Detailed Appendices: Patent Fee Proposal

Submitted to the Patent Public Advisory Committee

In accordance with the Leahy-Smith America Invents Act (Public Law 112-29), Section 10

February 7, 2012

See Executive Summary: Patent Fee Proposal for additional information.
This document includes appendices that provide background information and explain details supporting the Executive Summary of the Patent Fee Proposal, presented separately. The following additional documents are an integral part of the proposal:

- Transmittal letter;
- Patent Fee Proposal: Executive Summary;
- Attachment 1 - Table of Patent Fee Changes; and
- Attachment 2 - Aggregate Revenue Calculations.
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Appendix A

Background on USPTO Funding Model

The information included in this appendix provides more details on the manner in which the USPTO’s fees fund operations and the relationship between fees, costs, application filings, and workload.
USPTO Funding Model

- The USPTO operates much like a business in certain respects:
  - Stakeholders request products and services and expect them to be delivered in either the current or future years, in accordance with established performance metrics.
  - The aggregate cost [see Appendix E for details] of providing the products and services (budgetary requirements) are funded from the aggregate revenue [see Appendix F for details] derived from patent fees.

- Application filing rates increase each year, bringing with them both fees (albeit at less than one half the cost to prosecute the application) and the associated workload in patent examination.

- The publication, issue, and maintenance fees from granted patents subsidize the cost of patent examination, including those that are not allowed.

- This fee model, while beneficial for innovation and the U.S. IP system, adds additional complexities when analyzing, forecasting, and monitoring patent fee collections in relation to patent costs.
The Leahy-Smith America Invents Act (AIA) mandates that patent fees be set to recover the prospective aggregate cost of the patent operation – leaving a zero net cost to general taxpayers.

The chart on the following page depicts the relationship between:
- The patent application backlog;
- New requests for products and services (applications) arriving;
- The budgetary requirements (prospective aggregate costs) necessary to address the existing and incoming workload;
- Fees and funding used to offset the cost of operations; and
- The cost drivers in the form of performance targets and commitments.
### USPTO Funding Model

#### Strategic Goals, Objectives, and Performance Targets:
- **10/20 months by 2015/2016**
- **Innovation, Commercialization of New Technologies, and Job Creation**

#### Budgetary Requirements

<table>
<thead>
<tr>
<th>Production Goals</th>
<th>Direct Production</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Support</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Increased Examination Capacity</th>
<th>Current Examination Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and Benefits, Production Overtime, Workload</td>
<td>Contracts, Examiner Support, Pre-Exam, Publication</td>
</tr>
<tr>
<td>Hiring, Financial, Legal, Rent, Utilities, IT User Support, Email, Network, IT Systems Operations and Maintenance</td>
<td></td>
</tr>
</tbody>
</table>

#### Fees and Funding

<table>
<thead>
<tr>
<th>Application Filing Fees</th>
</tr>
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<tbody>
<tr>
<td><strong>Primary Driver:</strong></td>
</tr>
<tr>
<td># of Applications Filed &amp; Economy</td>
</tr>
<tr>
<td>Issue Fees</td>
</tr>
<tr>
<td><strong>Primary Driver:</strong></td>
</tr>
<tr>
<td>Patent Examination Production</td>
</tr>
<tr>
<td>Maintenance Fees</td>
</tr>
<tr>
<td><strong>Primary Driver:</strong></td>
</tr>
<tr>
<td>Patents Issued 3.5, 7.5, and 11.5 years ago; renewal rates; and Economy</td>
</tr>
<tr>
<td>Operating Reserve</td>
</tr>
</tbody>
</table>

#### (Aggregate Cost) vs. (Aggregate Revenue)
USPTO has a backlog of unexamined patent applications in inventory and over a half million more applications arrive each year. The USPTO has committed to examine these applications within a certain timeframe – the performance targets depicted on the right. Achieving these targets facilitates an issued patent in the marketplace to increase commercialization, thereby helping the economy and creating jobs.

Given USPTO production and forecasting models, including the numerous data points monitored regularly, we estimate the level of resources required to meet these dates/targets. The costs of those requirements are estimated – the “purple” budget requirements box (our aggregate cost).

The requirements are funded with (1) application fees collected in the current year, (2) issue fees that relate to the amount of production and the average rate at which applicants pay their issue fees, (3) maintenance fees from patents issued in the past renewed at various rates for each stage, and (4) operating reserve funds carried over from prior years to meet operating requirements.

If we receive more fees than planned, it’s usually due to (a) receiving more applications than planned or (b) our production was greater than planned. In both instances, the aggregate costs within the USPTO increase due to increased workload requirements.

The ability to calibrate our fee structure, coupled with the operating reserve, gives the USPTO the right balance to manage this iterative model.
35 U.S.C. 42 provides for spending of USPTO fees to the extent and in amounts authorized by Congress in appropriations acts. If this spending authority does not keep pace with fee collections, the backlog may grow. This issue was intended to be addressed by the AIA.

The Fee Reserve Fund established by the AIA, combined with spending authority in annual appropriations language, when enacted, is intended to ensure spending authority equals all fees collected.
Appendix B

Background on Fee Setting Methodology and Analysis

The information included in this appendix describes the framework and philosophy of USPTO fee setting, the methodology used to recalibrate the fee structure, and an overview of the various analyses completed to arrive at the proposed fee structure.
Section 10 of AIA authorizes the Director of the USPTO to set or adjust by rule all patent and trademark fees established, authorized, or charged under Title 35 of the U.S. Code and the Trademark Act of 1946 (15 U.S.C. § 1051 et seq.), respectively.

- Authority effective on date of enactment (9/16/2011); Sec. 10(i)(1)
- Authority terminates 7 years after enactment (9/15/2018); Sec. 10(i)(2)
- Patent fees may be set to only recover the aggregate estimated cost of the patent operations, including administrative costs to the USPTO; Sec. 10(a)(2)
- Trademark fees may be set to only recover the aggregate estimated cost of the trademark operations, including administrative costs to the USPTO; Sec. 10(a)(2)

When patent fees for filing, searching, examining, issuing, appealing, and maintaining patent applications and patents are set using this authority, those fees shall be reduced as follows; Sec. 10(b):

- By 50% for small entities that qualify for reduced fees under 35 U.S.C. 41(h)(1)
- By 75% for micro entities as defined in 35 U.S.C. 123, as added by Sec. 10(g) of AIA
Authority and Requirements for Fee Setting

Fee Setting Authority Process

- Annually, the USPTO shall consult with the Patent Public Advisory Committee (PPAC) and the Trademark Public Advisory Committee (TPAC) on the advisability of reducing fees; Sec. 10(c)
- USPTO shall provide PPAC or TPAC (as appropriate) proposed fees not less than 45 days prior to publishing the proposed fee(s) in the Federal Register; Sec. 10 (d)(1)
- PPAC/TPAC shall hold a public hearing related to the proposed fee(s) during the first 30 days of the 45 day period; Sec. 10(d)(2)(B)
- PPAC/TPAC shall make a written report with comments, advice, and recommendations related to the proposed fees available to the public; Sec. 10(d)(3)
  - USPTO shall consider and analyze the report before setting or adjusting the proposed fee(s); Sec. 10(d)(4)
Fee Setting Authority Process (continued)

- USPTO shall publish any proposed fee change in the Federal Register; Sec. 10(e)(1)(A)
  - The proposal shall include the rationale and purpose for the proposal, including possible expectations or benefits; Sec. 10(e)(1)(B)
  - No later than the date published, the USPTO shall notify Congress of the proposed change; Sec. 10(e)(1)(C)

- The public comment period will be not less than 45 days; Sec. 10(e)(2)

- The final rule will be published in the Federal Register and Official Gazette; Sec. 10(e)(3)
  - The new or adjusted fee(s) may not become effective before 45 days after publishing the final rule; Sec. 10(e)(4)(A)
  - Congress may pass a law to disapprove the new or adjusted fee(s); Sec. 10(e)(4)(B)

A high-level timeline of the patent fee setting process is presented on the following page.
There are two periods for public comment: during the (1) Patent Public Advisory Committee (PPAC) Public Hearings and (2) Notice of Proposed Rulemaking (NPRM) public comment period.

The PPAC will issue their report on the proposed fee structure during the NPRM public comment period.
Reformulating the Fee Structure

- The USPTO’s goals in exercising its fee setting authority for patent fees are to:
  - Accelerate the Office’s progress in reducing the backlog of unexamined patent applications and reducing patent application pendency to bring more quality products to market within the timeframes demanded by patent applicants and owners and the public;
  - Realign the fee structure to add processing options during patent application prosecution; and
  - Put the Office on a path to financial sustainability.

- Before beginning to reformulate the patent fee structure, the USPTO defined a fee structure philosophy, which included a goal, objectives, and guiding principles. This philosophy provided the framework upon which analysis and decisions were based.
  - The fee structure philosophy is presented on the following page.
Fee Structure Philosophy

**Goal**
Provide sufficient financial resources to facilitate the effective administration of the United States intellectual property system.

**Explanation of Objectives**

(a) Promoting competitive markets that spur productive entrepreneurship;
(b) Fostering innovation that will lead to technologies of the future; and
(c) Encouraging high-growth and innovation-based small business entrepreneurship.

* Small entrepreneur subsidy * Ease of entry to encourage participation in U.S. innovation * Certain amount of back-end subsidy *

Analyze the full historical cost of USPTO processes compared to the fee amount and recalibrate, where appropriate.

Ensure aggregate fees recover the full prospective aggregate costs of the patent or trademark business operation.

The total aggregate fee revenue should be sufficient to address the cost of workload input on a steady-state basis, plus the necessary costs to achieve strategic objectives such as reducing the application backlog to achieve pendency goals, process improvements, multi-year strategic initiatives, capital improvements, and maintaining an operating reserve.

(a) Submitting applications or taking actions which help to facilitate efficient processing;
(b) Encouraging the prompt conclusion of application prosecution; or
(c) Recovering costs for actions that are strenuous on the patent and trademark systems.

Setting fees for certain processes that provide special (unique) value or advantages for the applicant.
Includes processing choices for the speed in which an application is processed.

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**Objectives**

- Promote the Strategy for American Innovation.
- Align fees with the full cost of products and services.
- Set fees to facilitate the effective administration of the patent and trademark systems.
- Offer application processing options.

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“Innovation ★ IP Protection ★ Jobs ★ Economic Growth”
Fee Setting Components and Methodology

Using the fee structure philosophy as a framework, the USPTO analyzed the many components of fee setting to arrive at the proposed fee structure.

The examination production capacity is the foundation for workload estimates related to the number of times a fee is expected to be collected in a given year. The related aggregate cost for the examination in the multi-year budget must be set at a rate appropriate.

Information from the established process will provide the planned (prospective) aggregate cost of sustaining and improving the USPTO. Fees should be set at a rate to recover the cost of the multi-year budget plan.

Understanding USPTO priorities and plans for the future permits prospective fee amounts to be set at the appropriate aggregate revenue level to pay for achieving strategic objectives and improvements.

Economic data guides fee structure design and is used to calculate elasticity of demand associated with fee changes.

In addition to each of these components, the proposed fee rates will consider the relationships among fees or groups of fees to the ABI cost of the related operational processes.

The data output from Activity Based Information (ABI) cost analyses of fees is referenced for historical cost. This includes the full cost of activities, for example, patent examining costs are burdened to achieve full cost by allocating a portion of rent, utilities, financial, legal, and IT costs, etc.
The fee setting process uses a complex and iterative methodology until the optimal balance between aggregate revenue and aggregate cost is achieved.
The Basics of the Patent Process and Relative Fee Collections

Fees collected for USPTO products and services occur at different intervals over the life of an application filing. The major actions are:

- **Filing**
  - Application Filings (Filing, Search, Examination, Excess Claims, Size Fees)

- **Publication**
  - Responses During Prosecution (Extension of Time, Appeal Fees)

- **Search and Exam**
  - Fees After Examination (Issue and Publication Fees)

- **Issue**

- **Maintenance**
  - Maintaining Exclusive Rights (Maintenance Fees)
Reformulating the Fee Structure

- Completed calculations and analyses of:
  - Historical cost using an activity-based information cost accounting analysis [see Appendix C for details];
    - Identified the full historical cost associated with the activities supporting fees and used it as a reference point to set fees based on both cost and policy factors.
    - The full cost includes compiling all costs that directly support an individual activity, such as patent examination or issuing a patent, and allocating an appropriate share of indirect costs (e.g., general, financial, administrative, and legal expenses).
  - Aggregate prospective costs that will be required beginning in the year fees will be effective [see Appendix E for details];
  - Amount of an operating reserve to ensure a sustainable funding model [see Appendix J for details];
  - Relationships among individual fees and the cost of operational processes;
    - Targeted increases to fees where the gap between cost and current fee rate is greatest.
    - Improved the alignment of the ratio of application filing fees with the ratio of the cost of those activities.
Reformulating the Fee Structure

- Completed calculations and analyses of (continued):
  - Economic and statistical information;
  - Fee changes that could administratively improve application processing;
  - Efficiency of the fee design by identifying and potentially aligning the points in patent prosecution where an applicant may have more information to make a decision about proceeding; and
  - Amount of aggregate revenue [see Appendix F for details] required to fund the aggregate cost of operations [see Appendix E for details] over multiple years.
Examples of Restructuring Analysis

- Analyzed the need to modify the alignment of front-end/back-end fees:
  - Lower front-end fees encourage innovation, publication of new ideas, and knowledge sharing. This is good for the economy by encouraging research and development and promoting competition.
  - A lower front-end fee model requires subsidy on the back-end.
  - Back-end fees (Maintenance Fees) are also good for the economy by:
    - Allowing those who reap financial benefits from their patented invention to “feed” the patent system,
    - Causing patent owners to make an economic decision about the value of their patent each time they pay a renewal fee.

- Evaluated the financial risk of this model and incorporated it into the operating reserve analysis [see Appendix J for details]. Specifically noted:
  - If: Application filings grow at a rate faster than planned, and maintenance fees (which subsidize search and exam fees) do not; or If: Maintenance fee collections are realized at a rate lower than planned;
  - Then: The USPTO will realize a financial risk that may impact the Office’s ability to continue working off the application backlog and/or maintain steady-state operations.
    - A sufficiently funded operating reserve will mitigate this risk until the fee structure can be recalibrated using AIA Section 10 fee setting guidelines.
Appendix C

Background on Activity-Based Information (ABI) Costing Methodology (Unit Cost Calculation)

The information included in this appendix provides an overview of the methodology used by USPTO to determine the unit cost of the patent fees at Appendix G – Rationale for Specific Fee Changes and Attachment 1 – Table of Patent Fee Changes.
A major component of analyzing patent user fees is to identify the full cost of activities associated with the fee rates. This information is used as a reference point when reviewing the alignment of costs with collection points in the patent process.

The Office uses an activity-based costing methodology, which is referred to as activity-based information (ABI) at the USPTO, to determine its historical costs for patent-related activities and outputs (fee services) as well as allocating an appropriate share of administrative costs to determine aggregate cost.

The USPTO’s ABI program has been in place for almost 15 years and is responsible for developing, maintaining and updating cost information for all USPTO organizations. The ABI methodology follows the full cost guidance outlined in Federal managerial cost accounting and fee setting standards.

USPTO’s ABI program is widely recognized to be one of the best in the Federal government and also compares well with commercial implementations of ABC. The USPTO ABI program has been the subject of a special Inspector General study, and is examined each year as part of the financial statement audit. There has never been a material weakness in internal controls reported concerning the ABI methodology or data.
An independent verification and validation study was also conducted on the ABI program in 2009, which identified the USPTO ABI program as a best practice in the Federal government.

Since the inception of the program, ABI methodologies have continuously improved and are consistently used in fee setting, budgeting, performance reporting, financial statement (Statement of Net Costs) preparation, and ad-hoc cost analyses and studies.

To facilitate agency-wide collaboration in the ABI program, the ABI Steering Committee was established and is the official rulemaking body for all issues related to ABI at the USPTO. This committee is comprised of representatives from all organizations at the USPTO and all changes to ABI methodology or ABI models are approved by the Steering Committee.
USPTO ABI Costing Methodology

ABI uses a two-step methodology to assign costs to its work activities and then to its related outputs.

- Expenses (also referred to as costs) are those things on which an organization spends its budget, such as salaries and benefits for employees, contractor costs, rent, equipment, etc.
- Activities represent the work that people in the organization undertake (e.g., examining a patent application, printing a patent, fee processing).
- Outputs are the goods or services that the organization produces through its activities (e.g., completed patent applications).

- The cost analysis and all historical expenses referenced in this proposal are based upon FY 2010 data as FY 2010 is the most recent fiscal year for which complete cost and production measure information was available during analysis.
The ABI analysis starts with extracting expense information from the USPTO’s core financial system. This information is “tagged” with identifiers such as the organization that spent the money, the activities the money was spent for, and the type of expense (e.g., salaries, benefits, printing, rent).

When compiling patent costs, any spending by, or directly on behalf of, the patent organization are considered direct expenses. These expenses do not require any type of allocation methodology to aggregate them with patent costs.

Indirect expenses are those expenses that originate in one organization, but are allocated to the patent operation because they indirectly facilitate patent services or products (e.g., IT help desk support, human resources hiring support, invoice processing).

Indirect expenses require a “driver” of costs (e.g., help desk calls by organization, number of hires, or invoices processed) to allocate the indirect expenses to the patent operation.

Expenses within the patent organization are compiled into “categories” of spending called processes and activities – “examination” is an example of a process and “perform initial search” is an example of an activity.

All direct and indirect costs are aggregated into the activities.
The direct cost for an activity plus the indirect costs is known as the “fully burdened” cost for that activity.

The “fully burdened” cost for an activity is then divided by workload measures (number of outputs for that particular activity completed) to arrive at the fully burdened unit cost for that activity.

In some cases, the cost for a particular process is then determined by ascertaining which activities occur for the process, and how often each activity occurs. This is known as the “frequency factor” and is based on a statistical analysis of a one year set of completed applications.

During the last five years (FY 2007 thru FY 2011), on average, direct expenses accounted for 83% of the Patents organization’s costs while the remaining 17% were classified as indirect.

Examples of the unit cost calculations for filing, search and exam fees can be found on the following pages.
<table>
<thead>
<tr>
<th>Fee Code</th>
<th>Fee Code Description</th>
<th>Patent Activity</th>
<th>FY 2010 Activity Costs</th>
<th>Driver Volume</th>
<th>FY10 Activity Unit Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1011/2011</td>
<td>Basic filing fee - Utility</td>
<td>1.01 - Process Incoming Paper</td>
<td>$ 1,276,181</td>
<td>541,933</td>
<td>$ 2.35</td>
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<td></td>
<td>1.02 - Process Application Fees</td>
<td>$ 741,695</td>
<td>541,933</td>
<td>$ 1.37</td>
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<td>1.03 - Application Indexing/Scanning</td>
<td>$ 38,665,946</td>
<td>543,021</td>
<td>$ 71.21</td>
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<td>1.04 - Routing Classification/Security Screening</td>
<td>$ 2,081,516</td>
<td>540,054</td>
<td>$ 3.85</td>
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<td>1.05 - Second-level Security Screening and L&amp;R Processing</td>
<td>$ 680,481</td>
<td>477,194</td>
<td>$ 1.43</td>
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<td></td>
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<td>1.06 - Conduct Formalities Review</td>
<td>$ 15,929,082</td>
<td>433,867</td>
<td>$ 36.71</td>
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<td>1.07 - Customer Service (Pre- and Post-Examination)</td>
<td>$ 2,613,144</td>
<td>497,167</td>
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<td></td>
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<td>2.01 - Tech Support Application Process</td>
<td>$ 31,054,194</td>
<td>357,754</td>
<td>$ 86.80</td>
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<td>2.02 - Classification and Assignment by Art Unit</td>
<td>$ 12,169,428</td>
<td>357,754</td>
<td>$ 34.02</td>
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<td><strong>1011/2011 Total</strong></td>
<td></td>
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<td><strong>$ 243.00</strong></td>
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### USPTO ABI Costing Methodology – Example: Utility Search & Exam

<table>
<thead>
<tr>
<th>Fee Code</th>
<th>Fee Code Description</th>
<th>Patent Activity</th>
<th>Activity Costs</th>
<th>Driver Volume</th>
<th>FY10 Activity Unit Rate</th>
<th>Frequency Factor Adjustment</th>
<th>FY10 Final Adjusted Unit Rate</th>
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</thead>
<tbody>
<tr>
<td>1111/2111</td>
<td>Utility Search Fee</td>
<td>2.05 - Perform Initial Search</td>
<td>$ 468,693,609</td>
<td>320,589</td>
<td>$1,461.98</td>
<td>96.98%</td>
<td>$ 1,417.86</td>
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<td></td>
<td>2.09 - Perform Subsequent Search</td>
<td>$ 160,863,764</td>
<td>626,631</td>
<td>$ 256.71</td>
<td>107.76%</td>
<td>$ 276.62</td>
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<td><strong>Total</strong></td>
<td><strong>1111/2111 Total</strong></td>
<td><strong>$ 1,694.48</strong></td>
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<tr>
<td>1311/2311</td>
<td>Utility Examination Fee</td>
<td>2.03 - Analyze New Application</td>
<td>$ 175,857,475</td>
<td>320,597</td>
<td>$ 548.53</td>
<td>96.98%</td>
<td>$ 531.98</td>
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<td>2.04 - Analyze New Application - Restrictions/Unity of Invention</td>
<td>$ 12,354,684</td>
<td>84,522</td>
<td>$ 146.17</td>
<td>24.41%</td>
<td>$ 35.68</td>
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<td>2.06 - Prepare Initial FAOM (excluding RCEs)</td>
<td>$ 247,036,124</td>
<td>320,597</td>
<td>$ 770.55</td>
<td>96.98%</td>
<td>$ 747.30</td>
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<td>2.07 - Consider IDS (Information Disclosure Statement)</td>
<td>$ 62,945,800</td>
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<td>$ 167.30</td>
<td>92.80%</td>
<td>$ 155.25</td>
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<td>2.08 - Prepare All Subsequent Actions</td>
<td>$ 243,248,528</td>
<td>626,631</td>
<td>$ 388.18</td>
<td>107.76%</td>
<td>$ 418.29</td>
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<td>2.10 - Prepare After Final Response</td>
<td>$ 25,427,904</td>
<td>78,762</td>
<td>$ 322.84</td>
<td>6.52%</td>
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<td>2.11 - Applicant Interviews</td>
<td>$ 18,903,087</td>
<td>123,784</td>
<td>$ 152.71</td>
<td>24.54%</td>
<td>$ 37.47</td>
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<td>2.12 - Internal Conferences</td>
<td>$ 2,612,818</td>
<td>25,419</td>
<td>$ 102.79</td>
<td>3.45%</td>
<td>$ 3.55</td>
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<td>2.13 - Communications to the Board of Appeals</td>
<td>$ 13,590,747</td>
<td>12,834</td>
<td>$1,058.96</td>
<td>1.73%</td>
<td>$ 18.27</td>
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<td><strong>Total</strong></td>
<td><strong>1311/2311 Total</strong></td>
<td><strong>$ 1,968.84</strong></td>
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</tbody>
</table>
Appendix D

Background on Patent Fees

The information included in this appendix provides an overview of the current USPTO fee structure, including historical trends of fees and fee collections.
As of the end of FY 2011 (September 30, 2011), the USPTO had about 242 different patent user fees.

- 41% regulatory fees and 59% statutory fees.

- In FY 2011, statutory fee revenue accounted for about 80% of the aggregate patent revenue and regulatory fees accounted for about 20%.

- Most statutory fees provide for a 50% discount to small entities.

- There currently is no small entity discount for regulatory fees, with an exception for Requests for Continued Examination (RCE).

- The most recent regulatory fee change was to PCT international fees in FY 2008.
Patent Filings by Type

Fiscal Year Patent Filings by Type

- Basic Filing
- RCE
- Continuations
- Divisional
- Continuation-In-Part
- PCT National Stage
Patent Fee Collections

Monthly Patent Fee Collections (2009-2011)
Maintenance of Patents

Renewal Rates by Stage (1998-2011)
% renewed as a portion of patents issued

First Stage Renewal Rate
Second Stage Renewal Rate
Third Stage Renewal Rate
Appendix E

Aggregate Cost Information

The information included in this appendix provides additional details related to the prospective aggregate cost that will be paid for with the aggregate revenue derived from the proposed fee structure.

This appendix also outlines the assumptions for patent filing, workload, production, and performance, which provide the underlying foundation for calculating aggregate cost.
In FY 2013, the USPTO expects to spend $2.549 billion toward three of the four highest priorities of the patent operation – The Administration Priority Goal of patent pendency and backlog reduction; information technology; and America Invents Act (AIA) implementation. Any fees collected in excess of the $2.549 billion will be used to address the fourth high priority – sustainable funding – by depositing unspent fees in the operating reserve to carry over into future years.

Patent Pendency and Backlog Reduction

By the end of FY 2013, the USPTO expects to spend $1.7 billion with about 10,400 personnel on board for patent examining activities.

This includes hiring 1,500 new patent examiners during FY 2013. With this hiring, the USPTO will have hired more than 3,800 patent examiners since FY 2011 to expand examination capacity sufficient to reduce the application backlog and maintain pendency thereafter.

The additional revenue generated with the proposed fee structure will enable the USPTO to continue paying for this increased examination capacity in the out years.

Increased production units and reduced patent pendency and application backlog are the most significant benefits realized from generating and using these additional resources. The chart on the following page outlines the annual improvements to reach a 10.1 months average first action pendency in FY 2015, an 18.3 months average total pendency by FY 2016, and reducing the patent application backlog in half by FY 2015.
## Aggregate Costs – Patent Goals and Production Statistics

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em><em>UPR</em> Units of Production</em>*</td>
<td>502,488</td>
<td>539,700</td>
<td>620,600</td>
<td>671,900</td>
<td>694,200</td>
<td>645,200</td>
<td>656,200</td>
</tr>
<tr>
<td><strong>UPR Applications Filed</strong></td>
<td>506,924</td>
<td>533,300</td>
<td>565,300</td>
<td>599,200</td>
<td>632,200</td>
<td>666,900</td>
<td>700,300</td>
</tr>
<tr>
<td><strong>UPR Applications Filed Percent Change Over Previous FY</strong></td>
<td>2.95</td>
<td>5.2</td>
<td>6.0</td>
<td>6.0</td>
<td>5.5</td>
<td>5.5</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>UPR Disposals</strong></td>
<td>499,930</td>
<td>539,700</td>
<td>620,600</td>
<td>671,900</td>
<td>694,200</td>
<td>645,200</td>
<td>656,200</td>
</tr>
<tr>
<td><strong>UPR Issues</strong></td>
<td>223,135</td>
<td>250,600</td>
<td>302,000</td>
<td>328,900</td>
<td>337,900</td>
<td>302,200</td>
<td>304,000</td>
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<tr>
<td><strong>UPR First Actions</strong></td>
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<td>539,700</td>
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<td>694,200</td>
<td>645,200</td>
<td>656,200</td>
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<tr>
<td><strong>UPR Examiners On-Board at End-of-Year</strong></td>
<td>6,685</td>
<td>7,800</td>
<td>8,700</td>
<td>8,600</td>
<td>8,300</td>
<td>8,300</td>
<td>8,200</td>
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<tr>
<td><strong>Applications Awaiting First Office Action</strong></td>
<td>669,625</td>
<td>621,800</td>
<td>529,100</td>
<td>421,600</td>
<td>329,500</td>
<td>328,400</td>
<td>358,000</td>
</tr>
<tr>
<td><strong>Inventory Position (Months)</strong></td>
<td>21.2</td>
<td>17.9</td>
<td>12.9</td>
<td>9.5</td>
<td>7.3</td>
<td>8.3</td>
<td>9.2</td>
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<tr>
<td><strong>Total Cost Per Patent Production Unit</strong></td>
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<td>$3,910</td>
<td>$3,915</td>
<td>$3,846</td>
<td>$3,849</td>
<td>$4,148</td>
<td>$4,190</td>
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<tr>
<td><strong>Patent Quality Composite</strong></td>
<td>30.7</td>
<td>48-56</td>
<td>65-73</td>
<td>83-91</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td><strong>Average First Action Pendency/UPR (Months)</strong></td>
<td>28.0</td>
<td>22.5</td>
<td>16.9</td>
<td>15.9</td>
<td>10.1</td>
<td>9.4</td>
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<tr>
<td><strong>Average Total Pendency/UPR (Months)</strong></td>
<td>33.7</td>
<td>34.7</td>
<td>30.1</td>
<td>24.6</td>
<td>22.9</td>
<td>18.3</td>
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<tr>
<td><strong>Applications Filed Electronically (Percent)</strong></td>
<td>93.1</td>
<td>96.0</td>
<td>97.0</td>
<td>97.0</td>
<td>97.0</td>
<td>97.0</td>
<td>97.0</td>
</tr>
</tbody>
</table>

*UPR – Utility, Plant, and Reissue*
Aggregate Costs

- **Information Technology**
  - During FY 2013, the USPTO expects to spend $161 million with about 350 personnel on board for information resources that contribute to patent operations directly.
  - This includes modernizing the patent systems through the Patents End to End (PE2E) IT capability. For applicants, PE2E will transition the patent application and examination process to one in which applications are submitted, handled, and prosecuted electronically. This means less manual scanning, less uploading of multiple file types to multiple systems, the ability to make amendments and changes to a copy of an original document, and comparison tools to make it easy to identify differences between original and amended claims, among other improvements.
  - In addition, patent fees are expected to pay for about $209 million toward the USPTO’s IT infrastructure systems and support activities. These include items such as the network supporting the Alexandria campus, teleworking, a nationwide workforce, data center operations, email systems, and cyber security.

- **AIA Implementation**
  - The aggregate costs in support of the patent examination aspects of AIA implementation, such as supplemental examination and first-inventor-to-file, are included within the patent examining activity discussed on the previous page.
  - The costs in support of the contested cases activities, such as post grant and inter partes reviews, are included within the patent appeals and interferences activity.
  - During FY 2013, the USPTO expects to spend $60 million with about 370 personnel for all activities related to appeals and the new contested case provisions of the AIA.
Aggregate Costs

- **Sustainable Funding**
  - During FY 2013, the USPTO expects to deposit about $137 million of unspent fees in the operating reserve.
  - Building an operating reserve will enable the patent operation to meet pending workload needs and operate through significant temporary changes in revenue or application volumes.

- **Other Activities**
  - Patent fees also support the USPTO IP policy, protection, and enforcement activities. The USPTO estimates that it will spend about $49 million in this area during FY 2013, including:
    - Carrying out the U.S. Government’s obligations to provide IP technical assistance throughout the world, such as IP policy matters, international relations, treaty obligations, and patent cooperative activities.
    - Providing technical training, assistance, and capacity building programs to foreign government officials responsible for IP policy and enforcement.
    - Maintaining an IP Rights Attaché program to promote the value and importance of strong IP protection and enforcement internationally for the benefit of U.S. interests.
  - Finally, patent fees recover other general support costs that are necessary for the patent business to operate. The USPTO estimates that it will spend about $337 million – of which over 70% will be for mandatory cross-cutting expenses such as rent, utilities, telecommunications, and lease management – for these activities. The additional areas funded by these patent fees are:
    - Legal, financial, human resources, administrative, and communication services.

- An overview of the distribution of aggregate costs supporting the patent operation can be found on the following page.
A majority of the fees used to support the patent operation are spent on activities that directly support patent examination and information technology (patent information resources and IT infrastructure).

Only a small percentage of patent fees are used to support underlying mission support services.

* MGE includes cross-cutting expenses such as rent, utilities, telecommunications, and lease management.
The USPTO 2010 – 2015 Strategic Plan is the foundation for defining priorities and activities upon which the USPTO calculates its aggregate costs to support the goals and objectives of the multi-year plan.

When calculating aggregate costs, the USPTO reviews its key strategic initiatives, goals, and performance targets to ensure they continue to be aligned with annual plans – reassessments are made as necessary.

The calculations supporting the most significant patent operating cost – patent examining activities (about 70% of the total) – begin with analyzing and forecasting the estimated application filings coming into the USPTO and the necessary examination capacity, with the associated production and workload statistics. These statistics are monetized by estimating the salaries and benefits that will be required during FY 2013 for the personnel carrying out the examination activities, other non-salaries and benefits costs, such as the production workload contracts and the cost of printing patents.

When the prospective costs are calculated, the USPTO begins with the cost for the activity at the existing production levels and calculates the cost associated with any increases or decreases to those activities that would be necessary to achieve the desired performance target.
Aggregate Costs – Calculation Methodology

- Aside from analyzing the examination capacity, this same process is repeated for each of the activities supporting the patent operation (e.g., appeals and interferences, information technology (IT) resources, and operational support).
- All of these estimated prospective costs, including the optimal operating reserve balance, are summarized to obtain the total aggregate prospective cost for the patent operation.
- This process takes several months to complete. Requests and suggestions for increases and decreases to specific activities, or new initiatives, are reviewed and approved at the executive level.
- The USPTO continuously reviews its activities to identify candidates for cost savings that can be redirected to higher priority items. In FY 2013, the USPTO identified a little over $16 million in cost savings that have been redirected to other priority items.
- The graphic on the following page outlines the cost environment of the USPTO. A majority of the USPTO’s spending is on items for which the USPTO has little discretion in choosing to pay for, such as patent examination and printing, maintaining and operating supporting IT systems, rent, and utilities.
The vast majority of USPTO’s spending is for items that the Office has little discretion in choosing to pay. There is flexibility in only a small portion of the USPTO’s aggregate cost.

**Low discretion items = 94%**
- Compensation and Benefits (70%)
- Contracts (14%)
- Rent and Utilities (6%)
- Printing (4%)

**Higher discretion items = 6%**
- Other Contracts (2%)
- Equipment (3%)
- Other (1%)
Appendix F

Aggregate Revenue Information

The information included in this appendix provides an overview of the methodology used to forecast aggregate revenue.

A detailed calculation of aggregate revenue can be found in Attachment 2 – *Aggregate Revenue Calculations*. 
When forecasting fees to calculate aggregate revenue, the USPTO considers many factors, such as:

- The global and national economic outlook, by analyzing forecasts of Gross Domestic Product (GDP), research and development (R&D), consumer price index (CPI) and venture capital investments as indicators of future applicant demand;
  - This information is also used as an input into the patent production forecasting.
- The future of the IP environment, by examining legislative, regulatory and judicial actions/changes and procedural/process improvements that may affect demand for IP rights. This includes strategic initiatives, management of resources, and fee rate adjustments;
- The Office’s historical experience by analyzing events and trends to help predict future demand for IP and applicant behavior; and
- Stakeholder input.
Arriving at Fee Collection Projections

- The USPTO uses information compiled from reviewing the factors defined on the previous slide, coupled with internal data to:
  - Estimate application filing and major patent process workloads;
  - Apply the historical trends (relationships among workloads to demand for products and services) to future events, when applicable;
  - Classify information by applicant type, where applicable (entity, manner, origin, discipline);
  - Incorporate timing of fee payments and the applicant behavior associated with anticipated fee rate or legislative/regulatory/procedural adjustments;
  - Estimate a specific workload or forecasting assumption for each fee code; and
  - Multiply the forecasting assumption by the fee rate to calculate the estimated aggregate revenue for the particular fee.

- Each of the aggregate revenues for the individual fees are summed to calculate the total aggregate revenue [see Attachment 2].
Proposed Fee Structure Changes – Changes in Aggregate Revenue

The following pages summarize the composition of the aggregate patent revenue as it transitions from the current fee structure to the proposed fee structure in FY 2014.

Each page presents the percentage of revenue (fee collections) in each of the major patent fee categories for FY 2011 (actual revenue) and FY 2012 – FY 2014 (projected revenue). The following should be noted when reviewing the data:

- FY 2011 actual revenue includes an anomaly due to the 15% interim surcharge that went into effect on 9/26/2011 and caused a significant influx of fee collections (over $130 million) from 9/16/2011 – 9/25/2011. This is primarily evident in the maintenance fee category. In addition, by comparison to the large influx of maintenance fees, application filing fees as a percentage of total revenue appears uncharacteristically low.

- FY 2012 projected revenue is unusually low, primarily evident in the maintenance fee category, due to the influx of fees in FY 2011 described above.

- The proposed fee structure will be effective in the middle of FY 2013. Maintenance fees in FY 2013 are expected to be low due to the sluggish year in FY 2009 (due to the economic recession).

- The publication and issue fees decrease in FY 2014, which is evidenced by the shift in filing/search/exam and issue fees.
Proposed Fee Structure – *Projected* Trends of Aggregate Patent Fee Revenue

- Patent application fees (which include filing/search/exam, application size, excess claims, and RCEs) will grow from 24% of aggregate revenue in FY 2011 to 34% in FY 2014.
- Patent Issue/Publication fees will decrease from about 19% of aggregate revenue in FY 2011 to just over 11% in FY 2014, reflecting the decision to combine the Issue and Pre-Grant Publication fee and reduce the combined cost by 53% beginning January 1, 2014.
- The percentage of aggregate revenue from maintenance fee revenue is larger (40%) than later fiscal years because of the influx of fee payments before the 15% surcharge under AIA.
- Aggregate revenue from most other fee categories remains stable over the 4-year period.

* Further details of these two fee categories can be found on the following two slides.
Within the category of patent application fees, the percentage of aggregate revenue for basic filing, search, and exam will decrease by about 6%.

Aggregate revenue from RCEs will remain stable even though the proposed fee will be increased to achieve cost recovery.

The proportion of aggregate revenue from excess claims and application size fees will decrease slightly, from 16% to 13% over the period.

Fee revenue from new AIA procedures (e.g., supplemental exam, post-grant review, etc.) will increase significantly over the period. These fees are associated with more complex prosecution, and the fee rates are set to, at a minimum, achieve cost recovery.
Proposed Fee Structure – *Projected Trends of Aggregate Maintenance Fee Revenue*

- First Stage maintenance fees as a proportion of total maintenance fee revenue consistently increases from FY 2011 through FY 2014.
- Second Stage maintenance fees decrease as a proportion of total maintenance fee revenue, due to the timing of lower First Stage renewal rates in 2009 and the proposed increase in fees (elasticity).
- Third Stage maintenance fees decrease as a proportion of total maintenance fees due to the proposed fee increase (elasticity). Third Stage fees are more responsive to fee changes compared to First Stage and Second Stage fees.
Appendix G
Rationale for Specific Fee Changes

The information included in this appendix outlines the rationale for the most significant fee changes. A description of the criteria for identifying the most significant fee changes can also be found in this appendix.

All fee changes, including identification of the more specific changes, can be found in Attachment 1 – *Table of Patent Fee Changes*. 
Overall Rationale

- The mission of the USPTO is: Fostering innovation, competitiveness, and economic growth domestically and abroad by delivering high quality and timely examination of patent and trademark applications, guiding domestic and international intellectual property policy, and delivering intellectual property information and education worldwide, with a highly skilled, diverse workforce.

  Fee setting provides the USPTO with an opportunity to improve on accomplishing our mission by funding the USPTO at a level sufficient to reduce the patent application backlog and improve the quality of patent applications, while providing sufficient financial resources to facilitate the effective administration of the U.S. IP system and more certainty to stakeholders as they innovate.

- The USPTO can set fees in many different ways to generate aggregate revenue necessary to fund the cost of operations. For example, fees that are collected prior to disposal of an application can be set higher or lower compared to fees that are collected after disposal.

- While considering aggregate revenue, the USPTO also considered the impact of different fee structures on innovation and the economy.
Overall Rationale

- The Office looked at the different tradeoffs and benefits in fee setting and considered how to encourage beneficial innovation without excessively encouraging patents that tend to interfere with innovation. For example, a fee structure where fees paid through patent issue are relatively low encourages innovation by making it less expensive for inventors to obtain a patent. Likewise, a structure where maintenance fees are increasingly more costly and structured to subsidize patent prosecution encourages patent holders to remove low value patents from the patent system.

- The rationale and benefits supporting individual fee changes on the following pages abide by this general, overarching fee structure rationale.

- A specific rationale is listed on the following pages for at least any large entity fee listed in Attachment 1 – *Table of Patent Fee Changes*, that increased by at least 5% and $10.
Basic Filing, Search, and Exam Fees

Current fee rates only recover about one third of the cost to prosecute an application. The cost and fee rates associated with the stages of prosecution are also not aligned. For example, 51% of the cost to prosecute an application is estimated to occur during examination while only 20% of the fee amount is derived from the examination fee.

The proposed change in the filing, search, and exam fees brings the examination fee more in line with the cost to examine. In addition, the ratio of filing, search and exam fees is aligned with the cost of filing being the least expensive and examination being the most expensive.

While these changes increase the filing-time fees, they remain at less than 50% of the total cost to prosecute – striking a balance between operational efficiency, financial sustainability, and low cost of entry into the U.S. patent system.

Filing, search and exam fees for Design and Plant patents are also adjusted so the proportion of the filing, search and exam fees are the same as the Utility filing, search and exam fee proportions.

---

1 Please refer to the Table of Patent Fee Changes in Attachment 1 for a complete list of filing, search, and exam fee changes, including new micro entity fees. A description of the elasticity calculations can be found at Appendix I.
After experience conducting the prioritized examination program for the past four months, the USPTO determined that it was able to reduce the fee for prioritized exam without impacting the pendency of applications processed under non-prioritized examination timeline.

In addition, current participation in the program is lower than the 10,000 applications originally planned for in a single year. It is anticipated that a lower fee will make the program a viable option for those applicants that may be deliberating over the cost-benefit of prioritizing the examination of an application.

- There is no change in demand assumed with this fee decrease because the Office does not expect requests for prioritized examination to exceed the ceiling for receiving requests.

Considering the large entity filing, search, and exam fees proposed on the previous page, an applicant choosing to prioritize would pay $210 less ($6,050 v. $5,840) than the fee amount under the existing fee structure.

---

1 Please refer to the Table of Patent Fee Changes in Attachment 1 for a complete list of prioritized examination fee changes, including new micro entity fees.
An additional fee is charged for any application, the specification and drawings of which exceed 100 sheets of paper. The fee is charged for each additional 50 sheets of paper or fraction thereof.

Proposing to increase the fee to:

- Facilitate an efficient and compact application examination process, which benefits the applicant and the USPTO; and
- Ensure the effective administration of patent prosecution.

Examiners are able to examine a more succinct application faster and it is expected that they would make fewer errors.

---

<table>
<thead>
<tr>
<th>Fee Code</th>
<th>Description1</th>
<th>Current Large Entity Fee</th>
<th>Proposed Large Entity Fee</th>
<th>Dollar Change</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1081/2081</td>
<td>Utility Application Size Fee – for each additional 50 sheets that exceeds 100 sheets</td>
<td>$310</td>
<td>$400</td>
<td>+ $90</td>
<td>+29%</td>
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</tbody>
</table>

1 Please refer to the Table of Patent Fee Changes in Attachment 1 for a complete list of application size fee changes, including new micro entity fees. A description of the elasticity calculations can be found at Appendix I.
Excess Claims Fees

A fee is charged for filing, or later presentation at any other time, of each claim in independent form in excess of 3, and for filing, or later presentation at any other time, of each claim (whether dependent or independent) in excess of 20. This per claim fee is charged at filing when there are more than three independent claims, and when there are more than 20 total claims.

Proposing to increase the fee to:

- Facilitate an efficient and compact application examination process, which benefits the applicant and the USPTO;
- Ensure the effective administration of patent prosecution; and
- Encourage application filing with the most prudent number of claims to enable prompt conclusion of application processing.

Examiners are able to examine a more succinct application faster and prevent errors.

---

1 Please refer to the Table of Patent Fee Changes in Attachment 1 for a complete list of excess claims fee changes, including new micro entity fees. A description of the elasticity calculations can be found at Appendix I.
Extension of Time Fees

If an applicant is required to reply within a non-statutory or shortened statutory time period, the applicant can extend the time period for reply by filing a petition for an extension of time and paying the requisite fee.

Extensions of time may be automatically authorized at the time an application is filed or requested as needed during prosecution via a petition. However, in only a few circumstances is an actual petition required because in most circumstances the mere payment of the appropriate extension fee is treated as a constructive petition for an extension.

Proposing to increase the fee to facilitate an efficient and prompt conclusion of application processing, which assists in reducing patent pendency.

<table>
<thead>
<tr>
<th>Fee Code</th>
<th>Description</th>
<th>Current Large Entity Fee</th>
<th>Proposed Large Entity Fee</th>
<th>Dollar Change</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1251/2251</td>
<td>Extensions for Response within 1st month</td>
<td>$150</td>
<td>$200</td>
<td>+ $50</td>
<td>+33%</td>
</tr>
<tr>
<td>1252/2252</td>
<td>Extensions for Response within 2nd month</td>
<td>$560</td>
<td>$600</td>
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<td>+7%</td>
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<tr>
<td>1253/2253</td>
<td>Extensions for Response within 3rd month</td>
<td>$1,270</td>
<td>$1,400</td>
<td>+ $130</td>
<td>+10%</td>
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<td>1254/2254</td>
<td>Extensions for Response within 4th month</td>
<td>$1,980</td>
<td>$2,200</td>
<td>+ $220</td>
<td>+11%</td>
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<tr>
<td>1255/2255</td>
<td>Extensions for Response within 5th month</td>
<td>$2,690</td>
<td>$3,000</td>
<td>+ $310</td>
<td>+12%</td>
</tr>
</tbody>
</table>

1 Please refer to the Table of Patent Fee Changes in Attachment 1 for a complete list of extension of time fee changes, including new micro entity fees.
# Request for Continued Examination Fees

An applicant may request continued examination of an application in which prosecution is closed (e.g., the application is under final rejection or a notice of allowance) by filing a submission and paying a specified fee.

The historical cost represents the incremental cost to the USPTO to complete a single application with one request for continued examination (RCE) over a single application with no RCE.

The USPTO recognizes that intuitively, the cost to the Office to complete an RCE should be less than the cost to complete a new application because an RCE is continuing from work already performed on the original application. The Office’s historical cost data also demonstrates this, with the cost to process an RCE being 43% of the cost to prosecute a new application.

The USPTO is proposing to set the RCE at the FY 2010 cost recovery level.

When an applicant does not agree with a final rejection notice, s/he also has the option of filing a notice of appeal, for which the proposed fee is less than the fee proposed for RCE (see page 64). The USPTO proposed this fee relationship to ensure the applicant has a viable option to dispute a final rejection when the applicant believes the examiner has ruled in error.

---

<table>
<thead>
<tr>
<th>Fee Code</th>
<th>Description</th>
<th>Historical Cost (2010)</th>
<th>Current Large Entity Fee</th>
<th>Proposed Large Entity Fee</th>
<th>Dollar Change</th>
<th>Percent Change</th>
<th>Elasticity Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1801/2801</td>
<td>Request for Continued Examination</td>
<td>$1,696</td>
<td>$930</td>
<td>$1,700</td>
<td>+ $770</td>
<td>+83%</td>
<td>8% Decrease in RCE Filings</td>
</tr>
</tbody>
</table>

---

1 Please refer to the Table of Patent Fee Changes in Attachment 1 for a complete list of RCE fee changes, including new micro entity fees. A description of the elasticity calculations can be found at Appendix I.
Pre-grant Publication and Issue Fees

Since both the PGPub and Issue fees must be paid before a patent is granted, the proposal combines the fees to begin streamlining the fee structure.

The USPTO is proposing to decrease the combined fee to a relatively low level because:
- The patenting system benefits from publishing applications;
- The cost of publishing and issuing a patent is relatively low and the reduction contributes to the alignment of front-end to back-end fees, and offsets the increase in filing-time fees;
- Research shows that patent owners do not typically possess enough information to know the value of their invention until a few years after a patent is granted. Decreasing the issue fee helps inventors financially at a time when the marketability of their invention is highly uncertain; and
- The payment of an issue fee is important to providing a window to future maintenance fee payments and, in some ways, the publication and issue fees could be viewed as stage 0 maintenance fees.

---

1 Please refer to the Table of Patent Fee Changes in Attachment 1 for a complete list of PGPub and issue fee changes, including new micro entity fees.
Maintenance fees are required to be paid at defined intervals after the grant of a utility patent in order to keep the patent in force, maintaining exclusive intellectual property rights.

The increase in maintenance fees is commensurate with subsidizing the prosecution of a patent application and ensuring the USPTO has sufficient aggregate revenue to recover the aggregate cost of operations.

In addition, the proposed changes to the maintenance fees also considered the intellectual property system as a whole and the economic impact of patents in force. The maintenance fee system is designed assuming that maintenance fees are paid only by patent owners who believe the value of the patent is much higher than the renewal fee.

The early maintenance fees are lower because the uncertainty associated with the value of the patent is higher. As the value becomes more certain, the maintenance fee increases, which permits owners to make decisions on the value of maintaining a patent in force.

Those who find the patent of high commercial value will also find the $7,600 3rd stage maintenance fee to be valuable compared to the returns on investment.

Those who hold low-value patents will see the $7,600 3rd stage maintenance fee as an opportunity to self-select out of the IP system and encourage follow-on innovation.

---

1 Please refer to the Table of Patent Fee Changes in Attachment 1 for a complete list of maintenance fee changes, including new micro entity fees. A description of the elasticity calculations can be found at Appendix I.
Appeals Fees

<table>
<thead>
<tr>
<th>Fee Code</th>
<th>Description1</th>
<th>Historical Cost (2010)</th>
<th>Current Large Entity Fee</th>
<th>Proposed Large Entity Fee*</th>
<th>Dollar Change</th>
<th>Percent Change</th>
<th>Elasticity Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1401/2401</td>
<td>Notice of Appeal (NOA)</td>
<td>$4,960</td>
<td>$620</td>
<td>$1,500</td>
<td>$880</td>
<td>142%</td>
<td>No Change in Demand</td>
</tr>
<tr>
<td>1402/2402</td>
<td>Filing a Brief in Support of an Appeal</td>
<td></td>
<td>$620</td>
<td>$0</td>
<td>-$620</td>
<td>-100%</td>
<td></td>
</tr>
<tr>
<td>NEW</td>
<td>Appeal Fee</td>
<td></td>
<td>$0</td>
<td>$2,500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>$4,960</td>
<td>$1,240</td>
<td>$4,000</td>
<td>$2,760</td>
<td>223%</td>
<td></td>
</tr>
<tr>
<td>1403/2403</td>
<td>Request for Oral Hearing</td>
<td>$361</td>
<td>$1,240</td>
<td>$1,300</td>
<td>$60</td>
<td>5%</td>
<td></td>
</tr>
</tbody>
</table>

* The proposal includes the ability to pay a $0 PGPub/issue fee if an examiner withdraws a final rejection prior to filing for an appeal.

- An applicant dissatisfied with the examiner’s decision in the second rejection of his or her claims may appeal to the Board of Patent Appeals and Interferences (BPAI) for review of the examiner’s rejection by filing a notice of appeal (NOA) and the required fee within the time period provided. A NOA may be filed after any of the claims has been twice rejected, regardless of whether the claim(s) has/have been finally rejected.
- The appellant must file a brief within two months from the date of filing the notice of appeal. The office is proposing a $0 fee when filing the brief.
- If the appellant wishes to appeal the examiner’s answer, a $2,500 fee will be required to file an appeal. This fee payment structure allows the appellant to reduce the amount invested in the appeal process until receiving the examiner’s answer.
- If the examiner withdraws the final rejection prior to filing an appeal, the applicant will be permitted to pay a $0 combined PGPub/issue fee – making the net payment to the office for the NOA, brief, and publication/issue only $540 ($1,500 - $960).
- The objective for the changes to appeals fees is to create a fair and equitable environment by recovering more of the cost for those appeals, while also seeking ways to reduce fee burdens associated with withdrawn final rejections.

1 Please refer to the Table of Patent Fee Changes in Attachment 1 for a complete list of filing, search, and exam fee changes, including new micro entity fees.
Supplemental Examination Fees

<table>
<thead>
<tr>
<th>Fee Code</th>
<th>Description</th>
<th>Cost</th>
<th>Fee Proposed in RIN 0651-AC69</th>
<th>Proposed Large Entity Fee</th>
<th>Dollar Change</th>
<th>Percent Change</th>
<th>Elasticity Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>New</td>
<td>Request for Supplemental Examination</td>
<td>$5,180</td>
<td>$5,180</td>
<td>$7,000</td>
<td>+ $1,820</td>
<td>+35%</td>
<td>No Change in Demand*</td>
</tr>
<tr>
<td>New</td>
<td>Supplemental Examination</td>
<td>$16,120</td>
<td>$16,120</td>
<td>$20,000</td>
<td>+ $3,880</td>
<td>+24%</td>
<td></td>
</tr>
</tbody>
</table>

- A patent owner is permitted to request a supplemental examination of a patent by the Office to consider, reconsider, or correct information believed to be relevant to the patent. This proceeding could assist the patent owner in addressing certain challenges to the enforceability of the patent during litigation.
- The need for this proceeding arises only after a patent owner recognizes that the information submitted through prosecution of the application may not have been sufficient or needs to be corrected for the patent to be complete.
- The Office is adjusting the request for supplemental examination and the supplemental examination fees to be slightly greater than the cost of conducting the proceeding. The Office expects that this higher fee will encourage applicants to submit applications with all relevant information during initial examination, facilitates compact prosecution. A complete patent file, with all relevant information, benefits the overall IP system.

1 Please refer to the Table of Patent Fee Changes in Attachment 1 for a complete list of supplemental examination changes, including new micro entity fees.

* No change in demand is estimated because the volume is already projected to be low.
These fee proposals are the result of public input to date that suggest that the USPTO should allow applicants to delay submission of a declaration until allowance.

The fee to file an oath/declaration up to the notice of allowance is proposed to:

- Offset the loss of extension of time fees that would otherwise be paid;
- Help pay for pendency reducing initiatives that will be necessary to address the pendency increase that will result from the change; and
- Encourage applicants who can obtain an executed declaration during the current missing parts period to file it before examination.

The fee to correct inventorship during examination where the oath/declaration was not provided before examination will recover the cost of additional examination necessary when inventorship changes during examination.

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1 Please refer to the Table of Patent Fee Changes in Attachment 1 for a complete list of oath and declaration related changes, including new micro entity fees.
Appendix H

Small and Micro Entity Fees

The information included in this appendix provides an overview of the fees eligible for small and micro entity discounts that are proposed in the new fee structure.

A complete listing of small and micro entity fees can be found in Attachment 1 – *Table of Patent Fee Changes*. 
Today, the small entity fee discount of 50% is applied to all statutory fees outlined in 35 U.S.C. § 41(a) and (b) for those who qualify as a “small business concern” as defined under section 3 of the Small Business Act.

While the definition of a “small business concern” does not change with the AIA, the application of the 50% discount to the fees changes slightly, as described in the following pages.

The AIA introduces a micro entity discount of 75% for applicants who meet the definition included in a new section 35 U.S.C. § 123².

A small entity fee discount can apply whether the party paying the fee is the applicant/owner or a third party.

For a micro entity, the definition is specific to an “applicant”; therefore, the micro entity fee discount of 75% is only eligible for fees paid by the applicant/owner. Fees paid by a third party are not eligible for the micro entity discount.

Both entities, when meeting their respective definitions, will receive a 50% discount for small entities and a 75% discount for micro entities on all fees set or adjusted in the proposed fee schedule for “filing, searching, examining, issuing, appealing, and maintaining patent applications and patents”.

For purposes of forecasting aggregate revenue, it is estimated that 20% of fee payers who currently receive a small entity discount will qualify for a micro entity discount.

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¹ Please refer to the Table of Patent Fee Changes in Attachment 1 for a complete list of all fees, including those eligible for small and micro entity discount.

² The USPTO will be issuing a notice of proposed rulemaking with procedures for making a certification of micro entity status in accordance with the new definition introduced in Section 11(g) of the AIA.
Small and Micro Entity Fees

Fees for Filing:
- The small entity discount will apply to all filing related fees that receive it today. These same fees will be eligible for a micro entity discount.
- There is one fee that does not currently receive a small entity discount, 1503 – Non-English Specification, that will be eligible for both a small and micro entity discount under the new proposed fee structure.

Fees for Searching:
- The small entity discount will apply to all search fees that receive it today. These same fees will be eligible for a micro entity discount.

Fees for Examining:
- The small entity discount will apply to all examination fees that receive it today. These same fees will be eligible for a micro entity discount.
- Fees for RCE, prioritized examination, supplemental examination, reexamination (for micro entity, when requested by the applicant), request for expedited examination of a design applications, submission of an IDS, and certain petition, PCT and English translation fees, will also qualify for small and micro entity discounts.

1 Please refer to the Table of Patent Fee Changes in Attachment 1 for a complete list of all fees, including those eligible for small and micro entity discount.
Small and Micro Entity Fees

- **Fees for Issuing, Appealing, and Maintaining:**
  - The small entity discount will apply to all issue, appeal, and maintenance related fees that receive it today. These same fees will be eligible for a micro entity discount.
  - In addition, the surcharge for late payment fees will also qualify for small and micro entity discounts.

- **Changes to fees currently receiving a discount:**
  - The following fee currently receives a 50% small entity discount. However, this fee does not fit under the new classifications of filing, searching, examining, issuing, appealing, and maintaining patent applications and patents and therefore will no longer be eligible for a small entity discount (or for a new micro entity discount):
    - 1814/2814 – Statutory disclaimer, including terminal disclaimer.

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1 Please refer to the Table of Patent Fee Changes in Attachment 1 for a complete list of all fees, including those eligible for small and micro entity discount.
Appendix I

Elasticity Assumptions

The information included in this appendix describes elasticity and the information used to estimate the impact on demand associated with the more significant fee changes.
Elasticity

- Elasticity is a measurement of how sensitive fee payers are to fee changes.
  - If elasticity is low enough (meaning demand is *inelastic*), then when fees increase, the decrease in fee payments (demand for product/service) is minor enough that overall revenue increases.
  - If elasticity is high enough (meaning demand is *elastic*), then increasing fees will result in a more significant decrease in fee payments (demand for product/service) and revenue will decrease overall.

- The USPTO conducted a statistical examination and analysis of the best available data related to variables in the demand process for patent rights (patent applications, allowance rates, inventory, patent examiners on board, real GDP, pendency, and renewal rates). These variables were modeled against historical fluctuations in fee rates to develop range estimates for the percentage change in quantity that occurs for a percentage change in the price.
  - The USPTO is currently considering some fee changes that are significantly greater than past history, and therefore it is difficult to predict expected quantity changes with historical information*.

- All estimates were within the inelastic range, suggesting that increases in fee rates will lead to overall increases in revenue collections.

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* Please refer to Appendix J for a detailed description of the USPTO operating reserve. The uncertainty described here is a real-life example related to the purpose of an operating reserve.
Elasticity

- Filing time fees (filing, search, exam, RCE, excess claims, and application size):
  - Analysis suggests that fee increases around 30 - 40% would be sufficient to offset the additional patent filings associated with a 2% GDP increase. Additionally, based on econometric models used to forecast patent application filings, a 2% increase in GDP equates to about a 4% increase in patent filings. Therefore, at the time of the overall 47% increase in the total filing/search/exam fees, the USPTO estimates no more than a 4% decrease in application filings.
  - Application size fees are dependent on the number of applications filed, thus the 4% decrease in application filing is assumed for application size fees.
  - In 2005, excess claims fees increased by about 73% and resulted in a decline in excess claims being paid of approximately 35%. International offices see similar changes with changes in claims fees. The increase with this fee change is comparable to that in FY 2005. However, the increase in filing/search/exam fees are greater. Since the excess claims fee increase will be in addition to an estimated decrease in application filings, the USPTO only estimates about a 25% decrease in excess claim fees being paid.
Elasticity

Maintenance Fees:

Given the changes in renewal rate patterns during the recent economic recession, the USPTO is estimating the changes in renewal rates conservatively. Based on the limited information available, the USPTO estimates that:

- For a 10% increase in a 1st stage maintenance fee, we could expect about a 1.5% decrease in renewals and up to a 27% decrease in renewals with an 80% increase in fees. It is estimated that the 42% increase in a 1st stage maintenance fee could lead to an 8% decrease in renewals;
- The 26% increase in a 2nd stage maintenance fee could lead to the same 8% decrease in renewals as the first stage; and
- For a 10% increase in a 3rd stage maintenance fee, we could expect about a 19% decrease in renewals and up to a 25% decrease in renewals with an 80% increase in fees. It is estimated that the 61% increase in a 3rd stage maintenance fee could lead to a 23% decrease in renewals.
Appendix J

Operating Reserve
(Carryover of Fees)

The information included in this appendix provides more details on rationale, purpose, and size determination of the USPTO operating reserve used to carry over unspent fees into future years.
Operating Reserve — Definition & Rationale

Definition: The portion of fee collections that are carried over from the prior year and designated as available for use to sustain operations in the unanticipated event of significant variances of fee collections from forecasted estimates and/or unbudgeted increases in operating expenses associated with an increase in demand for USPTO services.

Rationale:

Promotes public confidence in the U.S. IP system by planning for long-term financial stability and increasing the USPTO’s ability to absorb and respond to temporary changes in its environment or circumstances.

Required to ensure financial stability of fee funded operations.

Fee funded operations are typically at high risk for cash flow stress and can be:

- Forced to make expensive short-term, crisis-based decisions in exchange for strategic, long-term decisions; or
- Not have the resources to continue the delivery of programs at designated performance levels.

Without typical business tools, such as the ability to borrow money, the operating reserve serves as an internal line of credit to cover normal fluctuations in funding to sustain operations and execute on the goods and services requested by intellectual property stakeholders.

3 The USPTO’s primary patent mission is to perform a service that is designed to take one to two years to complete.
Operating Reserve — *Purpose*

- Preserve operational capacity to deliver on the patent mission in the event of temporary changes in demand and revenues, such as:
  - Unexpected demands on resources when:
    - Production requirements increase due to unexpected increases in application filings, or
    - Litigation, information technology, process improvement contingencies are realized.
  - Unexpected shortfalls in fee collections due to the inherent uncertainty in forecasting fees.
  - Unanticipated opportunities, such as:
    - International work sharing opportunities to encourage cooperation with other international IP offices to help harmonize the global IP system.
    - Strategic initiatives to further progress toward meeting Administration and strategic goals.
  - Working capital on hand to address routine fluctuations in the timing of fee collections, obligations, and Congressional spending authority.

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*The USPTO is particularly vulnerable due to the public policy responsibilities for a lower than cost-recovery fee for entry into the U.S. Intellectual Property system with a corresponding back-end subsidy for successful applicants. The balance of the fee structure is at risk to be upended when either filing (front end) or maintenance (back end) fees are collected at rates that are either lower or higher than anticipated and out of sync proportionately.*
There is no right answer or single correct solution that would define the optimal size of an operating reserve.

The question of how much is an adequate operating reserve is best answered by examining risk factors in operating an organization.

- There are two main areas that create a risk of volatility – spending levels and revenue streams.
- Research shows that if these risk factors exist, a fully fee-funded organization such as the USPTO should maintain a minimum of three months operating reserve and the size should increase based on the likelihood and frequency of risk occurrence.

The major *spending* risk factors are discussed below:

- If a surge in new application filings is not matched by a proportionate surge in renewals, then cost of operations will be much greater than revenue.
- If the economic environment elicits depressed application filings and/or renewals, then the high proportion on non-discretionary (fixed) costs and long term commitments in human capital spending will cause the cost of operations to be greater than revenue.
- If there is a surge in unfunded/unplanned services or activities due to harmonization with international counterparts, policy or regulation changes, or Administration goals, then costs will outweigh revenues.
The major revenue risk factors are discussed below:

- If the economic environment elicits depressed application filings and/or renewals, then the high proportion on non-discretionary (fixed) costs and long term commitments in human capital spending will cause the cost of operations to be greater than revenue. Economic downturns occur once every 5 to 10 years.
- Economic uncertainty due to poor visibility.
- The economic or regulatory framework may shift applicants to different filing patterns and mixes.
- Inherent projection uncertainties due to the level and mix of data and modeling risks, compounded by economic uncertainties.
- Uncertainty of timing and amount inherent in the annual authorization of authority to spend fees that have been collected.

After considering the spending and revenue risk factors, the USPTO assessed that the minimal reserve of three months operating expenses was sufficient to mitigate the likelihood and frequency of risk.
The proposed fee structure modestly builds the operating reserve to the optimal level of three months of operating expenses, as follows:

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding</td>
<td>$562 M</td>
<td>$637 M</td>
<td>$675 M</td>
<td>$702 M</td>
<td>$712 M</td>
<td>$736 M</td>
</tr>
</tbody>
</table>

The funds will be derived from:
- Planned and budgeted surpluses of fees designated for the operating reserve.
- Unplanned surpluses (potential variances between the high and working level fee collection estimates).
- Unspent funds originally planned for in operating requirements.

Considering the workload, production, and economic assumptions outlined in the FY 2013 Budget, it is projected that the operating reserve will reach the optimal level in FY 2015, when aggregate costs level off after meeting backlog reduction targets.
Operating Reserve - *Size*

The table below summarizes the estimated aggregate revenue (working fee estimate), the estimated aggregate cost (budgetary requirements), the annual estimated funding/(use) of the operating reserve (current year funding operating reserve), and the estimated end of year balance compared to the target level (cumulative operating reserve balance).

<table>
<thead>
<tr>
<th>Patent Budgetary Resources vs. Budgetary Requirements</th>
<th>(Dollars in Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected Fee Collections</td>
<td></td>
</tr>
<tr>
<td>Low Fee Estimate*</td>
<td>1,901</td>
</tr>
<tr>
<td>Working Fee Estimate*</td>
<td>1,901</td>
</tr>
<tr>
<td>High Fee Estimate*</td>
<td>1,901</td>
</tr>
<tr>
<td>Budgetary Requirements</td>
<td>1,948</td>
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<tr>
<td>Current Year Funding Operating Reserve</td>
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<tr>
<td>Low Fee Estimate</td>
<td>(48)</td>
</tr>
<tr>
<td>Working Fee Estimate</td>
<td>(48)</td>
</tr>
<tr>
<td>High Fee Estimate</td>
<td>(48)</td>
</tr>
<tr>
<td>Cumulative Funding Operating Reserve Balance **</td>
<td>FY 2010</td>
</tr>
<tr>
<td>Target Operating Reserve</td>
<td>487</td>
</tr>
<tr>
<td>Operating Reserve Ending Balance</td>
<td>122</td>
</tr>
<tr>
<td>Over/(Under) Target Balance</td>
<td>(413)</td>
</tr>
</tbody>
</table>

* Each of the above fee estimates include other income collected in the amount of $19M.

** The USPTO currently estimates that it will reach the optimal operating reserve level in FY 2015. The Office will continue to review the operating reserve balance and fees on a regular basis. As the USPTO continues to make progress during FY 2013-2014 in meeting its goals, the results of the next fee review may lead to regulatory actions to reduce fees to a level that would sustain desired operating reserve level for the long term.
Rationale, Purpose and Benefits

Summary of the Operating Reserve Activity and Balance:

- Annually, through FY 2015, a small portion of the annual fee collections will be carried over to the following year and maintained in an operating reserve.

- This strategy will allow the USPTO to respond to significant downward changes in revenue (fee collections) or similar significant increases in demand for patent services.

If plans and assumptions are realized, USPTO will need to consider reducing fees to reduce revenue so as to maintain the optimal operating reserve level.

• Once aggregate costs level off after meeting backlog reduction targets, the operating reserve will meet its optimal balance – currently projected to be $702M in FY 2015.

• If annual operating requirements remain as planned, the USPTO will need to consider reducing fees to maintain the appropriate balance between aggregate revenue and cost.
The optimal operating reserve size will be reevaluated every 2 years during the budget formulation process. What was appropriate last year may not be appropriate in the future due to changing circumstances such as economic volatility and enterprise risk.

A comprehensive review of the projected operating reserve balance will be completed every year as a part of the annual budget formulation process. The actual balance will be reviewed against the annual planned balance every month when executing the annual budget. Significant variations from plan will be reported to USPTO executives.

If the actual operating reserve balance exceeds (or is below) the target level for 2 consecutive years – and the target level has been reevaluated to be optimal – the USPTO will use its fee setting authority to reduce (or increase) user fees accordingly. The USPTO will only embark on a user fee increase once the operating budget has been reevaluated to ensure it has been reduced to the most optimal and efficient level to achieve agreed-upon performance targets.
Appendix K

Other Resources

This Appendix provides web addresses to additional information related to USPTO fees, funding, and operations, which may be of use when evaluating the proposed fee changes.
Other Resources

- The USPTO FY 2010 – FY 2015 Strategic Plan outlines the USPTO’s multi-year plans and can be found on the USPTO website at:
  

  - 100% of Goal 1, Optimize Patent Quality and Timeliness, is supported by Patent Fees.
  - Over 60% of Goal 3, Provide Domestic and Global Leadership to Improve Intellectual Property Policy, Protection and Enforcement Worldwide, is supported by Patent Fees.
  - About 85% of the Management Goal, Achieve Organizational Excellence, is supported by Patent Fees.

- Once released by the President, details supporting the President’s Budget of the USPTO for FY 2013 can be found on the USPTO’s website at:
  
  [http://www.uspto.gov/about/stratplan/budget/index.jsp](http://www.uspto.gov/about/stratplan/budget/index.jsp)

- The Strategy for American Innovation can be found at:
  
  [http://www.whitehouse.gov/innovation/strategy](http://www.whitehouse.gov/innovation/strategy)