

# THE HARRISON GROUP, LLC

*...young or old, we turn great science into great products...*



**Innovations and  
Technologies  
Supported by THG**

**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**  
*April 16, 2019*  
**TABLE OF CONTENTS**

<b>Caring Technologies.....</b>	<b>2</b>
<b>Cogent Energy Systems, Inc.....</b>	<b>3</b>
<b>Condux International, Inc.....</b>	<b>4</b>
<b>Conservation Seeding and Restoration.....</b>	<b>5</b>
<b>Consumer Products International, Inc.....</b>	<b>6</b>
<b>earHero.....</b>	<b>7</b>
<b>Good Earth Bio-Solutions.....</b>	<b>8</b>
<b>INL Biomass Feedstock National User Facility.....</b>	<b>9</b>
<b>Nail Jack Tools.....</b>	<b>10</b>
<b>Naturopathix, Inc.....</b>	<b>11</b>
<b>Outpack Concrete Washout.....</b>	<b>12</b>
<b>PowerSheen Tire Brite.....</b>	<b>13</b>
<b>Precision Software Design.....</b>	<b>14</b>
<b>R2EV, LLC.....</b>	<b>15</b>
<b>RFinity, Inc.....</b>	<b>16</b>
<b>Stone Marker Equipment.....</b>	<b>17</b>
<b>Sunlution.....</b>	<b>18</b>
<b>SuperSpare.....</b>	<b>19</b>
<b>Sustainable Innovations.....</b>	<b>20</b>
<b>Roger Wilson Technologies.....</b>	<b>21</b>
<b>Wind Power Forecasting.....</b>	<b>22</b>

---

\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisongroupllc.com](http://www.theharrisongroupllc.com)



THE HARRISON GROUP, LLC  
\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES

April 16, 2019

CARING TECHNOLOGIES – “Capturing the Cause—Not Just the Effect”



Caring Technologies, Inc. (Boise, ID) is dedicated to the development of Behavior Imaging™ (B.I.) Technology as a means of more effectively conducting behavioral health assessments, treatment, and research by helping professionals assist people with autism, post-traumatic stress disorder, and other behavioral disorders through video technology. Caring Technologies' current portfolio of products includes:

B.I. CAPTURE is a behavior imaging tool to capture and store behavioral health events on video via a remote control camera.

B.I. CARE Consultation and Records Environment is a health record platform, which allows one to organize, analyze, and share videos and other documents between patients, health providers, teachers, therapists, and other professionals.



*“Caring Technologies provides healthcare technology to revolutionize behavioral and mental health assessment, treatment, and research. Behavior Imaging™ solutions enable collaboration and consultation between patients and professionals. We help health providers connect with patients or their caregivers anywhere in the world, making virtual office visits a reality.”*

**Ron Oberleitner, CEO  
Caring Technologies, Inc.**

THG assisted Caring Technologies with its expansion activities by advising the Company relative to its distribution, license, and Cooperative Research and Development (CRADA) activities, as well as negotiation strategies and “best practices” in the Company’s launch of its products into the marketplace. THG also assisted in the pursuit of venture-capital funding requirements for the Company.

---

\*Start-Up companies' summaries located at: “Portfolio Section” [www.theharrisingroupllc.com](http://www.theharrisingroupllc.com)

**BUSINESS SENSITIVE**

2 | Page



THE HARRISON GROUP, LLC  
\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES

April 16, 2019



...energy from waste—on site/on demand...

**A World Where Waste is Converted into Energy—On Site and On Demand**



Figure 1. Present-day WTE facility.

Waste-to-Energy (WTE) plants are large, cumbersome, and immovable.

So, the ability to design an approximately six-foot-high WTE system that can be easily moved from site to site—no matter how remote the location—is significant and worth substantial time and money to the end-user.

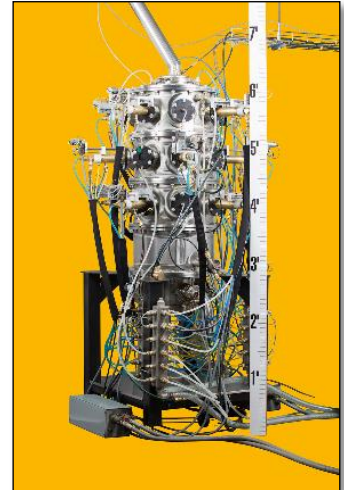


Figure 2. Cogent System compact design.

This vision has been realized by Cogent Energy Systems, Inc., a Delaware Corporation WTE company that, because of its patented, small-scale, on-site WTE conversion design, now occupies a distinctive space within the private and public sectors' market.

**The Product/Technology Overview**

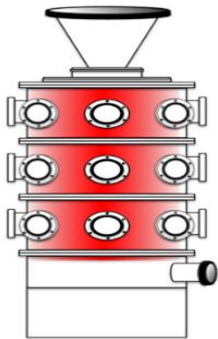


Figure 3. System Temperature Gradient: 0 to 10,000 degrees C.

Ionic Gasification – Cogent's core product, the HelioStorm Gasifier™, is a vertical processing vessel, roughly cylindrical in shape at six feet tall and three feet in diameter.

The system's modular hybrid plasma configuration enables energy to cascade between the modules, yielding greater reliability and lower total energy consumption, as the plasma fields support one another.

***One HelioStorm™-based WTE system can convert 4 tons of waste per day into roughly 3MWh of usable surplus electricity—enough to power more than 100 U.S. households.***

The HelioStorm™ system also makes it possible to generate extremely high temperatures (3000 to 10,000 degrees C) throughout the entire processing zone, while maintaining safety, reliability, and high total system energy efficiency.

THG is currently assisting Cogent with its go-to-market strategy and the appropriate mechanisms to choose to quickly introduce and sell this disruptive technology into the marketplace.

[www.cogentenergysystems.com](http://www.cogentenergysystems.com)

\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisingroupllc.com](http://www.theharrisingroupllc.com)

**BUSINESS SENSITIVE**

3 | Page



**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**

April 16, 2019



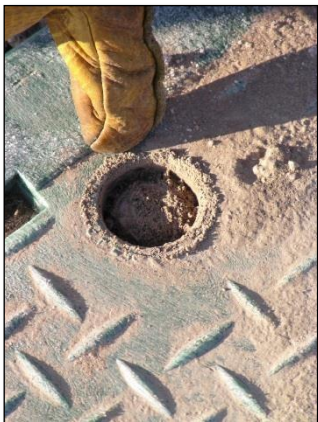
On June 28, 2013, Innovative Industrial Products, LLC (the New-Product Development Division of The Harrison Group, LLC) signed an Exclusive Distributor Agreement with Condux International, Inc. to distribute and sell the IIP-licensed **PENTA BUSTER™** debris-removal product into the utility, telecommunications, irrigation, and agriculture industries.



The patented **PENTA BUSTER™** is the ingenious invention of Hank Redford, an electrical contractor with over 45 years of electrical systems' design, installation, and maintenance experience. Like most patents (after getting injured by screwdrivers, knives, and other means of opening the electrical utility

boxes Hank serviced), Mr. Redford found a real need in the marketplace for such an implement to be brought to the marketplace.

If necessity truly is the "Mother of Invention", Hank thought his life-saving **PENTA BUSTER™** invention was certainly her long-overdue offspring.



Condux International has been manufacturing cable installation tools and equipment for over 30 years. Working directly with the electrical contracting, electrical utility, telecom, and CATV industries, Condux offers the highest quality tools, engineered to reduce installation time and increase safety.

\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisingroupllc.com](http://www.theharrisingroupllc.com)

**BUSINESS SENSITIVE**

4 | Page



**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**  
*April 16, 2019*  
**CONSERVATION SEEDING AND RESTORATION, INC.**  
*...we're all about native plants...*



CSR, Inc. is a native restoration and land stewardship company that employs qualified personnel and specialized equipment to complete all restoration efforts in an effective and timely manner. Every aspect of implementation is handled in-house. This includes items such as wildlife habitat creation and enhancement, stream restoration, custom propagation, seed collection, brushing, wetland banking, drill seeding, roadway construction restoration, prescribed burns, herbicide application and hydro-seeding.



CSR is currently developing a process for spraying autogenic biological soil crust (BSC) inoculants onto degraded arid lands in order to facilitate more efficient restoration of the planet's arid ecosystems. THG assisted CSR in its SBIR Phase II Proposal to the National Science Foundation.



***"Look to us for all your native restoration needs. From the smallest residential back yard, to large-scale wildland restoration. From riparian areas, to uplands, we are dedicated to restoring properly functioning, sustainable native habitats."***

**Steven Paulsen, General Manager  
Conservation Seeding & Restoration, Inc.**

\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisongroupllc.com](http://www.theharrisongroupllc.com)

**BUSINESS SENSITIVE**

5 | Page



**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**  
*April 16, 2019*  
**CONSUMER PRODUCTS INTERNATIONAL, INC.**  
*...coin-op seal-and-inflate system...*

The CPI Coin-Op Seal and Inflate System provide tire repair assemblies in two proposed configurations:

- Seal-and-Inflate System coupled with, and integrated into, an existing coin-operated tire inflation unit, including a tire sealant tank; an air assembly, coupled to the tire sealant tank; a valve configured to control fluid communication between the tank and the air assembly; and a currency-operated assembly configured to control the valve; and
- Stand-Alone Tire Sealant Tank System, including a tire sealant tank; an air compressor operatively coupled to the tank; a valve operatively aligned between the tank and the air compressor; a flow meter operatively aligned between the tank and the air compressor; and computer-processing circuitry operatively coupled to the air compressor, the valve, and the flow meter.

CPI, Inc. (owners of Paasch Products' SuperSpare Emergency Tire Repair product) plans to also take the opportunity to utilize the new Coin-Op Seal-and-Inflate System to increase brand awareness for their existing SuperSpare Tire Repair product, currently being sold in retail outlets.



\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisingroupllc.com](http://www.theharrisingroupllc.com)

**BUSINESS SENSITIVE**

6 | Page



**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**  
*April 16, 2019*  
**earHERO TOTAL AWARENESS EARPHONE SYSTEM**

Designed by clinical audiologists, earHERO's speakers are diminutive and do not block the ear canal. The ear speaker is secured in the ear canal by a ribbon or wire-like spring structure anchoring the speaker to the concha portion of the outer ear and pushing the speaker up against the top side of the ear canal, leaving a space for external sounds to bypass the speaker to the eardrum. Each ear simultaneously transfers alternate signals to the brain, giving one the ability to literally talk on a separate hone without removing the earHERO from either ear—and hear whisper-level sounds from yards away, while identifying the sounds' precise location.

earHero 

The advantages afforded by this invention are any:

- The ear speaker is miniscule—much small than over-the-ear or other in-the-ear earphones commonly used with portable devices;
- It is lightweight, affording the earphone user comfort and satisfaction;
- Safety and work effectiveness are positively addressed—a driver of a car; a bicyclist; a machinery operator; a skier, law enforcement, military or security officer, or an amusement park worker—virtually anyone—may now listen to one sound, while maintaining sensitivity to other outside ambient sounds;
- The device allows normal feedback from hearing one's own voice, resulting in the ability to speak at a normal level; and
- The arrangement of the earphone's spring member to secure the speaker into the ear canal is flexible to fit most adults with a single design, eliminating the customer-fitting operations associated with eyeglasses, thus allowing mass marketing of a single design.



\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisongroupllc.com](http://www.theharrisongroupllc.com)

**BUSINESS SENSITIVE**

7 | Page





**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**

*April 16, 2019*

**GOOD EARTH BIO-SOLUTIONS**  
*...the green-friendly way to recycle waste...*



Good Earth Bio-Solutions is an “environmental—green-friendly” company that utilizes a successful and proven science to turn organic material into nutrient-rich compost. The Symbiotic Microbial Association Resource-Recovery Technology (SMARRT Process™) has low impact on the environment, reduces greenhouse gases, and produces no leachate.

Every year, the United States generates approximately 413 million tons of municipal solid waste, with an average of about 1.3 tons per person per year. These figures exclude non-municipal solid waste, such as construction and demolition debris, as well as industrial waste. Zero Waste America, an internet-based organization, estimates that municipal solid waste accounts for only about 20% of the total waste generated in the United States each year. While less than a quarter of all waste in the U.S. is recycled, it’s estimated that more than 70% of current landfill waste could be reused, recycled, or composted.

Good Earth’s microbial science is able to culture a distinct blend of microbes, molds, and enzymes for rapid decomposition of organic material; the end result is a long-awaited solution to address the very insidious waste issued in this country, as well as in the international community.

This process eliminates odor and water contamination and extends useable life of landfills. The Company’s soil amendment process is a soil-building agent that increases nutrient uptake of micro and macro nutrients, increases moisture retention, and is free of harmful antibiotics. This unique technology can be used on farm fields, golf courses, flower beds, and in-home gardens.

THG assisted Good Earth with its Business Plan re-write in pursuit of venture capital funding to launch the Company into the marketplace.

---

\*Start-Up companies’ summaries located at: “Portfolio Section” [www.theharrisingroupllc.com](http://www.theharrisingroupllc.com)

**BUSINESS SENSITIVE**

8 | Page



**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**  
*April 16, 2019*  
**IDAHO NATIONAL LABORATORY (INL)**  
**BIOMASS FEEDSTOCK NATIONAL USER FACILITY**

Bioenergy Program at INL (a Department of Energy National Laboratory) is focused on the material handling phase of the bioenergy field-to-refinery process. With material handling comprising roughly 40% to 50% of the total production cost of a product, considerable attention is given to this very important step in the biomass feedstock process.

Feedstock material handling involves five main areas: characterization, preprocessing, receiving, storage, and conveying. INL's bioenergy primary focus is characterizing and preprocessing the feedstock in preparation for the receiving, storage, and conveying steps.

INL Characterization Capabilities:

- Chemical composition and analysis
- Enzymatic saccharification and fermentation
- Thermochemical feedstock properties
- Rapid-screening techniques
- Particle-size distribution and morphology
- Microscopy and imaging
- Scanning electron microscopy
- Algal lipid and bio-product characterization
- Particle properties
- Laboratory-scale palletization
- Durability and feedstock deconstruction



INL Preprocessing Capabilities:

**Energy Systems Laboratory** – Located on the Idaho Falls Research and Education Campus, the ESL was officially dedicated by the INL in April of 2013. The facility has 54,000 square feet of reconfigurable laboratory research space, plus a large laboratory for biomass characterization and is LEED Gold certified.

**Feedstock PDU** – The DOE Biomass Programs' Feedstock Process Demonstration Unit (PDU), managed and operated by INL's Bioenergy Program, transforms raw biomass into uniform-format commodity feedstocks. The scale of the PDU (nominally five tons/hour) allows larger volumes to be produced in a reasonable time and provides processing data and information about scale-up issued from laboratory- and bench-scale systems.

---

\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisongroupllc.com](http://www.theharrisongroupllc.com)

**BUSINESS SENSITIVE**

9 | Page



**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**

April 16, 2019

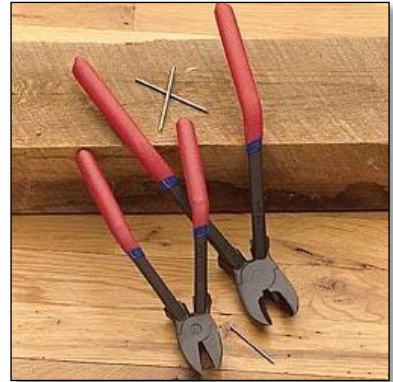
**NAIL JACK TOOLS**

*...saving today's buildings for tomorrow's planet..."*

Nail Jack Holdings, LLC, a Hailey, Idaho-based company founded by Michael Foley, is dedicated to the manufacturing, marketing, and distribution of the Nail Jack®, Nail Hunter®, and other unique hand tools that provide a—greener and more efficient—way to dig, grip, and pull any size nails, staples, and brads. The Company holds two issued patents and has submitted numerous patent pending claims in the United States—and internationally—for this new line of hand tools.

The utility and ease with which one is able to use the Nail Jack Tools' products will create a new, disruptive-to-the market tool category. It is the belief of Nail Jack management—and others—that this innovative—"green"—technology will bring changes in daily life of similar magnitude to the "information technology" explosion over the last two decades.

Prototypes of the Product were initially manufactured in Taiwan from investment casting in 4140 steel; additional models are currently also being manufactured in HangZhou, P.R. China. The Nail Jack Tools are currently being sold on Amazon.com, and have begun delivery to Hand Hardware, Lee Valley, and Woodcraft.



A national award from **Popular Mechanics** in May, 2009, confirmed the appeal of the Nail Jack tools to everyone from the "trade" to the "do-it-yourselfers" (DIY), as well as the homeowner.

THG is currently seeking Licensees, as well as venture funding companies, to meet current inventory needs.



\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisingroupllc.com](http://www.theharrisingroupllc.com)

**BUSINESS SENSITIVE**

10 | Page



**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**

*April 16, 2019*

**NATUROPATHIX, INC.**

*ZymaDerm*

The economic downturn has created an unprecedented “window of opportunity” in the natural products marketplace. Quietly, spurred by increased costs and expenditures, consumers continue to turn to natural solutions to satisfy their necessary healthcare needs; nearly eight in ten (78%) Rx drug buyers are “very”/“somewhat” interested in switching to OTC medications. U.S. sale of natural remedies which have been enjoying double-digit growth for the past several years, brought in \$860 million in sales in 2008. Natural and mass market retail sales of adult homeopathic medicines grew nearly 6%, while herbal formulas also grew almost 6%--and the trend continues.

The topical Naturopathix, Inc. ZymaDerm product provides a composition for use in treating viral-induced skin lesions in humans, where the configuration of the technology does not destroy healthy, uninfected tissues, nor result in either significant systemic side effects or local side effects, such as initiation, necrosis of tissue surround the wart, allergic rashes, scarring, disfigurement, or discomfort to the human being treated.

Viral-induced Common Warts – The patented ZymaDerm treatment method painlessly shrinks warts until they disappear—without scarring—and contains no dangerous caustic chemicals that can burn or irritate normal skin.

Shingles – It is estimated that approximately 50% of the population over the age of 50 can expect to experience an outbreak of shingles sometime in their lives. Considering the size of this demographic alone, an over-the-counter natural treatment, such as ZymaDerm, is the answer to this very insidious virus.

Molluscum Contagiosum (MC) – Current methods for treating MC include surgical removal of the MC lesions and/or painful tissue destruction by chemical or physical means. The ZymaDerm technology has been proven to treat this virus, which is currently resistant to commonly used anti-viral agents.



\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisingroupllc.com](http://www.theharrisingroupllc.com)

**BUSINESS SENSITIVE**

11 | Page



## OUTPAK WASHOUT



*...keeping your construction projects compliant...*

Outpak Concrete Washout units are designed to be a portable solution for harmful industrial concrete sediment, paint, dry wall, mud, stucco, and mortar. With Outpak Concrete Washouts, your job site will be organized, eco-friendly, and Best-Management-Practice (BMP – Clean Water Act of 1972) compliant. The units are designed for a simple, matter-of-minutes set-up, and can remain on the job site for the duration of the project. Outpak Concrete Washouts are compatible with both mixer and pump trucks, as well as wheelbarrows. Just dispose of them after evaporation and job completed.



The Outpak Chick Box was invented almost by happenstance. Bob Eason, President and Owner of Outpak, LLC, and a twenty-nine-year concrete company owner, patented his own simple design for the above concrete washout system. When a prominent southwestern Idaho pet and lawn care representative happened to see the washout product, the gentleman proclaimed,

*“Bob, believe it or not, this would be perfect for our company’s new-born chicks. It’s easy to unfold, and the simple design and low cost really work for our DIY market”*

And, the Outpak Chick Boxes have been selling off the shelf ever since.



POWERSHEEN TIRE BRITE



TIRE BRITE

...no oil...no water...no fling...no sling!

Car enthusiasts love a deep, rich, dark-rubber look in their tires—and a tire dressing that lasts. That's what you get with...PowerSheen Tire Brite Tire Dressing.

Solvent-based products use a hydrocarbon silicon carrier that leads to premature drying and cracking of the tire surface. Water-based products contain oils and polymers that don't last and are difficult to apply evenly—and they can attract dirt.



PowerSheen's fully cured, bonded elastomer lasts for months—or years, depending upon use.



**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**  
*April 16, 2019*  
**PRECISION SOFTWARE DESIGN**

*...affordable custom software solutions for your business...*

Precision Software Design's Smpl technology fills the gap in business automation. You will find Smpl where business processes are well understood and should be automated, but are not currently, due to the cost and impracticality of today's database solution.

Smpl technology significantly decreases the time associated with building customer software solutions and also supports structuring information that does not easily fit into traditional databases, such as outlines, legal documents, specifications, and design. The resulting Smpl solutions automate today's manual business processes, including: email automation; updating websites and databases; generating office documents, legal documents, reports; and even generating tests and code.

- Smpl can create charts and reports, typical of a database.
- Smpl tools are written in Visual Basic or C# and can take advantage of the full capabilities of .net.
- Smpl can generate Word documents. This goes far beyond mail merge and allows generating tables, repeated sections, repeated documents.
- Smpl can send emails with general attachments. For example, creating reminder emails of upcoming events.
- Smpl can format data to be sent to suppliers, accountants, or other associated businesses.
- Smpl can update website content and email contacts in your email client database. For example, updating all employees in the company when customer contact information changes.



---

\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisongroupllc.com](http://www.theharrisongroupllc.com)

**BUSINESS SENSITIVE**

14 | Page



**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**

April 16, 2019

**R<sub>2</sub>EV, LLC**

*...the removable battery technology that sustains life...*

R<sub>2</sub>EV's technology delivers scalable battery systems for all electric and hybrid drive systems. The patented removable and exchangeable battery technology allows for integration when building or converting vehicles, while adding functionality and extended range to the vehicle.

From scooters to heavy-duty delivery vehicles, the same portable module can be used to deliver cutting-edge power and energy, which allows the electric vehicle to quickly exchange drained modules.

R<sub>2</sub>EV can provide power and energy-dense systems to meet any need. The batteries are rugged, safe, and need no servicing—nor outside maintenance. The result? Batteries that are capable of being located outside a building—addressing the repeated objection that large battery rooms take up too much interior space.



THG assisted Idaho TechConnect in their effort to seek funding for the launch of the R<sub>2</sub>EV technology into the marketplace.



\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisingroupllc.com](http://www.theharrisingroupllc.com)

**BUSINESS SENSITIVE**

15 | Page





**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**  
*April 16, 2019*  
**RFINITY, INC.**

RFinity, located in Idaho Falls, Idaho, was launched in October, 2008, after signing a multi-year funding agreement.

The Company's main technology development focus is on developing a platform that combines the flexibility of mobile devices and near-field communications with the integrity of hardware-based cryptography.

The technology that RFinity brought to market is patent-pending hardware and software originally developed at the U.S. Department of Energy's Idaho National Laboratory.

Key markets on which RFinity focuses includes:

University student ID and payments;  
Mass-transit access;  
Event ticketing; and  
Military and Homeland Security applications.



---

\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisongroupllc.com](http://www.theharrisongroupllc.com)

**BUSINESS SENSITIVE**

16 | Page



**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**  
*April 16, 2019*  
**STONE MARKER EQUIPMENT**



The Stone Temporary Road Pavement Markers (TRPMs), as well as the Stone Marker Placement Equipment (SMPE), are protected by issued patents.

The exclusive right granted from the Government to a Patentee prevents others, without the Patentee's permission, from making, using, selling, or distributing the patented invention during the patent period. This is a right that is attractive to potential licensees or technology buyers.

#### Stone Temporary Road Pavement Markers

The TRPMs are the most effective TRPMs today for providing short-term road markings, both day and night, because...

Best engineering practices have been used;  
Unlike other methods, the reflective strip covers are easy to peel, thereby increasing time-to-place operations; ultimately, saving time and money; and  
Meticulously manufactured to withstand the vigorous demands of road construction work zones.



#### Stone Marker Placement Equipment

Road construction sites are dangerous. Because of the antiquated method in which markers are currently placed, all the warning signs in the world aren't going to prevent the more than 1,300 deaths reported in highway work zones every year. Many of these mishaps occur when drivers inadvertently strike workers who are straying out of the construction safety work zone to physically place and remove temporary pavement markers on the highway. Now, there is a way of preventing these accidents from occurring.

The SMPE is designed to save lives and labor through the automation of the placement of the markers. Its unique, patented process is the only product on the market today that, while in operation, stays within safety zone requirements.

---

\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisingroupllc.com](http://www.theharrisingroupllc.com)

**BUSINESS SENSITIVE**

17 | Page



**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**  
*April 16, 2019*  
**SUNLUTION, LLC**

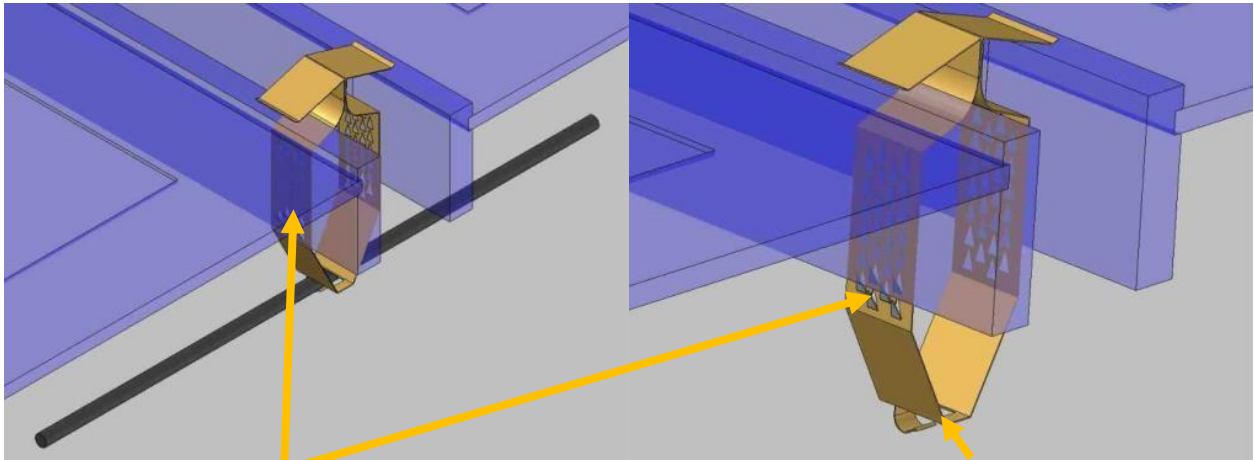


With global market forces growing by double digits, the future of the worldwide PV market remains bright. Uncertain times are causing governments everywhere to rethink the future of their energy mix, creating new opportunities for a competitive, safe, reliable electricity source, such as PV. Over the last 10 years, progress has been impressive.

Current PV interconnect manufacturers are generally not attending to the industry's proclaimed need for better costs, performance, and reliability. For example, current grounding methods are ranging from \$2-\$4 per module, which is inherently much higher than the industry needs to achieve the highly sought-after grid parity point.

Sunlution currently has a provisional patent filed for a novel ground approach that can meet the applicable U.S. NEC and UL certification requirements and enter the approximate \$10M-\$15M U.S./Canadian ground market at an aggressive \$1.50/module price, with 300% markup over a \$.35 fully burdened manufacturing cost, thus significantly undercutting the competition and satisfying the vitally important need for better industry costing.

The Sunlution "solution" provides uniquely innovative and simple mechanical and electrical design solutions that will change the basic assumptions in current industry thinking.



*Fig. 1 - Upward and outward-facing triangular surface; penetrating contacts/"teeth" provide positive retention to the bottom of the module .frames.*

*Fig. 2 – Spring, according to Claim 1 of Provisional Patent, can have an integral feature to capture and secure a separate cable.*

\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisingroupllc.com](http://www.theharrisingroupllc.com)

**BUSINESS SENSITIVE**

18 | Page



THE HARRISON GROUP, LLC  
\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES

April 16, 2019

SUPERSPARE



*"The single greatest concern of the driving public is flat tires."*  
J.D. Power & Associates

The answer to the above "issue" is an environmentally friendly (no toxic chemicals), "reusable", alternative that can be easily cleaned from tires: *SuperSpare*. The *SuperSpare* Technical Team spent two years perfecting its proprietary, latex-based sealant-and-transfer system.

The result? A reliable tire-repair-and-inflating system that positively addresses the aforementioned concerns.

To use *SuperSpare*, simply connect sealant bottle to flat tire; connect transfer hose to sealant bottle; connect the other end of the transfer hose to ANY inflated tire; puncture is sealed, and the tire is inflated to a safe driving pressure.



\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisongroupllc.com](http://www.theharrisongroupllc.com)

**BUSINESS SENSITIVE**

19 | Page



**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**

April 16, 2019

**SUSTAINABLE INNOVATIONS, LLC**  
*...in business, as in nature, all wastes  
are assets in disguise...*



Playing a prominent role in Sustainable Innovations Food Service Operations is the Company's Liquid Waste Extractor for organic waste. The stand-alone and modular liquid waste extractor device shreds and presses liquids from fruit, vegetables, and plate scrapings, as well as diverts processed solids for soil enhancement, composting, and vermicomposting.

This technology is manufactured in Bavaria with sturdy Siemens-designed/constructed motors for long-lasting durability. The three-year-old—used—unit that was installed at the Ada County Jail in Boise, Idaho, in July of 2008 has warranted only one service call; food waste has been reduced from 12 bags down to 4; and food waste generation has been cut by sixty-six percent (66%).



Since the worldwide marketplace has shown a keen interest in this machine, THG welcomes the opportunity to assist Sustainable Innovations in licensing the technology to U.S. companies.



\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisongroupllc.com](http://www.theharrisongroupllc.com)

**BUSINESS SENSITIVE**

20 | Page



**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**

April 16, 2019

**ROGER WILSON TECHNOLOGIES**



We use our hands for everything we do, for everything we touch. No matter what we do, through the use of our hands, we are in constant contact with germs and bacteria. So, what can we do to safely and effectively limit the transfer of bacteria, viruses, and other microbes? We can use a technology that “grabs” any type of bacteria-laden handle, twist-know, or push button and executes...on our behalf.



The grabzz hinged-card technology is one compelling answer to the recent emergence of antibiotic-resistant bacteria. The product’s hinged plastic outer surface contains an antimicrobial foundation that secures the long-lasting integrity of the card. The inner, replaceable, “mat” features an EPA-registered biostatic surface protectant that provides an effective barrier to the growth of disease-causing organisms.

The Wilson Hideaway Wind Turbine...*your retractable wind turbine solution...*



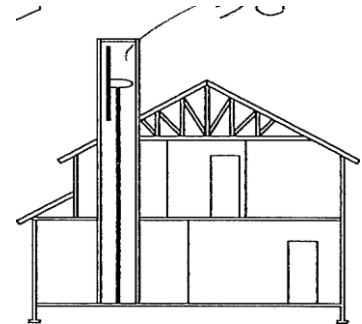
The residential wind turbine market is starting to boom. Homeowners see a true benefit to reducing their electric bills and protecting themselves from continually fluctuating electricity prices, decreasing their dependence on foreign oil, and seizing the opportunity to produce clean energy.

What has not been addressed in this exciting movement is the aesthetic aspects, as well as the

safety and structural security issues, associated with a wind turbine located very near a home. The Wilson Hideaway Wind Turbine addresses these niches in this new market expansion by introducing...a retractable wind turbine.

*DoorSaver...it's like hard-hat protection for surfaces—only better.*

Roger Wilson, owner of three very successful high-end interiors shops in the Boise area realized that in order to maintain the integrity of his products, he would need to protect them, once they were installed, on-site. Since he was not able to find anything suitable in the marketplace, he started another company entitled, “Pro-tecta Industries”, and patented his own process for protecting doors. Since that time, he, again out of necessity, has addressed all types of surface protection products for tubs, counter tops, baseboards floors, and door casings, to name a few.



\*Start-Up companies' summaries located at: “Portfolio Section” [www.theharrisongroupllc.com](http://www.theharrisongroupllc.com)

**BUSINESS SENSITIVE**

21 | Page



**THE HARRISON GROUP, LLC**  
**\*THG-SUPPORTED INNOVATIONS AND TECHNOLOGIES**

April 16, 2019

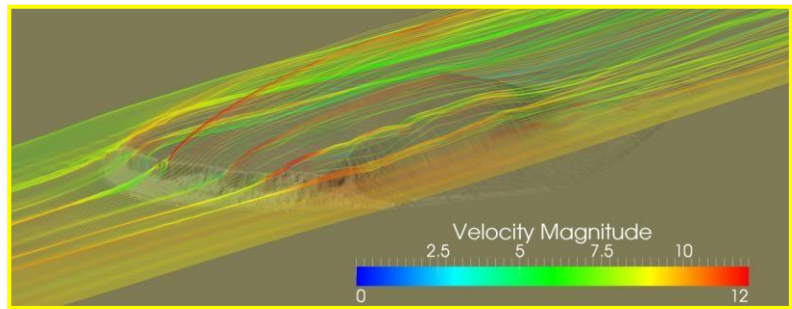
**WIND POWER FORECASTING**

On December 12, 2012, a proposal from Boise State University (BSU) to commercialize a short-term wind forecasting engine that will help lower the current wind grid integration costs arising from intermittent winds was accepted for funding by the National Science Foundation (NSF) Innovation Corps (I-Corps).



The BSU I-Corps Team's goals were to be the first graphics processing unit (GPU)-accelerated wind forecasting software in the market and to secure global market share in wind simulation technology. The computational technology in the forecasting engine fully exploits the GPUs that power the fastest supercomputer in the world.

Figure 1 (right) presents streamlines extracted from a time-averaged wind field simulation over the Bolund Hill in Denmark. Note that the BSU I-Corps Team's model captures distinct points on the terrain where the wind substantially accelerates. A blind evaluation of wind simulation models for this particular terrain was also performed.



**Figure 1- Visualization of streamlines extracted from a time-averaged wind field over the Bolund Hill in Denmark.**

There are five critical technologies in the forecasting engine; four of these technologies have been completed and include:

- Multi-GPU parallel incompressible flow solver;
- Parallel geometric multi-grid algorithm;
- Cartesian immersed boundary method for complex terrain;
- Lagrangian dynamic sub-grid scale model for large-eddy simulation of turbulent winds; and
- Multi-scale coupling with a regional community weather forecasting model and concurrent execution of the micro- and meso-level codes on heterogeneous computing platforms.

The first four above technologies form the technology proof-of-concept. The present BSU I-Corps team is ready to demonstrate the technology on a multi-GPU cluster of workstations. At project completion, the expectation is to establish a start-up business, along with a business plan for third-party investors.

\*Start-Up companies' summaries located at: "Portfolio Section" [www.theharrisingroupllc.com](http://www.theharrisingroupllc.com)

**BUSINESS SENSITIVE**

22 | Page

