

**UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD**

XILINX, INC.,
Petitioners,

v.

SAINT REGIS MOHAWK TRIBE,
Patent Owner.

Case IPR2018-01395
Patent 9,153,311 B1

DECLARATION OF MARK WOLLGAST

I, Mark Wollgast, declare as follows:

1. I am more than twenty-one years of age, competent to present this affidavit, and have personal knowledge of the facts set forth herein.

2. I am currently the Engineering Program Manager (EPM) at Lockheed Martin. I am in charge of the Tactical Reconnaissance and Counter-Concealment Radar (TRACER) program, which was developed for the U.S. Army's Intelligence and Information Warfare Directorate, based at Aberdeen Proving Grounds, Md.

3. I work closely with the Department of Defense.

4. The Department of Defense's most critical missions rely heavily on advanced cutting-edge technology from American companies who perform their development and manufacturing in the United States.

5. Many of these companies are small businesses that can move much faster than the very large contractors.

6. As such, they can often invent and field new technology at much faster pace than Lockheed Martin for example.

7. SRC/DirectStream is a perfect example of such a company.

8. They have been producing groundbreaking processor technology for over two decades and have been a key supplier to Lockheed Martin for more than 12 years.

9. SRC/DirectStream is the sole source vendor of processors used in both our TRACER program and another program that requires extremely high-performance signal processing in a very limited SWAP (size, weight, and power) environment.

10. The TRACER system operates in a tactical capacity which means that it must collect and process large volumes of radar information in real-time and within a SWAP environment that meets the US Army unmanned aerial vehicle (UAV) requirements.

11. The compact high-performance design of the SRC/DirectStream FPGA processors are what has made this application possible on the UAV class of air vehicles

12. Ongoing counter-terrorism and counter-insurgency operations present tough challenges that our forces must face each day.

13. They need surveillance and reconnaissance capabilities that provide a long-term stare at specific geographic locations so they can detect environmental changes, patterns, and asymmetric tactics.

14. TRACER has been operational outside the continental United States (OCONUS) for 10 years performing surveillance operations as part of the U.S. Southern Command's mission requirements.

15. SRC/DirectStream's processors have allowed these surveillance operations to produce images of targets on the ground in real-time as the aircraft fly's the mission plan.

16. This means there is actionable information available immediately as opposed to systems that must rely on image processing to be performed post mission by large server class computing hardware located in a data center.

17. The success of TRACER in the U.S. Southern Command (SOUTHCOM) area of operation has been very favorable.

18. The unique radar capability coupled with the high-performance processing has resulted in the detection of rebel forces, drug cartel activities, and related terrorism that occurs in the dense jungles of that region.

19. Currently SRC/DirectStream is under a sole source contract by Lockheed Martin on behalf of the U.S Southern Command to produce an even more advanced version of the current TRACER processor expected to be delivered in 2019.

20. This system will have five times the current processing capability while being just 1/3 the physical size and consuming half the power.

21. These performance, size and power consumption improvements continue to demonstrate SRC/DirectStream's leading edge capabilities that Lockheed Martin's own procurement process showed no other vendor could match.

22. In my opinion, it is in the best security interests of the United States as a whole, and Lockheed Martin in particular, to keep companies like SRC/DirectStream healthy and unencumbered so they can stay focused on technology development that they have proven they can do best.

23. In my opinion, our national security interests are not served by requiring SRC/Directstream to spend time or money defending against *inter partes* review proceedings

24. I hereby declare that all statements made herein of my own knowledge are true and further that all statements herein are made with knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Dated: September 10, 2018

By: Mark T. Wollgast

Mark T. Wollgast