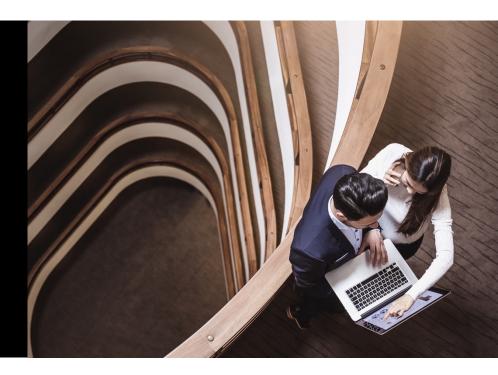


### Trends in Patent Prosecution

Don't Get Left Behind

November 30, 2021



### **Today's Presenters**



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IP Counsel and Litigator

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LexisNexis intellectual Property Solutions



🌔 LexisNexis

### Today's Discussion

- Trends in 101 and 112 rejections in the life sciences and high-tech sectors
- Real life examples of claim amendments that led to allowance
- Claim and drafting strategies for streamlining prosecution





### Background: Measuring examiner behavior

PatentAdvisor ETA<sup>™</sup> (Examiner time allocation) = Total office actions: total allowances issued + X factors



ETA is more accurate and a better predictor of examiner's behavior than Examiner Allowance Rate because it:



Includes all pending applications Factors in how long the examiner has been at the Patent Office



Is driven by the examiner's behaviors, not by the filer's actions





### 112 Rejections Over Time in 1600: Biology and Organic Chemistry



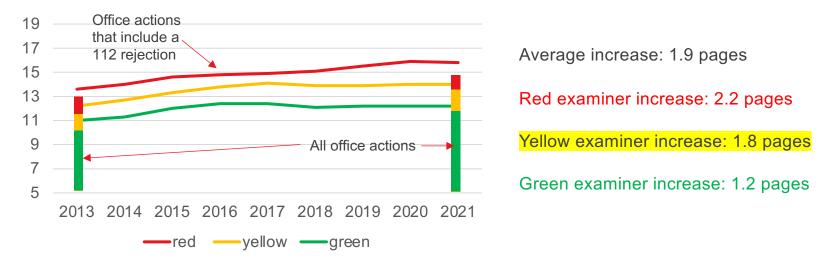
112 Rejections as a percentage of total rejections





112 Rejection Complexity in 1600: Biology and Organic Chemistry

Number of pages per OA

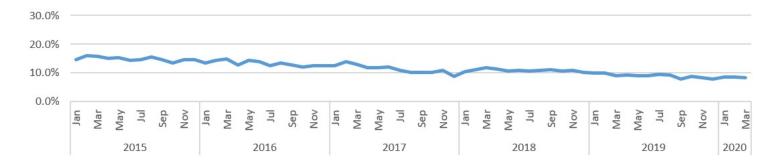


\* Year indicates the year in which the application was disposed (allowed or abandoned). Office Actions for any applications filed in the past 18 months are not accounted for.





### 101 Rejections Over Time in 1600: Biology and Organic Chemistry

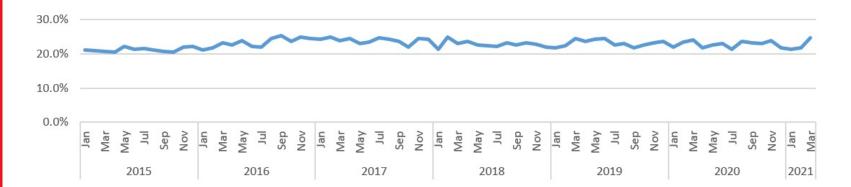


101 Rejections as a percentage of total rejections





### 112 Rejections Over Time in 2100: Computer Architecture and Software

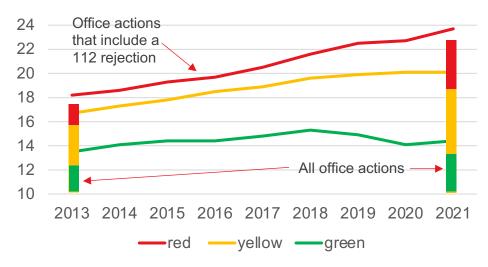


112 Rejections as a percentage of total rejections





112 Rejection Complexity in 2100: Computer Architecture and Software



Number of pages per OA

Average increase: 4.2 pages

Red examiner increase: 5.5 pages

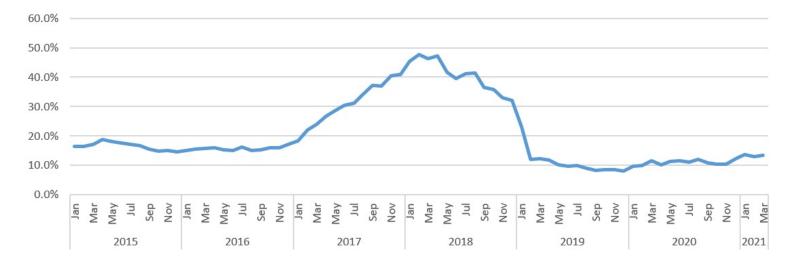
Yellow examiner increase: 3.4 pages

Green examiner increase: 0.9 pages





### 101 Rejections over time in 2100: Computer Architecture and Software



101 Rejections as a percentage of total rejections









### Would you like more information about today's presentation?

### www.LexisNexisIP.com/PatentAdvisor

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Mayo v. Prometheus	Vanda v. Westward	INO v. Praxair	Ariosa v. Illumina
(method of optimizing	(method of treatment)	(method of treatment)	(method of preparation)
therapeutic efficacy)	eligible	ineligible	eligible
ineligible			
1. A method of optimizing	9. A method of treating a	1. A method of treating	1. A method for preparing a
therapeutic efficacy for	patient who is suffering from a	patients who are candidates for	deoxyribonucleic acid (DNA)
treatment of an immune-	schizoaffective disorder,	inhaled nitric oxide treatment,	fraction from a pregnant
mediated gastrointestinal	depression, Tourette's	which method reduces the risk	human female useful for
disorder, comprising:	syndrome, a psychotic	that inhalation of nitric oxide	analyzing a genetic locus
(a) administering a drug	disorder or a delusional	gas will induce an increase in	involved in a fetal
providing 6-thioguanine to a	disorder, the method	pulmonary capillary wedge	chromosomal aberration,
subject having said immune-	comprising:	pressure (PCWP) leading to	comprising:
mediated gastrointestinal	determining if the patient is a	pulmonary edema in	(a) extracting DNA from a
disorder; and	CYP2D6 poor metabolizer by	neonatal patients with	substantially cell-free sample
(b) determining the level of 6-	obtaining or having obtained a	hypoxic respiratory failure,	of blood plasma or blood
thioguanine in said subject	biological sample from the	the method comprising:	serum of a pregnant human
having said immune-mediated	patient, and performing or	(a) identifying a plurality of	female to obtain extracellular
gastrointestinal disorder,	having performed a	term or near-term neonatal	circulatory fetal and maternal
wherein the level of 6-	genotyping assay on the	patients who have hypoxic	DNA fragments;
thioguanine less than about	biological sample to determine	respiratory failure and are	(b) producing a fraction of the
230 pmol per 8×108 red	whether the patient has a	candidates for 20 ppm inhaled	DNA extracted in (a) by:
blood cells indicates a need	CYP2D6 poor metabolizer	nitric oxide treatment;	(i) size discrimination of
to increase the amount of	genotype, and	(b) determining that a first	extracellular circulatory DNA
said drug subsequently	if the patient is a CYP2D6	patient of the plurality does	fragments, and
administered to said subject	poor metabolizer, then	not have left ventricular	(ii) selectively removing the
and	internally administering	dysfunction;	DNA fragments greater than
wherein the level of 6-	iloperidone to the patient in	(c) determining that a second	approximately 500 base
thioguanine greater than	an amount of up to 12	patient of the plurality has left	pairs,
about 400 pmol per 8×108	mg/day, and	ventricular dysfunction, so is	wherein the DNA fraction after
red blood cells indicates a	if the patient is not a CYP2D6	at particular risk of increased	(b) comprises a plurality of
need to decrease the amount	poor metabolizer, then	PCWP leading to pulmonary	genetic loci of the extracellular
of said drug subsequently	internally administering	edema upon treatment with	circulatory fetal and maternal
administered to said subject.	iloperidone to the patient in	inhaled nitric oxide;	DNA; and
	an amount of greater than 12	(d) administering 20 ppm	(c) analyzing a genetic locus
	mg/day, up to 24 mg/day.	inhaled nitric oxide treatment	in the fraction of DNA
		to the first patient; and	produced in (b).
		(e) excluding the second	
		patient from treatment with	
		inhaled nitric oxide, based on	
		the determination that the	
		second patient has left	
		ventricular dysfunction, so is	
		at particular risk of increased	
		PCWP leading to pulmonary	
		edema upon treatment with	
		inhaled nitric oxide.	



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### Trends in Patent Prosecution

## Trends in Patent Prosecution and Claim Language

Roberta Young November 30, 2021

#### Seyfarth Shaw LLP

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### 35 U.S.C. 101 & 35 U.S.C. 112

Increase in 35 U.S.C. 101 rejections of greater complexity
Example application – Continuation Application
Amendments made to receive allowance
Increase in 35 U.S.C. 112 rejections (a), (b)
Claims as filed receiving 35 U.S.C. 112 rejection
Amendments made to receive allowance

## Increase in 35 U.S.C. 101 rejections of greater complexity

- USPTO flowchart has increased complexity.
- Examiner must establish the broadest reasonable interpretation of the claims as a whole.
- Examiner must determine if claim is directed to a statutory category.
- Review carefully to determine that all steps of analysis have been performed and completely discussed by the examiner.
- Look for conclusory statements, incomplete analysis
- 101 rejections are increasing in length, this 101 rejection was over 8 pages.

### **Example Application – Continuation Application**

- Continuation application filed September 2017.
- Parent application filed January 2013.
- Specification does not reflect current application drafting practice. specification provides a fairly generic discussion of an electronic record system.
- Independent claims were directed to an electronic record information system comprising: a secure memory and a processor. The processor is programmed to access multiple web services for secure data records.
- The secure records relate to individuals represented in the data accessed from the web services.
- Based on the records, a target individual is grouped into population cohorts.
- A clinical condition is attributed to the target individual based on the secure data records.

#### Amendments made to receive allowance

- Clarify and simplify claim language.
- Emphasize how the processor matches records of individuals across the multiple web services.
- Focus on the technical details of the improvements to the processor and the user interface.
- A fairly extensive amendment was made in response to the final office action, focusing on details of the user interface.
- The amendment led to an examiner requested interview that resulted in allowance with a far less extensive amendment than previously presented.

### Increase in 35 U.S.C. 112 (a) & (b)

- 112 rejections more common and more complex.
- Both (a) & (b) rejections issued in most applications.
- For 112 (a) examiners allege that the specification is non-enabling for specific technical features.
- The features are alleged to be missing and required.

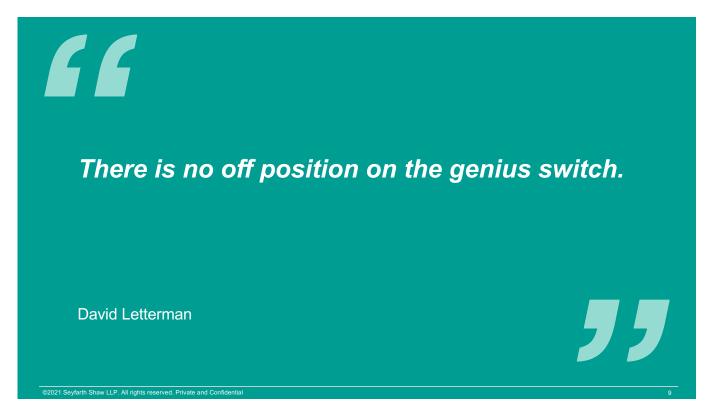
- For 112 (b) the examiner then uses the same argument to allege that the application does not point out and distinctly claim the invention.
- When this allegation is made, the examiner has alleged that an element is missing from the specification and claims.
- Examiners have also alleged that claims are indistinct for recitations that do not specifically enumerate functionality with respect to other elements.

### **Example Application Claim**

- Independent claims directed to a method of setting an operating voltage of a shared power rail.
- The method includes identifying voltage specifications for each core in a multicore device, receiving reports of core operating states from each core in the device, determining an operating voltage for the shared power rail, and programming the voltage regulator.

#### Amendments made to receive allowance

- Clarifying amendments were made that detailed where a voltage specification was received and from what element.
- Further clarifying amendments were made to indicate how the selection of the operating voltage was made.
- The amendments also included how the selected operating voltage was programmed into the voltage regulator.



# thank you

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