

## **PART B – COLLECTION OF INFORMATION METHODOLOGY**

### **1. Description of Sampling Methods**

The FTC believes that it is in the public interest to conduct a descriptive case study of Patent Assertion Entity (PAE) activity. The FTC's study will consist of two parts. The primary focus of the study consists of a descriptive case study of the PAE business model. The second part is a narrowly focused comparative case study of patent assertion activity in the wireless chipset sector. This is a one-time collection that will not create a repetitive burden for respondents.

Response by recipients of the information requests, pursuant to FTC Act Section 6(b), 15 U.S.C. § 46(b), is mandatory. Previous FTC collections under Section 6(b) orders have had 100% response rates. The recipient of a 6(b) order may file a petition to limit or quash, and the FTC may seek a federal court order requiring compliance. In addition, the FTC may commence suit in Federal court under Section 10 of the FTC Act, 15 U.S.C. § 50, against any party that fails to comply with a 6(b) order after receiving a notice of default from the FTC.

#### **A. Selection of Subjects for the Broad PAE Case Study**

For the first part of the study, the FTC proposes sending information requests to approximately 25 PAEs that use different organizational models and assertion strategies. The FTC recognizes that no publicly available data set identifies the full population of PAEs, consequently the FTC's ability to generalize study findings to the population as a whole is restricted. Hence, this study will not extrapolate its findings to the population of all PAEs. Instead, the FTC will publish a detailed case study of the PAE industry where the study subjects have been selected to disproportionately include firms with more patents and litigation activity while still including small and medium sized firms.

An ideally constructed sample of PAEs for the study would select PAEs that were representative of the population of PAEs operating in the U.S. Such a sample would oversample firms that were more economically important (accounting for a larger proportion of economic activity) while simultaneously including firms pursuing different assertion strategies (such as acquiring large or small portfolios of patents for later assertion). The FTC then could generalize results obtained from such an ideally constructed sample to the population of PAEs. Unfortunately, no publicly available data set identifies the full population of PAEs. Moreover, no data set describes the type of assertion strategy used by particular PAEs (*e.g.*, primarily litigating or primarily licensing). Given the uncertainty about the PAE universe, it is infeasible to conduct a study whose results can be generalizable to the population.

Making the best use of available data, the FTC has designed a subject-selection procedure that will simultaneously be more likely to include more economically important firms (that account for a larger proportion of PAE behavior) while including firms of different sizes (to ensure that firms operating a variety of business models are included). To meet these goals, the FTC proposes to use a stratified sampling method. First, the FTC will group firms into categories corresponding to firm size. Second, the FTC will randomly sample a fixed number of firms within each group, where the probability of being selected will be based on the relative size of the firm within the group. Because there is no public data source that systematically estimates the

revenues of all PAEs operating in the U.S., the study cannot use a firm's revenue as a measure of firm size. Instead, the study will use two publicly observable measures of a PAE's size to construct a proxy measure for firm size: the estimated patent holdings of PAEs and estimated number of defendants sued by the PAE.<sup>1</sup> The proposed stratified sampling algorithm used to construct the PAE respondent sample is explained below.

The FTC purchased the measures of estimated patent holdings and the estimated number of defendants sued from two commercial data collection firms: Patent Freedom and RPX.<sup>2</sup> Patent Freedom and RPX use public sources of information to determine if a firm is a PAE. Patent Freedom and RPX also provide estimates of the patent holdings and litigation behavior of firms engaged in patent litigation. It is important to note that both firms only provide estimates of the universe of PAEs. With publicly available data it is not currently possible to determine how much of the PAE universe is covered by Patent Freedom and RPX. The FTC does not have the resources to conduct a census of the PAE industry from which to determine a sample, and is relying on the estimated universe compiled by these firms. Hence, the results of this study will not be extrapolated to the population of all PAEs. Instead, the study's results should be interpreted as a detailed case study of the PAE industry where the study subjects have been selected to disproportionately include firms with more patents and litigation activity, while still including small and medium-sized firms.

The FTC will sample PAE subjects based on measures of patent holdings and litigation activity provided by Patent Freedom and RPX. As one goal of the case study is to cover a large part of total observable activity while also sampling smaller firms, the sampling design will use two variations on pure random sampling, stratified and weighted sampling, to construct a list of study subjects. The selection algorithm will combine measures of both litigation and patent holding data to determine the mutually exclusive stratum and the weight assigned to each PAE.

Stratified sampling will allow the FTC to divide the PAEs included in the publicly available data into mutually exclusive strata based on observable characteristics that proxy for firm size. Stratified sampling will also ensure that some of the entities from each strata, or group, are selected. The sampling design will define three strata based on the combined measure of activity – one for the most active firms, one for firms with a moderate level of activity, and one for the firms with relatively little observable activity. The FTC will use weighted random sampling within each stratum to choose the number of entities allocated to that stratum.

Within each PAE stratum, the probability of inclusion will be proportional to the measure of PAE activity: the larger a firm's proxy score, the higher the probability that the firm will be selected for the study. This is still a random selection process. However, it will increase the likelihood – although it will not guarantee – the inclusion of the larger firms within a PAE

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<sup>1</sup> The FTC developed this methodology after conducting its own research and meeting with academics, businesses, trade associations, and other government representatives.

<sup>2</sup> There also is no publicly available data set detailing all patents held by PAEs and all defendants sued by PAEs. Consequently, the FTC conducted its own research and met with academics, businesses, trade associations, and representatives of other government agencies to identify commercial data sources. While a number of academics have begun to create litigation data sets, Patent Freedom and RPX were the only commercial data providers who attempt to identify all PAE patent litigation and measure PAE patent holdings.

stratum. The FTC will sum the two size proxy measures into a single composite score.<sup>3</sup> Overall, relative to using weighted sampling on a sample that includes firms of all sizes, stratifying the PAE sample will increase the probability (substantially in some cases) of including firms with lower composite scores (to cover a range of PAE types) and decrease the probability of including firms with higher scores.

The FTC will construct the litigation activity score as follows: across the previous 4 years of data (2010-2013), the PAE filing patent infringement suits against the largest number of defendants will receive a score of 1.0. All other PAEs will receive a score that is the ratio of their total number of defendants to the number of total defendants sued by the most active PAE. The patent holding index will be constructed in a similar way. The PAE with the largest number of patents held at the end of 2013 will receive a score of 1.0. All other PAEs will receive a score that is the ratio of their observed number of patents held to that of the largest PAE. The FTC will then sum the two component scores to form the overall weighting statistic that will determine both the stratum that the PAE is assigned to and, ultimately, the probability of being included in the PAE study.<sup>4</sup> The FTC will define strata by non-overlapping ranges of the combined activity score, where the ranges are determined after the scores for all of the PAEs in the sample are determined.

Because the FTC is relying on third party estimates of PAEs for the initial selections, the FTC will select slightly more PAEs than are ultimately included in each stratum to create a candidate sample. After the initial selection is complete, the FTC will sort the selected candidate sample PAEs within each stratum according to their activity score. The FTC then will research whether the selected firms meet the FTC's definition of a PAE (*i.e.* firms with a business model based primarily on purchasing patents and attempting to generate revenue by asserting the intellectual property against persons who are already practicing the patented technology). Once the number of verified firms matches the number of firms allocated to each stratum, the FTC will drop the remaining candidate firms from the sample.

## **B. Selection of Subjects for the Comparative Wireless Chipset Case Study**

The second part of the study will compare how PAEs, manufacturing firms and other firms assert intellectual property in the wireless chipset sector. For example, the FTC seeks to explore whether the potential for countersuit against manufacturing firms changes their respective assertion behavior relative to PAE firms. While some commenters suggested expanding the scope of the comparative case study, the FTC proposes limiting that case study to the wireless chipset sector because that sector is relatively well-defined with a significant amount of assertion activity by PAEs, manufacturing firms, and other firms. This limitation also permits the FTC to achieve its goal of performing a comparative analysis of assertion behavior without

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<sup>3</sup> The assumption is that PAEs with large patent holdings but few litigations have significant patent monetization but do not rely on filing litigation as a primary business strategy. Similarly, firms with relatively few patents but many litigations are assumed to have significant patent monetization activity.

<sup>4</sup> To give a simple, concrete example of the mechanics of the design, consider a stratum of PAEs A, B, and C, in which only one firm from the group will be selected. Suppose that A, B, and C file suits against 10, 2, and 3 defendants respectively: A receives a litigation score of 1.0, B receives 0.2, and C receives 0.3. During the same period, A holds 75 patents, B holds 50 patents, and C holds 150 patents. Their respective patent holding scores are 0.5, 0.33, and 1.0. The resulting probabilities of inclusion for A, B, and C are 0.45, 0.16, and 0.39.

imposing an undue burden on study subjects. The FTC proposes sending information requests to approximately nine manufacturing firms and approximately six other firms asserting patents in this sector.

For manufacturing firms, the sample will include nine manufacturers of wireless chipsets who collectively represent the majority of industry sales of wireless chipsets. Any representations in a subsequent report will make clear that the analysis relates specifically to the subjects chosen and will not extrapolate to assertion behavior in other industries.

The FTC recognizes that no publicly available data set identifies the full population of non-practicing entities (NPEs) or those NPEs asserting patents in the wireless chipset sector. Consequently, the FTC's ability to generalize study findings to the population as a whole is restricted. Hence, this study will not extrapolate its findings to the population of all NPEs or to the population of all NPEs asserting patents in the wireless chipset sector. Instead, the FTC will publish a comparative case study of the wireless chipset sector where the NPE study subjects have been selected to disproportionately include firms with more patents and litigation activity while still including small and medium sized firms.

For NPEs, an ideally constructed sample of NPEs for the comparative wireless chipset study would select NPEs that were representative of the population of NPEs asserting patents in the wireless chipset sector in the U.S. The FTC then could generalize results obtained from such an ideally constructed sample to the population of NPEs asserting patents in that sector. Unfortunately, no publicly available data set identifies the full population of NPEs or of NPEs asserting patents in the wireless chipset sector. Given the uncertainty about the NPE universe, it is infeasible to conduct a study whose results can be generalizable to the population.

Instead, as in the case of the PAE sample, the FTC has designed a subject-selection procedure for NPEs that will simultaneously be more likely to include the most economically important firms (that account for a larger proportion of NPE assertions in the wireless chipset sector) while including firms of different sizes (to ensure that firms operating a variety of business models are included). To meet these goals, the FTC proposes to use a stratified sampling method similar to the method used in the PAE sample. First, the FTC will group firms into categories corresponding to firm size. Second, the FTC will randomly sample a fixed number of firms within each group, where the probability of selection will be based on the relative size of the firm within the group. Because there is no public data source that systematically estimates the revenues of all NPEs operating in the U.S., or more particularly of those asserting patents in the wireless chipset sector, one cannot use a firm's revenue as a measure of firm size. Instead, the FTC will use two publicly observable measures of NPE size to construct a proxy measure for firm size: the estimated patent holdings of the NPE and the estimated number of defendants sued by the NPE. The proposed stratified sampling algorithm used to construct the NPE respondent sample is explained below.

The FTC purchased the measures of estimated patent holdings and the estimated number of defendants sued from two commercial data collection firms: Patent Freedom and RPX.<sup>5</sup> Patent

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<sup>5</sup> There also is no publicly available data set detailing all patents held by PAEs and all defendants sued by PAEs. Consequently, the FTC conducted its own research and met with academics, businesses, trade associations, and representatives of other government agencies to identify commercial data sources. While a number of academics

Freedom and RPX use public sources of information to determine if a firm is an NPE. Patent Freedom and RPX also provide estimates of the patent holdings and litigation behavior of firms engaged in patent litigation. It is important to note that both firms only provide estimates of the universe of NPEs. With publicly available data it is not currently possible to determine how much of the NPE universe, or the universe of NPEs asserting patents in the wireless chipset sector, is covered by Patent Freedom and RPX. The FTC does not have the resources to conduct a census of the NPE industry from which to determine a sample, and is relying on the estimated universe compiled by these firms. Hence, the results of this study will not be extrapolated to the population of all NPEs or to all NPEs asserting patents in the wireless chipset sector. Instead, the study results should be interpreted as a detailed case study of NPEs and manufacturers in the wireless chipset sector where the NPE subjects have been selected to disproportionately include firms with more patents and litigation activity while still including small and medium sized NPEs.

The NPE subjects will be sampled based on measures of patent holdings and litigation activity provided by Patent Freedom and RPX. As in the PAE sample, the sampling design will use two variations on pure random sampling, stratified and weighted sampling, to construct a list of study subjects. The selection algorithm will combine measures of both litigation and patent holding data to determine the mutually exclusive stratum and the weight assigned to each NPE.

Stratified sampling will allow the FTC to divide the NPEs included in the publicly available data into mutually exclusive strata based on observable characteristics that proxy for firm size. Stratified sampling will also ensure that some of the entities from each strata, or group, are selected. The sampling design will define three strata based on the combined measure of activity – one for the most active firms, one for firms with a moderate level of activity, and one for the firms with relatively little observable activity. The FTC will use weighted random sampling within each stratum to choose the number of entities allocated to that stratum.

Within each NPE stratum, the probability of inclusion will be proportional to the measure of NPE activity: the larger a firm's proxy score, the higher the probability that it is selected for the study. This is still a random selection process. However, it will increase the likelihood – although it will not guarantee – the inclusion of the larger firms within a NPE stratum. The FTC will then sum the two size proxy measures into a single composite score to capture large NPEs across different business strategies. The composite score will be relative to other firms in the NPE sample only. Overall, relative to using weighted sampling on a sample that includes firms of all sizes, stratifying the NPE sample will increase the probability (substantially in some cases) of including firms with lower composite scores (to cover a range of NPE types) and will decrease the probability of including firms with higher scores.

The FTC will construct the litigation activity score will be constructed as follows: across the previous 4 years of data (2010-2013), the NPE filing patent infringement suits against the largest number of defendants will receive a score of 1.0. All other NPEs will receive a score that is the ratio of their total number of defendants to the number of total defendants sued by the most active NPE. The patent holding index will be constructed in a similar way. The NPE with the

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have begun to create litigation data sets, Patent Freedom and RPX were the only commercial data providers who attempt to identify all NPE patent litigation and measure NPE patent holdings.

largest number of patents held at the end of 2013 will receive a score of 1.0. All other NPEs will receive a score that is the ratio of their observed number of patents held to that of the largest NPE. The FTC will then sum the two component scores will be summed to form the overall weighting statistic that will determine both the stratum to which the NPE is assigned and, ultimately, the probability of the NPE being included in the comparative wireless chipset study. The FTC will define strata by non-overlapping ranges of the combined activity score, where the ranges are determined after the scores for all of the NPEs in the sample are determined.

Because the FTC is relying on third party estimates of NPEs for the initial selections, the FTC will select more NPEs than are ultimately included in each stratum to create a candidate sample. After the initial selection is complete, the FTC will sort the selected candidate sample NPEs within each stratum according to their activity score. FTC staff will then research whether the selected firms meet the FTC's definition of an NPE (*i.e.* firms with a business model based primarily on developing and transferring their patented technologies) and whether the firm is asserting patents in the wireless chipset sector. Once the number of verified firms matches the number of firms allocated to each stratum, the FTC will drop the remaining candidate firms from the sample.

## **2. Description of Information Collection Procedures**

This is a one-time collection that will not create a repetitive burden for respondents.

For the first case study, the FTC proposes sending information requests to approximately 25 PAEs that use different organizational models and assertion strategies. (The sampling methodology is described in Part 1 of this document.) For instance, the proposed requests seek information on the composition of PAE portfolios (information such as the age and field of patents); whether any patents are essential to any standards or encumbered by other licensing obligations; the costs of acquiring patents, as well as whether the PAEs share an economic interest in their portfolios with other entities. The requests also seek information about assertion activity, such as licensing and litigation activity, and the costs from assertion.

The second case study compares how PAEs, manufacturing firms and other firms assert intellectual property in the wireless chipset sector. For example, the FTC seeks to explore whether the potential for countersuit against manufacturing firms changes their respective assertion behavior relative to PAE firms. While some commenters suggested expanding the scope of the comparative case study, the FTC proposes limiting that case study to the wireless chipset sector because that sector is relatively well-defined with a significant amount of assertion activity by PAEs, manufacturing firms, and other firms. This limitation also permits the FTC to achieve its goal of performing a comparative analysis of assertion behavior without imposing an undue burden on respondents. For the second case study, the FTC proposes sending information requests to approximately 9 manufacturing firms and approximately 6 NPEs who assert patents in the wireless chipset sector.

The information requests sent to manufacturing firms and NPEs who assert patents in the wireless chipset sector will have fewer questions than the information requests sent to PAE respondents. It will not include subparts relating to patent holdings, patent portfolios, and patent acquisition. It also will only request information for the subset of respondents' assertion activity related to the wireless chipset sector.

The FTC will send one set of information requests to each respondent. The requests will call for both the production of non-privileged documents as well as the provision of information in both narrative and spreadsheet form. Wherever practical, the FTC will ask for short responses that can be provided as spreadsheet entries, such as dates, dollar amounts, and “yes” or “no” responses. The FTC also will provide a spreadsheet template that will include sample responses and formatting instructions.

Because the FTC will carefully direct information requests toward significant aspects of the respondents’ business activities, the FTC expects that respondents will have much of the requested data available in an organized electronic form. Consequently, the FTC expects that the spreadsheet will reduce the respondent’s burden. In addition, the use of a spreadsheet will reduce the FTC’s burden in analyzing responses.

**A. Information Collection**

The information to be collected in each subpart is discussed below:

**1. Firm Information**

The proposed information request for both case studies will include one subpart related to the respondents’ corporate form and organization, including identification of parents, subsidiaries, and related firms. As noted in Part A, information related to how PAEs are organized is relevant to both patent reform legislation and other policy responses to PAE activity. This subpart comprises several questions calling for a narrative response. Because the FTC expects that respondents will have this data available in electronic form, it encourages electronic submission to reduce the respondent’s burden.

**2. Patent Information**

The proposed information requests for the PAE case study will include one subpart asking for information related to each patent held by the respondent since January 1, 2009. As noted in Part A, information regarding PAE patent holdings is relevant to a number of policy issues.

To reduce the burden to respondents, the FTC has coordinated with the United States Patent and Trademark Office (USPTO). In this section, the FTC will request that respondents provide a spreadsheet listing the patent number for each relevant patent so the FTC can cross-reference this data with data obtained from the USPTO. By doing this, the FTC will reduce the burden to respondents because it will reduce production of publicly available data.

The proposed information request also will ask for non-public information regarding the patent, including whether third parties hold any interests in the patent and whether any party has performed a valuation of the patent. In addition, the proposed request will ask respondents to provide information regarding the history of each patent, such as whether the patent has ever been licensed or asserted in litigation.

To reduce the respondent’s burden, wherever practical, the FTC will seek a “yes” or “no” response, or a simple categorical or numerical response. To further reduce the respondent’s burden, the FTC will provide respondents with a template spreadsheet to answer “yes,” “no,” categorical and numerical requests. Some requests, however, will require narrative responses. Other requests will require respondents to produce specific documents, for example existing

agreements and non-privileged reports related to requested patents. Because the FTC expects that respondents will have this data available in electronic form, it encourages electronic submission to reduce the respondent's burden.

### **3. Standard Setting Commitments**

The proposed information request for both the PAE case study and the wireless case study will include one subpart related to commitments made to Standard Setting Organizations (SSO). In the PAE case study, the FTC also will ask respondents to identify any patent held by the PAE since January 1, 2009 subject to an SSO licensing commitment. In the wireless chipset case study, the FTC will ask respondents to identify any patent asserted in the wireless sector held by the firm since January 1, 2009 that is subject to a SSO licensing commitment.

To address public comments raising concerns regarding burden, the FTC will ask respondents to identify such commitments only when they are known to the firm. The FTC will not ask firms to perform legal analysis to identify encumbered patents. The FTC intends to cross-reference this information with assertion information to observe how firms assert standard essential patents.

To reduce the respondent's burden, wherever practical, the FTC will seek a "yes" or "no" response, or a simple categorical or numerical response. To further reduce the respondent's burden, the FTC will provide respondents with a template spreadsheet to answer "yes," "no," categorical and numerical requests. Some requests, however, will require narrative responses. Other requests will require respondents to produce specific documents, for example, agreements related to the SSO commitment. Because the FTC expects that respondents will have this data available in electronic form, it encourages electronic submission to reduce the respondent's burden.

### **4. Patent Portfolio Information**

The proposed information requests for the PAE case study will include one subpart asking for information related to the manner in which PAEs organize their patent holdings into portfolios. For example, the FTC will ask about the corresponding technological areas for patent portfolios, the identity of patents held patent portfolios and information regarding portfolio valuation. As noted in Part A, information regarding PAE patent organization is relevant to a number of policy issues.

To reduce the respondent's burden, wherever practical, the FTC will seek a "yes" or "no" response, or a simple categorical or numerical response. To further reduce the respondent's burden, the FTC will provide respondents with a template spreadsheet to answer "yes," "no," categorical and numerical requests. Some requests, however, will require narrative responses. Other requests will require respondents to produce specific documents. Because the FTC expects that respondents will have this data available in electronic form, it encourages electronic submission to reduce the respondent's burden.

### **5. Patent Acquisitions**

The proposed information requests for the PAE case study will include one subpart asking for details regarding each transaction in which the PAE acquired a patent since January 1, 2009. The FTC will ask respondents to complete three spreadsheets. The primary spreadsheet



will have one entry for each acquisition transaction. The FTC will ask respondents to provide information regarding the transaction, including the date, transferor, and details regarding the nature of the acquisition. The second spreadsheet will have one entry for each patent acquired in each transaction. The FTC will ask respondents to list the patent number for each acquired patent, which will allow the FTC to cross-reference assertion information with acquisition information on a per-patent basis. The third spreadsheet has one entry for each third party receiving compensation as a result of the acquisition transaction. The FTC will ask respondents to provide detail regarding the amount and type of payments made to third parties to acquire patents, which will provide the FTC with quantitative information regarding the financial benefits to third parties—including inventors—of PAE activity.

To reduce the respondent's burden, wherever practical, the FTC will seek a "yes" or "no" response, or a simple categorical or numerical response. To further reduce the respondent's burden, the FTC will provide respondents with a template spreadsheet to answer "yes," "no," categorical and numerical requests. Some requests, however, will require narrative responses. Other requests will require respondents to produce specific documents. Because the FTC expects that respondents will have this data available in electronic form, it encourages electronic submission to reduce the respondent's burden.

## **6. Patent Transfers**

The proposed information requests for both studies include will one subpart asking for details regarding each transaction in which the respondent transferred a patent to third parties since January 1, 2009.

The FTC will ask respondents to complete three spreadsheets. The primary spreadsheet has one entry for each transfer transaction. The FTC will ask respondents to provide information regarding the transaction, including the date, transferee, and details regarding the nature of the transaction. The second spreadsheet has one entry for each patent transferred in each transaction. The FTC will ask respondents to list the patent number for each transfer patent, which will allow the FTC to cross-reference transfer information with acquisition information on a per-patent basis. The third spreadsheet has one entry for each third party that compensated the respondent as a result of the transaction, including the amount paid. The FTC will ask respondents to provide detail regarding the amount and type of payments received from third parties to acquire patents.

To reduce the respondent's burden, wherever practical, the FTC will seek a "yes" or "no" response, or a simple categorical or numerical response. To further reduce the respondent's burden, the FTC will provide respondents with a template spreadsheet to answer "yes," "no," categorical and numerical requests. Some requests, however, will require narrative responses. Other requests will require respondents to produce specific documents. Because the FTC expects that respondents will have this data available in electronic form, it encourages electronic submission to reduce the respondent's burden.

## **7. Assertion Information**

The proposed information requests for both case studies will include one subpart asking for details regarding each instance in which the respondent asserted patents since January 1, 2009. Both case studies will study three types of assertion activity: the sending of demands,

patent litigation, and patent licensing. This subpart will have one section related to each type of assertion activity.

The first section will ask questions about demands sent by the respondent. Demands include correspondence inviting a third party to take a patent license. As noted in Part A, PAE conduct regarding demands is the topic of proposed reform legislation. The FTC will ask respondents to provide a spreadsheet listing each demand and providing information such as the recipients and the patents and products at issue. The FTC will provide a template spreadsheet to guide respondents. In addition, the FTC will request that respondents produce correspondence and reports related to the demand.

The second section will ask questions about litigation involving patents held by the respondent. The FTC will ask respondents to provide a spreadsheet listing each lawsuit and providing information such as the patents and products at issue. In addition, the FTC will request information regarding the disposition of the lawsuit and will request the production of relevant court orders, expert reports, and settlement agreements. The FTC will provide a template spreadsheet to guide respondents.

The third section will ask questions about licenses that the respondent executed since January 1, 2009. The FTC will ask respondents to provide a spreadsheet listing each license, and providing information regarding the licensee, licensed patents, and terms of the license agreement. The proposed information requests will also enquire into payments received pursuant to the licenses, and call for the production of reports and agreements related to the license. The FTC will provide a template spreadsheet to guide respondents.

Each section will ask respondents to identify the patents relevant to each assertion, which will allow the FTC to cross-reference this information with patent holding and acquisition information. In particular, this information will allow the FTC to compare the revenues derived by the respondent from a particular patent to the payments made to acquire the patent, including payments made to the inventor.

To reduce the respondent's burden, wherever practical, the FTC will seek a "yes" or "no" response, or a simple categorical or numerical response. To further reduce the respondent's burden, the FTC will provide respondents with a template spreadsheet to answer "yes," "no," categorical and numerical requests. Some requests, however, will require narrative responses. Other requests will require respondents to produce specific documents. Because the FTC expects that respondents will have this data available in electronic form, it encourages electronic submission to reduce the respondent's burden.

## **8. Aggregate Cost Information**

The proposed information requests for the PAE case study and the wireless case study will include one subpart asking for information regarding the respondent's costs for each year since 2009. To understand the overall costs of operating a PAE, the FTC will ask respondents to provide aggregate cost information for patent acquisitions, patent litigation, and patent licensing for each year from 2009 to the date of the request. The FTC will also request estimates of future costs associated with ongoing acquisitions, litigations, and licensing. In addition, if PAEs are engaged in R&D activity related to patents they hold, the FTC will request the aggregate cost of R&D activity. While some of the information requested in the Aggregate Cost section of the information request may have been reported in earlier sections of the information request, there

are two reasons why it is important that this information be reported in the aggregate cost section. First, this section will report data over time. This will allow the FTC to observe how the costs of PAEs in the broad case study and Other Entities in the wireless chipset case study have changed over time. Second, to the extent that some of the costs associated with patent assertion are fixed (not directly affected by the number of firms involved in litigation, licensing, or Demands), it may not be possible for Firms to attribute costs to each litigation, Demand, or license. These general fixed costs can be reported in the aggregate cost section of the information request.

To reduce the respondent's burden, wherever practical, the FTC will seek a "yes" or "no" response, or a simple categorical or numerical response. To further reduce the respondent's burden, the FTC will provide respondents with a template spreadsheet to answer "yes," "no," categorical and numerical requests. Some requests, however, will require narrative responses. Other requests will require respondents to produce documents sufficient to show these costs, which is less burdensome than requiring production of all documents that discuss costs. Because the FTC expects that respondents will have this data available in electronic form, it encourages electronic submission to reduce the respondent's burden.

## **9. Aggregate Revenue Data**

The proposed information requests for the PAE case study and the wireless case study will include one subpart asking for information regarding the respondent's revenues for each year since 2009. In order to better understand the sources of revenue PAEs receive, the FTC will ask that respondents provide aggregate revenue information corresponding to patent transfers, patent litigation, and patent licensing for each year from 2009 to the date of the request. In addition, estimates of future revenues associated with ongoing transfers, litigations, and licensing are requested. This section will report data over time, which will allow staff to observe how the revenues of PAEs in the broad case study and Other Entities in the wireless chipset case study have changed over time. While the information requested in the Aggregate Revenue section of the information request may have been reported in earlier sections of the information request, in most cases only revenues aggregated over time are requested in those sections to lessen burden on respondents.

The FTC will ask respondents to provide information regarding both their revenues and how those proceeds are shared with third parties. The FTC will ask for this information on an annual basis, broken down into revenues from the transfer and assertion activities identified in response to the other requests.

To reduce the respondent's burden, wherever practical, the FTC will seek a "yes" or "no" response, or a simple categorical or numerical response. To further reduce the respondent's burden, the FTC will provide respondents with a template spreadsheet to answer "yes," "no," categorical and numerical requests. Some requests, however, will require narrative responses. Other requests will require respondents to produce documents sufficient to show these revenues, which is a less burdensome request than requiring production of all documents that discuss revenues. Because the FTC expects that respondents will have this data available in electronic form, it encourages electronic submission to reduce the respondent's burden.

## **B. Statistical Limitations of Empirical Analysis**

The goal of the proposed study is to develop and publicly disseminate qualitative and quantitative information describing patent assertion activities to inform policymakers and the public on the nature of patent assertion business models. The proposed study consists of two related case studies, a PAE case study and a wireless case study. While the PAE case study includes PAEs that selected by a stratified random sampling method from an estimated population of PAEs, the FTC will not project its findings to the population of PAEs as a whole. As described above, it is not possible to determine how well the estimated population of PAEs being sampled corresponds to the true universe of PAEs. As a result, the study should be viewed as descriptive and limited to the observed sample.

The wireless case study compares the assertion behavior of NPEs and manufacturers in the wireless chipset sector. The FTC has chosen to study the wireless chipset sector because it is a sector with substantial patent assertion, litigation, and licensing by PAEs, NPEs, and manufacturers. As noted above, this is a case study, and as such, it is not statistically valid to extrapolate the findings from the case study to the population of PAEs, manufacturers, or NPEs. Instead, the findings of the case study should be viewed as descriptive and probative for future studies seeking to explore the relationships between organizational form and assertion behavior.

### **3. Methods to Maximize Response Rates/Reliability of Sample Data**

As noted above, response by recipients of the proposed information request is mandatory. Additionally any destruction, removal, mutilation, alteration or falsification of documentary evidence that may be responsive to this information collection within the possession, custody or control of a person, partnership, or corporation subject to the FTC Act may be subject to criminal prosecution. 15 U.S.C. § 50; see also 18 U.S.C. § 1505. Consequently, the FTC expects 100% compliance with the requests.

### **4. Testing Procedures and Methods Undertaken**

The FTC has not conducted any tests of procedures or methods to be used in the collection of the information from recipients. As discussed in Section (2) above, FTC staff have developed detailed spreadsheets to facilitate data collection both to lower respondents' burden and to facilitate staff analysis of the information submitted.

### **5. Individuals Consulted on Statistical Aspects of the Surveys**

The questions for the survey have been developed and reviewed internally by various FTC staff, including staff attorneys and economists within the Office of Policy Planning, the Bureau of Competition, and the Bureau of Economics. The attorney contact is Suzanne Munck, Chief Counsel for Intellectual Property and Deputy Director, Office of Policy Planning, (202-326-2429).