

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FLEX LOGIX TECHNOLOGIES INC,

Petitioner

V.

VENKAT KONDA,

Patent Owner

Case IPR2020-00262

Patent 8,269,523 B2

DECLARATION OF VENKAT KONDA

I, Venkat Konda, make this declaration in connection with the proceedings identified above.

1. I am the sole inventor of U.S. Patent No. 8,269,523 (“the ‘523 Patent”). I submit this declaration in support of Patent Owner’s Preliminary Response to the Petition for *Inter Partes* Review in Case IPR2020-00262 filed by Petitioner Flex Logix Technologies Inc. (“Petitioner”) challenging claims 1, 15-18, 20-22, 32 and 47 (the “Challenged Claims”) of the ’523 Patent. Paper 1.

2. I earned a Bachelor of Technology in Electronics and Communications Engineering from Nagarjuna University in Vijayawada, India in 1986, a Master of Technology in Electrical Engineering from the Indian Institute of Technology in Kharagpur, India in 1988, and a Ph.D. in Computer Science and Engineering from the University of Louisville, Kentucky in 1992.

3. I have over 25 years of Research and Development and Management experience in various semiconductor integrated circuit and systems companies **with extensive experience in interconnection networks** including nCube Corporation from March 1992 to March 1995, Mitsubishi Electric Research Labs and VSIS Inc. from April 1995 to July 1998, Infineon Technologies from July 1998 to December 2000, and Velio Communications from December 2000 to June 2001. I was the founder of Teak Networks Inc. in August 2001 and CEO from

August 2001 until March 2007. I was also co-founder of Teak Technologies Inc.

founded in February 2005 and CTO from February 2005 until April 2006.

4. In 1994-95, I taught graduate courses related to **interconnection networks** as an adjunct faculty member in the department of Computer Science and Engineering, Santa Clara University, Santa Clara, CA.

5. I founded Teak Networks Inc. after solving an approximately 60-year-old research problem by inventing strictly and rearrangeably non-blocking multi-cast solutions for Clos Networks. I have been granted several related patents for that technology including U.S. Patents No. 6,885,669, 6,868,084, 7,424,010, 7,424,011 and 7,378,938 by the United States Patent and Trademark Office (“USPTO”).

6. I founded Konda Technologies, Inc. (“Konda Tech”), in 2007, after solving approximately 30-year-old open research problems by inventing strictly and rearrangeably non-blocking multi-cast solutions for Benes and Butterfly Fat Tree Networks and the seminal 2D-layouts to implement those networks using only vertical and horizontal wires. I am a pioneer in multi-stage based field-programmable gate array (“FPGA”) routing fabric and interconnection networks technology. Konda Tech was founded to commercialize semiconductor integrated circuits and system level interconnection technology solutions based on my work.

7. Konda Tech licenses chip and system level interconnection

technology solutions to the commercial semiconductor industry. To date, Konda Tech has eleven patents relating to the technology. Konda Tech has licensed FPGA interconnection architecture patents to two FPGA chip vendors, the first of which has made and sold three generations of chips using the 2D-layouts disclosed in the '523 Patent.

8. A selected list of some of my publications is attached in Appendix A.

I hereby declare under penalty of perjury under the laws of the United States of America that all statements made herein of my own knowledge are true and that all statements made herein on information and belief are believed to be true, and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Dated: May 6, 2020

Respectfully submitted,

/Venkat Konda/
Venkat Konda

PARTIAL LIST OF SOME SELECTED PUBLICATATIONS

- 1) Rearrangeably nonblocking multicast multi-stage networks**
 - Priority Date: September 27, 2001
 - US Patent Application Number: 09/967,815
 - US Patent Number: US 6,885,669
 - Date of Patent: April 26, 2005
- 2) Strictly nonblocking multicast multi-stage networks**
 - Priority Date: September 27, 2001
 - US Patent Application Number: 09/967,106
 - US Patent Number: US 6,868,084
 - Date of Patent: March 15, 2005
- 3) Strictly non-blocking Multicast Multi-split Linear-time Multi-stage Networks**
 - Priority Date: September 6, 2003
 - US Patent Application Number: 10/933,900
 - US Patent Number: US 7,424,010
 - Date of Patent: September 9, 2008
- 4) Rearrangeably nonblocking multicast multi-stage networks**
 - Priority Date: September 27, 2001
 - US Patent Application Number: 10/999,757
 - US Patent Number: US 7,424,011
 - Date of Patent: September 9, 2008
- 5) Strictly nonblocking multicast multi-stage networks**
 - Priority Date: September 27, 2001
 - US Patent Application Number: 10/999,649
 - US Patent Number: US 7,378,938
 - Date of Patent: March 27, 2008
- 6) Fully Connected Generalized Multi-stage Networks**
 - Priority Date: March 6, 2007
 - US Patent Application Number: 12/530,207
 - US Patent Number: US 8,270,400
 - Date of Patent: September 18, 2012
- 7) Fully Connected Generalized Butterfly Fat Tree Networks**
 - Priority Date: March 25, 2007
 - US Patent Application Number: 12/601,273
 - US Patent Number: US 8,170,040

- Date of Patent: May 1, 2012

8) Fully Connected Generalized Multi-link Multi-stage Networks

- Priority Date: March 25, 2007
- US Patent Application Number: 12/601,274
- US Patent Number: US 8,363,649
- Date of Patent: January 29, 2013