Idea #1: Compare length of Response to Office Action substantive arguments (minus form paragraphs and reiterated claims) to total number of non-final and final actions before abandonment or allowance.

Why test

Although applicants are required to fully respond by providing explanations as to why the claims avoid rejection or objection under the prior art (per 37 CFR 1.111(b),(c)), some applicants do not comply. Instead, those non-complying applicants usually provide some conclusory argument that "The claims recite X. The reference does not teach X" but do not provide any exploration of the prior arte. This failure of applicants to fulfil the requirements of responding under 1.111 not only conceals portions of the prosecution history, it arguably lengthens prosecution by not permitting examiners to directly address applicants' concerns.

We should determine whether encouraging examiners to send notices of non-compliance, agency rule that has existed for years, can lead to gains in both quality and traditional pendency.

How to test

For each Response to Office Action:

(1) Search the remarks, filed most recently before allowance or abandonment, for sections headers that contain the words: "102", "anticipation", "103", or "obviousness."

(2) Extract the sections.

(3) Remove paragraphs where more than one legal citation occurs (these are usually just boilerplate legal form paragraphs, which is also not substantive)

If an amendment to the independent claim was made:

(4) Perform a sequence alignment algorithm

(5) Take a ratio of the *gap* score to the length of the sections (i.e determine how much of the Remarks is not the attorney's repeat of the claim language)

If no amendment to the independent claim was made:

(4) Perform a sequence alignment for each element/step.

(5) For every element/step that has an alignment score above a certain threshold, take the average of the ratio of the gap score to the total length.

(6) Compare the score with the total actions before final disposition.

Essentially, we should determine if the depth of applicants' response tends to more quickly clarify potential areas of allowance or whether the application should be abandoned. Low gap score/length ratios should reflect little or no substantive response to argument, whereas higher scores should reflect a higher degree of explanation by the applicants.

If higher scores are found to correlate to earlier allowances or abandonments, then encouraging examiners to enforce 1.111 is beneficial both to examiners (helps them understand the application) and to stakeholders during litigation (by providing an extensive prosecution history to help determine) it is also beneficial to the applicants (by helping them obtain a longer enforceable period).

Idea #2: Determine whether descriptive Reasons for Allowance help prevent litigation.

Why test

Examiners have responded to the USPTO's call to provide details for Reasons for Allowance. Many of them have done so with the following template: "The claim requires [entire claim] and the examiner could not find prior art that addresses [entire claim]. Therefore, the claims are novel." It may be worthwhile to retrain examiners on how to write a proper Reasons for Allowance. However, before spending the time and treasure to do so, the Agency should determine whether Reasons for Allowance even provides any benefit.

How to test	
Split litigated patents into three categories	
No Reasons for Allowance	(aka "No Reason," no Reasons for Allowance
Section provided)	
Form Paragraph Reasons for Allowance	(aka "FP," Reasons for Allowance provided
that just repeats the claim language and claims the examiner couldn't find art)	
Explanatory Reasons for Allowance.	(aka "Explanatory," Everything else)

For each category, find the percentage of patents that entered the *Markman* phase but resulted in settlement rather than continued litigation.

Ideally, the percentages for "FP" should be the lowest (because it is useless, no matter what the circumstance), the "No Reason" should be higher (because it may be a mix of patents where the claim construction is clear on its face, or patents that should have had a Reasons for Allowance for clarity but do not) and the percentage of "Explanatory" should be highest (because these patents should always minimize ambiguity).

If the results generally track this ideal, then it can be reasonably speculated that the Reasons for Allowance are useful in avoiding costly litigation by helping clarify the proper claim interpretation. Training examiners to provide elaborate Reasons for Allowance may improve overall quality, even if examiners are asked to reduce their time in other areas (searching, claim mapping, etc). But if not, then perhaps the USPTO should allocate examiner time to more productive and quality-enhancing areas.

-Jason Liao