UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC.

Petitioner

v.

CONTENTGUARD HOLDINGS, LLC

Patent Owner

U.S. Patent No. 7,774,280

Case CBM: Unassigned

DECLARATION OF BENJAMIN GOLDBERG, PH.D.

OVERVIEW

1. I have been retained as an expert witness on behalf of Google Inc. for the above-captioned covered business method review. I am competent to make this declaration.

2. I am being compensated for my time in connection with this covered business method review at my standard consulting rate, which is $450 per hour. My compensation is not dependent on the substance of my opinions, my testimony, or the outcome of this covered business method patent review.

3. I understand that the petition for covered business method patent review ("the Petition") involves U.S. Patent No. 7,774,280 ("the '280 patent"), (GOOG-1001), which is a continuation-in-part of U.S. Application No. 10/162,212, filed on June 5, 2002. That application claims the benefit of three provisional applications: U.S. App. Nos. 60/296,113 filed June 7, 2001, 60/331,625, filed November 20, 2001 and 60/331,624, filed November 20, 2001.

4. In preparing this Declaration, I have reviewed the '280 patent and considered each of the documents cited in this Declaration. In formulating my opinions, I have relied upon my experience in the relevant art. I have also considered, in formulating my opinions, the viewpoint of a person of ordinary skill in the art in early 2001. I am familiar with the level of skill of a person of ordinary

skill in the art with respect to the technology at issue in June, 2001, which I understand is the earliest possible priority date for the '280 patent.

BACKGROUND AND QUALIFICATIONS

5. I am a tenured Associate Professor in the Department of Computer Science of the Courant Institute of Mathematical Sciences, New York University ("NYU"), in New York, NY. I have held this position since September 1994. From 1987 to 1994, I was an Assistant Professor in the Department of Computer Science at NYU. Since September 2014, I have been the Director of Graduate Studies for the MS programs in the Department of Computer Science, having previously served in that role from September 2009 through August 2012. I served as the Director of Undergraduate Studies for the Department of Computer Science from September 1995 through August 1998 and from September 2003 through August 2006. In addition, I held a one-year visiting professorship at the *Institut National de Recherche en informatique et en Automatique (INRIA)*, a national laboratory in France, and was twice appointed to a month-long position as an invited professor at the *Ecole Normale Supérieur*, a University in Paris.

6. I received my Doctoral degree in Computer Science from Yale University, New Haven, Connecticut in 1988, having previously received Master of Science and Master of Philosophy degrees in Computer Science from Yale in

1984. My undergraduate degree from Williams College in 1982 was a Bachelor of Arts degree with highest honors in Mathematical Sciences.

7. I have taught courses at the undergraduate and graduate level in, among other things, software development, programming languages, embedded systems (including mobile devices and media devices), operating systems, object-oriented programming, hardware design, and other areas related to the technology of the '280 patent. The content of these courses (e.g. operating systems, embedded systems, etc.) includes computer security and digital content distribution. Additional information concerning the computer science courses that I have taught, my professional publications and presentations in the field of computer science are set forth in my current Curriculum Vitae, a copy of which is attached as Exhibit A.

8. In sum, I have over 30 years of experience in research and development in the areas of computer science as a professor, researcher and consultant. I consider myself to be at least a person of ordinary skill in the art, as described below.

DOCUMENTS CONSIDERED

9. In formulating my opinion, I have considered the following exhibits attached to the Petition as well as the file history of the '280 patent:

Google Exhibit #	*Description*
1001	U.S. Patent No. 7,774,280 to Nguyen et al. ("the '280 patent")
1002	U.S. Patent No. 5,634,012 to Stefik et al. ("the '012 patent")
1015	Extensible Markup Language (XML) 1.0
1020	Definition of "variable" – free dictionary online

PERSON OF ORDINARY SKILL IN THE ART

10. I was asked to provide an opinion regarding the skill level of a person of ordinary skill in the art of the '280 patent in early to mid-2001. In my opinion, a person of ordinary skill in the art of the '280 patent is a person with a bachelor's degree in electrical engineering, computer science or a related field, with a few years (e.g. two years) of experience with digital content distribution and/or computer security. I have been informed that the owner of the '280 patent has offered the same definition of a person of ordinary skill in the art in the pending litigation involving this patent.

RELEVANT LEGAL STANDARDS

Anticipation

11. I have been informed by counsel and understand that a patent is invalid on the basis of anticipation under 35 U.S.C. § 102 if a single prior art

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