

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

GOOGLE LLC,  
Petitioner,

v.

AGIS SOFTWARE DEVELOPMENT LLC,  
Patent Owner.

Patent No. 8,213,970  
Filing Date: November 26, 2008  
Issue Date: July 3, 2012

Inventor: Malcolm K. Beyer, Jr.  
Title: METHOD OF UTILIZING FORCED ALERTS FOR INTERACTIVE  
REMOTE COMMUNICATIONS

---

**DECLARATION OF JAIME G. CARBONELL, Ph.D**

Case No. IPR2018-01079

---

IPR2018-01079 – Ex. 2005

AGIS Software Development LLC Patent Owner

I, Jaime G. Carbonell, Ph.D., hereby declare and state as follows:

## **I. INTRODUCTION**

1. I have been asked by counsel for Patent Owner AGIS Software Development LLC (hereinafter “AGIS”), to review U.S. Patent No. 8,213,970 (the “’970 Patent”), to describe the level of ordinary skill in the relevant art of the ’970 Patent, and to provide my technical review, analysis, insights, and opinions regarding the ’970 Patent in view of the prior art references cited by Petitioner Google LLC. I submit this declaration in support of Patent Owner’s response in this IPR proceeding. I have personal knowledge of the matters stated herein and would be competent to testify to them if required.

## **II. BACKGROUND AND QUALIFICATIONS**

2. I received Bachelor of Science degrees in both Physics and Mathematics in 1975 from the Massachusetts Institute of Technology. I received M.S., M.Phil., and Ph.D. degrees in Computer Science from Yale University in 1976, 1977, and 1979, respectively.

3. I have held the position of Allen Newell Professor of Computer Science at Carnegie Mellon University from 1995 to the present. I have been appointed University Professor (top 5% of tenured faculty) at Carnegie Mellon University in 2012. I currently also hold the title of Director of the Language Technologies Institute at Carnegie Mellon University. I first joined Carnegie

Mellon as an Assistant Professor of Computer Science in 1979. In 1987, I was appointed as a Professor of Computer Science at Carnegie Mellon.

4. Since 1979 I have taught a wide variety of graduate and undergraduate courses at Carnegie Mellon that fall within the general field of Computer Science, including courses in software engineering, data mining, natural language processing, electronic commerce, machine learning algorithms, system design, and artificial intelligence. I have been involved in a number of different professional organizations and activities, including memberships in the Association of Computing Machinery (“ACM”), the Association for the Advancement of Artificial Intelligence (“AAAI”), and the Cognitive Science Society. I have also held leadership positions within professional organizations. From 1983 to 1985, I served as Chair of the ACM’s Special Interest Group on Artificial Intelligence (“SIGART”). From 1988 to the present, I have been a Fellow of the AAAI. From 1990 to 1992, I served on the AAAI executive committee. I have also served on a number of different government committees, including 1) the Scientific Advisory Committee of the Oakridge National Laboratories, energy and computing division (1985-1987); 2) the Computer, Information Science & Engineering Advisory Committee of the National Science Foundation (2010 to 2014); 3) the Human Genome Scientific Advisory Committee to the National Institute of Health, also known colloquially as the “Watson Committee” (from 1988 through 1992); and

4) the Scientific Advisory Committee of the Information Access Division of the National Institute of Standards and Technology (from 1997 through 2001).

5. I am an author or co-author on more than 390 technical papers published as invited contributions and/or in peer-reviewed journals or conferences. These papers present the results of my research which is generally directed at computer-implemented algorithms and methods that relate to machine learning, including such applications as mapping protein sequences to three-dimensional shapes, predicting protein folds, detecting financial fraud, and also related to natural language processing including performing inter-lingual machine translation, parsing natural language (a.k.a. “content analysis”) and text mining, and to various forms of storage and communication of data. I have served as an editor and peer-reviewer for a number of different technical journals in my field, including the Machine Learning Journal (from 1984 through 2000), the Machine Translation Journal (the 1980’s), and the Artificial Intelligence Journal (1984 through 2008). I was also a co-Editor of the book series Lecture Notes in Artificial Intelligence which was published by Springer from 1996 through 2008.

6. I received a “recognition of service” award from the Association for Computing Machinery for my role as chair of the ACM’s special interest group in Artificial Intelligence (SIGART) between 1983 and 1985. In 1986, I received the Sperry Fellowship for excellence in artificial intelligence research. In 1987, I

received the Carnegie Mellon University Computer Science Department's teaching award.

7. I have also worked as a technical consultant on Computer Science applications for a variety of industrial clients. This includes consulting on data mining applications and hand-held safety/gas meters for Industrial Scientific Corporation to workplace safety; Carnegie Group Inc. (artificial intelligence and natural language processing); Citicorp (financial data mining, natural language); Wisdom Technologies (financial optimization); Dynamix Technologies (large-scale algorithms with applications to Homeland Security, telecommunication protocols, etc.), and Meaningful Machines in natural language processing and machine translation. I have experience in many aspects of computing technology, including communications programming and protocols, where I regularly teach two classes every year, in topics such as search engines, databases, in telecommunications methods, in network-based systems, such as master-slave control devices, whether for displaying or capturing information, and in applications areas ranging from finance and advertisement models to display-based communications and customer-contact methods and algorithms. My consulting included power minimization and management in server farms (ORNL), on the International Space Station computing/network design, and in the resource and power management remote gas meters for workplace safety.

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.