Should You Appeal?

A Look at Success Rates Before the PTAB on an Individual Rejection Basis

Ryan Pool*

Imagine an applicant faced with a final Office Action containing rejections with which they do not agree. They consider appealing the rejections, but only want to proceed to appeal if they feel they have a better than average chance of winning. Their application faces a rejection under 35 USC § 112 for Enablement and for lacking Written Description. Their application is also rejected under 35 USC § 102 and 103. This should be relatively easy to imagine as it is commonplace. From October 2016-October 2017, the Patent Trial and Appeal Board (PTAB) reported an intake of 11,796 appeals.¹

Deciding whether to appeal is a rather consequential decision, both in time (pendency remains around 18-24 months on average before a decision is rendered) and in money (government fees alone are almost \$3,000 for large entities). Although every case is different and favorable facts make for favorable decisions, it remains helpful and informative to have a correct statistical perspective regarding likely outcomes before the PTAB.

The PTAB produces many statistics for public use including the outcomes of its ex parte appeals. The Board provides these outcome statistics on a yearly basis. A small amount of cases are remanded or dismissed each year, but the three most relevant and most common result types are Affirmed, Affirmed-in-Part, and Reversed. The PTAB reported its results from 2014 to 2017 (through October) as follows:²

^{*}Ryan Pool, Esq. is a patent attorney at Millen, White, Zelano, & Branigan P.C. Ryan is licensed to practice law in Florida and registered to practice before the United States Patent & Trademark Office (reg. no. 64,615). Views expressed herein are those of the author and do not necessary reflect views of the firm or clients.

¹Patent Trial and Appeal Board, Appeals and Interferences United States Patent and Trademark Office - An Agency of the Department of Commerce, available at https://www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/appeals-and-interferences (last visited Feb 12, 2018).

	2014	2015	2016	2017
Affirmed	53.6%	56.9%	57.4%	55.5%
Affirmed-in-	12.9%	12.7%	12.9%	13.0%
Part				
Reversed	31.3%	28.9%	28.6%	29.9%

Our imagined applicant could look at these statistics and reasonably conclude that they should not appeal because the statistical chances of success are low. Even with favorable facts, the USPTO statistics would have them believe they are more than likely going to lose. However, as discussed below, when the cases from which these USPTO statistics are derived are analyzed more closely, one finds that they are misleading, and provide very little usefulness to our imagined applicant in helping to make an informed decision regarding whether they should appeal. The actual rates of success for each individual rejection type vary widely, but almost all offer a much greater success rate than the roughly 30% reversal rate reported by the USPTO outcome statistics.

How the USPTO determines which appeal decisions are labeled Affirmed, Affirmed-in-Part, or Reversed

For an appeal decision to be labeled Reversed, every rejection on appeal must be reversed. If even one rejection in the decision is affirmed, the decision will not be labeled Reversed.

The rules for labeling a decision Affirmed or Affirmed-in-Part are based upon whether any particularly claim has had all the rejections which apply to it reversed (likely allowable).³ Unfortunately, this is not very useful information for an applicant trying to obtain a reasonable predication of their own chances of success. These labels (Affirmed or Affirmed-in-Part) provide virtually no information regarding which or how many rejections were reversed. For example, in *Ex parte Morales*,⁴ the Board reversed rejections under 35 U.S.C. § 101, 35 U.S.C. § 112 first paragraph, and 35 U.S.C. § 112 second paragraph. The only rejection which was affirmed was a rejection under 35 U.S.C. § 103. The Board labeled this decision Affirmed, not Affirmed-in-Part. However, in *Ex parte Martinez*⁵, the Board reversed rejections under 35 U.S.C. § 102 and 103 but affirmed a rejection under 35 U.S.C. § 112 second paragraph. This decision is labeled Affirmed-in-Part. The only difference revealed by the labeling is that the reversals in *Ex parte Martinez* happen to leave at least one claim with no rejections whereas *Ex parte Morales* did not.

Effects of this Decision Labeling System

The PTAB's decision labeling system includes a clear bias against reporting reversals and for reporting affirmances. This is because only cases where every

³See 37 C.F.R. § 41.50.

⁴Ex parte Morales, Appeal 2017-006205 (PTAB Nov. 30, 2017)

⁵Ex parte Martinez, Appeal 2016-005244 (PTAB Nov. 30, 2017)

rejection is reversed gets the Reversed decision label, but cases where, for example, only one out of four rejections is affirmed can be labeled Affirmed.⁶ In view of the above, the only reliable information that one can glean regarding the treatment of rejections from the PTAB statistics, using 2016 as an example, is:

- 1. 28.6% of cases had all their rejections reversed.
- 2. At least 12.9% of cases had at least one rejection reversed and at least one rejection affirmed.
- 3. At least 57.4% of cases had at least one rejection affirmed.⁷

The PTAB's reporting method is also especially unhelpful to applicants where c-term PTA (Patent Term Adjustment) is of value. C-term PTA is extra time added to the term of the patent and if granted, is equal to the total pendency time of the appeal (about 18-24 months).⁸ For some applicants, this can be incredibly valuable. C-term PTA is awarded where any rejection is reversed before the Board.⁹ The Boards labeling is confusing because, for example, both *Ex Parte Morales* and *Ex Parte Martinez et al.* cited above, are eligible for c-term PTA for the entire pendency of their appeal despite *Ex Parte Morales* being labeled Affirmed.

The PTAB's reporting method makes determining the exact chances of receiving c-term PTA on appeal impossible. All that can be determined is that a minimum of 41.5% of cases were eligible for c-term PTA in 2016. The actual percentage of cases that were eligible for c-term PTA in 2016 is almost certainly higher than 41.5% some portion of the "Affirmed" decisions from this time period had at least on rejection reversed. However, the exact percentage is impossible to determine under the current reporting system without a case by case accounting.

The Board could, of course, choose to report its outcomes differently. For example, the Board could label cases where at least one rejection was reversed as, Reversed. This would, of course, greatly increase the reported reversal rate but it would also provide useful and objective information, i.e., what percentage of appealed cases were granted C-term PTA eligibility.

Far more useful to applicants would be for the Board to report the outcome statistics for each individual rejection before them rather than a single semi-arbitrary summary label for the entire decision. Such information would be far more helpful to both applicants and the USPTO for predicting actual success rates, modifying behavior, and supporting better, more efficient, decision making.

⁶Morales supra note 4.

⁷See *supra* Table 1; see also, Patent Trial and Appeal Board, Appeals and Interferences United States Patent and Trademark Office - An Agency of the Department of Commerce, available at https://www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/appeals-and-interferences (last visited Feb 12, 2018).

⁸See 35 U.S.C. § 154(C)(i)-(iii) and 37 CFR § 1.702 (c)-(e) & 1.703(c)-(e).

⁹Id.

 $^{^{10}}$ Percent of Reversal decision plus the percent of Affirmed in Part decision from chart above.

Individual Rejection Result Data

Detailed below are the decision statistics for each individual rejection type between October 2015 and October 2017. For each rejection type, a random sample of cases where taken of sufficient size that the results presented below have a confidence level of 95% and a confidence interval of 5.¹¹ Additionally, the samples taken were spread-out evenly through the 2-year time period of the population sampled. The individual rejections looked at were: 35 USC § 112 (Written Description), 35 USC § 112 (Enablement), 35 USC § 112 (Indefiniteness), 35 USC § 102(b), 35 USC § 103(a), and 35 USC § 101. The results are as follows:

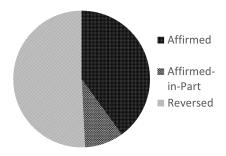


Figure 1: Decision Statistics for 35 U.S.C. § 112, Written Description Rejections

35 USC § 112, Written Description		
Affirmed	40%	
Affirmed-in-Part	9.2%	
Reversed	50.8%	
	20.070	

Table 1: Decision Statistics for 35 U.S.C. § 112, Written Description Rejections

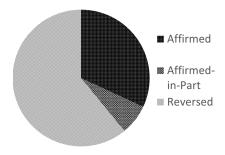


Figure 2: Decision Statistics for 35 U.S.C. § 112, Written Description Rejections

35 USC § 112, Enablement		
Affirmed 31.9%		
Affirmed-in-Part	7.2%	
Reversed	60.9%	

Table 2: Decision Statistics for 35 U.S.C. § 112, Enablement Rejections

¹¹Sample Size Calculator, Sample Size Calculator - Confidence Level, Confidence Interval, Sample Size, Population Size, Relevant Population - Creative Research Systems, available at https://www.surveysystem.com/sscalc.htm (last visited Feb 12, 2018).

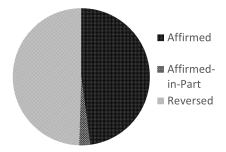


Figure 3: Decision Statistics for 35 U.S.C. § 112, Definiteness Rejections

35 USC § 112, Definiteness		
Affirmed	47.9%	
Affirmed-in-Part	2.6%	
Reversed	49.5%	

Table 3: Decision Statistics for 35 U.S.C. § 112, Definiteness Rejections

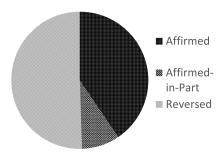


Figure 4: Decision Statistics for 35 Table 4: Decision Statistics U.S.C. § 102(a) Rejections

35 USC § 102(a)		
Affirmed	40.5%	
Affirmed-in-Part	9.0%	
Reversed	50.5%	

for 35 U.S.C. § 102(a) Rejections

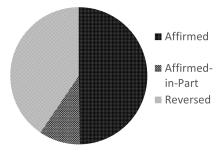


Figure 5: Decision Statistics for 35 Table 5: Decision Statistics U.S.C. § 103(a) Rejections

35 USC § 103(a)		
Affirmed	49.7%	
Affirmed-in-Part	9.7%	
Reversed	40.5%	

for 35 U.S.C. § 103(a) Rejections

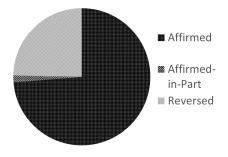


Figure 6:	Decision	Statistics	for	35
U.S.C. § 10	1 Rejectio	ns		

35 USC § 101		
Affirmed	73.7%	
Affirmed-in-Part	1.6%	
Reversed	24.7%	

Table 6: Decision Statistics for 35 U.S.C. § 101 Rejections

Comparison to USPTO reported Data

Over roughly the same 2 year period (2015-October 2017) as the data provided above regarding individual rejections, the USPTO reports based on decision labeling is:

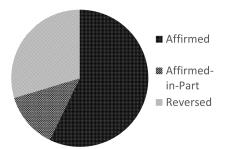


Figure 7: Decision Statistics Overall

Overall	
Affirmed	56.5%
Affirmed-in-Part	13%
Reversed	29.3%

Table 7: Decision Statistics Decision Statistics Overall

Data Obtained but not Shown above by Study

Not shown above is the rate at which each rejection is appealed to the Board. The relative frequency at which rejections are taken to the Board on appeal arguably indicates the contentiousness between Examiners and Applicants over that specific issue. The numbers below were obtained by simply counting appeal decisions containing a particular rejection type.

The two year data sample found that obviousness rejections under 35 USC § 103 were, by far, the most appealed rejection (over 11,000).

Anticipation is the next most frequently appealed rejection (about 2,000), which is appealed followed by 35 USC § 101 and 35 USC § 112 Indefiniteness

rejections (both about 1,000). 35 USC § 112 Written Description rejections follow closely behind (about 700).

35 USC § 112 Enablement rejections are, by far, the most rarely appealed rejection (about 250).

Analysis of Data

As shown above, it is immediately apparent that the actual reversal rates of each individual rejection type differ drastically from the USPTO reporting over the same period. The data from the individual rejection types clearly show that individual applicants chances of success on appeal are substantially greater than that reported by the USPTO with regard to every rejection type except rejections under 35 USC § 101.

However, it would be misleading to cite just the reversal percentage or the affirmance percentage as representing an applicant's chances of success on a particular issue. This is because when adding up the reversal affirmance percentages, one does not arrive at 100%. The missing percentage is found in the Affirmed-in-Part decisions. Please note that with regard to the Affirmed-in-Part statistics above, this label indicates that the Board was presented with multiple rejections of the same type and reversed at least one, and affirmed at least one. When accounting for the Affirmed-in-Part decisions, it is reasonable to expect that the same reversal to affirmance ratio would be maintained in the Affirmed-in-Part decisions. That is, it is reasonable to expect that the ratio of reversals to affirmances for a general rejection type would be maintained in Affirmed-in-Part decisions where the Board considers multiple rejections of a single type.

Give the above, the ratio of reversal to affirmance is the best indication of how the Board is treating a particular rejection type and is the best indicator of the statistical likelihood of success for any given individual rejection on appeal.

Finally, please note that an applicant is eligible for c-term PTA in all cases where the decision rendered was reversed or Affirmed-in-Part.

- Individual Rejections

Enablement rejections are the most applicant friendly by a surprisingly wide margin with over a 60% reversal rate and a reversal to affirmance ratio of about 2:1. This means the Board is twice as likely to overturn an enablement rejection as it is to affirm it. Additionally, 7.2% of rejections Affirmed-in-Part meaning that almost 70% of applications which appeal an Enablement rejection were eligible to receive c-term PTA based on the evaluation of that rejection type.

Anticipation, Written Description and Indefiniteness rejections are, more often than not, reversed by the Board (roughly 5:4 Reverse to Affirm ratio). Anticipation and Written description rejections offer a slightly better reversal to affirmance ratio and an even greater chance at PTA thanks to at least a 9% partial affirmance rate.

Obviousness rejections are more difficult to overcome with only a 40% reversal rate, but an almost 10% Affirmed-in-Part rate reduces the reversal to affir-

mance ratio to only about 4:5. That is, the Board is only slightly more likely than not to affirm an obviousness rejection than to reverse it.

35 USC § 101 rejections are the most difficult to overcome with less than a 25% reversal rate and also a low Affirmed-in-Part rate (less than 2%). This results in the Board being almost 3 times as likely to affirm a 101 rejection as it is to reverse it.

Further Lessons of the Data

In a perfect world, with a perfect examining corps, reversal rates would be 0% and the PTAB would be disbanded as being unnecessary. However, such perfection is fantasy and having a 0% reversal rate in the real world would actually be a disturbing sign of a bias and illegitimate PTAB.

In the real world, the forwarding of a case to the PTAB is an indication of contentiousness over at least one issue. That is, an issue does not make it before the PTAB unless an applicant and a team of 3 examiners disagree on that issue. Therefore, one would expect that if both applicants and Examiners have a good understanding of the issues surrounding the rejection and the relative strength of their positions, the reversal rates would ideally be about 50%. A reversal rate higher than 50% suggests that Examiners are too strict with regard to that particular issue and need to adjust their examination practices. A reversal rate lower than 50% suggests that applicants are overestimating the strength of their position and/or that the applicant community is confused or dissatisfied with the current state of the law.

In view of the above, it can be reasonably concluded that the Examining core is over rejecting the majority of rejection types (all but 35 USC § 103 and § 101). This results in inefficient prosecution, and a higher than needed number of ex parte appeals. In this, the PTAB is a victim. This inefficiency is contributing a large number of cases to the PTAB backlog. For an office that is highly concerned with its pendency rates, both at the examination level and at the PTAB, the USPTO would be wise to consider informing their Examiners of this inefficiency, and encouraging corrective behavior. By withdrawing rejections which the PTAB is likely to reverse anyway, the total number of cases which proceed to appeal can be reduced and prosecution in general can be made more efficient.

For those who argue this practice would result in lower quality patents, consider that the rejections which would be withdrawn in following the above proposal are those which the PTAB would more likely than not reverse anyway. Meaning that, these rejections do not ultimately prevent the application from being patented, but they do greatly slow down and increase the costs of the patent process for applicants.

It does not necessarily follow, however, that when reversal rates are lower than 50%, Examiner's should increase the rate at which they are making rejections. Rather, the adjustments needed are more likely on the part of applicants. This concept will be explored further below in an individual look at the only two rejections types with reversal rates below 50%.

¹²See Manual of Patent Examination Procedure (MPEP 9th) 1207.01 - Appeal Conference.

Regarding 35 USC § 101

Rejections under 35 USC § 101 with their 24.7% reversal rate are clearly an outlier from the other rejection types and not one in the applicants favor. Recent Supreme Court decisions (Bilski, Mayo, Myriad, and Alice) ¹³have made it harder to obtain patents in the software and diagnostic method arts where 101 rejections are most commonly issued. Considering that 35 USC § 101 rejections are only relevant to a small fraction of inventions and that the success rate of appealing these rejections is relatively low, one would expect that the total number of these rejections going to appeal would be low in comparison to other rejection types. Instead, 35 USC § 101 rejections are essentially tied with Indefiniteness as the third most frequently appealed rejection type.

The lower reversal rates paired with a relatively high frequency in appeal rates appear to indicate that applicants in these arts disagree and/or have not yet accepted the new viewpoint being applied to these cases by the PTAB. Given these circumstances it would be of great service to the affected industries for the USPTO to provide a high level of clarity and consistency regarding its treatment of 35 USC § 101 rejections. Notably, the USPTO has shown some awareness of this issue and responded by releasing its 35 USC § 101 guidelines beginning in 2014 and updated yearly.¹⁴

While this effort is to be commended, application of these guidelines has sometimes been inconstant at the Examiner level. Additionally, at least one district court in *Cleveland Clinic v. True Health Diagnostics LLC*¹⁵ has questioned the authority of these guidelines and has issued a warning regarding placing too much reliance on them pointing out that:

- 1) the guidelines had not been through "formal adjudication or notice and comment rule making;" and
- 2) the Federal Circuit had never held that the guidelines were entitled to deference.

Some applicants may be hoping for a legislative solution to the 35 USC § 101 problem. For example, in 2017 the American Bar Association Section of Intellectual Property Law submitted a legislative proposal for revising 35 U.S.C. § 101 which would ease this sections requirements. ¹⁶

Additionally, at least some of the high appeal numbers for 101 rejections could be the result of a strategy of delay be the applicant community. That is, applicants are employing a strategy of appealing and using its sometimes 2 year backlog as a way to delay action on the application until legislative or higher judicial action can be taken to make the patenting climate more hospitable.

¹³Bilski v. Kappos, 561 U.S. 593, 612-13 (2010); Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289 (2012); Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2117 (2013); Alice Corp. v. CLS Bank Int'l, 134 S. Ct. 2347 (2014).

¹⁴Office of Patent Legal Administration, Subject matter eligibility United States Patent and Trademark Office - An Agency of the Department of Commerce, available at https://www.uspto.gov/patent/laws-and-regulations/examination-policy/subject-matter-eligibility (last visited Feb 12, 2018).

¹⁵Cleveland Clinic v. True Health Diagnostics LLC, No. 1:17-cv-198 (E.D. Va., Aug. 4, 2017).

¹⁶March 28, 2017 Letter from the American Bar Association Section of Intellectual Property Law to Michelle K. Lee re: Supplemental Comments Related to Patent Subject Matter Eligibility available at https://www.americanbar.org/content/dam/aba/administrative/intellectual_property_law/advo-cacy/advocacy-20170328-comments.authcheckdam.pdf ((last visited Feb 12, 2018).

Regarding 35 USC § 103(a)

Obviousness rejections also deserve special attention at least because of the sheer number of appeals addressing this rejection. Obviousness is appealed at a rate over 5 times higher than any other rejection and almost 50 times higher than enablement; it is fair to say that this is the most contentious issue between applicants and Examiners.

Additionally, the outcome data with regard to obviousness suggests a more complex dynamic than with the other rejection types. A reversal rate of only 40% seems to indicate that it is applicants who need to adjust their strategy for pursuing an appeal in obviousness rejections. However, it is noteworthy that when Affirmed-in-Part decisions are added to the reversal decisions the total number of decisions where at least one Obviousness rejection was reversed increased to just over 50%.

A reasonable hypothesis regarding the relatively high near 10% Affirmed-in-Part rate in obviousness cases is that the obviousness rejection being reversed by the Board is a secondary independent claim or a narrower dependent claim. This could be an indication that Examiners are failing to give proper consideration to all applicants' appealed claims, particularly the more narrow dependent claims. It is likely that the PTAB could remove many cases from their docket if the rejections in this Affirmed-in-Part cross section of cases were decreased. That is, if Examiners were to fully examine these narrower dependent claim, it is likely that at least some of these bad rejections (those being reversed on appeal) would be withdrawn. After the withdrawal of these rejections, applicants would be faced with the decision of accepting a more narrow scope of claims for allowance or proceeding to appeal on the broad claims where their chances of success would be only about 40%. Many applicants may choose to forgo appeal under such circumstances thereby reducing the total number of appeals filed.

Additionally, this Affirmed-in-Part cross section is not a small number of total cases. Because of the incredibly large number of Obviousness rejections being appealed, the 10% of cases which are Affirmed-in-Part represents over 6% of the total number appeal decisions rendered. Therefore, even partially reducing this Affirmed-in-Part cross section of Obviousness cases through more thorough examination of secondary independent claims and dependent claims could result in hundreds of cases being removed from the appeals docket each year.

In consideration of the above, it would be wise for applicants to argue these secondary independent claims and dependent claims more extensively before appeal in order to better draw the Examiner's attention to these claims and increase the likelihood that allowable subject matter can be found before appeal.

One Last Consideration

The statistics above only represent outcomes from cases which proceed all the way through decision at the Board. The appeal process also includes a preliminary phase after the filing of an appeal brief, where a three Examiner panel

reviews the brief and meets to decide whether they wish to proceed to Board with their rejections, withdraw at least one rejection and reopen prosecution, or withdraw all the rejections and allow the case.

It is unknown whether data regarding the relative frequency of the three Examiner panel publically exists. However, personal experience teaches that a three Examiner panel's decision to pull a case from appeal is not uncommon.

A reasonable estimate range for withdrawal is between 25% and 50% based data internal to Millen, White, Zelano & Branigan, PC. It is notable that in a single issue obviousness case assuming only a 20% rate of withdrawal by a three Examiner panel would bring the chances of reversal of even an obviousness rejection to over 50% (101 rejections would need a 70% withdrawal rate).

Application of the Lessons Above

So what is our imagined applicant to do? As stated at the beginning, the applicant faces one rejection each under 35 USC § 112 for enablement and lacking written description. Their application is also rejected under 35 USC § 102 and 103. Ignoring the perceived relative strengths of the arguments for each rejection (of course this is an important factor for any appeal decision), a statistical estimate of their chances of success on every single issue (all four rejections) before the board is only 6%. However, their chances of success on at least one of these issues, thereby reducing the issues in the case and also granting the application c-term PTA should it issue are almost 95%. One takeaway from this is if you are looking for a full reversal try to take as few rejections to appeal as possible. Conversely, if PTA is highly valuable, one should look to take as many rejections as possible to the Board as doing so increase your chances of being granted c-term PTA if the patent issues.

Including the effects of the three Examiner panel into the estimated outcomes is difficult because in the stated example there are 4 separate rejections of different types. The most likely outcome is that the three Examiner panel will withdraw the appeal and cancel at least one but not all of the rejections. Depending on which rejections are withdrawn, the likely outcome before the PTAB will change by increasing the chances of total reversal but decreasing the chances of receiving PTA by some amounts.

This may appear counter intuitive at first. However, consider that every rejection offers the Board an additional chance to either issue an affirmance or a reversal. It only takes one affirmance to prevent a complete reversal and likely notice of allowance, but it also only takes one reversal to grant PTA. The more rejections on appeal, the more chances the Board has to issue at least one affirmance and/or at least one reversal and therefore the less likely one is to receive a full reversal and the more likely one is to receive c-term PTA.

In consideration of all the above, if the our imagined applicant chooses to appeal this case they should expect advancement of prosecution though withdrawal or reversal of at least one rejection and the benefit of substantial c-term PTA, however, a next action allowance is unlikely.

Suggestion to the USPTO

It is strongly encouraged that the USPTO at least consider providing better and more usable data to the public in the form of individual rejection disposition rates to help applicants better decide when appeal is appropriate. It is also strongly encouraged that the USPTO use such data to improve its examination by reducing the quantity of poor rejections, and also monitor such data as potential indicator of areas where the applicant community may benefit from increased guidance from the Office (such as in rejections under 35 USC § 101).

Either of the above would result in more efficient prosecution, and a reduction in appeal rates and also appeal pendency both of which are publicly stated goals of the USPTO. Such measures would also save applicants substantial costs and decrease the time from filing to patent or abandonment. This proposal is a win-win with little to no cost on the part of the USPTO to implement.