

INVENTORS

THE MAGAZINE FOR IDEA PEOPLE >

DIGEST

October 2013
Volume 29 Issue 10
\$3.95

Q & A:
Inside Scoop on The
Shark Tank Experience

PROFILE:
Idea to Product: Kamlet
Laboratories and Clinit-
est

PROTOTYPING:
Building Memories

FIRST LEGO:
Robotica El Carme

SPOTLIGHT:
Million-Point Insider
Spotlight: Marvin Blaine

LANDER ZONE:
Thoughts on Determin-
ing Royalties



**"The start of
something BIG"**



Scan with your smart phone's QR
Reader to check out our content
online!



GOT INVENTION RADIO

with
Brian Fried



**AIRS EVERY THURSDAY AT
8PM EASTERN / 5PM PACIFIC**

Call in and ask questions live during the show at

888-327-0061

or email your questions to

brian@gotinvention.com.

LISTEN LIVE

WWW.GOTINVENTION.COM

Presented by

Inventors digest



AY HELLO TO INNOVATION

Get to know strategic branding

Shake hands with results

At enventys we breathe new life into existing products and brands, as well as create new ones using an efficient, collaborative approach.

Simply put, we believe there are two ways to grow your business: introduce new innovative products or sell more of what you already have.

Whichever direction fits your needs, we can help you thrive with a proven approach that delivers quantifiable results.

WHAT WE DO



INDUSTRIAL
DESIGN



ENGINEERING
& PROTOTYPING



ADVERTISING
& BRANDING



INTERACTIVE
& WEB



VIDEO
PRODUCTION



PUBLIC
RELATIONS

For more information and to view samples of our work visit enventys.com

or call us at 704-333-5335





Gyro Bowl®

The amazing kid-proof bowl is now found in Walgreens, Target, Bed Bath and Beyond and all major retailers across the country. Over 2 million units sold in 12+ Countries!

Edison NATION™

**“Kid tested, Parent approved”
on The Rachael Ray Show**

**Another “Parent-invented, kid-approved” Product Brought to market
By Edison Nation.**

Edison Nation is partnered with ASOTV industry leaders to find great new “As Seen on TV” products to launch in the more than \$200 billion direct response television market. Does your idea have what it takes to go from concept to TV set? Edison Nation wants to find those ideas with real ASOTV hit potential... just like our Gyro Bowl®, Eggies®, Emery Cat®, and Mister Steamy®.

Visit edisonnation.com/asotv to learn more about this search and other opportunities!

IN THIS ISSUE

ON THE COVER



9

MARKETING TIP OF THE MONTH

By: John Rau

10

UNDER THE RADAR

16

Q&A

Inside Scoop on The Shark Tank Experience

18

THE START OF SOMETHING BIG

Inductees of the National Inventors Hall of Fame spark creative thinking in youth

22

PROFILE

Idea to Product: Kamlet Laboratories and Clinitest

29

PROTOTYPING

By: Jeremy Losaw

32

FIRST LEGO

Robotica El Carme

36

SPOTLIGHT

Million-Point Insider Spotlight: Marvin Blaine

38

LANDER ZONE

Thoughts on Determining Royalties

46

CLASSIFIEDS



Available on the iPad

App Store

EDITOR'S NOTE

The Next Generation of Inventors

Last week, I had the great pleasure of hosting Jack Lander and his lovely wife, Mary, in our office. We were able to have lunch at my favorite quirky spot and getaway. It was a real treat getting to chat in a relaxed atmosphere as we reflected on the magazine, the inventor community, the magazine moving forward, and world peace.

Conversations with industry icons like Jack represent what our magazine is all about and why we publish the articles we do. Education and inspiration are our core values, and what mentors like Jack give back to the community is invaluable.

You'll notice over the past several months we've written more articles in the BrainChild vein than previously. As we delve into another decade at Inventors Digest, it's becoming more apparent that our younger generation will key our future growth as an industry and we need to continue pushing them and helping them succeed. Normally, Inventors Digest publishes an entire issue to celebrate our young inventors and innovators as well as those who have helped them along the way. Moving forward, you'll see more articles about young inventors, but not a dedicated issue because there are too many organizations and programs to do just one issue.

I encourage all of you to donate time, money, expertise, or whatever you can to the many fine organizations dedicated to helping our young people expand creative, out-of-the-box thinking and hone invaluable skills, including Camp Invention, FIRST, and Conrad Foundation. Find a local chapter of whatever organization you click with and have in your area.

Inventor Hall of Fame

One of many renowned organizations that recognized the need to influence our younger generation was the Inventors Hall of Fame. In the 1990's they established the first of many programs geared toward the youth movement – Camp Invention. Over the years, Camp Invention has grown from that small seed and now serves over 60,000 children.

This past summer, after learning about Camp Invention, I signed my 7 year-old up and he had the time of his life. From my experience, I can attest that it's a well oiled machine with established and qualified teachers. Rarely do you have summer camps where the parent is impressed and your child is begging to go back next year (seeing how most times our kids end up homesick).

BrainChild

Moving forward, I'm excited to hear about what the next generation has innovated, and I encourage you to send me articles about our young inventors as well as the people who make it possible for them to succeed. I will try my best to include them when I can.

MARK R. CANTEY
VP & ASSOCIATE PUBLISHER



CONTRIBUTORS



JACK LANDER, our regular columnist on all things prototyping, licensing and inventing, explores the gap between inventor and entrepreneur. Jack, a near-legend in the inventing community, is no stranger to the written word. His latest book is *Marketing Your Invention – A Complete Guide to Licensing, Producing and Selling Your Invention*. You can reach him at Jack@Inventor-mentor.com



Dhana Cohen, founder of TheNextBigZing.com knows a thing or two about great innovation, her website searches out and finds these great products and awards only the best “retail ready” products and is sharing a new partnership with Melinda Knight from womentorz.com, called Women Inventorz Network. A new platform to support, inspire and build the brands of women inventors. The network is the only program of its kind to award women inventors each month and the culmination of an Academy Award style Gala in Chicago February 2014!!



EDIE TOLCHIN, “The Sourcing Lady” (SM), “invented” EGT Global Trading in 1997, with a goal to link U.S. inventors with Asian manufacturers, to provide an exclusive import service for sourcing, quality control, production testing and safety issues, manufacturing, international financing, air/ocean shipping, customs clearance arrangements, and dock-to-door delivery.



BERNADETTE MARSHALL, is the president of NB Graphics & Associates, Inc. specializing in the preparation of design and utility patent drawings and trademark illustration nationally and internationally over the past 23 years. Ms. Marshall can be reached at (770) 640-1500, or found online at: <http://www.nbgraphics.com>

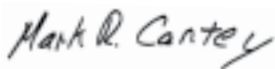


JOHN RAU, President/CEO of Ultra-Research Inc., an Anaheim, CA-based market research firm, has over 25 years of experience conducting market research for ideas, inventions and other forms of intellectual property. In addition, he is a member of the Board of Directors of Inventors Forum, based in Orange County, CA, which is one of the largest inventor organizations in the nation. He has been a contributor to *Inventors Digest* magazine since 1998. E-mail: ultraresch@cs.com
Phone: (714) 281-0150

INVENTORS

THE MAGAZINE FOR IDEA PEOPLE >

DIGEST



MANAGING EDITOR
MARK R. CANTEY



ASSISTANT EDITOR
MARY DICKSON



EDITORIAL DIRECTOR
TAYLOR HIGGINS



ART DIRECTION AND LAYOUT
Sarah Hudson

For Advertising Contact Us At:
info@InventorsDigest.com

CONTRIBUTING EDITORS

Andrea Simon
Edie Tolchin
Sarah Hudson

INVENTORS DIGEST LLC

PUBLISHER:

Louis Foreman

VICE PRESIDENT, ASSOCIATE PUBLISHER

Mark Cantey

VICE PRESIDENT, INTERACTIVE AND WEB

Matt Spangard

FINANCIAL CONTROLLER

Debbie Muench

ASSISTANT TO THE PUBLISHER

Kara Sheaffer

ADVISORY BOARD

Ken Bloemer
James Daly
Paul Schols

Ad rates, subscriptions & editorial content: info@InventorsDigest.com www.InventorsDigest.com

© 2013 Inventors Digest, LLC. All rights reserved. Inventors Digest, LLC is a North Carolina limited liability company and is the publisher of Inventors Digest magazine. INVENTORS DIGEST and INVENTORS' DIGEST are trademarks of Inventors Digest, LLC. Reproduction or distribution of any materials obtained in this publication without written permission is expressly prohibited. The views, claims and opinions expressed in article and advertisements herein are not necessarily those of Inventors Digest, LLC, its employees, agents or directors. This publication and any references to products or services are provided "as is" without any expressed or implied warranty or term of any kind. While effort is made to ensure accuracy in the content of the information presented herein, Inventors Digest, LLC is not responsible for any errors, misprints or misinformation. Any legal information contained herein is not to be construed as legal advice and is provided for entertainment or educational purposes only. Interested parties and inventors seeking legal advice should consult a lawyer.

Market Research

tip of the Month

by John Rau

I recently conducted a Google search using key terms such as “sex”, “inventions” and “invention market research”. I got 122 million hits for the term “sex” and 38.5 million hits for the term “inventions” thus suggesting, as a metric, that perhaps sex was 3 times more important than inventions. (Note: I’m not sure everyone would necessarily agree with my logic relative to sex!) With regard to the term “invention market research”, I got 19.7 million hits. This would then imply, using my logic, that sex was over 6 times more important than invention market research! (Again, no comment about my logic here.) What is noteworthy, however, when we focus on inventions rather than sex, is that I got less than 50% of the amount of hits for “invention market research” relative to hits for “inventions”, thus suggesting the importance of invention market research relative to inventions. In comparison, I also searched on the term “market research” and got 32.4 million hits. What’s interesting here is that over 60% of the “market research” hits were related to “invention market research,” thus suggesting (again trying to create an illustrative metric here) that a major focus of market research activities deals with market research relative to inventions. This is an extremely important point as the term “market research” as an activity in the invention development process occurs in many areas. If you want to commercialize your invention idea, then you need to understand the market. In this regard, the first step is to study it through market research, which as an activity occurs in many areas such as:

- The determination of “prior art” which includes existing related patents as well as non-patented similar products already in the marketplace.
- Information required in your initial assessment to ascertain if it makes economic sense to move forward with your invention idea.
- The basis for the marketing element in your business plan if you are moving forward and plan to develop and market your invention yourself.
- The basis for your marketing plan and/or invention business plan and promotional materials if you plan to promote your invention idea to investors, potential licensing candidates and companies who might have an interest in buying your invention.

The prior art search should generally be your first step for two basic reasons. First, to determine the patentability of your idea you need to conduct a patent search to determine what similar or like inventions, if any, are already patented. The term “similar” doesn’t necessarily mean “identical,” but claims listed in existing patents may overlap those you intend to make, thus creating the basis for an infringement claim should your invention ever enter the marketplace. Another subtle, but important point, is that some similar (or like) products you identify in your market research efforts that are already in the marketplace may never have been patented for a variety of reasons. Don’t assume that all existing and potentially

competing products in the marketplace have been patented. If there is enough similarity with your product claims, then your invention idea would not be regarded as “new” and, as a result, not patentable. If it is determined that your invention idea is not patentable, then that doesn’t necessarily mean you should stop and not move forward with trying to commercialize your idea. It just means that you won’t be able to receive patent protection in the sense of keeping others from using your idea without your permission. In this situation, you are most likely in the Red Ocean and you will have to decide if you can successfully compete against existing competitive products.

If you decide to move forward to develop and market your invention idea yourself by setting up a business, then you should have a business plan. Many templates for such a plan are available on the Web and preparation assistance can be obtained from the Small Business Administration and the Service Corps of Retired Executives (SCORE) relative to which there are over 340 chapters across the country. A key chapter (or element) of your business plan is your marketing plan which defines your marketing strategy and how you plan to market your new product. Your market research results form the basis for this section of your business plan. Here is where you define who your competition is, what are the competing products and how do they compare with yours, what are the sales trends and demand for products like yours, who are the potential consumers, how big is the market, how do you plan to capture market share, etc.

If you plan to promote your invention idea to prospective investors, licensing candidates and potential buyers of your new product idea, then you need to recognize that trying to sell your invention idea without patent protection will limit its marketability. In any case, you can expect that most companies who may consider licensing or purchasing your invention will inquire about your patent search results, thus be prepared to share these results along with those of your market research activities.

If you decide not to prepare a business plan and want to promote your invention idea such as to potential licensing candidates and/or companies that might have an interest in purchasing your invention idea, then you will need to prepare promotional materials such as brochures and summary presentations as to what your invention is all about. In addition to a description of your invention in terms of what it does, what needs it meets, how it is better than and/or an improvement over existing potential competing products, you will need to address its “marketability” in terms of how it fits in the marketplace. You should identify its unique features and describe how these would make it appealing to customers. Having sales projections based on an analysis of similar or related products would be useful along with any market trend information to show compatibility with your new product would also be useful. Here’s where you will need the results of your market research.

In summary, without having conducted adequate market research, your chances of commercialization success are “slim to none!”

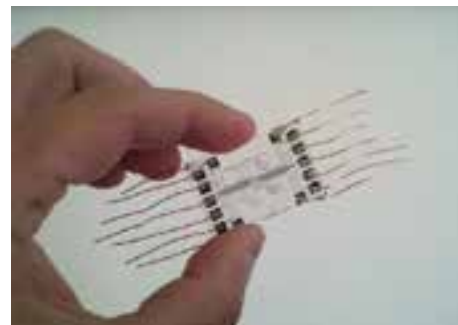
ultraresch@cs.com | (714) 281-0150

UNDER THE RADAR

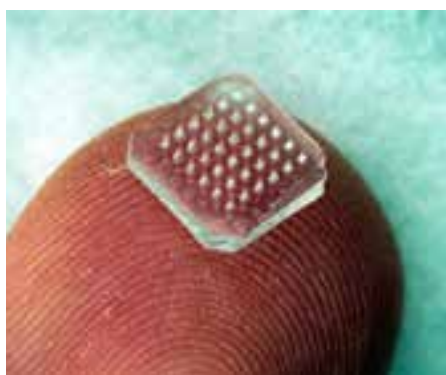
1

This Little Chip Could Turn Seawater Into Drinkable Water

Scientists from the University of Texas at Austin and Germany's University of Marburg are working to help marooned sailors and everyone else who needs access to non-salty drinkable water. They've come up with a plastic "water chip" that can desalinate sea water. It will hopefully replace the problematic membrane system previously used for the same purpose.



But the chips aren't exactly ready to hand out to every sailor in the Navy. The water chip's capabilities are limited to desalinating 25% of the water (99% is needed to become drinkable). But it gives hope that being stranded at sea will allow the person something drinkable when "water, water" is everywhere.



Ouchless Immunizations: Dissolving Patch Delivers Vaccine

A cooperative effort between Emory University and the Georgia Institute of Technology has brought about an exciting possibility for the future of vaccinations: needle-free, pain-free vaccinations.

The small patches are made up of an adhesive backing and tiny spikes containing the vaccine. To administer the vaccine, a user only has to stick the patch onto her skin. The vaccine is absorbed into the body and the spikes dissolve completely, leaving only the adhesive backing behind.

2

3

SKRIBS Customizable Wristbands for Kids

SKRIBS are customizable wristbands that let children write and draw whatever they like with whatever they like (most ballpoint pens and dry-erase markers). Children simply swipe their finger or tissue across the band's writing surface to erase.

SKRIBS is a Top 5 finalist in Wal-Mart's Get on the Shelf competition, a title that has already made the product for sale on Walmart.com. On October 29th, A grand prize winner will be chosen based on pre-order performance, where they will receive Wal-Mart marketing support and possible brick-and-mortar store introduction.

This product allows for children to maintain their creative zeal for doodling and scribbling in a form that is easy to share. pre-order SKRIBS Customizable Wristbands at www.skribs.com



Your
Innovative
Products

Our
Sales
Network

Increase your sales
Reach new markets!

Offer your
products to a
bigger and
broader
audience.

Call us and
we'll start
selling for
you!

widgeteer
inc

A **NEW e-commerce site** for **YOUR** innovative products.

Widgeteerinc.com

Want to
know more?
**Call us to start
the conversation**
847-462-8938

Only have a Sketch?



**Need some help
putting it all together?**



Suburban Artworks

www.suburbanartworks.com

1-360-306-5539

sales@suburbanartworks.com



ANIMATIONS

RAPID PROTOTYPES

SELL SHEET WEB PAGES

SELL SHEETS

**VIRTUAL PROTOTYPES MADE
IN IGS, STL AND STEP**

PHOTO REAL IMAGES

GRAPHIC DESIGN

CONCEPT DESIGN

4

Sniffle No More: Scientists Create a Universal Allergy Vaccine

Millions of people around the world suffer from allergies, but so far there's no universal preventive measure for all allergies. Scientists at the University of Eastern Finland are correcting that issue and may have it on the market in as little as five to seven years.

The antibody immunoglobulin E (IgE) is the cause of allergic reactions. It causes white blood cells to release histamine, which then causes a whole mess of nasty allergy symptoms. The Finnish scientists believe that they can genetically modify the IgE-binding structures in allergens so that they no longer bind to IgE, but can still interact with immunoglobulin G, which protects from allergic symptoms. By injecting this altered antibody into human bodies, the scientists believe they can prevent allergic reactions, which is sweet news for all allergy sufferers.



One Ring to Rule Them All: Cool Transit Card Alternative

The new quick-access system for Boston public transit has its roots in temporary lapses in memory. Two MIT undergrads who often used the Boston transit system would continually forget their metro cards.

To make it easier, they created the Sesame Ring - an RFID-enabled knuckle accessory that works just like the Charlie Card. Users load money onto the ring and the amount is debited from their account every time they use the ring to

access the transit system. It has already been approved by the Massachusetts Bay Transit Authority. Buyers can even request custom designs or messages to be built onto the ring's surface.

The duo plan to create other rings in the future that can be used as substitutions for any other kind of smart card.

5

6

Smart Mug Displays Real Time Temperature

Smart Mug is a mug that is minimalistic design, thermometric powered, environmentally friendly and temperature indicating; it can easily be used for hot beverages, such as tea and coffee. Smart Mug determines the temperature of the liquid inside the mug and indicates the right time to start enjoying your favorite beverage. Light indicators correspond to temperature levels next to them, once temperature changes and passes indicator threshold it turns on or off. There are six light indicators - indicating too high, ideal and lower temperatures. Project seeks funding at kickstarter where you can order your piece.



PR BOOTCAMP *for* ENTREPRENEURS

Presented by Alyson Dutch, author of *PR Handbook for Entrepreneurs*

No budget to launch your product? You could hire a publicity firm for \$5000 a month - or you could learn how to do it yourself! From the mind of a big brand product PR maven, Alyson Dutch, the bootcamp includes how to:



1. Create a news-worthy differentiation statement



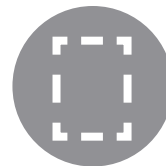
2. Write a press release



3. Develop a pitch that gets TIME magazine to report about you



4. Step-by-step guides



5. Templates



6. Exercises that result in a ready-to-use campaign for your product

Special offer for Inventor's Digest readers:

~~\$39.99~~

\$19.99

www.prbootcamp.myquickcheckout.com/inventorsdigestspecial

Continued from page 12

7

FlyKly Smart Bicycle Wheel

FlyKly Smart Bicycle Wheel is a lightweight, comfortable and highly efficient pedal assist that encases an ultra-thin electric motor and intelligent electronics within a robust housing, neatly fitted onto the spokes of a bicycle rim. The motor turns on when you start pedaling and begins accelerating to your desired speed. Simply remove your rear wheel, replace it with the Smart Wheel and you're all set! Smart Wheel goes up to 20 mph (25 km/h) for a 30 miles (50 km) range and it weights only 9 lbs (4 kg). While cruising you can monitor your current speed, the distance, the time of travelling and the battery level using the FlyKly App. You can also remotely lock the motor and track it in case it gets stolen.



Augmented Reality Glasses “See” What Students Understand

Scientists at Spain's la Universidad Carlos III are working on a pair of glasses that teachers can wear to tell whether or not their students are following them.

The glasses use augmented reality, a system that essentially places unreal things in your real-world environment. Through an app, students can select an icon that lets the professor know where the student is in terms of understanding the lecture. There are icons that tell the professor that the student is 'getting it', not 'getting it', to slow down, or that they know the answer to a question.

8

9

Next-Gen Screen Cover Will Be the Light of Battery's Life

A small company called Wysips has created the world's first photovoltaic screen covering. The super-thin (less than 100 microns!) covering would go over the screen of your phone (or tablet, or iPod touch, or ebook reader) and constantly supply the battery with solar power.

You would still be able to use the device's touch screen unhindered. The typical smartphone could charge completely in six hours under direct sunlight, or longer under indoor light. But even more exciting is the fact that the covering would constantly top-up your phone's battery, meaning that you have to charge via a wall plug much less often. And because phone batteries can use this constantly-available power to stay charged, phone manufacturers can stop making them so huge.



10

RFID-Chipped Electronic Socks Keep Themselves Organized

A Swiss company called BLACKSOCKS has put RFID chips in socks. But it isn't to track down missing socks from the dryer; it is actually part of a very sophisticated system to keep your foot clothes looking and feeling just right,

The Smarter Socks system involves an RFID scanner and an iPhone app. After a load of socks is washed, the user scans each sock with the RFID scanner. The scanner sends the sock's info to the app, telling how old the sock is, which matching sock is its sole mate, how many washes it has endured, and which foot it goes on.



Laser Guided Scissors Keep Cuts Straight

The Laser Guided Scissors feature an integrated laser, ensuring you will never make a crooked cut again.

The battery-operated laser beam is integrated into the handle of the scissors, shining a bright, red guide along the material to be cut. The scissors can be used to cut most types of materials, including hair—though perhaps, if you need a laser beam to cut hair then that task should be left to the professionals. The laser beam can also be turned off or on, as desired.

trendhunter.com

11

12

LEAK Air-Freshening Coat Rack

The LEAK concept coatrack was designed to effortlessly dry and refresh clothes while also improving indoor air quality.

Currently a contestant in the Electrolux Design Awards, the LEAK is designed to absorb the sweat and moisture that accumulates in jackets and shirts. Small sensors in the 'branches' of the coat rack dehumidify the object of clothing and channel that water to an integrated air purifier, when then releases the filtered moisture to help freshen the air as it dries and deodorizes the clothes.

electroluxdesignlab.com





INSIDE SCOOP ON THE SHARK TANK EXPERIENCE WITH DEBBIE GLICKMAN

Shark Tank, a critically-acclaimed business-themed show, is dedicated to supporting and investing in the up and coming business and product future of America. The hour long show hosts numerous entrepreneurs seeking support to expand their success and The Women Inventor Network had the pleasure of getting an inside perspective on the inventor experience! Debbie Glickman, a mom of two and successful woman inventor, is the founder of Fairytale Wishes Inc. and creator of a line of aromatherapy sprays for kids. As her children struggled to overcome common anxieties like sleeplessness, monsters in the closet, and even going to the doctor, Debbie began producing the natural, calming sprays.

Her appearance on Shark Tank was an unforgettable learning experience and definitely led her down a professional path for further success. She is truly inspirational to the Women Inventors that have busy schedules, families, and innovative ideas that are seeking to take their business to the next level.

WHAT POSITION WAS YOUR COMPANY IN PRIOR TO BEING ON THE SHOW?

My company was very, very small and had limited brand awareness and a scattering of distribution in

the US and Canada. We had won a myriad of very relevant awards but due to limited capital, it was very difficult to make the inroads that we needed to take our company to the next level.

HOW DID YOU GET ONTO SHARK TANK?

Someone forwarded the link to my website to one of the Executive Producers who thought my company would be interesting to feature on the show. I had to submit an audition video and fill out a mountain of scary paperwork.

WHAT SORT OF THINGS DID YOU NEED TO DO TO PREPARE FOR THE SHOW? WAS THERE ANY ASPECT OF THE SHOW THAT YOU FEEL IS IMPOSSIBLE TO PREPARE FOR? IN OTHER WORDS, WHAT TOOK YOU BY SURPRISE?

It was a great exercise for me because I really had to take a good look and my “numbers” and how my business is structured. That was the hardest part of the preparation because you don’t want to go in front of those guys not knowing everything there is to know about your business. The other thing I



Debbie on Shark Tank

did to prepare was to craft a really interesting story both visually and from a presentation standpoint. There was nothing that really took me by surprise other than the fact that television lights are 100 times hotter than they tell you.

APART FROM A MONETARY GAIN, WAS THERE ANYTHING ELSE THAT YOU HOPED TO ACHIEVE AFTER BEING ON SHARK TANK? WHAT SORT OF HOLISTIC GAIN DO YOU FEEL YOU RECEIVED?

I knew it was a real long shot to get a deal with one of the sharks with my sales being very nominal compared to what they were used to seeing. But I had absolutely nothing to lose. For me, it was a chance to have a platform to introduce Fairytale Wishes to the whole country. I could never have afforded to do a national television commercial. I call shark tank the “superbowl” for Entrepreneurs.

WHAT WAS THE MOST DIFFICULT CHALLENGE OR INTIMIDATION BEING ON THE SHOW? NEGOTIATING? DEFENDING YOUR PRODUCT? SHOWING YOUR COMPANY’S POTENTIAL OR SUCCESS?

The most challenging thing for me was to convince the sharks that I was ready to take Fairytale Wishes to the next level after having it be a little more than “hobby” for the last 4 years. If I had gone on my first year in business, I think I would have gotten a bite because they really loved the products.

The other difficult thing is that the viewer sees 10 minutes of a 45 minute conversation so they left a lot out—including the unique selling proposition which is that we have a hint of magic glitter and a fairytale with each bottle. They also edit the segment to make the sharks seem much harsher than they really were.

I was not intimidated at all—I really wanted to have fun with it because my products are fun and helpful to kids and parents. Because of my advertising background—I was very used to presenting ideas in front of heads of companies—they put their pants on one leg at a time just like you and I.

WHAT WAS THE MOST HELPFUL CRITIQUE THAT YOU TOOK AWAY, THAT HAS HELPED YOUR BUSINESS BECOME MORE SUCCESSFUL THAN IT WAS PRIOR TO BEING ON THE SHOW?

I think Laurie’s feedback was the most helpful. She loved the products and suggested that I sell them in a multi-pack which is a great idea and one we are pursuing currently.

WAS THERE ANYTHING YOU WISH YOU KNEW BEFORE BEING ON THE SHOW? WHAT TACTICS OR ADVICE WOULD YOU RECOMMEND A NEW BUSINESS TO HAVE IN ORDER TO BE SUCCESSFUL ON A SHOW LIKE THIS?

I did a lot of research before I went on the show and I have been an avid watcher since it first aired.

I think that the most important thing I can tell anyone is to know everything there is to know about your business. There was no question that they could have thrown at me that I did not have an answer for. Just being on the show will have a positive effect on your business. They call it the “Shark Tank Effect”.

My company’s sales have tripled in one month from the exposure of being on there and I am hoping that the re-runs will have a positive effect as well. It gives your company a credibility that it would not have had without it. After all, over 100,000 entrepreneurs hope to swim in the Shark Tank and only a few get the chance to actually do it!

"The start of something BIG"



"Inductees of the National Inventors Hall of Fame spark creative thinking in young minds"

Campers work together to create inventive, innovative projects.

In 1973, the National Inventors Hall of Fame was established to honor the great minds that conceived, patented, and developed the most tremendous technological achievements in our country. From the automobile to the zigzag sewing machine, the National Inventors Hall of Fame commemorates the work and creations of some of the brightest individuals

in our nation's history. For many years, Inductees have been honored with exhibits at the United States Patent and Trademark Office (USPTO).

The National Inventors Hall of Fame moved to Akron, Ohio in 1995, but later returned in 2008 to the campus of the USPTO in Alexandria, Va. Co-founded by the

National Council of Patent Law Associations and the USPTO, the National Inventors Hall of Fame accepts nominations from a variety of sources and selects Inductees on an annual basis. The selection process relies on experts in the fields of science, technology, engineering and patents to screen, vet and make final selections. Today, the Hall of Fame is part of a larger organization, Invent Now, which recognizes and fosters invention and creativity through educational programs.

Fostering Youth Inventors

In an effort to further encourage the development of creativity and innovation among younger generations, the Collegiate Inventors Competition was introduced in 1990. Open to both graduate and undergraduate students, entries are judged on the originality and inventiveness of the new idea, process or technology. In addition, they are judged on their potential social, environmental and economic value to society.

Invent Now and the National Inventors Hall of Fame continued their commitment to inspire inventive thinking in youths by partnering alongside the Akron Public Schools, the University of Akron and the City of Akron to establish the National Inventors Hall of Fame (NIHF) School ... Center for STEM Learning in Akron, Ohio. The school is designed to be a unique and comprehensive middle school that promotes formal and informal learning through a curriculum based on science, technology, engineering, and mathematics (STEM) for grades fifth through eighth. More recently, the National Inventors Hall of Fame STEM High School opened its doors in Akron, al-

lowing graduating middle school students the opportunity to continue experiencing unique problem-based learning. Both schools have been influenced by and benefit from Inductees from the National Inventors Hall of Fame as part of the Visiting Inductee Program, allowing students to interact directly with Inductees.

The National Inventors Hall of Fame Inductees also inspired Invent Now to create Camp Invention, a nationally acclaimed, week long summer enrichment program for children entering grades first through sixth. The program creatively immerses and engages its participants through hands-on activities in STEM. NIHF Inductees such as Steve Sasson, inventor of the digital camera, have invested in the Camp Invention program and continue to do so by visiting camps to provide guidance for our young inventors.

“At Camp Invention, there are no wrong answers and the fun never stops,” said Don Keck, a 1993 Inductee of the National Inventors Hall of Fame. “Camp Invention teaches children to find solutions to everyday problems. I think that is very important.”

The Future of Invention

Camp Invention began in 1990 and served schools in the Akron, Ohio area during its early years, and then expanded to a national program just six years later. The program has grown significantly since its start, serving more than 60,000 campers per season at over 1,500 camps.

“Based on feedback from thousands of school districts around the country, Camp



Campers work on a variety of activities to promote growth and imagination.

Invention has earned a reputation as the leader in high-quality summer programming. This has helped the organization grow to a national program,” explains Michael J. Oister, Chief Executive Officer for Invent Now. “More than 90 percent of parents and educators surveyed observed improvements in their child’s and students’ outlook on learning and increased interest in using science to solve problems.”

As soon as children begin their first day at the Camp Invention program, they are engulfed in an imaginary, scientific world inspired by the curricula. Children may find themselves on Planet ZAK where they must use rocket science and Newton’s three laws to get back to Earth, or challenged to build a robotic car in the Super Go module to explore inertia, or even creating new inven-

tion prototypes as a team that is created from VCRs, cardboard and other mechanical gadgets. Throughout the day, children move from module to module, each of which includes creativity, innovation, STEM, design and entrepreneurship.

Camp Invention aims to teach children the necessary 21st century skills they will need for the future. The modules present participants with real-world challenges by promoting the direct application of critical-thinking and communication skills. In addition, campers work together during some of the activities to encourage teamwork.

“As an inventor, I have worked in a team situation and know just how important that is. Teamwork is just one of the many skills children learn at Camp Invention,” said Keck.

Moving Invention Forward Editors Note

Morphed! Are the newest Camp Invention curricula, set to arrive at schools next summer? Participants will experience a set of fun, educational modules during Morphed! They will design and build vehicles that are able to soar, zoom and submerge. They dig into nature to investigate fascinating features, adaptations and behaviors that can inspire their vehicle designs. Children can experiment with circuits, discover life through the lens of chromadepth glasses and investigate the workings of a bionic hand. In addition, participants can reverse engineer broken appliances and upcycle their parts to build insect pinball machines. Camp Invention provides a learning environment unlike anything kids have seen before – and our testimonials from past campers reflect that.

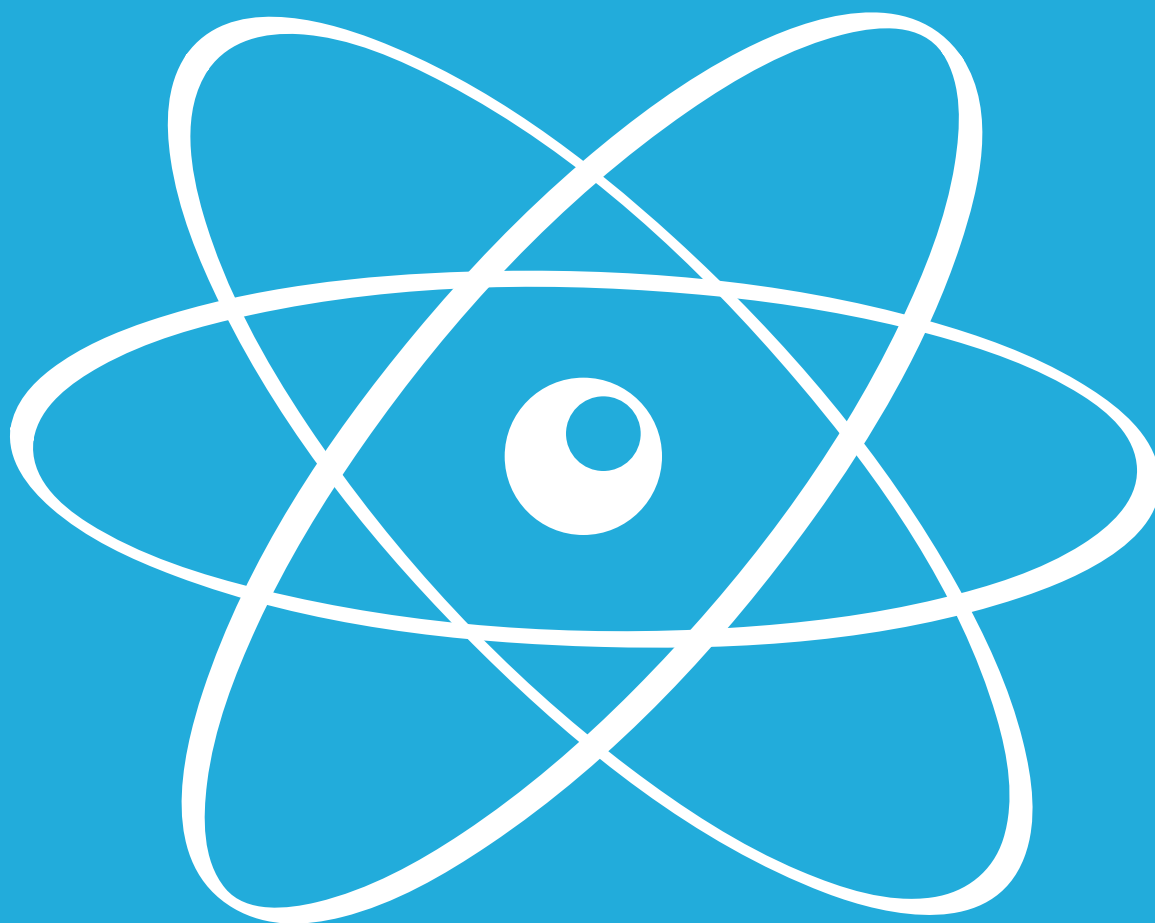
This past summer, I enrolled my 7 year-old son in Camp Invention. I was fortunate enough to visit the camp several times during the week and I was astounded by what I witnessed. The teachers were amazing, the organization was outstanding, and I could not have been more impressed with the camp as a whole. The depth to which they engaged the campers and stretched the age limits was even greater than I had imagined when we had signed him up. As a typical 1st grader who doesn't like homework, he had no idea he was learning and stretching his imagination – and he had fun doing it. Hands-on learning is the best way not only to teach kids, but also to keep them engaged and excited about their projects.

I'll let my son's quote sum up Camp Invention: "Best Camp ever! Can I do this camp every week next summer?"

A group of campers enjoy their activity.



IDEA TO PRODUCT: KAMLET LABORATORIES AND CLINITEST



*Dean F. Martin and Brodie A. Reiger
Institute for Environmental Studies, Department of Chemistry, University of
South Florida, Tampa, FL, USA*

How does an inventor receive credit for his or her invention? Sometimes a name is attached to a process invented, such as the Hall Process or the Héroult process for the electrochemical production of aluminum. There is a plethora of organic reactions named for their inventors. But too many times, credit is not forthcoming, especially for a hired consultant. The authors had the opportunity to examine a particular situation of the development of an idea from patent to product by examining the Kamlet papers available at the USF Library. The files of Kamlet Laboratories (*vide infra*) were donated to USF in 2006. A website was set up so that chemists and other interested persons may view the general contents of the Kamlet papers. The first manuscript in the series described the origin of the collection (14). A second manuscript considered details of the early years of operation using information found in the Kamlet Laboratories Collection at USF. This ar-

ticle is concerned with the development of an idea by Dr. Jonas Kamlet: pills that would allow rapid, accurate tests of important clinical constituents to be made in physicians' offices.

Our study revealed a noticeable absence of credit given to Dr. Kamlet, inventor of a product called Clinitest, marketed for a number of years by Miles Laboratories, then of Elkhart, Indiana. Sold as pills, Clinitest was designed to test biological fluids for glucose and other components of interest in the treatment of diabetes. In 2010, an estimated 25.8 million children and adults (8.3%) of the US population had diabetes. Some 18.8 million of that number were diagnosed. Today, the preferred analysis for glucose testing is the blood glucose meter, but in the past, urine glucose concentrations were tested by chemical means, then by pills, then by strip tests.

CLINITEST: IDEA TO PRODUCT

TABLE 1. SUMMARY OF PATENTS AWARDED TO JONAS KAMLET AND ASSIGNED TO MILES LABORATORIES*

| DATE | PATENT | DESCRIPTION |
|-----------|--------------|---|
| 4/28/1942 | 2,280,918 | Preparation of ortho-hydroxycinnamic acid (substance is "valuable as an intermediate in manufacture of coumarin, which is extensively used as a flavoring") |
| 5/19/1942 | 2,283,262 | Diagnostic composition and method (detection/quantitative estimation of acetone and acetoacetic acid in body fluids) |
| 7/21/1942 | 2,290,436 | Diagnostic composition and method (qualitative detection/semi-quantitative estimation of blood in body fluids) |
| 2/09/1943 | CA 410,533** | Reagent mixture for determination of reducing sugar (e.g., glucose) |
| 3/23/1943 | 2,314,831 | Preparation of d-tartaric acid by fermentation (economical method using cheap, readily available raw materials) |
| 5/25/1943 | 2,320,282 | Diagnostic compositions for amino-arylsulfonamides (simple test for estimate of "sulfa" compounds) |
| 4/11/1944 | 2,346,261 | Titration reaction vessel (used in a diagnostic method) |
| 6/19/1945 | 2,378,559 | Synthetic elastomers (new rubber line synthetic polymers) |
| 9/03/1946 | 2,406,774 | Synthesis of riboflavin and intermediates Therefore (new synthesis of Vitamin B2) |
| 3/25/1947 | 2,418,033 | Diagnostic compositions (detection/quantitative, estimation of glucose, etc. in body fluids) |

GREAT IDEAS CAN HAPPEN ANYWHERE!

(Just dry off before you contact us)



The United Inventors Association

www.uiausa.org

InventingQuestions@uiausa.org

Providing free Inventor Education programs for over 25 years

1025 CONNECTICUT AVENUE 1000 • WASHINGTON D.C. 20036

Few persons are aware of the background of the test strips Clinistix or appreciate that perhaps some of the credit should go to the person who was responsible for obtaining the first patent for what became Clinitest, the forerunner of these strips at Miles Laboratories. We believe that some credit should go to the founder of Kamlet Laboratories (New York, NY), Dr. Jonas Kamlet, a man who developed a unique system of chemical entrepreneurship. He was assisted in the activities of the Kamlet Laboratories by his wife, the late Edna Yadven Kamlet Rogers, a resident of Sarasota, Florida.

MILES LABORATORIES

Miles Laboratories'—widely famous for Alka-Seltzer—interesting and varied history. Starting as Dr. Miles' Medical Company (established by Dr. Franklin Miles of Elkhart, Indiana) in 1885, the founder was soon joined by two colleagues—George Compton and Albert Beardsley—and the trio became responsible for Miles Laboratories. Descendants of the trio, including Dr. Arthur Compton, would later be executives within the firm.

The company was profitable within 5 years, in major part because of the sales of a sedative, "Dr. Miles' Restorative Nervine". Subsequently, Alka-Seltzer would be a major seller, a product that was suggested by Andrew "Hub" Beardsley, nephew of a trio member and later first Chairman of the Board. Having noted that reporters of a local newspaper seemed to resist colds by taking a mixture of aspirin and sodium bicarbonate, he encouraged a different emphasis on products. After years of experimentation, Alka-Seltzer became available in 1931.

The timing was excellent for this product, coming just before the repeal of prohibition. Alka-Seltzer was designed to alleviate headaches and upset stomachs, "as the incidence of hangovers increased, so did the consumption of Alka-Seltzer". At last report, it was available in more than 100 nations with annual sales of \$90 million.

The firm decided to diversify into a wider range of products under the leadership of Dr. Walter Ames Compton, company president from 1964 to 1973 and later Chairman of the Board. Diversification included the development of products for comprehensive health care. Though many of the developments occurred in the late 1960s and early 1970s, One-a-Day vitamins had been developed much earlier and were first marketed in 1943. Jonas Kamlet also deserves partial credit for this product.

However, the company may have become too attractive and, in October 1977, was subjected to a takeover bid by Bayer AG (West Germany). The firm was converted to the North American division of Bayer AG and later became defunct in 1995 as Bayer removed the Miles name from all products and facilities. The US headquarters was moved from Elkhart to Pittsburgh.

KAMLET LABORATORIES

Kamlet Laboratories was founded in 1940. Laboratory personnel consisted of Jonas Kamlet and his wife, Edna Yadven Kamlet. They specialized in consulting or in developing inventions and selling the patent rights to interested companies. Though the laboratory had some facilities for doing laboratory experiments, the Kamlets also arranged subcontracted work to be done by others. Outside work, however, was carefully divided by Edna Kamlet, so that only the Kamlets knew how the components would fit into a final product.

HOW IT STARTED

Jonas Kamlet was associated with Miles Laboratories in a number of ways according to the correspondence. How this association developed requires a bit of background. Ultimately, 10 patents that Dr. Kamlet developed were assigned to Miles Laboratories. He developed ideas for diagnostic compositions and methods of analyses of blood and urine for specific components of interest in clinical chemistry that led

to patents assigned to Miles Laboratories. The purpose was to provide a rapid, simple, and convenient method for performing tests with a high degree of accuracy and specificity, one that can readily be used by the average physician without laboratory equipment or specialized analytical training.

Dr. Kamlet would use a method (e.g., Benedict's reagent for glucose); develop it for clinical use; and convert the necessary reagents into, for example, five-grain tablets, and the tablets would then be agitated to produce carbon dioxide when dissolved in water. One patent was concerned with the analysis of acetone and acetoacetic acid (Table 1). Another was concerned with the analysis of "occult blood" in body fluids and feces. A third was concerned with the analysis of sulfa drugs in body fluids, using 2.5-grain tablets. The analyses provide a good estimate of concentrations of antibiotics at a time when proper doses had not been established. A fourth was concerned with the estimation of reducing carbohydrates such as glucose, laevulose, and arabinose in body fluids (urine, cerebrospinal fluid, milk). The patent titled "Diagnostic Compositions" was a continuation in part of co pending applications.

Clearly, Jonas Kamlet had developed an idea for a tablet that could be used in tests for diabetes, and these were covered in patents assigned to Miles Laboratories. He needed a convenient method for agitating the solution, and his wife suggested contacting Miles Laboratories because they manufactured Alka-Seltzer and would know how to agitate something in solution using a pill. Further development of the story from the Kamlet point of view has been described elsewhere.

Dr. Kamlet had a sound appreciation of how the mixture worked. In a December 1943 letter, he noted why "the sodium hydroxide and the citric acid go so well together in our Clinitest tablets until the tablet is wetted. Then they interact like all get out". He cited an old Aristotelian dictum that he wrote still held good: *Corpore non agunt nisi solute* or "bodies do not interact unless they are dissolved".

KAMLET AND PUBLIC RELATIONS

Jonas Kamlet realized that there was a need for publicity for the Clinitest products, and his ideas are outlined in a letter written to Dr. R. L. Conklin, a popular Elkhart physician who helped run the Miles medical facility on a part time basis during World War II:

One of the next steps that I believe we ought to take in the introduction of our Clinitest series to the physicians and clinical pathologists of this country is to publish a paper in one of the journals (e.g., the Journal of Laboratory and Clinical Medicine is my choice).

It is hard to disagree with the wisdom of this idea, but it is interesting to read further in the letter. He noted on May 5, 1942, that he "forwarded to Dr. Compton a *US patent search: <http://www.pat2pdf.org/>

**Canadian patent, Canadian Intellectual Property Office: cipo.ic.gc.ca 84 Martin and Reiger 16-page letter containing an extensive bibliography to serve as the basis around which we could construct the first Clinitest paper." He also suggested that, at their next meeting, they "should discuss the advisability of publishing this paper in the near future as well as lay down a policy for future publications".

Jonas Kamlet had another idea, which he added at the end of the first paragraph: "The author of the introductory paper must be what appears to be a disinterested outsider. I suggest that Dr. Casper of the Herman Keefer Hospital in Detroit be requested to 'author' the first Clinitest paper which we can ghost-write for him". Thus far, we have been unable to find the ghostwritten paper, either in manuscript or published form.

Dr. Kamlet was an enthusiastic proponent of the Clinitest kits. In 1943, he wrote to Dr. Raymond L. Conklin at Miles about a visit to the International Paper Company at Glens Falls, New York. He specifically noted that there were two problems that he

suggested could be solved using the Clinitest kit. He wrote, “During a second trip, I brought along one of these [kits] and demonstrated its use. Dr. Taylor and his staff were very interested and wanted to know where they could buy this kit”. Kamlet was unable to find a pharmacy in Glens Falls that stocked the Clinitest kit, so he suggested sending a half dozen complimentary kits to Dr. Taylor.

THE IMPROVEMENTS

Bohning wrote an article based on the Chemical Heritage Foundation’s Oral History Program. He noted that just before Dr. Alfred Free (co-developer of Clinistix) arrived, “Miles [Laboratories] had developed Clinitest, a tablet for monitoring the glucose in urine for diabetic patients. The tablet, based on the relatively simple chemistry of Benedict’s reagent (CuSO₄, NaOH, and tartaric acid) contained cupric sulfate, citric acid, sodium hydroxide, and because it came from Miles—a little bit of carbonate to make it fizz.” Dr. Alfred Free’s research group improved the Clinitest process and increased the sensitivity so that amounts of glucose up to 5% could be detected, rather than stopping at 2%.

One of the problems with Clinitest tablets, according to Helen Free in an oral presentation, was that the bottle had skull and crossbones on it. Subsequently, Dr. Alfred Free “realized that paper could be impregnated with the reagent and a drop of urine added. Finally, even the dropper was eliminated by cutting the paper into test strips so that the strips could simply be dipped into the urine. The concept of the Clinistix was born”.

The system had a number of assets—convenience, safety, sensitivity, and an impressive range of analytes, including density. Clinistix had a curious response by some users. Bohning noted that the College of American Pathologists had approved Clinitest as the acceptable method for measuring urine reducing sugars. Clinistix was also accepted but with a caveat that the test would need to be confirmed with Clinitest, presumably a less sensitive test.

CREDIT TO DR. WALTER COMPTON

Helen Free, co-developer with her husband Dr. Al Free, of Clinistix was interviewed in 2011. The resulting article said, “In the 1940s the company [Miles Laboratories] had already introduced a test called Clinitest, which was developed by Walter Ames Compton, who would later become president and chairman of the board at Miles”. The comparison of composition (Kamlet vs. Compton) is summarized in Table 2.

Jonas Kamlet did, in fact, receive some written credit for his contribution. Cray wrote that when Compton “became head of research and development at Miles, he became concerned as to whether something couldn’t be done about making laboratory tests more convenient. He enlisted the skills of a consulting chemist, Jonas Kamlet, and Maurice Treneer, the in-house expert on effervescence”. Clinistix tablets still sold well more than 40 years after their introduction in 1941. In addition, the Kamlet papers indicate involvement with other effervescence products. In crediting Compton, was the free research group’s contribution neglected? No, but neither does the name Jonas Kamlet appear in either article.

CONCLUSION

Dr. Jonas Kamlet was a bright capable inventor and chemist, who was also a shrewd businessman, as evidenced by an analysis of the earnings of the Kamlet Laboratories during the first 15 years. It seems that the good living and the success of the CLINITEST: IDEA TO PRODUCT 85 firms were based on his success as an entrepreneur and consultant, rather than an author of manuscripts in refereed journals. In one sense, he could be regarded as what some attorneys call a “hired gun.” He was financially compensated for what he produced, rather than for what he wrote for refereed journals as would be true for a faculty member in a major college or university today. As noted earlier, some inventors are memorialized by having their names attached to their invention. Paul

L. T. Héroult and Charles Martin Hall had their names attached to the same invention but in different parts of the world: Hall in the US and Héroult in the rest of the world (16). The Colt pistol is another example, as is the (Rudolph) Diesel engine, the (John) Deere plow, the (Karl) Benz motor vehicle, and the (Cyrus) McCormick harvester, among others.

Dr. Kamlet was not overlooked at the time. The available correspondence with Miles Laboratories available at USF covers the period November 21, 1940 through April 19, 1945. He seemed to be on great terms with his correspondents (chiefly Dr. Raymond Conklin) and typically closed his letters saying, "With kindest regards". His correspondence with representatives of Miles Laboratories reveals a helpful person, full of ideas. This is amply indicated in Table 2.

We have seen no written concern over a lack of personal publicity for his efforts. His wife (the late Mrs. Edna Yadvah Kamlet Rogers) may have focused on a topic more important than fame—money. She said of a certain patent assigned to Miles Laboratories that they (the Kamlets) earned \$5 million in 5 years; they had expected to earn \$17 million.

THIS ARTICLE FIRST APPEARED IN THE JOURNAL TECHNOLOGY AND INNOVATION – PROCEEDINGS OF THE NATIONAL ACADEMY OF INVENTORS®, 15(1) PP.81-86, AND IS REPRINTED BY PERMISSION OF THE PUBLISHER COGNIZANT COMMUNICATION CORPORATION (NY). DOI: [HTTP://DX.DOI.ORG/10.3727/194982413X13608676060691](http://dx.doi.org/10.3727/194982413X13608676060691).

FOR ACKNOWLEDGMENTS AND REFERENCES, PLEASE CHECK OUR ON-LINE VERSION OF THIS STORY, DUE TO SPACE AVAILABILITY: WWW.INVENTORSDIGEST.COM

AMERICA'S LARGEST INVENTION SHOW
INPEX
INVENTOR'S

JUNE 18-20, 2014
DAVID L. LAWRENCE CONVENTION CENTER
PITTSBURGH, PA

**EXHIBIT
YOUR
INVENTION**



25% OFF
the price of a Booth!

Offer good Oct 1 - Nov 30, 2013



David L. Lawrence Convention Center



- MEET WITH ATTENDEES
LOOKING FOR NEW PRODUCTS
- PRODUCT SEARCHES
- SEMINARS, PRESENTATIONS
& PANEL DISCUSSIONS
- NETWORK WITH INVENTORS FROM
AROUND THE WORLD
- CASH PRIZES AND MEDALS AWARDED

CALL TO RESERVE YOUR BOOTH FOR 2014
888-54-INPEX

FOR MORE INFO VISIT:
WWW.INPEX.COM

Convention Center Photo Courtesy of VisitPittsburgh.com

protoTYPING

BY Jeremy Losaw

It seems like it has been the year of the box in the Edison Nation engineering office. We have had many projects that have utilized the humble box to achieve a goal greater than its name would suggest. I have revealed two in this column already, the Huber board bending demo and the Dock-n-Lok safe driving system. This month I would like to talk about the story of yet another box-centric innovation, the Kraftlyn-Legacy keepsake box.

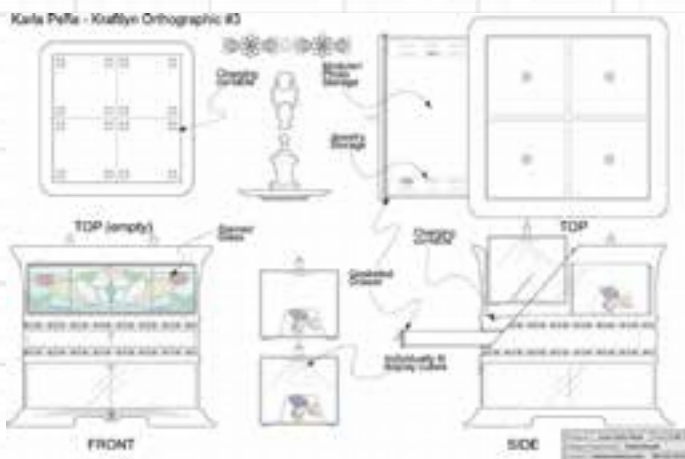


Rene and Karla Pena

Kraftlyn is a company started by an innovative husband and wife team, Karla and Rene Pena. After the birth of their second child in 2011, they noticed that some of the keepsakes from the beginning of their relationship and even some mementos from the birth of their first child were starting to fade and deteriorate.

They looked for products on the market that would protect their keepsakes from premature deterioration. Everything available that provided archival quality were style-less boxes that hid the contents behind opaque walls, and all of the products that allowed you to see the keepsakes did not have any way to prevent aging. It was at this moment that the spark of innovation hit and Karla and Rene came up with the idea to design a keepsake storage system that would allow cherished mementos to be displayed attractively and kept in a micro-environment with conditions that would keep their items safe. The result of their vision allied with the expertise of Edison Nation is the Kraftlyn-Legacy keepsake storage system.

Karla and Rene came to the Edison Nation office for the



Kraftlyn Orthographic

first time in the fall of 2011. They had an idea of what they wanted to achieve and a vision in their minds eye of what the product should look like. However, they did not know what technology would be appropriate to use or how to get the product developed. The first thing to do was to come up with a general design and layout for the product. This was done by the design team, and after a few weeks of market and category research, they settled on a unit that was about a 12 inch cube with a main tray, a drawer to keep an album with acid free paper, and a 3rd compartment to house a series of miniature keepsake boxes, that were dubbed satellites. The design team also did some aesthetic variations that included a stained glass pattern for some of the windows as well as a wood grain pattern for the main body of the product.

Once the initial design work was done, it was handed off to the engineering team to develop the guts of the product and give it the technologies that would do the preservation of the keepsakes. The first thing to do was to determine what the optimum environment would be to preserve the keepsakes. When I was in high school

and into my early college years, I worked at an antique store, and I also worked at Chesterwood, which was the summer estate of Daniel Chester French who designed the Lincoln Memorial. Preservation is important at both of these places, so the first step was to call my old colleagues and get some insider knowledge. That led us to a series of papers written for the museum industry about how to preserve different materials in a collection, some articles about preservation strategies for the Mona Lisa at the Louvre, and eventually we called the Smithsonian Institute and talked to preservation specialists. At the end of the research we determined that for a mixed media collection there should be little to no UV light content, the relative humidity needs to be between 15 and 35 percent with small temperature fluctuations and with as little oxygen present as possible.

Armed with that knowledge we started to prototype. UV light is easily filtered with coatings at the factory, so there was no need to prototype that. However, we experimented with ways to reduce the humidity and to control the oxygen content.



Alpha prototype

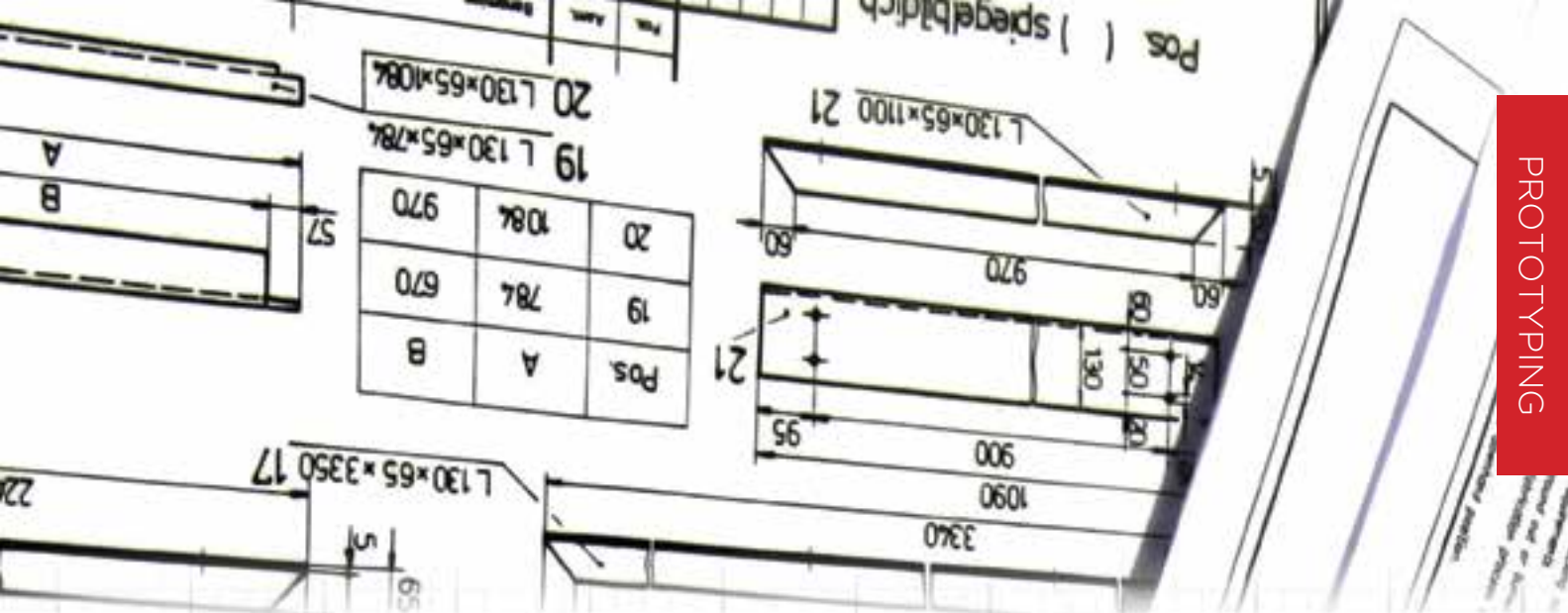
The humidity in the environment around the Mona Lisa is controlled by a volume of silica beads that absorb water from the air. This is the same material that is in the packets that come inside of electronics packaging sometimes.

They are inexpensive and really effective, so we decided to use those for our humidity control. We also experimented with oxygen reducing materials, and found some good additives that can be used in the same container as the silica beads. We considered pulling a vacuum on the unit to pump most of the oxygen out, but we determined that this would add too much cost to the final product to pursue.

Once we had all of the elements, we worked with the design team to combine the aesthetic that Karla and Rene wanted with the preservation techniques that we wanted to use. These were combined for the first time in the alpha prototype. The alpha prototype had a central acrylic tank that housed the keepsakes which we deemed the 'survival cell'. The survival cell was housed in a decorative shell that was given a wood grain look. The silica beads were housed underneath the survival cell and exposed to the air inside via a small hole. There were four satellite boxes, each with LED lighting and these were accessible via a door with a stained glass graphic. This was combined with an MP3 player that was hidden away behind a latching door. The alpha looked and sounded great and when Karla came out to Charlotte to see the prototype, she was very excited to finally see her vision in the flesh. However, she also had some changes that she



Performing a humidity test in a 5 gallon bucket with silica beads



wanted to make, and after spending a couple of weeks building it, I did too.

A big concern after building the alpha was the cost of goods for the final product. Tooling cost is always a consideration at each step in the design of any product, and the Kraftlyn-Legacy is no different. In the alpha, all of the side pieces were slightly different and would need their own tools. I took a ground up approach and redesigned it so that both sides and the back were the same part. This allows them to be able to be made from the same mold to cut costs. I was also able to make the entire assembly more structurally sound and made the chamber of silica beads removable. From Karla's comments, I also added a lot of interior LED lighting to really make the keepsakes pop when they are in the box.

After a month of design work and a further month of build time, we came up with the beta prototype. This is a looks like, works like model of the future production unit. It has the embodiments of all the features that Karla and Rene want as well as the styling that the final product will

have. It also gives them something to take to tradeshows and buyer meetings to try to generate some interest in the product. After Karla and Rene reviewed the beta, it was



Removable silica bead drawer

immediately whisked away down the hall to the Everyday Edisons film studio to shoot a product demonstration video. The resulting video is in use on their website as well as their Kickstarter campaign that is currently up and running.

While there is still manufacturing and cost of goods issues to work out, the Kraftlyn-Legacy keepsake storage unit is on track to be on the market in 2014, proving yet again how versatile a box can be. Hopefully many of you will have one displayed in your home soon.

For more information about Kraftlyn and their innovation story check out their website, www.kraftlyn.com, or their Kickstarter campaign that runs through October 7, 2013.



Beta prototype



ROBOTICA

EL CARMIE

Thirteen students from Spain engineer the Escalador 2.0 to aid in climbing stairs

Edison Nation was pleased to again partner with FIRST Lego League for their annual Global Innovation Award. 10 teams from across the country were selected as semi-finalists in this year's Senior Solutions challenge. This month we're spotlighting the Robotica El Carme team from Catalonia, Spain.

Tell us about your team!

We are 13 students between the ages of 12 and 16 from El Carme, a small school located in Sant Sadumi d'Anoia, a small winery town in Calonia, Spain. Team members are: Pau Batlle, Xenia Olle, Irina Espinet, Miquel Girart, Joan Malet, Meritxell Puig, Helena Mateu, Oriol Riudavets, Oriol Company, Teresa Roig, Judit Martin, Alba Barrera and Nil Lopez.

The school introduced the children to the FIRST Lego League. Once the students knew what it was about, they decided to work together in this project during the weekends. Our official FLL team name is REC – Robòtica El Carme, and the Web link is www.roboticaelcarme.cat.

Who is your favorite inventor and why?

There are a lot of famous inventors that interest us. However, Thomas Edison is our favorite inventor because he invented the light, and our society is based on it.

What inspired you about this year's Senior Solutions challenge?

When we found out that the topic was senior solutions, we did research in many different places. We looked on the Internet, talked with older people, asked what the common problems were at the police station, visited care homes for the elderly and watched TV programs and movies.

We discovered that there are many problems for seniors, so we brain stormed to find solutions to these problems. Many of them have already been solved, so we needed to find a problem which had no solution yet. After two months of researching, we were struggling to find a good idea. Then one student presented a new problem, which is the difficulty to go up and downstairs with a traditional walker. A very common problem which nobody had realized before, and we were unable to find a solution on the market. This was what inspired us to create Escalador 2.0.

When we were creating our product, we shared our ideas with local seniors and they were encouraging us to make

a product to make their lives easier. We realized that although the competition was important to us, it became our priority to help them be safe, to gain independence and, most importantly, to be happy.

Tell Inventors Digest about your team - how did you all come together?

We all belong to the same school and we joined in an extracurricular activity in the school that consisted in preparing ourselves for the FLL challenge. First, most of us only went with our level partners, but later we worked in mixed groups and made contact with everybody.

Did you encounter any problems or obstacles during the Senior Solutions challenge?

Yes, we had some problems during the preparation of FLL. We had group problems, so we had to reorganize the dynamic of the group to increase our efficiency. We had many meetings and talks with elderly people and also police to find out some common problems. We found the equilibrium between working in a topic that we were comfortable and being efficient. Also, we asked ourselves and our team to be stricter and more responsible. We created specific working groups, and all of us became further committed. It was also tough to combine all this work with school, homework and exams. We had to work harder than other students in school. However it has been a good learning process for us.

How did the team problem solve together to invent, and what has it taught you?

First, the whole group got on well with the seniors of the "Casa dels avis", a place in our town where older people live, and we saw that our invention was simple, but very useful for them. We also learned that good work has no limits, and hard-work is always rewarding. At last, we have shown to everyone that teenagers can solve problems which are usually solved by engineers.

How does it feel to create something new?

It makes you feel special to think that you can help other people with your invention. When you realize that, you have got something good in your hands. You feel relieved and proud of yourself and, in this case, proud of all your team.

What do you all want to be when you grow up?

Many people from our group want to be something related with technology because robotics has inspired them. However, other group members want to do something different, like journalism or art, although they have enjoyed the experience. Also, we have practiced writing and oral expression, and we think this experience will be very useful to all of us in the future.

If you win the Global Innovation Award, what's next for the team?

We would like to sell our invention in the future, because we think that the elderly people must have the chance of being independent. We invented it for this purpose: to improve their daily lives. We also want to work together in another FLL competition. We believe that this year's experience is going to help us to work better and avoid some

problems than we had this year. This experience has encouraged us to work hard again!

What advice or words of wisdom would you give other FIRST LEGO League innovators?

Be simple – you don't have to think up extremely complicated inventions. Be persistent and don't give up if you can't solve something easily and quickly. Keep working, because finally you will find something that will be very rewarding.

What do you think is the most important invention of your lifetime?

Smartphones. They help to connect all of the people with the world, so with them we can obtain information, help, news, relationships, etc. They are very useful, nowadays.

One thing the team learned during the competition was that "teenagers can solve problems which are usually solved by engineers."



2 Critical Steps to getting your NEW PRODUCT "out there"

1 GET IT MADE

Contact Edie Tolchin – "The Sourcing Lady" (SM) for sourcing, China manufacturing, product safety issues, packaging assistance, quality control, production testing, final shipment inspections, freight arrangements, import services and delivery to your door!

www.**EGTglobaltrading**.com

EGT@warwick.net

P.O. Box 231 - Florida, NY 10921

845-321-2362

2 GET A WEBSITE!

Contact Ken Robinson – While your order is being manufactured, you need to start working on your WEB PRESENCE! Get people talking about your product on Social Media (Facebook, Twitter, YouTube, Google+), get good search engine placement (SEO)!

www.**widgetsontheweb**.com

kenrbnsn@widgetsontheweb.com

614 Van Liew Court - Hillsborough, NJ 08844

908-963-2447

Get more BANG for your BUCK from two professionals with a combined total of over 60 years of experience!

**Laughter.
Elation.
Heartbreak.
Inspiration.**

...and that's just the first episode.



**Experience the excitement of invention
on American Public Television.**

This spring, the fourth season of *Everyday Edisons*® follows the journey of 11 innovators who team up with industry experts to learn how to take their ideas from a drawing on a napkin to store shelves.

Inventions featured on Season Four span a broad range of product categories, from medical solutions to household innovations and fitness devices.



Ordinary People, Extraordinary Ideas®

For more information visit:

www.EverydayEdisons.com

➤ Marvin Blaine with his partner, John Vilardi, who worked with him to create the prototype as seen on *Everyday Edisons* Season 5.

MILLION-POINT INSIDER **SPOTLIGHT:** MARVIN BLAINE

By: Korde Tuttle

If you're a member of the online inventor community, Edison Nation, and regularly frequent their blog and forum posts, the name Marvin Blaine is no stranger to you. Marvin, who joined Edison Nation in 2009, is the first inventor ever to surpass the one million Insider-point threshold within the online community! Insider Points are earned each time an Edison Nation Insider Member submits a new idea, and the points increase with each stage the idea passes. The fact that Marvin has obtained such a substantial amount is a true testament to his talent and dedication as an inventor!

Marvin Blaine has owned Santa Monica Printing Company since 1987. He added graphic design, web design, and multimedia services to his printing business twenty years ago, after re-enrolling in college at the age of forty. His extended education took place at The Academy of Entertainment and Technology in Santa Monica, California.

Marvin Blaine now lives and works out of his home in Los Angeles, California. In fact, he can see The Hollywood Sign from his bedroom window! The size of Mr. Blaine's heart is exemplified by his compassion toward animals. In a recent correspondence with Edison Nation, he wrote, "I rescued two cats two years ago, and just started fostering a dog eight weeks ago. This dog was at the shelter and it was his last day before they were to euthanize him, when Ace of Hearts Dog Rescue came and saved him. I got a call that night from Ace of Hearts and decided to foster him until they found him a forever home. Two weeks ago, I decided I couldn't live without him and adopted him. His name is Nelson. He's an American Bulldog - 65 lbs. and all puppy." This touching story should come as no surprise, given Marvin's ever-growing collection of uplifting blog and forum posts. His cup-half-full approach to life is infectious. In fact, we are still looking for a way to brand and distribute his positivity! Learn a little more about Marvin in the interview below:

➤ **EN: What is the best idea you ever had?**

Marvin: Wow, that's a hard question to answer, seeing as I love them all. But if I had to pick out a favorite, it would be the one that's up for Season 5 of Every-day Edisons TV Show.

➤ **EN: What is your favorite food to eat while brainstorming?**

Marvin: Pizza. I could eat pizza for breakfast, lunch, and dinner. Mixed nuts as well. :)

➤ **EN: What is your most salient memory as an inventor?**

Marvin: I remember there was an As Seen On TV Search going on with Edison Nation. I wanted to come up with a cupcake idea and immediately saw the workings of how this baking pan looked, moved, and functioned in my mind.

➤ **EN: Who do you cite as the biggest inspiration in your life thus far, and why?**

Marvin: The biggest inspirations in my life have been my mom and dad. My mom, an artist, and my dad, a concert violinist. I feel like I got the best of both worlds. I have such a passion

for creating something beautiful, something that's never been done before from nothing, a blank canvas.

➤ **EN: What is your best Edison Nation memory to date?**

Marvin: This is an easy one for me. It has to be when Edison Nation flew me to present my idea for Season 5 of the "Every-day Edisons" TV Show. I have to thank my partner, John Vilardi, for our brainstorm sessions and his amazing 3D artwork, along with John making our prototype. There are many more great memories, such as every time an idea of mine goes to an Edison Nation's partner presentation. There's that hope and excitement that the idea will get licensed and end up making someone's life a little easier in the process.

➤ **EN: What would you do if your one million Insider Points were actually one million dollars?**

Marvin: It's a fun game to imagine, isn't it? I have thought about this quite often, and the answer is always the same. I'd do exactly what I'm doing today. I love what I do. I'm a graphic artist and web designer, and I am rewarded to create. I think being passionate about what you do is the key to happiness. When you love what you do it's not work, it's play, and you get rewarded for it.

➤ **EN: What is the one thing you would invent if you knew you couldn't fail?**

Marvin: An energy free car. I've had this idea for years. Spring driven car. As one spring propels you forward and unwinds another spring is being wound. The process repeats itself.

➤ **EN: If you could trade places with an Edison Nation member, who would that be, and why?**

Marvin: I'm quite happy being who I am and wouldn't trade my life for another, as I really do like myself. :) But if I had to, I would choose Brad and Melinda Shepard. The Gyro Bowl Invention of theirs is genius and it was an honor meeting both of them in North Carolina last year.

➤ **EN: What's an existing invention you wish you could take credit for?**

Marvin: It would have to be the Artificial Heart, because of how many lives it saves.

➤ **EN: What is the best vacation you've been on (or favorite place to visit)?**

Marvin: I went to the Caribbean (Barbados) back in 1990 and it was the most exotic place I've ever been to. The people there were so hospitable and friendly. I had a printing business at the time and did a trade with a client, who owned a travel agency. I was put up in a three story new house on the water for a week. The water was light green and so clear that you could see schools of fish swimming around your feet.

Once again, congratulations, Marvin, and keep the creativity flowing!

THOUGHTS ON DETERMINING ROYALTIES



JACK LANDER

Our lives as inventors would be simplified if royalty percentages, earned from licensing our patents, were set at some fixed standard that was fair to us and to our licensees. But the variables involved conspire to muddy the waters of clear reasoning.

Before we begin to cover the variables, we should understand the three basic components of profit. These are:

- THE BASIC COST OF MONEY.
- THE COST OF (RESERVE FOR) INSURING THE RISK OF LENDING.
- ECONOMIC VALUE ADDED, (EVA).

I can almost hear you groaning. But bear with me while I try to make this at least tolerable, if not exciting.

The “Fed” (Federal Reserve) regulates the basic lending rate of money as a means to help stabilize the economy. When the typical corporation borrows money from a bank, the bank must add to its cost of money its costs of self insuring against slow repayment or failure to repay, its processing costs, and a bit of profit. Let’s say, for example, that the total lending rate is 12 percent, which includes the basic cost of its money, plus the averaged cost of insuring against risk, plus its processing costs, plus its profit.

Now, let’s assume that the corporation earns an accounting profit of 22 percent based on its Income and Expense Statement. Whether the corporation has borrowed the money for its operations or is self funded, it considers that such cost is an “investment cost” that is returned as income, and is not a true component of profit. Thus, what is left over, after deducting the 12 percent borrowing rate, is 10 percent, which is “true profit,” or economic value added, EVA.”

The point here is that the royalty percentage the corporation will be willing to pay is related to the EVA – the economic value added as a result of sales of our invention (product) – rather than relating it to the 22 percent shown at the bottom line of its Income and Expense Statement. This is the more realistic way to assess our invention’s profit contribution. Whether the top executives use arithmetic or gut feel, this reasoning is bound to affect your royalty negotiations.

So, let’s say that you are hoping to get a royalty rate of 5 percent of sales. This 5 percent is half of the EVA profit that the corporation earns, (from my example above). And if I were the president of this corporation, I’d resent paying half of my “true profit” to an inventor. After all, my engineers must create the final design, my company must invest a lot of money in tooling and other startup costs, and my marketing department must position, advertise, and sell the product.

The lesson here is that our invention must earn an extraordinary profit, defined as EVA, in order for us to earn a respectable royalty rate. Let’s say that the President of the Arrogance Unlimited Corporation considers that a “lowly inventor” is only entitled to a fifth of the product’s earned EVA. This would mean that its Income and Expense Statement would have to show a net profit of 37 percent, (25% EVA + 12% borrowing rate).

The President’s attitude and the figures above are hypothetical, of course. But the principle involved is sound. Our invention/product must offer benefits that are extraordinary, and that the buying public will be willing to pay for. And consequently, our invention/product must earn an exceptionally high profit as defined by economic value added. If our invention is merely another way to accomplish what is already being done – even though that way is novel or “cute” – unless it offers superior benefits, from which extraordinary profits flow, we aren’t likely to interest potential licensees.

In addition to the high EVA, potential licensees will also be concerned about:

- THE DEGREE OF PROTECTION FROM COMPETITION THAT YOUR PATENT WILL PROVIDE, AND
- HOW LONG THE HIGH LEVEL OF EVA WILL LAST.

We can't predict the future reliably, of course. Who would have known that Barbie® would still be around 54 years after her introduction, when meanwhile, countless other dolls have come and gone. Who could have predicted that the ubiquitous floppy-disk would be replaced by the writeable CD and gigabyte-memory flashdrives within a few years? Thus, the licensee will want its investment to last for many years, like a Barbie, well past its royalty paying years. But it will be skeptical because progress – especially technological progress – is passing us by with an ever-increasing rate of change.

Counter to this rapid rate of change, is the rate at which patents issue – often taking three years these days. Most inventors prefer not to wait for their typical patent to issue in order to license it. We've got to license our application while our invention is still hot. But what we apply for, and what issues may be quite different. The key claims that protect the essential features of our invention may be watered down, or even rejected by the Patent Examiner. Thus, in our self-interests, we should head off negativity in negotiations by acknowledging the possibility of our patent being less protective when it issues, and propose a fair reduction in royalties if this possibility should become a reality. Not only is this fair to both parties, but it provides us with the opportunity to license the concept of our invention in the event it is not patentable. (Try licensing a raw concept without a patent application and you won't get to first base.)

For example, let's say you have two main claims in your application. Let's say that you ask for a 6 percent royalty, conceding 2% for each claim if each or both is rejected. This still leaves you with 2 percent for the concept even if both main claims are rejected, and only trivial claims remain.

CONCLUSIONS:

Determining a practical asking rate for royalties requires careful thinking and objective judgment. We must have a basic understanding of true profit as "economic value added," but we may risk confusing negotiations if we talk this language. Keep it simple and explain why your invention will earn extraordinary profit. Show that your features are clearly superior to whatever presently exists.

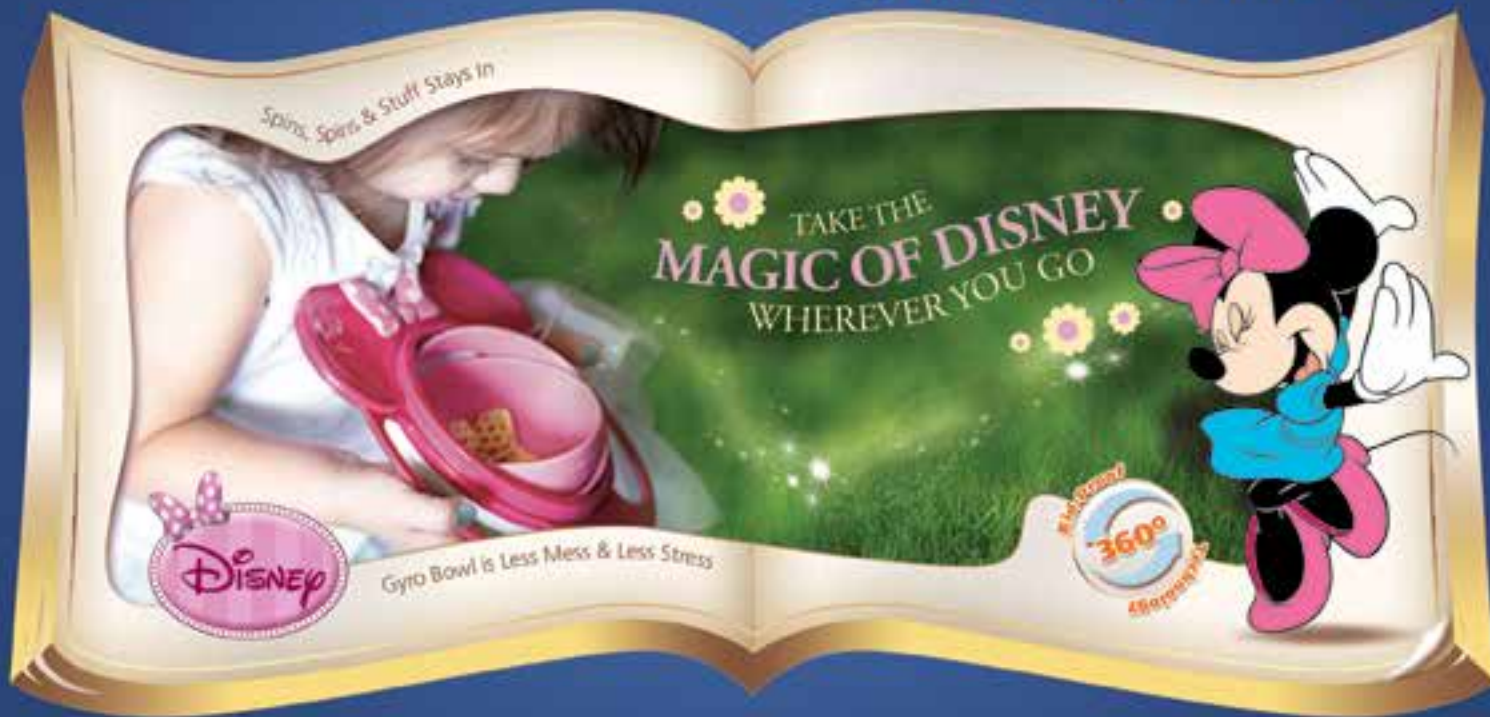
And here's a rationale that may be novel: if you're beaten down by the dominant forces of Arrogance Corporation, check out its dividend rate to its stockholders. (If it's not a public corporation, you'll have to use an average for its industry.) The investment of intellectual property should earn at least as much as an investment of money. Both are measured as a percent, and both are dependent on the profits arising from sales. It would seem unfounded for a company that pays its stockholders a 5% average dividend rate to argue that your intellectual property is not worth at least the same.

In the end, we are caught between natural greed and unwarranted humility. It is our mature and objective sense of the earning value of our invention that enables us to pick the number – the royalty rate that we can request without blushing.

Disney GYRO BOWL

100% KID-PROOF

Stays open side up, no matter what!



Minnie Mouse

Cars

Princesses

Toy Story

The Disney Gyro Bowl is the first ever bowl that spins and spins, and stuff stays in! The inner bowl rotates to keep snacks off the floor, because let's face it, kids spill stuff. No matter how you drop, kick or roll it... it's virtually indestructible! Dishwasher safe and BPA free, moms and kids alike love the Disney Gyro Bowl!

ONLY

\$16.99

VISIT

www.NewGyroBowls.com

TO GET ALL 4!

LID INCLUDED!





AUTOMATIC PAPER TOWEL DISPENSER

DELIVERS SANITARY PAPER TOWELS
WITH THE WAVE OF A HAND.

- Accepts any standard paper towel roll
- Perfect for families, new parents and seniors
- Easy hands-free operation delivers as many paper towels as needed
- Automatically retracts excess paper towels
- Quick and simple installation
- Fits conveniently under most cabinets

BUY ONLINE AT:

www.innoviahome.com

THE INTELLIGENT, SLEEK,
SIMPLE SOLUTION.

Alabama
Auburn Student Inventors and Entrepreneurs Club
 Auburn University Campus
 Samuel Ginn College of Engineering
 1210 Shelby Center
 Auburn, AL 36849
 Grant Moore
 hgm0001@gmail.com

Invent Alabama
 Bruce Koppenhoefer
 137 Mission Circle
 Montevallo, AL 35115
 205-222-7585
 bkoppy@hiwaay.net

Arizona
Inventors Association of Arizona, Inc.
 Tim Crawley, President
 PO Box 6436
 Glendale, AZ 85302
 (623) 680-5192
 azinventors.org

Carefree Innovators
 34522 N Scottsdale Rd
 Scottsdale AZ 85266
 ideascouts@gmail.com
 http://ideascout.org

Arkansas
Arkansas Inventors' Network
 Chad Collins
 PO Box 56523
 Little Rock, AR 72215
 Phone: (501) 247-6125
 arkansasinvents.org

California
American Inventor Network
 Jeff McGrew II
 1320 High School Rd.
 Sebastopol, CA 95472
 (707) 829-2391

Inventors Forum
 George White, President
 PO Box 1008
 Huntington Beach, CA 92647-1008
 Phone (714) 540-2491
 inventorsforum.org

Invention Accelerator Workshop
 11292 Poblado Rd.
 San Diego, CA 92127
 (858) 451-1028
 Enovex@aol.com

San Diego Inventors Forum
 Adrian Pelkus, President
 1195 Linda Vista, Suite C
 San Marcos, CA 92069
 (760) 591-9608
 sdinventors.org

Colorado
Rocky Mountain Inventors' Association
 Roger Jackson, President
 1805 So. Bellaire St., Suite 480
 Denver CO 80222
 (303) 271-9468
 info@rminventor.org
 RMInventor.org

Connecticut
Christian Inventors Association, Inc.
 Pal Asija
 7 Woonsocket Ave.
 Shelton, CT 06484
 (203) 924-9538
 pal@ourpal.com
 ourpal.com

CT Invention Convention
 PO Box 230311
 Hartford CT. 06123-0311
 860-793-5299

Danbury Inventors Group
 Robin Faulkner
 2 Worden Avenue
 Danbury, CT 06811
 (203) 790-8235

Inventors Association of Connecticut
 Doug Lyon
 521 Popes Island Road
 Milford, CT 06461
 (203) 924-9538
 inventus.org

Aspiring Inventors Club
 Peter D'Agunno
 773 A Heritage Village
 Hilltop west
 Southbury, CT 06488
 petedag@att.net

District of Columbia
Inventors Network of the Capital area
 P.O. Box 18052
 Baltimore, MD 21220
 Ph: 443 794 7350
 www.dcinventors.org

Florida
Inventors Council of Central Florida
 Dr. David Flinchbaugh
 5635 Commerce Drive
 Orlando, FL 32839
 407-760-7200
 Inventorscouncilcentralfla.us
 drdavidflinchbaugh@bellsouth.net

Edison Inventors Association, Inc.
 PO Box 60972
 Ft. Myers, FL 33906
 (239) 275-4332
 edisoninventors.org
 grossrdlab@yahoo.com

Inventors Society of South Florida
 Leo Mazur, President
 P.O. Box 6008
 Delray Beach, FL 33482
 561-676-5677
 inventorsociety.net
 mazurelectric@earthlink.net

Space Coast Inventors Guild
 Angel Pacheco
 4346 Mount Carmel Lane
 Melbourne, FL 32901-8666
 321-768-1234

Tampa Bay Inventors' Council
 Wayne Rasanen, President
 7752 Royal Hart Drive
 New Port Richey, FL 34653
 (727) 565-2085
 tbic.us

Georgia
The Columbus Phoenix City Inventors Association
 PO Box 8132,
 Columbus GA 31908
 Mike Turner
 cpcinventorsassociation@yahoo.com
 http://cpcinventorsassociation.org

Inventor Association of Georgia
 Dave Savage, Point of contact
 1407 Bunky Lane
 Dunwoody, GA 30338
 404-323-8686
 GaInventors.org
 dave@davesavage.com

Hawaii
Hawaii Inventors Club
 95-488 Awiki st
 Mililani, HI 96789
 http://HawaiiInventorsClub.com
 Email: GaryF@ClayInnovations.com

Idaho
Inventors Association of Idaho
 P.O. BOX 817
 SANDPOINT, IDAHO 83854
 http://inventorsassociationofidaho.webs.com/
 inventone@hotmail.com

Creative Juices Inventors Society
 7175 W. Ring Perch Drive
 Boise, Idaho 83709
 http://www.inventorssociety.org
 reme@inventorssociety.org

Illinois
Chicago 'st Black Inventors/Entrepreneurs Organization
 Calvin Flowers
 2444 W. 16th Street
 Chicago, IL 60608
 312-850-4710
 cfbieo.org

Black Hawk Hills Entrepreneur & Inventor Club
 PO Box 173
 Lanark, IL 61046
 (815) 541-0577
 http://www.bheic.com
 Email: info@bheic.com

Illinois Innovators & Inventors
 Don O'Brien, President
 P.O. Box 623
 Edwardsville, IL 62025
 ilinventor.tripod.com

Indiana
Indiana Inventors Association
 David Zedonis
 10699 Evergreen Point
 Fishers, IN 46037
 (317) 842-8438
 indianainventorsassociation.blogspot.com

Iowa
Iowa Inventors Group
 Frank Morosky-President
 PO Box 10342
 Cedar Rapids, IA 52410
 (206) 350-6035
 info@iowainventorsgroup.org
 iowainventorsgroup.org

Kansas
Inventors Assoc. of S. Central Kansas
 Richard Freidenberger
 2302 N. Amarado St.
 Wichita KS, 67205
 (316) 721-1866
 inventor@inventkansas.com
 inventkansas.com

Inventor's Club of Kansas City
 Carrie Jeske, President
 15701 Howe Street
 Overland Park, KS 66224
 (913) 322-1895
 inventorsclubofkc.org
 Carrie@theickc.org

MidAmerica Inventors Association, Inc.
 David F. Herron II
 PO Box 12457
 Overland Park, KS 66282
 (913) 495-9465
 midamerica-inventors.com

Kentucky
Central Kentucky Inventors Council, Inc.
 Don Skaggs
 699 Perimeter Drive
 Lexington, KY 40517
 dlwest3@yahoo.com
 ckic.org

Louisville Metro Inventors Council
 PO 17541
 Louisville, KY 40217
 Alex Frommeyer
 lmic.membership@gmail.com

Louisiana
International Society of Product Design Engineers/Entrepreneurs
 Roderick Whitfield
 PO Box 1114
 Oberlin, LA 70655
 (337) 802-9737
international-society-of-productdesign-engineers.ws

Maryland
Inventors Network of the Capital Area
 C/O Glen Kotapish
 PO Box 18052
 Baltimore, MD 21220
 (443) 794-7350
ipatent@aol.com
dcinventors.org

Massachusetts
Cape Cod Inventors Association
 PO Box 143
 Wellfleet, MA 02667
 (508) 349-1628
inventne.org

Innovators Resource Network
 P.O. Box 6695
 Holyoke, MA 01041
 (Meets in Springfield, MA)
 413-367-3668 (367-MEET)
info@IRNetwork.org
irnetwork.org

Inventors Association of New England
 Robert Hausslein
 PO Box 335
 Lexington, MA 02420
 (781) 862-9102
rhausslein@rcn.com
Inventne.com

Michigan
Jackson Inventors Network
 John D. Hopkins, Chairman
 2755 E. Berry Rd.
 Rives Junction, Mich. 49277
jhopkins@jacksoninventors.org
jacksoninventors.org

Grand Rapids Inventors Group
 Bonnie Knopf, President
 2100 Nelson SE
 Grand Rapids, MI 49507
 (616) 293-1676
grinventors.org
info@grinventors.org

Inventors Council of Mid-Michigan
 Martin Sovis
 PO Box 232
 Lennon, MI 48449-0232
 (810) 659-6416
msovis@comcast.net
inventorscouncil.org

Muskegon Inventors Network
 Orville Crain
 530 East Giles Road
 Muskegon, MI 49445
 (866) 719-1290
muskegoninventorsnetwork.org

Minnesota
Inventors' Network (Mpls/St.Paul)
 Todd Wandersee
 4028 Tonkawood Rd
 Manneronka, MN 55345
 (612) 353-9669
www.inventorsnetwork.org

Minnesota Inventors Congress
 Deb Hess, Executive Director
 235 S Mill Street, PO Box 71
 Redwood Falls MN 56283
 507.627.2344
 800.468.3681
info@minnesotainventorscongress.org
www.minnesotainventorscongress.org

Society of Minnesota Inventors
 20231 Basalt street
 Anoka Mi 55303
 (763) 753-2766
inventorsnetwork.org

Missouri
Southwest Missouri Inventors Network
 Springfield Missouri
 Jan & Gaylen Healzer
 PO Box 357
 Nixa, Mo 65714
janhealzer@yahoo.com
 (417) 827-4498

Inventors Association of St. Louis
 Robert Scheinkman
 PO Box 410111
 St. Louis, MO 63141
 (314) 432-1291
inventorsconnection.org
president@inventorsconnection.org

Inventor's Club of Kansas City
 Carrie Jeske, President
 15701 Howe Street
 Overland Park, KS 66224
 (913) 322-1895
inventorsclubofkc.org
Carrie@theickc.org

Mississippi
Mississippi SBDC Inventor Assistance
 122 Jeanette Phillips Dr.
 University, Mississippi 38677
 (662) 915-5001
 (800) 725-7232
msbdc@olemiss.edu
mssbdc.org

Nevada
Inventors Society of Southern Nevada
 3627 Huerta Dr.
 Las Vegas, NV 89121
 (702) 435-7741
InventSSN@aol.com

Nevada Inventors Association
 C4Cube Location
 300 east 2nd st #1405
 Reno, NV 89501
 775-636-2822
info@nevadainventors.org
nevadainventors.org

New Jersey
National Society of Inventors
 Stephen Shaw
 8 Eiker Road
 Cranbury, NJ 08512
 Phone: (609) 799-4574
 Monthly meetings Held in Roselle Park, NJ
nsinventors.com

Jersey Shore Inventors Group
 Bill Hinchler, President
 24 E 3rd Street
 Howell, NJ 07731
 (732) 407-8885
ideasbiz@aol.com

New Mexico
The Next Big Idea: Festival of Discovery, Invention and Innovation
 Los Alamos MainStreet
 109 Central Park Square
 Los Alamos, NM 87544
 Phone: (505) 661-4844
nextbigideaLA.com

New York
The Inventors Association of Manhattan (IAM)
 Ananda Singh-- Membership Manager
 Location TBD ever 2nd Monday of the month
 New York, NY
manhattan-inventors.org
manhattan.inventors@gmail.com

Inventors Society of Western New York
 Alan Reinagel
 174 High Stone Circle
 Pitsford, NY 14534
 585-943-7320
inventny.org

Inventors & Entrepreneurs of Suffolk County, Inc.
 Brian Fried
 PO Box 672
 Melville, NY 11747
 (631) 415-5013
iesuffolk.com

Long Island Forum for Technology, Inc.
 111 West main Street
 Bay Shore, NY 11706
 (631) 969-3700
LCarter@lift.org

NY Society of Professional Inventors
 Daniel Weiss
 (516) 798-1490 (9AM - 8PM)
dan.weiss.PE@juno.com

North Carolina
Inventors' Network of the Carolinas
 Tom Getts, President
 520 Elliot Street, Suite 300
 Charlotte, NC 28202
 (704) 369-7331
www.inotc.org
tgetts@ezclaw.com

North Dakota
North Dakota Inventors Congress
 2534 South University Drive, Suite 4
 Fargo, ND 58103
 (701) 281-8822
 (800) 281-7009
neustel@patent-ideas.com
ndinventors.com

Ohio
Inventors Council of Cincinnati
 Jackie Diaz
 PO Box 42103
 Cincinnati, Ohio 45242
 (513) 898-2110 x4
Inventorscouncil@inventcinci.org
www.inventcincy.org

Canton Inventors Association
 Frank Fleischer
 303 55th Street NW
 North Canton, OH 44720
 (330) 499-1262
cantoninventorsassociation.org

Inventors Connection of Greater Cleveland
 Don Bergquist
 Secretary 440-941-6567
 P.O.. Box 360804
 Strongsville, OH 44136
icgc@aol.com
 Sal Mancuso- VP (330) 273-5381
salmancuso@roadrunner.com

Inventors Council of Dayton
 Stephen W. Frey
 Wright Brothers Station
 PO Box 611
 Dayton, OH 45409-0611
 (937) 256-9698
geopierce@earthlink.net
daytoninventors.com
groups.yahoo.com/group/inventors_council

Patent No. US 7,900,405 B1
A Simple Structural Dome.



Available for Licensing

JOHNDJACOBY@HOTMAIL.COM

Source Direct™
 Product Innovation



Our Services Include:
 Product Development
 Sourcing & Design
 Manufacturing
 Quality Control
 Logistics & Marketing
 25 Years of Product Success

Got an Idea?
 Not sure what to do next?
We Can Help!
 Call for a FREE Consultation
888.373.3876
 info@thesourcedirect.net
 www.TheSourceDirect.net
 A company run by a fellow inventor who's been through the struggles and has found success.

Inventors Network (Columbus)
 1275 Kinnear Road
 Columbus, OH 43212-1155
 (614) 470-0144
 www.inventorscolumbus.com

Youngstown-Warren Inv. Assn.
 100 Federal Plaza east
 Suite 600
 Youngstown, OH 44503
 (330) 744-4481
 rherberger@roth-blair.com

Oklahoma
Oklahoma Inventors Congress
 Dan Hoffman
 PO Box 204
 Edmond, OK 73083-0204
 (405) 348-7794
 inventor@telepath.com
 oklahomainventors.com

Oregon
MicroEnterprise Inventors
Program of Oregon (MIPO)
 Kedma Ough
 5257 NE MLK, Suite 201
 Portland, OR 97202
 (503) 998-9560
 mipooregon.org

South Coast Inventors Group
 c/o Southwestern Business
 Development Center
 2110 Newmark
 Coos Bay, OR 97420
 541-756-6866
 lcapps@southwestern.cc.or.us

Inventors North West
 Attn: John Herrick
 #11 Pioneer Lane
 Sunriver, OR 97707
 jhunterh2001@yahoo.com
 www.inventorsnorthwest.com

Pennsylvania
American Society of Inventors
 Henry Skillman
 PO Box 58426
 Philadelphia PA 19102-5426
 (215) 563-4100, Ext. 235
 hskillman@ddhs.com
 asoi.org

Central Pennsylvania Inventors Assn.
 9 First Avenue
 Lemoyne, PA 17043
 (717) 763-5742
 S1Pickford@aol.com

Pennsylvania Inventors Assn.
 2317 East 43rd St.
 Erie, PA 16510
 (814) 825-5820
 pa-invent.org

Williamsport Inventor's Club
 One College Ave., DIF 32
 Williamsport, PA 17701
 http://www.wlkiz.com/resources/
 inventors-club
 info@wlkiz.com

Puerto Rico
Asociacion de Inventores
de Puerto Rico
 Dr. Omar R. Fontanez Canuelas
 Cond. Segovia Apt. 1005
 San Juan, PR 00918
 (787) 518-8570
 inventorespr.com

Puerto Rico Inventors Association
 PO Box 1081
 Saint Just, PR 00978
 (787) 760-5074
 acuhost@novacomm-inc.com

Tennessee
Music City Inventors
 James Stevens
 3813 Dobbin Rd
 Springfield, TN 37172
 (615) 681-6462
 inventorsassociation@hotmail.com
 http://musiccityinventors.com
 WWW.IAMT.US

Mid South Inventors Association
 Deborah Murdock
 1115 Halle Park circle
 Collierville, TN 38017
 (meets in Memphis)
 (901) 850-7324
 murdock@legacytransfers.com

Tennessee Inventors Association
 Igor Alexeff
 PO Box 11225
 Knoxville, TN 37930-1225
 (865) 483-0151
 ialexeff@comcast.net
 www.tninventors.org

Texas
Amarillo Inventors Association
 J. T. Haynes, President
 2200 W. 7th Avenue
 Amarillo, TX 79106
 (806) 367-8610
 info@amarilloinventors.org
 www.amarilloinventors.org

Houston Inventors Association
 Ken Roddy
 2916 West TC Jester #100
 Houston, TX 77018
 (713) 686-7676
 kenroddy@nol.net
 inventors.org

Alamo Inventors
 3463 Magic Drive
 Suite T-14
 San Antonio, Texas 78229
 210-582-5835
 Alamoinventors.org

Austin Inventors and Entrepreneurs
Association
 Lill O'neall Gentry
 12500 Amhearst
 Austin, TX
 lillgentry@gmail.com

Utah
UtahInventors.org
 David Osborne
 8180 s 700 E, Suite 350
 Sandy, UT 84070
 (801) 748-1939
 utahinventor.org

Virginia
Virginia Inventors Forum
 Bambi Walters
 PO Box 5743
 Williamsburg, VA 23188
 (757) 253-5729
 www.virginiainventors.org

Wisconsin
Inventors & Entrepreneurs Club of
Juneau County
 Economic Development Corp.
 Terry Whipple / Sandra Morris
 PO Box 322, 122 Main Street
 Camp Douglas, WI 54618
 (608) 427-2070
 www.iandclub.com
 jcedc@mwt.net

Inventors Network of Wisconsin
 Jeff Hitzler
 1749 Chateau Dr.
 Green Bay, WI 54304
 (920) 429-0331
 www.inventors-network.org
 inventorgb@sbcglobal.net

CHINA MANUFACTURING

"The Sourcing Lady"(SM) Over 30 years' experience in Asian manufacturing – textiles, bags, fashion, baby and household inventions. CPSIA product safety expert – Licensed US Customs Broker.

Call 845-321-2362, EGT@egtglobaltrading.com,
www.egtglobaltrading.com

INVENTION DEVELOPMENT SERVICES

Market research services regarding ideas/inventions. Contact ULTRA-RESEARCH, INC. at (714) 281-0150 or P.O. Box 307, Atwood, CA 92811.

AFFORDABLE PRODUCT DEVELOPMENT

Retired Product Engineer with 12 U.S. Patents and 44 Records of Invention is looking for a project to work on. With money limited, timelines critical and the product development path full of pit falls experience is your best asset. Contact Jim at jjwulfing@q.com or Call 651-483-0031.

PRODUCT DEVELOPMENT / INDUSTRIAL DESIGN SERVICES

Independent Industrial Designer with 40 years of experience designing plastic and metal consumer and medical products for corporations and entrepreneurs. Conversant in 3 D modeling, all forms of prototyping, and sourcing for contract manufacturers. Request disk of talks given in the NE and NYC to inventor and entrepreneur groups.
jamesranda@comcast.net or www.richardson-assoc.com
(207) 439-6546

PRODUCT DEVELOPMENT/OFFSHORE MANUFACTURING

David Fussell is a prolific inventor with 32 patents, and 35 plus years experience in manufacturing, product development and licensing. David is the author of The Secret to Making Your Invention a Reality, as well as a public speaker and consultant to companies and individuals. Why trust your new product ideas to large impersonal marketing, engineering and product development companies? Work one-on-one with an expert who has made money inventing, developing and marketing new products. One of David's inventions sold over 60 million worldwide. David has enjoyed success in the consumer electronics, pneumatics, Christmas, camping, and pet products industries, to name a few. His areas of expertise include: microchip design, PCB fabrication, injection tooling services, and retail packaging. To view some of David's patents and to learn more about his products and services, visit www.ventursource.com. David Fussell - 2450 Lee Bess Road, Cherryville, NC 28021. (404) 915-7973
dafussell@gmail.com



We always take a personal approach when assisting clients in creating, improving, illustrating, and proving product concepts. Contact us today to get started proving your concept.

- 3D models
- Physical Prototypes
- Realistic Renderings
- Manuals
- Product Demos
- And More...

info@ConceptAndPrototype.com

www.ConceptAndPrototype.com

PATENT SERVICES

Affordable patent services for independent inventors and small business. Provisional applications from \$500. Utility applications from \$1800. Free consultations and quotations. Ted Masters & Associates, Inc., 5121 Spicewood Dr., Charlotte, NC 28227. (704) 545-0037.

www.patentapplications.net.

Patent filing services for independent investors and small businesses. Competitive fees. Provisional application \$500, utility applications from \$2000.

Free consultations. IP Legal Services,
36 Greenleigh Drive, Sewell, NJ 08080.

1-866-387-5386 www.ipprocure.com

PATENTS GUARANTEED!

PATENT ATTORNEY WITH 21+ YEARS OF EXPERIENCE OFFERS A PATENT GUARANTEE PROGRAM. I HAVE SUCCESSFULLY RECEIVED HUNDREDS OF PATENTS FOR MY CLIENTS. INQUIRE ABOUT MY PATENT GUARANTEE PROGRAM AND VISIT MY WEBSITE AT WWW.PATENTINFOPLUS.COM OR CALL 763-497-0529 AT LINGBECK PATENT LAW FOR DETAILS.

SHOP AT OUR ONLINE STORE.



Shirts, mugs
and much
more for the
inventor,
creator and
Edison in your
life.

**T-SHIRTS
STARTING AT
\$11.99**

Offering a variety of
colors, styles and
sizes to choose from

100% cotton, double-needle
stitching throughout.

Shipping and handling not included.
www.cafepress.com/inventmag

Animations
Rapid Prototypes
Sell Sheet Web Pages
Sell Sheets
Virtual Prototypes made in IGS, STL and STEP
Photo Real Images
Graphic Design
Concept Design

Suburban Artworks
 www.suburbanartworks.com
 1-360-306-5539
 sales@suburbanartworks.com

design patent handbook
 How to prepare, file and prosecute
 U.S. Design Patent Applications

Features hundreds of quotations showing what the USPTO permitted in issued design patents, as well as rules, commentary and suggestions for enhancing design applications.

Essential to anyone drafting a design application!

by Registered Patent Attorney DAVID A. BURGE
 \$39.95 + \$2.00 handling (Ohio add Ohio Sales Tax)
 Available From The Publisher
 COBBLESTONE TECHNOLOGY FAX: 216-921-1806
 16781 CHAGRIN BLVD. #428 • SHAKER HEIGHTS, OH 44120-3721

NEED A MENTOR?

Whether your concern is how to get started, what to do next, sources for services, or whom to trust, I will guide you. I have helped thousands of inventors with my written advice, including more than six years as a columnist for Inventors Digest magazine. And now I will work directly with you by phone, e-mail, or regular mail.

No big up-front fees. My signed confidentiality agreement is a standard part of our working relationship. For details, see my web page:

www.Inventor-mentor.com

Best wishes,
 Jack Lander



INVENTORS

THE MAGAZINE FOR IDEA PEOPLE > DIGEST

ORDER ONLINE NOW
WWW.INVENTORSDIGEST.COM

TO PLACE NEW ORDERS OR RENEW SUBSCRIPTIONS BY
 MAIL FILL OUT CARD, OR CALL 1-800-838-8808 OR EMAIL
 US AT INFO@INVENTORSDIGEST.COM.

☐ 1 YEAR \$36.00 U.S. ☐ 2 YEARS

Make sure to enclose payment and send to
 INVENTORS DIGEST 520 Elliot St., Suite 200
 Charlotte, NC 28202

NAME (please print)

ADDRESS

CITY/STATE/ZIP

E-MAIL

PHONE

HAVE AN INVENTION
OR PRODUCT IDEA?

LICENSE YOUR
INVENTION AND BE
PAID ROYALTIES!

IDEA

INTRODUCING LAMBERT & LAMBERT

If you are an inventor with a patent or just someone who has one great idea for a new invention, we can help. We are licensing agents in search of great inventions or product ideas to bring to market by way of licensing.

IDENTIFY + DEVELOP + COLLABORATE

Lambert & Lambert represents inventors and product developers all over the world. Our focus is to identify great products, develop them and place them with companies well-positioned to sell the products in high volumes. In doing so, our clients maximize the return on their invention by receiving royalties for as long as it sells.

CONTINGENCY BASED - RESULTS DRIVEN

Our first step is for us to perform a license feasibility study for your invention to evaluate its potential. If we like it and think your product could sell, we will represent you on contingency! That means we are paid only when we are successful at getting royalties for you.

TO LEARN MORE
CONTACT US TODAY!

Phone 651-552-0080

Email info@lambertinvent.com

Web www.lambertinvent.com

SELF EVALUATION

- Does your invention Provide a Unique Solution to a Real Problem?
- Is it Superior to Existing Products?
- Does it have a Large Potential Market?
- Can it be Produced and Sold at a Profit?

**IF YOU ANSWERED YES TO THESE QUESTIONS,
WE WANT TO SEE YOUR INVENTION!**

IN OUR CLIENTS WORDS...

"I want to thank your team for a job well done in achieving what so many other companies said they would do, but did not...I heartily recommend your company to other inventors like myself."

- Steven D., Kansas City, MO

"Thanks to Lambert & Lambert, my invention was successfully licensed...They found a forward-thinking imaginative housewares manufacturer, stuck with it and sculpted the agreement until all parties were happy. I'd submit another invention to L&L in a minute - they are professional, honest, accessible and do what they say they will."

- Jim M., Chicago, IL

