

# Curriculum Vitae

**Robin Keith Elkins**  
**Born: May 25, 1955**

**Employment:**

**American Advanced Technologies, Inc.**  
Chief Scientist, Director R& D

**ELK Industries**

Owner; Incorporated 1984

**State Paving Corporation**

Director of Research and Engineering; Employee Since 1979

**Holografix, Inc.**

Chief Scientist, 1983

**Systems Engineering Labs**

Computer Engineer, Member of Technical Staff 1; Design Maturity Test Group, 1981

**Education:**

**Graduate**

Hollywood Hills High School, FL

**Undergraduate Studies**

Rochester Institute of Technology, NY  
Florida Institute of Technology, and University of Miami, FL

**Post-Graduate Level Studies**

Georgia Tech, LASER Technology and Systems Applications  
Massachusetts Institute of Technology, LASERS and Optics for Applications

**United States Patents:**

4,124,773 Audio Storage and Distribution System  
4,774,449 Transformerless Battery Charging Circuits in Combination with a Battery and Method of Charging a Battery  
4,954,831 Analog-to-Digital Converter  
5,079,436 Anti-Theft Equipment  
5,825,802 Optical Elements for LASERS

**Career Milestones:**

1983 - Certification of Compliance with US 21CFR1040.10 (LASER Products CDRH,FDA)  
1985 - Patent license sold to IBM & ROLM  
1987 - Patent license sold to Digital Equipment Corporation  
1988 - Patent license purchased from Patlex Corporation  
1988 - Patent license sold to Sony Corporation

1989 - Patent license sold to Wang Laboratories  
1989 - Patent license sold to Siemens  
1992 - Patent license sold to Octel Corporation  
1993 - Patent licenses sold to Dialogic and Glenayre  
1994 - Patent license sold to Digital Sound Corporation  
1995 - Patent licenses sold to Northern Telecom & ATT  
1996 - Patent licenses sold to Microsoft and Netscape

**Completion of U.S. Government And Military Contracts:**

**NASA Langley Research Center**, -Custom High Voltage Power Supply w/Multiplexers and High Voltage Drivers, Displays, and Annunciators

**United States Air Force** – Undisclosed/Classified

**EG&G, Rocky Flats (Nuclear)** - Pinholes in Tantalum Foil **(DOD)**

**United States Army Missile Command at Redstone Arsenal** – Undisclosed/Classified

**US Naval Warfare Center, Indian Head, MD**- Undisclosed/Classified

**Lockheed /Martin Coherent Technologies** – (Patented) Optical Elements for LASERS

**Boeing/Kirtland Air Force Base, New Mexico** - “Starfire Optical Range”

**US Department of Energy** at Sandia National Laboratories

**Los Alamos National Laboratory** - Model 90 Solid Dye LASER

**Sandia National Laboratories** – (Patented) Analog to Digital Converter, **(DOD)**

**Sandia National Laboratories** – Solid State Dye LASER Materials, **(DOE)**

**US ARMY Research Laboratories** at White Sands Missile Range, Solid State Dye LASER Materials

**ALCON France** – Model 90 Solid State Dye LASER, Pulsed

**US Surgical**- LASER drilled holes for SS surgical needles

**MIT Lincoln National Laboratories** – Fluorescence lifetime research using high energy Flashlamp-Pumped Dye Liquid LASER

**Utah State University** –Aeronautical & Mechanics Department, Custom Semiconductor Diode LASERS, Class IIIb and Class IV, with Modulation

**University of Canada at Ottawa** – Blue LASER Cores for 473nm Generation

**Stanford Research Institute** – Model 20 OEM Pulse Nd:YAG LASER System

**Project Engineer/Project Manager 1979/1981 for contracts with:**

NASA, BOEING, LOCKHEED MARTIN, McDONALD DOUGLAS, NOAA/NESS, NSA, WESTINGHOUSE, AND EDWARDS AIR FORCE BASE, moving on to perform design maturity testing for the most compact mini Supercomputer, the “PHOENIX” and the most powerful cryogenically cooled Supercomputer, the “THUNDERBIRD”

**Designed and Invented Products for Market:**

LASERS, LASER and Optical Accessories, LASER Light Shows, Electronic Equipment, Instrumentation Systems, Integrated Circuits, Integrated Optical Devices, Solar Energy Systems, Photographs, Video Tapes,

**Computer Language Skills:**

Basic, Fortran, Assembly Language, DSS, TSS, MS-DOS, Windows, and Machine Language

**Institutional Memberships:**

**IEEE** - Institute of Electrical and Electronic Engineers

**SPIE** - The International Society for Optical Engineers

**SME** - Society of Manufacturing Engineers

**LIA** - LASER Institute of America  
**IFPO** - International Freelance Photographer's Organization  
**SEIA** - Solar Energy Industry Association  
**CPS** - Canon Professional Services  
**AAAS** - American Association for the Advancement of Science

**Contributed Works:**

**Florida Tech**

Lecturer; "The Engineering Profession" (Audience were recent Graduates of Engineering)

**International Conference on LASERS, 1989**

"Advances In Blue-Green Flashlamp Pumped Dye LASER Development."

**Georgia Tech**

Guest Speaker; "LASER Technology and Systems Applications."

**IEEE Broward Section**

Guest Speaker; "LASER Fundamentals"

**Palm Beach Society of American Inventors**

Guest Speaker; "Successful Patent Litigation"

**University of Miami**

Lecturer; "State Of The Art In Audio"

**Florida Institute of Technology**

Lecturer; "The Patent Process"

**Innovative Product Technologies**

Keynote Speaker; Inventor "Voice Mail"

**Tampa Bay Inventor's Council**

Speaker; "Protecting Your Intellectual Property"

**Brevard County Professional Photographer's Assn. 2002**

"LASER Photography Techniques"

**Brevard County Museum of Arts and Sciences**

Course Instructor; "Introduction to Holography"

**Brevard County Museum of Arts and Sciences**

Lecturer; "LASER Fundamentals"

**Space Coast Press-Florida Today Newspaper 2000**

Freelance Photographer, on Staff

**Earth Day, Hollywood Florida, 2000, 2001, 2002, 2003, 2004, 2005, 2006**

Powered Earth Day for 15,000 to 25,000 people using his Power Solutions invention using Solar Energy.

**Florida Tech**

Held a seat at the "Roundtable Meetings" – Northrop Grumman, by Invitation of Dean of School of Engineering, Dr. Bailey

**Webster University**

Lecturer; "Intellectual Property"

**Florida Institute of Technology**

Guest Speaker; "Starting Out in the Engineering Business"

**Orlando Inventor's Council**

Speaker; "Patent Litigation and Licensing"

**Awards:**

**Best of Melbourne**

"Winner of the 2009 LASER Award"

**City of Hollywood Proclamation** (Father of Voicemail)

Robin Elkins Day, October 18, 1995

**Who's Who of American Inventors**

1990, 1991, and 1992-1993

**KINSA**

Kodak International Newspaper Snapshot Award, 1971

**City of Hollywood**

Photography Contest

**Swimming**

Hollywood Beach Hotel, Emerald Hills Country Club, Montgomery County High School;  
Numerous Medals, Titles, And Ribbons In Competition

**Archery**

Bowmanship, Golden Archer Award

**NRA**

National Rifle Association; Marksmanship Awards

**N.A.S.D.S.**

Open Water Scuba Certification, 1972

**PADI**

Advanced Scuba Certification, 1974

## **OTHER ACCOMPLISHMENTS:**

2009- Invented, built and demonstrated the most powerful industrial Nd:Yag LASER System to operate directly from (ordinary) 110 VOLT, 60 Hz, “household current” with an output of 22-60 WATTS, CW, TEM<sub>00</sub> Spatial Mode, and Beam Divergence of less than 200 Microradians, in a beam diameter of only 5mm (Max.).

Awarded the contract to design and build a custom, Q-Switched (2 Nanosecond Pulses) Nd:Yag LASER System for a University Physics Laboratory in Indonesia.

1986-1994 Performed virtually all of the LASER Light Shows for Fantasma Productions, Megadyne Production, Lightning Productions, and The Artist’s Network at essentially every Night Club featuring rock music- from “metro 107” ins South Miami, to Climatis Avenue in West Palm Beach.

2008- Designed and built an X-Y AXIAL LASER operated in manual mode. Currently, full computer control with manual options for this LASER are very close to completion.

Mr. Elkins is currently developing ground breaking technologies for American Advanced Technologies, in the field of LASERS, and Energy conservation and it’s related applications.

## **LIST OF LICENSEES TO ONE OR MORE PATENTED INVENTIONS OF ROBIN ELKINS**

- INTERNATIONAL BUSINESS MACHINES CORP. (IBM)
- DIGITAL EQUIPMENT CORP. (DEC)
- WANG LABORATORIES
- SONY CORPORATION
- AMERICAN TELEPHONE & TELEGRAPH (AT&T)
- MICROSOFT CORPORATION
- SIEMENS
- ERICSSON
- AMERICA ONLINE (AOL)
- NETSCAPE
- PRODIGY
- NETCOM
- EXPRESS MESSAGE ENTERPRISES, INCORPORATED
- CENTIGRAM CORPORATION
- OCTEL COMMUNICATIONS CORPORATION
- DIALOGIC CORPORATION
- GLENAYRE ELECTRONICS, INC.
- CPC HOLDING CORPORATION
- DIGITAL SOUND CORPORATION
- PERIPHONICS CORPORATION

- IWATSU AMERICA, INC.
- NORTHERN TELECOM LIMITED
- CODE-A-PHONE CORPORATION
- VMX, INCORPORATED
- SUDBURY SYSTEMS
- COMVERSE
- FUJITSU BUSINESS COMMUNICATION SYSTEMS
- SOLAR CAR CORPORATION
- MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.
- SHARED RESOURCE EXCHANGE, INC.
- INTERVOICE, INCORPORATED
- ASPECT TELECOMMUNICATIONS CORP.
- PRECISION SYSTEMS, INC.
- COMPUSERVE, INCORPORATED
- DASH, INCORPORATED
- TALX CORPORATION
- COMPUTER COMMUNICATIONS SPECIALIST
- NATURAL MICROSYSTEMS CORP.
- DICTAPHONE CORPORATION
- LANIER WORLDWIDE, INC.
- VOICE TECHNOLOGIES GROUP, INC.

United States Patents:

The following Patents are available for License and/or sale:

- 4,124,773 Audio Storage and Distribution System
- 4,774,449 Transformerless Battery Charging Circuits in Combination with a Battery and Method of Charging a Battery
- 4,954,831 Analog-to-Digital Converter
- 5,079,436 Anti-Theft Equipment
- 5,825,802 Optical Elements for LASERs