Bob Hay

1213 E. Kimberley Ln. Boise, ID 83712   208-850-5230   roberthay@boisestate.edu or rhay@allosys.com   November 2013

Education

Ph.D., Electrical and Computer Engineering, 2009

Boise State University, Boise, ID

Major focus: Circuits; Minor focus: Signal Processing

Dissertation: "Wideband Digitally Tunable SAW Resonator"

MBA, major in Management, 1972

Santa Clara University, Santa Clara, CA

MSEE, focus on controls and communication systems, 1968

Carnegie Mellon University, Pittsburgh, PA

BSEE, minor in economics, 1967

Carnegie Institute of Technology, Pittsburgh, PA

Experience

1997 to present:

President, AlloSys Corp, Boise, ID

RF/wireless/radar technology research, development, and test; system design and signal integrity

Signal and image processing and complex data analysis.

Remote telemetry and sensor systems.

2006 to May, 2013:

Special Lecturer, Boise State University, Boise, ID

Courses taught:

ECE 210	Introduction to Circuits
ECE 212	Circuit Analysis and Design
ECE 212L	Circuit Analysis and Design Lab
ECE 310	Microelectronic Circuits
ECE 310L	Microelectronic Circuits Lab
ECE 480	Senior Design Project I
ECE 482	Senior Design Project II
ECE 513/413	RF Design
ECE 551/451	Communication Systems
ECE 560	Linear Systems
ECE 597/497	Signal Integrity

Managed Senior Design Project Lab

Faculty Advisor, BSU/NASA Microgravity Projects:
  Gravitational effects on soil impedance (2009-2010)
  Gravitational modulation of calcium flux in bone (2010-2011)

Retired as *Professor Emeritus*.

1968 to 1997:

Hewlett Packard, Palo Alto, CA and Boise, ID

R&D Project Manager in projects including:

RF/Microwave instrumentation product development

Laser and Inkjet print technology and product development

Optical and magnetic storage technology and product development

Patents granted

7,932,789 Frequency-Adjustable Surface Acoustic Wave Oscillator.

6,239,879 Non-contacting communication and power interface between a printing engine and peripheral systems attached to replaceable printer component.

5,239,431 Head lift limiter for a disk drive.

4,716,423 Barrier layer and orifice plate for thermal ink jet print head assembly and method of manufacture.

4,694,308 Barrier layer and orifice plate for thermal ink jet printhead assembly.

4,590,482 Nozzle test apparatus and method for thermal ink jet systems.

4,535,343 Thermal ink jet printhead with self-passivating elements.

4,408,865 Corona discharge device for electrophotographic charging and potential leveling.

4,197,493 Electrostatic voltmeter.

3,643,126 Frequency-measuring system utilizing means for momentarily stopping the variable frequency generator.

Publications

Robert R. Hay, "Digitally-Tunable Surface Acoustic Wave Resonator," Dissertation, 2009, available at http://scholarworks.boisestate.edu/td/58/.

Bill Elder, Bob Hay, "Formulating Bluetooth Manufacturing Test Strategies," *Evaluation Engineering*, pp. 20-25, September 2001.

Robert R. Hay, "Six Steps to a Printed Page," *Hewlett Packard Journal*, pp. 6-7, June 1982

Robert R. Hay, "Versatile VHF Signal Generator Stresses Low Cost and Portability," *Hewlett Packard Journal*, pp. 18-24, March 1974

Patrick J. Barrett, Robert R. Hay, and Paul G. Winninghoff, "Adding More Precision to Spectrum Analyzer Measurements," *Hewlett Packard Journal*, pp. 10-16, July 1970

Research interests	Adaptive and reconfigurable RF Circuits and Systems
	Remote telemetry, sensors, radar, and communication systems
	Signal and image processing and complex data analysis
	Wideband tunable Surface Acoustic Wave (SAW) devices
	Novel interdisciplinary RF and wireless system solutions
Membership	Senior life member, IEEE.
	Idaho Society of Professional Engineers (License 14245)
References	References are available on request.