Filed on Behalf of NETWORK-1 TECHNOLOGIES, INC.

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC.
Petitioner

v.

NETWORK-1 TECHNOLOGIES
Patent Owner

Cases IPR2015-00343, IPR2015-00345, IPR2015-00347, and IPR2015-00348
Patents 8,640,179, 8,205,237, 8,010,988, and 8,656,441

DECLARATION OF DR. GEORGE KARYPIS

NETWORK-1 EXHIBIT A2005
Google Inc. v. Network-1 Technologies, Inc.

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I, George Karypis, declare:

I am making this Declaration at the request of Patent Owner Network-1 Technologies, Inc. in the following *Inter Partes* Reviews of U.S. Patent Nos. 8,205,237 ('237 patent), 8,010,988 ('988 patent), 8,640,179 ('179 patent), and 8,656,441 ('441 patent) (collectively the "IPR Patents"):

- IPR2015-00345 ('237 patent),
- IPR2015-00347 ('988 patent),
- IPR2015-00343 ('179 patent), and
- IPR2015-00348 ('441 patent),

(collectively the "IPRs"), all initiated by petitioner Google Inc. ("Petitioner").

I. Background to my opinions in this Declaration.

A. Expertise.

1. I am a Professor in the Department of Computer Science and Engineering at the University of Minnesota. I hold a Ph.D. in Computer Science from the University of Minnesota, granted in 1996. I began my post-graduate school career as a Research Associate in my current department. I became an Assistant Professor in 1999, an Associate Professor in 2004, and a Professor in 2009. I teach courses in Algorithms and Data Structures, Parallel Programming, and Data Mining, among other subjects.

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