Comments of the National Association of Patent Practitioners For the National Academy of Public Administration's USPTO Review of Patent Work Processes and Organization Structure

Submitted by Joy L. Bryant, Executive Director

March 2, 2005

#### **Executive Summary**

The National Academy of Public Administration sought comments from the National Association of Patent Practitioners (NAPP) with respect to the U.S. Patent and Trademark Office (USPTO) patent work processes and organization structure. In this paper, the NAPP expresses its observations with respect to the progress, and lack thereof, that the USPTO has made in achieving its 21<sup>st</sup> Century Strategic Plan Milestones. Discussion is included with respect to: 1) Quality and timeliness of patent examinations; 2) Greater reliance on electronic information and processing systems; and 3) Attracting and retaining a quality workforce. In particular, the NAPP notes that the quality and timeliness of patent examinations has degraded in some technology areas and patent pendency is on the rise. NAPP members are reluctant to file patent applications electronically for many reasons, with the main reason being that the software packages provided by the USPTO are not user-friendly and there is poor technical support. The NAPP notes that the USPTO needs to work harder on attracting qualified patent examiners and retaining these examiners. In particular, the USPTO should require the patent bar examination as a pre-requisite to applying for a position as a patent examiner. This requirement is less burdensome than that for trademark examiners (who must have a law degree). Other issues of concern to NAPP members are further addressed within this document.

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### Comments of the National Association of Patent Practitioners For the National Academy of Public Administration's USPTO Review of Patent Work Processes and Organization Structure

The National Association of Patent Practitioners (NAPP) appreciates the opportunity to voice our concerns with respect to the U.S. Patent and Trademark Office (USPTO) work processes and organization structure. NAPP is an organization of patent agents and patent attorneys whose practices focus on procedure before the USPTO. In particular, our members are deeply involved in patent-prosecution practice, as the majority of our practitioner members are patent agents. NAPP was founded in 1996 and has approximately 475 members in 13 countries. As part of our member benefits, we conduct a daily Patent Practice Forum<sup>TM</sup> that enables our members to communicate by e-mail on a daily basis. In preparing our testimony, questions were posed to our members through the Patent Practice Forum<sup>TM</sup>; therefore, the information provided to you today is believed to be fairly representative of the NAPP membership views.

### Progress the USPTO has made in achieving its 21<sup>st</sup> Century Strategic Plan Milestones

With some exceptions, NAPP applauds the USPTO efforts with respect to working towards achieving the milestones set forth in the 21<sup>st</sup> Century Strategic Plan. We realize that this plan is an aggressive plan aimed at improving our patent system. In particular, we note that the USPTO's effort with respect to enhancing the reviewable record of prosecution in patent applications has vastly improved since the inception of the strategic plan. However, we believe that the USPTO has a way to go before it achieves its goals with respect to electronic end-to-end processing of patent applications and, especially, reducing patent pendency. We also believe that the quality and strength of the patents that are presently issuing from the USPTO is questionable.

Challenges the USPTO faces in meeting these milestones

- 1) Quality and timeliness of patent examinations Our members note that generally the quality of patent examination has remained the same but in some technology areas it has degraded. We are noting that the number of restriction requirements is on the rise and the quality of the searches with respect to examination is low. For example, many of the searches fail to incorporate publications other than U.S. patents and published patent applications. With respect to the timeliness of patent examinations, our members have noted that patent pendency has increased rather than decreased. In particular, those NAPP members working in the software and business methods patent area are seeing pendencies of five (5) years and more. This is alarming.
- 2) <u>Greater reliance on electronic information and processing systems</u> Our members remain reluctant to file patent applications electronically. In

particular, we have found that the software presently available from the USPTO is incompatible with other commonly used programs and is clearly not user-friendly. Most importantly, the USPTO fails to provide adequate technical support for the electronic filing software. In addition, there is a lack of confidence that the application will be received in full at the time of filing. Our members have experienced transmission failures, drawing transmittal errors, OCR errors, and errors made by the clerical staff. The amount of time that it takes to correct these errors makes it not worth the effort to file electronically. In view of the wide availability of digital senders and other commercially available methods to transmit information with ease electronically, the problems with the USPTO software are inexplicable. This is, after all, the 21<sup>st</sup> Century, and the USPTO should be at the forefront of technology. At a minimum, the USPTO should permit applicants to file patent applications in either PDF or TIFF formats, as they allow with respect to the filing of assignment documents and documents sent to the Board of Appeals.

3) <u>Attracting and retaining a quality workforce</u> – The USPTO needs to work on attracting and retaining patent examiners who are either native English speakers or have a high proficiency in the English language. Some of our members have found that Office Actions are written in broken English and do not clearly convey the nature of the rejection. This is particularly seen in the electrical arts. The need for clear communications is especially important in technical areas where subtle distinctions must be communicated. Future litigation over the broken English prosecution histories now being generated by the USPTO will greatly burden the courts and taint the U.S. patent system.

The USPTO needs to do a better job screening applicants for examiner positions. There is no reason why the USPTO could not require job applicants to take the patent bar examination as a condition of receiving a position as an examiner. This requirement is less burdensome than that on the trademark side of the office, where trademark examiners are required to have completed law school. If all applicants for positions as patent examiners passed the patent bar exam before starting work at the USPTO, a significant amount of money could be saved in training examiners. The patent bar requirement sets a minimum standard for patent examiners that is equal to that of the patent practitioners with whom they are working. We understand, however, that implementation of this requirement should be done with sensitivity to the USPTO's need to hire large numbers of new examiners to reduce the backlog.

Extent to which the organization's structure and patent review process are appropriate to:

1) <u>Fulfill the strategic plan goals</u> – We found it interesting that, in comparing the USPTO's 2004 Performance and Accountability Report with earlier reports, it appears that management changed the strategic plan goals. The

strategic plan goals are not static and the review process is skewed to try to make the USPTO appear as if it meets its goals. The USPTO needs to adjust its goals to meet the minimum requirement set forth in the American Inventor's Protection Act of 1999, a first office action on or before 14 months from the earliest filing date.

- 2) <u>Increase patent quality</u> It appears as if the USPTO has attempted to insert more cross-checks into the patent examination process. However, in doing so, these cross-checks delay issuance or disposal of patent applications. Quality checks should be conducted early in the patent examination process. NAPP recommends that these checks take place prior to or at the time of a first office action.
- 3) <u>Decrease the rate of patent pendency</u> Every year, the USPTO has increased the patent-pendency goals in the strategic plan. We find this "tweaking" of the patent-pendency goals as a way for the USPTO to try to make it appear to the public as if it is meeting its goals, when, it fact, it is not. The American Inventor's Protection Act of 1999 set one bar a first office action at 14 months. Our members rarely see this goal met. The USPTO needs to focus on the law and its original goals and stop creating the illusion that they are meeting their goals.

### Extent to which USPTO has a suitable allocation and skill mix of employees

It seems apparent that, as the USPTO hires more new examiners, the number of inexperienced examiners will soon (if not already) outnumber those with experience. In reviewing the 2004 report, the USPTO noted that the number of procedural training courses offered each year is based on the projected number of new examiners entering the patent business unit. Based on this statement, it is conceivable that a new examiner in one business unit may receive less procedural training than an examiner in a business unit with more hires. We recommend that, with respect to procedural training courses, all examiners should be trained equally, regardless of what patent business unit they are in.

# <u>Review of business processes and the extent to which they contribute to the timeliness of patent examinations</u>

Our members have expressed concern with respect to how the quality review process comes into play with respect to the examination process. If a quality review check is conducted, how long does it take? In other words, is the quality review check delaying the sending of the office action? In addition, when does the quality review check take place? If the USPTO is waiting to conduct a quality of review check until the time the case is allowed, this is inefficient and costly to the applicant. An applicant has the burden of having to pay the costs associated with patent prosecution. The practitioner is at the mercy of the examiner who is making a judgment call with respect to patentability. If the examiner's work is not checked until the time of allowance, after the investment of time and money has gone into the prosecution of the application, the applicant's money is wasted. NAPP recommends that the USPTO perform quality review checks at the time of the first office action. This will ensure that the examiner is issuing a proper rejection from the start and prevents applicants from wasting their money by being subjected to the process a second time.

Quality review checks should be implemented to grade examiners on how often they find the best rejection the first time around. In an appreciable fraction of instances, examiners make a completely improper rejection and, when the error is pointed out by the applicant (or, in some cases, even by the Board of Appeals), the examiner finds another rejection. Such sequential examination increases applicant costs and extends pendency considerably. The business procedures should be structured to check for this kind of problem at an early stage of prosecution.

Extent of stakeholder confidence in the USPTO's ability to manage its workload -Presently, our members' confidence in the USPTO's ability to manage its workload is low. We are experiencing increased pendency rates and poor patent examination quality. We are aware that the USPTO is presently understaffed. We are also aware that money has been approved for new hires. With the high influx of new examiners, the USPTO will need to find creative ways to quickly train new hires. One way to achieve this goal is to require applicants for examiner positions to pass the patent bar exam. This requirement is less burdensome than that for trademark examiners and ensures a minimum understanding of practice before the USPTO. This would minimize the need and costs for introductory level courses and allow new hires to focus more on sharpening their examination skills.

# How the USPTO can improve communications with key stakeholders so they obtain necessary information

The USPTO primarily uses three modes to communicate with NAPP members:

1) Written Office Actions; 2) Oral Communications; and 3) Electronic communications.

- 1) <u>Written Communications</u> Some of our members have reported incidents of receiving office actions that are written in broken English and do not clearly convey the nature of the rejection. A quality check by a supervisory examiner at the time a first office action is to be issued would identify this problem and any other potential issues that may delay prosecution.
- 2) <u>Oral Communications</u> Oral communications take the form of telephone conversations with examiners, customer service representatives, independent inventor service line, and through customer partnership meetings.
  - a. <u>Communications with examiners</u> In most cases, examiners are willing to work with practitioners over the phone to move the patent application along through the examination process.
  - b. <u>Communications with customer service representatives</u> NAPP members have reported long delays and, in some instances, the inability to actually contact a customer service representative when they call the customer service number. Since many of the questions to customer service representatives involve procedural issues, there is no reason why a practitioner could not e-mail them to the USPTO. By

establishing an e-mail address for customer service (OIPE), applicants can e-mail their procedural questions to the USPTO and receive a reply within 24 hours.

- c. <u>Independent inventor service line</u> Some NAPP members have found that contacting representatives in the independent inventor's office to be more helpful than the customer service representatives. Apparently, these practitioners have not experienced the long hold times that are associated with the customer service number. As recommended with respect to the customer service representatives, an e-mail address would be helpful.
- d. <u>Customer partnership meetings</u> The USPTO has done a fairly good job communicating through its Biotechnology Customer partnership meetings. NAPP members have benefited from the information at these meetings because NAPP representatives have been diligent in making sure that the information is timely disseminated to our members. NAPP recommends that every patent business group hold customer partnership meetings. NAPP is willing to work with the USPTO in distributing information from these meetings. The USPTO needs to work with organizations such as NAPP to inform members when these meetings are held.
- 3) <u>Electronic Communications</u> The USPTO communicates with its stakeholders electronically through its website, weekly USPTO e-newsletter, and by electronic filing.
  - a. <u>Website</u> NAPP members have found the USPTO website to contain a wealth of information related to patent practice. On the whole, the USPTO has done an excellent job providing information through its website.
  - b. <u>E-newsletter</u> NAPP members find the USPTO's e-newsletter to be informative with respect to changes in personnel. NAPP recommends that the USPTO use the e-newsletter to disseminate information about changes with respect to practice before the office. A simple link to where the information can be found on the USPTO website would be helpful.
  - c. <u>Electronic filing</u> Improvement is needed with respect to the area of electronic filing. Our members are reluctant to file electronically for the reasons stated earlier in this paper. The main reason being that the software provided by the USPTO is incompatible with other commonly used programs and, clearly, is not user-friendly. The NAPP offers the following recommendations:
    - i. Allow the filing of patent applications in PDF or TIFF formats. The USPTO is already accepting the filing of assignments and documents sent to the Board of Appeals in these formats, so why not patent applications?
    - ii. If applicants must use the USPTO software, offer more technical support and training. In particular, the electronic

business center should host customer partnership meetings and offer more training sessions on how to use the electronic filing software. If they are doing this, they are failing to communicate these meetings to the practitioner community.

iii. The USPTO assumes that all practitioners have IT people or software expertise to correct "bugs" found in its electronic filing software. This is not the case. Practitioners, particularly those who specialize in the chemical arts, find the software packages provided to date to not be user-friendly because they are written from the assumption that the user knows something about software programming. NAPP recommends that betatesters for any USPTO software packages should include those who are not "software-savvy."

### Processes used by the EPO and JPO and their applicability to the USPTO

One of our members is an examiner with the EPO, who provided information to us about searches and examinations. In particular, he informed us that at The Hague and in Munich, examiners perform all duties associated with patent searches and examinations. In fact, the EPO found that when the search and examination duties were split, the work product was not as good. Hence, the EPO has moved toward eliminating this practice through the implementation of its BEST program (Bringing Examination and Search Together). NAPP recommends that the USPTO learn from the EPO's experience that dividing the search and examination functions leads to poor examination quality.

Other issues of Concern

1) <u>Outsourcing patent searches</u> – A strong economy must have strong intellectual property protection available, otherwise there is no incentive for those with the money to seek patent protection and those with the capital to back new ventures to risk investing in new technology. Conversely, poorly examined issued patents clog the courts and slow down the American economy. NAPP is concerned about the proposed outsourcing of patent searches and does not believe that this will significantly improve the quality and speed of examination, and may on balance result in a net loss of quality, speed, or both. On the whole, our members have expressed many concerns about the idea. NAPP members who are former examiners and/or administrators in the USPTO expressed extreme concern. Searching is important, because poor searches result in weak patents.

A number of reasons have been given for opposing general outsourced searching:

a) Former examiners report that they examined and searched in combination. Good, solid office actions are rarely the result of a single-pass search. Often, especially in the case of obviousness rejections, once the primary reference is determined, subsequent searches are done to look for proper secondary references to create solid rejections. Examination often leads to new search strategies. Searching and examining often overlap. Searching becomes an

iterative process, with the search strategy developing as the examination progresses. As the search progresses, the search strategy evolves based on the claimed invention. In the late stages of the search process, examiners report that they would begin the office action drafting process while finalizing the search. Sometimes, during drafting, the need for additional searching became apparent. This process enables examiners to offer strong patents to inventors and to the American public. This methodology would not be possible if examiners were required to rely only on the results of a one-time search completed by someone else. Moreover, the examiner does not have the benefit of relying on the results of his or her own search for the construction of a strong rejection argument.

- Under the current system, examiners become experts in particular b) arts, in which they also search. Outsourcing searching will hinder an examiner's ability to stay cognizant of the state of the art. For example, when an examiner conducts his or her own searches for numerous inventions in a particular art unit, he or she is repeatedly exposed to that art. Even new examiners quickly become familiar with their fields, through interaction with experienced examiners and through examination and searching in a concentrated field of This means that the searches are likely good ones, study. performed by specialists. In addition, if the search function is taken away from the examiners, they will lose the constant review of the ever-increasing body of information within the art, causing examination to suffer from a lack of current scientific information as a result.
- No outsourcing firm would be able to hire the number of people c) and the quality of people hired by the USPTO. Also, it is not likely that a private firm would offer the kind of job benefits that are offered by the Office -- job benefits that keep people for the length of time it takes to become a skilled searcher. The private sector cuts costs by cutting benefits to their employees. Less skilled people, with less incentive to do a good job, will necessarily produce less skilled or poor searches. Searching can be tedious and trying and requires a high work ethic, tenacity, and Those who have the personality traits and the foresight. background required to do a good search will not waste their skills working for the low wages likely to be paid by a private industry, lowest-bidder contractor. As a result, it is likely that contracted searchers will lack the experience of skilled examiners and consequently produce poorer search results.

- d) Outsourcing searching will demoralize the examination corps and turn examiners into little more than scribes of office actions, again leading to weaker patents. Our members report that examiners presently in the USPTO who are asked about the idea of outsourcing appear overwhelmingly opposed. Indeed, in their own newsletter, POPA has an article entitled, "No Examiner Favors Outsourcing." <u>http://www.popa.org/newsletters/decjan05.shtml</u> The article states that search outsourcing is not cost effective. Both the searcher and examiner must spend time reading and understanding the invention, the claims and the references. Paying both for their time is wasteful and inefficient.
- e) Outsourcing could potentially go to foreign labor markets to cut costs even further. This raises additional problems associated with breaches of National security and economic espionage. NAPP members are concerned that eventually the USPTO would outsource its searches to another country where wages are low. Such action would result in putting our Nation's future at risk. By sending our innovations overseas, the safeguards are not in place to protect from security breaches.
- f) Our members are concerned that outsourcing will result in loss of confidentiality for our inventor clients. Will the measures be in place to prevent inventions from being prematurely "leaked" into the public domain?
- The EPO history with decentralized searching, as reported by one g) NAPP member who is an EPO examiner, is instructive. The EPO has not outsourced searches. However, the EPO has two main locations, one in The Hague and one in Munich. Several years ago, the searches were performed by a separate search group in The Hague, even for examiners in Munich. The EPO examiners apparently routinely ignored the searches, ran their own searches, and found different art. The EPO experience demonstrated that separating searching from examination, as in the PTO's outsourcing proposals, resulted in double the work for no effect. As a result, the EPO is consolidating searching and examination, though by the implementation of a program known as "BEST" (Bringing Examination and Search Together), which is now effected EPO-wide. Some examiners in both locations still may only search or exam, but this will end in a matter of a few years.

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Assuming that the USPTO proceeds with some form of outsourcing of searches, our members encourage the USPTO to implement the following restrictions and requirements:

- a) Outsourced searching is best reserved for specialized searching under the direction of examiners. For example, the USPTO now has search units for specialized searching available through the specialized libraries. Examiners can direct the unit to search for particular subjects before particular dates. Outsourcing such specialized, examiner-directed searching presents less of a problem. The search effort needs to be coordinated and directed by the examiners.
- b) The examiners should have flexibility to redo, repeat, expand, or supplement searches if they think that some areas of the art were overlooked or not looked at closely enough. This should not negatively impact the examiner's job rating, either directly or indirectly through production quotas. Examiners should be rewarded, not punished for or discouraged from trying to do a good job.
- c) Third party search firms should be strictly reviewed for quality. One way to accomplish this, consistent with the previous paragraph, is to allow examiners to grade the search results and explicitly say whether the searcher's results appear adequate as a starting point. Preferably this should be done by having the examiners independently repeat a certain percentage of all searches (despite the duplication). After the examiner finishes, he or she should be obligated to look at the outsourced search, compare it with his or her own, and grade the searcher. Factors used in grading may include whether the searcher found references equally or more on point than the examiner's best references, whether the searcher included irrelevant references, etc. The grades could be used to identify incompetent searchers and/or search firms. If there are too many declarations of inadequacy for a given searcher or search firm, the person, or firm, should be disqualified.
- d) More than one search firm should be employed. In fact, search firms should be assigned specific patent business units, to promote specialization and expertise associated with various technology areas.
- e) Except for outsourcing to the EPO and JPO, which is unlikely, searching should be kept within the United States.
- f) Even within the U.S., strong safeguards should be implemented to guard confidentiality.

- g) Search service contracts should be written to require minimum patent experience, fixed staffing commitment, and some form of prior certification, *e.g.* –the patent bar examination.
- 2) <u>Fee Schedule</u> NAPP recommends that Congress amend the Patent Act to allow reduced fees of 50% (at least) for ALL payments due to the USPTO. This could be done as a fee-neutral change. The USPTO doesn't give small entity discount now for all fees because the statute authorizes it only for fees stated in 35 USC 41(a),(b),(d)(1) per the small-entity statute, 35 USC 41(h)(1). The referenced subsections include the fees due upon filing, issuance, disclaimer, appeal, revival, and extension (in 41(a)), maintenance fees (in 41(b)), and search fees (in 41(d)(1)). It does not cover other fees, authorized under 41(d)(2), such as publication fees, petition fees, IDS submission fees, surcharges for revival after expiration, late submission of priority claim fees, reexamination fees, processing fees, etc. (Nor does it apply to trademarks or PCT applications.) NAPP and its small-entity discount available.

NAPP also recommends that the most recent fee bill's fees for extra claims be rolled back. There is no reason for such punitive charges for extra claims. Somewhat larger claim sets are often necessary for proper patent protection, given the complexities of patent law. This is particularly the case in certain fields, such as software patents. The PTO should insert such high per-claim charges only for excessive numbers of claims, such as for those few patents that have more than 100 or 150 total claims or more than 15 or 20 independent claims.

3) <u>Publication</u> – Our members have expressed concern about the proposed legislation that would require mandatory publication of all patent applications at 18 months. Many small-entity inventors request non-publication because they are unable to afford filing abroad. Requiring mandatory publication of all patent applications buys small-entity inventors nothing with respect to the patent system. Many of these entities cannot afford the high price of patent litigation. At a minimum, by allowing a small-entity inventor to request non-publication, the entity may retain the option for trade secret protection, in the event financial resources or other considerations make patenting unavailable.

These concerns are particularly heightened by the fact that the original proponents of patent publication argued for that change in part using the point that most patents are examined at least once before publication. Thus, applicants could have an initial review and have the ability of deciding whether to withdraw applications from publication. At the time, the average pendency to first office action was near the 14 months goal. Since then, the average pendency has grown substantially, and in some areas, such as software or business method patents, the average pendency to first action is four years.

#### Conclusion

In conclusion, members of NAPP have expressed concerns regarding the quality of patents issuing from the USPTO. The USPTO's constant, upward adjustment of the patent-pendency goals in the strategic plan do nothing but create an illusion to the USPTO that it is meeting its goals. The USPTO should establish a minimum hiring requirement that all patent examiners must have passed the patent bar exam. This minimum threshold would help the USPTO to gain qualified candidates who have a basic, fundamental understanding of practice before the USPTO. This enables new examiners to focus less on the basics and more on examination. Quality review checks should take place prior to sending the applicant the first office action. With respect to electronic filing of patent applications, the USPTO needs to adopt a software platform that is user-friendly and is supported by the USPTO staff. NAPP recommends that the USPTO allow applications to be filed in PDF or TIFF formats. Lastly, NAPP recommends that the USPTO learn from the experience of the EPO, in that outsourcing of patent searches does not result in better patent quality, but is, in fact, counterproductive to an examiner's ability to provide a quality examination.