

# Exhibit 7A

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

|                                   |   |                      |
|-----------------------------------|---|----------------------|
| <hr/>                             | ) |                      |
| ARENDI S.A.R.L.,                  | ) |                      |
|                                   | ) |                      |
| Plaintiff,                        | ) |                      |
|                                   | ) |                      |
| v.                                | ) | C.A. No. 12-1595-LPS |
|                                   | ) |                      |
| LG ELECTRONICS, INC.,             | ) |                      |
| LG ELECTRONICS USA, INC. and      | ) |                      |
| LG ELECTRONICS MOBILECOMM U.S.A., | ) |                      |
| INC.,                             | ) |                      |
|                                   | ) |                      |
| Defendants.                       | ) |                      |
| <hr/>                             | ) |                      |
| ARENDI S.A.R.L.,                  | ) |                      |
|                                   | ) |                      |
| Plaintiff,                        | ) |                      |
|                                   | ) |                      |
| v.                                | ) | C.A. No. 12-1596-LPS |
|                                   | ) |                      |
| APPLE INC.,                       | ) |                      |
|                                   | ) |                      |
| Defendant.                        | ) |                      |
| <hr/>                             | ) |                      |
| ARENDI S.A.R.L.,                  | ) |                      |
|                                   | ) |                      |
| Plaintiff,                        | ) |                      |
|                                   | ) |                      |
| v.                                | ) | C.A. No. 12-1597-LPS |
|                                   | ) |                      |
| BLACKBERRY LIMITED and            | ) |                      |
| BLACKBERRY CORPORATION,           | ) |                      |
|                                   | ) |                      |
| Defendants.                       | ) |                      |
| <hr/>                             | ) |                      |
| ARENDI S.A.R.L.,                  | ) |                      |
|                                   | ) |                      |
| Plaintiff,                        | ) |                      |
|                                   | ) |                      |
| v.                                | ) | C.A. No. 12-1599-LPS |
|                                   | ) |                      |
| MICROSOFT MOBILE, INC.,           | ) |                      |
|                                   | ) |                      |
| Defendants.                       | ) |                      |
| <hr/>                             | ) |                      |

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ARENDI S.A.R.L., )  
 )  
 Plaintiff, )  
 )  
 v. ) C.A. No. 12-1601-LPS  
 )  
 MOTOROLA MOBILITY LLC )  
 f/k/a MOTOROLA MOBILITY, INC., )  
 )  
 Defendant. )

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ARENDI S.A.R.L., )  
 )  
 Plaintiff, )  
 )  
 v. ) C.A. No. 12-1602-LPS  
 )  
 SONY MOBILE COMMUNICATIONS (USA) )  
 INC., f/k/a SONY ERICSSON MOBILE )  
 COMMUNICATIONS (USA) INC., )  
 SONY CORPORATION and )  
 SONY CORPORATION OF AMERICA, )  
 )  
 Defendants. )

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ARENDI S.A.R.L., )  
 )  
 Plaintiff, )  
 )  
 v. ) C.A. No. 13-919-LPS  
 )  
 GOOGLE LLC, )  
 )  
 Defendant. )

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ARENDI S.A.R.L., )  
 )  
 Plaintiff, )  
 )  
 v. ) C.A. No. 13-920-LPS  
 )  
 OATH HOLDINGS INC. and )  
 OATH INC., )  
 )  
 Defendants. )

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**DECLARATION OF EDWARD A. FOX, PH.D.**

I, Edward A. Fox, of Blacksburg, Virginia, hereby declare as follows:

**I. INTRODUCTION AND SCOPE OF WORK**

I have been retained by Paul Hastings LLC to provide consultation and expert opinions regarding technical issues raised in the above-captioned matters for Google LLC and Motorola Mobility LLC f/k/a Motorola Mobility, Inc. This Declaration reflects my personal knowledge. If I were called as a witness, I would and could competently testify to the facts and opinions set forth in this declaration.

**II. BACKGROUND AND QUALIFICATIONS**

1. In formulating my opinions, I have relied upon my knowledge, training, and experience in the relevant art. My background and qualifications are stated more fully in my curriculum vitae, which has been provided as Appendix A. Here I provide a brief summary.

2. My education includes a B.S. in Electrical Engineering (Computer Science Option) from the Massachusetts Institute of Technology (MIT) in 1972, followed by an M.S. in Computer Science from Cornell University in 1981. I received a Ph.D. in Computer Science from Cornell University in 1981. My undergraduate advisor was JCR Licklider, then Director of Project MAC, who, when working at DARPA, managed projects that led to the Internet. My graduate advisor was Gerard Salton, often called the father of information retrieval (the field that works with search engines). My doctoral dissertation (1983) considered bibliographic records with author names, document text analysis, text matching, and database calls.

3. Before college, starting in 1965, I took courses about computing, first at Columbia University on Saturdays, and then at Stevens Institute of Technology in the summer, working with parsing and analysis of text files. As an undergraduate at MIT, I worked with early editors and text processors. During one summer job, I worked to explore how to automate

newspapers, including studying the latest electronic publishing technologies. My B.S. thesis concerned collecting electronic texts, document text analysis, searching over a collection, and text matching such as of queries with documents. During another summer I programmed a PDP-8 with display processor and light pen, exploring early human-computer interaction methods and user interfaces. During the academic year I was paid to help users of early time sharing computers such as CTSS. As founder of the Student Information Processing Board (SIPB, still operating at MIT), I interacted with many around campus with computing systems, helping students gain access.

4. I have been a Professor of Computer Science for more than 35 years, teaching courses each year, including about information retrieval, digital libraries, hypertext, database management, and multimedia as well as textual information. From September 1983 through May 1988, I served as an Assistant Professor of Computer Science at Virginia Polytechnic Institute and State University (Virginia Tech). I served Virginia Tech as an Associate Professor until April 1995, when I was promoted to Professor. I have continued in that capacity since, but also became a Professor, by courtesy, in Virginia Tech's Department of Electrical and Computer Engineering, in February 2016. Since January 1998, I have been the Director of the Digital Library Research Laboratory at Virginia Tech. From June 1990 to June 2014, I was the Associate Director for Research at Virginia Tech's Computing Center, a position that evolved to Faculty Advisor to Information Technology. I have (co)advised more than 76 graduate students for their dissertation/thesis/project. I received an award on 16 October 2015 for Research Impact in Human-Computer Interaction, conferred by the VT Center for HCI, for which I served as a founding member; my relevant activities included working on information visualization, user

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