group 2630 - 81	Work Group 2640 – 168
Work Group 2650 - 127	Work Group 2660 – 157
Work Group 2670 - 69	Work Group 2680 - 99

- Examiner by Grade Level

GS 5 - 1	GS 7 - 2
GS 9 - 17	GS 11 - 23
GS 12 - 104	GS 13 - 190
GS 14 - 638	GS 15* - 16

* GS-15 Patent Examiners: WG2680 – 1; AU2615 - 15

TC 2600 Quality Programs and Metrics

John LeGuyader
TC 2600 Director

UNITED STATES
PATENT AND TRADEMARK OFFICE



Quality Reviews

TC 2600 internal quality reviews consist of:

- **QUIPs** (Quality Improvement Plans) – In depth review of Primary Examiners work (All Statutes reviewed).
- **KPI** (Key Process Indicators) – In depth review of outliers in the areas of Allowance, Reopen (after final, pre-appeal or appeal brief) and Rework (second action non-finals, consecutive final rejections and consecutive restrictions).
- **RQAS QUIPs** – OPQA* reviewers perform bi-weekly reviews of a number of TC primary actions on a rotational basis (All Statutes Reviewed).

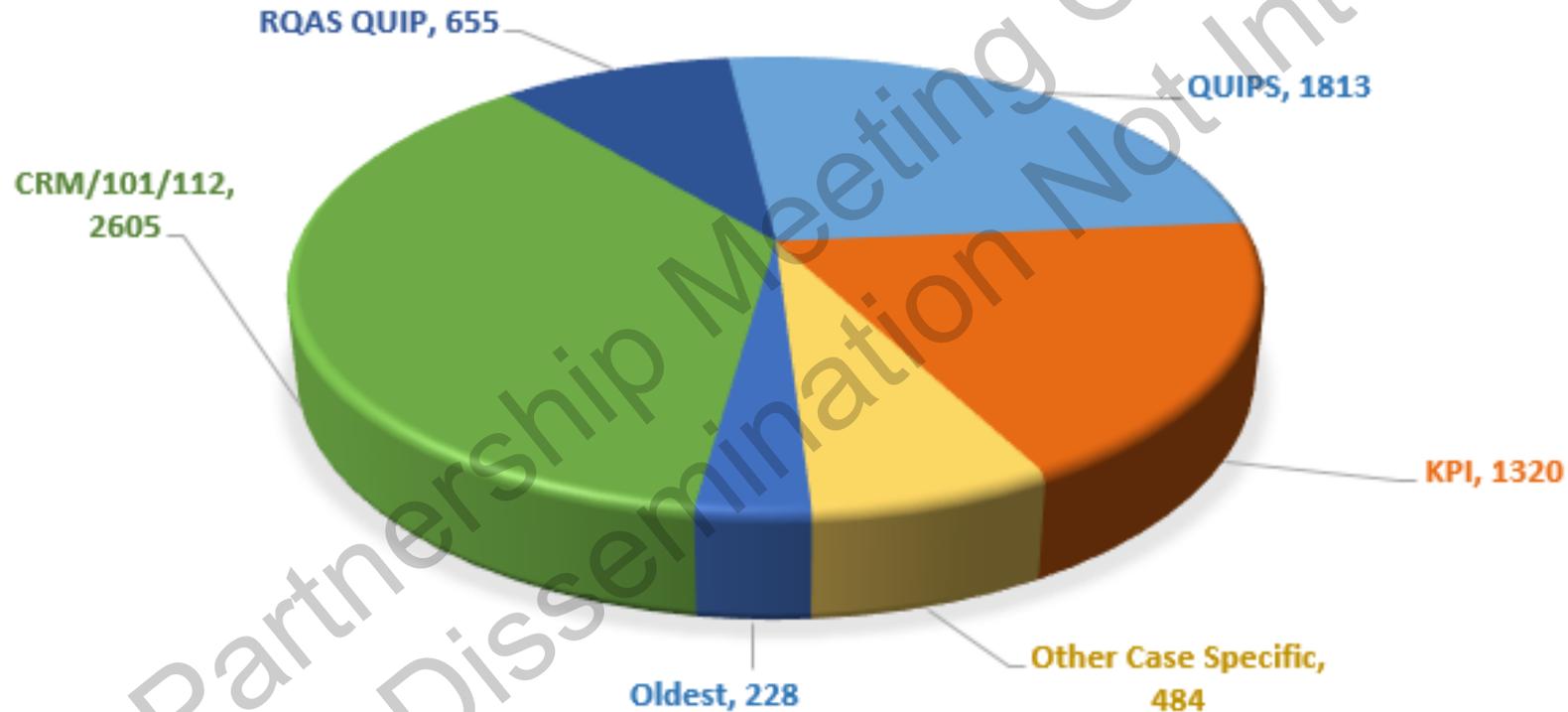
*Office of Patent Quality Assurance (OPQA) review office independent of TCs

Quality Reviews

- **CRM/101/112 review** – In depth random biweekly review of actions for compliance in 35 USC 101, Computer Readable Medium, Abstract Ideas; 35 USC 112 (a), (b), and (f).
- **End Loading review** - In depth review of individual examiner actions where majority of work is submitted at the last bi-week of a QTR.
- **Oldest Pending Application review** – In depth AU SPE review of oldest pending application to determine a path towards resolution.
- **Other Case Specific reviews** – as needed.

Quality Reviews

TC 2600 ONGOING QUALITY REVIEWS
FY 2017 THROUGH 3RD QTR



Over 8,200 projected number of internal TC Quality related reviews to be completed.

Approx. 2,000 projected number of OPQA* reviews for TC 2600 to be completed.

*Office of Patent Quality Assurance (OPQA) is a review office independent of TCs

Results of TC 2600 QUIPs Reviews

WorkGroup	Review Completed	Home SPE		101		112		Art Rejection (102/103)		Restriction (Improper)	CAT 1 (Improper)	Indicia of O/C
		Decision Agree/Agree in Part	ODP Improper / Omitted	Improper / Omitted	Improper / Omitted	Improper	Improper					
2610	240	218	0%	4%	6%	7%	0%	6%	57%			
2620	131	121	1%	0%	6%	9%	0%	5%	56%			
2630	151	140	0%	1%	5%	4%	0%	4%	66%			
2640	262	234	1%	3%	5%	9%	1%	6%	32%			
2650	301	265	2%	1%	3%	2%	0%	1%	63%			
2660	375	303	2%	2%	5%	2%	0%	6%	64%			
2670	199	180	2%	4%	11%	6%	1%	5%	43%			
2680	205	198	4%	3%	6%	10%	1%	5%	63%			
2690	230	154	1%	1%	5%	6%	0%	5%	59%			
2600	2094	1813	1%	2%	6%	6%	0%	5%	56%			

Number of TC 2600 KPI Reviews Performed

Number of Reviews Per KPI WorkGroup	Consistency of Decision Making	Reopen Prevention	Rework Reduction	Grand Total
2610	40	37	42	119
2620 and 2690	50	61	103	214
2630	60	31	30	121
2640	50	118	89	257
2650	43	41	51	135
2660	74	66	66	206
2670	45	10	40	95
2680	45	47	81	173
Grand Total	407	411	502	1320

Number of TC 2600 CRM/101/112 reviews

FY'17 CRM SPOT CHECKS	# of Cases Checked	Errors	Percent
2610	201	2	1.0%
2620/90	454	5	1.1%
2630	240	3	1.3%
2640	478	7	1.5%
2650	337	2	0.6%
2660	441	4	0.9%
2670	177	2	1.1%
2680	277	5	1.8%
TC TOTAL	2605	30	1.2%

Break

Partnership Meeting Only -
Further Dissemination Not Intended

UNITED STATES
PATENT AND TRADEMARK OFFICE



35 USC § 101: Subject Matter Eligibility

Vladimir Magloire – SPE AU 2641
Will Boddie – SPE AU 2625

UNITED STATES
PATENT AND TRADEMARK OFFICE



Overview

- The Requirements of 35 U.S.C. § 101
- The Four Statutory Categories (Step 1 of Subject Matter Eligibility Analysis)
- The Two Part Analysis for Judicial Exceptions (Steps 2A and 2B of Subject Matter Eligibility Analysis)
- Formulating a Subject Matter Eligibility Rejection
- Examples
- Overview of afternoon breakout session

The Statute:

§ 101 - Inventions Patentable:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Four Requirements in § 101 :

- “A” patent – means only one patent granted for each invention.
 - Basis for statutory double patenting rejections. See MPEP 804.
- “Useful” – the invention must have a specific, substantial, and credible utility.
 - “Utility” requirement – see MPEP 2107 for Utility Guidelines.
- **“Process, Machine, Manufacture, Composition of Matter”**
 - **“Subject matter eligibility” - these categories, as interpreted by the courts, limit the subject matter that is eligible for patenting.**
- “Whoever invents or discovers”
 - A patent may only be obtained by the person who engages in the act of inventing.

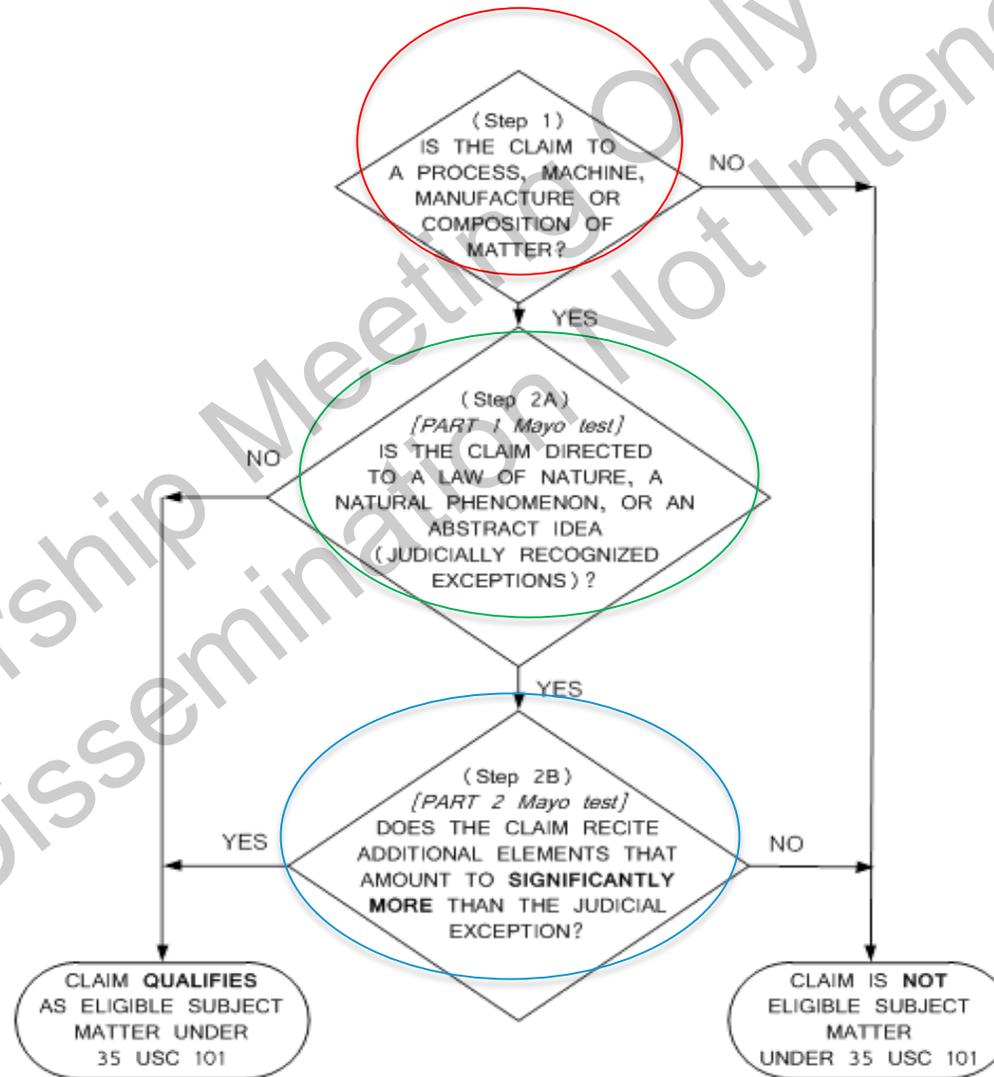
35 USC §101: Eligibility Guidance

- 2014 Interim Eligibility Guidance (Issued Dec. 16, 2014, 79 FR 74618) :
 - For examination of all claims
 - 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
 - Comprehensive view of subject matter eligibility under 35 U.S.C. § 101 that incorporates teachings from the full body of relevant case law and associate memorandums
- Supplemental guidance documents have been circulated as relevant court decisions are rendered

§101 Subject Matter Eligibility Flowchart

**For all claim types, in all arts,
Examiners are to:**

- I. Review the disclosure to identify what applicant considers as the invention and determine the broadest reasonable interpretation of the claims.
- II. Determine if the claim falls into a statutory category (Step 1).
- III. Identify the judicial exception recited in the claim, if any (Step 2A).
- IV. If there is an exception, determine if the claim as a whole recites significantly more than the judicial exception itself (Step 2B).



Step 1 – Four Statutory Categories

- The four statutory categories of invention:
 - Process, Machine, Manufacture, or Composition of Matter and Improvements Thereof
 - **Process** = “an act, or series of acts or steps”
 - **Machine** = “a concrete thing, consisting of parts, or of certain devices and combination of devices”
 - **Manufacture** = “an article produced from raw or prepared materials by giving these materials new forms, qualities, properties, or combinations, whether by handlabor or by machinery”
 - **Composition of Matter** = “all compositions of two or more substances and all composite articles, whether they be the results of chemical union, or of mechanical mixture, or whether they be gases, fluids, powders or solids, for example.”

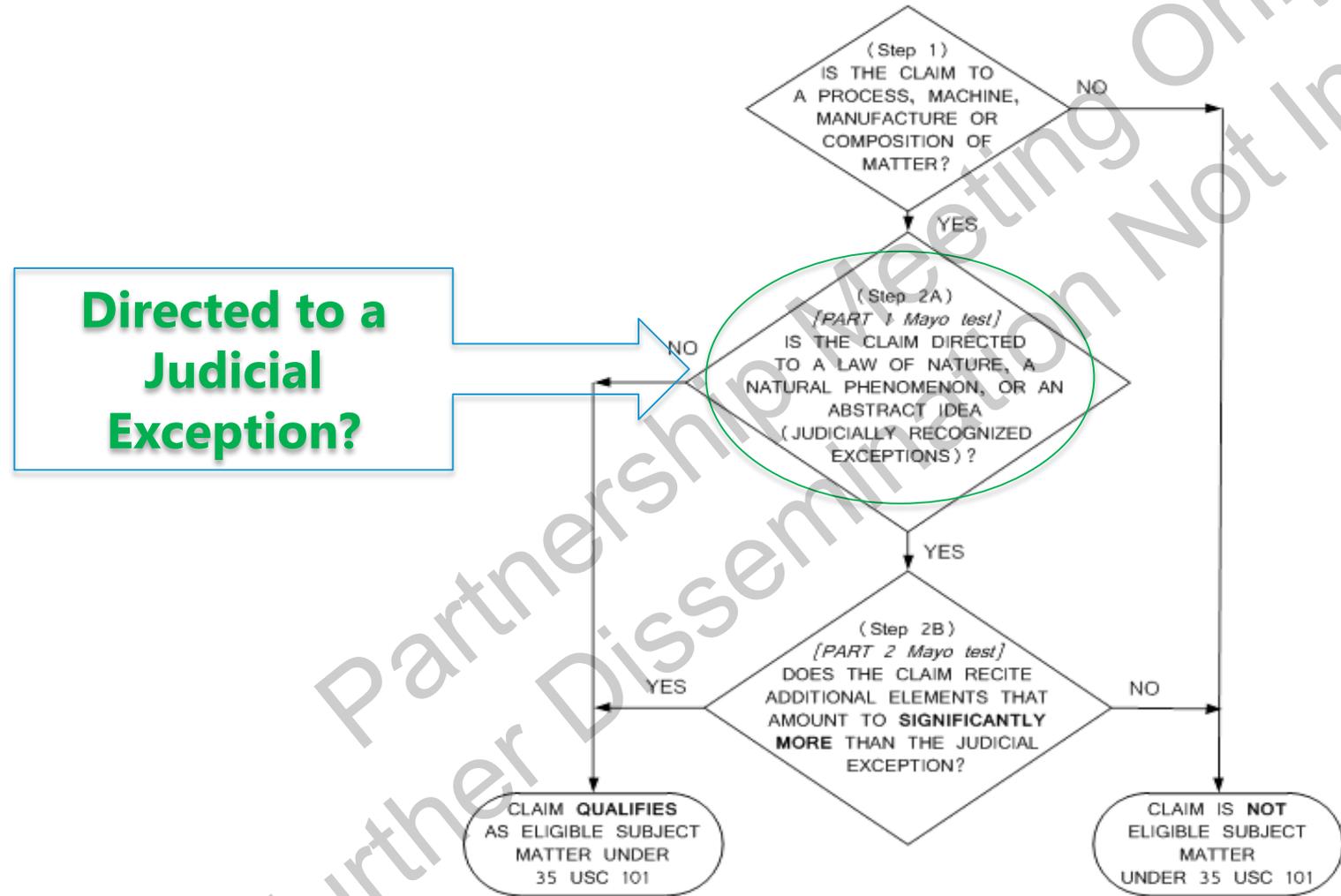
Step 1 – Four Statutory Categories

- Claimed inventions that do not fall within the statutory categories are not eligible for patenting.
 - Identification of one category is not necessary for eligibility.
 - A claim may satisfy the requirements of more than one category.
 - Ex., a claim to a bicycle may satisfy both machine and manufacture categories.
 - Analyze based on the claim's broadest reasonable interpretation (BRI).
 - A claim that covers **both** eligible and ineligible subject matter should be rejected under §101 because the BRI covers ineligible subject matter.

Step 1 - Four Statutory Categories

- Non-limiting examples of embodiments that fall outside the statutory categories:
 - **transitory forms of signal transmission**, In re Nuijten, 500 F.3d 1346, 1357, 84 USPQ2d 1495, 1503 (Fed. Cir. 2007)
 - **a legal contractual agreement between two parties**, see In re Ferguson, 558 F.3d 1359, 1364, 90 USPQ2d 1035, 1039-40 (Fed. Cir. 2009) (cert. denied)
 - **a computer program per se**, Gottschalk v. Benson, 409 U.S. at 72, 175 USPQ at 676-77
 - **a company**, Ferguson, 558 F.3d at 1366, 90 USPQ at 1040
 - **a mere arrangement of printed matter**, In re Miller, 418 F.2d 1392, 1396, 164 USPQ 46, 49 (CCPA 1969)
 - **data per se**, Digitech Image Tech., LLC v. Electronics for Imaging, Inc., 758 F.3d 1344, 1350, 111 USPQ2d 1717, 1720 (Fed. Cir. 2014).

§101 Subject Matter Eligibility – Step 2A



Step 2A: “Directed To” an Exception

- “Directed to” means the exception is **recited** in the claim, *i.e.*, the claim **sets forth** or **describes** the exception
 - *Example:* “A machine comprising elements that operate in accordance with $F=ma$.”
 - The claim recites the law of nature that force equals mass times acceleration ($F=ma$) and is therefore directed to an exception
 - Step 2A: YES – Further eligibility analysis needed

Step 2A: Not “Directed To” an Exception

- If the invention is merely *based on* or *involves* an exception, but the exception is not set forth or described in the claim, the claim is **not** directed to an exception (Step 2A: NO) and is eligible
 - *Example: “A teeter-totter comprising an elongated member pivotably attached to a base member, having seats and handles attached at opposing sides of the elongated member”*
 - This claim is based on the concept of a lever pivoting on a fulcrum, which involves the natural principles of mechanical advantage and the law of the lever
 - However, this claim does not recite these natural principles (Step 2A: NO) and thus is eligible without further analysis

Step 2A: Directed to a “Judicial Exception”

- Law of Nature, Natural Phenomenon, or Abstract Idea
 - These are the labels commonly used by the courts, but there is no bright line between the exceptions. For example, courts have labelled mathematical formulas as both abstract ideas and laws of nature, and have labelled “products of nature” as natural phenomena and laws of nature.
- Identify the exception recited in the claim:
 - The analysis is the same regardless of what the exception is called, so it is sufficient to identify the concept recited in the claim as being at least one type of exception
 - Even *narrowly defined exceptions* will trigger an eligibility analysis, e.g., a highly detailed mathematical formula is still a judicial exception
- A claim that recites an exception is not automatically ineligible and will be patent eligible if it passes Step 2B

Step 2A: Laws of Nature/ Natural Phenomena

- The types of concepts that fall under “Laws of Nature” and “Natural Phenomena” include:
 - Naturally occurring principles
 - Physical, chemical or biological principles, for instance
 - Naturally occurring substances
 - Substances that do not have markedly different characteristics compared to what occurs in nature
- Examples:
 - An isolated DNA
 - A correlation that is the consequence of how a certain compound is metabolized by the body
 - **Electromagnetism to transmit signals**
 - The chemical principle underlying the union between fatty elements and water

Step 2A: “Directed to” a Judicial Exception

- Step 2A: Is the claim **directed to** a law of nature, a natural phenomenon, or an abstract idea?
 - If no, the claim is **eligible** and examination should continue for patentability
 - Ex., a claim to a computer including only a memory and a microprocessor is not directed to an exception
 - If yes, proceed to Step 2B to analyze whether the claim as a whole amounts to significantly more than the exception
 - Claims that are directed to an exception are not necessarily ineligible – they require further analysis to determine eligibility

Step 2A: Abstract Ideas

The types of concepts that fall under “Abstract Ideas” have been identified by the courts only by example, and include 4 types:



Step 2A: Abstract Ideas

“Fundamental Economic Practices”

Examples:

Creating a contractual relationship

Hedging

Mitigating settlement risk



The phrase “fundamental economic practices” is used to describe concepts relating to the economy and commerce, such as 1) agreements between people in the form of contracts, 2) legal obligations, and 3) business relations.

Step 2A: Abstract Ideas

“Certain Methods of Organizing Human Activity”

This phrase is used to describe concepts relating to interpersonal and intrapersonal activities.



Note that “certain methods” means that not all methods of organizing human activity are abstract ideas, and that this category description is not meant to cover human operation of machines.

Step 2A: Abstract Ideas

“Certain Methods of Organizing Human Activity”

- Examples most applicable to TC2600 technology:
 - Filtering internet content
 - Generating menus on a computer
 - Classifying and storing digital images in an organized manner
 - Creating an index, and using that index to search for and retrieve data
 - Receiving, screening, and distributing e-mail
 - Virus screening



Step 2A: Abstract Ideas

“An Idea ‘Of Itself’”

The phrase “an idea ‘of itself,’” is used to describe an idea standing alone such as:

- 1) an uninstantiated concept, plan or scheme, as well as a
- 2) mental process (thinking) that “can be performed in the human mind, or by a human using a pen and paper.”

Some concepts that are “ideas” can also fall within other categories.



Step 2A: Abstract Ideas

“An Idea ‘Of Itself’”

Examples most applicable to TC2600 technology:

- Comparing information regarding a sample or test subject to a control or target data
- Collecting and comparing known information
- Comparing data to determine a risk level
- Obtaining and comparing intangible data
- Comparing new and stored information and using rules to identify options
- Encoding and decoding data
- Delivering user-selected media content to portable devices
- Mental process for logic circuit design
- Using categories to organize, store and transmit information



Step 2A: Abstract Ideas

“Mathematical relationships/formulas”

The phrase “mathematical relationships/formulas” is used to describe mathematical concepts such as :

- 1) mathematical algorithms,
- 2) mathematical relationships,
- 3) mathematical formulas, and
- 4) calculations.

It is also noted that the courts have described some mathematical concepts as laws of nature.



Step 2A: Abstract Ideas

“Mathematical relationships/formulas”

Examples most applicable to TC2600 technology:

- An algorithm for converting binary coded decimal to pure binary
- A formula for computing an alarm limit
- A formula describing certain electromagnetic standing wave phenomena
- Managing a stable value protected life insurance policy by performing calculations and manipulating the results
- Reducing the amount of calculations in known and established computations
- An algorithm for calculating parameters indicating an abnormal condition
- Calculating the difference between local and average data values
- Organizing information through mathematical correlations



Step 2A: Abstract Ideas

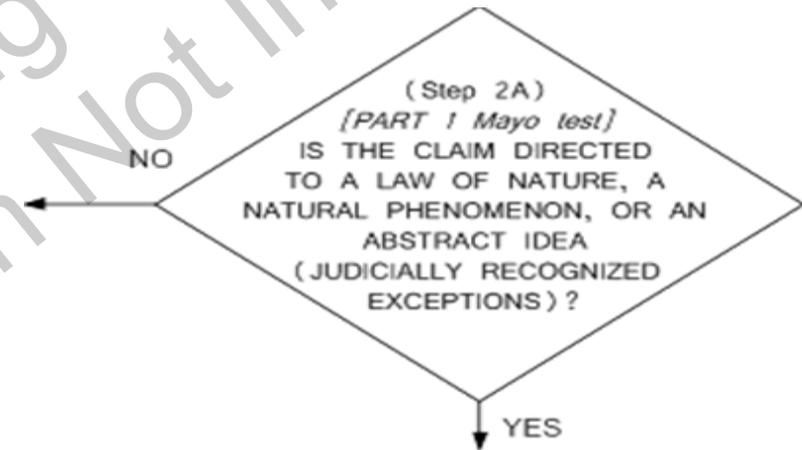
- To identify an abstract idea in a claim, we keep in mind what applicant invented
 - Compare the claimed concept to the types of ideas courts have found as abstract
 - When making a rejection, specifically identify the abstract idea (e.g., the claim recites the steps of creating a contractual relationship), instead of categorizing it as a certain type of idea (e.g., economic practice)
 - The Federal Circuit cautioned against describing a claim at a high level of abstraction untethered from the language of the claim

Step 2A: Abstract Ideas

- Software or business methods are not excluded categories of subject matter
 - ‘Software’ is not automatically an abstract idea. While some software may include an abstract idea (such as a step that employs a mathematical relationship), further analysis of the claim as a whole would be required to determine eligibility.
 - Software can provide eligible improvements in computer functionality. Such improvements are not limited just to physical components alone.
 - For example, in *Enfish v. Microsoft*, the claimed database software designed as a “self-referential” table was held to be patent eligible because it is not directed to an abstract idea. The claims were directed to improvements in computer technology and thus not similar to claims that have previously been identified as abstract by the courts. The specification identified that claimed invention achieves benefits over conventional databases such as increased flexibility, faster search times, and smaller memory requirements.

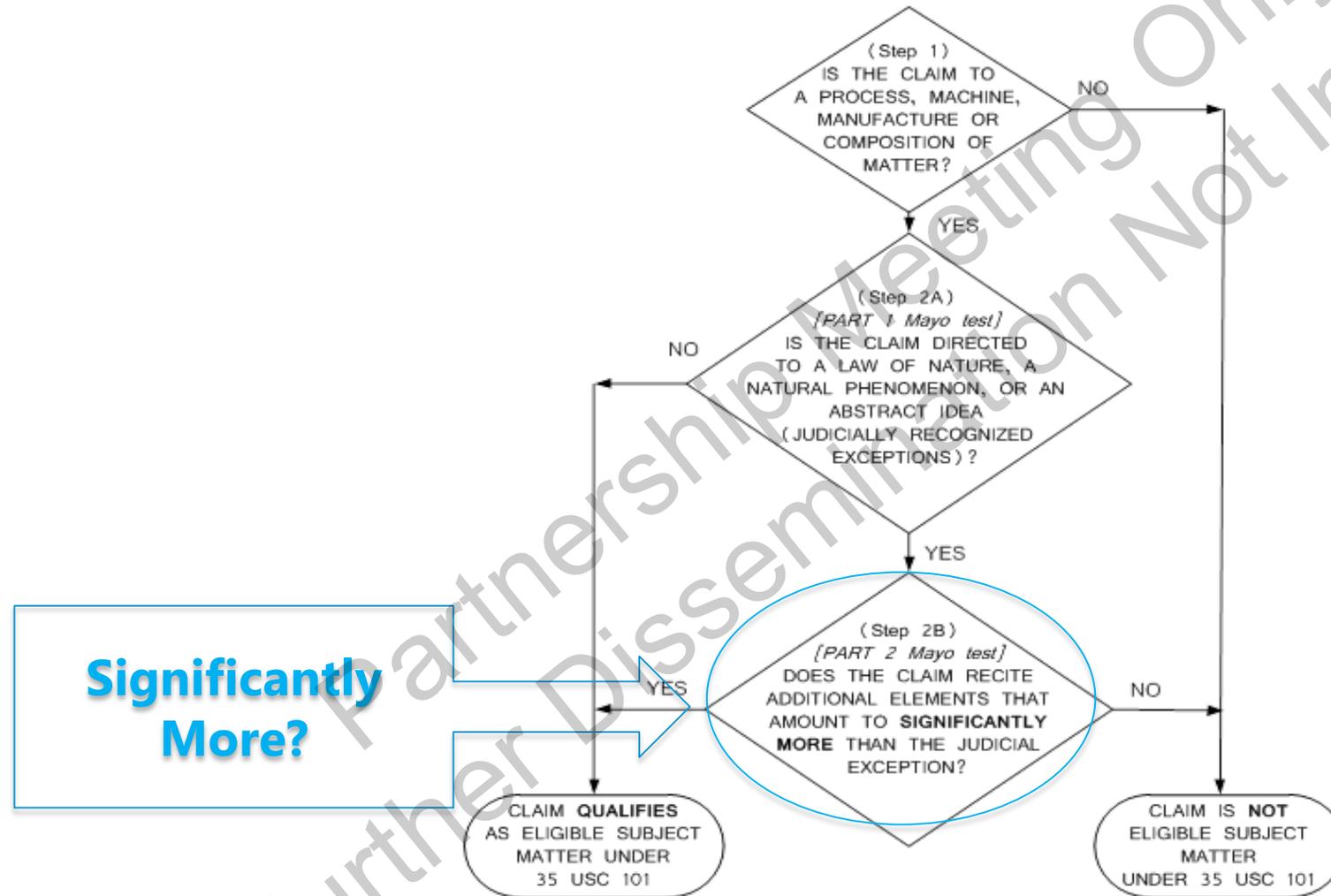
Step 2A: YES or NO?

- If the claim is not directed to an exception, and is in one of the four statutory categories, the claim is eligible.
 - Step 2A: NO



- If the claim is directed to an exception, proceed to Step 2B to determine whether the claim amounts to significantly more than the exception.
 - Step 2A: YES

§101 Subject Matter Eligibility – Step 2B



Step 2B: Does the Claim as a Whole Amount to Significantly More than the Judicial Exception?

- Analyze each claim as a whole
- Consider the additional elements claimed with the exception, both individually and as an ordered combination.

Step 2B: Identify the Additional Limitations in the Claim

- The additional elements in the claim:
 - Must establish **meaningful limitations**
 - Must be **more than a drafting effort** designed to monopolize an exception
 - Individual elements when viewed on their own may not appear to add significantly more, but when **viewed in combination** may amount to significantly more than the exception

Step 2B: “Significantly More” Considerations

Limitations that may be enough to qualify as “significantly more” when recited in a claim with a judicial exception:

- Improvements to another technology (Diamond v. Diehr)
- Improvements to the functioning of the computer itself (RCT v. Microsoft)
- 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 (Tilghman v. Proctor)
- Adding a specific limitation other than what is well-understood, routine, and convention in the field, or adding unconventional steps that confine the claim to a particular useful application (DDR Holdings, LLC v. Hotels.com, L.P)
- Other meaningful limitations beyond generally linking the use of the judicial exception to a particular technological environment

Step 2B: “Significantly More” Considerations

Limitations that are not “significantly more:”

- Adding the words “apply it” (or an equivalent) with the judicial exception, or mere instructions to implement an abstract idea on a computer
- Simply appending well-understood, routine and conventional activities previously known to the industry, specified at a high level of generality
 - *e.g.*, a claim to an abstract idea requiring no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry
- Adding insignificant extrasolution activity to the judicial exception
 - *e.g.*, mere data gathering in conjunction with a law of nature or abstract idea
- Generally linking the use of the judicial exception to a particular technological environment or field of use

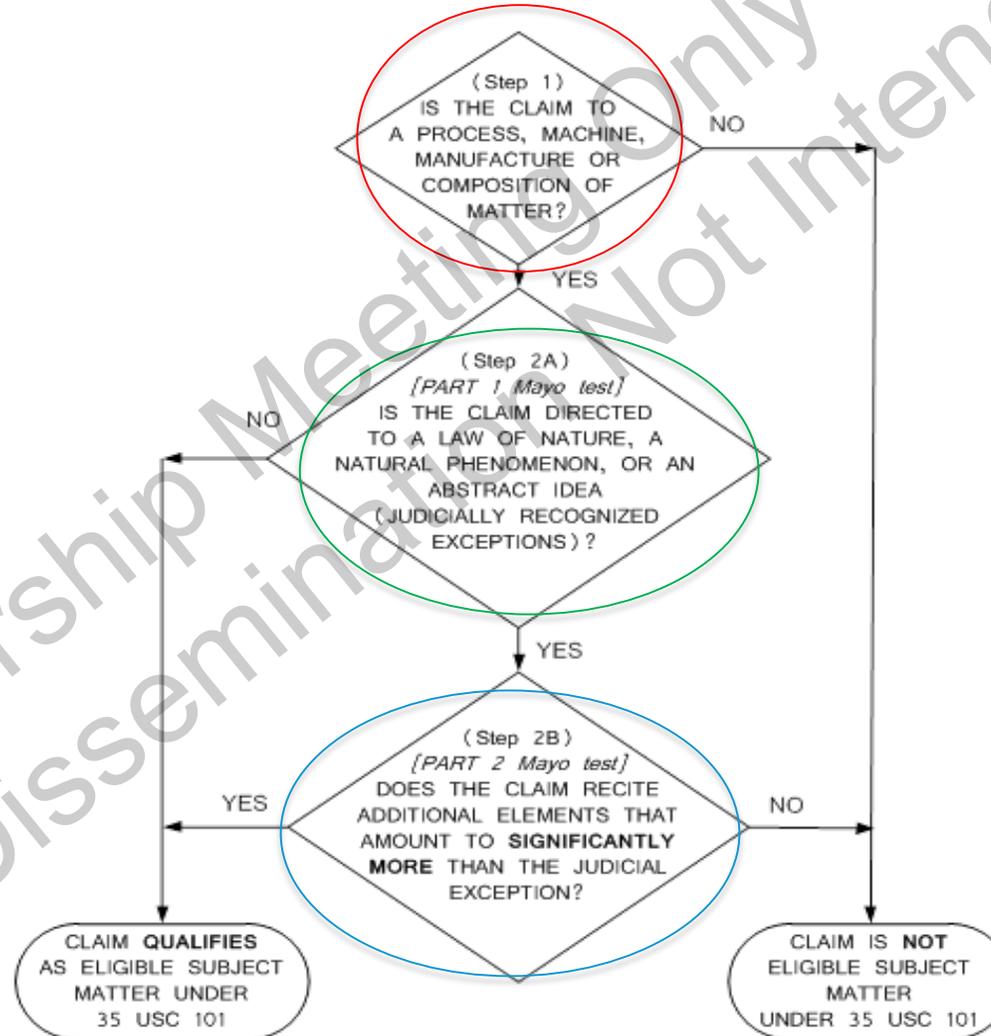
Step 2B: “Significantly More” Considerations

- Some courts recognized examples of well-understood, routine, and conventional functions:
 - performing repetitive calculations
 - receiving, processing, and storing data
 - electronically scanning
 - extracting data from a physical document
 - electronic recordkeeping
 - automating mental tasks
 - receiving or transmitting data over a network
- This listing is not meant to imply that all computer functions are well-understood, routine and conventional, or that a claim reciting a generic computer component performing a generic computer function is necessarily ineligible.

§101 Subject Matter Eligibility Flowchart

For all claim types, in all arts,
Examiners are to:

- I. Review the disclosure to identify what applicant considers as the invention and determine the broadest reasonable interpretation of the claims.
- II. Determine if the claim falls into a statutory category (Step 1).
- III. Identify the judicial exception recited in the claim, if any (Step 2A).
- IV. If there is an exception, determine if the claim as a whole recites significantly more than the judicial exception itself (Step 2B).



Making the § 101 Rejection

- When making a rejection, it is important for the examiner to explain the rationale underlying his or her conclusion so that applicant can effectively respond.

Making the § 101 Rejection

- Provide a reasoned rationale that:
 - identifies the judicial exception by referring to specific language that is recited (i.e., set forth or described) in the claim and explain why it is considered an exception (2A);
 - Identifies any additional elements (specifically point to claim features/limitations/steps) recited in the claim beyond the identified judicial exception (2B); and
 - Explains the reason(s) that the additional elements taken individually, and also taken as a combination, do not result in the claim as a whole amounting to significantly more than the judicial exception (2B).

Making the § 101 Rejection

- Sample Explanations for 2A:
 - For a claim that recites an abstract idea:
 - “The claim recites the steps of sorting information by X, which is an abstract idea similar to the concepts that have been identified as abstract by the courts, such as organizing information through mathematical correlations in *Digitech* or data recognition and storage in *Content Extraction*.”

Making the § 101 Rejection

- Guidance on explaining 2B:
 - If it is determined that the additional element is widely prevalent and its combination with any other additional elements is well understood, routine, conventional activity, the examiner should provide a reasoned explanation that supports that conclusion.

Making the § 101 Rejection

- Sample Explanations for 2B that add insignificant extrasolution activity to the judicial exception:
 - Adding a final step of storing data to a process that only recites computing the area of a space (a mathematical relationship) does not add a meaningful limitation to the process of computing the area.
 - Employing well-known computer functions to execute an abstract idea, even when limiting the use of the idea to one particular environment, does not add significantly more.
- It is particularly critical to address the combination of additional elements, because while individually-viewed elements may not appear to add significantly more, those additional elements when viewed in combination may amount to significantly more than the exception by meaningfully limiting the judicial exception.

Applicant Response

- A proper response to a § 101 rejection would be claim amendments or persuasive arguments/evidence that the claim:
 - Falls within at least one statutory category;
 - Is not directed to a judicial exception; or
 - Amount to significantly more than the judicial exception.

101 Breakout:

Specification

101 Analyses
Steps:

1

2A

2B

Discussion

Does the claim as a whole amount to significantly more than the abstract idea (Step 2B)?

A. Are there any additional elements (features/limitations/step) recited in the claim beyond the abstract idea identified above?

Choose 1 or 2:

1. No, there are no other elements in the claim in addition to the abstract idea.

Conclude SME analysis by making a § 101 rejection and continue with examination under each of the other patentability requirements. Use Form Paragraphs 7.05 and 7.05.015 available in Custom OACs.

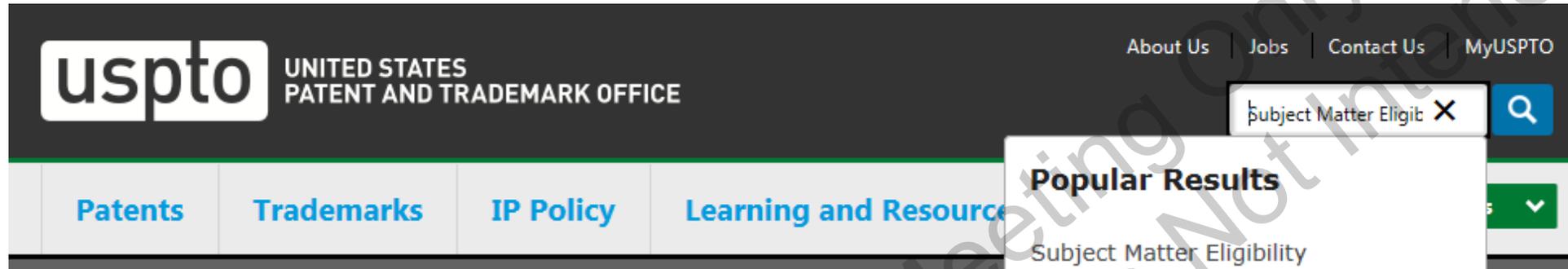
Are there elements in the disclosure that could be added to the claim that may make it eligible? Identify those elements and consider suggesting them to applicant:

2. Yes, the claim elements (features/limitations/steps) in addition to the abstract idea are:

Continue with the SME analysis.

B. Evaluate the significance of the additional elements. Identifying additional elements and evaluating their significance involves the search for an “inventive concept” in the claim. It can be helpful to keep in mind what applicant invented (identified in Section I above) and how that relates to the additional elements to evaluate their significance.

Online Resources



<https://www.uspto.gov/patent/laws-and-regulations/examination-policy/subject-matter-eligibility>

Various hypothetical claim examples, pertinent federal register notices, and examination guidance are available at the above website.

Questions?

Lunch

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35 USC § 112(f): Functional Language

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Topics

- Broadest Reasonable Interpretation
- Identifying Limitations that Invoke 112(f)
 - 3-Prong Analysis for “Means Type” Claim Limitations:
- Issues relating to §112(a) and §112(b) for claim limitations that invoke 35 U.S.C. §112(f)
- Common Types of Software-Related Claim Issues
 - Programmed Computer Functions
 - Software Per Se

Overview

35 U.S.C. 112(f) Element in Claim for a Combination:

“An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.”

Importance of Identifying 35 U.S.C. 112(f) Limitations

- Governs broadest reasonable interpretation of the claim limitation
 - The Court of Appeals for the Federal Circuit, in its en banc decision *In re Donaldson Co.*, 16 F.3d 1189, 1194, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994), held that a “means-or-step-plus-function” limitation should be interpreted as follows:
 - Per our holding, the “broadest reasonable interpretation” that an examiner may give means-plus-function language is that statutorily mandated in paragraph six. Accordingly, the PTO may not disregard the structure disclosed in the specification corresponding to such language when rendering a patentability determination.
- Prevents potential over assertion of claims

Broadest Reasonable Interpretation

- During patent examination, the pending claims must be “given their broadest reasonable interpretation consistent with the specification.”
 - The Federal Circuit’s en banc decision in *Phillips v. AWH Corp.*, 75 USPQ2d 1321 (Fed. Cir. 2005) expressly recognized that the USPTO employs the “broadest reasonable interpretation” standard. (MPEP 2111):
 - “The Patent and Trademark Office (‘PTO’) determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction ‘in light of the specification as it would be interpreted by one of ordinary skill in the art.’ *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364, 70 USPQ2d 1827, 1830 (Fed. Cir. 2004).”

Broadest Reasonable Interpretation for Claims that Invoke 112(f)

- 35 U.S.C. 112(f) imposes limits on the BRI
- The BRI under § 112(f) is restricted to the corresponding structure, material, or acts described in the specification and equivalents thereof
- § 112(f) is a claiming technique that allows applicants to use purely functional terms in their claims **in exchange for** relying on the structure, material or act that performs the function described in the supporting specification

Comparison of Broadest Reasonable Interpretation

- Limitation that does not invoke § 112(f)

BRI = [plain meaning of the claim language]

- Details from the specification are not considered part of the claim limitation

- Limitation that does invoke § 112(f)

BRI = [corresponding structure, material, or acts disclosed in the specification, and equivalents, for performing the recited function]

- The corresponding specification is considered to be part of the claim limitation

Determining Corresponding Structure, Material (or Acts)

- Corresponding Structure or Material:
 - Must be disclosed or described in a way that one of ordinary skill in the art will understand what structure or material the inventor has identified to perform the recited function
 - The structure or material must be sufficient to perform the entire function recited in the claim limitation
 - The structure or material must be clearly linked to the function in the written description

Determining Corresponding Structure, Material (or Acts)

- What qualifies as “corresponding” structure or material?
 - The structure or material that is described in the specification as performing the recited function
 - The statute identifies the “specification” – this is interpreted to mean the written description, including the drawings.
 - This is also called the corresponding “disclosure” - meaning the description in the specification
 - Adequate disclosure in the specification is required for the claim to be definite under § 112(b) because the specification forms part of the § 112(f) claim limitation

Determining Whether the Limitation Invokes §112(f)

3-Prong Analysis for “Means Type” Claim Limitations:

A claim limitation should be interpreted according to §112(f) if it meets the following 3-prong analysis:

- A. The claim limitation uses the phrase “means” or a term used as a substitute for “means” that is a generic placeholder for performing the claimed function;
- B. The phrase “means” or the substitute term is modified by functional language, typically linked by the transition word “for” (e.g., “means for”) or another linking word; and,
- C. The phrase “means” or the substitute term is not modified by sufficient structure or material for performing the specified function.

MPEP 2181(I)

112(f) Presumption for “Means”

- The term “means” with functional language raises a rebuttable presumption that the claim element is to be treated under § 112(f)
 - The presumption is rebutted when the function is recited with sufficient structure or material within the claim itself to entirely perform the recited function

112(f) Presumption in the Absence of “Means”

- Absence of the term “means” with functional language raises a rebuttable presumption that the claim element **is not** to be treated under § 112(f)
 - The presumption is rebutted when the claim element (1) recites a generic placeholder for structure or material; (2) recites a function; and (3) does not recite sufficient structure or material to perform the function.
 - Terms that represent only non-structural elements such as information, data, instructions, and software per se would not serve as substitutes for “means”, because the terms do not serve as placeholders for structure or material.

Prong A – Means-type claims

Prong A is met when the claim language:

- Explicitly uses the phrase “means” or
- Uses a term as a substitute for “means” that is a generic placeholder (i.e., the term is simply a verbal construct or fails to recite sufficient structure to perform the function)
 - This substitute term is sometimes referred to as a non-structural nonce word

Examples:

“Means for ink delivery”

“Unit for delivering ink”

Prong A – Substitute for “means”

- For a term to be a substitute for “means” (and lack sufficient structure), it must:
 - Be a generic placeholder and not limit the scope of the claim to any specific manner/structure for performing the claimed function
- There are no absolutes in the determination of terms used as a substitute for “means”
- An examiner must carefully consider the term in light of the specification and the accepted meaning in the technology

Prong A – Substitute for “means”

Claim limitation: Mechanism for delivering ink

Specification 1	Specification 2
<p>The mechanism for delivering ink can be a piezoelectric printhead, thermal printhead or laser printhead.</p> <p>‘Mechanism’ is used in the claim in a generic manner. One of ordinary skill would understand that ‘mechanism’ is not limited to a specific structure for performing the function.</p> <p>Substitute for “means”</p>	<p>The mechanism for delivering ink is preferably a laser printhead.</p> <p>Although a preferred embodiment is described, ‘mechanism’ is used in the claim in a generic manner. One of ordinary skill would understand that ‘mechanism’ is not the name for the specific structure for performing the function.</p> <p>Substitute for “means”</p>

Prong B – Means-type claims

- Prong B is met when the phrase “means” or the substitute term is modified by functional language, typically linked by the transition word “for” (e.g., “means for”) or another linking word
 - It must be clear that the element in the claims is set forth, at least in part, by the function it performs as opposed to the specific structure, material, or acts that perform the function. See *York Prod., Inc. v. Central Tractor Farm & Family Center*, 99 F.3d 1568, 1574

Examples:

- Means for ink delivery
- Module for delivering ink

MPEP 2181(I)(B)

Linking Words

- It is not required that the transition “for” be used to link “means” or the substitute term to the function
- Other linking words can be used, such as “so that”, or “configured for”, provided it is clear that a function is being recited
- In certain circumstances, it is also not necessary to use a linking word if other words used convey the function without imparting structure

Examples:

Ink delivery means

Module configured to deliver ink

Prong C – Means-type claims

- Prong C is met when the phrase “means” or the generic placeholder is **not** further modified by sufficient structure or material for performing the claimed function

Examples:

- *Means for ink delivery*
 - Prong C met - no structural recitation
- ***Ink jet means for ink delivery***
 - Fails Prong C – modified by “ink jet” which is sufficient structure for achieving specified function
- *Means for ink delivery **having an ink delivery tube***
 - Fails Prong C – modified by “tube” which is sufficient structure for achieving specified function

Prong C – Means-type claims

- To determine whether a word, term, or phrase coupled with a function denotes structure, examiners should check whether:
 - (1) the specification provides a description sufficient to inform one of ordinary skill in the art that the term denotes structure
 - (2) general and subject matter specific dictionaries provide evidence that the term has achieved recognition as a noun denoting structure; and
 - (3) the prior art provides evidence that the term has an art-recognized structure to perform the claimed function.
 - “The standard is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349, 115 USPQ2d 1105, 1111 (Fed. Cir. 2015).

MPEP 2181(I)(C)

Prong C – Means-type claims

- A claim limitation that uses the phrase “means” or substitute for “means” associated with functional language where the phrase is:
 - preceded by a structural modifier, defined in the specification as a particular structure or known by one skilled in the art, that denotes the type of structural device (e.g., “filters”); or
 - modified by sufficient structure or material for achieving the claimed function.
- Prong C is not met.
- The limitation will **not** invoke 35 U.S.C. §112(f).

Example: *“Filter mechanism for filtering particulates”* will **not** invoke 35 U.S.C. §112(f), because the generic placeholder “mechanism for” is preceded by the modifier “filter,” which is known by one skilled in the art as denoting a type of structural device.

Prong C – Means-type claims

When a claim limitation uses a modifier **that does not have any generally understood structure meaning in the art** before the phrase “means,” or before the phrase used as substitute for “means”:

- Prong C is met.
- The limitation **will** invoke 35 U.S.C. §112(f), assuming Prongs A and B are met.

Example: Generic placeholders (e.g., “*mechanism*,” “*element*,” and “*member*”) preceded by modifiers that do not have any known structural meaning in the art may invoke 35 U.S.C. §112(f), e.g., “*colorant selection mechanism*,” “*lever moving element*,” and “*moving link member*.”

Broadest Reasonable Interpretation Revisited

- How to Interpret Claim Language that Does Not Meet the 3-Prong Test for §112(f) Claim Language?
 - When 112(f) is not invoked and an element is recited along with a function, that element is construed as being capable of performing the function – in other words, the BRI of that element is limited by the function

Issues relating to 35 U.S.C. §112(a) and §112(b) for Limitations that Invoke 35 U.S.C. §112(f)

- To comply with 35 U.S.C §112(b), the specification must disclose adequate structure (or material or acts) for performing the recited function
 - Adequate disclosure in the **specification** is required for the claim to be definite under § 112(b) because the **specification** forms part of the § 112(f) claim limitation
- Whether a claim reciting an element in means- (or step-) plus-function language fails to comply with 35 U.S.C. §112(b) because the specification does not disclose adequate structure (or material or acts) for performing the recited function is closely related to the question of whether the specification meets the description requirement in 35 U.S.C. §112(a).
- Therefore, when an issue arises under §112(b) for lack of adequate corresponding structure, then a rejection under §112(a) (written description) should also be made.

MPEP 2181(III)

§112(f) Invoked: Determine if Limitation is Definite

- After identifying a § 112(f) means-type claim limitation, look to the specification to determine what applicant has identified as the structure or material that performs the function recited in the § 112(f) claim limitation
 - Locate description of function in specification
 - Ensure the specification links the claimed function to structure or material that performs that function
 - Ensure that the structure or material is sufficient to perform the claimed function
- If the corresponding structure or material is sufficient, the limitation is definite under § 112(b)

§112(f) Invoked: Determine if Limitation is Definite

- If the disclosed structure or material for performing the entire claimed function is not sufficient, the claim is indefinite under § 112(b)
 - No structure or material is present in the specification
 - Structure or material is present, but not sufficient to perform the entire function
 - Structure or material that is capable of performing the function is present, but the disclosure in the specification does not clearly link that structure to the claimed function

Applicant Response to a § 112(b) Rejection Based on Inadequate Disclosure

- A showing by applicant that one of ordinary skill in the art *could* find a way to perform the function of a § 112(f) limitation does not satisfy the § 112(b) requirement for disclosure of corresponding structure
 - The purpose of § 112(f) is to ensure that the supporting disclosure imposes boundaries on the purely functional language used in a means-plus-function claim limitation
 - An appropriate response to a rejection under § 112(b) would be to:
 - Identify the structure described in the specification that performs the claimed function, or
 - Amend the claim to recite the structure that performs the function if possible, thus not invoking § 112(f)

Issues Relating to § 112(a) – “Indefinite” Signals Lack of “Written Description”

- Finding a § 112(f) limitation indefinite for failure to disclose adequate structure in the specification signals a lack of *written description* under § 112(a) for that limitation
 - The inventor must provide an adequate written description of the claim limitations to show possession of the invention under § 112(a)
 - The description can be accomplished with words, structures, figures, diagrams, and formulas, for example
- Indefiniteness rejection should be accompanied by a rejection for lack of written description under § 112(a)

Programmed Computer Functions

- Programmed computer functions require a computer programmed with an “algorithm” to perform the function
 - An algorithm is a step-by-step procedure for accomplishing a given result
 - Can be expressed in various ways “in any understandable terms including as a mathematical formula, in prose or as a flow chart, or in any other manner that provides sufficient structure” (*Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1340 (Fed. Cir. 2008))
 - Amount of disclosure of an algorithm is analyzed on a case-by-case basis

Programmed Computer Functions

Two types of computer-implemented functions:

- Specialized functions: functions other than those commonly known in the art, often described by courts as requiring “special programming” for a general purpose computer or computer component to perform the function
 - Example: “means for matching incoming orders with inventory on a pro rata basis”
- Non-specialized functions: functions known by those of ordinary skill in the art as being commonly performed by a general purpose computer or computer component
 - Ex. means for storing data

Programmed Computer Functions – Specialized Functions

- A specialized function must be supported in the specification by the computer and the algorithm that the computer uses to perform the claimed specialized function
 - The **default rule** for § 112(f) programmed computer claim limitations is to require disclosure of an algorithm when special programming is needed to perform the claimed function
 - Disclosure of the step by step procedure for specialized functions establishes clear, definite boundaries and notifies the public of the claim scope
 - “Claiming a processor to perform a specialized function without disclosing the internal structure of the processor in the form of an algorithm, results in claims that exhibit the ‘overbreadth inherent in open-ended functional claims’” (emphasis added) (***Halliburton Energy Services v. M-I LLC*, 514 F.3d 1244, 1256 n.7 (Fed. Cir. 2008)**)).

Specialized Function - Sufficiency of Disclosed Algorithm

- A rejection under [35 U.S.C. 112\(b\)](#) or [pre-AIA 35 U.S.C. 112](#), second paragraph is also appropriate if the specification discloses an algorithm but the algorithm is not sufficient to perform the **entire** claimed function.
- For example, for a function that includes two distinct functional components, disclosure of an algorithm that is sufficient to perform **one of** the functions but not the other would not be adequate to satisfy the requirements of [35 U.S.C. 112\(b\)](#) or [pre-AIA 35 U.S.C. 112](#), second paragraph.

Specialized Function - Sufficiency of Disclosed Algorithm

- The disclosure of structure to support one function cannot fill in the gaps in the specification for structure needed to perform a different function. Where a disclosed algorithm supports some, but not all, of the functions associated with a means-plus-function limitation, the specification is treated as if no algorithm has been disclosed at all.
- Moreover, attempting to fill in the gaps of the specification by importing off the shelf software or asserting that individuals of ordinary skill in the art would understand how to accomplish the function described with the assistance of such off the shelf software does not solve the inadequacy of the disclosure. *Noah*, 675 F.3d at 1318, 102 USPQ2d at 1421.

Programmed Computer Functions – Non-Specialized Functions

- A non-specialized computer function can be adequately supported in the specification by a general purpose computer only
 - Applies to functions that can be accomplished by any general purpose computer without special programming
 - It is only in **rare circumstances** that an algorithm need not be disclosed
 - Sufficient supporting structure for a “means for storing data” could be a known memory device, such as a RAM, recognized by those skilled in the art as sufficient structure for storing data
 - In those situations, make the record clear, if necessary, that the function is a non-specialized function and therefore no disclosure of an algorithm is required
 - Note that a known prior art device (any general purpose computer) that performs the claimed function would anticipate the limitation

Comparison: *In re Katz* (Fed. Cir. 2011)

Non-specialized vs. Specialized Function

means for storing... certain select data from said caller information data entered by said operator

- A general purpose computer was identified in the specification as the structure for performing the function
- Katz had not claimed a specific function performed by a special purpose computer, but simply recited the function of “storing”, which can be achieved by any general purpose computer without special programming
 - “As such, it was not necessary to disclose more structure than the general purpose processor that performs those functions.”
- This limitation is an example of a non-specialized function that is definite and adequately supported by the specification

Comparison: *In re Katz* (Fed. Cir. 2011)

Non-specialized vs. Specialized Function

processing means ... for receiving customer number data entered by a caller and for storing the customer number data ... and based on a condition coupling an incoming call to the operator terminal, the processing means visually displaying the customer number data, the operator terminal providing other data entries to the central memory to update data relating to the caller

- A general purpose computer was identified in the specification as the structure for performing this specialized function
- No algorithm was disclosed that corresponds to the “based on a condition coupling an incoming call to the operator terminal” function (a specialized function) – the limitation is indefinite

“Computers can be programmed to conditionally couple calls in many ways. Without any disclosure as to the way Katz’s invention conditionally coupled calls, the public is left to guess whether the claims cover only coupling based on particular system conditions, such as the availability of an operator, or are broad enough to cover any coupling in conjunction with an if-then statement in source code.”

Compare Claims with 112(f) Limitations to Claims to Software *per se*

- A claim that properly recites a means-type limitation cannot be software *per se*
 - Software *per se* means that **no** structure is recited in the claim
 - A claim that also recites structure, such as a processor or a memory, is not software *per se*
- A claim that recites software *per se* is not patent eligible subject matter under 35 U.S.C. 101
 - The preamble may recite a computer program product or a system, but the elements are simply a set of software routines or a list of instructions or code

Software *per se* vs. Programmed Computer

Compare software *per se* to a programmed computer:

8. *An image processing system that filters pixel values comprising:
a calculation unit configured to extract a first pixel value; and
a processing unit configured to compare the first pixel value to
a pixel threshold to filter pixel values that exceed the threshold value.*
- The specification identifies a CPU programmed with a first algorithm to extract a first pixel value and a second algorithm to compare the first pixel value to a pixel threshold to filter pixel values that exceed the threshold value
 - Both claim elements use generic placeholders (a unit) coupled to a function and invoke § 112(f)
 - The elements are definite because the corresponding structure is a computer linked to the algorithms that perform the claimed functions

Claims to Software per se

Software per se

7. An image processing system that filters pixel values comprising:
 - calculation code that extracts a first pixel value; and
 - process code that compares the first pixel value to a pixel threshold to filter pixel values that exceed the threshold value.
- The calculation code and the process code are described in the specification as software routines that can be loaded onto any general purpose processor to perform image processing
- The claim is directed to software *per se* that is ineligible subject matter under 35 U.S.C. 101

112(f) Workshop Overview

Analyzing Functional Language: EXAMPLE 3 COMPUTERIZED COLOR EDITING SYSTEM

The invention is a computer-assisted color-editing system for editing and reproducing color images. A specification excerpt follows:

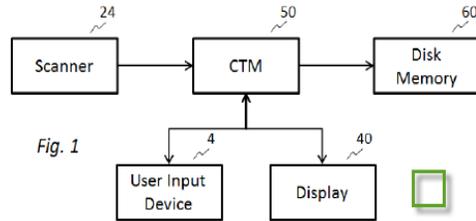


Fig. 1

Applicant invented a computer-assisted color-editing system for editing and reproducing color images. During use, a scanner 24 scans an original color image, and produces representative appearance signals (e.g., RGB signals). The appearance signals are sent from the scanner to a color translation module (CTM) 50, which is described as hardware (such as aesthetic correction circuitry) or software (such as programming instructions) running on a microprocessor. The color translation module (CTM) 50 is programmed to transform the appearance signals into modified appearance signals representative of a reproduction image, by a user interacting with the system via user input device 4 to introduce aesthetically desired alterations (e.g., user-selected adjustments to the hue, saturation and luminance) into the reproduction image as it is simultaneously shown on display 40. More specifically, user input device 4 receives 8-bit adjustment values (V_{ADA}) for each adjustment component (e.g., hue, saturation, luminance) which are added as vectors to the input appearance signals (V_A) in color translation module (CTM) 50 to produce the modified appearance signals as $V_{MA} = V_A + V_{ADA}$. Once the user is satisfied with the appearance of the reproduction image, the color translation module (CTM) 50 sends the modified appearance signals to disk memory 60. In one embodiment, the aesthetic correction circuitry is an electrical circuit having an input of the appearance signals produced by the scanner, a design that permits interactive introduction of aesthetically desired alterations into the appearance signals, and an output of modified appearance signals. The transformation of the appearance signals by the color translation module (CTM) 50 results in an improved reproduction image even when the reproduction image is formed from a smaller number of colorants than the original image (as is typical when a color photograph is reproduced for printing on an inexpensive inkjet printer).

The following set of hypothetical claims shows variations on the use of functional language.

Claim to be reviewed:

5. A computer-assisted color-editing system, comprising:
- a scanner that produces appearance signals representative of a color image;
 - a color translation module for producing modified appearance signals representative of a reproduction image based on user input introducing aesthetically desired alterations into the appearance signals;
 - a display on which the modified appearance signals are displayed as the reproduction image;
- and
- a disk memory in which the modified appearance signals are stored.

FUNCTIONAL LANGUAGE WORKSHEET

This worksheet is used in the 2016 Functional Language Workshop to facilitate the discussion of the interpretation and definiteness under 35 U.S.C. 112(b) of hypothetical product claims reciting functional language. As every claim must be examined individually based on the particular elements recited therein, a separate worksheet should be used to analyze each claim. The use of this worksheet during examination is optional.

Example: _____ Claim: _____

Part I: Identifying Functional Language

This claim includes at least one instance of functional language, which is:

1. Does the claim element including this functional language invoke 35 U.S.C. 112(f)?

Use the three-prong analysis in MPEP 2181 to determine whether the claim limitation invokes § 112(f).

Yes	No	Notes
<input type="checkbox"/>	<input type="checkbox"/>	Prong A is met because:
		Prong B is met because:
		Prong C is met because:

Summary

- Broadest Reasonable Interpretation
- Identifying Limitations that Invoke 112(f)
- 3-Prong Analysis for “Means Type” Claim Limitations:
- Issues relating to §112(a) and §112(b) for claim limitations that invoke 35 U.S.C. §112(f)
- Common Types of Software-Related Claim Issues
 - Programmed Computer Functions
 - Software Per Se

QUESTIONS?

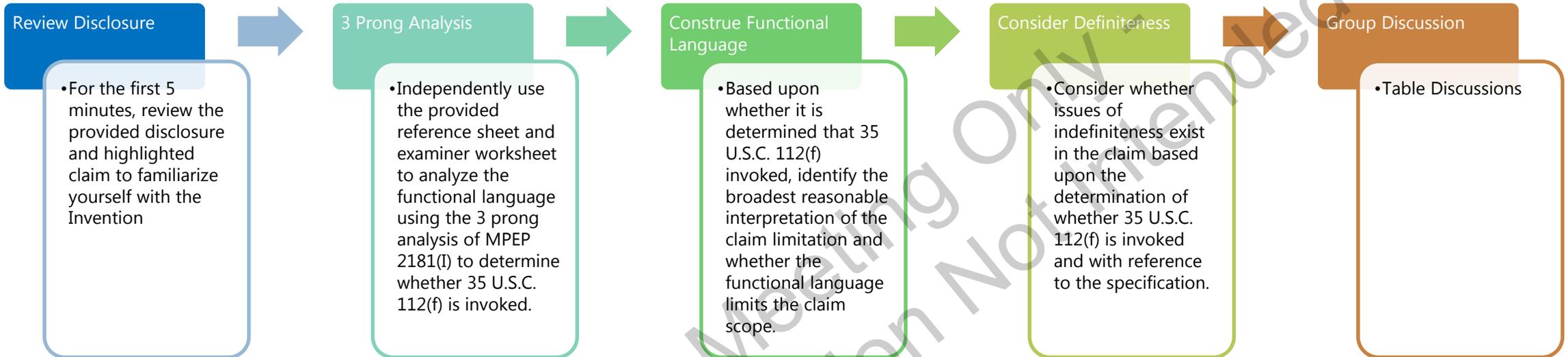
Workshops

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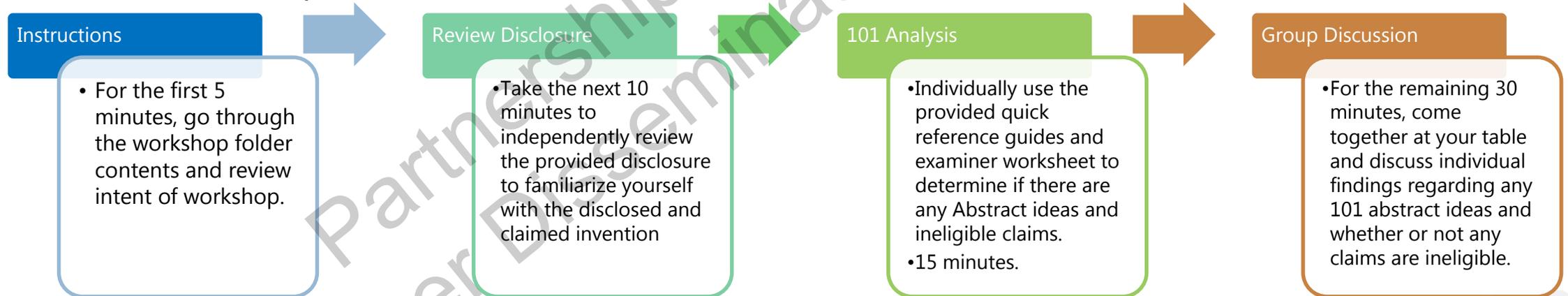
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