September 24, 2010

The Honorable Barbara A. Mikulski  
Chairwoman  
The Honorable Richard C. Shelby  
Ranking Member  
Subcommittee on Commerce,  
Justice, Science and Related Agencies  
Committee on Appropriations  
United States Senate


The Department of Commerce’s U.S. Patent and Trademark Office (USPTO) grants patents that protect innovations ranging from new treatments for diseases to new wireless technology applications. Over the last several years, increases in both the volume and complexity of patent applications have lengthened the time between when an application is submitted and when a final decision is made—referred to as patent pendency—and resulted in a current backlog of over 700,000 applications. For several years, concerns have existed about USPTO’s ability to recruit and retain enough qualified patent examiners to reduce this backlog. In 2005 and again in 2007, we identified numerous challenges related to USPTO’s ability to modernize its human capital management system and hire and retain a qualified and well-trained patent examination workforce.1 Recently, USPTO management has also recognized the need for changes in its performance management system and additional training for its employees and managers. In this context, you asked us to obtain additional information on the performance management of USPTO’s patent examination workforce.2 Specifically, you asked us to describe (1) USPTO’s processes for evaluating the performance of supervisory patent examiners (SPE) and patent examiners, and the actions that the agency takes when performance is at an unacceptable level; (2) USPTO’s process for promoting patent examiners to the SPE level; and (3) how newly promoted SPEs are assigned to various units and the training they receive throughout their career.


2According to USPTO, performance management is the process by which an agency involves its employees in improving organizational effectiveness in the accomplishment of the agency’s mission and consists of performance planning, monitoring, and evaluation as well as employee development and recognition.
To describe USPTO’s processes for evaluating the performance of SPEs and patent examiners, and the actions that USPTO takes when performance is at an unacceptable level, we reviewed the most recent documents on which USPTO’s policies and guidance for performance management are based, including the Office of Personnel Management’s (OPM) performance management regulations; the Department of Commerce’s 1995 General Workforce Performance Appraisal System; policies based on the agency’s past practices; and agreements between USPTO and the Patent Office Professional Association (POPA), the independent union that represents professional USPTO employees. We also interviewed officials from USPTO’s Office of the Commissioner of Patents, Office of Human Resources, and Office of the Chief Administrative Officer. To describe USPTO’s process for promoting patent examiners to the SPE level, we reviewed data on USPTO’s promotion process, which we obtained from the Office of Human Resources, and interviewed officials from that office. To describe how newly promoted SPEs are assigned to various units and the training they receive, we reviewed data from USPTO’s Office of the Commissioner of Patents on the number of newly promoted SPEs and where they have been placed in the organization over the last 5 years and interviewed USPTO Office of Human Resources officials on the training offered for SPEs. Because USPTO management is currently implementing changes in its performance appraisal system and training for PTO managers, we are restricting our review to describing current practices and planned changes. Although we have identified key practices for effective performance management through our past work, we did not evaluate USPTO’s system against these practices given that the system is currently being revised.

We conducted our work from December 2009 through September 2010 in accordance with all sections of GAO’s Quality Assurance Framework that are relevant to our objectives. The framework requires that we plan and perform the engagement to obtain sufficient and appropriate evidence to meet our stated objectives and to discuss any limitations in our work. We believe that the information and data obtained, and the analysis conducted, provide a reasonable basis for any findings and conclusions in this product.

In Summary

USPTO has similar processes for evaluating SPEs’ and patent examiners’ performance. However, patent examiners receive additional checks on their performance, and patent examiners and SPEs are rated on different elements. According to USPTO officials, in April 2010, USPTO implemented a revised SPE performance appraisal plan and is currently revising the patent examiner performance appraisal plan, which it expects to implement in 2011. USPTO’s processes for addressing unacceptable performance are similar for patent examiners and SPEs, although there are some differences for examiners and SPEs who are newly hired and recently promoted, respectively. For example, those patent examiners in their first 2 years of employment (trial period) can generally be discharged by USPTO for unacceptable performance without first going

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through a process which includes issuing oral and written warnings, which is required in addressing unacceptable performance in other patent examiners. In addition, during newly promoted SPEs’ 1-year probationary period, if their performance is unacceptable and they do not improve their performance after receiving a written warning, USPTO may return them to a nonsupervisory patent examiner position and pay grade. USPTO’s process for promoting examiners to supervisory positions relies largely on examinations and five key criteria, including their ability to supervise and perform administrative duties, and their knowledge of scientific and technical matters. From fiscal years 2005 through 2009, 1,247 people applied and 337 were promoted at USPTO to the GS-15 SPE position. USPTO generally assigns newly promoted SPEs to clusters of specific related patent technologies, known as “art units,” on the basis of the SPEs’ technical expertise and requires management and supervisory training throughout their career. Most new SPEs are generally assigned to art units on the basis of the technology they are most familiar with, but according to USPTO officials this scenario is not always possible. The agency requires that new SPEs take introductory and specialized supervisory training, and requires all SPEs to take additional training throughout their career. In addition, USPTO recently implemented a leadership development program that allows SPEs and others to assess their leadership skills and set goals to develop or improve their skills.

Background

Protecting intellectual property rights and encouraging technological progress are important for ensuring the current and future competitiveness of the United States. USPTO, under the direction of the Under Secretary of Commerce for Intellectual Property and Director of USPTO, helps protect the nation’s competitiveness by granting patents for a wide range of innovations. USPTO consists of two organizations: one for patents and one for trademarks. This report focuses on the patent organization, which accounts for approximately 81 percent of the agency’s resources. USPTO’s patent organization has two primary functions. First, the organization protects and disseminates patent information—for example, information on issued patents and most patent applications. Such information allows other inventors to improve upon the original inventions and to apply for their own patents. Second, the organization grants patents—an exclusive right granted for a fixed period of time to someone who invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.

To obtain a patent, inventors—or more likely their attorneys or agents—submit an application to USPTO that fully discloses and clearly describes one or more distinct, innovative features of the proposed invention and pay a filing fee to begin the examination process. According to USPTO officials, the agency assigns patent applications to one of its nine technology centers for review: (1) Biotechnology and Organic Chemistry; (2) Chemical and Materials Engineering; (3) Computer Architecture and Software; (4) Network, Multiplexing, Cable and Security; (5) Communications; (6) Semiconductors, Electrical, and Optical Systems and Components; (7) Transportation, Construction, Electronic Commerce, Agriculture, National Security, and License and Review; (8) Mechanical Engineering, Manufacturing, and Products; and (9) Designs for Articles of Manufacture. Each technology center is managed by one or more group
directors and is organized into smaller “art units”—clusters of specific related patent technologies. For example, the Communications Technology Center includes art units for digital communications, audio components, cellular telephony, and radio and satellite communications. The art units are staffed by one SPE and several patent examiners. Grade levels for the patent examiner position range from the general schedule (GS) pay plan for grades GS-5 to GS-15; SPEs are GS-15s. According to a USPTO Office of Human Resources official, as of March 2010, USPTO had 423 SPEs and 6,046 patent examiners.

Patent examiners’ primary responsibility is to review applications to determine if a patent is warranted. In making this determination, patent examiners must meet two specific milestones in the patent examination process: first actions and disposals.

- **First action.** Patent examiners notify applicants about the “patentability” of their inventions through what is called a “first action.” After determining if the invention is new and useful, or a new and useful improvement on an existing process or machine, patentability is determined through a thorough investigation of information related to the subject matter of the patent application and already available before the date the application was submitted, such as publications and U.S. and international patents.

- **Disposal.** Patent examiners dispose of a patent application by determining, among other things, if a patent will be granted or not.

USPTO has a system for determining the amount of time in which a patent examiner is expected to complete an examination and the credit earned for each completed stage of an examination. Patent examiners receive credit, called “counts,” for each first action and disposal they complete. They are assigned production goals on the basis of the number of production units—each consisting of two counts—they are expected to achieve in a 2-week period. The counts in a production unit may be any combination of first actions and disposals. In February 2010, USPTO revised the count system to, among other things, give patent examiners more time to complete first actions.

According to USPTO officials, SPEs are expected to evaluate patent examiners’ performance based, in part, on the production goals established by the technology center in which the patent examiner works. Also, according to USPTO criteria for SPE performance, SPEs must be able to effectively train examiners; review work products; make decisions on hiring, retention, and promotion of junior examiners; conduct the requisite performance management activities associated with ratings, recognition, and potential adverse actions; and provide mentoring to ensure the development of the examiners in their unit. In addition, SPEs may have to assist examiners in assessing patent applications and making decisions on whether to grant a patent.

According to USPTO officials, USPTO’s performance management processes for the SPE and patent examiner workforce are based on several sources, including OPM regulations and the Department of Commerce’s 1995 General Workforce Performance Appraisal System (GWPAS). In addition, USPTO has periodically issued performance management
policies that are based on the agency’s past practices, as well as USPTO agreements with POPA. According to a USPTO official, in 2006, the Department of Commerce established a new performance management system that was to replace the 1995 GWPAS. However, according to this same official, USPTO continues to follow the 1995 GWPAS because prior agreements between USPTO and POPA, as well as prior agreements between USPTO and other unions that represent USPTO staff, have not been renegotiated to implement the new system. The official stated that the agency has decided to follow the 1995 GWPAS until it can issue an administrative order implementing a USPTO employee performance management system that includes, among other things, a new performance appraisal system that better meets the agency’s needs. In 2006, USPTO drafted this order, as well as a Performance Management Program Handbook that is to be a guide on USPTO’s performance management processes. As of September 2010, USPTO had not issued the order or published the handbook.

**USPTO Uses Structured Processes for Evaluating SPEs’ and Patent Examiners’ Performance and Addressing Unacceptable Performance**

USPTO has similar processes for evaluating SPEs’ and patent examiners’ performance. However, the agency’s processes for addressing “unacceptable” performance differ somewhat between SPEs and patent examiners.

**USPTO’s Processes for Evaluating SPEs’ and Patent Examiners’ Performance Are Similar**

USPTO’s current performance appraisal processes for SPEs and patent examiners involve three distinct stages: (1) performance planning, (2) progress review, and (3) performance appraisal and recognition. Records pertaining to these three stages are maintained in each SPE’s and patent examiner’s individual Classification and Performance Management Record, referred to as the performance appraisal plan.

According to USPTO officials, for SPEs, during the performance planning stage of the appraisal process, a technology center’s group director (1) identifies the performance elements on which the SPEs will be rated—for example, effective leadership; (2) provides in writing the objective of the elements, the major activities or results needed to accomplish the performance element, and performance standards used to evaluate the employee’s performance of each element; and (3) discusses the elements and performance standards with the SPEs. In 2009, SPEs were rated on several elements, including quality of examination products and processes; accountability for personal property of their art unit; timely and efficient processing of patent applications; productivity; and effective leadership, including employee satisfaction. Generally, performance standards for SPEs are based on a methodology that ensures that the

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4 According to a USPTO official, the administrative order will be consistent with OPM’s regulations. USPTO officials told us that they will submit the new performance management system plan to OPM for approval, but could not provide a time frame for doing so.

5 According to a USPTO official, all SPE performance elements are considered “critical.” A critical element is a work assignment or responsibility to be achieved that is of such importance that unacceptable performance in that element would result in a determination that the employee’s overall performance was unacceptable.
performance rating reflects the type of patent application technology examined within the SPE's technology center, as well as the resources available to examine the applications. This methodology, called “fair share,” takes into account the differences in the levels of complexity of the patent applications that the various technology centers receive and may vary the rating criteria accordingly for the centers each year as needed.

According to USPTO officials, in April 2010, USPTO implemented a revised SPE performance appraisal plan as a result of recommendations from a USPTO task force formed to make the performance appraisal plan better reflect key priorities of the agency, including improved quality of patent application examinations, reduced patent pendency, and improved responsiveness to applicants, as well as to better reflect the varied roles and responsibilities of SPEs. A major change to the SPE performance appraisal plan is the elevation of responsibilities, such as coaching and mentoring, which had previously been included under the “effective leadership” element, to a separate element. A USPTO official stated that emphasizing SPE coaching and mentoring of patent examiner staff should help improve patent examiners’ skills and thereby contribute to the reduction of patent pendency. In addition, according to this official, USPTO combined the timeliness and productivity elements into a “pendency reduction” element, added a new element to address responsiveness to applicants, and removed the accounting for personal property element.  

According to USPTO officials and the agency’s performance appraisal plan guidance, during the progress review stage of the performance appraisal process, group directors are to discuss with the SPEs (1) their progress in accomplishing the elements, (2) whether the performance appraisal plan needs to be adjusted, and (3) any performance deficiencies and recommendations on how to improve them. SPEs receive progress reviews at the midpoint of the fiscal year, and this information is recorded in their performance appraisal plans.

In the performance appraisal and recognition stage of the process, group directors rate SPEs’ overall performance during the fiscal year. The group director determines a rating level for each performance element—(5) outstanding, (4) commendable, (3) fully successful, (2) marginal, or (1) unacceptable—and scores each element by multiplying its weight by the rating level. Each element is weighted to reflect agency priorities—for example, the coaching and mentoring element accounts for 15 percent of the rating. According to a USPTO Office of Human Resources official, weights are set by the technology centers and are consistent for SPEs throughout the patent organization. The overall performance rating for the SPE is then determined by totaling the scores of the individual performance elements. Finally, according to a USPTO official, monetary bonuses may be awarded to some SPEs. In the past, SPE bonuses were based solely on ratings; however, for the past several years bonuses have been awarded based on additional factors, including production rate and timeliness of the SPE’s entire art unit, and the SPE’s leadership contributions both within the technology center and outside it. However, because of budgetary constraints, SPEs did not receive bonuses in fiscal year 2009. According to this official, USPTO planned to award bonuses in fiscal year 2010.

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The accounting for personal property element is now a major activity under the coaching and mentoring element.
According to USPTO officials, the performance appraisal process for patent examiners is similar to that of the SPEs. For example, the SPE evaluates the patent examiner in specific performance elements, provides the examiner with a progress review at the midpoint of the fiscal year, and using the performance standards, determines a rating for each, weights the individual rating scores, and calculates an overall performance rating at the end of the fiscal year. According to a USPTO Office of Human Resources official, however, receive quarterly checks on performance by their SPE, as well as the formal midpoint progress review. In addition, patent examiners are rated on different elements than SPEs at the end of the fiscal year, including performance of patent examining functions, patent examining productivity goal achievement, workflow management, and customer service. Several of these elements include specific productivity goals and timeliness requirements tied to USPTO's count system; these goals and requirements become more stringent as the patent examiner’s grade level increases. In addition, some elements on which higher-grade patent examiners are rated, such as “patentability determination,” do not apply to lower-grade level examiners. Moreover, the patent examiner appraisal process differs from the SPE appraisal process in that SPEs have performance appraisal plan guidelines to help them evaluate and score patent examiners’ performance. According to USPTO officials, a new joint management and labor task force is updating the patent examiners’ performance appraisal plan, and USPTO expects to implement the revised plan by 2011. A USPTO official said that after the performance appraisal plan is updated, USPTO will update the guidelines.

USPTO’s Processes for Addressing Unacceptable Performances by Patent Examiners and SPEs Differ in Some Aspects

USPTO’s processes for addressing unacceptable performance are similar for patent examiners and SPEs, although there are some differences for examiners and SPEs who are newly hired and recently promoted, respectively. According to USPTO officials, the process for addressing unacceptable patent examiner performance involves a series of actions that can take place as a result of quarterly checks or at midpoint reviews, or at the final performance appraisal review of the year. First, a patent examiner with “unacceptable” performance in one or more critical elements receives an oral warning from the SPE requiring that the performance be improved to at least the marginal level within about one-quarter of a year. If, at that time, the examiner’s performance for a particular element is still considered unacceptable, the SPE issues the patent examiner a written warning, also referred to as a performance improvement plan. This plan provides

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7 According to a USPTO Office of Human Resources official, an SPE checks the performance of a patent examiner on a quarterly basis, but unless performance is unacceptable, there is no requirement for a formal discussion or feedback session with the patent examiner at the quarterly check.

8 According to a USPTO official, all elements for patent examiners are considered critical except the customer service element.

9 According to USPTO officials, there are no performance appraisal plan guidelines for directors to use in evaluating SPEs’ performance, in part, because SPEs’ duties and activities vary considerably across art units. These officials told us that for this reason USPTO performance appraisal plan guidelines would not be helpful.
information on the examiner’s performance, establishes a plan of action to improve it, and grants another improvement period of about one-quarter of a year. According to a USPTO Office of Human Resources official, most patent examiners improve their performance after receiving an oral warning and do not get a written warning. Figure 1 shows the number of oral and written warnings issued to patent examiners for unacceptable performance in one or more critical elements from 2005 through 2009.

Figure 1: Number of Oral and Written Warnings Issued to Patent Examiners, Calendar Years 2005-2009

![Graph showing number of oral and written warnings from 2005 to 2009]

Note: According to a USPTO Office of Human Resources official, some patent examiners have received more than one oral and written warning during the 5-year period. A total of 953 patent examiners received 1,659 oral warnings, while 265 patent examiners received 315 written warnings during this period.

In addition, according to a USPTO Office of Human Resources official, patent examiners who receive oral warnings often improve their performance so that by the end of the fiscal year, when overall performance ratings are given, they do not receive an overall “unacceptable” performance rating. For example, a total of 953 patent examiners received oral warnings from calendar years 2005 through 2009. During fiscal years 2005 through 2009, 476 overall unacceptable performance ratings were issued to patent examiners.10

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10The number of oral warnings and the number of unacceptable ratings are not directly comparable because some individuals could have received multiple unacceptable ratings during this 5-year period. In addition, the data for oral warnings are in calendar years, while USPTO collects data on performance ratings only on a fiscal year basis.
According to USPTO documentation we reviewed, if, during an improvement period, a patent examiner does not raise his or her performance to at least the marginal level in the element or elements rated unacceptable, or if the patent examiner’s performance improves but becomes unacceptable again within a year of the beginning of the improvement period, USPTO management may propose that the patent examiner either receive a reduction in grade or be removed from the agency. According to a USPTO Office of Human Resources official, the agency usually proposes removal rather than reduction in grade. When a patent examiner receives notification of a proposed removal for unacceptable performance, the examiner has 15 days to respond orally and in writing either accepting or refuting the proposed removal action. The examiner has the right to obtain representation through POPA or an attorney and may request an extension of the 15-day response time from USPTO management.

According to USPTO officials, the Deputy Commissioner of Patents or designee reviews proposed removals and decides whether to remove the examiner from the agency. USPTO is required to give examiners 30-day advance notice of the proposed removal. According to these officials, the Deputy Commissioner of Patents usually takes about 60 days to make decisions on proposed removals. Rather than deciding to remove the employee, the Deputy Commissioner may decide to allow the examiner to remain with the agency without taking further action or allow the examiner to remain but take other actions, including allowing the examiner to sign an abeyance agreement or settlement agreement. An abeyance agreement is an agreement between USPTO management and the patent examiner on mutually agreed terms to resolve the pending adverse action. An example of the terms would be that, if the examiner raises his or her performance from unacceptable to fully successful and maintains that level of performance for at least 2 years, the patent examiner can retain his or her position. According to a USPTO Office of Human Resources official, if at any time during the abeyance period the examiner’s performance returns to the unacceptable level, the USPTO’s Deputy Commissioner of Patents will review the case and determine whether the abeyance agreement has been breached. If the agreement has been breached, and the Deputy Commissioner of Patents believes removal is appropriate, the patent examiner will be removed from the agency and will have no recourse. In addition, according to this official, under a settlement agreement, the patent examiner may agree to accept another course of action, such as a move to another technology center, change to a part-time work schedule, or a reduction in grade and pay. Under a settlement agreement, patent examiners are not usually subject to immediate removal if their performance returns to an unacceptable level. As an alternative to an abeyance or settlement agreement, management may transfer examiners to another art unit, reduce their grade level, or issue another written warning in view of specific facts of the situation.

According to documentation provided by USPTO, from January 2005 through January 2010, USPTO proposed 124 performance-based removals of patent examiners. Of these, USPTO may also propose removals for misconduct, but according to a USPTO official, this occurs less frequently than proposed performance-based removals. From January 2005 through December 2009, USPTO proposed 29 removals for patent examiner misconduct.
33 patent examiners were removed from USPTO and 19 decided to resign or retire rather than be removed. Of the remaining proposed removals, 45 accepted an abeyance or settlement agreement, 1 was transferred to another unit, 1 received a reduction in grade, and 5 received additional written warnings. In 20 cases, the Deputy Commissioner of Patents decided that no action should be taken. A patent examiner who has been removed for unacceptable performance generally may appeal the decision to the Merit Systems Protection Board (MSPB), which is responsible for, among other things, adjudicating employee appeals of removals and demotions for unacceptable performance.\(^{12}\) If the examiners are represented by a union, they can either use the grievance and arbitration process contained in the labor-management contract or appeal to the MSPB, but not both.

Patent examiners are initially appointed under the Federal Career Interns Program, which means that they are in a trial period for their first 2 years of employment.\(^{13}\) Until the examiners complete their trial period, they do not generally have the same rights as other patent examiners. Specifically, USPTO may discharge patent examiners during their trial period for unacceptable performance or any other permissible reason without issuing an oral or written warning, and generally, discharged examiners may not appeal the removal decision to the MSPB. According to a USPTO Office of Human Resources official, the SPE and the technology center director generally request a discharge of patent examiners during this period by notifying the Office of Human Resources, which prepares a discharge letter that the technology center director issues to the examiner. At this point, the examiner has the option to resign before close of business on the discharge date specified in the letter.

According to a USPTO Office of Human Resources official, from January 2005 through December 2009, USPTO issued 320 performance-related discharge requests for examiners in their trial period. According to this official, most of the examiners that received a discharge letter chose to resign rather than be discharged. Figure 2 shows the number of performance-related discharges of patent examiners during their trial period and the number that chose to resign rather than be discharged from 2005 through 2009.

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\(^{12}\)An independent, quasi-judicial agency in the executive branch, MSPB ensures that (1) federal employees are protected against abuses by their agencies’ management; (2) executive branch agencies make employment decisions in accordance with merit systems principles; and (3) federal merit systems are kept free of prohibited personnel practices.

\(^{13}\)Under the Federal Career Interns Program, individuals are appointed to a 2-year internship. Upon successful completion of the internship, the interns may be eligible for permanent placement within the agency. The 2 years spent in the internship serve as the employee’s trial period.
USPTO officials told us that a new examiner’s performance is carefully scrutinized during the trial period. Performance data are collected, documented, and continuously evaluated, and feedback is frequently given on job performance, including on areas that need improvement.

USPTO’s process for taking action when SPEs’ performance is unacceptable is similar to that for patent examiners. However, according to an Office of Human Resources official, SPEs do not first receive oral warnings—only written warnings. Another difference between the process for examiners and for SPEs is that SPEs who receive a proposed removal action generally have 10 days to provide a response rather than the 15 days afforded the patent examiner.

In addition, the process for newly promoted SPEs, who serve a 1-year supervisory probationary period, is different from that for experienced SPEs. According to USPTO officials, if the performance of SPEs in their probationary period is determined to be unacceptable in one or more critical elements, and they do not improve their performance, USPTO may return them to a nonsupervisory patent examiner position and pay grade. USPTO also requires SPEs to sign an agreement when they are promoted to the SPE position that acknowledges they are in a 5-year temporary promotion period. Under this agreement, their promotion can be rescinded at any time during the 5-year
period for such reasons as workload changes or other staffing needs, and they have no right to appeal. Should an SPE be returned to an examiner position, he or she may reapply for another SPE position. According to a USPTO Office of Human Resources official, from January 7, 2007, to February 14, 2010, 22 SPEs in their 5-year temporary promotion period returned to being patent examiners.\(^\text{14}\)

**USPTO’s Process for Promoting Examiners to Supervisory Positions Relies Largely on Examinations and Five Key Criteria**

USPTO’s Merit Promotion Program outlines the procedures and responsibilities associated with promotion at USPTO. According to a USPTO Office of Human Resources official, the agency’s SPE promotion process begins when the Office of Human Resources publishes a vacancy announcement for the GS-15 SPE position. Once USPTO receives applications for a specific vacancy announcement, it reviews each application to ensure that the applicant is eligible for that position, and then forms a promotion panel—composed of three SPEs or two SPEs and one group director of a technology center—that evaluates and scores the applications. With respect to eligibility, according to this official, USPTO requires candidates for an SPE position to have at least 1 year of service at the GS-14 level, in addition to specialized experience such as examining patents in specific art units dealing with such technologies as electric circuits, semiconductors, control circuits, printers, fiber optics, and lasers. Candidates must also meet specific selective factors listed on the vacancy announcement, including having full signatory authority—the knowledge, skills, and experience to approve their own as well as other examiners’ patent application reviews. In addition, candidates must have passed one of three tests to be considered for the SPE position. Specifically, patent examiners generally take the Certification Exam when they are at the GS-12 level and applying for promotion to GS-13. However, candidates at the GS-14 level who have not taken the Certification Exam must pass the Patent Manager Candidate Examination, a comprehensive test that evaluates the cumulative knowledge of each potential candidate. Candidates, such as attorneys, who are applying for the SPE position, may also meet the certification requirements by taking the Agent’s Exam—a test required for those seeking to register with the agency to represent a patent applicant before USPTO. USPTO also requires that candidates meet OPM qualification requirements for the position, such as relevant education and experience, as outlined in OPM’s *Group Coverage Qualifications Standards for Professional and Scientific Positions*. Some technology centers within USPTO also require academic course work in specific areas, but a degree dedicated to a specific area is not required. USPTO officials told us that, in general, examiners have at least 5 to 7 years of patent evaluation experience before they reach the GS-14 level at USPTO and can apply for a supervisory position.

According to USPTO officials, in the second step of the process, the promotion panel scores applicants based on the extent to which they have (1) the ability to supervise and perform administrative duties; (2) knowledge of the scientific and technical matters associated with the patent process; (3) knowledge of legal matters associated with the patent process; (4) knowledge of USPTO strategic direction, policies, and programs; and

\(^{14}\)USPTO does not systematically track the reasons why SPEs may return to being patent examiners.
(5) the ability to communicate effectively orally and in writing. The scores are weighted, with the ability to supervise and perform administrative duties representing 30 percent of the total score and each of the other criteria making up 20 percent or less of the total score. Once scoring has been completed, the applications of the individuals deemed “best qualified” are forwarded to the selection official, who is usually the group director of the USPTO technology center where the vacancy is located. The selecting official cannot be a member of the panel.

According to a USPTO Office of Human Resources official, from fiscal years 2005 through 2009, USPTO issued 55 vacancy announcements for SPE positions, and 1,247 people applied. 15 From this number of applicants, 337 were promoted to the GS-15 SPE position (see fig. 3).

**Figure 3: Applications and Promotions to SPE, Fiscal Years 2005-2009**

![Graph showing applications and promotions to SPE from 2005 to 2009](image)

**USPTO Generally Assigns Newly Promoted SPEs to Art Units on the Basis of SPEs’ Technical Expertise and Requires Management and Supervisory Training throughout Their Career**

New SPEs are generally assigned to art units on the basis of the technology they are most familiar with, or what USPTO refers to as the “best fit.” In January 2010, USPTO sent out an e-mail request to all patent managers, asking those who had been promoted

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15 A vacancy announcement may contain more than one SPE position.
to SPE since January 2005 to state where in USPTO they were placed after they were promoted. Of 228 patent managers who responded, 122, or about half, were placed in art units where they had previously been patent examiners or where they had a working knowledge of the subject matter.\textsuperscript{16} However, according to USPTO officials, this scenario is not always possible because of production needs and available vacancies in specific art units. For example, according to the results of USPTO’s inquiry, in the last 5 years, approximately 45 of the 228 respondents were initially placed in an art unit where they did not have previous work experience or background knowledge of the subject matter. USPTO officials stated that if conditions require placing SPEs in an unfamiliar art unit, highly experienced patent examiners are available to assist them in their new duties, such as in training of other patent examiners, until they learn the art unit’s subject matter. In addition, according to a USPTO official, 55 respondents were initially assigned to an 8-month detail at the Patent Training Academy, where they instructed new patent examiners.\textsuperscript{17} A USPTO official said that this detail provides new SPEs with valuable experience as supervisors before they begin their supervisory duties in an art unit. For example, it allows them to obtain the experience of training patent examiners, which is a major responsibility of an SPE, without the distraction of other management duties such as dealing with employee and labor relations issues. If SPEs do not do well on their detail, they are returned to their previous examiner position and previous grade level. Moreover, according to the survey, six new SPEs accepted details to other USPTO offices, such as the Office of General Counsel. After these SPEs completed their details, which usually lasted 6 months, they moved to an art unit to perform the work for which they were promoted.

Regarding career training for SPEs, according to USPTO officials, the agency requires new SPEs to take introductory and specialized supervisory training. Until recently, the introductory supervisory training included a series of classroom lectures provided by the Supervisory Patent Examiner and Classifiers Organization (SPECO).\textsuperscript{18} This training was a 40-hour program that included instruction specific to newly promoted SPEs in areas such as leadership, management, administrative processes, oversight responsibilities, and Department of Commerce human capital policies. USPTO officials stated that the SPECO course curriculum has recently been revised to reflect comments and suggestions obtained via an employee survey, and the course name has been changed to “New SPE Training.” USPTO officials told us the new training was implemented by the Office of Patent Training in July 2010.

In addition, according to USPTO officials, the agency requires all new SPEs to participate in the USPTO-wide Supervisory Certificate Program (SCP), which consists of 16 hours of

\textsuperscript{16}According to a USPTO official, this e-mail was sent out to all SPEs included on technical center mailing lists. The USPTO official was unable to give us an exact number of SPEs that were contacted. As stated earlier, however, as of March 2010, USPTO had 423 SPEs.

\textsuperscript{17}According to the USPTO Web site, the USPTO Patent Training Academy was established in 2006 to provide comprehensive and consistent basic training to prepare new hires for patent examiner careers.

\textsuperscript{18}An organization within USPTO, SPECO was formed to, among other things, increase the efficiency of overall management.
classroom presentations and discussion sessions. The SCP focuses more specifically on strengthening generic supervisory skills with modules on such topics as how to handle difficult people; diversity in the workplace; and coaching, communication, and time management skills. Other components of the SCP, such as “Supervisors and EEO,” “Performance Management,” and “Supervisors’ Role in Staff Development,” are offered as Web-based modules via the department’s Commerce Learning Center. USPTO requires that new SPEs complete the New SPE Training and SCP training within the first year after promotion.

In addition to new supervisor training, according to USPTO officials, all SPEs are required to take other training sessions throughout their career, such as “Information Technology Security,” “Diversity,” and “Feedback on Coaching.” An additional mandatory course, “End-of-Year Case Review Training,” focuses on patent cases decided by the courts during the year that will have a significant impact on how patent statutes are to be applied during the patent examination process. USPTO also offers SPEs optional courses, including the “Technical Center Facilitator Training Workshop,” a customized workshop for supervisors who will provide training or facilitation in their technology center, and “All Hands Management Training,” an annual meeting for all SPEs and other managers to discuss goals and share best practices.

According to USPTO officials, the agency has made leadership development a key cross-cutting strategy for achieving the objectives of the agency. Developmental and leadership training opportunities are geared to employees’ individual roles and career development needs and interests. Specifically, USPTO recently implemented its Leadership Development Program (LDP), which emphasizes leadership as instrumental in achieving the agency’s strategic vision to “innovate, protect, communicate, share, and inspire while maintaining intellectual property.” The LDP was implemented in two phases—in March 2010, it became available to new and experienced SPEs, as well as other management employees, and in June 2010, it became available to all patent examiners interested in developing their leadership skills. LDP provides resources for leaders at all levels through a Web site that allows them to assess their leadership skills and, with input from their own supervisors, set goals to develop or improve their skills and plan a course of action to achieve these goals. The LDP Web site provides links to the Commerce Learning Center to allow supervisors and senior management officials to take online training or register for classroom training related to various performance elements. The site also provides links to other online resources, such as articles on leadership skills, and enables both program participants and their supervisors to track participants’ progress in achieving their goals. The LDP coursework is geared toward specific management levels. For example, coursework for new SPEs—provided in classroom sessions and online modules—covers basic supervisory skills (e.g., managing performance and workload, effective hiring, and developing others); human capital management; financial management; change and conflict management; and organizational awareness.
Agency Comments

We provided a draft of this report to the USPTO for review and comment. USPTO provided technical comments that we incorporated into the report, as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Under Secretary of Commerce for Intellectual Property and Director of USPTO, and other interested parties. This report also is available at no charge on the GAO Web site at http://www.gao.gov.

If you or your staffs have any questions concerning this report, please contact me at (202) 512-3841 or ruscof@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Individuals making key contributions to this report include Tim Minelli, Assistant Director; Greg Carroll; Nancy Crothers; Karin Fangman; Cindy Gilbert; Sandra Kerr; Janice Latimer; and Jeanette Soares.

Frank Rusco
Director, Natural Resources and Environment
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