



§ 101 at the P.T.O.

56th Annual Conference on IP Law

The Center for American and International Law

Robert G. Sterne and Joseph E. Mutschelknaus

November 13, 2018

Technical Minds. Legal Muscle.

Problems and Solutions

- How is the PTO approaching § 101?
- How to advise potential applicants on whether they can get a patent for their invention
- How to draft patent applications with eligibility challenges to improve chances of receiving a patent
- How to prosecute a patent application rejected at the Patent Office under § 101



How is the PTO approaching § 101?

How did we get here? Mayo Collaborative Services v. Prometheus Laboratories, Inc. (2012)

- Set forth a two-step analysis for assessing patent eligibility under 35 U.S.C. § 101
 - Step 1: Is the claim “directed to” an abstract idea, natural phenomena, and laws of nature
 - Step 2: Is what is left more than “well-understood, routine, conventional activity”?
- Could have foreclosed patenting in areas of diagnostic and precision medicine
 - See also Association for Molecular Pathology v. Myriad Genetics, Inc., 569 U.S. 576 (2013)

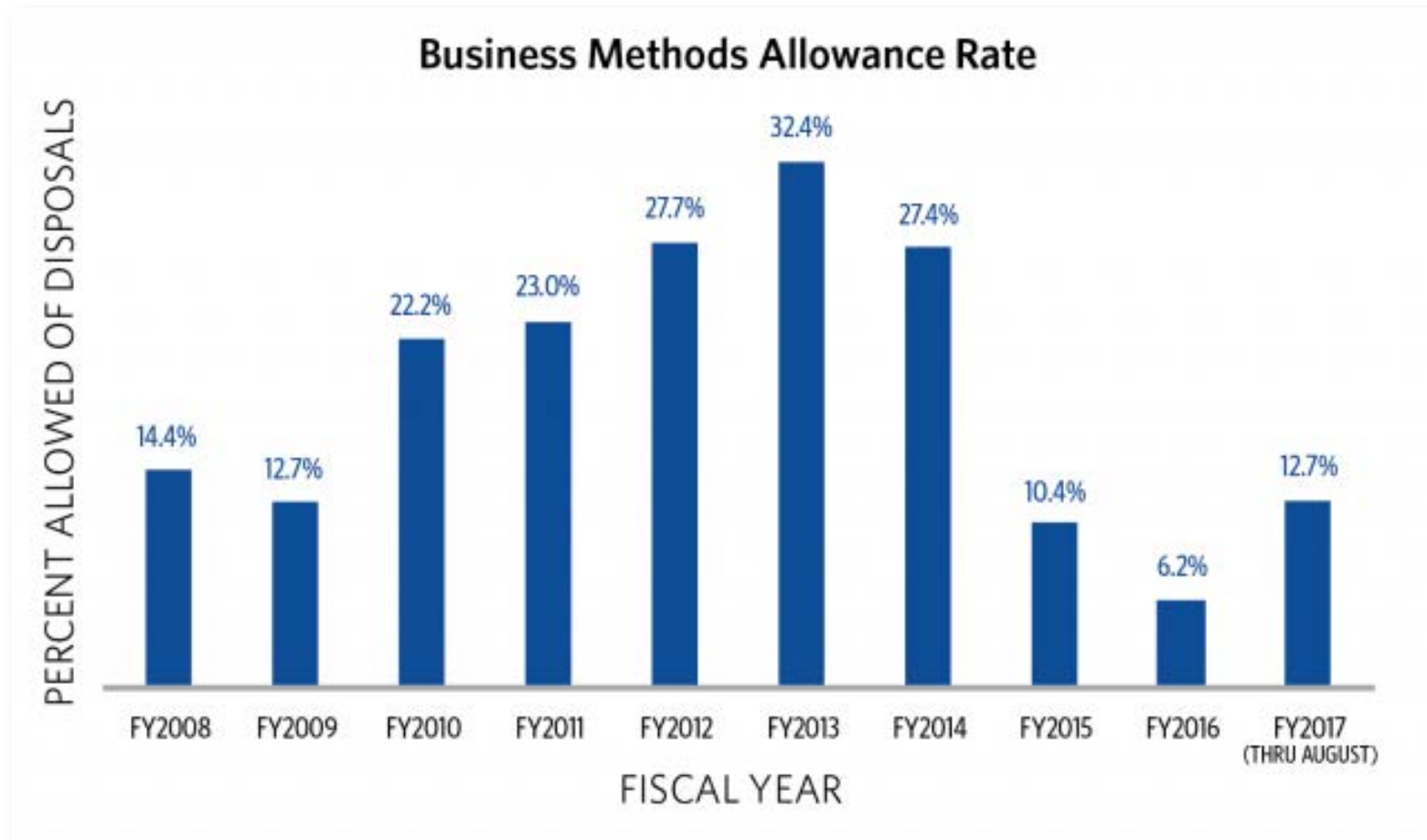
How did we get here? *Alice Corp. v. CLS Bank* (2014)

- Confirmed the reach of the *Mayo* two-step analysis into the world of software patents
- A mere instruction to implement an abstract idea on a computer “cannot impart patent eligibility.”
- “Stating an abstract idea while adding the words ‘apply it’ is not enough for patent eligibility.”
- “Nor is limiting the use of an abstract idea to a particular technological environment.”

Alice and Mayo leave more questions than answers

- What is an “abstract idea”?
- When is a claim “directed to” an abstract idea?
 - If you strip out all concrete elements, any claim starts to look abstract
- What is the standard for determining whether something is “well-understood, routine, conventional activity”?
- Extend the *Alice/Mayo* logic too far and nothing would be eligible

After *Mayo* and *Alice*, allowance rates in some art units plummeted



Source: [USPTO](#)

Chart provides allowance rates for business method patents – a subset of TC 3600.

Some major Federal Circuit cases trying to define the outer limits of *Alice/Mayo*

Step One Software Cases

- *DDR Holdings, LLC v. Hotels.com*, L.P., 773 F.3d 1245 (Fed. Cir. 2014) (Store-within-a-store eligible because technological problem “particular to the internet” by implementing a solution specific to that technological environment)
- *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016) (for software inventions ask “whether the focus of the claims is on the specific asserted improvement in computer capabilities ... or, instead, on a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool”)
- *Thales Visionix Inc. v. United States*, 850 F.3d 1343 (Fed. Cir. 2017) (The proposed abstract idea must “articulate what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful.”)
- *Data Engine Techs., LLC v. Google, Inc.*, Case No. 17-1135, slip op. at 20 (C.A.F.C. Oct. 9, 2018) (“It is not enough... to merely trace the invention to some real-world analogy” when there is a functional improvement)

Step Two Software Cases

- *BASCOM Global Internet Services v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016) (when combined, an inventive concept may be found in the non-conventional and non-generic arrangement of the additional elements)
- *Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir. 2018) (a particular technology is well-understood, routine, and conventional goes beyond what was simply known in the prior art).

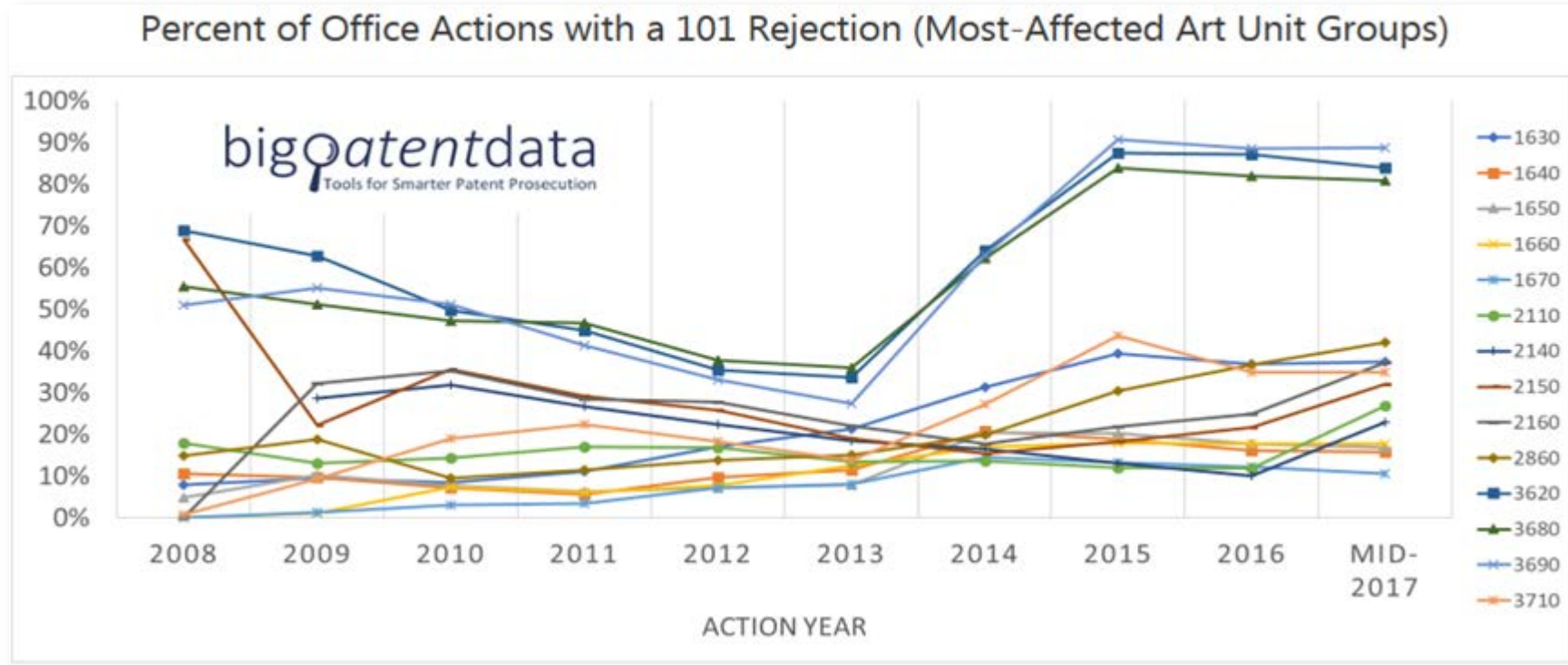
Precision Medicine

- *Vanda Pharmaceuticals Inc. v. West-Ward Pharmaceuticals Int'l Ltd.*, 887 F.3d 1117 (Fed. Cir. 2018) (Distinguishing Mayo and Myriad when the claim recited “a new way of using an existing drug”)

Widely believed that § 101 is being applied inconsistently by the USPTO and the courts

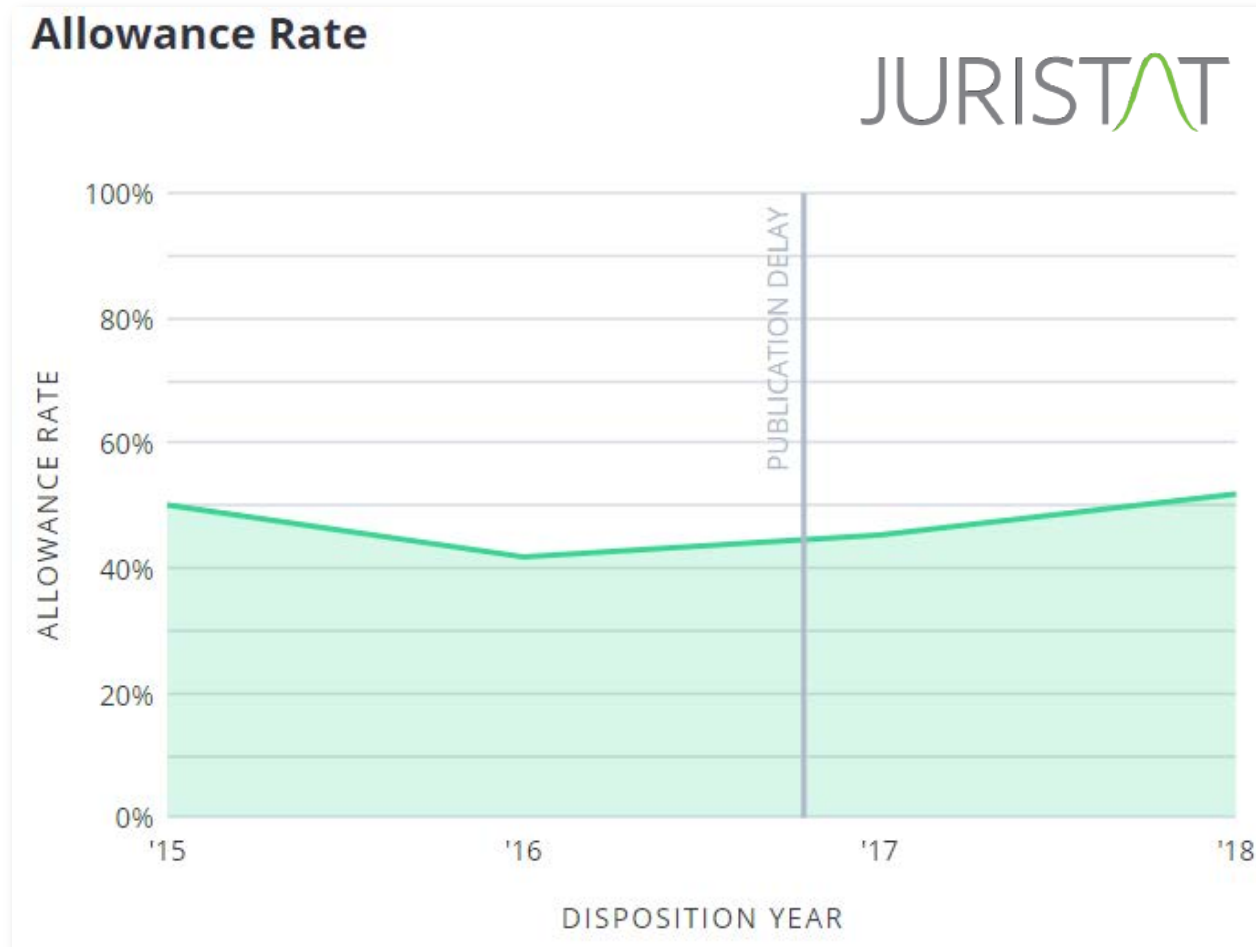
- The *Alice-Mayo* standard leaves room for subjectivity
 - How much can be abstracted out of the claim in the step 1 analysis?
 - When is something “routine, conventional, well-known”?
- Usually, no prior case is directly on point, claims can be analogized to various cases with different results
- Frustration from applicants and patentees
 - Particularly foreign applicant that have already met eligibility requirements in non-U.S. jurisdictions

Belief of inconsistency appears to be supported by data



- A recent [study](#) from BigPatentData, which analyzed § 101 rejections and found that, while *Alice* seemed to have little effect on some groups of examiners, other groups “went absolutely bananas after *Alice*.”

Tides are shifting



Allowance rate for patent applications receiving *Alice* rejections.

PTO's effort to increase consistency under leadership of Director Iancu

- Case law updates for new CAFC decisions on eligibility – *Finjan* (January 2018) and *Core Wireless* (January 2018)
- *Berkheimer* memo – *Alice* step 2 (April 2018)
- *Vanda* memo – precision medicine (June 2018)
- Public statements of another forthcoming memorandum – *Alice* step 1

Berkheimer Memo: Changes to Examination Procedure for *Alice* step 2

- **Problem:** How do you prove that something is **not** well-known? You can't. It'd be proving a negative.
- **Solution:** Require the examiners to provide **evidence** to support an allegation that an element or combination was well-known. To support an allegation that something is well-known:
 - An applicant admission
 - A court decision holding an element to be well-known
 - A book, manual, review article, or other source that describes the state of the art and discusses what is well-known and in common use in the relevant industry. A single patent publication is insufficient. A printed publication is only sufficient if the nature of the publication “demonstrate[s] that the additional elements are widely prevalent or in common use in the relevant field.”
 - Official notice under the procedures set out in MPEP 2144.03.

***Berkheimer* Memo: Perhaps having an effect** **Allowance Rate of *Alice*-Rejected Applications**

- Using Juristat, filtered to applications with disposition dates in from January-March and May-July to compare outcomes. (*Berkheimer* guidance issued in April.)
- Filtered down to applications with *Alice* rejections based on Juristat's rejection text search.
- It looks like this could be an acceleration of a long term trend. Juristat puts the 2016 allowance rate for *Alice*-rejected applications at **42%**, and the 2017 rate at **45%**.

51%

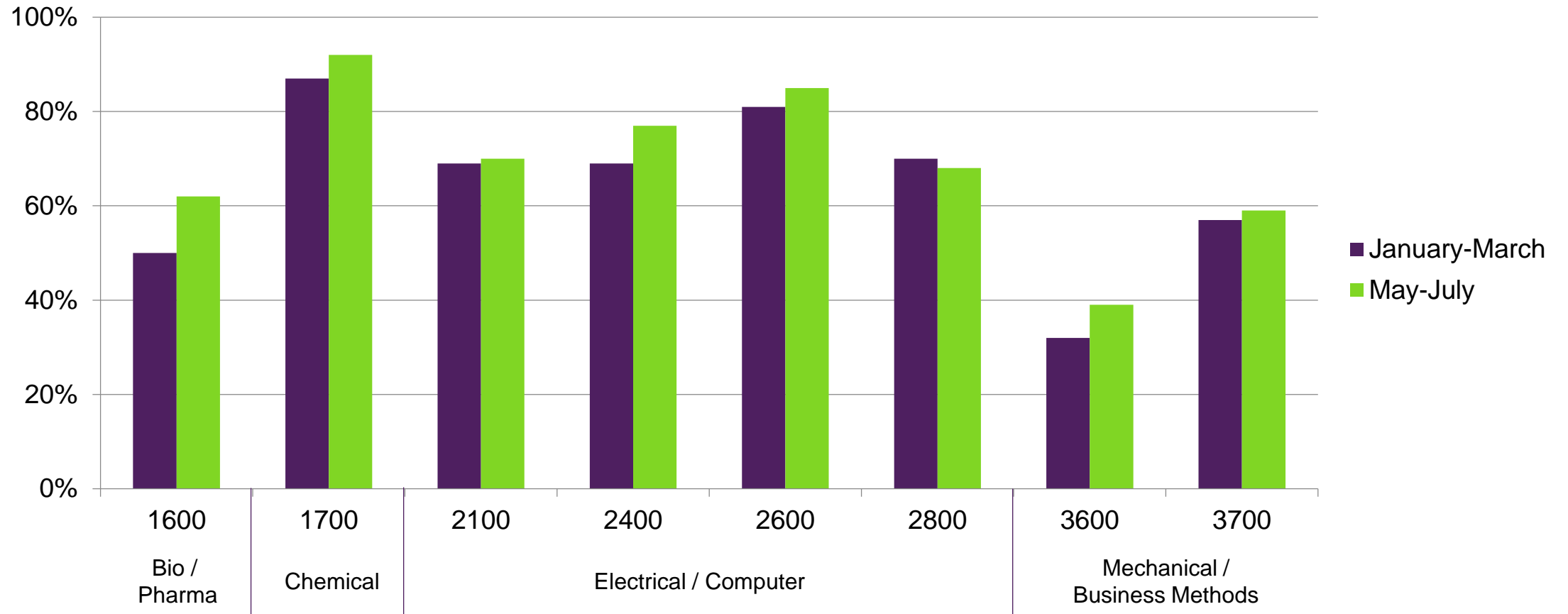
January-March allowance rate
for *Alice*-rejected applications

58%

May-July allowance rate
for *Alice*-rejected applications

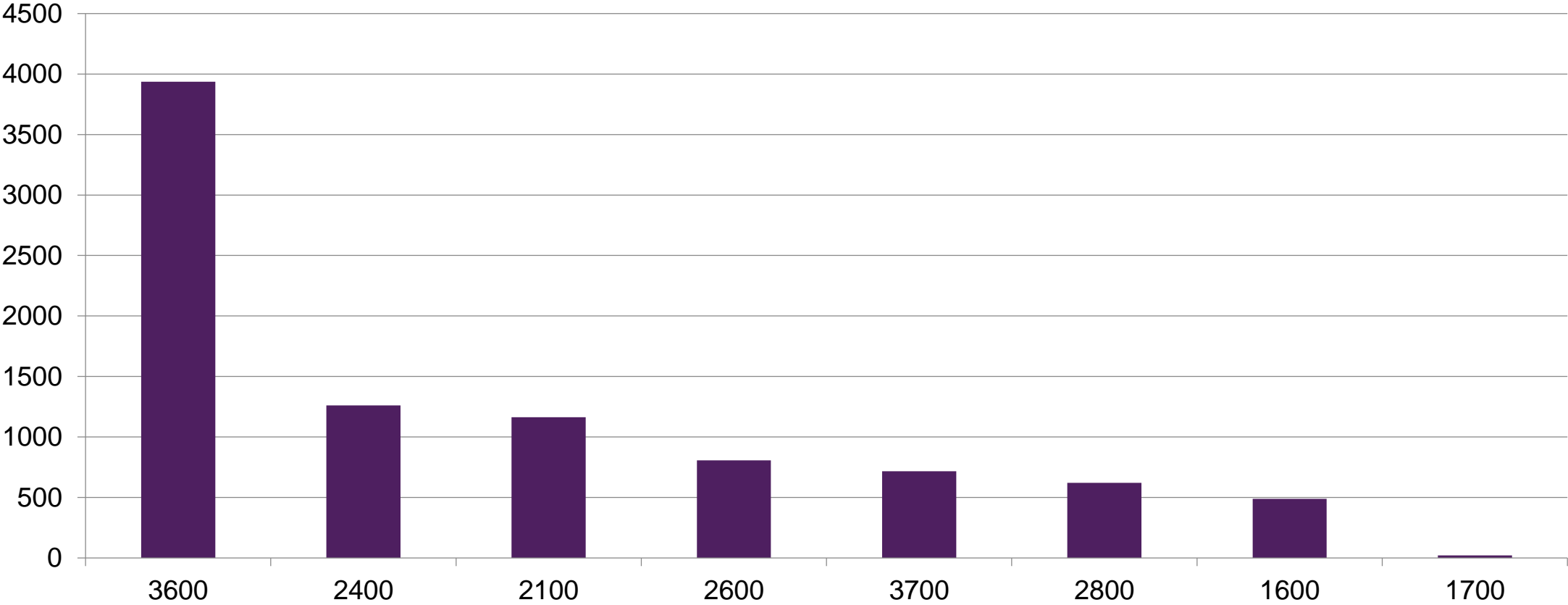
Effect Seen Across the PTO

Allowance Rate by Tech Center



Alice-Rejected Applications Disposed January-March, May-July 2018

Applications by Tech Center



The *Vanda* Memo: Precision medicine

- “Method of treatment” claims that practically apply natural relationships should be considered patent eligible
- It is not necessary for "method of treatment" claims that practically apply natural relationships to include nonroutine or unconventional steps to be considered patent eligible under 35 U.S.C. § 101

A new memo on *Alice*/Mayo step 1

- At IPO Annual Meeting in Sept. 2018, Director Iancu stated that another memo addressing *Alice* step 1 was forthcoming.
- The proposed PTO guidance would:
 - synthesize “abstract ideas” as falling into the following three categories:
 - Mathematical concepts like mathematical relationships, formulas, and calculations
 - Certain methods of organizing human interactions, such as fundamental economic practices commercial and legal interactions; managing relationships or interactions between people; and advertising, marketing, and sales activities
 - Mental processes, which are concepts performed in the human mind, such as forming an observation, evaluation, judgment, or opinion.
 - explain that Supreme Court jurisprudence taken together effectively allows claims that include otherwise excluded matter as long as that matter is integrated into a practical application. The line, in other words, delineates mere principles, on one hand, from practical applications of such principles, on the other.



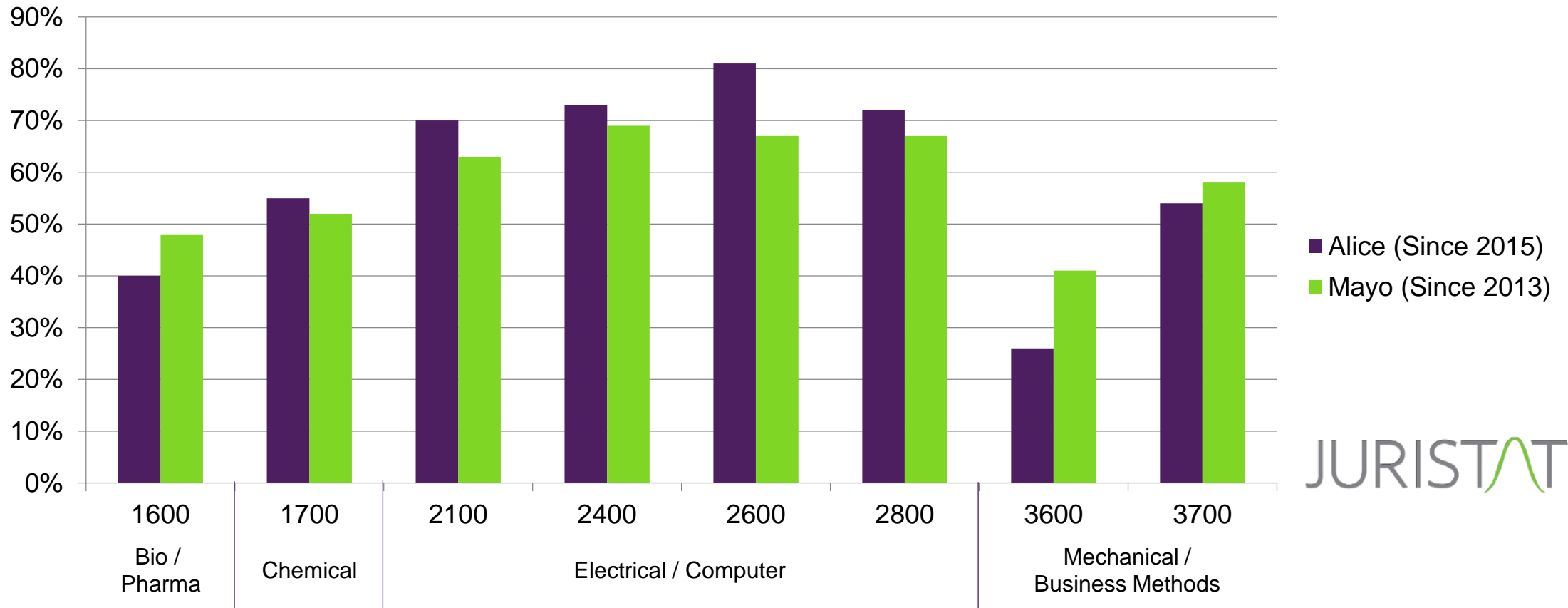
How to advise potential applicants?

How to advise potential applicants?

- What is the improvement that the inventors believes she has made?
 - Is the improvement “technological”? If yes, likely eligible
- Is there something else that the inventors did in making the invention that is “technological”?
 - Is does the inventor believe that the technological piece is well-known, routine, or conventional? If no, possibly eligible, if claims are appropriately scoped.

Some technology areas may be better than others

Allowance Rate by Tech Center

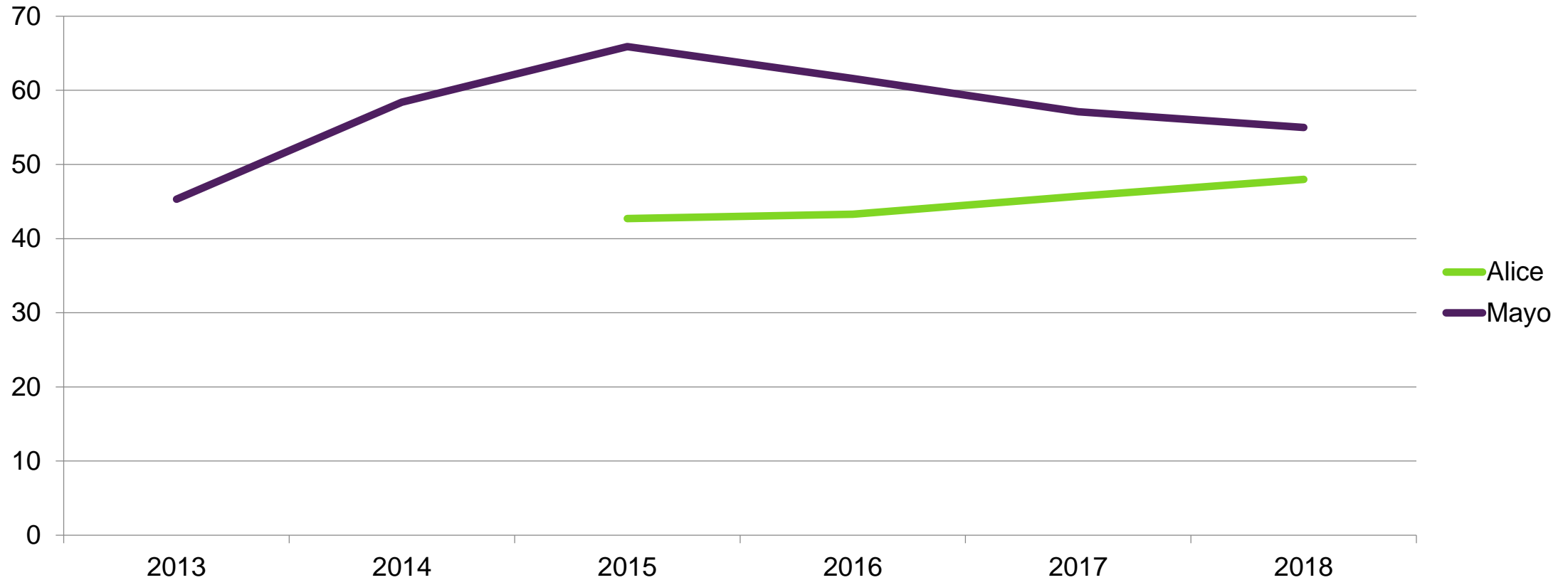


JURISTAT

Advise clients with borderline inventions of the challenge ahead

Months to Disposition

JURISTAT





How to draft patent applications for § 101?

Emphasize advantages that are technological

- Starts with the disclosure meeting
- Put story in your specification emphasizing the technological features and advantages
- Make sure technological features are in the claims

To the extent possible, draft for a friendlier art unit

- Once an art unit and examiner are assigned, it is very difficult to get them changed
- To the extent that the invention sounds like a business method, try to de-emphasize that aspect (while maintaining adequate support in the specification)

Consider prosecuting PCT first before U.S.

- Europe is now more liberal than the U.S. in terms of eligibility
 - Technical problem-result – Novel and useful software function that is technical is sufficient
 - Sounds similar to U.S. *Alice* test, but in practice applied more liberally
- Process:
 - File PCT designating EPO as the ISA
 - Prosecute the PCT application, i.e., by responding to written opinions and amending if necessary
 - After indication of allowability, file national phase application in U.S. and elsewhere (perhaps under the PPH), notifying the examiner the PCT allowance



How to prosecute patent applications for § 101?

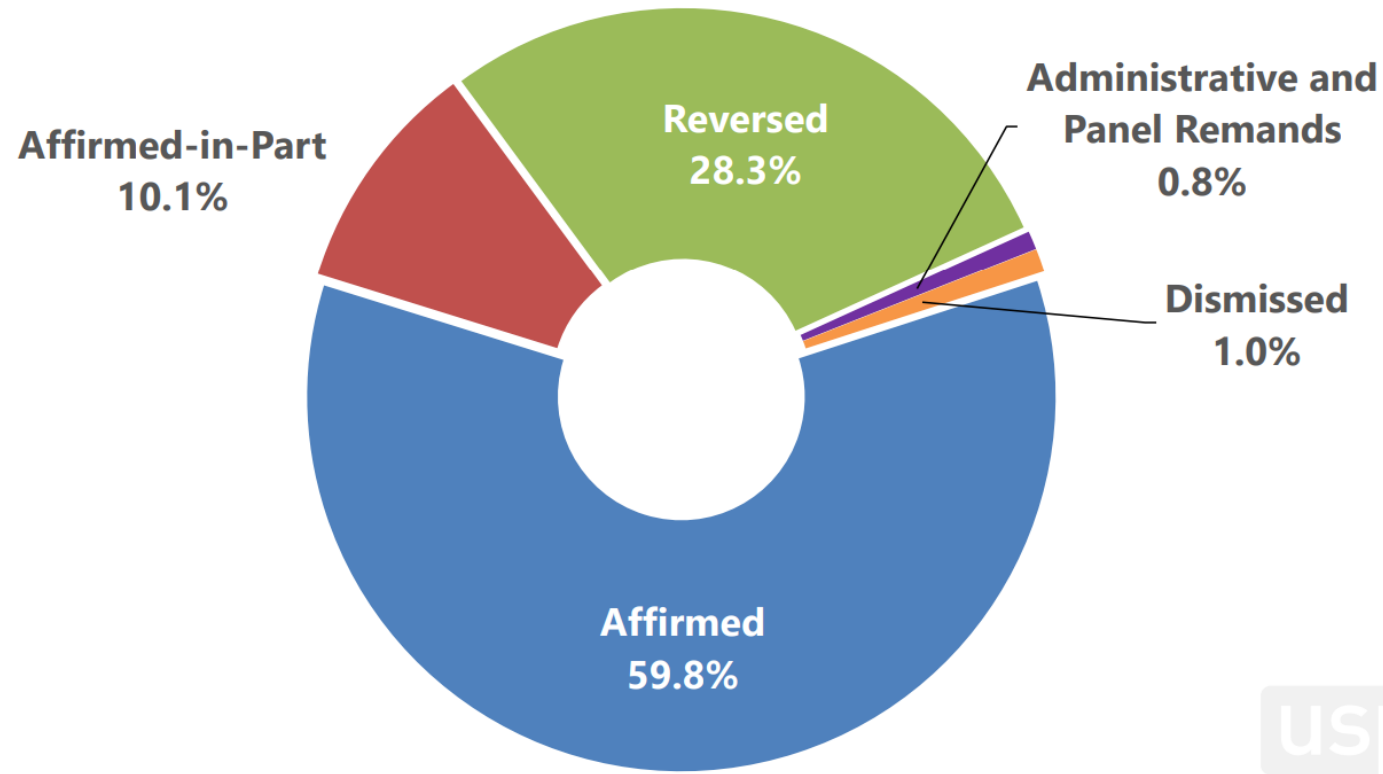
Prosecution Tips

- INTERVIEW – ask who needs to approve an allowance and ask that all of the reviewers be at the interview
 - Examiners will often say that they need approval from someone else before allowing
- Cite to guidelines
 - Examiners are more comfortable relying on the guidelines than interpreting case law
- Make the examiners provide **evidence** of their contentions
- When spec is weak, consider § 132 declaration

Appeal can break impasse with an examiner

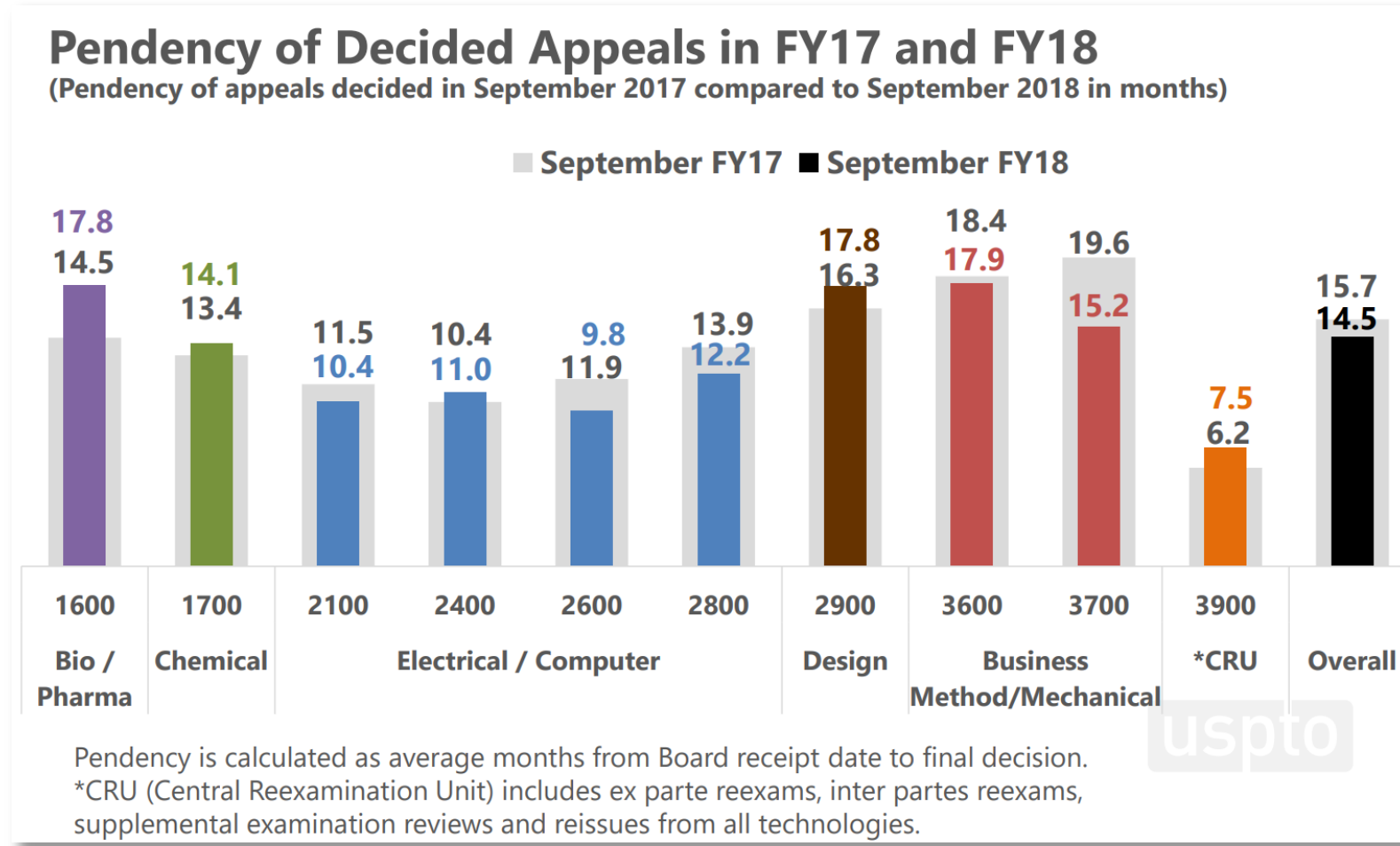
Appeal Outcomes in FY18

(FY18: 10/1/17 to 9/30/18)



This chart is not exclusive to § 101. It shows the overall affirmance rates for *ex parte* patent application appeals.

PTAB has been working on pendency and backlog



Note the colored number is from FY2018, and the gray number is from FY2017.





Questions?

Contact



Robert Greene Sterne
(202) 772-8555
rsterne@sternekessler.com



Joseph E. Mutschelknaus
(202) 772-8874
jmutsche@sternekessler.com