# SUPPORTING STATEMENT United States Patent and Trademark Office Grace Period Study OMB Control Number 0651-00xx (Modified Submission –September 30, 2013)

### B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

# 1. Universe and Respondent Selection

The United States provides inventors with a one-year grace period following their public disclosure of patent-eligible inventions during which they can file patent applications for those inventions. Many European countries, however, offer grace periods of less than one year or do not offer grace periods of any length. The consequences of this are not fully understood.

To study this issue, the USPTO plans to conduct a pilot study on the relationship between European countries' lack of one-year grace period and researchers' patenting activities. The Grace Period Study Survey will guide research on the significance of the one-year grace period and premature disclosure. This pilot study would support the USPTO's efforts to be a leader on intellectual property matters internationally and to promote efficiency and cooperation in the global patent system because of the prominence of the grace period in discussions on international patent harmonization.

The respondents will consist of scientific researchers. The USPTO's survey contractor (IIPI) will survey approximately 3,000 researchers determined to have published articles disclosing potentially patentable materials. The articles were selected to be representative of European research outputs and were limited to a five year time period.

We expect a response rate of at least 14 percent. This is based on the response rate of a similar survey of German researchers conducted by the German Ministry for Education and Research (BMBF). This estimate is a conservative estimate. Our survey design includes several features (e.g., pre-response and non-response letters) which distinguish it from that of the BMBF study. However, the lack of existing research makes it difficult to justify a more optimistic estimate. The survey results will assist researchers in designing future surveys by indicating the effectiveness of these features in increasing response rates.

### 2. Procedures for Collecting Information

<sup>&</sup>lt;sup>1</sup> During the public response period, Science Business Innovation Board published its survey of European university technology transfer managers. The survey achieved a response rate of 29.4%, and the results had a margin of error of 5.71 percent at a confidence level of 95 percent. Like the BMBF survey and unlike our survey, the Science Business survey did not include pre-response and non-response letters. Also, unlike our survey, the Science Business survey did not enjoy government backing.

The survey will consist of no more than fifteen closed-ended questions. The majority of these questions, including the substantive questions, will be categorical. The survey will also include several numerical biographical questions.

Required sample size can be calculated using the following equation

$$n = \left(\frac{P[1-P]}{\frac{A^2}{Z^2} + \frac{P[1-P]}{N}}\right)$$

where n is the required sample size, N is the size of the sampled population, P is the estimated variance in the sampled population, A is the margin of error, and Z is the standard score (z-score) of the confidence level. Even assuming an extremely conservative variance of P = 0.5 and a large value for N, based on our expected response rate, we will receive sufficient responses for us to state the survey's conclusions with a margin of error of 5 percent at confidence level of 95 percent. This estimate is independent of non-response bias.

IIPI will distribute the survey electronically through a secure, third-party survey distributor to all of the sampled respondents. Respondents will be surveyed once. IIPI may distribute the survey in waves for convenience. All contact between IIPI and the respondents will be electronic. IIPI will consult with USPTO in crafting the content of the various communications.

The survey distribution will contain a personalized cover letter. This cover letter will reference the journal article used to identify the respondent, explain why the USPTO is sponsoring the survey, and explain that all responses will be kept private, to the extent of the law. The cover letter will also include instructions describing how the respondent can access the survey securely.

A pre-response letter describing the study and asking for participation will be sent to all sample members, after which the cover letter and survey will be sent to them. The cover letter will include the username, password, and survey identification number needed to access the survey. After the survey is distributed, a reminder letter will also be e-mailed to all sample members. Although the pre-response and cover letters will include identifying information, this information will not be submitted with responses. The cover letter will explain to respondents that IIPI cannot use any identifying information in these letters to match respondents with responses.

In the case of nonrespondents, IIPI plans to use a brief non-response follow-up to encourage response from them. IIPI will attempt to redistribute the survey to nonrespondents. This may involve distributing the survey to nonrespondents' alternate e-mail accounts. Demographic information of initial nonrespondents who respond to these redistributions will be compared to that of initial respondents.

# 3. Methods to Maximize Responses

We expect that the response rate will be higher than the conservative estimate provided because of researchers' interest in the patentability of their work. The survey's simplicity, brevity, and privacy will also improve the response rate. Unlike other, similar surveys, the survey does not contain open-ended questions. Participants will be able to complete the entire survey electronically, which will further reduce burden. Additionally, the survey procedures include several mechanisms for maximizing response. These include the pre-response and reminder letters.

We will address non-response bias in two ways. First, we will compare responses to the survey's biographical questions with biographical information concerning the sampled population. If there are any differences, we will assess whether they would affect the responses to the substantive questions. Second, IIPI will distribute a brief non-response follow-up containing several questions from the survey. We will compare responses to the survey with responses to the non-response follow-up. We will use this comparison, in conjunction with the known non-response rate, to estimate the non-response error.

# 4. Testing of Procedures

Many of the survey questions were developed from previous surveys. Additionally, IIPI distributed the survey questions to technology transfer experts familiar with European research scientists' attitudes and understandings of the issues involved. The experts provided valuable feedback which resulted in changes to several questions. IIPI also described and distributed the survey to consultants familiar with survey methodology, who approved the survey's methods and content. The survey was distributed to fewer than ten persons.

# 5. Contact for Statistical Aspects and Data Collection

IIPI is responsible for designing and distributing the survey. Remington Knight is the contact person for this survey and can be reached by e-mail at <a href="mailto:rknight@iipi.org">rknight@iipi.org</a> or by phone at (202) 544-6610. The survey was developed in consultation with Paul Salmon in the USPTO's Office of Policy and External Affairs. He can be contacted by e-mail at <a href="mailto:paul.salmon@uspto.gov">paul.salmon@uspto.gov</a> or by phone at (571) 272-9300.