

Cordless, Battery Powered . . .

THERMOCEPS™

.. Non-Stick, Instant-ON

The novel break-through technologies of the cordless, disposable THERMOCEPS™ thermal cautery makes precise cauterization available in emergency rooms, surgery centers and hospital operating rooms. The THERMOCEPS™ is perfect as a new product for emerging markets and military front line applications. This GAME|CHANGING new device offers true dynamic reimbursement for the full cost of providing an energy solution for surgical cautery and hemostasis. Facility providers are finally released from carrying the high costs of Electrical Generator Units by placing in the surgeon's hands a more effective, battery powered, vessel sealing and ablation device. This new invention eliminates all exposed electrical current flow, uses no

grounding pads or cumbersome locking jaw bi-polar RF forceps. The novel sealed electrical design assures safety by eliminating all aberrant open sparks, exposed



flames and smoke. The INSTANT-ON action, of new Silicon-Nitride Heaters means faster surgical completion times. The incorporation of the newest light weight, *lithium polymer* batteries allows the physician to easily use the THERMOCEPS™ as both a vascular pick-up and a vessel sealing instrument. The cordless/wireless design eliminates cables and wires from the surgical field. Internal thermistors measure the heat energy at the sealing site to maintain safe, low temperature welds and vessel seals.

A story of innovation & timing...



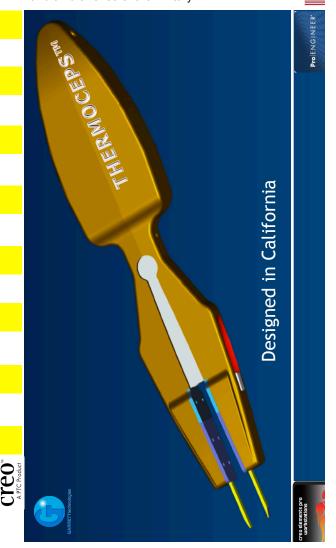
1.0a

The invention of the THERMOCEPS™ is a tale of medical care awaiting the successful integration of two new technologies; lithium polymer batteries & advanced ceramic heaters. In 1988, Dr. Herzon had just completed his fellowship in Head & Neck Cancer

Surgery at Northwestern Memorial Hospital in Chicago and was called to the **ER** to see his postoperative patient with a severe hemorrhage on the fifth day following laser tonsillectomy. The patient was indeed, the surgeon's first surgical case as a new staff physician. The anxious patient had lost a large volume of blood from an active arterial "bleeder" arising from one inferior pole of one tonsil. Digital pressure was maintained while the patient was rapidly taken to the operating room, as the **ER**, in one of the country's largest medical centers did not have a RF electrosurgical generator unit for cautery. The national reported average for post-tonsillectomy bleeding is 2 to 20%. Once transferred to the **OR**, he used the RF cautery to seal the 3 mm vessel. Clearly a simple, affordable, use-once cautery device stocked throughout the hospital & available in the ER could have averted this patient's urgent return to the **OR**. This same problem regarding the lack of a cautery machine to seal and cauterize blood vessels continues to be the norm in hospital ERs throughout the US today. The Electrosurgical Generator capitalization costs & maintenance overhead continues to limit wide access to a cautery solution. A new, simple disposable, light weight, battery powered, thermal cautery forceps design could have easily sealed the hemorrhaging vessels & averted the difficulty Dr. Herzon encountered in the ER as he treated his patient. However, until lighter weight lithium chemistry batteries were invented & silicon nitride ceramic heaters were developed, the vision of a simple solution was impossible. Finally, a solution can now be brought to market using the successful combination of two new technologies, lithium polymer batteries & special ceramic igniter/heaters. The desires of a surgeon are now made a reality with the patented, game-changing THERMOCEPS™ cordless cautery forceps. Our awarded patent portfolio describes all variations of the revolutionary, solution to seal any blood vessel using a vascular forceps to grasp, heat and seal vessels & tissue.

4 fully maintained U.S. Patents...

The THERMOCEPS™ thermal cautery technology is protected by four, broad based, issued patents; nos. 6,235,027, 6,533,778, 8,128,623 & 8,409,199 issued as recently as April 2, 2013. A new USPTO patent application has been filed to maintain amendable status and broaden our issued claims. The THERMOCEPS™ patents and digital medical value added trade secrets allow a company to either enter or compete more effectively for a larger share of the over \$1.9 billion electrosurgical marketplace. As the THERMOCEPS™ can be configured for full battery operation requiring NO external electrical supply, the device is well suited for sales in emerging global medical markets and all branches of the military.



LL costs are charged to the patient & the nospitals spend over purchasing electro-cautery products. thrown away after use! According to the **Medtech Insight™** U.S. Market Report* <u>S</u> **\$1.9 Billion** per year entire device

patented, dual-use, instant-on, completely electrically sealed surgical cautery forceps device As a self contained battery THERMOCEPS " relieves the facility from purchasing the expensive base station generator unit and all related maintenance overhead expenditures including scheduled testing and re-certification by biomedical engineering providing operative cautery by removing all hospital facility costs. The THERMOCEPS™ is a new which solves the high cost of powered device, the

*Windhover Information, Inc., Newport Beach, CA 92660 (*Windhover Information, Inc., Newport Beach, CA



Dr. Herzon is the key inventor, research scientist & surgical specialist for GARRETTtechnologies™. His academic career began as an Assistant Professor Faculty at Northwestern University Medical School, Department of Otolaryngology-Head & Neck Surgery. While in Chicago at Northwestern Memorial Hospital he was appointed Chief of ENT Surgery at the renowned Rehabilitation Institute of Chicago & faculty at the Chicago Lakeside VA Hospital. Currently an Active Attending at Cedars-Sinai Medical Center, Los Angeles, he specializes in the care of the professional voice as a Neurolaryngologist & serves as a member of the Sinus Center of Excellence. As a recipient of the Whitaker Foundation Award for Biomedical Engineering, he serves as a research scientist & investigator on multiple NIH Grants & Contracts. He has published over 50 articles in, refereed scientific medical papers & contributes as an editor for leading academic medical journals. The American College of Surgeons elected him as a Fellow and he served the AAOHNS national ENT organization as Chair of the Quality Improvement Committee for two terms. His proven record as an inventor, product designer & device developer of finished medical goods allowed him to launch **GARRETT**technologies™ following the successful sale of his first disposable medical device to Bristol-Myers Squibb, Inc™, Xomed™ & **Medtronic**[™]. Herzon & his manufacturing partners captured over 10% of the U.S. marketplace for Disposable Nerve Locators & Finders. This success propelled the new nerve stimulator, the AXOSTIM1™, to be sold for a 10:1 ROI. He has successfully invented, designed and brought to the medical marketplace, multiple breakthrough new medical technologies, including the world's first steerable. KTP fiber laser endoscope for Functional Endoscopic Sinus Surgery sold by the Richard Wolf, Inc. Ask about the new AXOSTIM2, patented bipolar nerve Locator & Evaluator.

GARRETTtechnologies.com

in

10817 Wellworth Avenue Los Angeles, CA 90024 310.474.5600 • 310.474.5602 FAX



