# PATENTING A WEB APPLICATION:

## A Case Study

This white paper presents my experience on using the U.S. Patent and Trademark Office's patent process. As part of an on-going goal to reinvent myself as a technical communicator, I developed a web-based questionnaire to obtain job performance feedback and recommendations. As performance recommendations are an integral part of employment, and can mean the difference between employment and unemployment, a web-based questionnaire turned into a business website, may be a tool people would be willing to pay to use. Patenting the website is a business method that prevents capitalization on my idea.

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# PATENTING A WEBSITE APPLICATION

## WEB-BASED QUESTIONNAIRE

My basic idea is to design a website that contains a job performance questionnaire to email to co-workers, former employers, current supervisors, etc. to obtain job performance feedback. As my website could be turned into a profitable business plan, acquiring a patent prevents others from profiting from my idea. Per the U.S. Patent and Trademark Office (USPTO), a patent for an invention is the grant of a property right to the inventor. The right conferred by the patent grant is, "the right to *exclude* others from making, using, offering for sale, or selling" the invention in the United States or "importing" the invention into the United States.

As part of the patent application process, I had to develop an application document to support my application and claim for a patent. A shorter version of the application document is below and contains a rough outline of the website.

1. Web pages containing:

   - Company name, information, logo and contact information.

   - Usage fees.

   - Secure login procedures.

   - Registration forms, contact information and secure payment information.

2. Web pages containing a guide on how to write effective job-performance questions.

3. Web pages containing two questionnaire methods.

   - <u>Predesigned Questions</u>: Users select predesigned questions and answers that allow for simple and quick results. An example of a predesigned question is: "Would you hire me again"? An example of a predesigned response is "yes" or "no."

   - <u>User Defined Questions</u>: Users write their own questions that allow them to design specific, results-oriented questions and responses. Users will also have the option to add predesigned answers and questions from the first method. The response format for users who want to develop their own questionnaire is flexible and left to the user to determine. Some responses may be yes/no, while others may a comment area.

4. Upon completion, users review their questions, submit payment information, and email the questionnaire. Recipients receive an email containing:

   - Secure login information to the website.

   - Information about the company.

   - Name of the user (person who submitted the questionnaire).

   - The questionnaire.

   - Instructions.

5. Upon completing the questionnaire, the results are emailed to the user.

6.  As user's return to the website, the website will automatically keep a list of previous questionnaire results, thus allowing the user to develop an on-line job-performance profile.

## PATENT TYPES

Through my research, I discovered there are three types of patents: utility patents, design patents and plant patents.  Based on the information at the USPTO's website, I believe that my web application is a "new and useful process" and falls under the category of a utility patent.  "Utility patents may be granted to anyone who invents or discovers any new and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof."[1]

## OBTAINING A PATENT

After reading a fraction of the material at the USPTO's website, I'm convinced the work is best left to a patent attorney.  My impression is that the patent application is extremely detailed and contains much legalese.  However, as I cannot afford a patent attorney and I want the learning experience, I opted to apply for the patent myself.  I also decided to work directly at the USPTO's website as, according to them, there are five basic steps to obtaining a patent:  Search, View Fee Schedule, Apply, Check Status, and Maintain.

## SEARCH

One of my first steps was to see if my idea was patented.  To do so, the USPTO has an on-line search feature called "Quick Search" that allows you to search two terms in 30 different fields.  By default only patents submitted since 1976 are searched.  I opted to search on a few terms using just the title field and obtained the following results.

| Term 1 | Term 2 | Hits |
|---|---|---|
| Web | Survey | 4928 |
| Web | Application | 198 |
| Web | Job Performance | 129 |
| Job performance | Survey | 46 |

In all, I spent approximately 4-6 hours searching and did not find an existing patent.  Using the terms "web" and "survey" produced 4928 hits.  After reading a few results, I concluded using "survey" wasn't adequate as the term infers gathering statistics for market research.  I attempted to narrow my search using other terms and the closest I came to finding applicable patents was on the terms "job performance" and "survey" where I obtained 46 hits.  I read these 46 patents and the patent that most closely resembled mine was on the development of electronic employee selection systems and methods.  Close, but no cigar.  As best as I could determine, my idea hasn't been patented.

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[1] U.S. Patent and Trademark Office

## VIEW FEE SCHEDULE

Yikes!  Patent fees are expensive.  A basic filing fee is $330 and fees quickly escalate depending on the patent type.  Also, fees apply at each step in the application process.  The good news is that United States Code, Title 35, Section 41, dictates that *some* fees charged by the USPTO are reduced by 50 percent for small businesses meeting certain criteria, independent inventors (like myself,) and nonprofit organizations.  The fees that are reduced include, but are not limited to, the filing fee, search fee, examination fee, and maintenance fees.  All of these fees apply to my patent and are $82 for the application fee, $270 for the search fee, $110 for the examination fee, and $755 for the issue fee.  Grand total of $1217… so far.

## APPLY

It would have been helpful if I had read through the *entire* application process before beginning so that I was prepared with all of the necessary information.  Alas, I didn't prepare and was delayed at several points in the on-line application while I gathered information.

I discovered that the basic filing process is to file as either a registered e-filer or an unregistered e-filer. |After some research, I finally understood that a registered e-filer has an assigned customer number, a digital certificate (for secure access,) public key infrastructure technologies (for identification) and can save their work while it's in progress.  Also, should problems arise, or you need to take subsequent action, you can do so electronically.  An unregistered e-filer is offered none of these enhancements.  I opted to become a registered e-filer, completed the paperwork for a customer number on October 7, 2009 and receive my customer number on October 19, 2009.
I thought this was an adequate turn-around time as the paperwork was completed via the U.S. Post Office and not the internet.

## Step 1.    Unregistered E-Filer

Using the USPTO's website called EFS Web (Figure 1) I started at entering my information and encountered my first problem.  I thought since I had a customer number I could file as a registered e-filer.  But, I discovered I had to start as an unregistered e-filer to become a registered e-filer; as I completed the unregistered e-filer steps, I was able to associate my customer number with the application.

I completed my name and email (Figure 2) and selected "New Application."  The second problem I encountered is declaring if I am filing a provisional or nonprovisional utility application.  The USPTO's website has plenty of information on how to file each type of utility application, but not on their definitions. Google came to the rescue with several websites where I was able to determine that a nonprovisional application establishes the filing date of your patent application and begins the examination process. A provisional application only establishes your filing date and is primarily used when you are not ready to enter your application into the regular examination process.  Based on this information, I opted to file a nonprovisional application.
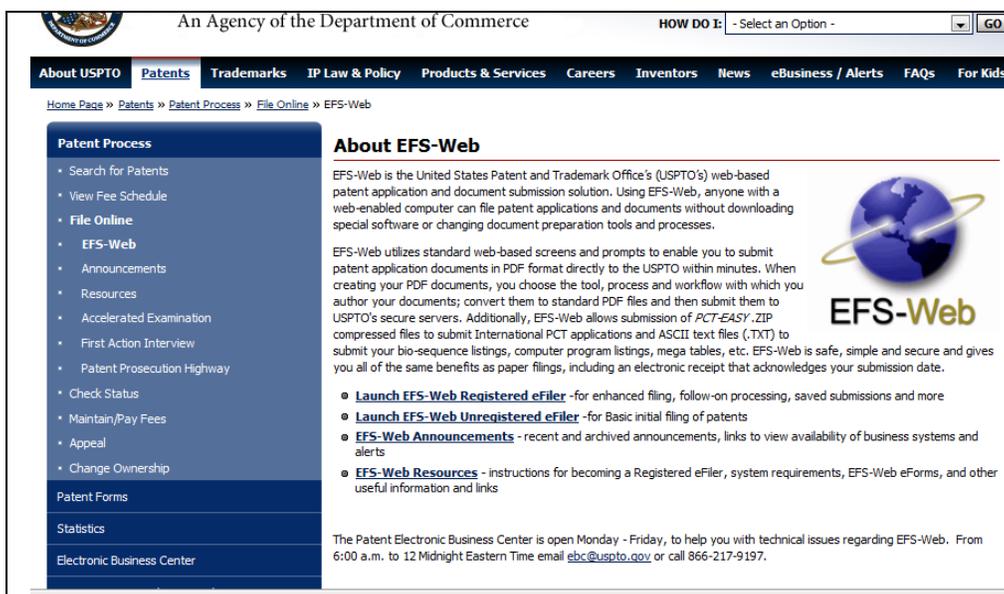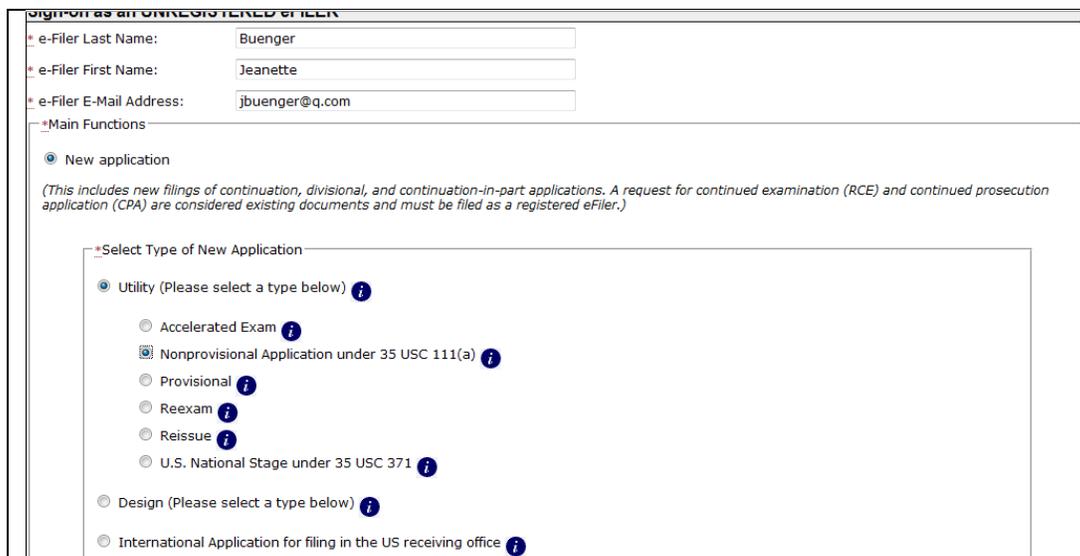
**Figure 1.  EFS-Web.**



**Figure 2.  Unregistered E-Filer.**

## Step 2.    Application Data

Next I completed the name of my patent "Web-Based Job Performance Questionnaire," the name of the inventor, inventor's address (where I can enter my customer number or address) (Figure 3).

**Figure 3. Application Data.**

## Step 3. Attaching and Reviewing Documents

At this point, I wished I would have read the entire application process before starting as, if I had, I would have been prepared with the attaching documents. I didn't know what documents to develop or attach. I searched the USPTO's website and the internet and did not find anything I though pertinent. I looked at the information submitted for several patents, especially the patent on the development of electronic employee selection systems. This patent has an abstract, list of inventors, assignee (company,) application number, date filed, related patent documents, references, related application data, a list of claims, description, drawings, and examples. I noticed that this same, basic outline of information was used by this company on a number of awarded patents. As it appears that this basic outline proved useful, I decided to use it as a guide to generate my patent document. (An abbreviated version of my patent document is the outline at the beginning of this white paper.)

Another problem occurred during the upload process (Figure 4). I received numerous error messages stating I wasn't using a true type font per the USPTO's requirements. I did some research and discovered how to tell what fonts in MS Office are true type fonts. I was using a true type font (Arial) in my Word document. My next step was to examine if Adobe Acrobat was causing the problem during the conversion to a pdf file. I went to the Adobe website, logged in and created a pdf file that uploaded to the USPTO's website with no problem.

## Step 4. Calculate Fees

As you can see from Figure 5 and Figure 6, there is quite a difference in filing fees between a large entity (businesses) and a small entity (independent inventors). Just the filing fee is $330 for a large entity as opposed to $82 for a small entity. I opted to pay just the filing fee as I'm not financially able to pay for the filing fee, search fee, and exam fee. Instead, I will pay the fees as each stage in the process is completed.

The remainder steps in the process were easy and consisted of confirming and submitting the application, paying fees, and printing my receipt.

**Figure 4.  Attaching Documents.**



**Figure 5.  Calculating Fees – Large Entity.**

**Figure 6.  Calculating Fees – Small Entity.**

## CHECK STATUS

The USPTO offers the patent application information retrieval (PAIR) system for checking a patent's status.  There are two PAIR applications, public PAIR and private PAIR.  I opted for the private PAIR for secure, real-time access.  (The public PAIR only provides access to issued patents and published applications and doesn't seem useful for tracking my status.)  This is another point in the process where, had I read the instructions in advance, I would have completed and mailed the paperwork for a private PAIR.  The paperwork for a private PAIR includes a customer number and applying for a digital certification.  I already have a customer number and I completed the paperwork for a digital certificate on November 15, 2009.  After my paperwork is processed and approved, I will receive an authorization code and a reference number; both of which are used to access private PAIR.

## MAINTAINING A PATENT

As I am applying for a utility patent, I must pay maintenance fees 3.5, 7.5 and 11.5 years from the date the patent is originally granted.  Should I obtain a patent, my maintenance fees at 3.5 years are $490.  Fees may be paid in three ways: by mail, a revenue accounting management system, and electronic funds transfer.  I have not looked into the revenue accounting management system as it requires information from the actual patent.  I probably won't use electronic funds transfer, as I really don't want the U.S. government to have my bank account number.  Thus, I will use on-line banking to pay by check.

## PATENT STATISTICS

I don't expect to obtain my patent quickly.  In 2009 there is an average of 6,148 staff members for utility, plant, and reissue patents.  The backlog is currently 60,882 applications for 629 examiners, or 97 applications per examiner.  For computer architecture, software and information security patents (the category I think my application falls under,) the average pending rate for the first action (which I assume to be the filing and examination process) was 29.4 months (2 years and 4 months).  For subsequent actions, the average pending rate was 40.7 months or 3 years and 4 months.

Overall, I would give the USPTO's website a B-/C+ mainly due to the lack of an explanation on some of their terms and also because the entire process cannot be done on the internet.  I had to use the U.S. Post Office to mail in the customer number form and to obtain the digital certificate.