

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION

VULCAN GOLF, LLC, JOHN B.	)	Case No. 07 CV 3371
SANFILIPPO & SONS, INC., BLITZ	)	
REALTY GROUP, INC., and VINCENTE E.	)	
“BO” JACKSON, Individually And On Behalf	)	
Of All Others Similarly Situated,	)	
	)	HON. BLANCHE M. MANNING
Lead Plaintiffs,	)	
	)	
v.	)	MAGISTRATE JUDGE
	)	GERALDINE SOAT BROWN
GOOGLE INC., OVERSEE.NET,	)	
SEDO LLC, DOTSTER, INC., AKA	)	
REVENUEDIRECT.COM	)	
INTERNET REIT, INC. d/b/a/ IREIT, INC.;	)	
and JOHN DOES I-X,	)	
	)	
Defendants.	)	

**AMENDED DECLARATION OF PROFESSOR ITAMAR SIMONSON, PH.D.  
IN SUPPORT OF DEFENDANTS’ CONSOLIDATED OPPOSITION TO  
PLAINTIFFS’ MOTION FOR CLASS CERTIFICATION**

I, Professor Itamar Simonson, Ph.D., declare as follows:

BACKGROUND AND QUALIFICATIONS

1. I am the Sebastian S. Kresge Professor of Marketing at the Graduate School of Business, Stanford University. A copy of my curriculum vitae, which includes a complete list of my publications, is attached as Exhibit A.

2. I hold a Ph.D. in Marketing from Duke University, Fuqua School of Business, a Master's degree in business administration (MBA) from the UCLA Graduate School of Management, and a Bachelor's degree from The Hebrew University with majors in Economics and Political Science.

3. My field of expertise is consumer behavior, marketing management, trademark infringement from the consumer's perspective, survey methods, and human judgment and decision making. Most of my research has focused on buyers' purchasing behavior, the effect of product characteristics (such as brand name, price, features), the competitive context, and marketing activities (such as promotions, advertising) on buying decisions, and trademark infringement.

4. I have received several awards, including (a) The award for the Best Article published in the *Journal of Consumer Research* (the major journal on consumer behavior) between 1987 and 1989; (b) The "Ferber Award" from the *Association for Consumer Research*, which is the largest association of consumer researchers in the world; (c) The 1997 O'Dell Award, given to the *Journal of Marketing Research* (the major journal on marketing research issues) article that has had the greatest impact on the marketing field in the previous five years; (d) The 2001 O'Dell award (and a finalist for the O'Dell Award in 1995, 2002, 2004, 2005, 2007, and 2008); (e) The award for the Best Article published in the *Journal of Public Policy & Marketing* (the major journal on public policy and legal aspects of marketing) between 1993 and 1995; (f) The 2007 *Society for Consumer Psychology* Distinguished Scientific Achievement Award; (g) The 2002 *American Marketing Association* award for the Best Article in the area of services marketing; and (g) I was a winner in a competition dealing with research on the

effectiveness of direct marketing programs, which was organized by the *Direct Marketing Association* and the *Marketing Science Institute*.

5. I have published three articles relating to trademark surveys and trademark infringement from the customer's perspective, including two in the *Trademark Reporter* and one in the *Journal of Public Policy & Marketing*. The two articles published in the *Trademark Reporter* were: "The Effect of Survey Method on Likelihood of Confusion Estimates: Conceptual Analysis and Empirical Test,"<sup>1</sup> and "An Empirical Investigation of the Meaning and Measurement of Genericness."<sup>2</sup> The *Journal of Public Policy & Marketing* article, titled "Trademark Infringement from the Buyer Perspective: Conceptual Analysis and Measurement Implications,"<sup>3</sup> was selected (in 1997) as the Best Article published in that journal between 1993 and 1995.

6. At Stanford University I have taught MBA and executive courses on Marketing Management, covering such topics as buyer behavior, developing marketing strategies, building brand equity, advertising, sales promotions, and retailing. I also taught an MBA course on Marketing to Businesses and a course on High Technology Marketing. In addition to teaching MBA courses, I have guided and supervised numerous MBA student teams in their work on company and industry projects dealing with a variety of markets.

7. I have taught several doctoral courses. One doctoral course examines methods for conducting consumer research. It focuses on the various stages involved in a research project, including defining the problem to be investigated, selecting and developing the research approach, data collection and analysis, and deriving conclusions. A second doctoral course that I have taught deals with buyer behavior, covering such topics as buyer decision making processes, influences on purchase decisions, and persuasion. A third doctoral course that I have taught

---

<sup>1</sup> Itamar Simonson (1993), "The Effect of Survey Method on Likelihood of Confusion Estimates: Conceptual Analysis and Empirical Test," *Trademark Reporter*, 83 (3), 364-393.

<sup>2</sup> Itamar Simonson (1994), "An Empirical Investigation of the Meaning and Measurement of Genericness," *Trademark Reporter*, 84 (2), 199-223.

<sup>3</sup> Itamar Simonson (1994), "Trademark Infringement from the Buyer Perspective: Conceptual Analysis and Measurement Implications," *Journal of Public Policy and Marketing*, 13(2), 181-199.

deals with buyer decision making. Prior to joining Stanford University, during the six years that I was on the faculty of the University of California at Berkeley, I taught an MBA Marketing Management course, a Ph.D. course on buyer behavior, and a Ph.D. course on buyer decision making. I also taught in various executive education programs, including a program for marketing managers in high technology companies.

8. After completing my MBA studies and before starting the Ph.D. program, I worked for five years in a marketing capacity in a subsidiary of Motorola Inc., serving in the last two years as the product marketing manager for two-way communications products. My work included (a) defining new products and designing marketing plans for new product introductions, (b) customer and competitor analysis, and (c) sales forecasting.

9. I have conducted, supervised, or evaluated well over 1,000 marketing research surveys, including many related to trademark, branding, marketing strategies, and advertising-related issues. I serve on eight editorial boards, including leading journals such as the *Journal of Consumer Research*, *Journal of Marketing Research*, and the *Journal of Consumer Psychology*. I am also a frequent reviewer of articles submitted to journals in other fields, such as psychology, decision making, and economics. I received the Outstanding Reviewer Award from the *Journal of Consumer Research*. As a reviewer, I am asked to evaluate the research of scholars wishing to publish their articles in leading scholarly journals. I have also worked as a consultant for companies and organizations on a variety of marketing and buyer behavior topics. And I have served as an expert in prior litigations involving various marketing and buyer behavior issues, trademark-related matters, false advertising, branding, and other areas. A list of cases in which I provided sworn testimony during the past four years is included in Exhibit B. I am being compensated at my standard rate of \$650 an hour.

10. I was asked by counsel for Google Inc. to evaluate, based on principles of consumer behavior and marketing, whether it is meaningful or possible to generalize across members of the proposed class with respect to the alleged likelihood of confusion and the distinctiveness of their respective marks. I have reviewed documents filed by the parties in this

litigation and this Court's March 20<sup>th</sup>, 2008 order. In addition, I visited various Internet websites.

### INTRODUCTION

11. The "Motion for Class Certification" (page 2) alleges that "Google and the Parking Company Defendants have taken infringement to a new level. They have created and even patented an automated process of tasting, registering, and monetizing domain names that are confusingly similar to marks owned by the Plaintiffs and members of the proposed class." Thus, the Plaintiffs suggest that members of the proposed class, such as Vulcan Golf, Bo Jackson, and millions of others, are all in the same situation with respect to the alleged infringement/confusion. Although, as far as I am aware, the Plaintiffs have not yet proven or tested for likelihood of consumer confusion with respect to any class member, they assume that the alleged likelihood of confusion applies to all of the proposed class members.

12. To evaluate whether likelihood of confusion could conceivably be generalized across different class members' trademarks and domains, without investigating each case individually, it is necessary to examine the factors that are relied upon to determine the likelihood of confusion between any pair of marks. This assessment involves an analysis of the characteristics of the marks at issue and consumer behavior and psychology that influence the likelihood of marketplace confusion.

13. First, before examining the factors that determine consumer confusion, it is important to understand from a consumer behavior perspective what the allegation means. The notion that there is commonality across all members of the proposed class with respect to the alleged infringement is akin to saying that likelihood of confusion does not depend on the characteristics of the specific marks, marketplace conditions, consumer confusion, or any other factor. The question that naturally arises is on what basis could one make such a sweeping allegation that ignores virtually all factors that have been shown to affect confusion?

14. It appears that the Plaintiffs essentially suggest that one should not bother checking the characteristics and conditions that pertain to each pair of marks or a trademark and

a domain to know that there is consumer confusion. Whatever applies to one pair must also apply to any other pair. Moreover, it appears that the Plaintiffs assume that there is no need to show that there is a likelihood of confusion between any pair of marks and/or Internet domains, and we can just presume that (a) there is consumer confusion, and (b) it applies similarly to all websites that are defined by the proposed class.

15. I have been involved in many investigations and studies of likelihood of confusion, but I have never encountered such a sweeping claim whereby the same consumer confusion, which is not tested for any mark, is alleged regarding thousands or millions of different marks. This highly unusual claim, which (as explained below) is inconsistent with basic principles of consumer behavior, appears to reflect a fundamental confusion about what determines consumer confusion between marks (e.g., domain names, websites). That is, the plaintiffs effectively suggest that, because there is similarity in the manner in which the allegedly infringing domain names are created, one could reach a general conclusion that confusion between one pair of marks applies to all similarly-created domain names.

16. However, likelihood of confusion is not determined by how marks or domain names are created, but rather, by their characteristics, consumer behavior pertaining to the particular marks, marketplace conditions, the distinctiveness of each mark, and other factors discussed below. In other words, it is not meaningful or possible to treat all “parked” domain names and conceivably related trademarks as being in the same situation merely because of the technical way in which they were created.

17. I will next discuss in more detail the factors that determine the likelihood of confusion between any two marks (or a trademark and a domain name) and factors that affect inherent and acquired distinctiveness of marks.

#### DETERMINANTS OF LIKELIHOOD OF CONFUSION BETWEEN INTERNET DOMAINS

18. Consider, for example, a consumer who intends to visit the website of Vulcan Golf ([www.vulcangolf.com](http://www.vulcangolf.com)), which specializes in golf clubs, but instead reaches a website with the address [www.volcanogolf.com](http://www.volcanogolf.com), which at one time presented various sponsored links. What

factors determine whether such a consumer will mistakenly believe that the website with a list of sponsored links is actually the website of Vulcan Golf, LLC, as opposed to recognizing immediately (and correcting) the typing error?

19. The assessment of likelihood of confusion involves a certain set of factors.

Specifically, factors that affect the likelihood of confusion between websites include:

- a. The similarity between the domain name the consumers intend to reach and the domain name actually reached.
- b. Perhaps even more important in the present case, the similarity between the content and appearance of the intended website and the website actually reached.
- c. Consumer expectations and familiarity with the website they intend to reach.
- d. The distinctiveness of the domain names and websites at issue.
- e. Consumer care and level of involvement with respect to the goods or services offered by the intended website.

20. Perceived similarity between objects, names, and so on, is determined by various factors, including aspects that are not immediately intuitive and cannot be calculated based on any formula. In general, the perceived similarity between two words, marks, or other objects is based on the number and perceptual significance of features that both objects share (i.e., have in common) relative to their unique features.<sup>4</sup> The degree to which common features increase perceived similarity and unique features diminish similarity depends on the uniqueness (or diagnosticity) of these features. Specifically, if two objects share a feature that is also shared with many other known objects/words that consumers encounter in everyday life, that feature has a much smaller effect on perceived similarity than if the two objects are the only ones possessing that feature.

21. Furthermore, the relation between apparent similarity and likelihood of confusion may also be difficult to predict, which is exactly why one needs to investigate each specific case individually to determine whether there is a significant likelihood of confusion in that case. For

---

<sup>4</sup> See, e.g., “Features of Similarity,” Amos Tversky (1977), *Psychological Review*, 84, 327-352.

example, in research that I published in 1993,<sup>5</sup> I examined the likelihood of confusion between a “Rolex” watch and a “Ronex” watch. Both marks appear similar, yet the results using several survey methods revealed that there was no significant likelihood of confusion between them (even without accounting for “noise”).

22. Accordingly, it is simply impossible to assume any commonality with respect to the perceived similarity and likelihood of confusion across many, very different pairs of domain names or pairs of a trademark and a domain name (such as the similarity between [www.vulcan.com](http://www.vulcan.com) and [www.vulcangolf.com](http://www.vulcangolf.com) versus the similarity between “Fisher” and [www.fishergolf.com](http://www.fishergolf.com)). Since perceived similarity is one of the key factors influencing the likelihood of confusion, the lack of commonality with respect to perceived similarity also means that one cannot simply assume that a likelihood of confusion estimate pertaining to one trademark or domain name informs us about the likelihood of confusion pertaining to a different trademark or domain.

23. The dissimilarity and lack of commonality among the proposed class members go well beyond domain names, because a domain name is just one, and often not the most prominent, component of a website. In particular, the contents, such as the text, pictures, colors, stimuli, and so on, differentiate one website from another. A consumer who wishes to go to the website of Vulcan Golf, for example, is likely to have certain expectations and perhaps prior familiarity regarding the contents of that website. Indeed, after entering the address [www.vulcangolf.com](http://www.vulcangolf.com), a consumer is presented with a rather extensive Introduction, that shows the Speedlite Driver with background sounds. That display has little in common, for example, with a webpage that shows just sponsored links.

24. Moreover, even if there were any similarities between the Vulcan Golf home page and the allegedly infringing page, that would have told us virtually nothing regarding the home page of another company and some other allegedly infringing web pages. Because there are so

---

<sup>5</sup> Itamar Simonson (1993), "The Effect of Survey Method on Likelihood of Confusion Estimates: Conceptual Analysis and Empirical Test," *Trademark Reporter*, 83 (3), 364-393; see also Itamar Simonson (1994), "Trademark Infringement from the Buyer Perspective: Conceptual Analysis and Measurement Implications," *Journal of Public Policy and Marketing*, 13(2), 181-199.



many significant differences among web pages that consumers are trying to reach, making any generalizations regarding likelihood of confusion is simply not possible or meaningful.

25. As indicated, in many cases consumers who type in a web address have some prior familiarity and experience with the website they intend to reach. Such prior familiarity with web domains further diminishes the possibility of any confusion between the intended domain and the domain actually reached. That is, consumers can easily recognize the difference between the familiar domain and the observed domain and simply correct the mistake (e.g., by adding a dot to the URL address).

26. In addition, the degree of care exercised by consumers varies greatly across categories and related Internet domains. For example, when going to the Sony website to purchase an expensive notebook computer a consumer is in a very different state of mind than when the same consumer goes to a website to review the headlines. This is yet another factor that makes Internet domains so different with respect to the likelihood of consumer confusion.

#### ARE ALL TRADEMARKS EQUALLY DISTINCTIVE?

27. The likelihood of confusion also depends on the distinctiveness of each trademark. First, trademarks differ greatly with respect to what is referred to as “inherent distinctiveness.” Thus, for example, generic or descriptive names are less distinctive than arbitrary names. In particular, when entering a generic domain name, it is often impossible to know what the consumer’s state of mind or intention is. For example, the term “cars” might be used as a generic term, but it might also be used as a trademark in the context of a domain name. Accordingly, many of the consumers who enter the web address [www.cars.com](http://www.cars.com) may be simply looking for information about cars, without having any particular company or target website in mind, but it is also possible that they are thinking about that domain in relation to a trademark. On the other hand, a consumer who enters the address [www.sony.com](http://www.sony.com) is, in all likelihood, trying to reach the Sony website. Thus, Internet domains/names have little in common with respect to inherent distinctiveness.

28. Furthermore, different trademarks have little in common with respect to their

degree of consumer recognition and the degree to which consumers associate the mark with a single source (i.e., its secondary meaning or “acquired distinctiveness”). Again, each mark must be evaluated individually. Just because one mark enjoys high recognition and inherent distinctiveness does not inform us about the recognition and distinctiveness of another mark. Therefore, it is not meaningful to suggest that all members of the proposed class enjoy the same level of either inherent or acquired distinctiveness.

ESTIMATING LIKELIHOOD OF CONFUSION BETWEEN MARKS:  
AN OVERVIEW OF SURVEY METHODS FOR ESTIMATING LIKELIHOOD OF  
CONFUSION

29. As indicated, it is neither possible nor meaningful to make any generalizations about likelihood of confusion across many different marks without investigating each case separately. As Professor McCarthy points out, “There are at least three routes of proof of likelihood of confusion: (1) survey evidence; (2) evidence of actual confusion; and/or (3) argument based on clear inference arising from a comparison of the conflicting marks and the context of their use”.<sup>6</sup> Furthermore, “surveys are now routinely employed to prove likelihood of confusion, and a failure to introduce a survey into evidence often leads to harsh criticism by the courts.”<sup>7</sup>

30. The methodology of a consumer survey used to estimate likelihood of confusion must follow certain standards and reflect marketplace conditions. These standards have been developed by survey experts based on a great deal of experience and a careful examination of different methodological options.

31. As Professor McCarthy notes,<sup>8</sup> (1) The first step in designing a survey is to

---

<sup>6</sup> 4 J. Thomas McCarthy, McCarthy on Trademarks and Unfair Competition (September 2007) (McCarthy) at §23:2.50.

<sup>7</sup> Itamar Simonson (1993), "The Effect of Survey Method on Likelihood of Confusion Estimates: Conceptual Analysis and Empirical Test," Trademark Reporter, 83 (3), 364-393. See also, Lawrence Evans and David Gunn (1989), “Trademark Surveys,” Trademark Reporter, 79 (1).

<sup>8</sup> 4 J. Thomas McCarthy, McCarthy on Trademarks and Unfair Competition (September 2007) (McCarthy) at §32:159.

determine the ‘universe’ to be studied. The universe is that segment of the population whose perceptions and state of mind are relevant to the issues in the case. Selection of the proper universe is a crucial step, for even if the proper questions are asked in a proper manner, if the wrong persons are asked, the results are likely to be irrelevant.” In particular, the survey universe should not be either under-inclusive (i.e., exclude relevant segments of the customer population) or over-inclusive (i.e., include the opinions of irrelevant customer segments).” As Professor McCarthy further points out, “In a traditional case claiming ‘forward’ confusion, not ‘reverse’ confusion, the proper universe to survey is the potential buyers of the *junior user’s* goods or services. But in a ‘reverse confusion’ case, it is appropriate to survey the senior user’s customer base.”<sup>9</sup>

32. As I emphasized in the articles that I published, survey results are contingent on the method used, with different methods potentially producing drastically different results.<sup>10</sup> Consequently, it is critical that the expert conducting the surveys select the method that fits the particular case at issue. Probably the first and most obvious criterion is that, although a survey usually cannot replicate the exact marketplace conditions, the survey should be designed such that it mirrors the essential characteristics of the marketplace as closely as possible. As Professor McCarthy points out, “the closer the survey methods mirror the situation in which the ordinary person would encounter the trademark, the greater the evidentiary weight of the survey results.”<sup>11</sup> Indeed, courts have given little or no weight to likelihood of confusion surveys that failed to capture essential characteristics of the marketplace.<sup>12</sup> Accordingly, to the extent that one wants to test any misperceptions or confusion created when consumers visit a particular

---

<sup>9</sup> McCarthy at §32:159.

<sup>10</sup> See, for example, "Trademark Infringement from the Buyer Perspective: Conceptual Analysis and Measurement Implications," Journal of Public Policy & Marketing, (Fall 1994, volume 13, 181-199).

<sup>11</sup> McCarthy at §32:163.

<sup>12</sup> See, for example, *Nat’l Distillers Prods. Co. v. Refreshments Brands, Inc.*, 198 F. Supp. 2d 474, 484 (S.D.N.Y. 2002) (a survey was given no weight because it, “simply did not sufficiently replicate marketplace conditions to make it a reliable indicator of actual confusion in the marketplace.”); *Opinion and Order, Kargo Global, Inc. v. Advance Magazine Publishers* (06 Civ. 550 (JFK); SDNY, August 2007).

website, the survey respondents must be shown that website as it is seen by consumers in the marketplace.

33. Although there are different survey methods for assessing likelihood of confusion, the methods employed most often can be divided into two general categories. The first category includes methods in which respondents are shown just one of the marks and asked to identify the company that puts it out or is affiliated with it. As discussed in my articles, the most common method in this category is referred to as the *Eveready format*, named after a case in which the issue involved source confusion between Ever-Ready lamps and Eveready batteries.<sup>13</sup> McCarthy describes the sequence of questions with this method as follows:<sup>14</sup>

- “1. [Screening question to eliminate persons in the bulb or lamp industries.]
2. Who do you think puts out the lamp shown here? (A picture of defendant's EVER-READY lamp with its mark is shown).
3. What makes you think so?
4. Please name any other products put out by the same concern which puts out the lamp shown here.”<sup>15</sup>

The second category of likelihood of confusion methodologies includes surveys in which respondents are shown both the junior and senior marks. One method, referred to by McCarthy as the “line-up survey,”<sup>16</sup> involves showing respondents one mark followed by the second mark; then, while the respondents observe the second mark, they are asked whether the two are put out by the same company or by different companies. As indicated, such a method is appropriate only when consumers in the marketplace are typically exposed to both marks at approximately the same time.

---

<sup>13</sup> Union Carbide Corp. v. Ever-Ready, Inc., 531 F.2d 366, 188 U.S.P.Q. 623 (7th Cir. 1976), cert. denied, 429 U.S. 830, 50 L. Ed. 2d 94, 97 S. Ct. 91, 191 U.S.P.Q. 416 (1976).

<sup>14</sup> McCarthy at §32:174.

<sup>15</sup> In many applications, the Eveready format also includes questions as to whether the company that puts out the presented mark has a business connection with or needed to get permission from another company.

<sup>16</sup> McCarthy at §32:177.

34. A survey designed to estimate likelihood of confusion must include a (proper) “control.”<sup>17</sup> A control is designed to estimate the degree of “noise” or “error” in the survey. Indeed, without a proper control, there is no benchmark for determining whether a likelihood of confusion estimate is significant or merely reflects guessing and the flaws of the survey methodology. To fulfill its function, a control must be equivalent to the junior mark at issue, without infringing on the senior mark. For example, in a case involving Simon Property Group and mySimon, Inc., the court determined that any likelihood of confusion survey with a control that does not include the “Simon” name component “amounts to little more than a meaningless word association or memory exercise.”<sup>18</sup> Thus, to obtain an estimate of the net likelihood of confusion (after accounting for “noise”), the researcher subtracts the measured confusion level in the control from the measured confusion level in the “Test” version.

35. As is obvious from this brief review of likelihood of confusion survey methodologies, the assessment of likelihood of confusion requires a careful examination and data about consumer perceptions that apply to the particular marks at issue. Without such an examination, it is impossible to know whether there is a significant likelihood of confusion between any Mark A and Mark B. Certainly, it is not meaningful to assume simply a significant likelihood of confusion between thousands or millions of mark pairs (or a trademark and a domain name). Instead, each case must be examined individually, using a proper survey, and taking into consideration the particular circumstances that apply to that case.

### CONCLUSION

36. From a consumer perception and behavior perspective, there are vast differences among domain names and associated Internet domains. Accordingly, it is neither meaningful nor possible to assume any commonality among members of the proposed class with respect to the likelihood of confusion at issue.

37. Consistent with the standard analysis of the factors that influence consumer

---

<sup>17</sup> See, for example, S. Diamond, *Reference Guide on Survey Research*, in *Reference Manual on Scientific Evidence* 221, 226 n.8 (Federal Judicial Center ed., 1994).

<sup>18</sup> *Simon Property Group L.P. v. MySimon, Inc.*, 104 F.Supp.2d 1033, 1045 (S.D. Ind. 2000).

likelihood of confusion, key differences among members of the proposed class include:

- a. The perceived similarity between the (correctly typed) domain name and the misspelled domain name.
- b. The contents and appearance of each Internet domain.
- c. Consumers' familiarity with the Internet domain.
- d. The degree of care exercised by consumers in each category or domain type.
- e. The inherent distinctiveness of the domain and domain name.
- f. The recognition and acquired distinctiveness of each domain.

38. In fact, from a consumer behavior and marketing perspective, a claim that all members of the proposed class are in a similar situation is not more meaningful than saying that all marks, in all categories and markets, are in a similar situation with respect to likelihood of confusion. As indicated, the only thing that members of the proposed class may have in common relates to the manner in which the allegedly infringing domains were created. But the manner in which Internet domains are created does not affect the likelihood of consumer confusion between them.

39. In conclusion, members of the proposed class have very little in common with respect to the factors that determine likelihood of confusion, and there are vast differences among them.

I declare the foregoing under penalty of perjury under the laws of the state of California that the foregoing is true and correct to the best of my knowledge. Executed September 11, 2008, at Stanford, California.

By:   
ITAMAR SIMONSON, PH.D.