| UNITED STATES PATENT AND TRADEMARK OFFICE | | | | | | |
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| BEFORE THE PATENT TRIAL AND APPEAL BOARD | | | | | | |
| | | | | | | |
| APPLE INC. Petitioner | | | | | | |
| V. | | | | | | |
| UNILOC USA, INC. and UNILOC LUXEMBOURG, S.A. Patent Owner | | | | | | |
| | | | | | | |
| Patent 6,993,049 | | | | | | |

DECLARATION OF DR. CHARLES D. KNUTSON IN SUPPORT OF THE PETITION



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DECLARATION EXHIBITS

| APPLE-1001 | U.S. Patent No. 6,993,049 to Davies ("'049 Patent") |
|------------|--|
| APPLE-1002 | Prosecution History of the '049 Patent ("the Prosecution History") |
| APPLE-1003 | Declaration of Dr. Charles Knutson |
| APPLE-1004 | Curriculum Vitae of Dr. Charles Knutson |
| APPLE-1005 | U.S. Patent No. 6,704,293 ("Larsson") |
| APPLE-1006 | IrDA Object Exchange Protocol ("IrOBEX") |
| APPLE-1007 | Prosecution History of the 7,587,207 Patent ("207 Prosecution History") |
| APPLE-1008 | Second Declaration of Dr. Charles Knutson |
| APPLE-1009 | U.S. Patent No. 7,587,207 ("Davies" or the "'207 Patent") |
| APPLE-1010 | U.S. Patent No. 6,570,857 ("Haartsen") |
| APPLE-1011 | U.S. Patent No. 6,480,505 ("Johansson") |
| APPLE-1012 | Specification of the Bluetooth System: Wireless connections made easy, Profiles, Vol. 2, Bluetooth, Dec. 1, 1999 ("BT Profiles") |
| APPLE-1013 | The New Shorter Oxford English Dictionary on Historical Principles, Vol. 1, Clarendon Press, 1993 ("Oxford Dictionary") |
| APPLE-1014 | Specification of the Bluetooth System: Wireless connections made easy, Core, Vol. 1, Bluetooth, Dec. 1, 1999 ("BT Core") |
| APPLE-1015 | U.S. Patent No. 6,683,886 ("Tuijn") |



I, Charles D. Knutson, hereby declare the following:

I. INTRODUCTION

- 1. I have been retained by Fish & Richardson P.C., counsel for Apple Inc. ("Apple" or "Petitioner"), to analyze certain issues relating to the validity of certain claims of U.S. Patent No. 6,993,049 ("'049 Patent").
- 2. In forming the opinions I have expressed in this declaration, I have reviewed the '049 patent, its file history, the Petition for *Inter Partes Review* from Apple, and any documents cited or listed in this declaration. Furthermore, my opinions are also based on my experience and knowledge (as detailed further below).
- 3. I have been retained on behalf of Apple Inc., and am being compensated for my work on this matter. My compensation is not contingent upon the outcome of this matter.

II. SUMMARY OF CONCLUSIONS

4. As explained below, my opinion is that a POSITA would have viewed claims 11 and 12 of the '049 patent as being obvious in view of the following grounds.

| Ground | '049 Patent Claims | Basis for Unpatentability |
|----------|--------------------|---|
| Ground 1 | Claims 11 and 12 | §103: Obviousness over Larsson |
| Ground 2 | Claims 11 and 12 | §103: Obviousness over Larsson in view of BT (Bluetooth) Core |



| Ground | '049 Patent Claims | Basis for Unpatentability |
|----------|--------------------|-------------------------------|
| Ground 3 | Claims 11 and 12 | §103: Obviousness over IrOBEX |

III. QUALIFICATIONS AND EXPERIENCE

- 5. I received my Doctor of Philosophy (Ph.D.) degree in the field of Computer Science from Oregon State University in 1998. I received my Master of Science (M.S.) and Bachelor of Science (B.S.) degrees in Computer Science from Brigham Young University.
- 6. Since 1986, I have been engaged in engineering, management, research, and instructional positions. During my undergraduate education at Brigham Young University between 1985 and 1988, I focused on operating systems, leading to my employment as a development engineer at Hewlett-Packard between May, 1988, and February, 1989. During that time, I developed low-level system software for the HP Vectra personal computer.
- 7. I was employed as a development engineer, test engineer, and manager at Novell, Inc. between March, 1989, and September, 1994. During that time, I became very familiar with the theory and operation of data communication systems and system software. As a system test manager at Novell, I pioneered the creation of cutting edge system test tools for automated validation of network protocols.



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