



Kentucky Service Center

William C. Mers Kelly, PE
Senior Forensic Engineer

Louisville, Kentucky
(502) 243-3110
wmerskelly@uis-usa.com

EDUCATION:

Covington Latin School, Covington Kentucky
University of Cincinnati, Cincinnati, Ohio

EXPERIENCE:

Unified Investigations & Sciences, Inc.

Forensic Engineer – 2007 to Present

MedVenture Technology Corporation

Senior Program Manager 1989 – 2007

One of the original founders. Responsibilities included program management/functional manager with engineering direct reports, design engineering, failure and risk analysis, quoting, product and process development, manufacturing, procurement, and supporting development/training of initial quality system through FDA approval and ISO certifications.

EXPERIENCE (CON'T):

Slush Puppie Corporation

Chief Engineer 1991 – 1993

Responsibilities included designing, transferring, and managing production of a new line of slush machines from Freund Precision to The Delfield Corporation in Mount Pleasant, MI. Managed international equipment support to include design, manufacture, procurement, regulatory listings, failure analysis, parts, personnel, equipment, repair, documentation, training, design updates, and implementation.

Freund Precision/Freund Medical

Commercial Business Manager 1986 – 1991

Responsible for design and manufacturing of commercial products and equipment. Responsibilities included managing Design Engineering group to reverse engineer/electro/mechanical spare parts for DESC (Defense Electronics Supply Center) at Wright Patterson Air Force Base in Dayton, Ohio, and design, develop, manufacture, and commercialize medical devices and commercial equipment.

Technology Incorporated

Project Engineer 1985 – 1986

Responsibilities included bidding and leading teams to successfully design and implement aircraft modifications for the 4950th Test Wing based at Wright Patterson Air Force Base.

Enginetics

Design Engineer 1983 – 1985

Responsibilities included design, testing, and overseeing production of 9g Aft Facing Seats for C5B troop compartment including NASTRAN finite element analysis, hand analysis, documentation, and formal reports.

SPECIALIZED TRAINING:

- International Association of Arson Investigators (IAAI) Certified Fire Investigator Arc Mapping Basics, 11/27/2011, 4 hours Tested
- International Association of Arson Investigators (IAAI) Certified Fire Investigator Fire Investigator Scene Safety, 11/27/2011, 3 hours Tested
- Fire Findings, Investigating Solid Fuel-Burning Appliance Fires 2009, 16 hours Tested
- Mike Holt, 101 Essential NEC Rules & Key 2008 NEC Rules, 09/09/09, 8 Hours
- Fire Findings, Investigation of Residential Dryer Fires, Benton Harbor, MI, May 2008, 16 hours Tested
- Fire Findings, Investigation of Gas and Electric Appliance Fires, Benton Harbor, MI, November 2007, 30 hours Tested
- Motor Vehicle Air Conditioning refrigerant recovery and recycling equipment certification, esco institute, Mount Prospect, IL, December 2003 Tested.
- Motorcycle Accident Reconstruction, Kenneth S. Obenski, P.E.
- Traffic Accident Reconstruction, Lynn B. Fricke, Northwestern University Center for Public Safety

FAMILIAR TECHNOLOGIES:

Commercial and Residential Appliances & Lighting – Environmental Control Systems, Computers, Washers, Dryers, Fans, Stoves, Ovens, Toasters, Entertainment, etc

Vehicles – Automotive, commercial, and recreational

Air Conditioning and Refrigeration Equipment – Chillers, Cooling Towers, Heat Pumps, Package Units, Compressors, Condensers, Evaporators, Ammonia Systems

Commercial & Residential Heating Equipment – Boilers, Unit Heaters, Heat Exchangers, Furnaces, Piping, Blowers, Ducting & Controls

Fire Protection Equipment – Sprinkler Heads, Piping, Fire Pumps, Alarm Systems

Gas (Natural/Propane/LP) Equipment – Heaters, Regulators, Piping, Grills, Controls

Lawn and Garden Equipment – Mowers, Tillers, Lawn/Garden Tractors, Snow Blowers, Pressure Washers, Trimmers, Chain Saws, Residential Generators

Hydraulic and Pneumatic Equipment – Pumps, Air Compressors, Valves, Cylinders, Pressure Regulators, Filters, Tanks, & Controls

Manufacturing Shop Equipment – Machining, Lathes, Grinders, Mills, Saws, Forklifts, Hand Tools, Power Tools

Material and Equipment Analysis – Equipment Failure Analysis, Accident Analysis

Plumbing Equipment – Piping, Fixtures, Tubing/Hoses, Valves, Regulators

Residential Equipment – Heating Equipment, Air Conditioning Appliances, & Controls

FAMILIAR TECHNOLOGIES (CON'T):

Manufacturing Plant & Facility Systems/Equipment – Production & Process Line Flows, Preventative Maintenance, Predictive Maintenance, Engineering Management, Administrative Systems, Facilities Infrastructure Equipment, Building Services Equipment, Plant Energy Conservation, Plant Safety & Accident Analysis, Plant Security Systems, Plant HVAC Systems, Plant Water Systems, Sanitary & Storm Sewerage Systems, Facility Design & Layout.

Manufacturing Processing Equipment (Industrial/Commercial) – Storage Tanks, Storage Silos, Bulk Material Handling Systems, Liquid Material Handling Systems, Meters, Pumps, Controls, Motor Drives, Mixers, Screw Conveyors, Belt Conveyors, Bucket Conveyors, Mesh Conveyors, Metal Detectors, Checkweighers, Wrapping Machines, Cartoning Machines, Palletizers, Bundling Machines, Automatic Storage & retrieval Systems, Transformers, Switch Gear, Controls, Lighting, Material Handling Equipment.

Agricultural Equipment – Tractors, Sprayers, Spreaders, Planters, Combines, Haulers, Grain Elevators, Grain Dryers, Dairy Systems, Live Stock Farm Systems, Feeders, Environmental Systems, Structures, Storage Tanks, Storage Silos, Bulk Material Handling Systems, Liquid Material Handling Systems, Meters, Pumps, Controls, Motor Drives, Mixers, Screw Conveyors, Belt Conveyors, Bucket Conveyors, Mesh Conveyors

LIST OF TESTIMONY:

August 18, 2009	United States District Court, Eastern District of Kentucky, Central Division at Lexington Sentry Insurance Company a/s/o Elizabeth Chapman v. Nordyne Inc., et al., Civil Action No.: 5:08-cv-00400-KSF Representing Plaintiff – Expert Witness (Deposition)
May 5, 2011	United States District Court, Eastern District of Kentucky, Central Division at Lexington Arch Insurance Company, et al., v. Broan-Nutone, LLC, Civil Action No.: 09-319-JBC Representing Plaintiff – Expert Witness (Deposition)
September 13-14, 2011	United States District Court, Eastern District of Kentucky, Central Division at Lexington Arch Insurance Company, et al., v. Broan-Nutone, LLC, Civil Action No.: 09-319-JBC Representing Plaintiff – Expert Witness (Trial)
September 30, 2011	EMC Hamilton Insurance Company, et al., v. Hutson Inc., Brandeis Inc., SENNEBOGEN LLC Civil Action No.: 09-319-JBC Representing Plaintiff – Expert Witness (Deposition)
November 19, 2011	Kentucky Farm Bureau Mutual Insurance Company, (a/s/o Mallie Hodson), Plaintiff and Mallie Hodson Intervening Plaintiff vs. Wade Hatchell Heating and Cooling, Inc. Civil Action No.: 10-CI-00024 Representing Defendant – Expert Witness (Deposition)

PATENTS:

Awarded 20 US Patents to date, others pending:

4,760,846	Radial Artery Clamp
5,084,060	Apparatus for Enlarging a Vessel or Clearing Obstructive Tissue from a Vessel according to Vessel Compliance.
5,352,211	External Stability Device
5,540,237	Body Tissue Suspension Device
5,681,742	Biological Specimen Containment & Incubation Device
5,769,871	Embolectomy Catheter
5,827,174	Biological Specimen Containment & Incubation Device
5,860,993	Suture Cutter
5,919,199	Suture Device
5,928,935	Biological Specimen Containment & Incubation Device
6,033,358	Biological Specimen Containment Arrangement
6,036,717	Embolectomy Catheter
6,042,583	Bone anchor-insertion tool & surgical method employing same
6,283,979	Suturing device with tensioning adjustment member
6,695,877	Bifurcated Stents
7,452,327	Through the Scope Tension Member Release Clip
7,494,461	Through the Scope Tension Member Release Clip
7,758,634	Bifurcated stent and delivery system
7,799,064	Bifurcated stent and delivery system
D306,069	Medical Syringe