

Inventors

JUNE 2015

DIGEST

EYE ON WASHINGTON
The Patent Debate

BRENDA BRUNDAGE
Goes the Distance
With Roosport

THE SHAPE OF
THINGS TO COME
3D Printers Produce
Surprising Results

Hole In One
SOLVING CHALLENGES
ON THE LINKS

How Valuable
Is Your Patent?
THE TRUTH IS
IN THE CLAIMS

DR. GARY MICHELSON

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Inventions and Reinventions

Inventions don't come to fruition overnight. First, you recognize a problem or simply come up with a better way of doing something. If you're incredibly attuned to the cosmos, you might experience a eureka moment and think of something magical, like Thomas Edison did when he came up with the idea to record and reproduce sound—making the word "phonograph" part of our vernacular.

The idea is often the easy part. Next come the drawings, the revisions and prototypes, the successes and failures. If you're extremely persistent and driven, you'll get to take your invention to a good attorney, who can help you narrow your invention's claims and file for a patent. After you find a manufacturer, you still have to get your invention to market—and hope that it sells.

We, at *Inventors Digest*, are going through a similar experience—reinventing the magazine. We're in the process of redesigning the pages, examining the editorial content and defining readership. The magazine also has a new art director, Carrie Boyd, and a new editor, Cama McNamara—that's me.

Although I am an entrepreneur and innovator and have an extensive background in publishing, my experience in the world of inventions, intellectual property and the patent process is limited. Each time I read an article I learn something new—and we, at *Inventors Digest*, hope you do, too.

We want to provide the best articles possible so that you are better able to navigate your way through the intricate process of taking your innovations to market. We also hope to inspire you with stories from inventors—large and small. Successful inventors have the drive and determination to think outside the proverbial box and attain their dreams, despite daunting challenges.

You'll also notice an expanded series of articles in the section Eye On Washington, which offers facts and opinions on the flux in current patent legislation. Most are written by expert patent attorney Gene Quinn, a.k.a. the IPWatchdog.

If you're not familiar with Dr. Gary Michelson, and even if you are, don't miss this month's cover story, 21st Century Renaissance Man. A retired orthopedic surgeon cum inventor, Michelson holds 337 U.S. patents and 950 patents issued worldwide, with additional patents pending. Today Michelson oversees and funds three foundations that are impacting the fields of medical research, bioscience, technology, education and animal welfare.

A successful entrepreneur, whose patents were infringed upon, resulting in years of litigation, Michelson has strong opinions on the evolving patent legislation. Read more about Michelson on page 24.

Though much is new, you'll see the familiar faces of *Inventors Digest* contributors. You'll also come across the instantly recognizable face of Thomas Edison, who is featured in this month's Back in Time.

We hope you enjoy the June issue of *Inventors Digest*. We welcome your feedback, recommendations and story ideas.

— Cama McNamara



**DREAM
SMALL**

**DISCOVER NOTHING
IMAGINE LESS
DO WHAT'S BEEN DONE**



**INSPIRE NO ONE
GIVE UP HOLD BACK**



INVENT NO MORE

**IGNORE
YOUR HEART**

**SHOOT FOR AVERAGE
THINK NEGATIVE
REACH FOR THE GROUND**

IF CONGRESS PASSES LEGISLATION WEAKENING PATENT PROTECTION, THE MESSAGE TO INVENTORS IS, "WHY BOTHER?" SO WHAT INVENTIONS WON'T BE INVENTED? WHICH START-UPS WILL GET KILLED BY FOREIGN COPIERS BEFORE THEY GET STARTED? WHOSE JOBS WILL GET SHIPPED OVERSEAS? VISIT SAVETHEINVENTOR.COM AND TAKE ACTION TO HELP PRESERVE U.S. INNOVATION AND ECONOMIC GROWTH.

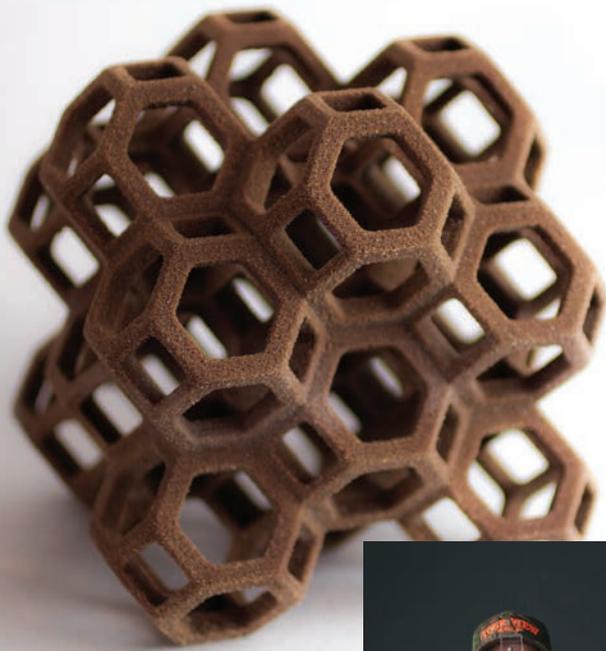


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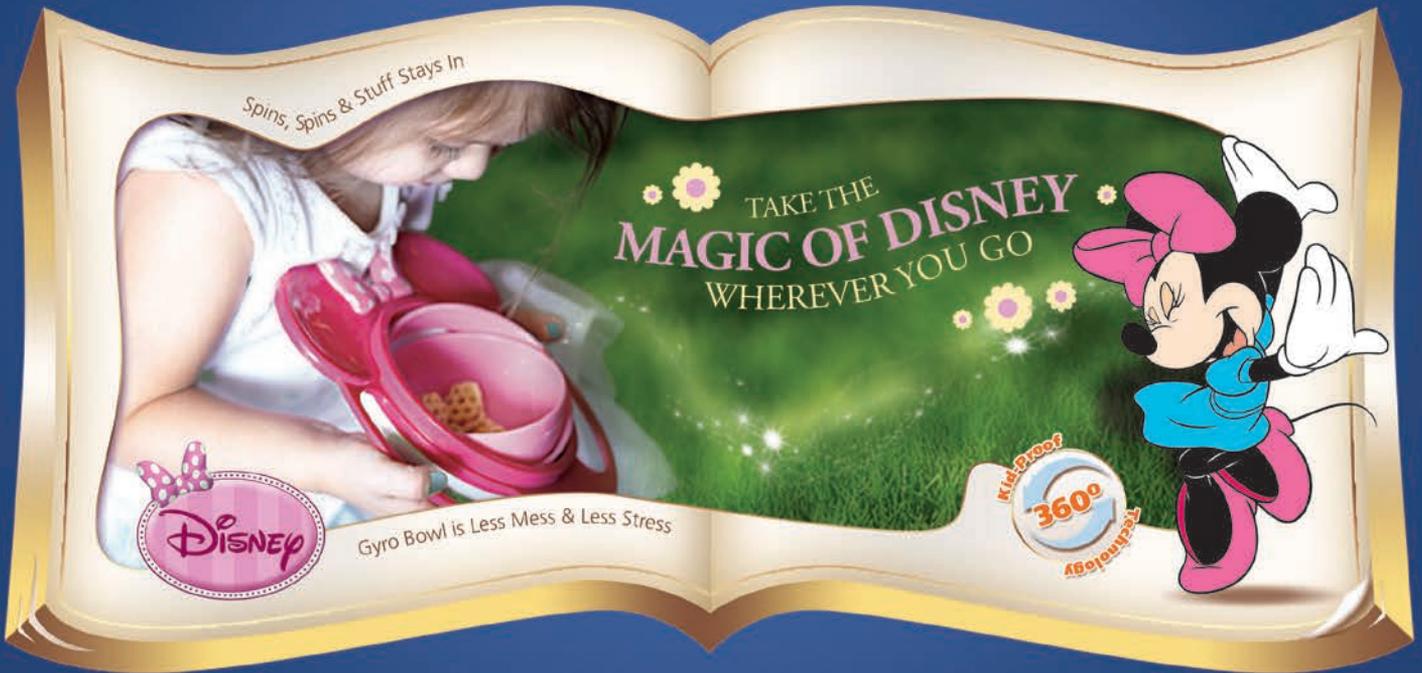
ON THE COVER:

Dr. Gary Michelson, photographed by John Livzey for the article "Convergence: Man with A Plan" in the Summer 2014 issue of *USC Trojan Family*.

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Bright Ideas

SPOTLIGHT ON INNOVATIONS



LED Earbuds Reduce Jet Lag

Just in time for summer travel, Swedish company Valkee released the first bright light headset, the HumanCharger. It looks like a pair of earbuds and uses LED light bulbs to send blue-enriched white light through the user's ear canals. The device helps users resist the effects of jet lag. Travelers who use HumanCharger recover 50 percent faster from jet lag symptoms, with improvements in mood, alertness, forgetfulness, sleepiness and overall efficiency.

A companion app lets the user know when and how long to use the HumanCharger when traveling. Finnair's flight crews have been using the device since 2012, and have begun storing the headsets for long-distance passengers.

www.humancharger.com

// Imagination has brought mankind through the Dark Ages to its present state of civilization. Imagination led Columbus to discover America. Imagination led Franklin to discover electricity. Imagination has given us the steam engine, the telephone, the talking-machine and the automobile, for these things had to be dreamed of before they became realities. So I believe that dreams—day dreams, you know, with your eyes wide open and your brain-machinery whizzing—are likely to lead to the betterment of the world. The imaginative child will become the imaginative man or woman most apt to create, to invent, and therefore to foster civilization.”

L. FRANK BAUM, *THE LOST PRINCESS OF OZ*



Food Fantasy

Genie presents innovative food technology that was previously only possible in the futuristic world of Star Trek. Similar in size and appearance to a coffee maker, Genie can produce an unlimited variety of meals using freeze-dried pods that contain natural dehydrated ingredients.

Take a pod, place it in the Genie, and at the push of a button on Genie's mobile application, the device begins mixing, shaking and adding required liquids from

tubes attached to the back of the compact machine. It then bakes or cooks the desired dish at the appropriate temperature.

The dish can be anything hot or cold—chicken with rice, or even chocolate soufflé—and Genie creates it in a mere 30 seconds. The meal pods, which contain no preservatives, have a shelf life of between

one and two years. Developed by Israeli entrepreneurs Ayelet Carasso and Doron Marco from White Innovation Company, Genie is expected to cost several hundred dollars. The price of the pods will be comparable to a meal, snack or dessert.

www.geniethefreshway.com

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

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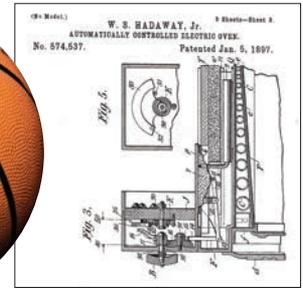
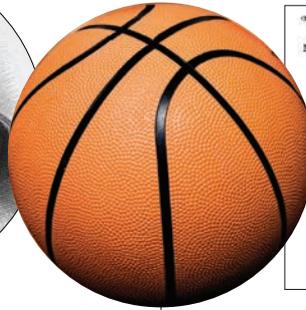
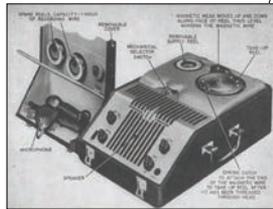
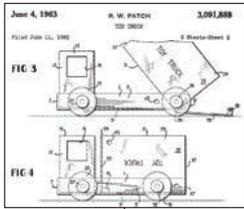
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INVENTOR ARCHIVES: June



June 4, 1963, six-year-old Robert Patch was granted U.S. Patent No. 3,091,888 for his Toy Truck. The truck could be easily assembled and disassembled by a child, and the base could be added on to create different types of trucks.

June 13, 1944, U.S. Patent No. 235,1004 was granted to Marvin Camras for the Method and Means of Magnetic Recording, or the magnetic tape recorder.

June 15, 1844, Charles Goodyear was granted U.S. Patent No. 3,633 for vulcanized rubber. He had no connection to the company that now bears his name.

June 25, 1929, G. L. Pierce was granted U.S. Patent No. 1,718,305 for the official basketball.

June 30, 1896, Canadian William Hadaway was granted U.S. Patent No. 574,537 for an Automatically Controlled Electric Oven. He later invented the first toaster, made by Westinghouse.



Follow the Hologram

Navion is a car navigation system that projects holographic arrows onto the road in front of you and then onto the next road, where you need to turn. Designed by Switzerland-based company WayRay, Navion uses a heads-up display, similar to that of an aircraft. Rather than throwing left-turn arrows up in your field of vision, Navion projects them onto the road. No headset is required.

The navigation system also allows users to interact with the car through gestures or voice commands. Navion can project certain smartphone apps onto the windshield for convenience. The device allows the driver to safely keep his eyes on the road at all times, and should make the driver navigation experience safer. Look for Navion this fall.

www.wayray.com/navion

Inventor Reads

David McCullough Recounts How the Wright Brothers Took Flight

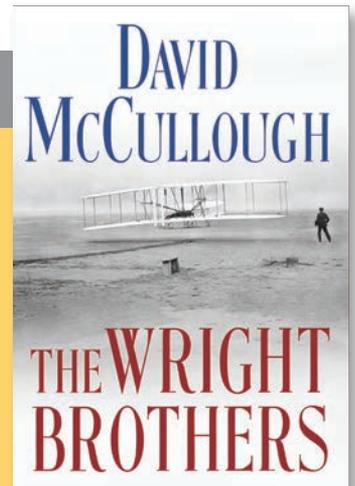
Pulitzer Prize winner David McCullough, author of *The Great Bridge*, about the Brooklyn Bridge, and the Panama Canal story *The Path Between the Seas*, turns his attention to the Wright brothers in this fascinating look at the two men known as the pioneers of aviation.

McCullough traces the brothers' lives, from their childhood in Ohio and the bicycle shop where they first revealed their mechanical genius, to Kitty Hawk, the site of the first 59-second flight on December 17, 1903.

The road to Kitty Hawk was a difficult one, and McCullough recounts the brothers' numerous failures and humiliations, and a fatal crash that killed passenger Lieutenant Thomas E. Selfridge and put Orville in the hospital for weeks. The crash, caused by a stress crack in the propeller, compelled the Wright brothers to make design changes for safer flight.

McCullough spent five years researching the book, visiting Kitty Hawk and Paris, where the Wright brothers were hailed as heroes, and reading thousands of pages of letters and diaries to get a true understanding of the brilliant men beneath the wings. He even learned how to tell them apart: Orville wore a mustache.

—Cama McNamara



BABY MAKES THREE

Five Innovative Parent-Friendly Products

BY DHANA COHEN

Parents across the country have jumped on the invention bandwagon, designing products to meet their—or their children’s—unfulfilled wants and needs. From education to entertainment, and everything in between, innovative merchandise is being introduced daily.

The problem? How do these inventors distinguish their products amidst so much competition? How do buyers find the best products for their particular market?

The solution? We, at the Inventorz Network, launched the first virtual “ikidz” show this past May, on computers everywhere. Twenty women participated in the show, which was designed to connect inventorz to buyers and the social media world.

This unique approach allowed buyers to see products hot off the manufacturing (press) line and support the mission of mom-invented brands. In fact, the show was so successful that it now has a permanent place on the Inventorz Network website.

After the show, our team of experts selected five innovative products that we thought filled a void in the market place.

1 Bella Bundles™

Julie Feldman, who “has a passion for fabric and design,” saw a need for functional baby blankets, towels and bibs. When her daughter was born, Feldman found that blanket and towel fabrics were not soft enough, and bibs on the market were too short. Enter Bella Bundles’ practical, comfortable and stylish products.

Reversible bibs feature terry cloth bottoms to wipe messy spills. The Blanket on the Go™ can snap onto strollers and carriers or safely around the mother’s neck to provide coverage while nursing. Towels are fitted with snap closures at the nape of the neck to keep infants and children warm. The Bella Sleep Sack is a cozy, luxury blanket that babies and toddlers cannot kick off, ensuring restful sleep. Bella Bundles towels are made with a 100 percent luxury-cotton shell, a plush terry cloth lining and a velour-lined hood to keep children warm and dry, whether after a bath or a dip in the ocean. bellabundles.com



2 Beautiful Earth Skin Care

Many people don’t realize how many substances the body’s largest organ, the skin, absorbs. For example, if you place a piece of garlic between your toes, 15 to 20 minutes later you will taste it in your mouth.

Knowing that what’s on the skin affects the body, one mom made it her mission to create safe skincare products for everyone in the family, including babies. Beautiful Earth Skin Care uses ingredients that are certified organic. The products are free of petrochemicals, artificial fragrances and extra fillers, and assist in balancing the skin’s natural oils. beautifulearthusa.com



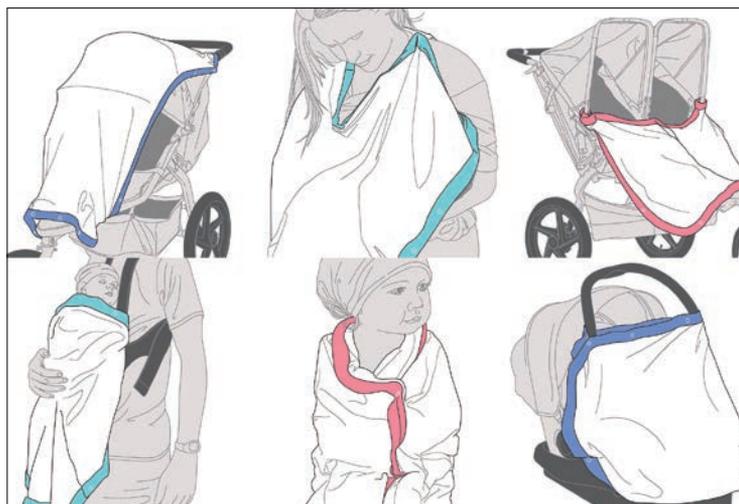
3 Comfortchew

Cuddle and chew—it's attached to you. The award-winning* Comfortchew combines a textured teether with super soft, absorbent fabric. The idea of two British moms with teething tots, who dribbled and frequently lost their teethers, Comfortchew attaches to baby's wrist, a car seat or stroller, making life easier for mom and baby. Patterned fabric stimulates baby, while the hippo-shaped teether, which is BPA- and phthalate-free, encourages baby to chew away. A smaller companion product, Neckerchew, also acts as a bib. Both are machine washable. *Gold medal, NAPPA, 2015. cheekychompers.com

4 Sunsnapz Uber Baby Blanket

New parents Julia and Seth Huben were searching for a product to protect their daughter from the sun and wind when they came up with the idea for the Sunsnapz Uber Baby Blanket. Not only does the fabric have a UPF rating of 50+, protecting baby's skin from 97 percent of the sun's harmful UVA and UVB rays, the blanket is also multi-functional, making it a must-have for busy parents.

The blanket is made from tightly woven, weighted cotton/spandex designed to block out the sun's harmful rays through at least two years of normal wear. In addition to swaddling a baby, with eight sets of snaps, the blanket can be easily attached to a stroller, baby carrier or infant seat. sunsnapz.com



5 Biglove™

Young children are often exposed to a world of violence and hate, so what could be better for them than positive messages? Biglove™ has created a line of clothing and accessories in eco-friendly materials, with the goal of promoting goodness in comfort and style.

The collection for young girls and boys includes lively graphics that display the values of love, peace, happiness and freedom. The messages are presented with four symbols, or coins, inspired by St. Francis of Assisi. They include a heart, peace symbol, smiling face and leaf. The collection, First Love, "gives parents an opportunity to instill the values that really matter and make a difference in the lives of their children," says creator and designer Tere Suárez. biglove.me.com



Dhana Cohen is co-owner of Inventorz Network, a platform that connects new and established inventors with the people and industries that can take their product to the next level. www.inventorznetwork.com

THOMAS EDISON

Creative Genius, Savvy Entrepreneur

Imagine your life without movies, incandescent light, the sound of music wafting through your home or cross-country road trips. That's the vastly different reality we could be living today if it had not been for Thomas Alva Edison. The motion picture camera, incandescent bulb, phonograph and alkaline battery are just four of Edison's 1,000-plus innovations that completely transformed the world.

Even more important is the impact Edison's inventions had on the future of both science and art. Where would we be without Hollywood and Motown, ad agencies and automobile dealerships, mass media and consumer markets, power grids and radio stations—all of which were either a result of or influenced by one or more of Edison's ideas.

Scholars agree that Edison's most important contribution, however, was the invention of the invention industry. A scientist who fostered modern research and development, Edison was also a savvy businessman and publicity agent. He applied the principles of mass production and large-scale teamwork to the process of invention, resulting in the creation of an industrial empire.

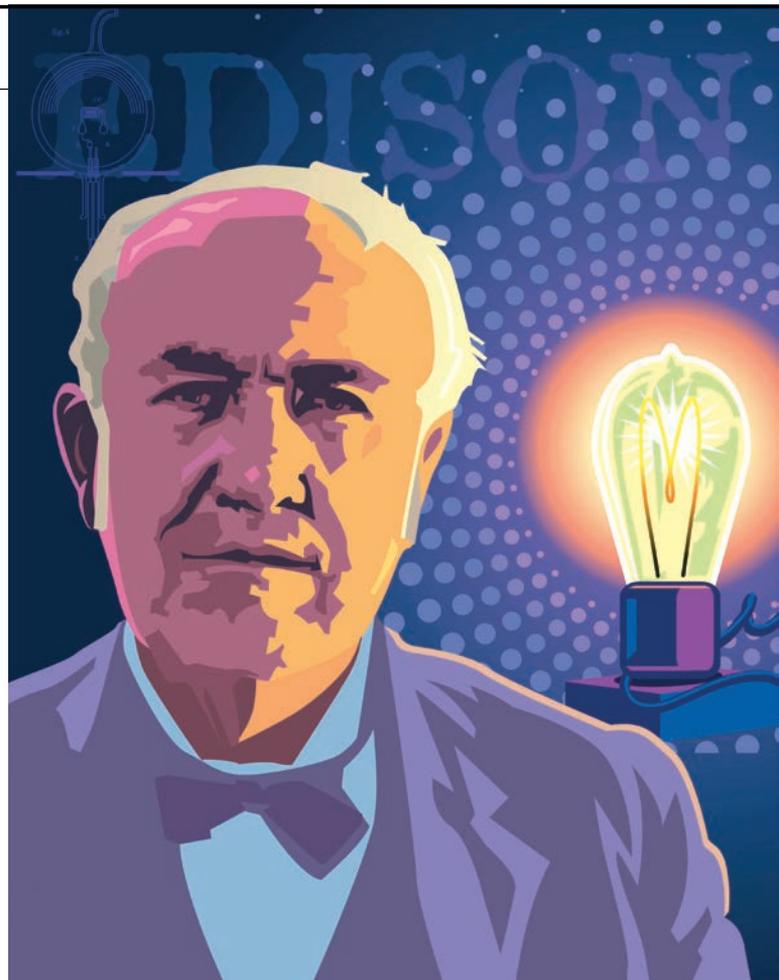
Self-Taught Genius

The youngest of seven children, Edison was born February 11, 1847 into an America of candles and oil lamps, trains and horse-driven carriages. A partially deaf, hyperactive child, who disrupted his class, Edison received only 12 weeks of formal education before his mother assumed the role of his educator. But it was Edison himself, with a voracious appetite for knowledge, who developed a life-long process of self-education.

Entrepreneurial Ventures

At 12 years of age, Edison convinced his parents to let him sell newspapers to passengers along the Grand Trunk Railroad in Port Huron, Mich. His access to news bulletins teletyped to the station inspired the young boy to publish his own newspaper, the *Grand Trunk Herald*. This was the first in a string of entrepreneurial ventures Edison would launch as he capitalized on opportunity.

The railroad industry not only sparked Edison's interest in the telegraph (the source of many of his inventions), it gave him opportunities for employment. In 1866, Edison moved to Louisville, Ky., where he accepted a position with Western Union on



the news wire service of the Associated Press. The night shift offered opportunities for reading and experimenting, which eventually cost him his job. One night as he worked with a lead-acid battery, sulfuric acid spilled on the floor and leaked onto his boss's desk. He was fired the next morning.

From Kentucky, Edison ventured to Boston, where he came up with an idea that led to his first patent: the electric vote recorder, an upgraded form of a telegraph, which sped up the process of recording votes on bills before Congress. The patent was granted June 1, 1869, but drew no interest from Congress. From that first rejection Edison concluded that he would not create anything unless there was a market for it.

Soon Edison made his way to New York, where he was exposed to the trading floors on Wall Street. He seized the opportunity to develop the Universal Stock Ticker, which synchronized several stock tickers' transactions. He was paid a small fortune—\$40,000—for the rights to his invention by the Gold and Stock Telegraph Company. At age 22, Edison quit his job as a telegrapher and devoted himself full time to inventing.

Industrial Empire

In 1870, Edison set up a small laboratory and manufacturing facility in Newark, N.J., where he improved the telegraph machine and introduced it into England. He worked out a system of quadruplex telegraphy, which had one wire doing the work of four. Jay Gould, owner of the Atlantic and Pacific Telegraph Company, paid Edison \$30,000 for the invention, and with his finances

secure, Edison built an industrial research facility in Menlo Park. It was the first institution set up for the specific purpose of producing technological improvements and innovation.

Most of the inventions to come out of Menlo Park were chemical, mechanical or electrical in nature—but Edison was not without surprises. When he revealed to the world the phonograph, an innovation so unprecedented it appeared magical, Edison was dubbed the “Wizard of Menlo Park.” The first recording: *Mary Had a Little Lamb*, in Edison’s voice.

At Menlo Park, Edison also developed the alkaline storage battery and the motion picture camera. On April 23, 1896, Edison held the world’s first motion picture screening in New York City. His film studio would go on to make close to 1,200 films.

Edison’s favorite movie was *The Birth of a Nation*. Although the technology from Edison’s phonograph eventually led to talkies, they spoiled Edison’s movie experience. “There isn’t any good acting on the screen. They concentrate on the voice now and have forgotten how to act. I can sense it more than you because I am deaf,” he said at the time.

“ I’d put my money on the sun and solar energy. What a source of power. I hope we don’t have to wait until oil and coal run out before we tackle that.” — THOMAS EDISON

ILLUMINATING EXPERIMENTS

Forty years after a light bulb with a platinum filament had been invented, in 1880 Edison was granted a patent for the incandescent bulb, which contained long-lasting carbon filaments. Capitalizing on his idea, he set out to develop a company that would deliver power and light to cities around the world. The result was the first investor-owned electric utility, Edison Illuminating Company, which later became General Electric Corporation. On September 4, 1882, Edison’s company opened the first commercial electric power station for incandescent lighting in the United States at 255-257 Pearl Street, New York City.

Although Edison invested heavily in electricity, the forward-thinker had his sights on the sun. “I’d put my money on the sun and solar energy. What a source of power. I hope we don’t have to wait until oil and coal run out before we tackle that,” he was quoted at the time.

In the early days of electrical power, two ideas emerged: alternating versus direct current. Edison favored direct current, while his rival, Nikola Tesla, championed alternating current, which Edison considered dangerous. The two men were embroiled in a major feud over electrical power that gathered steam when Tesla entered into a partnership with Edison competitor George Westinghouse.

In the end, with Edison’s company’s profits down, he was forced out of control. In 1892, financier J.P. Morgan engineered a merger of Edison General Electric with AC competitor Thomson-Houston Electric Company that put the board of Thomson-Houston in charge of the new company, re-named General Electric.

Edison lived to see electric power in one-half of the homes in the United States. In a tribute to his contribution to the power industry, a frail Edison was at the throttle of the first electric multiple-unit train to depart Lackawanna Terminal in 1930, driving the train the first mile through the Hoboken yard. He was buried later that year behind his home in West Orange, N.J. 

— Cama McNamara



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HOW VALUABLE IS YOUR PATENT?

Strong Claims Equal Marketability **BY JACK LANDER**

Several years ago, an inventor asked my advice about an issued patent that he had been trying to license for some time without success. My first inclination always is to look at the patent drawings. These, and the abstract, if it is well written, provide a quick overview of the invention.

His invention was that of a home smoke alarm network, wirelessly interconnected. Thus, the party living on the third floor of a structure would be alerted to a fire originating on the first or second floors. Considering there are hundreds of thousands of multiple-story homes in America, my reaction was enthusiastic. Why, I wondered, had such an obviously useful, life-saving invention not been licensed by the producers of smoke alarms, several of which he had approached with his patent?

Then I read the claims section of the patent. Although the drawings clearly showed the wireless network, and the front-end writing covered the need for, and benefits of, smoke alarm interconnection, the claims *failed to mention* this essential feature. Apparently, the patent examiner had found prior art that the patent searcher had failed to discover and had rejected the claims that covered the wireless network feature.

The unfortunate part was that the inventor had no idea that his patent was so utterly deficient. Perhaps he had not understood that a claim is the main thing an inventor has to sell when a patent is issued.

Marketability

Each claim is numbered, begins with a capital letter, and ends with a period. Unlike an advertising claim, which is a boast, often exaggerated, patent claims are conservative statements covering features of an invention that are novel with respect to discovered prior art. Claims are the most important part of any patent. They're the bottom line, we might say, and are, in fact, the last section of every patent.

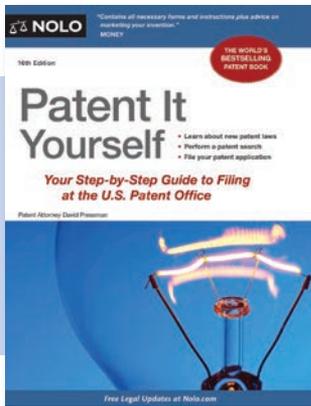


Although the entire body of the patent explains the features of an invention and argues that the features are novel, if those features are not covered by claims, and I should say *strong* claims—the inventor will most likely suffer the same fate as the smoke alarm inventor. What do I mean by strong? I don't mean how bullet-proof a patent attorney writes an application. I mean how *marketable* the claims are.

Search and Opinion

The time to challenge the value of your claims is when you receive your patentability opinion. The two main kinds of patent searches result in very different opinions. The first is a simple statement suggesting that you probably can or can't get a patent on your invention. This is the least expensive search and opinion. If your budget is limited, and you will be satisfied by the "can or can't" opinion, which does not explain why, then this search has value for you. Such searches typically cost in

CLAIMS ARE THE MOST IMPORTANT PART OF ANY PATENT.



Learn About Claims

Claims are often frustrating to read, using language that seems strange, even archaic. Run-on sentences seem to be a requirement. But they aren't in code written by aliens. With determination and effort, you can understand them. I urge you to buy a copy of *Patent It Yourself*, a well-written book by David Pressman, that explains claims in terms anyone can understand.

the range of \$99 to \$299, or more. Legal Zoom charges \$299. Having done many searches myself, and knowing the time involved in a good search, I feel very suspicious about the thoroughness of a search that costs less \$250.

The second type of search provides an analytical opinion that discusses the prior art that you are up against and why the attorney writing the opinion thinks you may or may not be able to get a patent. Such opinion can't guarantee that you will get your patent if you apply, but if the opinion suggests that you probably *won't* get your patent, it is almost certainly correct. This kind of search and opinion costs \$1,000 or more. Recently, I had two quotes, each \$1,200, for a search and opinion on one of my own inventions.

That's a lot of money, but in my opinion, worth the price. If the opinion is favorable, you'll be spending between \$5,000 and \$10,000 to prepare and file your patent application. The advantage is that if a feature in a certain patent, discussed in the opinion, competes with one of your features, you may be able to design around the competing feature.

A second advantage is that the reasoning in the opinion can be used in the patent application. Thus, some of its cost comes back to you in the form of savings in the cost of your application.

The third advantage is that if the opinion expresses high confidence about the probabilities of obtaining a patent, you'll feel better about pursuing it. If in doubt, discuss this point with your patent attorney. On a scale of one to 10, you may want to rethink your quest if your attorney rates your chances at five or lower.

Market Value

Although we can't accurately judge how strong a claim is written, we *can* assume that an attorney will write the claims to be as strong as possible. What we're after here is their market value.

Your patent attorney is not a marketing expert and may resist giving his opinion. So, it's up to the inventor to assess the market value of the feature a claim protects, not the claim itself.

An unbiased survey often works best. To get the most objective feedback possible, leave out friends and relatives. Strangers will provide the most useful information. You must word your

questions carefully. Avoid giving the impression that you will try to sell something if the participant likes your product. (It's a product now, not an invention.) And if you are conducting the survey, never disclose that you are the inventor. Pretend that you are an independent surveyor and could care less about how your product is rated, as long as it is an honest opinion.

One of the better ways of assuring that you'll have valid feedback is to use Survey Monkey®: www.surveymonkey.com. This service lets you pick your audience by age, gender, education, and political affiliation, etc., and the cost is not prohibitive. If you plan to spend \$1,200 on a patent search, logically, you are a candidate for a few hundred dollars of objective survey data that you can use to advantage in your sell-sheet. Potential licensees will be impressed with independent data.

If you can afford the \$1,200 opinion, select your patent attorney or patent agent carefully and have him handle the search. This assures that the delegated searcher does a good job. Stay away from "patent services" operations. You have no way of knowing whether these fellows are sharks or dolphins. Be wary of companies that offer to search and write a patent in a few hours—or don't provide an attorney who also holds a degree in your patent's field

Degree of Success

All patent attorneys must have a degree in a technical discipline, such as mechanical or electrical engineering, or chemistry. If in doubt, the mechanical engineer/attorney is usually capable of writing most patents. However, if your invention is complex and involves electronics, an electronics engineer/attorney is the better choice. ☛

Jack Lander, a near legend in the inventing community, explores the gap between inventor and entrepreneur. 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.





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HOLE IN ONE

Two Inventors Solve Challenges on the Links **BY EDITH G. TOLCHIN**

In addition to her role as a judge at the January 2015 United Inventors Association's Inventors' Spotlight Pavilion at the PGA Merchandise Show in Orlando, Fla., *Inventors Digest* contributor Edith G. Tolchin interviewed several exhibitors. Following is a look at two companies in various stages of product development and marketing. John Keeter, an IT professional, tennis teaching pro and inventor of MagneKlip™ Towel Keeper is trying to find a licensing partner, while golfer Mike Jones has 40 PGA players and 200 universities training with his invention, Tour View Golf®, winner of the UIA's 2015 Most Innovative Concept award.

(Responses have been edited for clarity.)



Mike Jones and his daughter, Kurstin, gear up for a round of golf with the aid of Tour View.

Mike Jones, Owner/Inventor, Tour View Golf®, LLC

Inventors Digest: Tell us about the Tour View Golf products and how they came about.

Mike Jones: Tour View Head and Body Stabilizer gives the player instant feedback during the swing of any micro movement. Tour View clips on the brim of a hat. By looking through the device's circles at the ball, a phenomenon called "stereo vision" is created. The player is now viewing the ball with a single containment circle around it. As the player swings, any movement (of the body) is indicated by the circle moving around the ball. The circle can be adjusted in size from 12 inches to three feet, depending on the ability of the player.

The unit is lightweight, portable and can be used to train anywhere. It is useful for every shot, from chipping and putting to driving, and for every player, from a beginner to a tour pro, but it can't be used in competition. The device can also be used to adjust improper spine angle.



Tour View's second unit is for eye alignment, which is critical because the club's path is determined by where your true eye line is pointing. A right-handed player has the right shoulder lower than the left, so what the player perceives as being straight will tend to be slightly to the right. A string line in the middle of Tour View Alignment perfectly lines up putting shots, while an alignment rod aids on the fairway. Both Tour View products are made from polycarbonate material and are very durable.

ID: Do these products solve a problem?

MJ: Throughout my lifetime as a player and instructor, I have witnessed instructors holding their students' heads stable with their hands. Recent articles show top instructors continue to use this technique. Tiger Woods' former coach, Sean Foley, taught Tiger's caddy to place a club against Tiger's head during practice to help maintain a steady head. He will never have to use that technique again.

ID: Please tell us about your background.

MJ: My passion for golf began at a very young age. My mom, Betty, dad, Gene, and two uncles, Bob and Jimmy, were all golf pros and operated several golf courses and driving ranges.

At 12 years old, I won the Florida State Junior Championship and went to California for the nationals, finishing 15th. When I was 15, I won the International Pee-Wee at Cypress Creek Golf Club in Orlando, breaking the club pro, Lenny Watkins', record by one shot. I later became the youngest player to make the cut at the Southern Amateur at Bayhill Country Club.

In 2009 after being absent from golf for many years, I attempted to make it on the Champions Tour. This is when I came up with the idea for Tour View. When I took a swing, I could not feel movement, but on video playback, movement was obvious. It was very

frustrating. My wife, Teri, my daughter, Kurstin, and I began working on Tour View, including all production machinery and packaging. After the discovery of Tour View in 2010, the dream of the tour faded and the dream of helping revolutionize golf was born.

ID: How many prototypes did you have?

MJ: Tour View had over 20 prototypes, the first one starting with a piece of angle iron and two washers.

ID: Do you have a patent on the product?

MJ: The patent is pending. I didn't show my product to anyone until I filed for my patent. And now that the America Invents Act is law, which includes "first inventor to file," I would urge all inventors to beware.

ID: How are you producing your invention? Your packaging?

MJ: My family is currently manufacturing Tour View in Orlando, Fla. The production of this unique device has been quite a challenge. Once the unit is cut out on a CNC machine, the bending process to create a clip for mounting demanded an invention of its own. We call it a "bending table." Precision is required in this early stage of development to ensure that once the clip is attached to the hat it will not move from its setting during the force that is created during the swing. The sliding or telescoping ability of the clip is important to personalize the unit for each player. The adjustment to meet all pupillary distances was somewhat of a challenge within itself.

The next step is the vinyl sticker attached for the containment circle. Not only did the size of the circle have to be machined, but the proper material had to be researched. Heat stamping our trademark on the polycarbonate unit requires not only the knowledge of foils but in-depth knowledge of the temperature that releases

it to this polycarbonate material. The stainless steel hardware that attaches the left to the right side has an added component that bonds the locking mechanism forever.

The final stage of production requires forming a receiver for the unit into a blister. The cardboard that contains the instructions and pictures was previously impregnated with glue that is released to the blister when heated. There are several other small processes that are included in the production of Tour View.

ID: Can you share with readers any obstacles in developing this product?

MJ: The first step of the production of TourView is manufacturing with a CNC router. From that point, everything is handmade. The tooling to continue the production had to be modified multiple times. Every step of production had to be studied before apparatuses could be designed.

ID: Is this the first time demonstrating your product?

MJ: Yes, although we just finished a casting call in Miami for *Shark Tank*.

Editor's Note: Tour View is in its second casting call for Shark Tank.

ID: What were you hoping to achieve in exhibiting here?

MJ: Coaches and instructors often called to ask if I was going to display in the PGA show. I wanted to meet many of these people, and finally be able to demonstrate my two training aids in person.

ID: Tell us about the award you received.

MJ: The award, for the Most Innovative Concept, was presented by the United Inventors Association of America. It is our hope and dream that the world will understand and perceive this innovative device as the UIA has.

ID: What are your long-range plans for the product?

MJ: We, at Tour View, believe that instructors, pro shops, sporting goods stores, universities, colleges, high schools with golf teams, training academies and golf courses around the world will benefit from using these innovative tools. To truly enjoy golf to the fullest you want to hit the ball solidly, consistently, and this is a proven effect of training with these products. We have not made a decision to license the product and are currently selling through our website. 📧

For information, visit www.tourviewgolf.com.



**John Keeter, Owner/Inventor,
MagneKlip™ Towel Keeper**

Inventors Digest: Please tell our readers about the MagneKlip Towel Keeper and how it came about.

John Keeter: The idea came while playing tennis and golf and the need for a better way to manage towel access during play. The product consists of two components—the MagneKlip and the MagneKlip Towel. The MagneKlip easily and comfortably attaches to your belt, pants, or skirt waistband. The MagneKlip Towel is a custom towel designed to detach and reattach quickly and easily without hassle or worry.

ID: Does the MagneKlip system solve a problem?

JK: Yes, the lay-flat design, with easy detach and reattach functionality makes having a towel to keep hands or equipment dry during work or play very convenient and unobtrusive. Unlike other solutions, the MagneKlip can be used with or without a belt or belt loops, and easily clips to a skirt or strap. It is also functional off the body, as the MagneKlip allows the wearer to hang or clip a towel to any metal object, such as a car, fence, or locker.

ID: How many prototypes did you have?

JK: I had at least four: a duct-tape version; a polypropylene and carpet-tape version; and two ballistic-nylon versions. My son, David, helped me develop the idea. He was a waiter and came home with a nametag that attached to his shirt with strong magnets. Amazed with the power, ... after searching the local hobby shop, I soon had a working prototype.

ID: How are you producing MagneKlip?

JK: The product is manufactured in China. We found the manufacturer by cold-calling websites making similar components and asking for advice, which eventually led us to friends who had Chinese connections. Dealing with the manufacturer has been tough because I am a small fish and have a small order. I also had communication challenges.

ID: How long was the process from product inception to market?

JK: About two-and-a-half years to get the product manufactured. I should receive the first shipment by the end of June.

ID: Can you share with readers any obstacles you had to overcome in developing this product?

JK: There have been numerous obstacles. The first is having a full-time job and a family while trying to research, develop, network, test, prototype, promote and more. There is no simple way to get your product to market. It's a one in a million break, if you find it. There is so much working against you. The path is full of fear, for you never know whom you can trust.

ID: Do you have a patent on the product?

JK: I have submitted and received a provisional patent from the USPTO, so my patent is pending.

ID: How have you financed your idea?

JK: I have invested my own money, but I'm at the point I need an investor or licensing partner.

ID: What is the anticipated retail price for both the MagneKlip and the MagneKlip Towel Set?

JK: \$19.99 retail for one clip and one towel; a three-towel set (not including the MagneKlip™ system) will be \$14.99.

ID: What did you hope to achieve in exhibiting here?

JK: I was hoping to come away with the following: affirmation that folks liked or would buy the product, possible licensing connections and contacts that might help me in other markets besides golf.

ID: Were you satisfied with the results of the show?

JK: Yes and no. Yes, because I received a lot of valuable feedback and made contacts; no, because I felt like a lamb surrounded by wolves. From China to Germany and locally, people wanted "samples" to take back to see if others were interested. I had



The MagneKlip Towel is a custom towel designed to detach and reattach quickly and easily.

hoped the UIA would have been a little more involved or helpful (concerning what to look out for)...

ID: How are you marketing MagneKlip?

JK: I've created a web and ecommerce site and use social media. I am also sending samples to key players in hopes they will help: distributors, professional athletes and marketing professionals.

ID: What are your long-range plans for the product?

JK: I believe my product can go far with the right marketing and financial backing. I would love for someone to buy or license it. I intend to see MagneKlip in retail markets some day. ☺

For information, visit www.magneclip.com.

Author **Edie Tolchin** focuses her work on the process of inventing. She is also the owner of EGT Global Trading, through which, for over 25 years, she has helped hundreds of inventors bring their products to market. Contact Edie at egt@edietolchin.com.





Brenda Brundage and her daughter Stephanie at a run sponsored by Disney.

The Idea Has Legs

The RooSport story began in 2005, when Brundage's running partner's son, an elite runner and triathlete, asked her to make a pocket he could pin on his running shorts. After a successful test at a triathlon, Brundage decided to sew one onto her own running skirt. "I just thought, *How can I make something that would be useful to carry things?* Women's athletic wear only has a little tiny key pocket and that's it," recalls Brundage. She found the pocket perfect for storing keys, money and credit cards, and the idea began to gel.

Brundage's vision was to create a universal pocket that would fit any brand of shorts or running gear. After limited success with Velcro, Brundage experimented with magnets, which were key in getting the pocket to cling to various waistbands. "The first prototype had four magnets and it took two people to get it on to keep the magnets from sticking together," she says, "but it worked."

To Market

Brundage knew that she had a great idea, but she also realized she had much to learn to get her company off the ground. She attended SBA seminars, where she learned how to develop a business plan, access funding and locate overseas manufacturers. She then abandoned her career making drapes and pillows for local designers and took a job at the local hospital as a housekeeper to pay for patenting and developing her idea.

"The first thing I did was read *Patent It Yourself, Your Step-By-Step Guide to Filing at the U.S. Patent Office*, by David Pressman, which really helped," says Brundage. "After reading the book I realized I needed a patent attorney, but I also was knowledgeable about the process and understood what questions to ask."

The original patent, filed in 2010, cost \$7,000, augmented over the years by an additional \$5,000, as Brundage defined the concept and narrowed her claims. Today, the patent is pending.

The next step was finding a cut-and-sew manufacturer, which she did through a friend with contacts in China. Brundage says she found manufacturing to be the most frustrating part of starting the business. She was never able to communicate directly with the factory representatives, instead going through a Chinese middleman to direct prototypes and make product improvements. It often took an anxious two months to receive revised samples. Finally, after two years of shipping prototypes back and forth and late night Skype calls, the first order was placed. By 2012, Brundage was in business.

FROM START TO FINISH

Brenda Brundage Goes The Distance With RooSport

BY JEREMY LOSAW

Talk about going the extra mile. When I caught up with inventor Brenda Brundage this past April, she had just completed the Boston Marathon. Her time—five hours, 43 minutes—wasn't her fastest, but Brundage approaches running the same way she runs her business: one mile(stone) at a time.

Brundage's passion for running led to the creation of RooSport, a low-profile, lightweight, water-resistant pouch to hold valuables while running. The patented technology is more comfortable than a fanny pack and more functional than the tiny pockets in running shorts.

With help from her husband, Earl, and four daughters, Nicole, Stephanie, Melissa and Heather, Brundage has taken the product from an idea generated at her kitchen table to marathoners across the country, with great success.



“The best thing about taking RooSport directly to consumers was that we could hear what they thought about it.”

BRENDA BRUNDAGE



Building Sales

RooSport was originally sold on the company website, accompanied by a social media blitz—both with disappointing results. Advertisements in *Runner’s World* didn’t increase sales much, either. “Even on our website it’s hard for people to understand how the product actually works,” says Brundage, “so we decided to take RooSport directly to our core customers.”

A booth at a local half marathon produced 60 sales. “I was so nervous two or three days before the event,” she discloses, “thinking they wouldn’t sell.” But with renewed vigor from her success, Brundage began booking bigger running events and sales increased each month.

Enthusiasm for RooSport continued to build as Brenda and Earl traveled the country each weekend selling the pouches at running events. “The best thing about taking RooSport directly to consumers was that we could hear what they thought about it,” Brundage says. “We continued to improve the product based on customer feedback.”

A year after the product launch, sales were strong enough and the schedule so demanding that Brundage quit her job at the hospital to build the business full time. “It was a great way to leave,” she says.

However, there were challenges ahead. An order from the factory came back defective. “They cheapened the fabric and the zippers, and it was not up to our quality standards, so we had to switch factories,” says Brundage. After moving production to a second overseas manufacturer, Brundage decided to bring the operations back to the States. “The cost per unit is only one dollar more,” she says, “and we have more control over the quality.”

Shipping isn’t an issue anymore, either. It took eight to nine weeks to receive a shipment from China, and if Brundage needed a shipment quickly, it had to be flown in. The manufacturing facility in Pennsylvania gets orders to Utah in a week to 10 days.

With manufacturing under control, the Brundages could devote their time and energy to sales. Not only did sales increase steadily, from \$150,000 the first year to \$600,000 the second, but

Runner’s World named RooSport one of the top products of 2013 and 2014.

Over time, the couple discovered that customers were using the product in surprising ways—for carrying personal items through airports or around amusement parks. They also wanted larger pouches in a variety of colors to carry cell phones and passports.

Brundage listened and went to work on the RooSport 2.0, increasing the pouch size and adding a second pocket and five new colors. RooSport 2.0 was launched on Kickstarter in the summer of 2014 and, with a goal of \$20,000, was successfully funded with pledges of \$115,111. “It is one of only 1,700 projects to earn more than \$100,000,” she says.

The Finish Line

Today, the Brundages run RooSport with their four daughters, traveling the country each weekend to running events. Often, they are in different cities, depending on how many events take place.

Does she get tired of the travel? “If I were working for someone else, I probably would,” she admits. “But because it’s my business, I love it.”

Not one to rest on her laurels, Brundage continues to expand RooSport’s product line and plan for the future—and fulfilling one of the company’s loftiest goals is about to happen: The Brundages are in the process of completing packaging and launching retail sales this month. Success has been 10 years in the making, but Brundage is about to cross the finish line. 🏁

For information, visit www.theRooSport.com.

Jeremy Losaw is a freelance writer and engineering manager for Enventys. He was the 1994 Searles Middle School Geography Bee Champion. He blogs at blog.edisonnation.com/category/prototyping/.



Dr. Gary Michelson
enjoys spending time
with his pets.



DR. GARY MICHELSON

21st Century Renaissance Man **BY CAMA MCNAMARA**

Dr. Gary Michelson, retired orthopedic surgeon, inventor and philanthropist, has used his intellect, insight, energy and compassion to make the world a better place to live. A prolific innovator of new surgical techniques, instruments and implants that advanced spinal and orthopedic surgeries, today Michelson oversees foundations, charitable organizations and research endeavors he is passionate about, funded by the great fortune he has earned from his inventions.

Michelson holds 337 U.S. patents and 950 patents issued worldwide, with additional patents pending. Most have made spinal surgery safer, faster and more effective. For his achievements, in 2011, he was inducted into the National Inventors Hall of Fame. In 2013, he was inducted into the National Academy of Inventors, making him one of five people to be inducted into both organizations.

Michelson landed on The Forbes 400 List of the Richest Americans in 2005, when he reached a \$1.35 billion settlement with Medtronic, Inc. after years of patent litigation.

In 2005, after 25 years as an orthopedic surgeon cum inventor, Michelson turned his attention to philanthropic endowments in medical research, bioscience, technology, education and animal welfare. Michelson funds and directs the foundations he felt compelled to create. “I get a good feeling from doing good things in the world,” he says.

The Inventor Emerges

Michelson and his three brothers were reared by his mother and grandmother. As a child, the inquisitive Michelson had a penchant for taking things apart to see how they worked. “I remember walking down the driveway, when I was 7 or 8, and

noticing what looked like a perfectly good record player on the street by the trash can,” he says. “I took it in the house and plugged it in, but it didn’t work, so I used a screwdriver to open it up. There was one part that wasn’t working, so I replaced it and I had a record player.”

On another occasion, he and his brother received watches bought in Switzerland from an aunt. Michelson immediately took his apart to see what was inside. “My brother, who is 16 months older than me, years later told me that he never would have done that,” Michelson says, “because he would have been afraid he couldn’t put it back together. That didn’t stop me.

“Inventors need to know they can’t be afraid of failing or they won’t venture out to do whatever it is they need to do. If you’re not willing to extend yourself beyond where you know you can actually succeed, then you’ll never know how far

you can reach,” he continues. “You have to give yourself permission to take it apart in the first place.

“I’ve observed over and over again, a room full of engineers from some of the largest companies in the world, answering a question with ‘You can’t do that,’” he says. “The idea ‘you can’t do that’ is damning. You try, you fail, but you learn from the experience.

Spinal Surgeries Lead to Discoveries

Encouraged by his grandmother, who suffered from a spinal deformity, to become an orthopedic surgeon, at age 17 Michelson became a freshman at Temple University. Working his way through Temple and Hahneman Medical College (now Drexel University College of Medicine), Michelson completed his residency in orthopedic surgery at Hahneman University Hospital. During a subsequent fellowship at St. Luke’s Medical Center in Houston, his proclivity for inventing resurfaced.

“I was training with a master spinal surgeon, and during a surgery, we encountered problems. When I asked what we were going to do about it, he replied, ‘Nothing. No one knows how.’ Later, I figured out how to do the procedure safely and effectively,” he says, further fueling Michelson’s fascination with problem solving.

From that day forward, Michelson spent countless hours developing better surgical instruments, procedures and implants to enable spinal surgeons to successfully treat a greater proportion of spinal ailments. He received his first patent in 1986

on the Lumbar Spondylophyte Impaction Set, which is routinely used in spinal surgeries today.

“Many of the things I invented for spinal surgery have to do with causing less disruption and achieving better results. They use minimal incisions and are less invasive, which makes surgery easier on the patient,” he explains. Michelson’s inventions, known collectively as the Michelson Devices, have improved the lives of millions of people with spinal ailments.

Innovative Philanthropy

Michelson carried his passion for improving the lives of his patients into overseeing his philanthropic endeavors: three foundations—the Gary Michelson Medical Research Foundation, the Found Animals Foundation, and the most recent, the Twenty Million Minds Foundation. He also provides funding for other institutions, including the Michelson Fund for NTDs Global Awareness and the Michelson Neglected Disease Vaccine Initiative, which are programs of the Sabin Vaccine Institute.

Cutting-Edge Research

Michelson’s involvement in medicine led to the creation of the Michelson Medical Research Foundation, which encourages medical researchers and practitioners to break new ground and improve existing treatments. Michelson has donated more than \$100 million to fund this forward-thinking medical research.

“The National Institutes of Health, historically, has not funded cutting-edge research,” says Michelson. The MMRF bridges that gap, funding what Michelson refers to as the “next frontier” in medicine.

Part of that initiative includes the Michelson Fund for NTDs Global Awareness and the Michelson Neglected Disease Vaccine Initiative, both of which are dedicated to promoting awareness of and eradicating neglected tropical diseases, which afflict 1.7 billion people worldwide. “These are the poorest people on Earth,” says Michelson, “living on the razor’s edge of starvation. Most are women and children. These diseases are the leading cause of



retardation in children who are born with normal brains; they are also one of the leading causes of maternal death at childbirth. To their credit, large drug companies have agreed to donate two billion doses of oral medicine, which costs 50 cents per dose, per year. Yet, the issue is that the developed world has not seen fit to mobilize the resources to deal with this problem.”

For the Love of Animals

Michelson’s love of cats and dogs (he has three dogs: Germ, Honey and Gracie, plus Stella the hamster) led to the development of the Found Animals Foundation, which aims “to reduce the number of euthanized animals by supporting adoption, microchip identification and making sterilization more affordable.”

Michelson created Adopt & Shop through the Found Animals Foundation. Dogs are picked up from a municipal animal shelter and taken to a “shop,” where they are groomed and trained, if necessary. Potential owners can come in and find a pet that suits their needs. The

As a child Dr. Gary Michelson enjoyed taking things apart to see how they worked, regardless of whether he could put them back together. “If you’re not willing to extend yourself beyond where you know you can actually succeed, then you’ll never know how far you can reach,” he says. “You have to give yourself permission to take it apart in the first place.”

\$25-million Michelson Prize was created in conjunction with the FAF to encourage scientists to develop a nonsurgical procedure to sterilize cats and dogs. The prize is backed by \$50 million in grants to fund the research, which is ongoing. To date, more than 20 different research projects have been funded.

Interactive Textbooks Encourage Success

When Michelson found out that the cost of textbooks in California community colleges exceeded the cost of tuition, he launched Twenty Million Minds. “Students could get grants for classes, which were paid directly to the college, but not for books,” Michelson says, “so many didn’t graduate. The book fees were too high.”

While the goal of 20MM is to increase educational access and foster academic success, Michelson didn't stop there. The foundation was instrumental in creating interactive textbooks that can be downloaded or accessed on a mobile device, iPad or computer, at no charge.

"The material in subjects such as French, calculus and chemistry has been the same for many years," Michelson notes. "We hired the same companies that produce most college textbooks to help us create these interactive versions. Students can read, answer questions and be tested. If they fail, students are directed to enriched content." It might be in the form of a YouTube video, original demonstration or lecture.

"The goal is for every student to be able to master the material. It's geared for

most were started by people in college or within that demographic," Michelson says. "These companies have been created around inventions and writing, which is copyright protected, but the company owners know little or nothing about intellectual property. IP isn't taught in high school, nor is it taught at the undergraduate level at any university in the country." This book and course will change that.

The virtual textbook was co-edited by Dave Kappos, former director of the U.S. Patent and Trademark Office, and former Chief Judge of the United States Court of Appeals for the Federal Circuit Paul Michel, who often presided over IP cases.

"In what has become a rapidly changing view of the law, the text and course will never be out of date. The content can be changed instantaneously," says Michel-

son, "depending on what is going on in Congress or within the Supreme Court concerning IP. We can also incorporate controversial material and analyze how issues are resolved."

companies in the medical device field. "I think that patent law has been relatively stable for a long period of time," he relates, "but I think the world is changing at an ever-increasing rate. That has required patent law to become much more dynamic. I think it began with the America Invents Act, and to Congress' credit, it had both Republican and Democratic support. I think that was the first tectonic change.

"Take a look at devices like iPhones, which might contain 100 inventions. It becomes almost impossible for one company to own all the intellectual property that goes into such a complex device.

"So, you have companies buying vast portfolios of patents, paying billions of dollars for them, and they don't even know what they're acquiring. They're just hoping they have something they can trade or

"While the original language in the Constitution says 'right to exclude all others,' I believe that patent law in this country will evolve so that if the inventor doesn't make use of his invention, others can." — DR. GARY MICHELSON

success, not failure," Michelson says. The current library of 25 books covers approximately 50 percent of the course material presented in the first two years of community college.

The ironic outcome of the project was that the community colleges the books were designed for weren't interested, because the material infringed on the "intellectual freedom" of the professors, who wanted to choose their own teaching material, regardless of how it affected students. 20MM currently works in conjunction with community colleges in New York, California and Texas.

Michelson's latest endeavor, a textbook titled *Intellectual Property*, has the intense interest of some of the top schools in the nation: Wharton School of Business, Stanford, MIT and Berkeley, to name a few. Michelson calls it a "course in a box," because the virtual book includes text, test and teaching materials.

"If you look at start-ups over the past 30 years or so, the Facebooks, Googles and Apples of the world, you recognize that

Patent Pending

In addition to involvement with his foundations, Michelson is a member of the Intellectual Property Owners Education Foundation Board of Directors. As an independent inventor and businessman, who spent years in court defending his patents, Michelson has a unique perspective on the U.S. patent system. He not only dealt with the U.S. Patent and Trademark Office in securing his patents, Michelson came face-to-face with the Federal Court and the U.S. Court of Appeals on the Federal Circuit during litigation with Medtronic, which he refers to as the 'David and Goliath' of patent litigation cases. He also has vast business experience, having created immensely successful start-ups, as well as having licensed patent agreements to the largest

use to stand off an assault by someone who owns one of the patents.

"I think the law seems to be changing, particularly in regard to injunctive relief (the ability of someone to stop an infringer from making use of an infringed invention). If the infringed invention constitutes one percent of the value of a device," he says, "it seems unreasonable to enjoin the entire device. Going forward, perhaps the most reasonable remedy will be a reasonable royalty."

Michelson also believes that a compulsory license and reasonable royalties should be taken into consideration when the owner of a patent isn't using it. "While the original language in the Constitution says 'right to exclude all others,' I believe that patent law in this country will evolve so that if the inventor doesn't make use of his invention, others can.

"I don't believe that if the government gives you an exclusive license that you should be able to deprive society of your invention until the patent expires. That is not a proper social bargain." 📌

The Shape of Things to Come

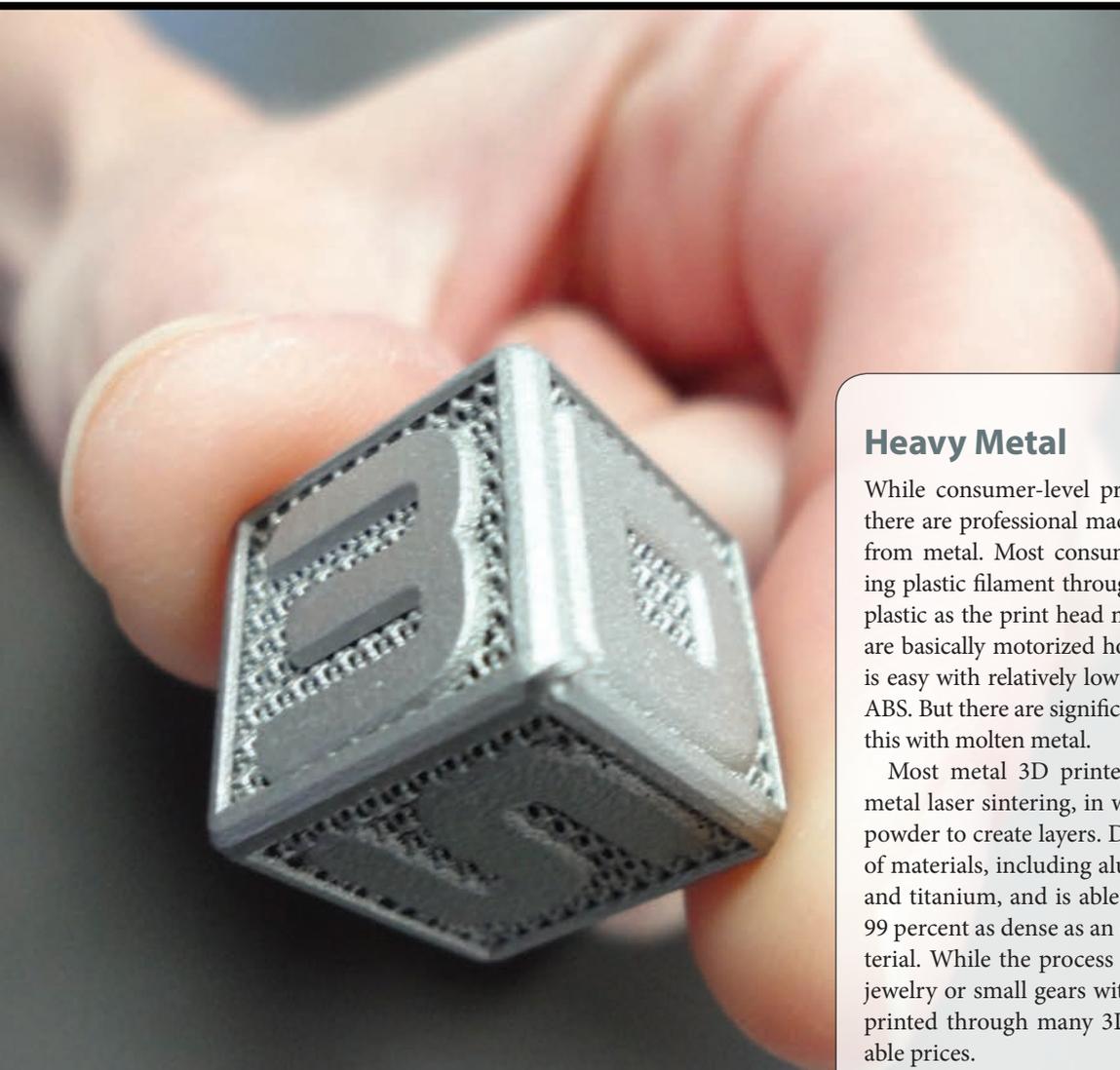
3D PRINTERS
PRODUCE
SURPRISING
RESULTS

BY JEREMY LOSAW

THE WORLD OF 3D PRINTING IS EVER EVOLVING, and inventors have come to rely on their exciting technologies for successful product development campaigns. 3D printers are well suited for creating plastic consumer-product prototype parts, but there are a plethora of other applications and materials that are lesser known.

Although some require high-end machines and professional-grade equipment, unique applications can be made with a commercial-grade printer or ordered through a printing service. Here are a few things you can do with a 3D printer that might surprise you.

PHOTOS COURTESY OF 3DSYSTEMS.COM
UNLESS OTHERWISE NOTED.



Heavy Metal

While consumer-level printers primarily print plastics, there are professional machines that can make 3D prints from metal. Most consumer 3D printers work by driving plastic filament through a heated head that melts the plastic as the print head moves to form the object. These are basically motorized hot glue guns, and the technique is easy with relatively low-melt temperatures of PLA and ABS. But there are significant technology hurdles to doing this with molten metal.

Most metal 3D printers use a process called direct metal laser sintering, in which a laser melts a fine metal powder to create layers. DMLS is available with a variety of materials, including aluminum, bronze, stainless steel and titanium, and is able to produce parts that are over 99 percent as dense as an equivalent volume of billet material. While the process can be pricey, small parts, like jewelry or small gears with low material volume, can be printed through many 3D printing services for reasonable prices.



PHOTO COURTESY OF MONAD STUDIO, ERIC GOLDBERG + VERONICA ZALCBERG, WWW.MONADSTUDIO.COM, IN COLLABORATION WITH MUSICIAN/LUTHIER SCOTT F. HALL

Musical Instruments

Playing music is an artful endeavor, but creating the instruments to make great music is an art form all to itself. Stradivarius' handcrafted violins are treasured for their rich sound quality, and Les Paul guitars are coveted by top-notch rockers such as Paul McCartney and Jimmy Page.

However, 3D-printed instruments are breaking onto the scene and may slowly start to challenge the old masters. Instrument designers have created an array of 3D-printed guitars, recorders, ukuleles and even trombones. The technology allows instruments to be formed into shapes that were not possible with standard materials and building practices, and also provides infinite tuning of sound quality. Some components, such

as guitar strings and valve springs, are added after printing.

While 3D-printed instruments have yet to make inroads onto the tour buses of major touring acts, a band in Sweden at Lund University's Malmö Academy of Music, in 2014, played the first rock concert with all 3D-printed instruments, including drums, keyboard and two guitars.

Design houses have also started putting new spins on established instrument design. The MONAD Studio in Miami created a piezoelectric violin (*shown above*) that looks like the offspring of a shark and a fighter jet. It was displayed at the 2015 3D Print Design Show.

Print Yourself

Printing products and parts is neat, but it is also possible to create personalized prints of your friends, family and even yourself. One of the coolest ways to do this is the 3DMe service from Cubify.com, which allows you to put your face on a number of different bodies. Whether you're into sports, Ghostbusters, Star Trek or even weddings (as in brides and grooms), you can find a character that represents your alter ego. All you do is upload a photo of a face, choose the body, and the company prints the model for you.





Edible Art

If you thought your stomach was the one place that 3D printing could not possibly feed, you were wrong. Scientists and engineers have figured out ways to use 3D-printing technology to print food.

One of the first foods to be 3D printed was sugar. Sugar printers lay down a flat layer of granulated sugar and then use the print head to selectively heat areas that are meant to be solid. Some sugar printers can even lay down food coloring at the same time to create full color prints. When the print is done, the un-solidified sugar is wiped away leaving the solid sugar shape. Evil Mad Scientist Laboratories came up with a DIY sugar printer, CandyFab, which got a lot of press but never made it to market. However, 3D Systems is releasing the ChefJet printer, which will print sugar and candy in a variety of flavors, in full color, later this year.

It is possible to 3D print savory foods as well. Any ingredient that can be made into a paste, powder or oil can be laid down by a 3D printer to make an edible dish. Pizza, hamburgers, cookies and pretzels are just some of the 3D-printed foods that have been making the news.

One of the most interesting food printers is the Natural Machines Foodini, which is made in Spain. It comes with empty capsules that can be filled with fresh ingredients of the user's choice, so it is not limited to specific food cartridges, only the user's imagination. Look for it later this year.

3D-printed chocolate sugar cake topper.



Full color sugar 3D printing with ChefJet™.



Natural Machines Foodini salad inspired by Aalto vase.



Natural Machines Foodini spaghetti.

Camera Gear

Almost any hobby that requires equipment can be enhanced with 3D printing. Photography is very gear centric, and there are plenty of ways to add to your photographic capabilities. With the popularity of DSLR video on the rise, there are many 3D-printed parts to aid in the task. Microphone stands, panning dollies and even shoulder rigs can be built from a mixture of 3D-printed and aluminum parts.

A favorite camera accessory to print is a bokeh filter. Bokeh is the intentionally out-of-focus background of photos with a narrow depth of field. Normally the shape of the bokeh is circular or slightly polygonal, due to the shape that the aperture blades make when they come together. However, the shape of the bokeh can be changed by adding a filter to the front of the lens, which creates cool effects, such as this picture of a string of Christmas lights (shown right). It was taken through a heart-shaped bokeh filter made with a Cube 2 printer.



PHOTOS BY JEREMY LOSAW



Medical Devices and Implants

Dentists have been using 3D technology for years to make retainers and other orthodontia, but the applications of 3D printing for medical use are growing each week as doctors discover new ways to apply the technology. Implantable devices that make complicated surgeries easier is one such application.

Recently, doctors in China conducted a vertebrae replacement surgery with 3D-printed titanium parts. The patient's damaged vertebrae were scanned and the doctors were able to design a custom replacement that matched perfectly with the undamaged spinal parts. There are also numerous applications for wearable 3D-printed medical devices, such as custom scoliosis braces (shown left) and wrist guards. 📦



Patent Reform 101:

A PRIMER ON PENDING PATENT LEGISLATION

BY GENE QUINN

It wasn't so long ago that President Obama signed the America Invents Act into law. Most watchers will tell you that the AIA represented the most substantive change to U.S. patent laws since 1952, but its impact was far greater. With a single exception, the 1952 Patent Act codified existing case law into a coherent and mandatory set of laws. The AIA threw out one patent regime and substituted it with an entirely new system. Regardless of how you choose to characterize the magnitude of the AIA, many in the industry thought that patent reform efforts would go on hiatus for another generation or two, as it had done between 1952 and 2011.

Behind the scenes, further patent reform efforts were already underway, even as the ink on the AIA was still wet. Patent reform is the new normal, and we can expect that it will continually be raised in every new Congress for the foreseeable future. Efforts to reform the patent system were stalled in the 113th Congress largely

thanks to two decisions from the United States Supreme Court that made it easier for district court judges to award attorneys fees in appropriate circumstances, a new tool that judges have availed themselves of generously, nearly quadrupling the number of attorneys fees awards in the year after those seminal decisions.

Immediately after Republicans regained control of Congress in the 2014 mid-term elections, leaders in both the House of Representatives and the Senate vowed to take up patent reform early in the 114th Congress. They were true to their word, although producing the quick results they wanted has proven difficult given the strong push to curb the appetite for reform and to allow the system some time to settle.

Currently, there are four serious proposals for patent reform in various stages of consideration in Congress. They are: (1) The Innovation Act; (2) The TROL Act; (3) the STRONG Patents Act; and (4) the PATENT Act. There is also another bill—

the Innovation Protection Act—that likely has no chance of passing but which is eminently reasonable. A summary of each of these five bills follows.

Innovation Act

On February 5, 2015, House Judiciary Committee Chairman Rep. Bob Goodlatte (R-VA) bypassed the IP Subcommittee and reintroduced the Innovation Act, which passed in the House during the 113th Congress but then failed in the Senate. The Innovation Act includes fee-shifting provisions, which provide that the loser of patent infringement litigation would have to pay the attorneys fees of the winner unless the loser's positions are found to have been objectively reasonable. Fee-shifting provisions have been a major stumbling block for the Innovation Act. There also remains an open question about whether fee-shifting is necessary given recent Supreme Court rulings giving district courts broader discretion to award attorneys fees, and the reality that a large majority of defendants simply choose to settle rather than fight patent infringement lawsuits to a conclusion, which would be required to obtain fees.

The Innovation Act also contains provisions that would heighten pleading standards on patent plaintiffs beyond what is necessary to institute a patent infringement lawsuit. The Innovation Act also includes the "customer-stay provision," which seeks to shield customers from patent litigation lawsuits more appropriately brought against the manufacturer of the allegedly infringing product. The customer-stay provision has become another major stumbling block. The Innovation Act defines the term "covered customer" as "a party accused of infringing a patent or patents in dispute based on a covered product or process." The term "covered product or process" is defined as "a product, process, system, service, component, material, or apparatus, or relevant part thereof, that: (A) is alleged to infringe... or (B) implements a process alleged to..." Thus, it would be possible for large tech companies to stay patent litigation and force patent owners to seek redress from the manufacturers of infringing components or products.

Patent reform is the new normal, and we can expect that it will continually be raised in every new Congress for the foreseeable future.

Rep. Bob Goodlatte may have a hearing or markup with respect to the Innovation Act at some point, although rumors of an impending markup have leaked previously and ultimately proved to be incorrect. There are some who are starting to suspect that the Innovation Act has become too controversial. There are even whispers that the Innovation Act may not be able to make it out of the House Judiciary Committee, which would explain why the much anticipated markup has yet to happen. Obviously, there has been a strong headwind against the bill or it would have been voted out well before this. Still, it would be shocking if the Innovation Act does not make it out of Committee given that the same bill passed by a vote of 325-91 in December 2013.

TROL Act

The Targeting Rogue and Opaque Letters Act, more commonly referred to as the TROL Act, was introduced during the 113th Congress and passed the House Commerce Subcommittee with bipartisan support. The TROL Act addresses the sending of bad faith patent demand letters, clarifying that such activity may violate the Federal Trade Commission Act. The Act defines bad faith as either applying to false or misleading statements or omissions, whether knowingly false, made with reckless indifference to the truth, or made with an awareness of a high probability that the statements or omissions would deceive the sender intentionally. The TROL Act also further authorizes the FTC and state attorneys general to bring actions to stop the abusive behavior, but also provides a good faith affirmative defense. The Act would further preempt any state law or regulation expressly relating to the transmission or contents of communications relating to the assertion of patent rights.

On April 29, 2015, the House Committee on Energy and Commerce voted to

approve the TROL Act by a vote of 30-22. This vote means that the TROL Act will be favorably reported out of Committee and now moves on for consideration by the full House of Representatives. The TROL Act, being the first bill to get voted out of Committee, is at least a little surprising given the Innovation Act passed the entire House by more than a 3 to 1 margin in December 2013, and further given how Republican leaders in the House promised to move the Innovation Act quickly during the 114th Congress.

Innovation Protection Act

The Innovation Protection Act is one of the lesser-known patent reform bills, but like several of the other bills it has been percolating in Congress over the past few years. The bill, which was introduced in April 2015 by Rep. John Conyers Jr. (D-MI), would provide a source of permanent funding for the USPTO. The fees collected by the USPTO would remain available to the USPTO until expended. This common sense idea has been floated for years, but it never seems to go anywhere. Appropriators have been unwilling to commit to allowing the USPTO to keep user fees, diverting over \$1 billion in user fees from the USPTO since 1992 according to the Intellectual Property Owners Association. Conyers has characterized fee diversion as “a tax on innovation.”

The Innovation Protection Act would go further than the fee provisions contained in the America Invents Act. The AIA created a revolving fund for use by the USPTO, but whether and how much the USPTO can spend is still governed by appropriators.

STRONG Patents Act

Sen. Chris Coons (D-DE), along with co-sponsors Sens. Dick Durbin (D-IL) and Mazie Hirono (D-HI) submitted the Support Technology and Research for Our Nations Growth Patents Act, or the STRONG

Patents Act, on March 3, 2015. The STRONG Patents Act would make a variety of changes to post grant administrative proceedings that the Patent Trial and Appeal Board of the United States Patent and Trademark Office, including requiring the PTAB to abandon the broadest reasonable interpretation standard and mandating that claims be presumed valid. The Act would also eliminate fee diversion, make it easier to obtain willful damages, make divided infringement actionable even if not all steps are practiced by a single entity, and give the Federal Trade Commission greater ability to go after those who send fraudulent or misleading demand letters, but creates a good faith defense. The bill would also eliminate Form 18 of the Federal Rules of Civil Procedure, which has already been proposed by the Judicial Conference. The STRONG Patents Act is supported by the Biotechnology Industry Organization, the Innovation Alliance and at least several major university groups.

It is worth noting that the STRONG Patents Act is similar to several other pending pieces of legislation in the House of Representatives. More specifically, the Innovation Protection Act reintroduced by Rep. John Conyers (D-MI) would similarly put an end to fee diversion. The TROL Act (discussed above) also seeks to target fraudulent and abusive demand letters.

PATENT Act

Without question, the Protecting American Talent and Entrepreneurship (PAT-ENT) Act has the most misleading name. Introduced April 30, 2015, by Sens. Grassley (R-IA) and Leahy (D-VT), the bill has nothing to do with talent or entrepreneurship, but everything to do with patents. Whoever came up with this name had to really stretch so that the acronym would spell out the word “patent.”

(Continued on page 44)

Mixed Reviews for the PATENT Act

WHAT'S IN—OR NOT IN—A NAME?

BY GENE QUINN



The long-awaited Senate alternative to the Innovation Act (H.R. 9) introduced in the House of Representatives has finally arrived. The Protecting American Talent and Entrepreneurship Act (the PATENT Act, S. 1137), introduced in the Senate on Thursday, April 30, 2015, is the latest patent reform bill. Despite what the name suggests, the proposed legislation has nothing to do with either talent or entrepreneurship. The PATENT Act is the Senate compromise, which in at least some ways moderates the Innovation Act.

The naming of the PATENT Act, which includes flag-waving terms, is creative if nothing else. How could anyone be against protecting America, talent and/or entrepreneurship? Still, the forced naming convention, so that it spells out PATENT, borders on the ridiculous. Who could think it is a good idea to name a bill something that it is not so that it spells out the subject matter it will regulate?

Despite the misnaming of the bill, the initial reaction to the PATENT Act has been cautious and carefully optimistic. Many of those who forcefully opposed the Innovation Act in the House have acknowledged that the PATENT Act is a step in the right direction, but they are also quick to explain that more work remains.

Microsoft applauded the introduction of the PATENT Act. It “avoids measures that would erode the value of patents and undermine incentives to innovation,” explained Erich Anderson, vice president

and deputy general counsel at Microsoft. “The bipartisan measure offered by Chairman Grassley, Ranking Member Leahy, and Sens. Cornyn, Hatch, Klobuchar and Lee targets badly needed reforms that will curb abusive practices in patent litigation and make patent cases fairer, more transparent and more efficient for all participants in the patent system.”

Universities Weigh In

Still supportive, but less enthusiastically, were universities. “We thank the Senate sponsors of the PATENT Act for listening to the concerns of the higher education community in drafting this legislation,” explained the so-called university statement, which comes from the Association of American Universities, the American Council on Education, the Association of American Medical Colleges, the Association of Public and Land-grant Universities, the Association of University Technology Managers and the Council on Governmental Relations. The statement went on to conclude: “This bill is a substantial improvement over H.R. 9 [because it] takes a more measured approach to addressing the abusive litigation practices of patent trolls while protecting the integrity of our patent system.” The statement also specifically notes that the fee-shifting and joinder provisions, which have most concerned universities, have improved, although further amendments may be necessary and could receive university support.

Customer Stay Language

The initial analysis of the PATENT Act by the Innovation Alliance was far less kind. “While this bill incorporates some welcome improvements over earlier versions, we must oppose its adoption as introduced,” explained Brian Pomper, executive director of the Innovation Alliance. “Passages of this act would cripple the ability of legitimate U.S. patent owners to protect their ideas from infringers, both in the United States and overseas.”

The main stumbling block identified by Pomper relates to the customer stay language. Pomper explained that while the summary of the bill provided by the Senate Judiciary Committee suggests that the customer stay provisions would apply only to those at the end of the supply chain, the language in the proposed legislation does not so limit stays. The concern consistently raised by the Innovation Alliance is that anyone could be a customer, including large corporations. “Congress must ensure that any ‘customer stay’ provision does not effectively immunize from liability large companies that use infringing technology and leave patent owners without redress for infringement by foreign manufacturers outside the jurisdiction of the U.S. courts,” Pomper stated.

Inter Partes Review

After congratulatory platitudes, a Biotechnology Industry Organization representative explained, “The PATENT Act is clearly a positive step toward building a greater

Still, the forced naming convention, so that it spells out PATENT, borders on the ridiculous. Who could think it is a good idea to name a bill something that it is not, so that it spells out the subject matter it will regulate?

consensus among patent stakeholders on ways to target abusive litigation tactics.” BIO pointed specifically to “pleading requirements, discovery stays and mechanisms for fee recovery against shell companies” as reflecting “noticeable improvements over H.R. 9.”

But then the hammer dropped. BIO explained that any patent reform bill that does not address abusive filings of inter partes review will be opposed by BIO. The statement explained: “We note with disappointment that the bill introduced today does not contain any of the critically needed reforms to prevent the continued exploitation and abuse of the PTO’s inter partes review proceeding against patent owners. However, we appreciate the acknowledgment by Chairman Grassley and other co-sponsors of the need to include such reforms as the bill proceeds through the Committee’s process, and BIO pledges to work with these leaders to include such important provisions. But any patent bill reported by the Senate Judiciary Committee that does not meaningfully reform the IPR system would lack a sense of balance and thus would be opposed by BIO.”

The Kyle Bass Effect

The pharmaceutical and biotechnology industries are livid about what many refer to as “the Kyle Bass problem,” and it seems as if BIO is pushing all their chips into the center of the table in an effort to get an IPR fix into the PATENT Act. In one way it is interesting that an IPR fix is of such great importance, given that the pharmaceutical industry lobby was among the most efficient and effective with respect to passage



Senator Chris Coons (D-DE)

of the America Invents Act, which created administrative post grant review procedures. It is also interesting, given that most did not believe that pharma and bio would find many, if any, patents subjected to post grant challenges.

But Kyle Bass, the head of Hayman Capital Management, changed everything. Bass has embarked on a strategy of making money in the stock market by invalidating patents. Bass has filed several petitions for IPR at the United States Patent and Trademark Office asking the Patent Trial and Appeal Board to invalidate patent claims covering drugs. According to *The Wall Street Journal* and others, after filing the IPR, Bass then either shorts the stock of the company owning the patent, or he buys shares in companies that would benefit from the patent claims becoming invalidated. Bass focuses his IPR requests on companies that have disproportionate revenues from a single drug. What Bass is doing is alternatively characterized as creative and brilliant, or evil and abusive.

Regardless of how you characterize the Bass IPR strategy, everyone seems to believe that eventually there will be a legisla-

tive fix. The fix could become quite complicated and might call into question the vitality of post grant proceedings at the USPTO. Therefore, there is some doubt about how quickly a fix will come. If a suitable legislative fix is incorporated into the PATENT Act, that would virtually assure that pharma and bio would put their considerable lobbying might behind the legislation.

Sen. Chris Coons (D-DE) echoed the concerns of BIO, saying he was “disappointed to see that the PATENT Act lacks any support for patent holders facing well-documented abuse in post grant proceedings.” Coons went on to say that IPR abuse “is actively undermining our nation’s ability to invest in high-risk ventures and break new ground in our fight against diseases, from Alzheimer’s to multiple sclerosis.” Not surprisingly, Coons believes that putting an end to fraudulent demand letters and raising pleading standards in patent cases, as does his STRONG Patents Act, “will address the legitimate concerns of end users while maintaining our vibrant and diverse innovation economy.”

Gene Quinn is a patent attorney, founder of IPWatchdog.com and a principal lecturer in the top patent bar review course in the nation, which helps aspiring patent attorneys and agents prepare for the patent bar exam. Strategic patent consulting, patent application drafting and patent prosecution are his specialties. Quinn also works with independent inventors and start-up businesses in the technology field.



The Patent Debate

JOHN OLIVER TAKES THE EASY WAY OUT

BY MICHAEL GULLIFORD

Recently, John Oliver—host of HBO's *Tonight With John Oliver*—took up the issue of patent trolls. Bravo to Oliver for bringing the subject of patents to his vast audience. Unfortunately, instead of using his platform to inform an important demographic about the complexities of intellectual property, Oliver took the easy way out, telling an outdated story in an attempt to influence public opinion.

If you are an innovator or entrepreneur, or consider yourself well-informed on current issues, you owe it to yourself to look past the easy laughs and understand the real state of today's patent system. Because then, no matter your ultimate position on patents or the need for patent reform, at least you will know the whole story.

Yes, There Was a Big Problem In The Patent World

You don't need a Wharton degree to see why patents are important. You need only do as Oliver suggests and watch the popular ABC series *Shark Tank*. As anyone who regularly watches the show knows, whenever a company that manufactures or sells a product asks for an investment, the first question asked by the Sharks is the same: "Do you have a patent?"

Inevitably, not having patent protection means no investment. Why? Because the investors need to know that the company has the ability to protect its products, as well as their investment. Patents provide those assurances.

But here's the rub: patents give their owners the right to exclude others from doing things. And for many years—given the boom in internet-based businesses, the patent office improperly granting

many broad software patents and the astronomical cost of defending a patent suit—much damage was done by patent trolls, who took advantage of the situation by suing as many entities as they could to extract settlements lower than the cost of defense.

As a former partner at a major international law firm practicing patent litigation, I witnessed the damage that unscrupulous patent trolls caused and how easy it was to demand high settlement payments from defendants, whose only option for defense was a \$3- to \$5-million litigation. This happened, again and again.

But that is not the world we live in today. It's unfortunate that Oliver, who is clearly seeking to influence public opinion on the issue, left so much out.

Things Have Changed Drastically

As we all know, businesses that get sued a lot are not going to sit quietly and take it. They are going to pick up the phone

and tell Congress that things need to change. And when it comes to patents, things *have* changed.

To begin, Congress passed the America Invents Act, a patent-reform bill designed to curb patent troll litigation abuse that has made it significantly easier and much cheaper for defendants sued in district court to invalidate a patent. Again, very important, but omitted from Oliver's story.

Oliver tells us that companies faced with a patent troll letter generally settle because the only other option is patent litigation that will cost upwards of \$5 million. Perhaps that was true two years ago, but not anymore. Not only has one of the AIA's coveted new proceedings allowed defendants to invalidate patents in record numbers, it only costs a small fraction of district court litigation.

Oliver also rails against the damage being caused by patent trolls aggressively asserting overly broad software patents that shouldn't have been granted in the



Perhaps the greatest irony of all is that the current reform has made it so financially and legally difficult for all but the best-financed companies to protect patent rights, that patent trolls are now more necessary than ever.

first place. Again, very true two years ago, not so much today. Although omitted from his story, the Supreme Court issued a much-anticipated decision regarding software patents in the summer of 2014, known as *Alice v. CLS Bank Int'l*. While the Supreme Court didn't put an outright ban on software patents, its ruling decimated a large swath of software patents in the U.S., particularly the overly broad business-method patents that were a favorite of patent trolls. Add to that additional Supreme Court decisions making it significantly easier to invalidate vague patents, and for defendants to recover attorneys' fees from losing patent trolls, and you start to see a different picture than the one Oliver paints.

Large verdicts for patent trolls are also a thing of the past. While juries occasionally award such verdicts, the reality is that the Court of Appeals in charge of patent cases throws these verdicts out time and time again. Just ask Vringo.

And let's not forget about state attorneys general or the FTC, which are generally against bad actor patent trolls. The NPE that extorted small businesses into paying licensing fees for using scanners, which Oliver highlights in his story, heard pretty loudly from the FTC and the New York attorney general. But Mr. Oliver left that out as well.

The Story Oliver Should Have Told

Indeed, if Oliver wanted to tell the real story of today's patent world, he would have had plenty of good material. Instead of relying on litigation statistics from 2012, for instance, he could have explained how current patent reform, which makes it so

much easier and significantly cheaper for defendants to win patent cases, caused litigation filings to drop markedly in 2014. After all, no one likes losing money, least of all NPEs.

Oliver could have also told the ironic story of the new creature in today's patent world: the patent ogre. That story goes as follows. Recognizing that recent reforms gave them a strong strategic and financial upper hand in litigation, many very large companies privately tell would-be licensees that they must bring a lawsuit to have any potential for a license. At the same time, these very same entities publicly decry how often they are sued because they know public sympathy can only lead to more advantageous reform.

Perhaps the greatest irony of all is that the current reform has made it so financially and legally difficult for all but the best-financed companies to protect patent rights, that patent trolls are now more necessary than ever. Because in a world where patent deals are only done in the courtroom, not the boardroom, patent trolls, with their deep pockets and litigation-focused business models, are now often the only way companies or inventors can protect their patent rights. Again, the ironies are apparent.

Oliver's Real Motivation

At the end of Oliver's humorous diatribe, we learn his real motivation: passage of the Innovation Act (HR 9)—the patent reform bill currently pending in the House that would no doubt benefit Oliver's employers. But even here, Oliver strongly misses the mark. It is not trial lawyers who are blocking the Innovation Act, as Oliver claims. Rather, it is a large swath of the technology

community—from universities to technology companies, small businesses, professors, and even venture capitalists—who understand that many innovators are now at a breaking point when it comes to patent rights and that the potential for further unintended consequences via additional reform is just too great.

So, in the end, no matter what side of the patent debate you are on, let's remember that our patent system is a vastly complex, finely tuned equilibrium. While market realities require adjustments from time to time, going too far in either direction will cause devastating consequences for large swaths of businesses. Right now, the market remains anti-patent in many respects, to the disadvantage of those companies dependent on strong intellectual rights to bring in investment for a new technology or protect that technology from being copied by those with the easy means to do so. While it makes sense to continue weeding out bad actors and deceptive demand letters, reforms must be carefully tailored. Because going much further in the anti-patent direction will be no laughing matter. ☹

Michael Gulliford is the founder and managing principal of Soryn IP Group, a patent-advisory company that provides a host of patent-centric services to clients ranging from promising start-ups to billion dollar corporations. Prior to founding Soryn, he was a partner in the intellectual property group at Kirkland & Ellis LLP, where he represented companies in an array of patent matters.



Patent Abuse or Genius?

IS KYLE BASS ABUSING THE PATENT SYSTEM?

BY GENE QUINN

The patent industry has been abuzz lately as patent reform gains momentum on Capitol Hill. This year, however, the question of patent abuse is not one that solely relates to patent troll activities, but also includes abuse of a different kind at the United States Patent and Trademark Office: the invalidation of patents.

The novel strategy being employed by Kyle Bass, head of Hayman Capital Management, seeks to make money by invalidating patents. Bass, who has teamed up with Erich Spangenberg, is filing petitions for inter partes review, which ask the Patent Trial and Appeal Board to invalidate patent claims. The patents that Bass sets his eyes on are pharmaceutical patents. Bass focuses on companies that have a large percentage of their revenues coming from a single patented drug. According to *The Wall Street Journal*, Bass shorts the stock of the patent owner and/or buys stock in companies that would benefit from a particular patent being invalidated. He then files the inter partes review. News of the IPR negatively impacts the patent-owning company because of the high rate at which the PTAB invalidates patent claims. If the patent is ultimately invalidated, stock in the patent-owning company should plummet.

Bass has come up with a creative, money-making strategy, but shorting a company in advance of an IPR is not something Congress seemed to envision when adopting post grant procedures as part of the America Invents Act. Indeed, once upon a time it was widely believed that post grant challenges would only be a problem for patent owners in the high-tech sector. Increasingly, however, pharmaceutical and biotechnology companies are finding that their patents are coming under fire, which is alarming given that these companies

have relatively few patents covering the commercialized product. If the Bass challenge is successful, there will be many more that follow due to the heavy reliance on patents to protect the extremely expensive research and development required to take pharmaceuticals and biosimilars to market. Indeed, if Bass is successful, it could be catastrophic for the industry.

Regardless of whether you believe Bass is doing a public service or engaged in an unforeseen abuse of process, an important question remains: Is Bass able to use IPR to challenge patent claims in this way? Unfortunately, the answer is complicated due to the fact that the statute seems to suggest one answer, while the legislative history suggests a different one.

Post Grant Review at the USPTO

The history of post grant review at the USPTO is relatively short. Starting on September 16, 2012, the first anniversary of the signing of the America Invents Act, the Patent Trial and Appeal Board was born. The jurisdiction of the PTAB is greatly expanded compared to the previous Board of Patent Appeals and Interferences. More specifically, the PTAB conducts trials within the Patent Office. These trials are required by the new procedures ushered in by the AIA, namely inter partes review, post grant review and covered business method review. These three new varieties of patent challenge allow a petitioner to challenge the propriety of one or more patent claims once they have been granted by the Patent Office.

The challenges being brought by Bass are IPRs. In an IPR the petitioner may request to cancel as unpatentable one or more claims of a patent only on a ground that could be raised under 35 U.S.C. 102 or 103 and only on the basis of prior art



consisting of patents or printed publications. (See 35 U.S.C. 311(b).) The contest between the petitioner and patent owner is played out in an administrative trial in front of a panel of the PTAB. The PTAB will not institute an IPR unless there is a reasonable likelihood that the petitioner would prevail with respect to at least one of the claims challenged in the petition. The determination by the director whether to institute an inter partes review under 35 U.S.C. 314 is final and nonappealable. (See 35 U.S.C. 314(d).)

According to the statute, “[a] person who is not the owner of a patent may file a petition to institute an inter partes review of the patent.” (See 35 U.S.C. 311(a).) Similarly, with PGR “[a] person who is not the owner of a patent may file with the Office a petition to institute a post grant review of the patent.” (See 35 U.S.C. 321(a).) However, when it comes to covered business method, things are quite different: “A person may not file a petition for a transitional proceeding with respect to a covered business method patent unless the person or the person’s real party in interest or privy has been sued for infringement of the patent or has been charged with infringement under that patent.” (AIA § 18 (a)(1)(B))

As you can see, in order to challenge a patent using CBM, the petitioner must be a defendant in a patent-infringement lawsuit or have been charged with infringement. No such similar requirement exists for either IPR or PGR. This is why Bass has a legitimate reason to believe that he can

Regardless of whether you believe Bass is doing a public service or engaged in an unforeseen abuse of process, an important question remains: Is Bass able to use IPR to challenge patent claims in this way?

challenge patents despite having no direct interest in the patent, either as an alleged infringer, licensee or prospective licensee.

Despite the fact that the statute on its face seems to allow any petitioner to file an IPR, it still feels wrong to many in the industry that a wealthy businessman should be able to reap financial rewards for a situation he creates. This is no doubt reinforced by familiarity with post grant procedures at the USPTO and why they were created in the first place.

Legislative History

Time and time again throughout the legislative history, post grant proceedings were explained as being faster, low-cost alternatives to litigating validity disputes in Federal District Court. That being the case, it would seem extremely odd that any petitioner could bring a post grant challenge to a patent when that petitioner would not have standing to sue to invalidate the patent in Federal District Court. Make no mistake about it—Bass would not be able to take his challenge to Federal District Court. He would have no standing to bring a Declaratory Judgment Action. There is no case or controversy. So why then would he have standing to bring a post grant challenge?

Patent reform efforts that ultimately culminated in the AIA were underway for at least five years prior to enactment of the legislation. In one earlier round of reform attempts, on April 18, 2007, Rep. Howard Berman speaking on the introduction of the Patent Reform Act of 2007, explained that the post grant procedures in the legislation were to “provide meaningful, low-cost alternatives to litigation for challenging the patent validity...” Berman would go on to say, “The post grant procedure is designed to allow parties to challenge a granted patent through an expeditious

and less costly alternative to litigation. Many have expressed concerns about the possibility of harassment of patent owners who want to assume quiet title over their invention. In an effort to address those concerns, the bill prohibits multiple bites at the apple by restricting the cancellation petitioner to opt for only one window one time. The bill also requires that the director prescribe regulations for sanctions for abuse of process or harassment.”

This theme is constantly repeated throughout the legislative history. Post grant procedures were designed to be an alternative to litigation, and Congress was well aware of at least some potential abuses of the new procedures. The intent was to give those with a justiciable grievance a cheaper, faster forum in which to challenge a patent. Likewise, the procedures were designed to the greatest extent possible to prevent abuse of process and/or harassment. The legislative history is silent with respect to the type of challenge Bass is bringing, although it stretches the imagination to believe that Congress intended to allow pharmaceutical companies to be subjected to a challenge by an individual or entity that would not have standing to sue in Federal District Court.

Patent Reform Act of 2007

But Berman was not the only one to make these same assertions, nor were they only made with respect to the Patent Reform Act of 2007. One of the three goals of this Act was “to improve and clarify several aspects of patent litigation, including the creation of a less expensive, more expeditious administrative alternative to litigating patent validity issues,” explained Sen. Patrick Leahy (D-VT) on January 24, 2008. “The time has come to eliminate the inter partes reexamination system and replace it with a new post grant review system at

the USPTO that will give third parties a quick, inexpensive and reliable alternative to district court litigation to resolve questions of patent validity.”

Similarly, in a report from the minority relating to post grant review procedures contained within the Patent Reform Act of 2007, Sens. Tom Coburn (R-OK), Charles Grassley (R-IA), Jon Kyl (R-AZ) and Sam Brownback (R-KS), explained that post grant review procedures “should be timely and streamlined and should take issues off the table that cannot be resurrected in subsequent litigation, providing a cost-effective alternative to litigation. To protect patent holders from harassment and abuse by a competitor or infringer, the system must be narrowly crafted with appropriate safeguards.”

Fast forward to 2011. On the Senate floor during the patent reform debate on February 28, 2011, Sen. Orrin Hatch (R-UT) explained, “The bill will also establish another means to administratively challenge the validity of a patent at the U.S. Patent and Trademark Office—creating a cost-effective alternative to formal litigation, which will further enhance our patent system.” Grassley similarly explained that the pending bill would “provide faster, less costly alternatives to civil litigation to challenge patents.” Leahy also explained during the debate that post grant procedures would “offer productive alternatives to costly and complex litigation.”

On March 7, 2011, Leahy would again echo his previous comments, saying the bill would “streamline the current ‘inter partes’ system so that it will be a more efficient alternative to litigation.” Similarly, Sen. Mark Udall (D-CO) explained that post grant proceedings “are intended to serve as a less-expensive alternative to courtroom

(Continued on page 44)

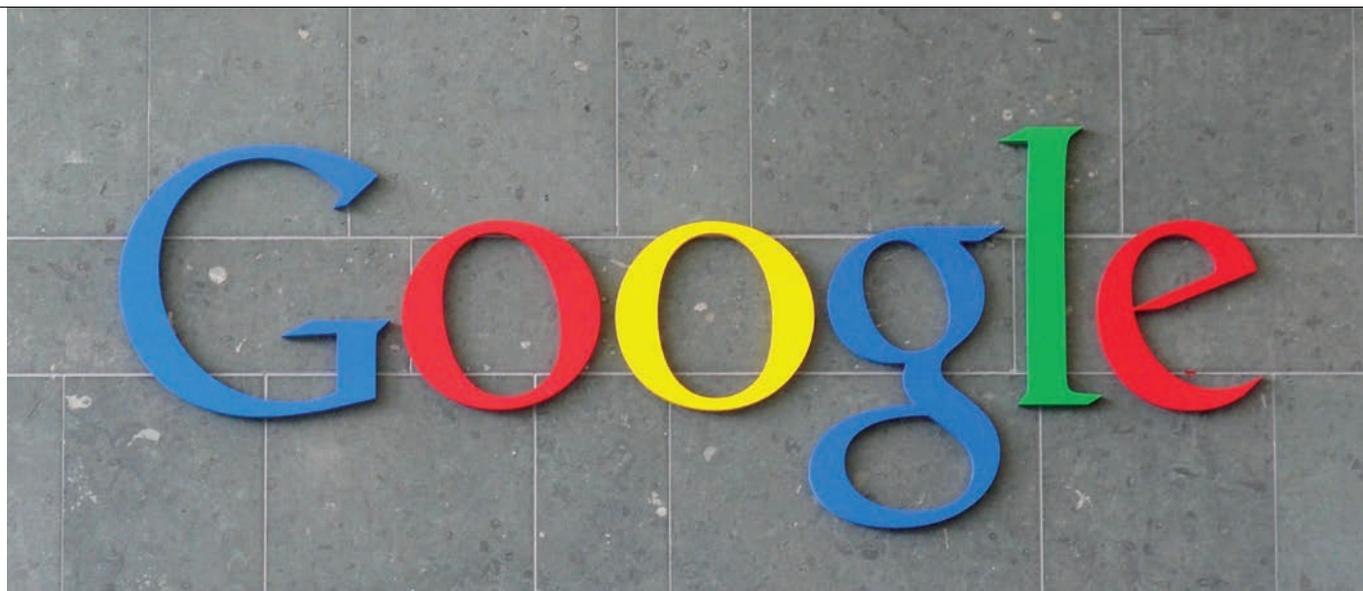


PHOTO COURTESY CARLOS LUNA

Google Collects Patents

WHILE LOBBYING AGAINST THEM **BY GENE QUINN**

Some companies can't have enough patents. For over a generation, IBM has received more U.S. patents each year than any other company. Oddly, however, the same seems to be true for Google. The Mountain View-based technology corporation earned the 8th-most patents from the U.S. Patent and Trademark Office last year with 2,566 U.S. patents granted. But to be polite, the Google view of patents seems hyper-nuanced. In one breath the company condemns patents, the patent system and patent owners, and, in another, they can't acquire patents fast enough. It is fair to say that there is more than meets the eye when it comes to Google's patent strategy.

Through third-party acquisitions and Google's own home-grown innovation, the company is spending a king's ransom to acquire more patents, paying steep fees to fast-track their portfolio to acquire patents quicker. At the same time Google is collecting patents, the company is spending tens of millions of dollars to weaken patent rights, which makes no sense. As Google advocates positions that weaken patent rights for innovators, the result will be billions of dollars lost due to devaluation of their own patent

portfolio. Shareholders, members of the Google board of directors, and members of Congress need to ask Google whether it is misusing company funds to acquire patents that are continually devalued by Google's own lobbying efforts.

Google's Latest Patent Acquisition Strategy

For example, over a two-week period in May, Google was hoping to "remove friction from the patent market and improve the landscape" through a Patent Purchase Promotion program. For a limited time, between May 8th and May 22nd, Google accepted offers to sell patents. During this time, Google said it would have a streamlined portal for patent holders to divulge details about the patents they hold and wished to sell to Google. Potential sellers set a price for their patent and Google said they would either accept or decline without negotiating. Google promised to pay patent owners by the end of the summer if they decided to purchase.

It's great to see that the company, which popularized the corporate catchphrase "Don't Be Evil," is taking action to broaden its patent portfolio; how this purchase plan will lead to a better patent system, as

the company explains, is not obvious. Of course, some are suspicious of Google's motives, particularly given the timing and with patent reform heating up in Washington. But if the company still intends to not be evil there is no reason for questioning motivations. Still, it is hard to forget that Google also promised not to be evil with the patents acquired from Motorola and subsequently was adjudicated to be a patent troll with respect to those patents. Indeed, Google's patent history has been checked, at times seemingly schizophrenic.

Google Understands The Value of Patents

The lasting value of patents is something that executives at Google have understood from the earliest days of the company's existence. Those who've come to see the company as synonymous with an Internet search engine and a domain name may be surprised to learn that Google put its name on a patent eight months before it was ever registered at Google.com as a website.

U.S. Patent No. 6,285,999, titled Method for Node Ranking in a Linked Database, claims priority from a U.S. provisional patent application filed January 10, 1997. The

patent protected a computer-implemented method of analyzing linked databases to score a plurality of linked documents. To quote directly from the patent's abstract: "The method is particularly useful in enhancing the performance of search engine results for hypermedia databases, such as the world wide web, whose documents have a large variation in quality." According to domain name registration data available at Whois.net, google.com wasn't created as a domain name until September 15, 1997. Thus, it seems for Google it was more important to file the patent application for its search engine ranking technology than it

was a veritable patent payday for Google, bringing the company more patents than the number of patent applications it filed the previous year. The only reason these graphs show a decrease in patent applications for 2014 and none for 2015 is because patent applications are not published until 18 months after they're filed. We're about one-third of the way through 2015 and already Google has more patents than it earned during all of 2011.

Google is also incredibly savvy when it comes to using the U.S. patent system. In previous articles on IPWatchdog.com we've noted how Google has been

been advocating for policies that weaken the patent system, both at the Capitol and in courtrooms across America, so that it can swoop in as a buyer? Can you imagine the buying power Google has now compared to what it would have had even several years ago? In addition to sitting on over \$62 billion in cash, Google led the charge to devalue patents, including its own, across the board.

Of course, all of this begs an essential question. If patents are so bad and Google has to spend so much money lobbying to weaken the patent system, why is the company simultaneously buying patents and

Through third-party acquisitions and Google's own home-grown innovation, the company is spending a king's ransom to acquire more patents, paying steep fees to fast-track their portfolio to acquire patents quicker.

was to register the website that would go on to process an average of 3.5 billion search queries every day. Despite what Google lobbyists may say as they lobby patent issues on Capitol Hill, the company has always supported a strong patent system, at least for themselves.

Google has built a tremendous portfolio of intellectual properties through patent-filing activities that began to pick up steam in the early 2000s and has been pretty colossal in the past few years. It is interesting to note that while Google has been pushing for patent reforms and making the case that software patents are unnecessary and the root of all evil, Google's own patent activities have literally launched forward.

Trendline data graphs obtained from In-nography show that the number of patent applications filed by Google throughout the late 1990s was very low but experienced a significant uptick in 2001. From then until 2010, the number of patent applications filed by Google trended upwards, approaching 2,000 per year, but it blew past the 2,000 patent-application number by 2011, and in 2012, found its trajectory much closer to hitting 4,000 patent applications within a year or two. 2014

utilizing the fast-track patent examination system put in place by the America Invents Act. For example, as of October 26, 2014, Google had obtained 875 U.S. patents from the USPTO fast-track system, far outpacing 2nd-place Huawei Technologies total of only 147 patents via fast-track. Given Google's willingness to pay an additional \$4,000 per application to obtain a patent within 12 months, questions can and should be raised about whether the U.S. has a patent system that currently supports Google innovation better than it supports American innovation in general.

Hungry, Hungry Hippo

While there has been much renewed talk about patent trolls, there is a troubling new force in the patent system: the patent hippo, munching up whatever it can find. As patents have become devalued, there are buyers in the marketplace. Google has been a hungry, hungry hippo in recent years.

How convenient that the policies and positions advocated by Google have led to patents being devalued, particularly the software patents that relate to Google's core business. Could it be that Google has

racing to quickly patent its own original innovation? There seems to be a disconnect between what Google says and what it does. Could it be possible that Google has taken such strong anti-patent positions in an attempt to drive down the market for software patents so it can continue to collect patents at steep discount? That would be quite troubling, but there is no question that as Google rhetoric against the patent system has increased, so, too, has its taste for patents.

It is well past the time for both Google shareholders and members of its board of directors to start asking difficult questions. They should be asking why Google is spending so much money to patent innovations when the company claims that patents are unnecessary and do nothing more than get in the way of innovation. They should be asking why the company is spending tens of millions of dollars lobbying to weaken the patent system, which necessarily will devalue Google's own massive investments in its own patented technologies, not to mention the patents the company acquires, including those acquired from Motorola for the staggering price of \$12 billion. ☒

Patent Games

PUBLICLY TRADED COMPANIES WANT TO WIN

BY GENE QUINN



One problem with the debate over patent litigation abuse is that it hasn't focused much on litigation abuse. Instead, the debate has focused on attempts to characterize patent owners with pejorative labels, such as calling anyone who has the audacity to seek to enforce their rights a "patent troll."

Those pushing patent reform have also tended to engage in a game of misdirection. For example, what could be wrong with forcing patent trolls who bring specious, extortion-like claims from having to pay the attorney fees of the prevailing defendant? Phrased that way most would say that the evil troll should pay. Then, why isn't the proposed legislation written to apply to bad actors?

We can easily write language that would make it easier for district courts to levy fees against those engaged in a pattern of misconduct without establishing a presumptive fee-shifting law that would require losing parties to pay unless they can demonstrate they acted in good faith at all times. Why, also, is it necessary to allow universities and venture capital firms to be pulled into litigation against their will and then have to pay the other sides attorney's fees for a litigation they didn't want to pursue?

The problem with patent reform, particularly the Innovation Act and the PATENT Act, is that the rhetoric doesn't match the language of the statute. Proposed reforms are not at all narrowly tailored; they will apply across the spectrum to all pat-

ent owners whether or not they are bad actors. All of this in the name of stopping the explosion of patent litigation that risks threatening the very survival of the entire system. Too bad it isn't so. The patent explosion myth is just one big lie. The facts tell a wholly separate tale.

Patent Litigation Tales

After an exhaustive review of patent litigation the Government Accountability Office concluded in an August 2013 report that there is no patent litigation crisis. The GAO report also found that 80 percent of patent lawsuits are brought by operating companies that are suing other operating companies, which debunks the myth that most patent infringement lawsuits are brought by patent trolls. Only 20 percent of patent infringement lawsuits were even brought by non-practicing entities, not all of which should qualify as patent trolls. Furthermore, according to data from Lex Machina, in 2014 there were 1,070 fewer patent lawsuits filed than during 2013, and the number of patent cases filed in 2014 was lower than the number of cases filed in 2012 by some 433 cases. Therefore, the stories of run-away patent litigation are greatly exaggerated.

When considering the raw numbers of patent litigations filed, it is also important to keep in mind that the America Invents Act, enacted in September 2011, introduced new joinder provisions for the express purpose of making it more difficult, if not impossible, for patent owners to sue large numbers of defendants in a

single litigation. Prior to the enactment of the AIA dozens or hundreds of defendants were typically sued in a single case brought by a patent troll. This unfairly compromised defendants' rights to mount an individual defense for a variety of reasons, so Congress wanted to separate disputes. Although Congress may have naively thought otherwise, no one familiar with the industry suspected that the implementation of joinder provisions in the AIA would mean patent plaintiffs would give up suing, or that patent plaintiffs would sue fewer defendants. It is also worth keeping in mind that the joinder rules were not intended to prevent patent litigation; they were intended to make patent litigation fairer for defendants so that they would not be bundled together in cases where there really was no commonality of facts aside from the patent being asserted.

Those who profess there are rampant problems associated with patent trolls and non-practicing entities suing for patent infringement are simply telling a tale that the factual data doesn't support. Despite the AIA requiring more patent infringement lawsuits, the data suggests that there is less patent infringement litigation.

So how has such a factually baseless narrative been able to dominate the discussion? Unfortunately, this propaganda was promoted by some of the elite Silicon Valley technology companies, with Google leading the charge. But Google is a high-tech company. Why would it want to damage the patent system by spreading half-truths

and reckless misrepresentations? Google shareholders and members of its board of directors should be asking these and other difficult questions. Why is Google spending billions to patent innovations when it is spending tens of millions of dollars lobbying to weaken the patent system? Something doesn't compute.

Sure, there are bad patents, but the problem with bad patents is not nearly what you might think. During 2014 there were 579,782 utility patent applications filed, with 303,931 utility patents issued. Even if the United States Patent and Trademark Office is correct 99.5 percent of the time that would mean that 1,520 patents during 2014 were improvidently issued. It is unrealistic to expect perfection in any system, particularly when there are nearly 8,500 patent examiners, who are the front-line decision makers. With that number of individual decision makers

Changes at the Patent Office

When you factor in all the legislative changes that have taken place over that same time frame, the scope of the problem facing the Patent Office is staggering. How can any system withstand so many changes over such a short period of time? Even assuming *arguendo* that there is a quality problem, can anyone blame examiners? How well would you do your job if you had to incorporate 19 separate, distinct and substantive changes to the way you do your job? My guess is that you would probably think it unfair, not to mention unwise.

The IG report blasted the Office for low quality, but the real story is that with so many substantive changes it is unrealistic to expect perfection or anything that approximates it. The IG report was nothing more than a political hit piece that threw the Patent Office under the bus in order

Shortsighted Views Create Long-Term Problems

Sadly, we find ourselves at a place where detractors of the patent system have succeeded beyond their wildest dreams, convincing nearly everyone of problems that don't exist. So successful has this misinformation campaign been that patents owned by everyone are worth less, if not completely worthless. By taking a shortsighted view of the litigation problems, detractors took direct aim on the patent system, including their own patent portfolios, the essence of their competitive advantage.

What are these companies going to do when foreign corporations push their way into the U.S. marketplace? How will CEOs explain away the existential they face when foreign manufacturers flood the market with goods and services without regard to long-since crippled patent portfolios of the form tech elite? The pat-

Those who profess there are rampant problems associated with patent trolls and non-practicing entities suing for patent infringement are simply telling a tale that the factual data doesn't support. Despite the AIA requiring more patent infringement lawsuits, the data suggests that there is less patent infringement litigation.

and the volume the USPTO handles in a given year there will be some mistakes.

The fact that mistakes are inevitable doesn't mean that the system should be or needs to be scrapped. But those who abhor the patent system would have the public believe that the Patent Office issues low-quality patents routinely. Every honest observer will tell you that the far larger problem is that the USPTO can't possibly be expected to provide the high quality demanded given the perpetual state of change the patent system has endured over the past five years.

Indeed, the real untold story is that the Patent Office is simply not to blame for low-quality patents. According to a Commerce Department Inspector General report, over the last five years the Patent Office has had to change examination policy 19 times in response to changes in the law brought about by judicial decisions.

to gin up the issue of low-quality patents as the patent reform debate is heating up in Congress. In fact, without intending to do so, the IG report makes the case for at least a temporary end to the activism in Congress and in the federal courts.

No one can succeed when the rules of the game are changing so fast, and no system can thrive when it is in a constant state of flux. U.S. patent laws and rules have been constantly shuffled without any real substantive reform that would lead to a better system. Yet, all these changes are putting \$5 trillion in gross domestic product and at least 40 million jobs at jeopardy. That is why reasonable voices are practically begging Congress to temper its enthusiasm for reform and to laser focus on the problem of fraudulent and misleading demand letters, which doesn't need to have any negative impact on legitimate exercise of valid patent rights by innovators.

ent portfolios these tech giants own have become so hopelessly compromised and many patents so worthless that all the money spent to build up significant barriers to entry will have been wasted and there will be no way to stop well-funded foreign companies who will simply ignore the non-threatening patents the Silicon Valley elite hold.

Management in these Silicon Valley elite tech companies has been spending large sums of shareholder money on R&D. They have spent large sums filing for and obtaining patents on their own home-grown innovations. They have also spent large sums acquiring patents either directly or by acquiring companies with attractive patent portfolios. Yet at the same time they are spending money lobbying for the purpose of devaluing patents. Can

(Continued on page 44)

Patent Reform 101 (cont. from page 33)

In any event, the bill would establish higher pleading standards for patent infringement complaints, which the sponsors say would give defendants real notice of the claims against them. The bill also contains a controversial customer-stay provision similar to the one found in the Innovation Act. This could prove to be a huge stumbling block, because the way the provisions are written, even the largest tech companies could move to indefinitely stay patent litigation because they are themselves consumers (i.e., have purchased something from another manufacturing company). The PATENT Act also requires district courts to stay discovery while early dispositive motions (i.e., motions to dismiss and motions to transfer venue) are being considered. The bill would also direct the Judicial Conference to develop rules about how much a party should bear the cost of discovery beyond what is considered core for the case.

Fee shifting is one area where there is a meaningful difference between the PATENT Act and the Innovation Act. While the Innovation Act creates a presumption that the loser should pay the attorneys fees of the prevailing party unless there is a finding that the losing party pursued only reasonable theories in the case, the PATENT Act would shift fees only if the prevailing party proves that the losing party was not “objectively reasonable.” This is a subtle but important difference, although fee shifting in any form can be expected to generate real opposition. Finally, the bill would also require the United States Patent and Trademark Office to keep information about patent ownership in order to provide a resource about patents being asserted in a demand letter or lawsuit. Those who watch the USPTO know that this was on the agenda for rule making, but after receiving enormous opposition from patent owners with large portfolios rule making plans were scuttled. ☛

Patent Abuse or Genius? (cont. from page 39)

litigation and provide additional access to the expertise of the Patent Office on questions of patentability.”

Sen. Jeff Sessions (R-AL) also spoke in some detail about the measures Congress was taking to help ensure that post grant proceedings did not become abusive. Sessions explained:

“The bill also includes many protections that were long sought by inventors and patent owners. It preserves estoppel against relitigating in court those issues that an inter partes challenger reasonably could have raised in his administrative challenge. It imposes time limits on starting an inter partes or post grant review when litigation is pending. And it imposes a one-year time limit on the duration of these proceedings. All of these reforms will help to ensure that post grant review operates fairly and is not used for purposes of harassment or delay.”

In the House of Representatives, on June 22, 2011, the primary architect of reform in the House, Rep. Lamar Smith (R-TX) repeatedly explained that the purpose of allowing post grant challenges to issued patents was to provide a low-cost alternative to invalidate patent claims. At one point during the day, Smith explained that post grant challenges “would create a cheap and speedy alternative to litigation—allowing parties to resolve these disputes rather than spend millions of dollars that litigation now costs. In the process, the proceeding would also prevent nuisance or extortion litigation settlements.”

Even the Obama Administration understood post grant proceedings to be for the purpose of creating an alternative to litigation in Federal District Court. Then Commerce Secretary Gary Locke explained that a post grant challenge “decreases the likelihood of expensive litigation because it creates a less costly, in-house administrative alternative to review patent validity claims.”

Conclusion

Given the universal agreement that the purpose for creating new post grant challenges was to create a low-cost alternative to litigation to determine the validity of

patent claims, it is difficult to understand why the Bass challenge should be allowed to move forward. Furthermore, given the concern about extortion-like litigation settlements, abusive challenges and harassment of patent owners, it seems unlikely that Congress will be supportive of the type of challenge that Bass is pursuing using IPRs. Of course, if Congress wanted to limit IPR and PGR to petitioners who had a vested interest in the outcome they could have done so, as they did do with CBM challenges. The fact that there is a standing requirement associated with CBM challenges and no such similar requirement with respect to IPR and PGR is fairly conclusive proof, at least in legal terms, that there is no standing requirement.

It will be interesting to see what happens with the Bass petitions, and even more interesting to see whether Congress steps in to bail out the pharmaceutical industry. The Biotechnology Industry Organization is already saying that it will oppose any patent legislation that does not offer an IPR fix, but coming up with legislative language to keep everyone happy could prove quite difficult. ☛

Patent Games (cont. from page 43)

they be oblivious to the fact that at the same time they are devaluing the patents of others they are also devaluing their own patents? Does spending millions in lobbying fees to undo billions spent on research, development and protection make sense to anyone?

In the patent arena it is not hypocrisy that is fueling the misguided strategies of tech companies. Instead, it is the self-interest of tech CEOs, who are increasingly only concerned about the short-term. This is tragic because corporations are supposed to exist in perpetuity, not just until the current CEO can cash out with his/her golden parachute. Short-term thinking of tech CEOs is destroying the patent system and wasting shareholder assets.

There is nothing wrong with public companies speaking out on patent reform, but shouldn't they have to report the material risk their positions pose to the interest of shareholders? ☛

VALUE PROPOSITION

Defining The Benefits of Your Invention **BY JOHN G. RAU**

Do you know your invention's value proposition? Simply put, a value proposition defines the benefits end users will gain from your invention. You will need to articulate these qualities in detail before you present your idea to potential investors or licensing candidates.

Your invention's value proposition must be formulated on the basis of several considerations:

- What does your invention offer in terms of product or service?
- For what market (or markets) is your invention created?
- What benefits will the market derive from your new product or service, and which does it value most?
- What makes your invention different from others on the market?
- What proof or evidence is there to substantiate your claims?

Value Proposition: 7 Easy Steps

Cindy Barnes and Helen Blake of the UK-based company Futurecurve offer a step-by-step process to help develop an invention's value proposition in the white paper "Harnessing Your Customer Truth: From Value Propositions to Sales Propositions."

Step 1: Define the market. What is your specific target group?

- Are the customers' unmet needs and problems well-defined and recognized?
- What kind of problem(s) does your new invention solve for them?
- Is this an important problem for this customer group?
- Does your new product or service address a large and growing market?

Step 2: Describe the value experience. What are the benefits minus the costs as perceived by your customer set?

- How does your invention solve customers' problems or improve their situation?
- How will your proposed solution work in the customers' hands and what benefits will it generate?

Step 3: Define the new product or service and analyze the value it brings to your targeted customer group. Describe your competition and how they solve the problems you are addressing for this customer set.

Step 4: Describe the benefits to be derived by these customers as the result of using your invention. Good examples of potential benefits to consider are suggested in *10 Value Proposition Examples* on the website plantostart.com:

- **Newness:** You have a technology or service idea that is unique and has never been seen before.
- **Performance:** Your product or service offers improved performance (faster, bigger, more efficient, etc.) over competing ideas.

- **Customization:** Your product or service is more flexible than the existing competition's product and can be designed for a specific customer's needs.
- **Getting the job done:** Your product or service enhances a customer's productivity.
- **Superior design or usability:** Your target market enjoys optimal design and convenience features.
- **Price:** Your product can be manufactured with adequate margins and offered at a retail price customers are willing to pay.
- **Reducing costs:** Your product or service can result in reduced costs for the targeted customer group.
- **Reducing risk:** Your new product has the potential of improving safety.

Step 5: Describe how your invention is different from and/or better than the alternatives. What is unique about your method of solving customer problems and why are you better than the competition in solving these problems? This is where you need to focus on "unique differentiation," specifying why the target market should buy from you rather than the competition.

Step 6: Provide documented and substantiated proof that your product or idea works, backed by clear examples, including diagrams, schematics, prototypes, pictures or test results, as applicable.

Step 7: If you have trouble formulating your value proposition, ask yourself the following questions:

- Is the problem you are solving validated by a measurable fact?
- Can you identify the customers in your target group who have the problem(s) you are trying to address with your invention?
- Does your new product or service offer advantages that would benefit your customers?
- Have you developed a convincing story as to why this customer group would buy from you rather than from the competition?
- Does your invention offer significantly more benefits than costs to your customers?
- Have you presented a clear message as to what matters to your customers and the value you can bring to them with your new invention?

Remember, in order to be successful, your value proposition must capture the unique qualities of your invention and address why customers will choose your product over others in the market place. 📌

John G. Rau, president/CEO of Ultra-Research Inc., has more than 25 years experience conducting market research for ideas, inventions and other forms of intellectual property. He can be reached at ultraresch@cs.com.



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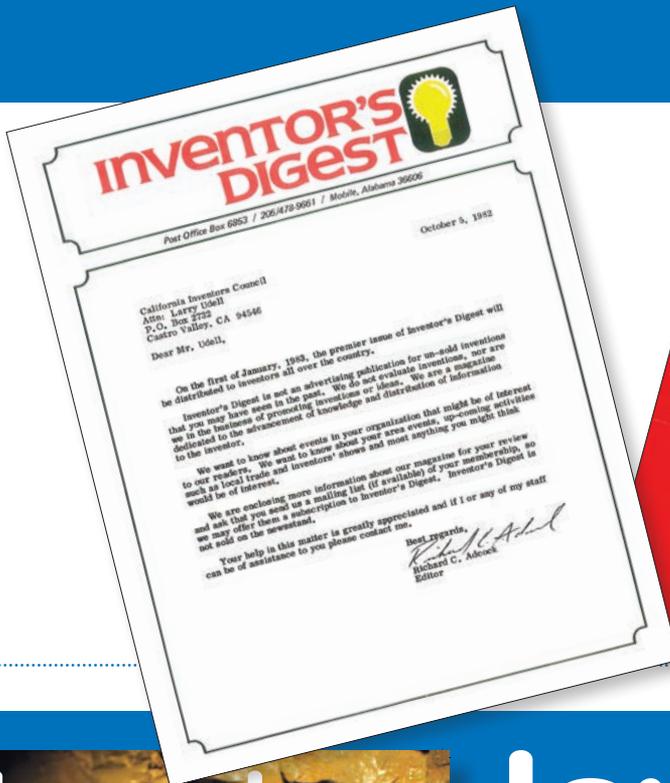
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