



Press Center



IPR Statistics Revisited: Yep, It's A Patent Killing Field

February 8, 2017 / by Samson Vermont

Some view Inter Partes Review (IPR) as a patent killing field. Yet, the statistics published by the PTO seem to suggest that the patent kill rate in IPR is modest, and other commentators suggest that it's roughly comparable to the kill rate in district court. The truth is closer to the killing field. Whether this will change under Trump remains to be seen, but there are reasons to believe it might.

There are four reasons why the killing field view is more accurate. First, the PTO's reported numbers are somewhat misleading. When reporting IPR numbers, the PTO reports on petitions "completed to date." This little fact, as others have noticed, makes the kill rate seem lower than it is.

Second, not only are the kill rates under 102 and 103 higher in IPR than in district court, but also those who suggest the kill rates are roughly comparable compare apples to oranges. In IPR, only printed publications can be used to attack patents. In district court, challengers can also attack with the other categories of prior art: prior public use or sale, public knowledge, derivation or incorrect inventorship,

and invention by another. In district court, these other categories account for about 40% of kills under 102.

Third, although the institution rate has dropped since the early days of IPR, some of the drop is attributable not to a decrease in the Board's willingness to institute any given claim but to an increase in the willingness of patentees to settle IPRs before the institution decision.

The fourth reason that the killing field view is more accurate concerns the rate at which parallel litigation is stayed, which does not speak to the kill rate but does speak to the overall power that IPR confers on patent challengers. Some commentators report a grant rate for stays that is misleadingly low because it's based on all motions to stay filed on the ground of a co-pending IPR. It's somewhat common for an accused infringer to file one motion before institution and one after and have the first fail and the second succeed. When calculated per motion filed, the grant rate is only around 50% to 60%. But when calculated per case, which is more meaningful, the grant rate is closer to 82%.

PTO Numbers Are Misleading

Below is a diagram from the PTO report on AIA Trial Statistics, current through 2016. It shows the disposition of IPR petitions completed to date. Take a quick look at the light blue hexagon at the top and the red and yellow hexagons at the bottom.

Disposition of IPR Petitions Completed to Date*



*Data current as of: 12/31/2016

<https://i2.wp.com/www.patentattorney.com/wp-content/uploads/2017/02/Screen-Shot-2017-02-02-at-10.25.26-AM.png?ssl=11>

The light blue hexagon shows the total number of petitions filed from the inception of IPR through 2016. The red hexagon shows the number of trials in which all instituted claims were held unpatentable and also states it as percentage of total petitions filed. The yellow hexagon shows the number of trials in which some instituted claims were held unpatentable and likewise states it as a percentage of total petitions filed.

Add the 23% in the red hexagon to the 5% in the yellow hexagon and we get 28% as the percentage of petitions in which the Board invalidated at least one claim. In addition, as shown in two of the gray hexagons, patentees requested adverse judgment after institution in 191 IPRs and before institution in 26 IPRs, resulting in another 5% of kills, for a total kill rate of 33% (28% + 5%).

The real kill rate, however, exceeds 33%. The reason is that after a petition is filed it takes about 18 months to get to trial and decision. Accordingly, the trial numbers in the red and yellow hexagons relate to petitions filed 18 or more months prior to the last day of 2016. Yet, in calculating the *percentages* in the red and yellow hexagons, the PTO divided by the number of all petitions filed as of the last day of 2016, instead of by the number of petitions filed as of 18 or more months *prior* to the last day of 2016.¹ [\[#easy-footnote-bottom-1\]](#) Similarly, the requests for adverse judgment in the gray hexagons relate to petitions filed at various times prior to the end of 2016.

One study that accounts for the delay until final decision is the Report on Patent Trial and Appeal Board Contested Proceedings (2016), prepared by Fitzpatrick, Cella, Harper & Scinto. This study looked at a set of IPRs consisting of those denied institution for substantive reasons through 2014 plus those that reached final written decision or request for adverse judgment through 2015. Among this set of IPRs, 60% of claims challenged in petitions were killed either directly by the Board or by way of request for adverse judgment by the patentee.

The Fitzpatrick study states the kill rate as a percentage of claims rather than as a percentage of IPR petitions. Arguably, the latter is more meaningful because the broader and more valuable claims in a challenged patent are more likely to be killed. For example, suppose all 20 claims in a patent are challenged. The two broadest claims cover a swath of infringers, while the remaining 18 claims cover few or no infringers. The two broadest claims are killed; the other 18 survive. In substance, this largely or entirely amounts to a loss for the patentee, but if we look only at the percentage of claims killed, it appears to be a 90% victory for the patentee.

On the other hand, the numbers in the red and yellow hexagons above tell us that, when the Board holds claims unpatentable, it holds *all* of the instituted claims unpatentable 82% of the time (23% / 28%). Similarly, a study by Brian Love and Shawn Ambwani found, that among IPRs reaching final decision, 77% of all instituted claims are either held unpatentable or disclaimed.² [\[#easy-footnote-bottom-2\]](#) If the norm when killing instituted claims is to kill them all, then stating the kill rate as a percentage of claims falls only a bit short of stating it as a percentage of petitions.

In any event, other data in the PTO report on AIA Trial Statistics suggests that the kill rate for petitions is about four percentage points higher than the kill rate for claims. If we adjust by adding 4% to the 60% from the Fitzpatrick study, we get an estimated kill rate per petition of about 64%. That is, in about 64% of petitions, one or more of the claims will not survive.

Kill Rates in IPR Greatly Kill Rates in District Court

The Fitzpatrick study finds that, of challenged claims that reach a decision on the merits, 49.6% are invalidated under 103 and 41.1% under 102. (Note that some claims are invalidated under both.) The study notes further that, in district court cases in which validity is adjudicated, 27.8% of claims are invalidated under 103 and 31.1% under 102. (Again, some claims are invalidated under both.) According to these numbers, the potency of 103 is much greater in IPR than in district court, while the potency of 102 is modestly greater.

In IPR, however, the only category of prior art available is printed publications. In district court, available prior art also includes prior public use or sale under 102(b), public knowledge under 102(a), derivation or incorrect inventorship under 102(f), and (for pre-AIA patents) invention by another under 102(g).

It is remarkable that, although printed publications are the only type of art available in IPR, the kill rate under 102 is nonetheless about a third higher than in district court. In district court, printed publications account for about 60% of invalidations under 102; the other art categories account for the remaining 40%.³
[\[#easy-footnote-bottom-3\]](#)

If we take 60% of the 31.1% kill rate under 102 in district court, we get a kill rate under 102 *printed publications* in district court of only 18.7%. Now, we can compare apples to apples and see that the 18.7% kill rate for printed publications in district court is dwarfed by the 41.1% kill rate for printed publications in IPR. (Note that in IPR attack under 103 is likewise limited to printed publications, but this limitation is far less significant for 103 because the vast majority of 103 attacks have always been based on printed publications.)

The Drop in the Institution Rate Is Due in Part to Rise in Settlement

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