UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

APPLE INC.,

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD., A Korean business entity; SAMSUNG ELECTRONICS AMERICA, INC., a New York corporation; SAMSUNG TELECOMMUNICATIONS AMERICA, LLC, a Delaware limited liability company,

Defendants.

Case No. 11-cv-01846-LHK

DECLARATION OF JOHN R. HAUSER

****CONFIDENTIAL – CONTAINS MATERIAL DESIGNATED AS CONFIDENTIAL – PURSUANT TO A PROTECTIVE ORDER****

UNITED STATES DISTRICT COURT

SUBMITTED UNDER SEAL

I, JOHN R. HAUSER, do hereby declare as follows:

1. I submitted an expert report (Expert Report of John R. Hauser, March 22, 2012, hereinafter the "Hauser Report") on behalf of Apple in this matter. I was subsequently deposed by counsel for Samsung. A true and correct copy of the Hauser Report is attached as Exhibit A. My curriculum vitae is attached to the Hauser Report as Exhibit A.

2. On June 21, 2012, counsel for Samsung filed a motion that, among other things, seeks to exclude my opinions and testimony.[1] The Samsung Motion mischaracterizes my opinions and testimony. Accordingly, I have been asked by counsel for Apple to respond to the Samsung Motion. I provide no new opinions and do not expand the Hauser Report in this declaration. The purpose of this declaration is to aid the court in assessing certain criticisms of the Hauser Report and testimony.

3. Specifically, I address the following erroneous criticisms in the Samsung Motion: (a) that my surveys cannot be replicated or assessed for their reliability because they are based on interviews and pretests which Samsung alleges have not been adequately documented; and (b) that my study should be excluded because I did not test all the features identified as important by consumers in the in-depth interviews ("IDIs").

4. The replication of the surveys can be done and their validity assessed completely independently of the IDIs and pretests. Samsung is wrong to assert that my surveys cannot be replicated or validated because it does not have notes from the IDIs or pretests. The IDIs and pretests of the survey are not the survey itself and do not form any part of the calculations that I performed.[2]

5. Samsung has all the information it needs to replicate and validate my surveys. I understand that Samsung has been provided the raw survey data, as well as the results of the two surveys. I understand that the conjoint studies, with all related analyses, calculations, tests, and

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[1] Samsung's Notice of Motion and Motion to Exclude Opinions of Certain of Apple's Experts, June 21, 2012 ("Samsung Motion") at pp. 10–13.

[2] Hauser Report at ¶ 7 and 15 is explicit that I rely on two surveys – the two conjoint-analysis surveys. The Hauser report at ¶ 37-40is explicit that the IDIs only informed questionnaire design. They are not to be confused with the conjoint analysis studies.

sensitivities, have been provided to Samsung. These include all relevant details regarding the statistical estimation as well as the sensitivity analyses and validation tests that I performed.[3] I have provided all of the information on the questionnaires, including screen shots of the web survey itself, copies of the animations and graphics that were shown and the text of all of the instructions and questions that were asked.[4] I have discussed the measures taken to ensure that I identified any respondents who may not have carefully responded to the survey.[5] The validation tests that I performed on the data from the conjoint-analysis surveys indicate that Samsung owners understood the questions and provided reliable answers.

6. This information is more than sufficient for Dr. Sukumar, Samsung's survey rebuttal expert, to replicate and validate my surveys. Indeed, Dr. Sukumar could have explicitly tested for the potential sources of bias. But he does not report having done any test in his rebuttal report. My assignment was to measure the price premium that Samsung owners would be willing to pay for the patent-related features. To do so I properly included the patent-related features, certain other features, and price in the conjoint analyses. Following standard academic and commercial practices, I included additional features to make the Samsung owners' choices more realistic and to ensure that the Samsung owners did not focus only on the patent-related features.

7. Samsung points to a decision by Judge Alsup which criticized another expert. Samsung attempts to use that decision to attack my conjoint-analysis surveys, saying "Dr. Hauser . . . did not test all the features identified in the [in depth] interviews." Samsung misrepresents the purpose of my conjoint analysis. The survey I conducted cannot be fairly compared to the one that was before Judge Alsup; the surveys have different goals and therefore different research designs. Second, from a scientific perspective, it is unnecessary to include all features of a product when designing a conjoint study. Such a requirement is not consistent with the academic literature or commercial use of conjoint studies. Standard practice holds constant many features so that the researcher can focus on those features that are of interest. If I were asked by Samsung

[3] Hauser Report at ¶¶ 82-87.

[4] Hauser Report at Exhibits D-G.

[5] Hauser Report at ¶¶ 74-76 and Exhibit J and Hauser Report at ¶¶ 77-105 and Exhibit K.

in the normal course of business to assess the price premium that Samsung owners would be willing to pay for the features that are varied in my survey, I would have designed exactly the same survey as I performed in this case. Indeed, I have used similar surveys to estimate price premiums for other substantial companies in non-litigation contexts.

8. The essence of conjoint analysis is to ask respondents to make choices between realistic products that reveal the respondents' tradeoffs among price and the features at issue. To see this intuitively, suppose a Samsung owner is offered the choice between Smartphone A with a specified feature and at a price (say $210) versus Smartphone B, with otherwise identical features, but without the feature at issue and at price that is $10 lower (say $200). In this simple example, if the Samsung owner chooses Smartphone A, then she is willing to pay a price premium of at least $10 for the feature; if the Samsung owner chooses Smartphone B, then she is willing to pay a price premium of at most $10 for the feature. By asking enough choice questions we determine the price premium a Samsung owner is willing to pay for the feature. To measure the price premium that Samsung owners would be willing to pay for the patent-related features, I included the patent-related features and price in the conjoint analyses. In addition I included five other features in my surveys: size and weight, camera, storage, connectivity, and number of apps. Including these five features assured that that Samsung owners in my survey did not focus only on the patent-related features, but rather made realistic choices among smartphones or tablets that varied on seven features (six features plus price). Such additional features, sometimes called distraction features, disguise the survey researcher's interest in a particular feature or features.

9. As discussed in my expert report, the five additional features have external validity; they are among the main features discussed in Samsung's own website as well as other consumer review websites.[6] Further, the validation tests on the survey results (all available to Samsung) indicate that inclusion of these features performed well in creating realistic choice tasks and that the inclusion of these features minimized the potential for demand artifacts.

[6] Hauser Report at ¶ 39 and footnotes 20 and 21.

10. In prior academic work, I have used exactly the same approach. For example, in a peer-reviewed publication (Finalist, Product Development and Management Association Best Paper Award in 2003) I explained that: "The goal of the study is to find out which features and feature levels customers prefer and how much they value the features. For example, a new instant camera might be represented by features such as image quality, picture taking (1-step or 2-step), picture removal method (motorized ejection or manual pull), light selection method, and two styling attributes—opening (slide open or fixed) and styling covers (Fig. 4). Other features such as picture size, picture type, camera size, battery type, and so forth might either be assumed constant among all concepts under study or might be the focus of a separate study."[7] That study was done for a major corporation and influenced its decision on which features to include in their camera.

11. My approach of selecting 7 features (also called attributes) conforms to commercial applications of conjoint analysis. For example, a classic 1982 *Journal of Marketing* article discussed the commercial application of conjoint analysis covering more than 700 applications across consumer goods, industrial goods, transportation, financial services, government, and other services.[8] The authors reported that "for most respondents the median number of attributes actually used in conjoint analysis is 6 or 7."[9] This study was updated in 1989 to cover an additional 1,062 studies reporting a median of 8 attributes.[10] A more recent 2007 book on *Conjoint Measurement: Methods and Applications* reviews choice-based conjoint analysis studies (the conjoint-analysis format I used) and provides a table in which the average number of profiles was 7 attributes.[11]

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[7] Ely Dahan and John R. Hauser, "The Virtual Customer," (2002) *Journal of Product Innovation and Management*, 19, 5, p. 336, A true and correct copy of this article is attached as Exhibit B.

[8] Philippe Cattin and Dick R. Wittink, "Commercial Use of Conjoint Analysis: A Survey," (1982) *Journal of Marketing*, Vol. 46, No. 3, p.45,. A true and correct copy of this article is attached as Exhibit C.

[9] Philippe Cattin and Dick R. Wittink, "Commercial Use of Conjoint Analysis: A Survey," (1982) *Journal of Marketing*, Vol. 46, No. 3, p.47, Ex.C.

[10] Dick R. Wittink and Philippe Cattin, "Commercial Use of Conjoint Analysis: An Update," (1989) *Journal of Marketing*, Vol. 53, No. 3, p. 94. A true and correct copy of this article is attached as Exhibit D.

[11] Rinus Haaijer and Michel Wedel, "Conjoint Choice Experiments: General Characteristics and Alternative Model Specifications," Chapter 11 in Andres Gustaffsson, Andreas Herrmann and Frank Huber, "*Conjoint Measurement:*

12. In my surveys all features that were not explicitly varied were held constant in all choices faced by Samsung owners. (When features are held constant among choices the constant features do not affect the estimated price premium that Samsung owners are willing to pay for the features that are varied.) Notably, Samsung's own survey expert, Dr. Sukumar, did not include even a single distraction feature in his own survey analysis (and therefore runs the risk of demand artifacts). In contrast, I designed my surveys to minimize the presence of such demand artifacts.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 31st day of May, 2012, at Lexington, Massachusetts

Respectfully submitted,

/s/ John R. Hauser

Methods and Applications, Springer: New York, 2007. Table 1, p. 207. A true and correct copy of an excerpt from this book is attached as Exhibit E.

ATTESTATION OF E-FILED SIGNATURE

I, MICHAEL A. JACOBS, am the ECF User whose ID and password are being used to file this Declaration. In compliance with General Order 45, X.B., I hereby attest that John R. Hauser has concurred in this filing.

Dated: May 31, 2012

/s/ Michael A. Jacobs

Michael A. Jacobs