Patent Trial and Appeal Board
Motion to Amend (MTA) Study

Update through March 31, 2023
Motion to Amend Study: Installment 8
(Update through March 31, 2023)

In April 2016, after having completed more than 1,500 trials in more than three-and-a-half years of America Invents Act (AIA) trials, the Patent Trial and Appeal Board (Board) undertook a study of motions to amend (MTAs) to determine: (1) the number of MTAs that had been filed in AIA trials, both as a cumulative total and by fiscal year; (2) the subsequent developments of each MTA; (3) the number of MTAs requesting to substitute claims that were granted, granted-in-part and denied-in-part, and denied; and (4) the reasons the Board provided for denying entry of substitute claims. The Motion to Amend Study and data supporting the study are available on the Board’s website. See Patent Trial and Appeal Board Motion to Amend Study (April 30, 2016, Installment 1), https://go.usa.gov/xXXyT; Data for 192 Completed Trials with MTA, https://go.usa.gov/xXXyZ.

The Board has continued to collect data on MTAs and has posted on its website the second, third, fourth, fifth, sixth, and seventh installments of the Motion to Amend Study that analyze the same information as the original study. See Motions to Amend Study, https://go.usa.gov/xEmqb (providing all Motion to Amend Study installments

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1 Trials, i.e., instituted AIA proceedings, are counted as “completed” when they are terminated due to settlement, a request for adverse judgment, dismissal, or a final written decision. Joinders were counted as a single trial for purposes of the MTA statistics. Trials with a consolidated final written decision were counted as a single trial for all the MTA statistics except for the numbers of MTAs filed by fiscal year and fiscal quarter, because those trials were not yet consolidated at the time an MTA was filed in each.
and data sets). The sixth installment of the Motion to Amend Study completed the pre-pilot program MTA data\(^2\) and included limited, preliminary information and data for MTAs filed under the pilot program. See Patent Trial and Appeal Board Motion to Amend Study (Installment 6: Update through March 31, 2020), https://go.usa.gov/xh3YG. The seventh installment provided the first fulsome collection of data on MTA filings under the pilot program from the start of the pilot program on March 15, 2019, through March 31, 2022. In particular, it included graphs providing detailed information and data specific to pilot program results since the start of the pilot program.

In this installment (the eighth), the Board provides another update to the Motion to Amend Study. This installment includes information and data regarding all (i.e., both pre-pilot program\(^3\) and pilot program\(^4\)) MTA filings, and results through March 31, 2023. Graphs I, II and IV–XVI update the same information and data provided in

\(^{2}\) On March 15, 2019, the United States Patent and Trademark Office implemented a pilot program for MTAs filed in AIA trials before the Board. See Notice Regarding a New Pilot Program Concerning Motion To Amend Practice and Procedures in Trial Proceedings Under the America Invents Act Before the Patent Trial and Appeal Board, 84 FR 9497 (Mar. 15, 2019). The pilot program applies to all AIA trials instituted on or after March 15, 2019. \textit{Id.}

\(^{3}\) For purposes of this study installment, “pre-pilot” refers to the time period from October 1, 2012, through March 14, 2019.

\(^{4}\) For purposes of this study installment, “pilot” refers to the time period from March 15, 2019 (the implementation date of the pilot program), through March 31, 2023.
installment seven. Additionally, Graph III is a new graph which shows the number of pilot MTAs filed by technology.

Graph I is a pie chart that shows the cumulative number of both pre-pilot and pilot MTAs that have been filed in AIA trials, both completed and pending. Cumulatively (i.e., pre-pilot program and during the pilot program), patent owners have filed at least one MTA in 768 trials (10% of all trials). As noted in previous studies, prior to the pilot program, patent owners filed at least one pre-pilot MTA in 504 trials (11% of 4,783 completed pre-pilot program trials). And as noted below, after the start of the pilot program, patent owners filed at least one pilot MTA in 264 trials (11% of 2,832 AIA trials since the pilot program began).

\[\text{Graph I is a pie chart that shows the cumulative number of both pre-pilot and pilot MTAs that have been filed in AIA trials, both completed and pending. Cumulatively (i.e., pre-pilot program and during the pilot program), patent owners have filed at least one MTA in 768 trials (10% of all trials). As noted in previous studies, prior to the pilot program, patent owners filed at least one pre-pilot MTA in 504 trials (11\% of 4,783 completed pre-pilot program trials). And as noted below, after the start of the pilot program, patent owners filed at least one pilot MTA in 264 trials (11\% of 2,832 AIA trials since the pilot program began).}\]

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\[\text{For purposes of this study installment, “pending” trials means trials that have not yet reached a final written decision and excludes trials with a request for rehearing of a final written decision and trials remanded from the United States Court of Appeals for the Federal Circuit.}\]

\[\text{A “pilot MTA” refers to any MTA filed during the pilot program, regardless of whether the patent owner exercised either of the two pilot program options: request for preliminary guidance and revised MTA. As such, pilot MTAs are MTAs in cases in which the Board instituted review on or after the start of the pilot program on March 15, 2019. The earliest date on which pilot MTAs could be filed was June 7, 2019 (some filed as late as July of 2019 were pre-pilot based on the date of institution of the proceeding). “Pilot MTA” also only refers to the initial, original MTA, i.e., not a revised MTA.}\]
Graph II is a pie chart that shows the number of pilot MTAs that have been filed during the pilot program. During the pilot program, out of 2,832 trials (both completed and pending), in 264 trials (11%) at least one pilot MTA was filed. Of those 264 trials, 220 (8%) have been completed, and 44 (1%) are currently pending.

Graph III is a bar graph detailing the number of AIA trials having a pilot MTA categorized by technology field. In particular, Graph III shows each technology field’s number and corresponding share of total pilot MTAs. Of the 264 trials with at least one pilot MTA, 15 MTAs (6%) were filed in biotechnology/pharmaceutical fields, 16 MTAs (6%) were filed in chemical fields, 137 MTAs (52%) were filed in electrical/computer fields, and 96 (36%) MTAs were filed in mechanical or business methods fields. The share of pilot MTA filings in each technology field roughly corresponds to the share of instituted trials in each technology field, noting that, in the electrical/computer field, the share of pilot MTAs is moderately lower than the share of instituted trials and, in the mechanical/business methods fields, the share of pilot MTAs is moderately higher than the share of instituted trials.


Graph IV is a pie chart that depicts the subsequent developments of both pre-pilot and pilot MTAs in completed trials, focusing on whether the 724 MTAs that patent owners filed in the 724 completed trials were substantively addressed. The Board decided an MTA requesting to substitute claims in 469 of the 724 completed trials (65%). In 181 completed trials (25%), the MTA was not decided because the MTA was withdrawn from consideration, the MTA merely requested adverse judgement or cancellation of the claims, the underlying case was dismissed or terminated (e.g., due to settlement between parties), or the case was consolidated with another case. In the remaining 74 completed trials (10%), the MTA was not reached because the MTA was a contingent MTA, i.e., the final written decision did not address the substitute claims because the corresponding original claims were not found unpatentable.

Graph V is a pie chart that depicts the subsequent developments of pilot MTAs in completed AIA trials, focusing on whether the 220 pilot MTAs that patent owners filed in 220 completed trials were substantively addressed. The Board decided a pilot MTA requesting to substitute claims in 134 of the 220 completed trials (61%). In 71 completed trials (32%), the pilot MTA was not decided because the pilot MTA was withdrawn from consideration; the pilot MTA merely requested adverse judgement or cancellation of the claims; the underlying case was dismissed or terminated (e.g., due to settlement between parties); or the case was consolidated with another case. In

9 As noted above, the patent owners in IPR2017-01405 and IPR2015-01190 filed two separate MTAs. Graph III includes the outcomes for both of them.
the remaining 15 completed trials (7%), the pilot MTA was not reached because it was a contingent MTA and the corresponding original claims were not found unpatentable.

Graph VI is a pie chart that depicts the final outcomes of the 469 pre-pilot and pilot MTAs requesting to substitute claims that the Board substantively decided. Specifically, the chart shows the number of MTAs requesting to substitute claims that the Board granted (i.e., granted in relation to all proposed substitute claims), granted-in-part (i.e., granted in relation to some, but not all, proposed substitute claims), or denied (i.e., not granted in relation to any proposed substitute claims). The Board granted or granted-in-part an MTA in 78 of the 469 trials with an MTA (17%) and denied the MTA in 391 of the 469 trials with an MTA (83%).

Graph VII is a pie chart that depicts the final outcomes of the pilot MTAs requesting to substitute claims that the Board decided. The chart shows that there were 134 trials with a pilot MTA. Of those 134 trials, the Board granted or granted-in-part the pilot MTA in 32 (24%) and denied the pilot MTA in 102 (76%).

Graph VIII is a bar chart consisting of three bars respectively representing the percentages of MTAs that were granted or granted-in part: (1) during both the pre-pilot and pilot program periods, (2) prior to the pilot program, and (3) during the pilot program. Cumulatively, for both the pre-pilot and pilot program periods (i.e., all MTAs filed since October 1, 2012), 17% of MTAs were granted or granted-in-part. During the pre-pilot program period, 14% of MTAs were granted or granted-in-part, compared with 24% of MTAs that have been granted or granted-in-part during the pilot program.
Graph IX is a Venn diagram that shows the number of denials for any proposed substitute claim of a pilot MTA (i.e., the pilot MTA was denied or only granted-in-part) based on the parties’ respective burdens. Specifically, the Venn diagram shows that in 61 (54%) of pilot MTAs, a claim was denied because the petitioner met its burden to show unpatentability; in 22 (19%) of pilot MTAs, a claim was denied because the patent owner failed to meet its burdens on statutory or regulatory requirements; and in 31 (27%) of pilot MTAs, a claim was denied because both the petitioner carried its burden and because the patent owner failed to meet its burden.

Graph X is a bar graph detailing the specific reason(s) that a pilot MTA was denied (for any proposed substitute claim of the pilot MTA) on the basis of unpatentability, as shown by the petitioner or the record. Reasons for denials based on unpatentability have included anticipation or obviousness over prior art under 35 U.S.C. 102 or 103, indefiniteness under 35 U.S.C. 112, non-enablement under 35 U.S.C. 112, or failing to recite statutory subject matter under 35 U.S.C. 101. Further, the graph shows that denials for unpatentability may be due to a single reason or multiple reasons. Of the 82 pilot MTAs with substitute claims that were denied as anticipated or obvious, 61 of them were denied solely for that reason, and the remaining 21 of those pilot MTAs were denied for that reason and another unpatentability reason. Of the 23 pilot MTAs with substitute claims that were denied as indefinite, eight of them were denied solely for that reason, and the remaining 15 of those pilot MTAs were denied for that reason and another unpatentability reason. Of the five pilot MTAs with substitute claims that were denied as non-enabled, one of them was denied solely for that reason, and the remaining four of those pilot MTAs were denied for that reason and another unpatentability reason. Of the four pilot MTAs with substitute claims that were denied as failing to
recite statutory subject matter, one was denied solely for that reason, and the remaining three were denied for that reason and another unpatentability reason.

Graph XI is a bar graph detailing the specific reason(s) that a pilot MTA was denied (for any proposed substitute claim of the MTA) on the basis of the patent owner failing to show that the pilot MTA met statutory and/or regulatory requirements. Reasons for denials based on the pilot MTA failing to meet statutory and/or regulatory requirements have included reciting new matter or lacking written description, substitution of unchallenged claims, not responding to a ground of unpatentability, or claim enlargement. Further, the graph shows that denials for failure to meet statutory and/or regulatory requirements may have been due to a single reason or multiple reasons. Of the 50 pilot MTAs denied for reciting new matter or lacking written description, 41 were denied solely for those reasons, and nine were denied for those reasons and another statutory and regulatory reason. Of the two pilot MTAs denied for substituting unchallenged claims, one was denied solely for that reason, and one was denied for that reason and another statutory and regulatory reason. Of the two pilot MTAs denied for non-responsiveness, both were denied for that reason and another statutory and regulatory reason. Of the 11 MTAs denied for enlarging the scope of the claim, two were denied solely for that reason, and the remaining nine were denied for that reason and another statutory and regulatory reason.

Graph XII is a pie chart that depicts whether patent owners requested preliminary guidance (PG) from the Board in relation to pilot MTAs. For the 264 pilot MTAs filed through March 31, 2023, 232 MTAs (88%) requested PG from the Board, and 32 MTAs (12%) did not.
Graph XIII is a pie chart that depicts a patent owner’s next filing, if any, after filing its original (i.e., initial) pilot MTA, regardless of whether the initial MTA requested PG. As of March 31, 2023, in 128 of 264 cases with a pilot MTA (49%), the patent owner filed a revised MTA. In 62 cases (23%), the patent owner filed a reply in support of its initial MTA. And in 74 cases (28%), the MTA was withdrawn, the case was terminated, or the due date for the patent owner’s next filing had not passed as of March 31, 2023.

Graph XIV shows two pie charts comparing a patent owner’s next filing, if any, based on whether the original (i.e., initial) pilot MTA requested PG. The left pie chart shows that of the 232 cases in which a pilot MTA requested and received PG, the patent owner filed a revised MTA in 127 cases (55%); the patent owner filed a reply in support of its initial MTA in 41 cases (18%); and the MTA was withdrawn, the case was terminated, or the due date for the patent owner’s next filing had not passed as of March 31, 2023, in 64 cases (27%). The right pie chart shows that of the 32 cases in which a pilot MTA did not request (and so did not receive) PG, the patent owner filed a revised MTA in one case (3%); the patent owner filed a reply in support of its initial MTA in 21 cases (66%); and the MTA was withdrawn, the case was terminated, or the due date for the patent owner’s next filing had not passed as of March 31, 2023, in 10 cases (31%). Notably, the charts show that only one revised MTA was filed without previously requesting PG.
Graph XV is a bar chart that shows the total number of MTAs filed by fiscal year, including pre-pilot MTAs, pilot MTAs in which the patent owner requested PG from the Board, and pilot MTAs in which the patent owner did not request PG from the Board.

Graph XVI is a bar chart that shows the number of MTAs filed by fiscal quarter, including pre-pilot MTAs, pilot MTAs in which the patent owner requested PG from the Board, and pilot MTAs in which the patent owner did not request PG from the Board.
Graph I: All MTA filings
(FY13 to FY22 through March: Oct. 1, 2012 to Mar. 31, 2023)

In how many trials are MTAs filed?

- Completed trials without MTA: 6,135 (77%)
- Completed trials with pilot MTA: 1,036 (13%)
- Completed trials with pre-pilot MTA: 504 (6%)
- Pending trials with pilot MTA: 220 (3%)
- Pending trials without MTA: 44 (1%)

Total trials: 7,939

“All MTA” in these graphs refers to the total number of pre-pilot and pilot MTAs filed.
In how many trials are MTAs filed?

- Completed trials without MTA: 2,013 (71%)
- Completed trials with pilot MTA: 555 (20%)
- Pending trials with pilot MTA: 44 (1%)
- Pending trials without MTA: 220 (8%)

2,832 Trials

“Pilot MTA” in these graphs refers to any MTA filed during the MTA Pilot Program, regardless of whether the patent owner used any MTA Pilot Program options.
Graph III: Pilot MTA filings by technology
(Pilot: Mar. 15, 2019 to Mar. 31, 2023)

- Bio/Pharma: 15 (6%)
- Chemical: 16 (6%)
- Design: 0 (0%)
- Electrical/Computer: 137 (52%)
- Mechanical & Business Method: 96 (36%)
"Contingent MTA Not Reached" means the patentability of substitute claims was not reached because the original claims were found not unpatentable.

"Not Decided" refers to cases in which the MTA was withdrawn, the case was consolidated with another case, the patent owner requested adverse judgment/cancellation, or the underlying case was dismissed or terminated, e.g., due to settlement.
Graph V: Subsequent developments of pilot MTAs
(Pilot: Mar. 15, 2019 to Mar. 31, 2023)
Graph VI: Disposition of all MTAs
(FY13 to FY22 through March: Oct. 1, 2012 to Mar. 31, 2023)

- 391 MTAs (83%)
- 469 MTAs
- 47 MTAs (10%)
- 31 MTAs (7%)

Dispositions reflect MTAs substituting claims.
Graph VII: Disposition of pilot MTAs
(Pilot: Mar. 15, 2019 to Mar. 31, 2023)

- 134 MTAs
- 102 Granted (76%)
- 20 Granted in Part (15%)
- 12 Denied (9%)

Dispositions reflect MTAs substituting claims.
Graph VIII: MTA grant rates


Grant rate calculated as the percent of MTA dispositions granted or granted in part.

- Overall: 17%
- Pre-Pilot: 14%
- Pilot: 24%
Graph IX: Denial of claim substitution, by party’s burden (Pilot: Mar. 15, 2019 to Mar. 31, 2023)

This diagram reflects instances where Petitioner met its burden to show unpatentability or Patent Owner failed to meet its burden on the statutory and regulatory requirements.
Graph X: Denial of claim substitution: Petitioner burden (Pilot: Mar. 15, 2019 to Mar. 31, 2023)

- **102/103**: 61 of 82
- **Indefiniteness**: 8
- **Enablement**: 5
- **101**: 4
- **Other**: 0

This diagram reflects reasons why the Petitioner met its burden to show unpatentability.
Graph XI: Denial of claim substitution: Patent Owner burden
(Pilot: Mar. 15, 2019 to Mar. 31, 2023)

New Matter or No Written Description 41 of 50
Substitutes for Unchallenged Claims 2
Nonresponsive to a Ground of Unpatentability 2
Enlarge Scope of Claims 11
Unreasonable Number of Substitute Claims 0
Claims Appendix Defects 0
Other 0

This diagram reflects reasons Patent Owner did not meet its burden on the statutory and regulatory requirements.
Graph XII: Preliminary Guidance (PG) requests during Pilot Program
(Mar. 15, 2019 to Mar. 31, 2023)

- 232 MTAs with PG Request (88%)
- 32 MTAs without PG Request (12%)
Graph XIII: Patent Owner filings after original MTA
(Pilot: Mar. 15, 2019 to Mar. 31, 2023)

- Revised MTAs: 128 (49%)
- Replies: 62 (23%)
- Other (Withdrawn, terminated, No PO filing, awaiting PO filing etc.): 74 (28%)
Graph XIV: Patent Owner filings after original MTA
(Pilot: Mar. 15, 2019 to Mar. 31, 2023)

With Preliminary Guidance

- Revised MTAs
- Replies
- Other (Withdrawn, terminated, No PO filing, awaiting PO filing etc.)

Without Preliminary Guidance

- 1
- 10
- 21
The one pre-pilot MTA filed in FY20 is a corrected MTA of an MTA originally filed in FY19.
Graph XVI: MTAs filed by fiscal quarter
(Pre-Pilot and Pilot: Oct. 1, 2012 to Mar. 31, 2023)

* The one pre-pilot MTA filed in FY20 Q1 is a corrected MTA of an MTA originally filed in FY19.