

Examination Time and the Production System

United States Patent and Trademark Office

UNITED STATES
PATENT AND TRADEMARK OFFICE



EXAMINATION TIME ANALYSIS: Why?

We will establish the optimal pendency and quality levels for both patents and trademarks that will enable us to operate efficiently and effectively in a steady-state maintenance mode, while considering the expectations of the IP community. –USPTO Strategic Plan 2014-2018

Examination Time Analysis: Why now?

- Properly calibrated examination time is critical for establishing optimal pendency and quality levels
- Patent prosecution has substantially changed since goals were established. For example:
 - New technologies and increased technological complexity
 - Exponential growth of available prior art
 - Transition to the Cooperative Patent Classification (CPC)
 - Increased use of Electronic tools
 - Changes in policy and legal interpretations

Examination Time Analysis: Why now?

- There has not been a comprehensive reevaluation of examination time since the current examination time expectancies were established in the 1970s
- Recent reports by oversight bodies such as the General Accounting Office and Office of the Inspector General have recommended that the USPTO reevaluate examination time

The Patent Model

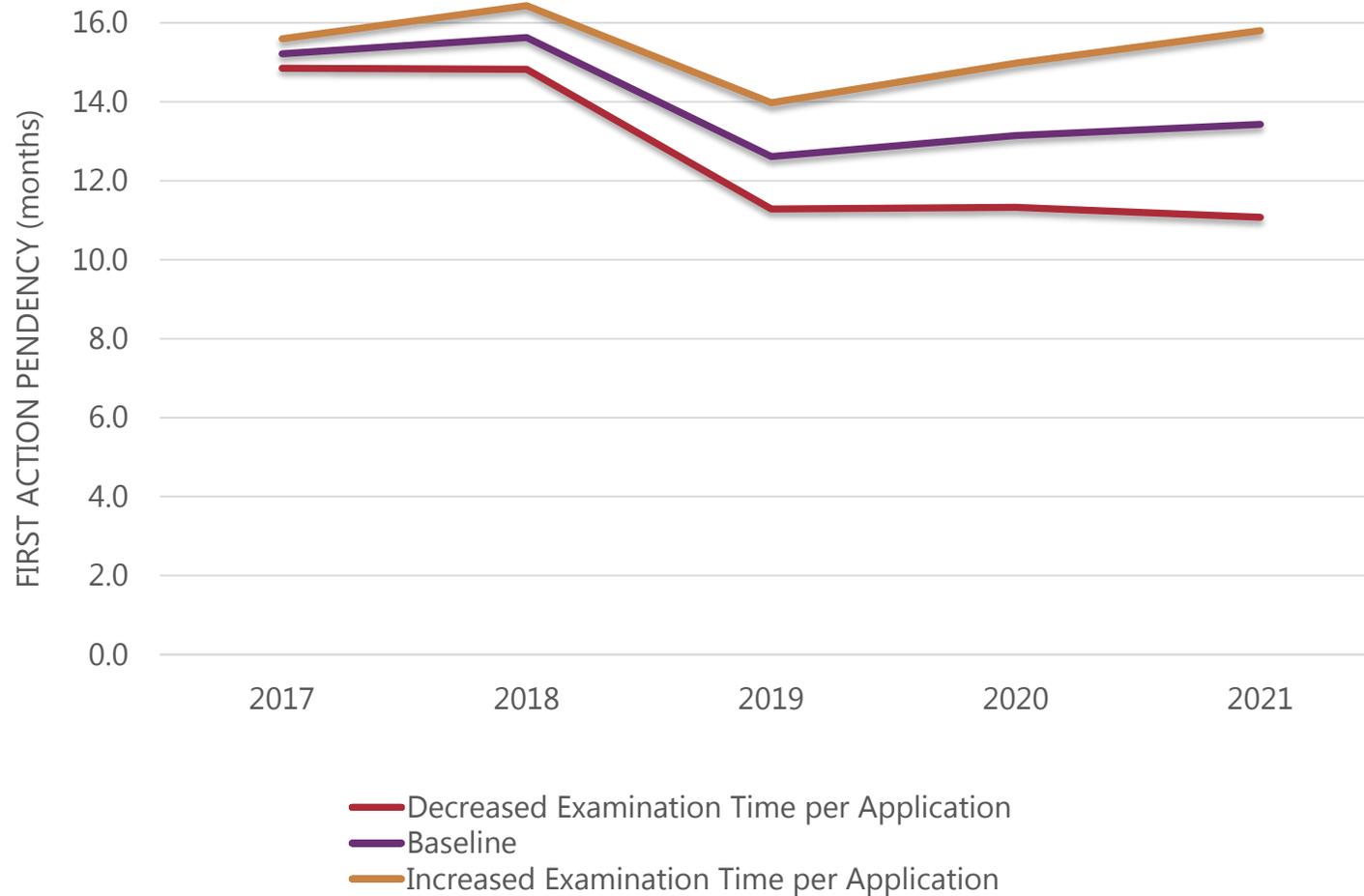
- Simulation tool that predicts pendency, workload and output
- Used to plan hiring and other factors to ensure that pendency goals are met and to project revenue and costs

Patent Model (cont.)

KEY INPUTS	KEY OUTPUTS
Filings	Staffing levels
Examiner attrition	Total production
Examiner hiring	Application inventories
Overtime	Pendency
Examining Resource Investments - Quality investments such as examiner training time and additional examining time to support quality efforts	

The patent model inputs projected application filings and examiner attrition as well as management decisions on hiring, overtime and special programs including quality initiatives and training. The resulting outputs are staffing, total production, application inventories and pendency. Individual examiner production goals are a critical determinant of how the key inputs relate to the key outputs.

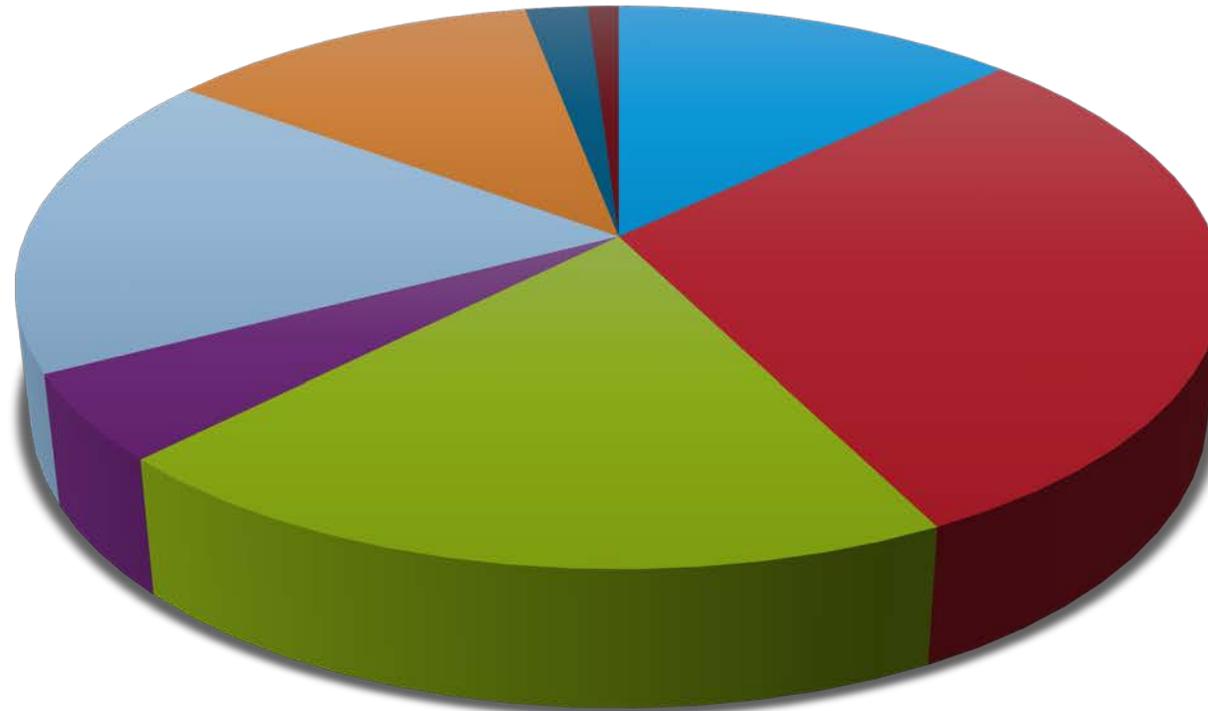
Impact of Changing Examination Time



Hypothetical data showing how examination time relates to projected pendency according to the Patent Model. Pendency can be maintained at baseline by adjusting Key Inputs such as Hiring.

Examination Time Goals and Examiner Evaluation

Patent Examination



- Analyze New Application
- Perform Intial Search
- Prepare Initial First Action
- Consider IDS
- Prepare Subsequent Actions
- Perform Subsequent Search
- Prepare After Final Response
- Communications to Board

Patent examination is comprised of a variety of tasks, each of which consume a greater or lesser share, on average, of the total time required to examine an application.

Examiners are responsible for:

- **Production**
 - Number of office actions / period of time
- **Docket Management**
 - Completing those actions within expected timeframe
- **Quality**
 - Quality of those actions

Examiner performance is evaluated in three critical elements: Production, which is a measure of the number of office actions completed within an evaluation period; Docket Management, which is a measure of compliance with timeliness goals; and, Quality, which is a measure of compliance with the quality major activities defined in the examiner Performance Appraisal Plan.

Examiner Performance Appraisal Plan

Examiner performance is rated on:

- 35% Productivity
- 35% Quality
- 20% Docket Management
- 10% Stakeholder Interaction

Examiners receive an overall annual performance rating based on a weighted average of performance in each of the critical elements described in the previous slide and a customer service element referred to as "Stakeholder Interaction". However, if performance in any of the critical elements is not at least fully successful then the overall rating can be no better than the rating in that element.

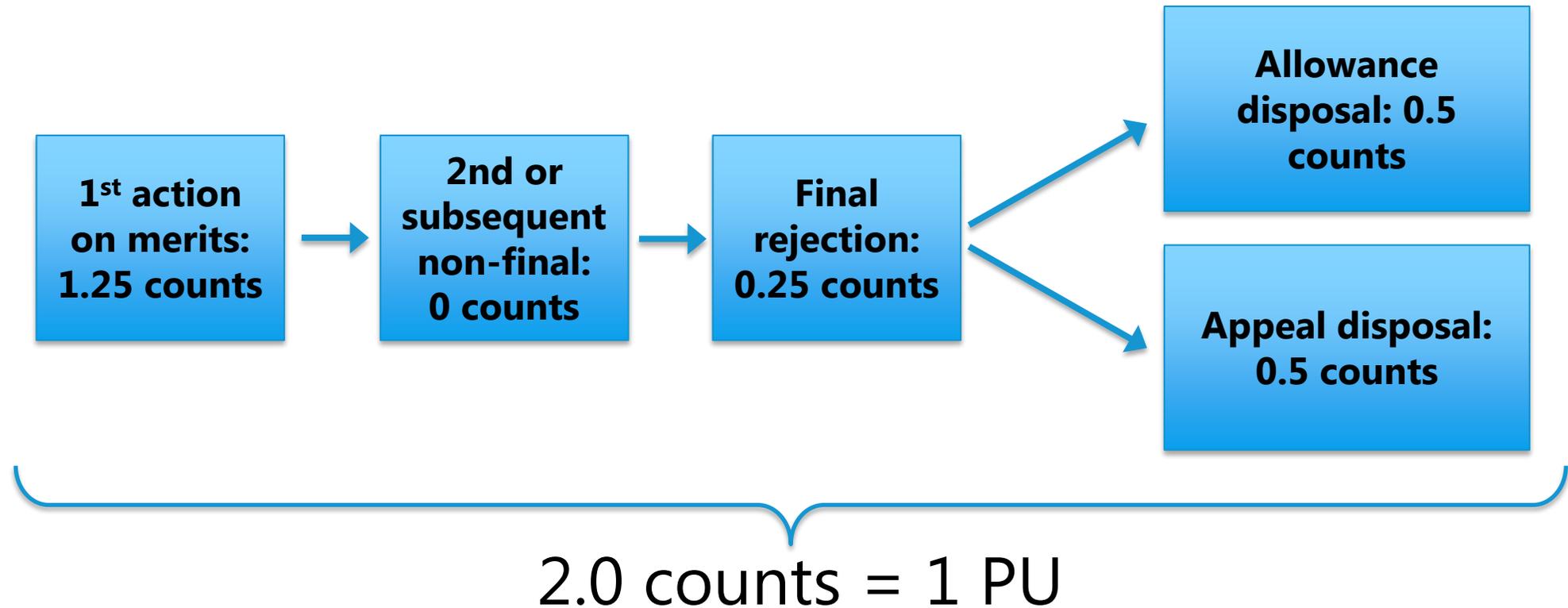
Production Goal Calculation: Expected Production Units For 100% of Goal

$$\frac{(\# \text{ of Examining Hours}) \times (\text{Seniority Factor})}{(\text{Technology Complexity})} = \# \text{ PUs}^* \text{ Needed For 100\% of Goal}$$

*A "Production Unit" or PU equals 2 Counts

Performance under the Production element is assessed based on actual Production Units achieved relative to the Examiner's production goal. The production goal is calculated for each examiner based on the number of "Examining Hours" worked in the evaluation period and quantitative values assigned to examiner seniority and complexity of the technology examined.

Counts Awarded Throughout Prosecution



Each serial new (i.e., non-RCE) application carries 1 PU or 2.0 counts, a fraction of which is awarded for each major Office Action type. The distribution of count credit is structured to incentivize a thorough and complete first action on the merits by awarding most of the PU at first action and less credit for follow-on actions. No credit is given for rework (e.g., 2nd non-final). In most but not all cases, RCEs carry a fraction of a PU (e.g., 1.75 counts) and the credit for a first action is reduced by a corresponding amount.

Production Goal Calculation: Examining Hours

Includes

- All major examination activities
 - Reviewing the application
 - Analyzing the claims
 - Searching the prior art
 - Considering prior art (including IDS)
 - Consulting with colleagues
 - Writing office actions
 - Addressing applicant's responses
- Administrative activities (e.g., reading and responding to e-mail).

Excludes

- Leave and holidays
- Training
- Staff meetings
- Programs where examiners receive additional time (AFCP 2.0, QPIDS, etc.)

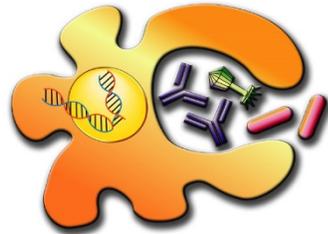
Examining Hours are a subset of an examiner's compensated time. Generally, activities that directly relate to examination of an application and generation of a production unit are included as Examining Hours. Leave and activities such as training and general staff meetings are excluded. In addition, activities performed under some special programs are excluded from Examining Hours.

Production Goal Calculation: Technology Complexity

- The **Technology Complexity** of an application designates the amount of time the examiner is given. For example:



16.6 hours/PU
Fishing lures



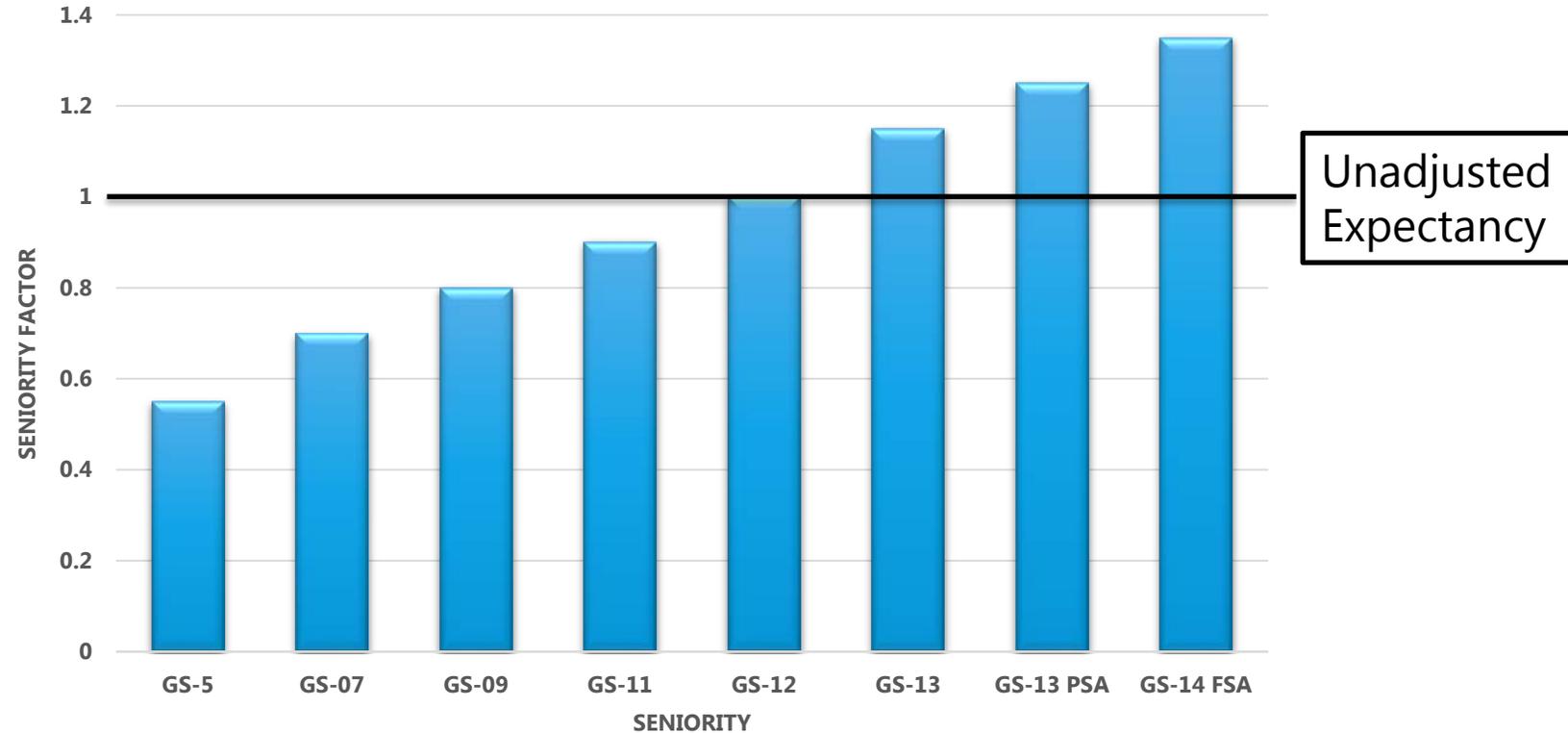
25.9 hours/PU
Immunotherapy



27.7 hours/PU
Satellite communication

Each application carries a classification with an associated unadjusted expectancy based on the complexity of technologies within that classification. Associated unadjusted expectancies range from 13.8 hours/PU to 31.6 hours/PU for utility applications. These unadjusted expectancies are adjusted based on the examiner's seniority.

Seniority Factor Adjustment



Individual utility examiner production expectancies are calculated by dividing the unadjusted expectancy by the Seniority Factor. Therefore, GS-12 examiners have an adjusted expectancy that is equal to the unadjusted expectancy (i.e., Seniority Factor equals 1), GS-11 examiners and below have an adjusted expectancy that is higher than the unadjusted expectancy and GS-13 examiners and above have an adjusted expectancy that is lower than the unadjusted expectancy. Design examiners have different seniority factors.

Example Expectancy Adjustment

Grade	Signatory Authority	Seniority Factor	*Expectancy (Hrs/PU)
GS-5	None	0.55	30.2
GS-7	None	0.7	23.7
GS-9	None	0.8	20.8
GS-11	None	0.9	18.4
GS-12	None	1.0	16.6
GS-13	None	1.15	14.4
GS-13	PSA	1.25	13.3
GS-14	PSA	1.25	13.3
GS-14	FSA	1.35	12.3

****Based on an art area of 16.6 hrs/PU for GS-12***

Example: 100% Bi-Weekly Production Goal for GS-7, GS-12 and GS-14 Utility Examiners:

All three examiners have the same number of examining hours (72) and the same GS-12 Technology Complexity (16.6 hours/PU):

$$\text{GS-7: } \frac{72 \times 0.7}{16.6} = 3.0 \text{ PU (for 100\% production)}$$

$$\text{GS-12: } \frac{72 \times 1.0}{16.6} = 4.3 \text{ PU (for 100\% production)}$$

$$\text{GS-14: } \frac{72 \times 1.35}{16.6} = 5.9 \text{ PU (for 100\% production)}$$

BEYOND EXPECTANCY

- Production Awards
- Overtime
- Compact Prosecution
 - Front Loading Production Credit
 - Training (e.g., interview practice, compact prosecution workshops)
 - Special Programs (e.g., FAI, AFCP 2.0, Pre-Appeal, P3)

Beyond Expectancy, productivity per examiner is maximized by providing opportunities for production awards and overtime as well as incentives, training and special programs intended to promote compact prosecution.