Appendix

The following pages provide an in-depth explanation of the methodology and data used to create the AIA trial statistics in this presentation.

General notes & methodology

- Common acronyms: Decision on Institution (DI); Final Written Decision (FWD); Request for Adverse Judgment (RAJ); Fiscal Year (FY).
- Inter partes reviews (IPR), covered business method reviews (CBM), and post grant reviews (PGR) were considered. Derivations were not considered.
- The reporting period refers to the date range shown in parenthesis in the upper left corner of a slide.
- The dataset includes the status of all petitions, patents, and claims as of the end of the reporting period on a slide.
- Percentages are rounded to improve readability. The number to be rounded is rounded down if it is between 0 and 4 and rounded up if it is between 5 and 9. Numbers that round to 0 are shown as "< 1%."
- Because of rounding, percentages may not always add up exactly to 100%.

Methodology – Disposition rates by decision type

- The disposition rates are calculated from all Director Discretionary Considerations Decisions (DSCO) and Decisions on Institution from the Board.
- The chart on the left-side of the slide shows the percentage of DSCO that were referred and the percentage of DSCO that were denied.
- The chart on the right-side of the slide shows decisions by the Board on whether to institute the petition. This does not include does not include the outcomes of a request for rehearing but does include joinders

Methodology – Institution Rates

<u>Institution rates by petition</u>

- Institution rates by petition for a fiscal year are calculated from all the decisions on institution issued in that fiscal year. The institution rate for each fiscal year or other reporting period is calculated by dividing petitions instituted by the total decisions on institution (i.e., petitions instituted plus petitions denied).

- DSCO denials are shown as a separate category but are counted as a denial as part of the institution rate.
- The by-petition institution rate includes joinders.
- The by-petition institution rate does not include the outcome of a request for rehearing. PTAB has been excluding rehearing outcomes from the by-petition institution rate to avoid the need to republish previously reported institution rates. Even if those outcomes on rehearing were included, the institution rates would not change significantly, if at all, because there are so few rehearing requests.

Institution rates by patent

- Institution rates by patent for a fiscal year are calculated from patents with a decision on institution that issued in that fiscal year. The institution rate for each fiscal year or other reporting period is calculated by dividing the number of patents with an instituted petition by the total number of patents that received any decision on institution
    - Example 1: if a patent is challenged by a petition that is denied in FY17, the denial contributes to the by-patent institution rate for FY17.
    - Example 2: if the patent in Example 1 is challenged by a second petition and the second petition is instituted in FY19, the institution is included in the by-patent institution rate for FY19, but the denial of the first petition still counts as a denial in the by-patent institution rate for FY17.
    - Example 3: if a patent is challenged by a petition that is instituted in FY17, the institution contributes to the institution rate for FY17. If that same patent is challenged again by a later-filed petition that is denied in FY19, the later denial counts as an institution, not a denial, in the by-patent institution rate for FY19 because of the earlier institution. The earlier institution still counts as an institution in the by-patent institution rate for FY17. That is, an institution followed by a denial in a later fiscal year counts as an institution in the rate calculation for both fiscal years. As a result, the instituted patents in a fiscal year may be slightly higher than the instituted petitions in the same fiscal year.

- The by-patent institution rate includes joinders. Motions for joinder are granted to join a case to an already instituted case. So joinders do not affect the institution rate if joinder is granted in the same fiscal year as the previous decision to institute. But if the joinder occurs in the fiscal year following the previous decision to institute, then the joinder is included in the by-patent institution rate for the later fiscal year. For example, a petition grant in FY19 would contribute to the FY19 institution rate, and a corresponding joinder grant to the earlier petition in FY20 would contribute to the FY20 institution rate.
- The by-patent institution rate includes the outcome of requests for rehearing. Rehearing outcomes are considered in the year that they occur, and the institution rate calculation uses the year of the rehearing outcome.
- Petitions denied after an instituted petition contribute to the by-petition institution rates but not to the by-patent institution rates. For example, different petitioners may each file a petition against a patent, or a single petitioner may file more than one petition to use different art or to address large claim sets. So the by-patent institution rate may not equal the by-petition rate. Mathematically, the institution rate by patent will never be lower than the institution rate by petition.
- Denials include DSCO and non-DSCO denials.

Methodology – Petition Outcomes

Outcomes by Petition

- This chart displays the results for each petition that reached an outcome in the reporting period.
- "Outcomes" are events that end an AIA proceeding. The outcomes are reported as FWD, Settled, Dismissed, RAJ, and Denied. These outcomes may also be referred to as "terminations" or "dispositions." Note that an RAJ may be requested by either the petitioner or the patent owner.
- Pending cases have not reached an outcome and are by definition excluded. Joined cases have the same outcome as the case to which they are joined. So, to avoid double counting, joined cases are excluded.
- The chart (as well as the similar charts that follow) divides FWDs into three categories.
    - "FWD All Patentable" means that all the claims addressed by PTAB in the FWD were found patentable and none were found unpatentable.

- "FWD Mixed" means that PTAB found at least one claim patentable and at least one claim unpatentable in the FWD.
- "FWD All Unpatentable" means that all the claims addressed by PTAB in the FWD were found unpatentable and none were found patentable, or that all challenged claims were canceled (e.g., in connection with Patent Owner's motion to amend).
- Claims that were originally challenged but not before PTAB in the FWD do not factor into the categorization (e.g., claims disclaimed or otherwise withdrawn from the proceeding) except that if all claims were canceled.

- In this way, the FWD categorization represents PTAB's ruling on the claim based on the evidence presented to it and evaluated in the FWD.

- Only the results of decisions on rehearing before the end of the reporting period are considered. For example, if a case is initially denied in the reporting period, but then instituted on rehearing after the reporting period, then the case's outcome is reported as denied for the reporting period. If a case was originally instituted, but the outcome of a rehearing during the reporting period changed the outcome to a denial, the case's outcome is reported as denied for the reporting period.

Methodology – Patent Outcomes

Outcomes by Patent

- This pie chart displays the overall results for each patent that saw an outcome (defined above) in one of its petitions in this reporting period. First, each patent that had a petition reach an outcome in the reporting period was identified (i.e., the petition outcomes shown in the "by petition" pie chart). Then, the outcomes of all the petitions ever challenging that patent as of the end of the reporting period were considered to determine a net outcome for that patent at the end of the reporting period. Outcomes occurring after the reporting period were not considered.
- The by-patent outcome categories are the same as those in the by-petition chart except for the "Mixed" category. A patent can be challenged by more than one petition, and the outcomes for those petitions can be different. So the set of petitions challenging the patent are reported as having "mixed" outcomes.

- But if any petition had a FWD outcome, then the patent is assigned to one of the FWD categories, even if the FWD happened before the beginning of the reporting period. So the “Mixed Outcomes” category does not include FWDs.
- To determine the FWD category for a patent, the net claim outcome of all claims challenged in all the FWDs addressing that patent were considered. The FWD classification is the same as the method used in the “Outcomes by petition” chart.
- A claim may be subject to more than one FWD. If a claim is ever found unpatentable, the claim is counted as unpatentable. If a claim is found patentable and never found unpatentable, the claim is counted as patentable. Thus, if a claim was both found patentable and unpatentable, the claim is counted as unpatentable. Additional details are provided on the “by claim” slide discussion, to follow.
- Pending cases are excluded because they do not have an outcome.
- Joined cases do not have an effect because their outcome is the same as the case to which they are joined.
- Patents receiving both a DSCO denial and a denial are categorized as mixed.
- Results on rehearing requests of decisions on institution are considered, as was explained in the “Outcomes by petition” section.
- Note that, by following the above rules for the patent-outcome categorization, the outcome listed in the pie chart for a given patent may not be an outcome the patent saw in this reporting period. For example, if a patent saw an FWD before the reporting period and a denial of institution during the reporting period, it would be reported as an FWD outcome, even though the FWD event occurred before the reporting period, because the chart shows the net outcome, as defined above, for the patent as of the end of the reporting period. Thus, the number of patents seeing an FWD in this reporting period is not necessarily the same as the number shown in the pie chart for outcomes by patent (please refer to the circles chart to see number of patents seeing an FWD in this reporting period).

Methodology – Claim Challenged Outcomes

Outcomes by Claim

- This pie chart displays the by-claim results for each patent that reached an outcome in the reporting period. Thus, the results shown are for the claims of the patents from the "by patent" slide, i.e., all claims of all patents having a proceeding reach an outcome in the reporting period.
- For each of those patents, the underlying proceedings were analyzed to capture claim-by-claim outcome information. Each claim in the patent was noted and then considered individually for whether the claim ultimately was denied, dismissed, found unpatentable, found patentable, disclaimed, or otherwise challenged but without reaching an FWD.
    - "Unpatentable" and "patentable" mean that PTAB found the claim unpatentable or patentable in a FWD on the merits of petitioner's ground, i.e., under 35 U.S.C. 318(a).
    - "Disclaimed" means that the patent owner requested adverse judgment on, disclaimed, or otherwise canceled the claim. Often called "RAJ" for brevity.
    - A claim was "denied" if it was denied in every ground of every petition challenging the claim.
    - A claim was "dismissed" if was dismissed in every petition challenging the claim.
    - A claim was "Challenged But No FWD" if it was challenged but did not fall into one of the above categories. For example, if it saw both a denial and a dismissal. Or, most commonly, the cases involving the claim settled.
- If a claim saw multiple outcomes, the following precedence was used: unpatentable > disclaimed > patentable.
- The outcome reported for a given claim of a given patent is assigned to one and only one of these categories.
    - Example 1: if a claim has been found unpatentable and patentable in two different proceedings, then the claim is listed as unpatentable.
    - Example 2: if a patent owner expressly cancels a claim in a motion to amend, that is categorized as a "disclaimed." If a patent owner merely moves to amend a claim, that is not considered a cancellation/disclaimer.

    - Note 2: the claims proposed in a motion to amend (MTA) are not considered because claims in MTAs are new claims. Thus, if MTA claim 31 is proposed to substitute for issued and challenged claim 1, only the results of claim 1 are reported, regardless of what happens to MTA claim 31. Please refer to one of PTAB's MTA statistics presentations for more information about the outcomes of the proposed claims in a MTA.
- The results shown are the net claim results for the patents as of the end of the reporting period. The results listed consider the net outcome seen by every claim of these patents at PTAB up to the end of the reporting period, even if the outcomes happened before the reporting period.
    - Example: a patent has two claims. Claim 1 was challenged in two petitions, the first petition denied in before the start of the reporting period and the second resulting in a FWD finding of patentable in during the reporting period. Claim 1 will be in the "FWD Patentable" category because the patentable outcome takes precedence over a challenged but not instituted (here, denied) outcome. Claim 2 was challenged in one petition denied in during the reporting period. Claim 2 will be shown in the "Institution Denied" pie category.

Methodology – Claim Bar Chart Claim

Outcomes Slide (bar chart)

- This graphic shows the outcome of all claims of all patents seeing an outcome at PTAB in the FY.
- The data has the same general categorization and methodology as the "by Claim Challenged" slide, but with more granularity. Please refer to that slide's methodology discussion for more detail.
    - The Claim Outcomes Slide explicitly shows how many claims were disclaimed pre- or post-institution.
    - The "No DI" category shows claims that never were addressed in a DI (e.g., due to settlement, dismissal, or petitioner's RAJ).
    - The "No FWD" category shows claims that were instituted but never were addressed in a FWD (e.g., due to settlement, dismissal, or petitioner's RAJ).

Questions? Comments? Suggestions?

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