

The Future of Patent Prosecution

The role of analytics and the evolution of the patent practitioner

10/14/2021



Today's Speakers



Dr. Michael Sartori

*Partner
Baker Botts L.L.P.*



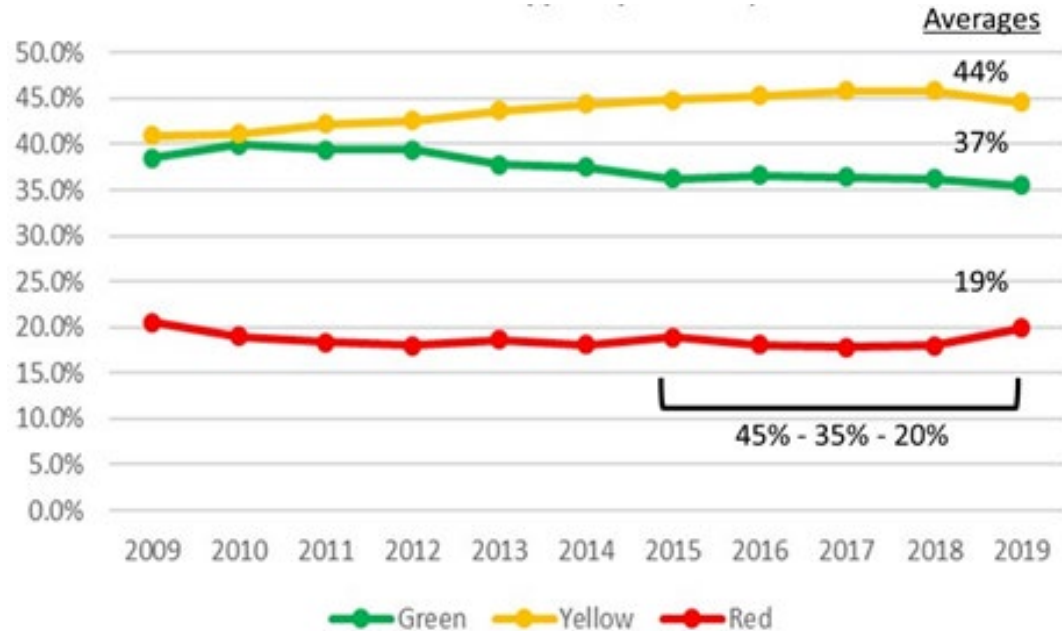
Megan McLoughlin

*Director of Product Management
LexisNexis Intellectual
Property Solutions*

Today's Discussion

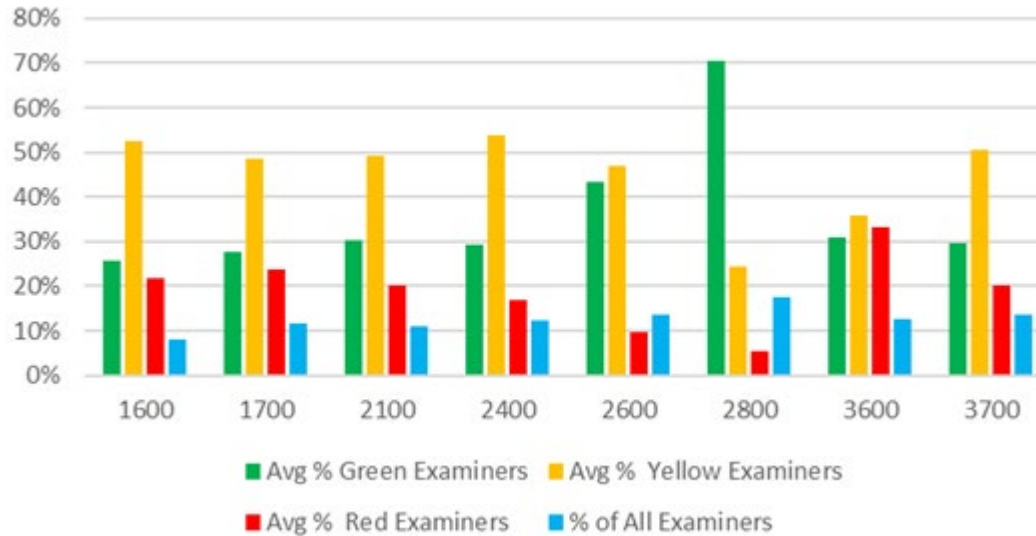
- Setting the scene: examiner variability over the past 10 years
- How prosecution analytics are changing the game
- Why data quality matters
- How to objectively measure your own prosecution performance

Percentage of Examiners by Examiner Type



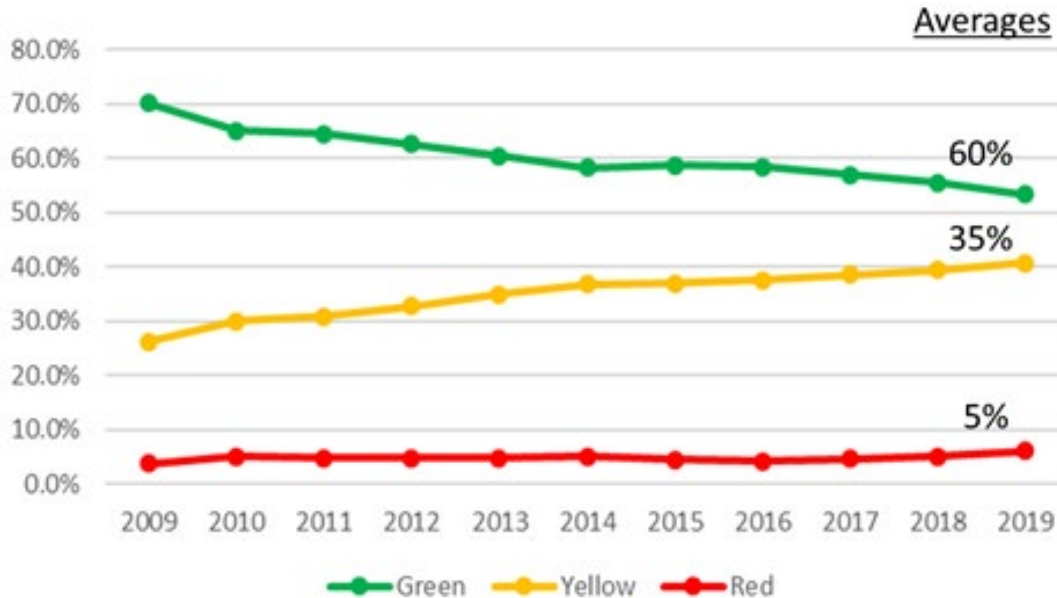
M. Sartori et al., “Green, Yellow, Or Red: What Color Is Your Patent Examiner and Why Should You Care?” *IPWatchdog*, January 21, 2021, www.ipwatchdog.com/2021/01/21/green-yellow-red-color-patent-examiners/id=129219/.

Percentage of Examiners by Tech Center



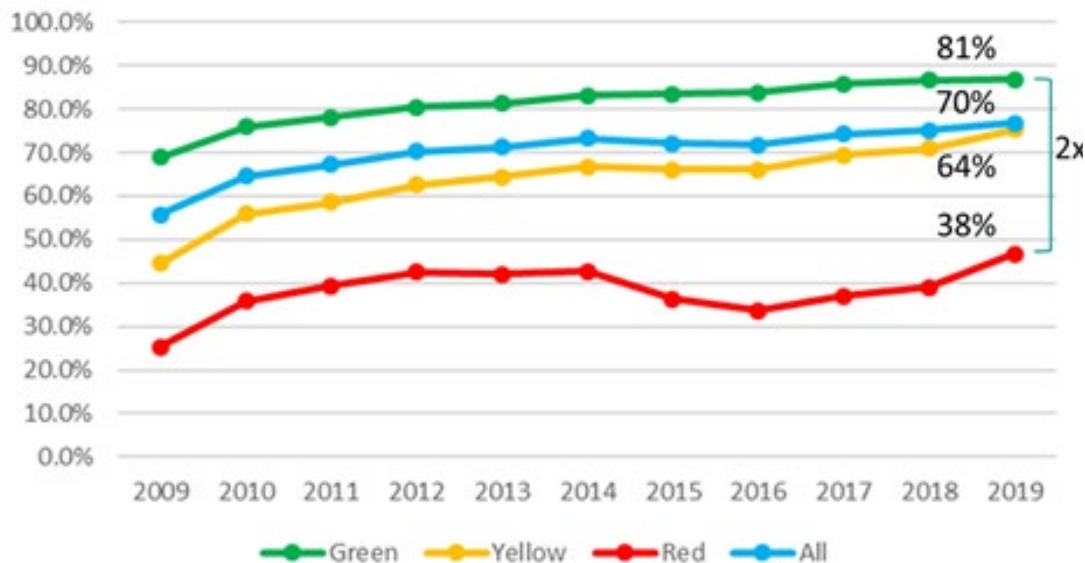
M. Sartori et al., "Green, Yellow, Or Red: What Color Is Your Patent Examiner and Why Should You Care?" *IPWatchdog*, January 21, 2021, www.ipwatchdog.com/2021/01/21/green-yellow-red-color-patent-examiners/id=129219/.

Percentage of Patents Allowed by Examiner Type



M. Sartori et al., "Green, Yellow, Or Red: What Color Is Your Patent Examiner and Why Should You Care?" *IPWatchdog*, January 21, 2021, www.ipwatchdog.com/2021/01/21/green-yellow-red-color-patent-examiners/id=129219/.

Allowance Rate by Examiner Type



M. Sartori et al., "Green, Yellow, Or Red: What Color Is Your Patent Examiner and Why Should You Care?" *IPWatchdog*, January 21, 2021, www.ipwatchdog.com/2021/01/21/green-yellow-red-color-patent-examiners/id=129219/.

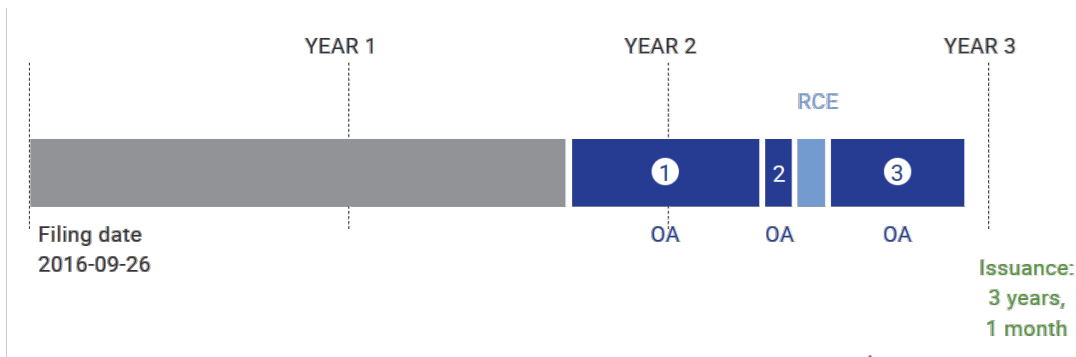
Differences Between Green and Red Examiners

Metric	Green Examiner vs. Red Examiner
Allowance Rate	Green is 2x higher
Office Actions to Disposal	Red is 2x higher
Time to Disposal	Red is 2x higher
At least one Final Office Action	Red is 2x higher
Two or more Final Office Actions	Red is 4x higher
Office Actions with Restriction Requirement	Red is 50% higher
Interviews	Red is 2x higher
Allowance Rate in response to after final Amendment	Green is 3x higher
AFCP 2.0	Red is 3x higher
At least one RCE	Red is 2x higher
RCE'd Applications with two or more RCE's	Red is 2x higher
Allowance Rate in response to RCE	Green is 4x higher
Time to next Action after RCE	Red is 50% higher
Appeals	Red is 3x higher
Win Rate on Appeal	Green is 15% higher

M. Sartori et al., "Green, Yellow, Or Red: What Color Is Your Patent Examiner and Why Should You Care?" *IPWatchdog*, January 21, 2021, www.ipwatchdog.com/2021/01/21/green-yellow-red-color-patent-examiners/id=129219/.

Measuring Prosecution Performance

Good measurements account for examiner variability



	Examiner A	Examiner B
Allowance rate	80%	20%
Average OA to allowance	1.5	3.2
Good result?	✗	✓



Measuring Prosecution Performance

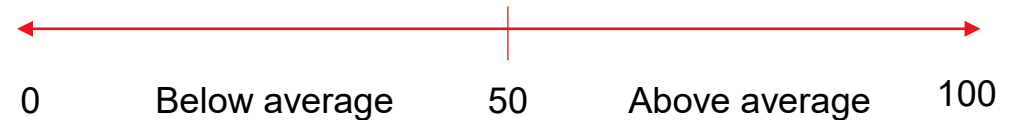
PatentAdvisor Efficiency Score™

Allowance rate: $\text{Patented} / (\text{Patented} + \text{Abandoned})$

- Doesn't account for examiner variability
- Penalizes for abandonments

PatentAdvisor Efficiency Score: how quickly applicants bring a case to resolution, relative to the examiner's average

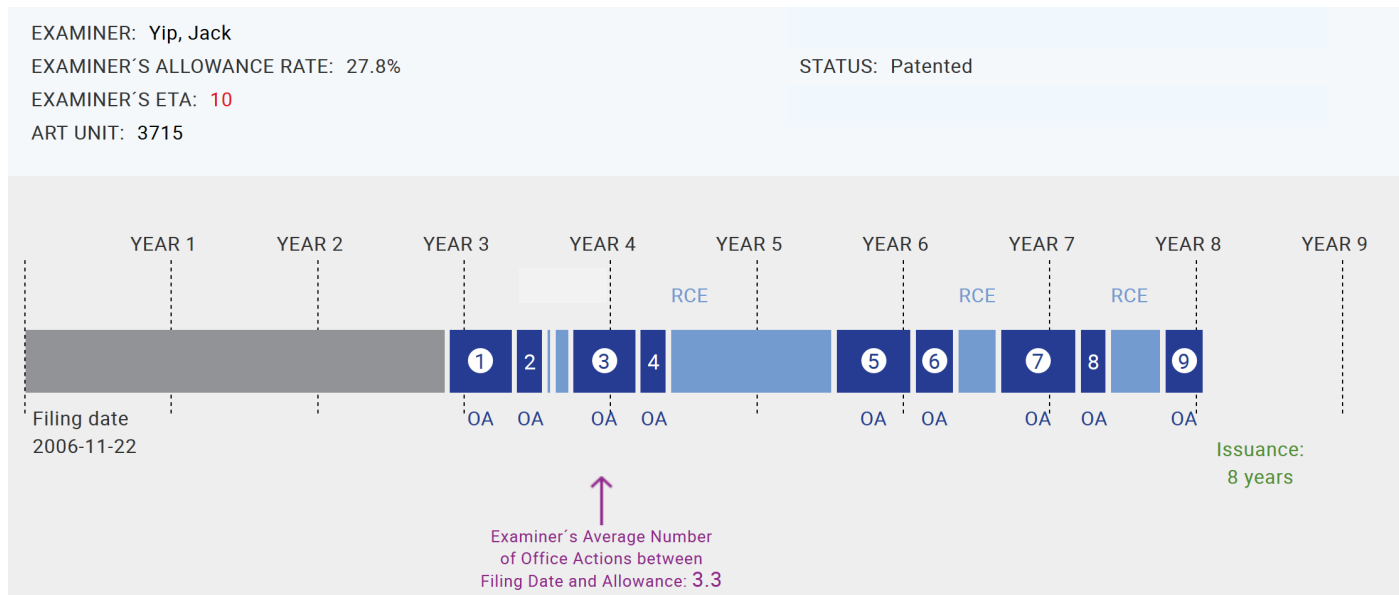
- Normalized for examiner difficulty
- No penalty for abandonments



Measuring Prosecution Performance

PatentAdvisor Efficiency Score™

1. Score every patented & abandoned case against “par” for the examiner
Par = 3.5 office actions + 1 RCE for a patented case
Score will be below 50 (average) because the case took much more than average.



Measuring Prosecution Performance

PatentAdvisor Efficiency Score™

2. Average the scores for every application in the dataset.

Red score = average of all scores for applications with red examiners

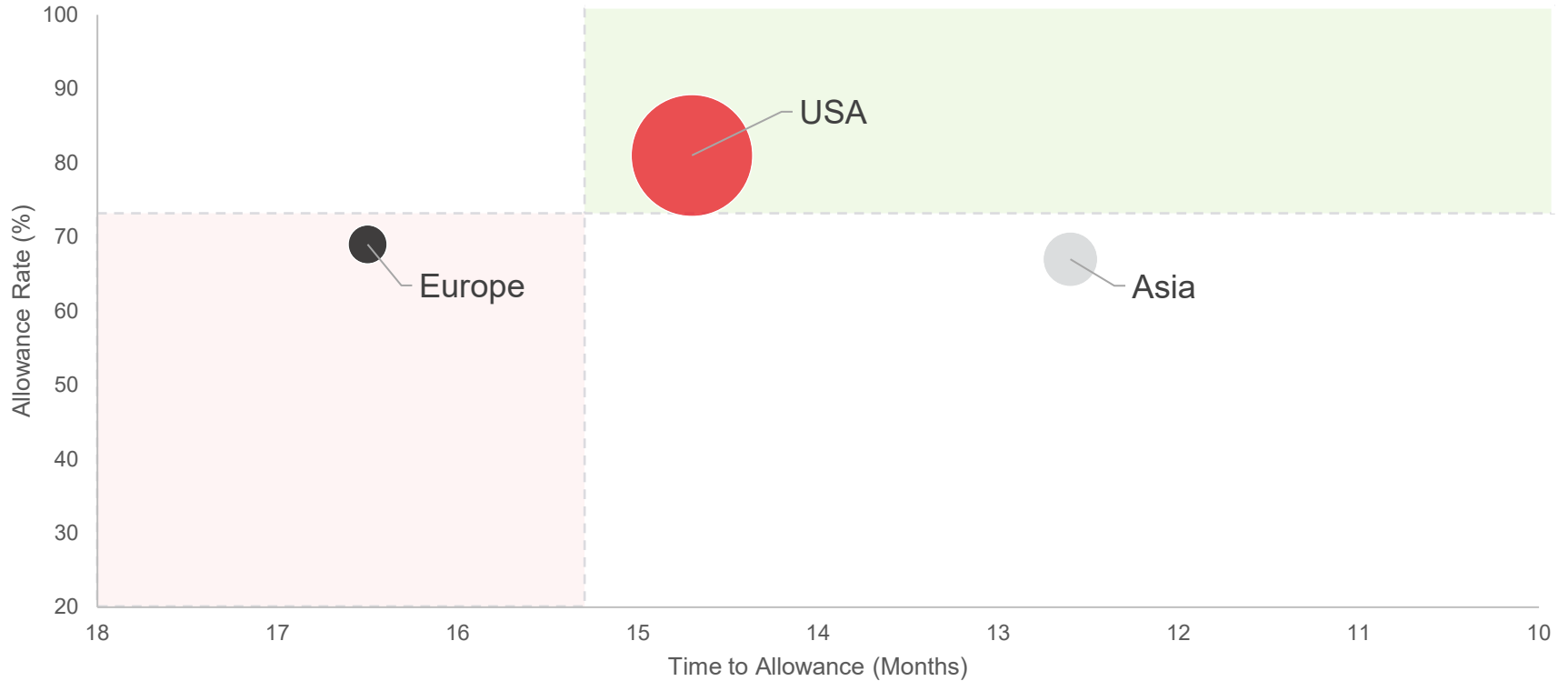
Yellow score = average of all scores for applications with yellow examiners

Green score = average of all scores for applications with green examiners

Overall score = weighted average of red, green, and yellow scores

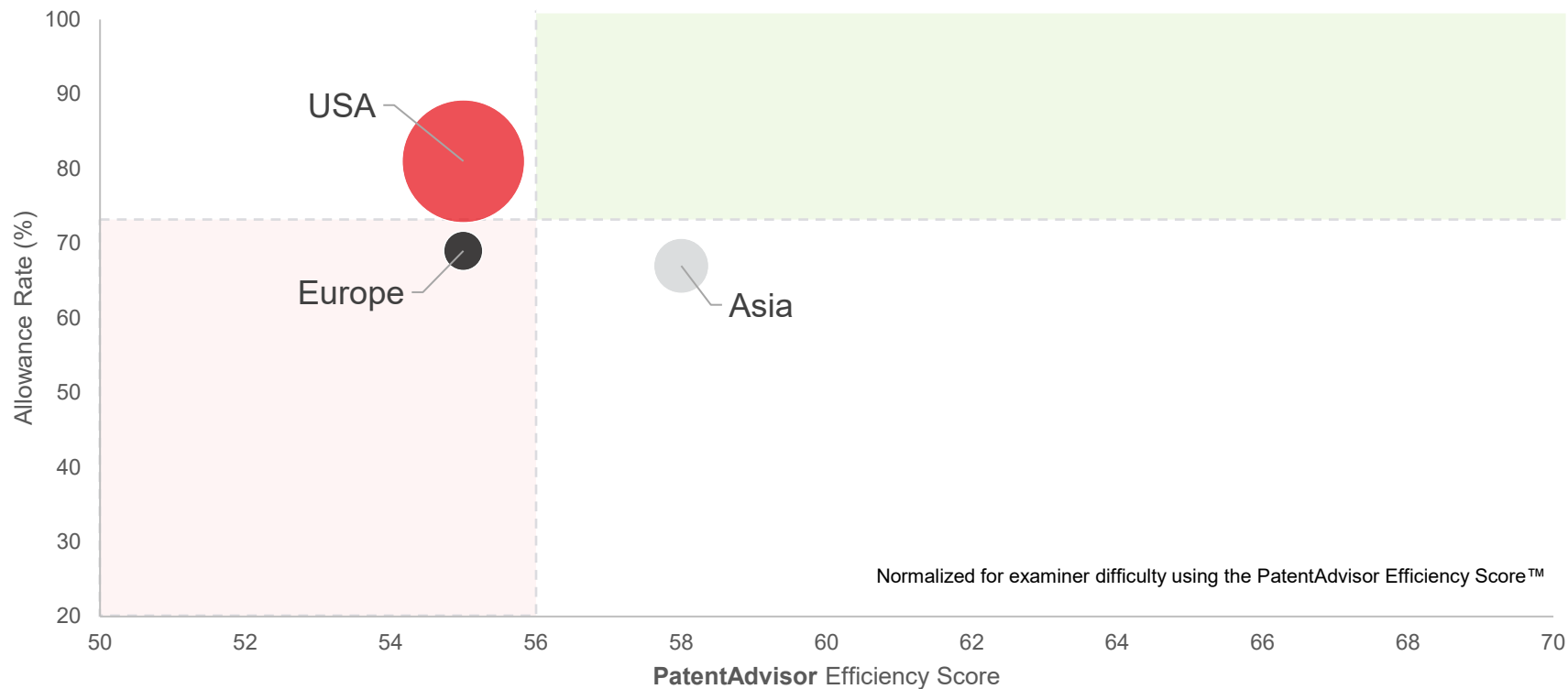
Measuring Prosecution Performance

USPTO Technology Center Group 2120: AI & Simulation/modeling




Measuring Prosecution Performance

USPTO Technology Center Group 2120: AI & Simulation/modeling



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GLOBAL DOSSIER ORDER CERTIFIED APPLICATION AS FILED ORDER CERTIFIED FILE WRAPPER VIEW ORDER LIST

14/123,456 ORNAMENTAL DISPLAY MN-101

Select Text Case Application Data Transaction History Image File Wrapper Certainty Data Foreign Priority Published Documents Address & Attorney / Agent Supplemental Content Assignments Foreign References

BIBLIOGRAPHIC DATA

Application #: [14/123,456](#) [Application Report](#)

Filing or 371(c) Date: 12-05-2013

Application Type: Utility

Examiner: [SAHLE, MAHIDERE S](#)

Allowance Rate	Average Office Actions To Allowance	ETA 0
79.7%	1.7	2.4

View This Examiner's [File Wrappers](#) [Interview Stats](#) [Agent Stats](#)

Art Unit: [2872](#)

Allowance Rate	Average Office Actions To Allowance
77.9%	1.4

Certification #: 5406

Attorney Docket #: MN-101

Class/Subclass: 350/019

First Named Inventor: [Nevan Ushenko, Kyoju, JP all Inventors](#)

First Named Applicant: -

Entity status: Undisclosed

Correspondence Address: [Customer Number: 74712](#)

State: [Abandoned - Failure to Respond to an Office Action](#)

State Date: 04-13-2015

Location: [ELECTRONIC](#)

Location Date: -

Earliest publication #: [US 2014-0098423 A1](#)



Earliest publication date: 04-10-2014

Patent #: -


Issue Date of Patent: -

Int. registration # (Pague): -


Int. registration publication date: -





Bring the Data into Your Workflow

15/494,368 DISC GRIPPER FOR STORAGE DISC ARC920150100US02 


Select New Case Application Data Transaction History Image File Wrapper Patent Term Adjustments Continuity Data Fees Published Documents Address & Attorney / Agent Assignments Display References






BIBLIOGRAPHIC DATA LexisNexis PatentAdvisor® PAIR Extension 


Application #: [15/494,368](#)   [Application Report](#)

Filing or 371(c) Date: 04-21-2017

Application Type: Utility

Examiner: [MILLER, BRIAN E](#) 

Allowance Rate 82.7%	Average Office Actions To Allowance 1.3	ETA  <i>(as compared to Art Unit 2688)</i> 1.7 
View This Examiner's File Wrappers  Interview Stats  Appeal Stats 		


Art Unit: [2688](#) 

Allowance Rate 85.4%	Average Office Actions To Allowance 1.3
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Correspondence Address Customer Number: 45504

Status: Patented Case

Status Date: 01-01-2019

Location:  ELECTRONIC

Location Date: -

Earliest publication #: US 2017-0232619 A1

Earliest publication date: 08-17-2017

Patent #: 10,186,295

Issue Date of Patent: 01-22-2019

Intl. registration # (Hague): -

Intl. registration publication date: -

“How USPTO Examiner Type Affects Patents”

IP Law360 4-part series of articles published in summer 2020

Part 1: Few Allow Many, Many Allow Few

Part 2: Doubling the Effort

Part 3: After Final Practice

Part 4: Impact on Patent Litigation

IP Watchdog summary article in January 2021




Green, Yellow, or Red: What Color Is Your Patent Examiner and Why Should You Care?

By Michael Sartori & Matt Welch
January 21, 2021

“Approximately 35% of patent Examiners allow 60% of all U.S. patents; and approximately 20% of Examiners allow only 5% of all U.S. patents. In other words, few Examiners are allowing many patents, and many Examiners are allowing few.”

This article summarizes and expands upon the content of a series of articles written for IP



How USPTO Examiner Type Affects Patents: Part 1



By Michael Sartori and Matt Welch (May 15, 2020, 5:32 PM EDT)

Patent procurement at the U.S. Patent and Trademark Office is affected by the type of examiner.

We gathered data from the LexisNexis PatentAdvisor database for each year from 2009 to 2019, for examiners in each of eight nondesign Tech Centers at the USPTO. Examiners are categorized into three different types, and the data shows that certain types of examiners allow disproportionately more and examine disproportionately more U.S. patents each year than other types of examiners, resulting in few allowing many, and many allowing few.

The LexisNexis PatentAdvisor patent prosecution analytics database provides a qualitative measurement for each examiner at the USPTO, known as the examiner time allocation. The ETA measurement is a proprietary calculation based on a number of factors for each examiner: allowance rate, all issued patents, all abandoned applications, all pending applications, and years of service with the USPTO.

By considering more than just allowance rate, the ETA measurement is able to take into consideration pending applications and does not penalize examiners for abandonments.



Expert Analysis

How USPTO Examiner Type Affects Patents: Part 2

By Michael Sartori and Matt Welch

Law360 (June 16, 2020, 12:13 PM EDT) – Patent procurement at the U.S. Patent and Trademark Office is affected by the type of examiner.



We gathered data from the LexisNexis PatentAdvisor database for each year from 2009 to 2019, for examiners in each of eight nondesign Tech Centers at the USPTO from the LexisNexis PatentAdvisor patent prosecution analytics database.

The data shows that the type of examiner can cause an applicant to double their efforts to obtain a patent. This doubled effort is evident in the allowance rate, the number of office actions needed per disposal (patent or abandonment), the time to disposal, applications with at least one final office action, and applications with at least one interview. Evidence of extra effort also appears for applications with at least two final office actions and with at least one restriction office action. Due to this distribution, knowing the type of examiner can help an applicant anticipate the likely costs to obtain a patent.

Part 1 of this series discussed the examiner types (so-called green, yellow and red examiners) and their effect on the number of patents issued each year.

Using the LexisNexis PatentAdvisor database, the number of green, yellow and red examiners for each of the eight nondesign Tech Centers at the USPTO was gathered for years 2009 to 2019. The following Figure 1 illustrates the allowance rate for green, yellow and red examiners, as well as all examiners combined.

As can be seen, the allowance rate for the green examiners is higher than the average allowance rate, while the allowance rate for the yellow and red examiners is considerably lower than the average allowance rate. In 2019, the allowance rate for the yellow examiners fell to its lowest below the average allowance rate. Over the time period, the allowance rate for the green and yellow examiners has steadily increased, while the allowance rate for the red examiners had a



How USPTO Examiner Type Affects Patents: Part 4

By Michael Sartori and Matt Welch (August 21, 2020)

Patent procurement at the U.S. Patent and Trademark Office is affected by the type of examiner.




We gathered data from the LexisNexis PatentAdvisor database for each year from 2009 to 2019, for examiners in each of eight nondesign Tech Centers at the USPTO from the LexisNexis PatentAdvisor patent prosecution analytics database.

The data shows that the type of examiner can impact patent litigation, both in the U.S. district courts and in post-grant proceedings (e.g., inter partes review proceedings) at the Patent Trial and Appeal Board, in terms of numbers and winning percentages.

This is the final article in a four-part series. The first part discussed the examiner types (so-called green, yellow and red examiners) and their effect on the number of patents issued each year. The second part explored the relationship between the examiner types and the effort required to obtain a patent, and the third part covered how examiner type affects after-final practice.

Figure 1 illustrates the number of patents litigated in at least one U.S. district court proceeding under the After Final Consideration Pilot Program 2.0, the filing of requests for continued examination, and the appeals to the Patent Trial and Appeal Board, in terms of numbers and winning percentages.

As can be seen, the numbers for each examiner type decrease from 2013 to 2019 as patent litigations in these years likely have not yet had a chance to be asserted. Further, patents examined by green examiners are litigated much more than patents examined by the other examiner types.



How USPTO Examiner Type Affects Patents: Part 3

By Michael Sartori and Matt Welch (July 15, 2020, 3:47 PM EDT)

Patent procurement at the U.S. Patent and Trademark Office is affected by the type of examiner.

We gathered data from the LexisNexis PatentAdvisor patent prosecution analytics database for each year from 2009 to 2019, for examiners in each of eight nondesign Tech Centers at the USPTO. The data shows that the type of examiner can greatly affect the options available to an applicant once a final office action has been sent by the examiner.



This result is evident in the response to after-final amendments, the submission of requests under the After Final Consideration Pilot Program 2.0, the filing of requests for continued examination, and the appeals to the Patent Trial and Appeal Board.

The first two articles in this series discussed the examiner types (so-called green, yellow and red examiners) and their effect on the number of patents issued each year and the comparative extra effort required to obtain a patent.

Often in after-final practice, an after-final amendment is filed, and this first metric considers how each examiner type responds. Figure 1 illustrates the allowance rate in response to an after final amendment for each examiner type, as well as all examiners combined, for applications (patented or abandoned) in the time period from 2009 to 2019.

Although the percentages for an allowance after an after-final amendment are relatively small, the percentages for an allowance for a green examiner are greater than average and greater than those for the yellow and red examiners.

From 2009 to 2019, the allowance rates for green examiners varied between 3.1% and 4.9%, for yellow examiners, which was close to the average, varied between 1.7% to 3.1%, and for red examiners varied between 0.6% to 2.9%. Over this time period, while the trend for the allowance rate for each examiner type generally decreased, the average allowance rate for all examiners was 2.7%, and the allowance rate for green, yellow and red examiners was 3.8%, 2.4%, and 1.3%, respectively.



“A Practical Metric for Annual Patent Filing Targets”

IP Law360 3-part series of articles published in summer 2021

Part 1: [U.S. Non-Provisional Applications](#)

Part 2: [U.S. Provisional Applications](#)

Part 3: [Foreign Applications](#)

A Practical Metric For Annual Patent Filing Targets:
Part 3

A Practical Metric For Annual Patent Filing Targets: Part 2

By Michael Sartori and Matthew Welch (June 21, 2021)

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A Practical Metric For Annual Patent Filing Targets: Part 1

By Michael Sartori and Matthew Welch (May 20, 2021, 6:52 PM EDT)

How many patent applications should we file this year? This question is contemplated annually by many intellectual property departments. The answer affects which of the company's goods or services will have patent protection, which future product lines will be patent-covered, how large of a patent moat can be built, and, perhaps most importantly, the valuation of the company.

The number of patent applications filed also affects the patent budget of intellectual property departments, which must balance the competing needs of filing new patent applications, proceeding with prosecution at the U.S. Patent and Trademark Office and worldwide, and maintaining issued patents. A practical metric for determining annual patent filings is provided to help answer this difficult question.

An informal survey of in-house patent counsel at seven U.S. companies across several industries was conducted by the authors in March 2020 to ascertain how companies determine patent application filing targets each year. Their wide and varied responses included:

- No specific annual filing target, but each patent attorney tries to file the same number of patent applications as last year;
- Annual patent filing target adjusted based on legal patentability standards, litigation risks/trends, and/or impact of large maintenance fees;
- Patent filings based on the number of invention disclosures received;
- Patent applications tied to results flowing from research and development projects;
- Number of patent filings based on inventive ideas harvested from engineering department and/or research and development department;
- Arbitrary filing target determined by company management; and

Michael Sartori
Matthew Welch

Thank you!



Would you like more information about today's presentation?

LexisNexisIP.com/PatentAdvisor

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