Why We Did This Review
As part of the Office of Inspector General’s FY 2010 audit plan, we conducted an audit of the PE2E project, USPTO’s effort to develop a fully integrated, automated patent process. Our audit objectives were to assess USPTO’s readiness to successfully manage the PE2E project by determining the adequacy of its acquisition process and methodologies as well as the project’s governance.

Background
In December 1982, USPTO submitted to Congress an automation master plan for a “paperless” office. Since then, the agency has spent over $1 billion on this effort and has made progress developing some automated capabilities, but it has not achieved its goal of a fully integrated, automated patent process. Past automation efforts have resulted in a combination of some four dozen aging systems that, according to USPTO, are difficult to maintain, unable to meet the demands of a growing user community and document database, and cumbersome for patent examiners to use.

PE2E is USPTO’s latest effort to improve, integrate, and automate its patent process. The project is one of the most ambitious and complex multi-year IT investments USPTO has undertaken in several years, and it supports the agency’s strategic goal of optimizing patent quality and timeliness.

U.S. Patent and Trademark Office
Patent End-to-End (PE2E) Planning and Oversight Need to Be Strengthened to Reduce Development Risk (OIG-11-033-A)

What We Found
USPTO has developed adequate short-term plans for the first segment of PE2E to be released; however, it began development of PE2E without developing a high-level prioritized list of requirements based on business and technical value for the entire project. In addition, although USPTO has planned for long-term technical needs, such as a hardware and software infrastructure that will be compatible with future PE2E development, it has not defined a high-level technical model of services to be implemented for the entire project. Unless USPTO improves its current long-term planning, it will not have a roadmap that guides the project’s building and deployment strategies. This could result in unnecessary rework and delays.

In mid-May, USPTO approved an acquisition plan for obtaining contracting resources to augment its technical experience and project staffing for PE2E, but the plan does not adequately detail its strategies for acquiring resources or how USPTO will manage future acquisition risks. Not adequately defining the acquisition strategy to obtain this support could potentially delay the project’s successful progression.

USPTO has established oversight reviews and implemented a governance structure for PE2E. However, it has not established key milestones and conditions for special reviews, and would benefit from independent expert advice as input into milestone reviews. USPTO should reinforce these oversight processes to better ensure that the project achieves its mission goals.

What We Recommended
We recommended that the USPTO Director direct the appropriate USPTO officials to

1. improve PE2E planning by developing a description and schedule of releases based on prioritized high-level requirements for the entire project and high-level designs for the project’s service architecture;
2. update the current acquisition plan so that it describes the strategy for acquiring contracting resources, including overall approach, processes, means to motivate contractor performance, and risk management; and
3. improve oversight of PE2E by establishing a key milestone oversight review schedule, criteria for evaluating project progress at oversight reviews, and thresholds for convening special oversight reviews, as well as seeking independent expert advice on technical and project management for milestone reviews.