

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

QUALCOMM INCORPORATED
Petitioner

v.

NETWORK SYSTEM TECHNOLOGIES, LLC
Patent Owner

Case: IPR2024-00343
U.S. Patent No. 7,594,052

DECLARATION OF SAGE KRUSE

I, Sage Kruse, declare as follows:

1. I am an IP Administrator at the law firm Carlson, Caspers, Vandenburg & Lindquist, P.A.
2. Through the IEEE Xplore homepage <https://ieeexplore.ieee.org/browse/conferences/title>, I pulled up abstracts from twenty conference proceedings in the 2004 to 2005 timeframe, selected at random. True and correct copies of these twenty abstracts, Titles and urls of which I list below, are provided as Exhibit 1061.

- "Hardware architecture design for visual processing: present and future," *Proceedings of 2004 IEEE Asia-Pacific Conference on Advanced System Integrated Circuits*, Fukuoka, Japan, 2004, <https://ieeexplore.ieee.org/document/1349388>
- "VCM design to improve dynamic performance of actuator in a disk drive," *APMRC 2004 Asia-Pacific Magnetic Recording Conference, 2004.*, Seoul, 2004, <https://ieeexplore.ieee.org/document/1521922>
- "KYPD: a solver for semidefinite programs derived from the Kalman-Yakubovich-Popov lemma," *2004 IEEE International Conference on Robotics and Automation (IEEE Cat.*

No.04CH37508), Taipei, Taiwan, 2004,

<https://ieeexplore.ieee.org/document/1393841>

- "Material loaded antennas and their contribution towards low-SAR," *2004 IEE Antenna Measurements and SAR, AMS 2004*, Loughborough, UK, 2004,
<https://ieeexplore.ieee.org/document/1514897>
- "Sensitivity analysis and design optimization for head interconnect," *APMRC 2004 Asia-Pacific Magnetic Recording Conference, 2004.*, Seoul, Korea (South), 2004,
<https://ieeexplore.ieee.org/document/1521928>
- "On service provisioning under a scheduled traffic model in reconfigurable WDM optical networks," *2nd International Conference on Broadband Networks, 2005.*, Boston, MA, USA, 2005, <https://ieeexplore.ieee.org/document/1589596>
- "Trends in collaborative technologies for supporting knowledge management," *Proceedings of the 2005 International Symposium on Collaborative Technologies and Systems, 2005.*, St. Louis, MO, USA, 2005,
<https://ieeexplore.ieee.org/document/1553275>

- "Integrating Region and Boundary Information for Improved Spatial Coherence in Object Tracking," *2004 Conference on Computer Vision and Pattern Recognition Workshop*, Washington, DC, USA, 2004, <https://ieeexplore.ieee.org/document/1384792>
- "Security challenges, technology and international cooperation; the holocide intercept and the future of humanity," *Proceedings of the 2004 IEEE International Conference on Computational Intelligence for Homeland Security and Personal Safety, 2004. CIHSPS 2004.*, Venice, Italy, 2004, <https://ieeexplore.ieee.org/document/1360194>
- "User interfaces for self and others in Croquet learning spaces," *Third International Conference on Creating, Connecting and Collaborating through Computing (C5'05)*, Kyoto, Japan, 2005, <https://ieeexplore.ieee.org/document/1419782>
- "An analogue multi-terminal line differential protection," *2004 Eighth IEE International Conference on Developments in Power System Protection*, Amsterdam, Netherlands, 2004, <https://ieeexplore.ieee.org/document/1364901>

- "Market based transmission expansion planning: stakeholders' desires," *2004 IEEE International Conference on Electric Utility Deregulation, Restructuring and Power Technologies. Proceedings*, Hong Kong, China, 2004, <https://ieeexplore.ieee.org/document/1337998>
- "On the monitoring of contractual service level agreements," *Proceedings. First IEEE International Workshop on Electronic Contracting, 2004.*, San Diego, CA, USA, 2004, <https://ieeexplore.ieee.org/document/1319502>
- "A parallel implementation of the Smith-Waterman algorithm for massive sequences searching," *The 26th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, San Francisco, CA, USA, 2004, <https://ieeexplore.ieee.org/document/1403804>
- "Aerosol Optical Thickness determination by exploiting the synergy of TERRA and AQUA MODIS (SYNTAM)," *IGARSS 2004. 2004 IEEE International Geoscience and Remote Sensing Symposium*, Anchorage, AK, USA, 2004, <https://ieeexplore.ieee.org/document/1370117>

- "Virtualizing the Net - a strategy for enabling network innovation [Keynote 2]," *Proceedings. 12th Annual IEEE Symposium on High Performance Interconnects*, Stanford, CA, USA, 2004, <https://ieeexplore.ieee.org/document/1375188>
- "A method for constructing the observer trajectory in bearings-only tracking of targets with a Markovian model," *2005 IEEE International Conference on Information Acquisition*, Hong Kong, China, 2005, <https://ieeexplore.ieee.org/document/1635043>
- "Steering and forwarding techniques for reducing memory communication on a clustered microarchitecture," *Innovative Architecture for Future Generation High-Performance Processors and Systems (IWIA'05)*, Oahu, HI, USA, 2005, <https://ieeexplore.ieee.org/document/1587821>
- "An application of chaos and bifurcation in nonlinear dynamical power systems," *2004 2nd International IEEE Conference on 'Intelligent Systems'. Proceedings (IEEE Cat. No.04EX791)*, Varna, Bulgaria, 2004, <https://ieeexplore.ieee.org/document/1344840>

- "Data mining for security applications," *2004 International Conference on Machine Learning and Applications, 2004. Proceedings.*, Louisville, KY, USA, 2004,
<https://ieeexplore.ieee.org/document/1383486>

3. For each of these abstracts, the IEEE Xplore interface displayed only “full text views” for the years starting in 2011 through the present. For each of the abstracts on IEEE Xplore that I reviewed, there was no option to see statistics for “full text views” from any year earlier than 2011.

4. It appears, based on my review, that IEEE Xplore only provides statistics on full text views of conference papers for the years 2011 through the present. Having reviewed the total number of full text views for these conference publications, it appears that IEEE did not start tracking full text conference publication views until 2011.

5. I declare that all statements made herein of my knowledge are true and that all statements made 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 19 of the United States Code.

Dated: January 17, 2025

/Sage Kruse/
Sage Kruse