ArentFox Schiff LLP
Attorneys

Alex Kuo, Ph.D.

ASSOCIATE

Dr. Kuo has extensive experience in drafting and prosecuting domestic and foreign patents, preparing validity and patentability opinions, and conducting landscape analyses.



Practices

Patent

Languages

Mandarin Chinese

Education

George Mason University, Antonin Scalia Law School, JD

University of Michigan, PhD, Electrical Engineering and Computer Science, 2008

University of Michigan, MS, Electrical Engineering and Computer Science, 2003

University of California, Berkeley, BS, Electrical Engineering and Computer Science, 2002

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Dr. Kuo brings to the firm a variety of technical expertise in areas including: semiconductor fabrication, device analysis, microelectronics, analog and digital circuits, microprocessors, communication processors, memory, packaging, optoelectronics, flat-panel displays, light-emitting diodes (LEDs), microcontrollers, wireless communications, fiber-optic communications, micro-electro-mechanical systems (MEMS), power devices, hardware/software encryption, software programming, software encoding/decoding, bioelectronics, medical devices, superconductors, quantum computing, supercomputers, grid computing, cloud computing, network storage, and virtual network.

Previous Work

Prior to joining ArentFox Schiff, Dr. Kuo worked as a patent agent at a boutique intellectual property firm where he drafted and prosecuted patent applications for complex technologies, and drafted IPR petitions.

He also worked as a patent agent in a California-based firm where he prosecuted and drafted US and PCT patent applications, and assisted in IP litigation.

Prior to his legal career, Dr. Kuo was a post-doctoral researcher at the University of Michigan.

Publications, Presentations & Recognitions

Dr. Kuo's published works include:

- "Back Channel Etch Chemistry of Advanced a-Si:H TFTs," *Microelectronic Eng*.; March 2011 (vol. 88, no. 3)
- "Advanced a-Si:H TFTs for AM-OLED's: Electrical Performance and Stability," *IEEE Trans. on Elec. Dev*.; July 2008 (vol. 55, no. 7)
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"Advanced a-Si:H TFTs: Geometric Effect on its Electrical Performance and Contact Resistance," *Jap. J. of App. Phy*.; 2008 (vol. 47, no. 5)

- "Recess Etch of Amorphous Silicon Thin-Film Transistor," *IEEE Trans. on Elec. Dev.*
- "Dynamic Response of a-InGaZnO and Amorphous Silicon Thin-Film Transistors for Ultra-High Definition Active-Matrix Liquid Crystal Displays," *J. Of Display Technology*; 2015 (vol. 11)
- "Electrical Properties and Stability of Dual-Gate Coplanar Homojunction DC Sputtered Amorphous Indium–Gallium–Zinc–Oxide Thin-Film Transistors and Its Application to AM-OLEDs," *IEEE Transaction on Electron Devices*; December 2011 (vol. 58, no. 12)

Dr. Kuo's conference publications and presentations include:

- "Threshold Voltage Control of the D.C. Sputtered Staggered Amorphous Indium-Gallium-Zinc Oxide Thin-Film Transistor," *International Thin-Film Transistor Conference 2010 – Digest of ITC'10*; 2010
- "Thermal and Electrical Instability of a-Si:H TFTs for FPD's," *2007 Vehicles and Photons Symposium – Digest of Technical Papers (SID)*; 2007
- "Thermal and Electrical Instability of Amorphous Silicon Thin-Film-Transistor for AM-FPD," *Digest of AM-FPD '06*; 2006
- "Electrical Stability of Advanced Amorphous Silicon Thin-Film Transistors," *2006 Vehicles and Photons Symposium – Digest of Technical Papers (SID)*; 2006
- "Dynamic Response of a-InGaZnO Thin-Film Transistors for Ultra-High Definition Active-Matrix Liquid Crystal Displays," *SID 2014 Vehicle Displays and Interfaces Symposium Proceedings*; 2014
- "Electrical Properties and Stability of Dual-Gate Coplanar Homojunction Amorphous Indium-Gallium-zinc-Oxide Thin – Film Transistor," *SID 11 Digest;* 2011

Bar Admissions

District of Columbia

US Patent and Trademark Office