

BIOGRAPHICAL DATA

ALWORTH Charles Wesley

February 1999

Attorney at Law
Registered Patent Attorney
Licensed Professional Engineer

Alworth Law & Engineering
Principal
Engineer and Attorney at Law
General Engineering Consulting and Forensic Engineering
Intellectual Property Law (Patents, Trademarks, etc.)
Litigation (Constitutional, Tort, and Intellectual Property)
502A Cumberland Road
Tyler, Texas 75703
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calworth@abanet.org

and serving as

Research Associate (Pro Bono - no salary)
The University of Tulsa
Drilling Research Projects
600 South College Avenue
Tulsa, Oklahoma 74104-3189
918/631-3047

PERSONAL DATA

Age 55

Citizenship USA

Birthplace: Buenos Aires, Argentina
23 August 1943 (American Parents)

Marital Status: Married to
Madeline Elaine (Wilson) Alworth

Number of Children: Two
C. Dwight Alworth (29)
B. Diane Alworth (26)

Home Address: 502 Cumberland Road, Tyler, Texas 75703-9324

Phone: Home: Unlisted

PROFESSIONAL DATA

Security Clearance: Secret (Valid through February 1974 - renewable)

Education:**Higher:**

JD	The University of Tulsa, December 1992
Ph.D.	The University of Oklahoma, Norman, 1969
MEEE	The University of Oklahoma, Norman, 1967
BSEE	The University of Oklahoma, Norman, 1965

Secondary and Primary:

High School -- Badingham College, Fetcham Park, near Leatherhead, Surrey, Great Britain Completed 6 Ordinary Levels and one year of "A" or Advanced Level Study (1961). "A" Level is equivalent to US Junior College and is a two year program.

Primary education received from both US and British School Systems located in the USA, UK, Iraq, and Indonesia. This schooling was obtained while parents were traveling throughout the world with a major US oil company.

Professional Licenses:

State Bar of Texas Number 00785661 (May 7, 1993)

Registered Professional Engineer

Texas Number 32,955 (1971)

Oklahoma Number 9,870 (1974)

Louisiana Electrical Engineering Number 16,084 (1976)

Louisiana Control Systems Number 16,084 (1993)

Patent Agent 33,824 (now Attorney)

Admitted to Practice before the US Patent & Trademark Office as an Agent (1989): as an Attorney (1993)

Other Licenses:

First Class Radio Telephone (Federal Communications Commission)
now called "General Radio Telephone Operator"

Private Pilot - Instrument - SEL (Federal Aviation Authority)

Advanced Ground Instrument Instructor (Federal Aviation Authority)

Practice Admissions:

All courts in the State of Texas (May 1993)
Federal District Courts
 - Eastern District of Texas (December 1993)
 - Northern District of Texas (September 1997)
Patent and Trademark Office (December 1989)
Temporary Admission Supreme Court of Oklahoma (1993/4)

Work Experience; Science and Engineering:

Conoco, Inc.

Principal Consultant February 1986 - July 1990
Chief Consultant June 1984 - February 1986
Senior Consultant June 1980 - June 1984
Consultant May 1977 - June 1980
Instrument Engineer December 1974 - May 1977

Educational:

Research Associate in Petroleum Engineering
and Member of the Graduate Faculty
The University of Tulsa, September 1990 - present

Associate Professor and Chairman - Electrical Engineering (See Notes)
The University of Texas at Tyler, February 1997 - March 1998

Outside Member of the Graduate Faculty - Engineering
The University of Tulsa, Summer 1987 - September 1990

Assistant Professor of Electrical Engineering
and Member of the Graduate Faculty
Texas A&M University, September 1968 - December 1974

Special Instructor in Electrical Engineering
The University of Oklahoma, September 1967 - June 1968

Graduate Assistant in Electrical Engineering
The University of Oklahoma, September 1965 - July 1967

Teaching Assistant in Electrical Engineering
The University of Oklahoma, January 1965- June 1965

Professional: (prior to Conoco, Inc.)

Consultant to Consoltec, College Station, Texas January 1970 - June 1972

Consultant to Antenna Products Corporation, Austin, Texas
June 1972 - December 1972

Director of the Electrical Engineering Digital Computer Facility, The University
of Oklahoma, Norman, Oklahoma June 1966 - September 1967

Assistant Director of above, January 1965 - June 1966
and January 1968 - May 1968

Research Assistant, The University of Oklahoma, Research Institute, Norman
July 1965 - September 1965 and September 1967 - May 1968

Work Experience; Law:

Patent Agent (Self Employed) January 1990 - May 1993
Prosecuted mechanical patent applications

Of Counsel; (Self Employed) Sefrna & Associates June 1993 - June 1995
Tyler, Texas
Prosecuted numerous mechanical patent applications and some electrical
patent applications
Handled appeals to PTO in Trademark Applications
Trademark and Copyright Matters
General Law - Contracts, Disclosure Agreements, etc.
Infringement Matters
General Practice of Intellectual Property Law

Principal, Alworth Law and Engineering June 1995 - present
Same as above with the addition of active Federal and State litigation practice
in the area of Intellectual Property Law, Constitutional (US) Law, Tort and
Contract plus expanded matters in Trademark and Worldwide Patents.

Society Memberships: (Honors)

Order of the Curule Chair (1992) (Law School Highest Honor - see Notes)
Pi Delta Pi (1991) (Law Honor - upper 1/3 at Tulsa)
Sigma Xi (Full Member - Research Honor) (1971)
Tau Beta Pi (General Engineering Honor) (1965)
Sigma Tau (now incorporated into above) (1964)
Eta Kappa Nu (Electrical Engineering Honor) (1964)

Additional Information:

Past Research Projects (Educational Career)

Co-principal Investigator

"Nuclear Radiation Dosimetry and Detection" --
Local Funding Texas A&M University

"Design of an Artificial Intelligence System" --
Local Funding Texas A&M University

"Design of a Refrigerated Superconducting System for Noise Suppression in RF
Communication Systems, Including the Apollo Unified S-Band System" -- NASA,
Houston, Texas. Research conducted at Texas A&M.

Principal Investigator

"Analysis of the Tailing Effect in Arsenic Implanted Silicon" -- Texas Instruments,
Dallas, Texas and Texas A&M Local Funding. Research conducted at Texas
A&M.

"Analysis of a Superconducting Tracking Filter for Noise Suppression in RF
Communication Systems" -- NASA, Houston, Texas. Research conducted at
Texas A&M.

Courses Taught (University of Oklahoma, Texas A&M, and University of Texas-Tyler):

Control Systems	Electromagnetics
Electric Circuit Theory	Electronics Laboratory
AC and DC Machinery	Basic and FORTRAN Programming
Elementary and Advanced Electronics	Technical Communications

Summary of Experience at Conoco, Inc.:

Designed, constructed, and started up an Alumina Transfer System (pneumatic solids conveying) at the Lake Charles Chemical Plant (now Vista Chemical Company).

Conoco's Consultant on most problems relating to pneumatic solids conveying systems.

Advised CONSOL (the Coal Company Subsidiary) on the use of PLC's (Programmable Logic Controllers) in safety and process control on the Coal Slurry Pipeline project.

Principal instigator on the use of PLC's for the Hutton Tension Leg Platform. Also coupled these PLC's to the Wellhead Safety Shutdown System.

Designed the standard pneumatic wellhead safety system used by Dubai Petroleum Company (a Conoco Affiliate).

Designed, installed, and started up a PLC based Compressor Control System (5000 plus horse power) for the Falah "A" Platform Gas Lift Facilities -- Dubai Petroleum Company.

Installed and started up gas compression facilities on Falah "A" and Southwest Fateh "II" platforms -- Dubai Petroleum Company.

Installed the Oil Production Facilities on Falah "A" Platform and responsible for the instrumentation and safety systems design.

Designed, installed, and started up three PLC based systems for Automatically Cutting Petroleum Coke at Conoco's Humber Refinery in the UK. The first such system being a prototype. (See Patents and Publications.)

Installed and started up a micro processor based Dry Blend (plastics) System at the Aberdeen (Miss.) Chemical Plant (now Vista Chemical Company).

Specialist on Burner Management and Flame Safety Systems particularly in Incinerators and Sulphur Plants.

Designed, installed and started up the Burner Management System on the Lake Charles VCM Plant Incinerator. This also included the waste heat boiler combustion control system. Fairly involved feedforward control system in order to be able to control and burn the large swings in off-gas.

Marine engine expert mostly on boiler controls, combustion controls and burner management systems.

Developed a self checking flowmeter (with three others) for the Du Pont plants. (see patents)

Configured the Crude Unit Control system for the No. 1 CTU at Conoco's Ponca City Refinery. This system which was the first of its kind for Conoco served to develop in the in house expertise required for future Conoco Projects. The system controls product end points, tower L/V ratios, separation parameters, heat recovery, preheat train optimization, and etc. The system uses product control laboratory results to feedback end point correction (or offset) parameters to the system thus providing closed loop end point control. (See also Publications and Presentations.)

Upgraded the Sulphur Plant Burner Management Control at the Denver Refinery to use a PLC for safety shut down and light off.

Advised Conoco's Humberside Refinery in the use of PLC control for Sulphur Plants using a similar approach as at the Denver Refinery. Included the control system for Burner Management and Flame Scanners.

Conoco project engineer for a new style catalyst system for the Sabine River Works (Du Pont). Project was conceived, designed, procured, constructed, installed and started up in a four month period and well within budget.

Conducted (jointly) investigation into the theory, use and operation of MWD (Measurement While Drilling) tools for use in Conoco's Extended Reach Development Well. A now abandoned research project to drill a 30,000 foot lateral well in the North Sea. Responsibilities were to include all instrumentation and automation systems.

Investigated and made recommendations on industrial accidents. (Fires at truck loading stations, boiler explosions, etc.)

Other matters confidential to Conoco, Inc. and its (then) parent E .I. du Pont de Nemours.

Publications and Presentations:

Prior to Conoco, Inc. (Academic)

"A Superconducting Time-variant Filtering System" IEEE Conference Record Applied Superconductivity Conference 1972, IEEE Conference Record Number 72, CHO 682-5 TABSC, May 1972, with G. D. Arndt, T. W. Eggleston, and C. R. Haden.

"Nuclear Radiation Detection Using a Superconducting Resonant Cavity", Journal of Applied Physics, 42(1), p 166, 1971, with C. R. Haden.

"Nuclear Radiation Detection Using a Superconducting Resonant Circuit". Presented to the 1970 Applied Superconductivity Conference, Bolder, CO, Bulletin American Physics Society, 1516, p 844, 1970, with C. R. Haden.

"Nuclear Radiation Dosimetry Using the AC Mode", Proceedings of the Southwestern IEEE Conference, April 1969, San Antonio, Texas, with C. R. Haden.

"The Detection of Nuclear Radiation Using the Cumulative Photodielectric Effect in Cadmium Sulfide", Ph.D. Dissertation, The University of Oklahoma, August 1969.

"An Off Line Plotting System Using an Incremental Recorder", Master's Thesis, The University of Oklahoma, July 1967.

"Analysis of Signal-to-Noise Enhancement Using a Highly Selective Modulation Tracking Filter" Final Report to NASA Manned Spacecraft Center, Houston, Texas, June 1972, with C. R. Haden.

Conoco, Inc. (Industrial)

Organized and chaired a session on the use of Programmable Controllers in Safety Shutdown Systems. Control Expo Conference and Show, Chicago, Illinois, May 1984. Presented a tutorial paper on "The Use of PLC's in Compressor Control and Safety". Oklahoma State University Conference, Tulsa, Oklahoma, Feb. 1984.

Presented a paper on "Automatic Decoking" API mid year Refining Meeting, New Orleans, Louisiana, May 1984.

"Coke is Cut Automatically from Drums" Oil and Gas Journal, May 16, 1984.

Presented "Sophisticated Control of Pneumatic Plants" a paper on the experiences gained with the No 1. Crude Unit at Ponca City to the 41st Annual Symposium on Instrumentation for the Process Industries, Texas A&M, Jan. 1986, with D. A. Evens. (Also published by Texas A&M in the 41st Symposium Proceedings)

"Pneumatic Crude-unit Controls Modernized" Oil and Gas Journal, Apr. 21, 1986, with D. A. Evens

"A User's View of PLC Interfaces" presented at the ISA International Conference and Exhibit, October 1987.

Internal to the Company (Confidential)

Numerous internal company reports on various instrument problems, relating to Micro processor use and failures, semiconductor device failures, Burner Management and Flame Safety, Off Shore Platform Safety Systems, and protection of electronic equipment from transients. Numerous presentations on the use of PLC's and flowmeters. Investigated explosions in truck racks and boilers and examined other process failures in refineries and chemical plants.

Post Conoco, Inc. (Legal)

"Parody, Satire and the Copyright Law – What is Fair Use and How is it Defined?" A paper submitted and presented to the senior class at the University of Tulsa and which won First Prize in the Nathan Burkan Memorial Competition 1992 sponsored by ASCAP – 1992.

“Patent or Copyright or Mask Protection? - The Dichotomy of Protection for Intellectual Property Contained Within the Integrated Circuit” A paper submitted in partial fulfillment of LAW 5862 at the University of Tulsa 1992.

“What the General Practitioner Should Know About Patents, Trademarks and Copyrights” Covered General Intellectual Property Law and was presented to Members of the Smith County Bar Association as meeting the members requirements for continuing education - March 1996

“What is an Expert ?” with George J. Greene, P.E.
Covered use of the Expert and current state of the law in Texas and was presented to Members of the Smith County Bar Association as meeting the members requirements for continuing education - November 1997

“Technology Update” with Sean P. Healy, JD
Covered the use of computers, ethics of the Web, and other modern technology available to attorneys and was presented to Members of the Smith County Bar Association as meeting the members requirements for continuing education - June 1998

Patents (assigned to Conoco, Inc.):

Holder of US (and Foreign pending) patent number 4,626,320 for a "Method for Automated De-Coking" with W. B. Davis and J. C. Thomas. Developed in the Humber Refinery - Great Britain. Filed Feb. 22, 1984; Granted Dec. 2, 1986 (See also Publications and Presentations)

Holder of US (and Foreign pending) patent number 4,718,443 for a "Mass Flowmeter Apparatus", with B. R. Adney, B. T. Jeffries, and J. B. Durkee. Filed Feb. 6, 1987; Granted Jan. 12, 1988

Improved method for a "Mass Flowmeter Apparatus", with B. R. Adney, B. T. Jeffries, and J. B. Durkee. Assigned to Conoco, Inc. Filed in January 1989 as SN 07/295,862. Issued on Oct. 16, 1990 with a Restriction. [Patent Number 4,962,666 - Foreign pending]

Improved method for a "Mass Flowmeter Apparatus"- Method Patent stemming from the restriction above, with B. R. Adney, B. T. Jeffries, and J. B. Durkee. Assigned to Conoco, Inc. Filed in April 1990 as SN 07/515,808. Issued on Jan. 29, 1991. [Patent Number 4,987,914 - Foreign pending]

Patents (unassigned):

Fluid Mixer - a design patent for a fluid (paint) mixer. Filed in May 1996 as SN 55,112. Issued March 24, 1998. [Patent Number Des. 392,523]

Other:

Holder of the 1992-93 William Bell Award for outstanding performance in Decedents, Estates and Trusts. Awarded for the highest grade during the given academic year by the College of Law at the University of Tulsa.

Local Winner Nathan Burkan Memorial Competition 1992 (Tulsa)
- Legal Paper Contest sponsored by ASCAP
(See Papers and Presentations)

Am Jur Award Winner
- Administrative Law (Spring 1992)
- Decedents, Estates, and Trusts (Fall 1992)

Presently serving as a "Member" (Graduate Faculty) on Thesis and Dissertation Committees for the University of Tulsa, Graduate School, and Holder of Continuing Appointment as Research Associate (Faculty Position - Pro Bono), Department of Petroleum Engineering. (Tulsa University Drilling Research Projects - TUDRP)

Listed in:

Strathmore's Who's Who (1998 Edition et seq.)
Marquis Who's Who
 General USA Edition
 Who's Who in the Southwest
 Who's Who in Law
 Who's Who in Science and Technology
 Who's Who in the World

References:

Supplied on Request

Explanatory Notes:

Membership in the Order of the Curule Chair is the "Highest Honor" conferred on a member of the Graduating Class by the University of Tulsa, College of Law. The award requires membership in the top 10 per cent of the class plus additional service to the University Community.

Served as chairman of the Department of Electrical Engineering at the University of Texas at Tyler. (1997/98) Did NOT apply for the particular position, but was asked to serve in such capacity by the Dean of Engineering and did so as a "paid" volunteer. Resigned in mid semester, and after thirteen months, due to lack of cooperation and unprofessional conduct by the Dean of Engineering. Continued maintaining the Law and Engineering practice during this period.