

**ROGER W. FINCHER**  
**23B Amherst Court, Conroe, Texas 77304**  
**713 858 5620**

Up-dated: 01/2016

Mr. Fincher's 36 plus year career has spanned 32 years of service with the Baker Hughes companies and 4 plus years in an active consulting role for two dedicated primary clients and numerous short term clients and projects for both profit and community support.

Throughout his 32 year career, Mr. Fincher has held a variety of technical and managerial positions within the Baker Hughes Companies. These positions cross all aspects of our industry and include Engineering, Marketing and Operations and retired as a member of the Enterprise Technology Portfolio Management Team. During his career, Mr. Fincher has been directly involved in engineering, field deployment and operational support for medium and short radius horizontal drilling systems, downhole vibration monitoring tools, steerable products and a wide variety of other multi-discipline products, services and tools. Mr. Fincher has also worked through the years with several Baker Hughes joint ventures associated with downhole tool development and deepwater subsea pumping systems, as well as NASA on the Mars Drilling Program and Tool Development project.

Mr. Fincher earned a Civil Engineering Degree, structures specialty, with additional study in Mechanical Engineering, heat engine specialty from the Georgia Institute of Technology. In addition Mr. Fincher has attended many industry short courses. Mr. Fincher is the author of several articles and papers. He holds 48 US Patents with international counter parts as well as an additional 3 pending applications. Mr. Fincher has conducted short courses on Horizontal and Short Radius Drilling, Motor Drilling Mechanics and other energy industry related topics.

In July of 2010 Mr. Fincher retired after 32 years with Baker Hughes to devote full time efforts to his consulting company formed in 2002.

## **EDUCATION**

Formal --

BS Civil Engineering, Georgia Institute of Technology 1979, structural design specialty, a nearly complete Mechanical Engineering minor, heat engine specialty, numerous CE courses, as well as company and industry short courses.

Informal --

Low voltage control and power systems, PCB layout and systems, basic understanding in hydraulic and related electromechanical systems, 2 and 3D computer aided drafting, MS Office systems, metal fabrication and machining, basic understanding of design for injection molding as well as other broad need to know subjects.

## **PROFESSIONAL EXPERIENCE**

Thirty-six plus years of diverse engineering, R&D, product development and management experience.

- July 2010 – Current, - [quo modo Innovations](#), LLC, - Owner
  - May 2014 – November 2015 – 212 Resources, Houston, Texas – Chief Engineering Consultant
    - Provide Engineering and Operational guidance to support a small in-house technical team with plant expansions and rebuilds include

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- a plant rebuild following an operational fire. Duties included engineering, project management, financial and operational guidance during fire investigation and insurance managed rebuild
    - Provide engineering and operational direction to rebuild an SWD facility purchased in an abandoned condition
    - Support construction completion and project management of a new build Oil Recovery, R-9 permitted facility
    - Provide engineering, 3D cad designs, cost estimates and project logistic planning for a desalination plant expansion study
  - October 2010 – December 2013 – Wireless Instrumentation Systems (WINS) – Trondheim, Norway – Consulting Chief Engineer
    - Served as hands on Chief Engineer for a small prototype development company during the clean sheet creation of a downhole, high temperature, wireless EM production data communication completion tool. Duties included, design, 3D Cad, manufacturing and manufacturing support, tool assembly and in-house testing. Retreat of oil prices has caused the client of WINS to suspend the project until prices recover and funding of field testing and in well installation can be obtained.
  - August 2010 – March 2011 – 212 Resources, Houston, Texas – Sr Engineering Consultant
    - Provided start-up and environmental compliance support for a new build 5000 bpd desalination plant in Collbarn, Colorado
    - Provide operational support and efficiency improvement guidance for a 3500 bpd R-9 permit Oil Recovery facility in Andrews Texas
- 2009 – July 2010 Baker Hughes Enterprise Technology, - Strategic Technical Support  
Responsible for support of Enterprise strategic technology direction, strategic intellectual property prosecution, new technology investigations, and complex field operation support, M&A research and review, and comparative technology review
- 2002 – 2008 Baker Hughes Strategic Development Group, - Team Leader  
Responsible for support of company wide strategic direction, strategic intellectual property prosecution, specialty projects including Mars Drill and other cross divisional strategic development projects
- 1998 – 2002 DeepVision, LLC (A Baker Hughes JV) - Team Leader  
Responsible for many aspects of hydrodynamic and mechanical design, performance testing, support system automation and data logging, and endurance testing of a world scale high-pressure subsea centrifugal pump system
- 1987 – 1998 Baker Hughes Drilling Systems – Product, Technical Services and Operations Manager  
Responsible for strategic technology development of tools, marketing and technical support for BHI INTEQ's downhole drilling tool product line including drilling dynamics with support to automated drilling systems
- 1981 –1982 Sr Project Engineer for Tri-State SynFuels (A Texas Eastman Company)  
Responsible for all non-process site facilities, including site layout, coal handling, process cooling systems, coal ash storage and disposal, etc.

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- 1979 –1981 Pipeline, compressor station, liquid pumping and storage facility  
Design Engineer (Texas Eastern)
- 1977 – 1979 Design Assistant (quo modo, INC) Part-time (in school) structural  
engineering work and structural design software development

## **RELATED SELECTED PUBLICATIONS**

### **Development and Successful Application of Unique Steerable PDC Bits**

Noris, J.A., Dykstra, M.W., Beuershausen, C.C., Fincher, R.W., Ohanian, M.P. (1998)  
*IADC/SPE Drilling Conference*, Dallas, Texas, March 1998.

“Drilling in Extreme Environments: Penetration and Sampling on Earth and other Planets”,  
Yoseph Bar-Cohen and Kris Zacny (Editors), ISBN: 978-3-527-40852-8, September  
2009, RW Fincher, contributing author

Numerous magazine, technical and internal publications

## **Granted U.S. PATENTS**

9,033,045 Apparatus and method for fracturing portions of an earth formation  
8,803,392 Axial magnetic suspension  
8,554,482 Monitoring reservoirs using array based controlled source electromagnetic methods  
8,535,126 Air flow control mechanism and methods  
8,455,402 Wellbore operations using controlled variable density fluid  
8,453,760 Method and apparatus for controlling bottomhole temperature in deviated wells  
8,444,344 Temporary containment of oil wells to prevent environmental damage  
8,348,732 Airflow control system  
8,343,894 Controlled variable density fluid for wellbore operations  
8,284,075 Apparatus and methods for self-powered communication and sensor network  
8,267,197 Apparatus and methods for controlling bottomhole assembly temperature during a pause in drilling boreholes  
8,151,878 Apparatus and methods for collecting a downhole sample  
8,134,476 Apparatus and methods for self-powered communication and sensor network  
8,132,630 Reverse circulation pressure control method and system  
8,020,621 Downhole applications of composites having aligned nanotubes for heat transport  
8,011,450 Active bottomhole pressure control with liner drilling and completion systems  
7,931,098 Steerable bit system assembly and methods  
7,836,948 Flow hydraulic amplification for a pulsing, fracturing, and drilling (PFD) device  
7,823,689 Closed-Loop downhole resonant source  
7,806,203 Active controlled bottomhole pressure system and method with continuous circulation system  
7,802,637 Steerable bit system assembly and methods  
7,757,784 Drilling methods utilizing independently deployable multiple tubular strings  
7,748,474 Active vibration control for subterranean drilling operations  
7,730,970 Drilling efficiency through beneficial management of rock stress levels via controlled oscillations of subterranean cutting levels  
7,721,822 Control systems and methods for real-time downhole pressure management (ECD control)  
7,597,148 Formation and control of gas hydrates  
7,806,203 Active controlled bottomhole pressure system and method with continuous circulation system  
7,802,637 Steerable bit system assembly and methods  
7,757,784 Drilling methods utilizing independently deployable multiple tubular strings  
7,748,474 Active vibration control for subterranean drilling operations  
7,730,970 Drilling efficiency through beneficial management of rock stress levels via controlled oscillations of subterranean cutting levels  
7,721,822 Control systems and methods for real-time downhole pressure management (ECD control)  
7,597,148 Formation and control of gas hydrates  
7,487,828 Apparatus and method for powering electrical devices along a pipeline  
7,400,262 Apparatus and methods for self-powered communication and sensor network  
7,353,887 Control systems and methods for active controlled bottomhole pressure systems  
7,341,116 Drilling efficiency through beneficial management of rock stress levels via controlled oscillations of subterranean cutting elements  
7,313,052 System and methods of communicating over noisy communication channels  
7,287,604 Steerable bit assembly and methods  
7,219,722 Apparatus and methods for powering downhole electrical devices  
7,174,975 Control systems and methods for active controlled bottomhole pressure systems  
7,114,581 Active controlled bottomhole pressure system & method  
7,096,975 Modular design for downhole ECD-management devices and related methods  
7,055,627 Wellbore fluid circulation system and method  
7,000,715 Rotary drill bits exhibiting cutting element placement for optimizing bit torque and cutter life  
6,854,532 Subsea wellbore drilling system for reducing bottom hole pressure  
6,648,081 Subsea wellbore drilling system for reducing bottom hole pressure  
6,527,054 Apparatus and method for the disposition of drilling solids during drilling of subsea oilfield wellbores  
6,443,249 Rotary drill bits for directional drilling exhibiting variable weight-on-bit dependent cutting characteristics  
6,415,877 Subsea wellbore drilling system for reducing bottom hole pressure  
6,408,948 Tubing handling for subsea oilfield tubing operations  
6,230,828 Rotary drilling bits for directional drilling exhibiting variable weight-on-bit dependent cutting characteristics  
6,206,108 Drilling system with integrated bottom hole assembly  
6,196,336 Method and apparatus for drilling boreholes in earth formations (drilling liner systems)  
6,179,057 Apparatus and method for killing or suppressing a subsea well  
6,102,138 Pressure-modulation valve assembly

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**Published and Pending U.S. Patents Applications**

2014/0347152  
2014/0224640  
2014/0053666

Axial Magnetic Suspension  
Distillation Solids Removal System and Method  
Wireless Communication Platform for Operation in Conduits

**Personal**

- US Citizen, married for thirty-four years, two children, always US based, current address for thirty-four years, extensive international travel and work, English language, good health, no physical limitations, non-smoker, clean driving and other records
- Hands on mechanically inclined, self motivated and driven, big picture focus that can handle details, but prefers the higher level support and creative challenges of being an innovator and creator
- People management capable, but not my life calling, prefer technology management, creation and innovation
- Owner of quo modo Innovation, LLC, a computer aid design, analysis and innovation focused consulting company providing, prototype development and testing, one off fabrication, solution management, problem analysis, and operations support
- Co-Owner of Adaptive-AC, Inc, a start-up with focus on residential and light commercial air balance products for duct based AC systems using patented state of the art autonomous self-powered damper systems
- Co-Owner of Orkem Oil, LLC, 60 acre Jojoba growing ranch in Hyder, Arizona growing and selling organic Jojoba beans for commercial production of high end jojoba oils and products
- Owner of 1505 Warehouse and Storage, 9 build (12,500 ft<sup>2</sup> under roof, 6,000 ft<sup>2</sup> open space) controlled access warehouse and storage facility in Conroe, Texas