EXHIBIT 1

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

WI-LAN INC., Plaintiff, v. ALCATEL–LUCENT USA INC., *et al*., Defendants.	CIVIL ACTION NO. 6:10–CV–521–LED

DECLARATION OF JAMES OLIVIER, PH.D.

1. My name is James Olivier. I am over the age of 21 years and am competent to give the testimony contained in this Declaration. All the facts set forth in this Declaration are within my personal knowledge and are true and correct.

2. I have a Ph.D. in the field of Electrical Engineering from the Ohio State University and have been in the field of telecommunications for the past 22 years.

3. I have extensive experience in the design and development of telecommunication systems, including cellular products, for industry. I have developed and designed equipment for telecommunication services since my start at AT&T Bell Laboratories in 1990, where I worked on AT&T's Autoplex Cellular Switching System as a Member of Technical Staff. After that I went to DSC Switch Products Division where as a Senior Manager I designed a new generation Base Station Controller for use by Motorola in their Centralized Base Station Controller. I then worked at Samsung Telecommunications America designing their next generation cellular switch, a UMTS switch. After that I worked at Marconi Communications Access division designing access equipment shelves for the central office. I then worked at Navini Networks on

their Broadband CDMA system. My C.V. is attached as Exhibit A to this Declaration.

4. Through consulting firm McAlexander Sound, I have been retained by Thompson & Knight LLP on behalf of Ericsson and Sony Mobile to offer opinions regarding certain technical issues related to this matter.

5. McAlexander Sound bills Thompson & Knight at the nominal rate of $425 per hour for my services. No part of my compensation depends on the outcome of this case.

6. In connection with my analysis, I have reviewed U.S. Patent Nos. 6,088,326 (the "'326 patent") and 6,222,819 (the "'819 patent"). I have also reviewed the Declaration of Jonathan Wells, Ph.D., Concerning Structure Supporting Means Plus Function Clauses, dated April 13, 2012.

7. I understand that claim 6 of the '326 patent claims a "central terminal . . . comprising channelisation means for determining which of the orthogonal channels will be subject to TDM techniques, and for transmitting that information to a plurality of subscriber terminals within the wireless telecommunications system."

8. I further understand that claim 7 of the '326 patent claims a "central terminal as claimed in claim 6, wherein the channelisation means also determines, for those orthogonal channels subject to TDM techniques, how many time slots will be provided within each orthogonal channel."

9. I further understand that claim 10 of the '819 patent claims a "central terminal . . . comprising channelisation means for determining which of the orthogonal channels will be subject to overlay codes, and for transmitting that information to a plurality of subscriber terminals within the wireless telecommunications system."

10. For the purposes of my analysis I have applied Dr. Wells's opinion that one of ordinary

skill in the art is a person with a four-year degree in Electrical Engineering, Physics, or Computer Science with some experience in cellular communications and computer programming.

11. In my opinion, one of ordinary skill in the art would find no algorithms disclosed in the ’326 patent for determining which of the orthogonal channels will be subject to TDM techniques or for determining, for those orthogonal channels subject to TDM techniques, how many time slots will be provided within each orthogonal channel.

12. In my opinion, one of ordinary skill in the art would find no algorithms disclosed in the ’819 patent for determining which of the orthogonal channels will be subject to overlay codes.

13. Further, in my opinion, none of the supposed algorithms that Dr. Wells constructs are disclosed by the specifications of the ’326 or ’819 patents.

14. In paragraphs 34 and 36 of his declaration, Dr. Wells proposes two versions of a purported algorithm for determining which of the orthogonal channels will be subject to overlay codes. None of the passages from the ’819 patent specification cited by Dr. Wells describe this supposed algorithm.

15. In paragraphs 25 and 26 of his declaration, Dr. Wells proposes two versions of a purported algorithm for determining, for those channels subject to TDM techniques, how many time slots will be provided within each orthogonal channel. None of the passages from the ’326 patent specification cited by Dr. Wells describe this supposed algorithm.

16. In paragraphs 18 and 19 of his declaration, Dr. Wells proposes two versions of a purported algorithm for determining which of the orthogonal channels will be subject to TDM techniques, and for transmitting that information to a plurality of subscriber terminals within the wireless telecommunications system. *See* Wells Declaration ¶ 20. None of the passages from the

’326 patent specification cited by Dr. Wells describe this supposed algorithm.

17. Moreover, in my opinion, Dr. Wells’s supposed algorithms do not perform the required functions for determining.

18. For example, Dr. Wells says the following is an algorithm for determining which of the orthogonal channels will be subject to overlay codes, and for transmitting that information to plurality of subscriber terminals within the wireless telecommunications system.

> “First, the DA engine looks to whether the subscriber terminal which data will be transmitted supports overlay codes. After establishing that a subscriber terminal to which data is to be sent supports overlay codes, the DA engine considers the type of data to be sent.” Wells Declaration ¶ 34.

This proposal does not explain how to determine which of the orthogonal channels will be subject to overlay codes, and for transmitting that information to plurality of subscriber terminals within the wireless telecommunications system. It states only that a consideration is made: “the DA engine considers the type of data to be sent.”

19. Dr. Wells says the following is an algorithm for determining, for those channels subject to TDM techniques, how many time slots will be provided within each orthogonal channel.

> “(1) consider the type of data that is to be transmitted in an orthogonal channel and (2) choose a suitable number of time slots to provide within the orthogonal channel to achieve an acceptable data rate.” Wells Declaration ¶ 26.

This proposal does not explain how to determine how many time slots will be provided within each orthogonal channel. It states only that such a determination is made: “choose a suitable number of time slots to provide within the orthogonal channel to achieve an acceptable data rate.”

20. Dr. Wells says the following is an algorithm for determining which of the orthogonal channels will be subject to overlay codes, and for transmitting that information to plurality of subscriber terminals within the wireless telecommunications system. *See* Wells ¶ 37.

> "First, the DA engine looks to whether the subscriber terminal which data will be transmitted supports overlay codes. After establishing that a subscriber terminal to which data is to be sent supports overlay codes, the DA engine considers the type of data to be sent." Wells Declaration ¶ 34.

This proposal does not explain how to determine how many time slots will be provided within each orthogonal channel. It states only that a consideration is made: "the DA engine considers the type of data to be sent." Second, this proposal does not state anything about transmitting information regarding which of the orthogonal channels will be subject to overlay codes to the subscriber.

I declare under penalty of perjury of the laws of the United States of America that the foregoing is true and correct.

Executed this 19th day of April, 2012.

Dr. James Olivier

Exhibit A

Curriculum Vitae Dr. James L. Olivier

PROFESSIONAL SUMMARY

I have a Doctorate in Electrical Engineering, with a triple minor in the areas of Computer Science, Microelectronics and Semiconductor Fabrication, and Discrete Mathematics. For twenty two years, I have worked in basic and applied research, in the areas of hardware and software systems design targeted to the areas of wired and wireless data telecommunications. My work experience began at various large research laboratories where I conducted basic research in the fields of computer and communication system design, then moved on to smaller more focused entities, where I developed a more practical understanding of the hardware and software required for modern computer and communications systems. For the past nine years, I have devoted my attention to industry consulting.

EDUCATION PROFILE

Ph.D. Electrical Engineering, The Ohio State University, Columbus, Ohio, 1988 Dissertation: "*Concurrent Error Detection in Arithmetic Processors using GAN Codes*", Received separate minors in fields of Computer Science, Microelectronics and Semiconductor Fabrication, and Discrete Mathematics. Recipient of a prestigious Kodak Fellowship, awarded nationally to the top twelve doctoral students in the field of physics and electrical engineering.

MS. Electrical Engineering, The Ohio State University, Columbus, Ohio, 1985 Thesis: "*A Navigation System for a Vehicle with a Laser Rangefinder*"; Major areas of study were computer design and software engineering.

BS. Electrical Engineering, The Ohio State University, Columbus, Ohio, 1983 Graduated Cum Laude, recipient of Larmus Award, Summa Scholarship, and Caldwell Scholarship.

EXPERIENCE PROFILE

2003 - present **M[c]Alexander Sound, Inc. - Richardson, Texas**
Consultant

- Patent related contract consulting including System, Product, and Program Code investigation, expert witness services for protection of intellectual property; Specialize in wireless and GPS platforms, networks, telephony protocol, and broadband switching systems, including ATM.

2002 **Navini Networks - Richardson, Texas**
Senior Manager

- Performed research and development in Navini's Wireless CDMA broadband System. Responsible for definition and implementation of layer 2 and layer 3 network protocols for Navini's Broadband Wireless Products. Developed features for network security, network services, service provisioning and subscriber management in a CDMA network.

1999 – 2002 **Marconi Communications - Irving, Texas**
Manager of Systems Engineering

- Responsible for design and development of new products and product evolution for Marconi's North American Access Division. Lead research and development efforts into new hardware and software systems, providing a wide range of data and telephony services. Designed new packet agnostic switching hardware and associated microprocessor subsystem. Responsible for development of access products ranging from high speed switching systems to complex management systems.

1996– 1999 **Samsung Telecommunications America - Richardson, Texas**
Principal Engineer

- Responsible for Service Control subsystem of Samsung's next generation wireless broadband UMTS switching system. Designed and developed a Java based platform for defining services for Samsung's next generation high-speed wireless switch. Areas of responsibility include traditional telephony services, wireless services, broadband services, and Internet services.

EXPERIENCE PROFILE (continued):

1995 – 1996 **DSC Switch Products Division – Plano, Texas**

Senior Manager: IN Evolution and Business Planning

- Responsible for competitive assessments, cost comparisons and fitness of use of the entire DSC AIN product line. Directed IN product evolution plans, actively interacting with key customers and participating in relevant standards work.

- Conceived and designed DSC's Broadband Intelligent Network products.

Senior Manager: ATM Systems Engineering Group

- Lead the systems engineering group in defining a new high speed ATM switches for enterprise and telecommunication networks. These efforts include the development of new Application Specific Integrated Circuits, (ASICs), multiprocessor architectures, communications subsystems, and software architectures

1990 – 1995 **AT&T Bell Laboratories - Columbus, Ohio**
Member of Technical Staff

- Designed and implemented a variety of multiprocessor systems for use in the telecommunications network. These include a Signaling Processor Subsystem for AT&T's Central Office ATM Switch, a translation subsystem for AT&T Autoplex Cellular Switching System and improvements to the Common Network Interface (CNI) subsystem, which is a part of the 5ESS, 4ESS, NCP, and STP product lines

1989 – 1990 **General Motors Research Laboratories - Warren, Michigan**
Senior Research Engineer: Computer Science Department

- Conducted research into basic computer science problems associated with the future development of vehicular systems. These areas include the design of fault tolerant control systems, new cost affective microprocessor architectures and software for reliability and performance modeling. Lead the development of an automotive testbed for the evaluation of prototype systems.

EXPERIENCE PROFILE (continued):

1988 – 1989 **Harris Communications – Melbourne, Florida**
Principal Engineer

- Conducted research and development into innovative computer systems for use in space systems. Studied coherency protocols for microprocessor memory systems. Developed fault tolerant multi-processor computer systems for use in Strategic Defense Initiative.

PUBLICATIONS

Olivier, J., Ozguner, F. "*A navigation algorithm for an intelligent vehicle with a laser rangefinder*", Proceedings of the 1986 IEEE International Conference on Robotics and Automation, Vol. 3, April 1986.

Olivier, J. L. and Ozguner, F. "*Design of Concurrent Error Detecting Systolic Arrays Using GAN Codes*" IEEE Transactions on Computer Aided Design, vol. 9, no. 10 October 1989.

Olivier, J.L. "*Low Cost Residue Prediction for Improved Addition Efficiency*", G. M. Research Publication, December 1989.

Olivier, J.L. and Tkacik, T.E., "*RELY, a Markov Modeling Package for System Reliability Prediction*" G.M. Research Publication, January 1990.

TECHNICAL CONSULTING

2005 – 2006 **Telstrat - Plano, Texas**
Consultant

- Responsible for the specification, design, and architecture of the Telstrat's Next Generation Access Product. Evaluated various approaches such as Metro Ethernet, MPLS, 802.17, and 802.3 solutions. Platform delivers Video, including analog, digital, HDTV and IP based voice, including packetized and local services, and internet access.

TECHNICAL CONSULTING (continued):

2004 – 2005 **Crane Aerospace - Plano, Texas**
Consultant

- Conducted research into the specification, design, and architecture of the Crane Wireless Sensor Network. Investigated scalability, address assignment, access, and security for a large Wireless Sensor Network. This network is a layered self-organizing network of sensors incorporating deployed low cost sensors with a potentially disposable goal. Intended applications include unattended “sentries” that can be used in wide area battlefield, border security, and asset and force protection.