Enduring Impact
TODD DICKINSON WAS A TITAN OF PATENT WORLD

Adjusting on the Fly
ENGINEERING TEAM PROTOTYPES FROM HOME

Star of the Fashion Fix
FORMER ACTRESS’S SEAMLESS BRA IS A WOMEN’S STAPLE
SAY HELLO TO INNOVATION

At Enventys Partners, we build new products, create new brands and breathe new life into existing ones using an efficient, collaborative approach. We believe there are two ways to grow your business: introduce innovative new products or sell more of the products you already have. Whichever approach fits your needs, we can help you thrive with a proven strategy that delivers quantifiable results.

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WHAT WE DO

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For more information and to view samples of our work, visit enventyspartners.com or call us at 704-333-5335.
Machines Can’t Be Inventors—Not Yet

Artificial intelligence may soon rule the world, but for now humans are king when it comes to patents.

Computerized innovation absorbed a rare setback recently when the United States Patent and Trademark Office denied two patents filed on behalf of DABUS, an AI system. So did the European Patent Office.

The USPTO’s explanation was that its patents can only be granted to “natural persons.”

In perhaps an inevitable irony, the patents—for a food container and a flashlight—were filed by a person, and one who has a patented AI system. In his application, Stephen Thaler, DABUS’s creator, calls his system “a creativity machine.” He said that if a machine were listed as an inventor, it “would incentivize innovation using AI systems.”

(Thaler’s bid was understandably self-serving. A favorable ruling would have been a boon to his company, Imagination Engines, which researches and develops artificial neural networks.)

In his application, Thaler said DABUS conceived the inventions via trained neural networks and with no human intervention. But the patent office issued a document, “Notice to File Missing Parts,” claiming that the application did not identify the inventor by his or her legal name. (We humbly suggest “Call Me Al.”)

Although Thaler subsequently filed a petition with the intention of eliminating that requirement, the patent office refused to vacate its request.

The USPTO’s ruling is consistent with previous federal court rulings. A 1994 decision opined that “Conception is the touchstone of inventorship, the completion of the mental part of invention. It is the formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention.”

Given AI’s growing role in the innovation world, the ruling provides an interesting talking point. Machines programmed by human do have the capacity to “learn” and therefore produce products.

But they aren’t creative. The human mind is always the trigger point for creativity, and the machines themselves originate in the human brain anyway.

So, score a victory for the human element! The way our world is rapidly changing, these instances could become increasingly rare.

—Reid
(reid.creager@inventorsdigest.com)
American innovation needs to hit the gym

Weakened patent protections have reduced the value of American inventions. To strengthen American innovation, support the STRONGER Patents Act—legislation designed to restore strong Constitutional patent rights, limit unfair patent challenges, and end the diversion of USPTO fees.

Make your voice heard now at SaveTheInventor.com
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ON THE COVER
Amanda Horan Andereck,
CEO of Sassybax®;
photo by Matt Blum

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ON THE COVER
Amanda Horan Andereck,
CEO of Sassybax®;
photo by Matt Blum
YOU HAVE THE IDEAS

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Edison Nation is the only innovation partner that has multiple channels to take inventors' product ideas to consumers worldwide.

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A Dr. Seuss book and “Star Trek” seem destined to live forever, especially in court.

Dr. Seuss Enterprises, which owns the intellectual property rights to many of Theodor Geisel's works, sued ComicMix in 2016 over a crowdfunded project that blended the two iconic properties. The planned “Star Trek”-themed comic book “Oh, the Places You’ll Boldly Go!” is a takeoff on the 1990 Dr. Seuss book “Oh, the Places You’ll Go!”

In March 2019, a federal judge ruled that the “Star Trek” version made fair use of copyright material. But that ruling is under appeal, with an attorney representing Seuss Enterprises claiming that “Boldly” violates copyright law and was created to compete with the original in the graduation gift market.

It’s not just the title that has been infringed upon, the suit alleges. It says the book copies the unique stylized font used in Dr. Seuss books, as well as the illustration style of the characters and backgrounds.

ComicMix attorney Dan Booth countered that the “Star Trek” version is a parody of the original. He said the Trek version has a more team-oriented theme than the original, which he claimed has a more narcissistic flavor.

“Oh, the Places You’ll Boldly Go” was written by David Gerrold, an awarded science fiction author who wrote the “Star Trek” episode “The Trouble With Tribbles.” It was illustrated by Ty Templeton.

The ultimate ruling could have a great impact on anyone planning to transform original works without permission.

The dispute recently took a decidedly futuristic twist, in part due to the new emphasis on social distancing. ComicMix invited the public to watch proceedings at the U.S. Court of Appeals for the Ninth Circuit being streamed over YouTube on April 27.

ComicMix crafted this Seuss-like verse and posted it in late April (before eventually removing the video capability):

We know at this time, no one feels very funny,
But Dr. Seuss still wants to take all our money.
So if you’re stuck at home thanks to COVID-19
with nothing to do in your long quarantine,
we’d like you to know as a last resort
you can see DSE appeal their loss in court
as the previous ruling they’ll try to impugn!
It’ll happen on Monday at the stroke of high noon
(that’s Eastern time; West coast, it’s three hours prior).

We’ll stick to the facts and we’ll cite precedent
as the Ninth Circuit hears our (remote!) argument.
The links are below and there’s bandwidth to spare,
so watch justice in action— we hope you’ll be there!
Fat Iron
BODY FAT REMOVAL DEVICE
luminarng.com

Fat Iron is the world’s first Food and Drug Administration-cleared and clinically tested home use device for ironing off fat.

With the same technology used by plastic surgeons and dermatologists, the device targets fat, stretch marks, wrinkles and saggy skin with an aim to tone and strengthen muscles.

It uses bipolar radio frequency to heat and destroy fat cells while stimulating collagen; electro-muscle stimulation to firm and strengthen muscles; and acts as a mini-workout.

Fat Iron will retail for $400, with expected delivery to crowdfunding Rewards backers in August.

“We have to continually be jumping off cliffs and developing our wings on the way down.”
—KURT VONNEGUT

DISSIM
INVERTED LIGHTER
dissim.com

Billed as the world’s first lighter designed for upright and inverted use, DISSIM features a patent-pending circle grip that allows for igniting in an upright or inverted position.

The flame adjustment wheel makes it easy to set the best flame height. The butane tank is refillable, so the product is environmentally friendly.

With a sleek design and made of cast metal, DISSIM comes in premium packaging.

DISSIM will retail for $30. Crowdfunding for Rewards backers is set for August.
**LaserPeckerPro**
PORTABLE ENGRAVER
laserpecker.net

LaserPeckerPro allows you to engrave on virtually any surface, including fruits. The app provides a wide variety of patterns, or you can create your own by uploading any picture or customized design.

LaserPeckerPro features an auto-adjusting support stand that sets up and focuses in seconds. Just put the engraving target on the spot; the stand’s built-in sensors measure the distance between the laser generator and the target, automatically adjusting the height to ensure the focal point is the correct distance from the surface of the object.

The standard model retails for $399; the deluxe version, with auto-focus supporting stand, sells for $559.

**POSSIBLE DELAYS**
Coronavirus-related factors may result in changing timetables and later shipping dates than companies originally provided.

**Rotofarm**
NASA-INSPIRED INDOOR GARDEN
bace.co/rotofarm

Using zero-gravity technology, Rotofarm lets you grow vegetables, herbs and microgreens using less space, water and energy.

To imitate the concept of zero gravity, Rotofarm rotates your garden 360 degrees every 46 minutes. This reduces the growth-suppressing effects of gravity and optimizes water and aeration of roots, as well as maximizes light exposure. The sleek design is conducive to being in the kitchen or other rooms in your home.

Rotofarm uses no soil and is hydroponic. It automatically controls watering and lighting, lasting several days without needing to top-up the base water reservoir.

The project team has a working demo, not the final product. It is scheduled for availability late this year.
James Ritty’s Dayton, Ohio, saloon was an unqualified success in the 1870s, but his profits weren’t reflecting that. It was enough to drive a man to drink.

In those days, over-the-counter businesses would put money from transactions in a cash drawer. This easy access for barmen resulted in a lot of employee turnover—and money that was figuratively going where the excess head of a beer goes.

The former captain in the Union Army needed some time away. While on a steamboat vacation to Europe in 1878, he made friends with the ship’s chief engineer and got a chance to tour the engine room.

Always mechanically inclined, Ritty was especially intrigued by the automatic mechanism that recorded the revolutions of the ship’s propeller.

One could almost hear the future ring of a cash register’s bell in his head.

**Milestone patent**

It stood to reason that if there was a device for counting propeller revolutions, there could be a device for counting transactions. Upon returning to Dayton, Ritty immediately began brainstorming with his brothers.

Two siblings had patents: Sebastian, involving items ranging from a wheel to a steam boiler to farm implements; and John, for machines for the hulling of green corn. John’s help was so instrumental that both he and James Ritty are in the National Inventors Hall of Fame for co-inventing the mechanical cash register.

However, arriving at a functional and finished product (before many advances made by others throughout the 1900s and beyond) was an arduous process with so many iterations that the number of attempts is in dispute. The Hall of Fame says the brothers’ third prototype was the one that resulted in U.S. Patent No. 211,360; history-computer.com says that version was the second prototype.

Regardless, the latter information source provides some fascinating detail on the first prototype—basically a keyboard adder, similar to others that had existed around the world for decades. The brothers’ first prototype “looked like a clock with a keyboard. It had two rows of keys along the lower front, labeled with cents in five-cent increments from 5 to 95 cents and dollar amounts from 1 to $9, and had no cash drawer.

“Pressed down, each key represented the individual amount of money to be recorded. The sales were registered on (a) large dial, probably resembling the one on the ship, with two sets of numbers—the outer circle of numbers showed cents and the inner one dollars—around its circumference and two hands operated by the keys.”

**Quick sale**

The model that was patented on Jan. 30, 1883, “wasn’t all that better” and wasn’t even put on the market, the site continues. The only significant addition was a series of adding wheels mounted in the back of the machine.

In fact, this model did not have a cash drawer. But it recorded the number of sales and the amount...
of each one, allowing the bar owner to keep track. This was a crucial distinction for James Ritty.

One of the most important later features was a bell that would sound when a sale was rung up, so that the bar owner or person in charge would be alerted to a sale in real time. This became known as “The Bell Heard Round the World.”

But running a saloon and overseeing the cash register business quickly became too much for Ritty. So he and his brother sold all of their interests, including patents, to glass and silverware salesman Jacob Eckert of Cincinnati.

Eckert established National Manufacturing Co. to manufacture and sell the first mechanical cash register. Meanwhile, a Dayton businessman, John Henry Patterson, received a circular that advertised a machine for recording money and sales in retail stores.

He is quoted in history-computer.com as saying: “The price was $100. We telegraphed for two of them, and when we saw them we were astonished at the cost. They were made mostly of wood, had no cash drawer, and were very crude. But we put them in the store, and, in spite of their deficiencies, at the end of 12 months we cleared $6,000.”

Patterson bought controlling interest in the cash registers and their patents for $6,500, according to Cash Registers Online. In 1884, he changed the name to the National Cash Register Co.

Patterson is generally credited with adding a paper roll to record transactions. This became a staple of the machine and produced a receipt.

**A market foothold**

Patterson’s cash register company was the most dominant in the market through the early 1900s as these ornate, cast-metal cases became ubiquitous in many establishments. Most were brass—these are the ones usually seen in antique stores—but they were also made of wood. Finishes included polished brass, nickel-plate, paint, antiqued copper, and even silver and gold plate.

If James Ritty was the father of the cash register, John Henry Patterson was the father of cash register sales. The company produced only 16,000 registers in its first decade, according to Ohio History Central, but thanks to aggressive marketing and advertising was producing 110,000 annually by 1914.

**James Ritty was inspired by the automatic mechanism that recorded the revolutions of a ship’s propeller.**

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**INVENTOR ARCHIVES: JUNE**

June 1, 1957: Jeff Hawkins, who invented the Palm Pilot and Treo, was born. The Palm Pilot was launched on March 10, 1997.

In 2002, Hawkins founded the Redwood Center for Theoretical Neuroscience, which promotes and conducts research on memory and cognition. In 2003, he was elected as a member of the National Academy of Engineering “for the creation of the hand-held computing paradigm and the creation of the first commercially successful example of a hand-held computing device.”
LETTERS AND EMAILS TO COMPANY EXECUTIVES BECOME A MORE PRODUCTIVE OPTION

BY JACK LANDER

AS I WRITE THIS, several U.S. state governors are partially opening their states for business and recreation again. It’s a gamble, because none of us knows the optimum balance point between exposure to what may remain of the COVID-19 virus and the potential bankruptcy of businesses that would continue to remain closed.

But one thing is certain: It won’t be business as usual as we venture out. We may find some of our sources of services and supplies are permanently closed. And those of us who have planned on attending trade shows to locate potential licensees may find indefinite schedules, or the trade show sponsors are out of business.

So, what can we do while the degree to which states are open is changing daily? What can we do from home, if we have time but not yet the inclination to venture out except for essentials?

Pitches that hit home

Those of you who have been steady readers of my column know that I have preached in favor of attending trade shows in order to find your potential licensee. There, you can learn a lot about companies that may be a good fit for your invention. You can meet directors of marketing or at least their immediate subordinates, persons you would have difficulty meeting almost any other way.

You’ll also recall that I’ve thought of email contact or letter-writing as typically being a second-rate approach. Well, at least temporarily, I’ve changed my mind. Now may be a productive time to write letters.

Many of us are still working from home. Newscasters, comedians, politicians, cooks, interviewees and others seem to have adapted quite well to working solo from their den, basement, or even their kitchen.

No doubt executives are part of this group, too. And your snail mail will reach them in person, bypassing the usual “gatekeepers” who would have received it before the pandemic.

Their company mail is forwarded to them at their home—where they have access to at least one phone, a computer, and Zoom or its equivalent. Zoom enables them to engage in conferences. (I suspect that Zooming may replace a lot of face-to-face conferencing from now on, reducing the expense of travel.) Except for face-to-face contact with their fellow workers, their jobs and their old routine survive in a new form.

Why contact executives by mail? One reason is, they’ll find it easier to open and read than to pass it on to a subordinate. Another is that your mail may be a refreshing change from their mode of trying to maintain business until the company is fully open again. The chances are fair to good that you’ll receive a reply, possibly even a hand-written note.

Of course, they may toss it in their overfilled wastebasket. But if you’re very lucky, the recipient may send you an e-mail with a Zoom response number, suggesting a time for a visual conference call.

Even if your letter’s only effect is to make them aware of your invention, (oops, sorry, your product), the next time they receive your mail they may be back in the office. They’ll hand your mail to an assistant, saying something like, “Look into this. It could be worthwhile.”

Meeting directors of marketing at trade shows could be a year or more in the future—especially if we experience a second wave of infection and the virus stays with us for longer than some medical professionals had estimated. A well-prepared mailing is worth a try.

Don’t sell in the letter

So, here’s what an ideal mailing consists of:

• A brief cover letter.
• Your sell-sheet.
• A return postcard.

If you’ve been reading past issues of Inventors Digest, you’ll know how to prepare an effective sell-sheet. If not, e-mail me for a free copy of my paper on how to prepare one.

But don’t attempt to “sell” (license your patent, etc.) in a letter. Letters don’t show your product or
convince the reader to take action the way a sell-sheet will.

So, when I say a brief letter, I mean bare bones—a polite greeting; a sentence stating the purpose of the mailing, which is to introduce your product; and contact information including e-mail address, phone number and street address.

Let your sell-sheet do all the selling. If you’ve prepared your own sell-sheet, you probably followed the time-honored rules and have spent several hours making it the best you can. Inventors who attempt to write a sales letter typically whip off something in 15 minutes—which is why they don’t get results.

Your letter should be little more than a large version of your business card. Its brevity leads the reader to review your sell-sheet. Long letters create impatience and reduce interest.

Your return postcard should have options that the reader can respond to with check marks. For example:

- [ ] I’m interested. Contact me again when my company opens.
- [ ] Tell me more.
- [ ] I’m not interested.
- [ ] Other (leave room for writing)

Be sure to put the name of the company on the front of the card so that you will know which company has responded. And add your address, of course.

Postcards may not be available from your local post office, but you can purchase them at the Postal Store at usps.com. Standard cards come with postage in a set of 10 for $3.90. Or, you can cut card stock to as large as 4 1/4 by 6 inches. A minimum of 35 cents postage is required.

It is difficult to get the name of a director of marketing under the best conditions, but mail directed to that title is now much more likely to actually reach the director than before the quarantine.

Now your snail mail will reach executives in person, bypassing the usual “gatekeepers” who would have received it before the pandemic.
Finding candidates

An internet search is one of the simplest ways to find the names of companies that are candidates for licensing. Suppose you invented an accessory for hairdryers, and you want the names of hairdryer producers. Search “companies that produce hair dryers.” Goodhousekeeping.com lists the 20 best dryers, and several more sources are listed.

Such lists provide the brand, but you must backtrack to find the company’s website and mailing address. Many brands are imported, and their company headquarters may not be in the United States even though the website provides a U.S. address.

All of the above assumes you have your patent application on file or issued patent in hand. If you are closer to the beginning of the invention cycle, you can spend hours, even days, searching the patent files.

To get the most out of searching, buy a copy of Nolo’s “Patent Searching Made Easy” and learn the advanced and more productive methods for searching before you start.

If you’ve completed your search but haven’t yet filed, put your nose in either of patent attorney David Pressman’s books, “Patent It Yourself,” or “Patent Pending in 24 Hours.” The more you know about filing before you approach a patent agent or patent attorney, the less money you’ll spend—and you may end up with a better patent.

Attending trade shows as a walk-in, not as an exhibitor, is still the most promising way to find a licensee. But every trade show doesn’t exhibit every brand. So the letter approach has the advantage of finding more complete prospects.

Let’s hope you can use both methods soon. Stay safe.

Jack Lander, a near legend in the inventing community, has been writing for Inventors Digest for 24 years. 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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Organic Social Media

5 REMINDERS FOR BUILDING RELATIONSHIPS WITH YOUR CURRENT CUSTOMERS

BY ELIZABETH BREEDLOVE

HERE IS A LOT of emphasis on managing paid advertising on social media, but organic (unpaid) social media is just as important.

Although paid content can be riskier because it involves hard-earned dollars, organic social media is more difficult in many ways. Social media tends to be a “pay-to-play” marketing tactic, which often makes it a challenge to achieve a large reach on popular platforms. But despite the inherent challenges, organic social media is a key aspect of a well-rounded social media marketing strategy.

It might be easy to think that because of the typically much lower reach of organic content, these types of posts aren’t important. That’s not the case.

Paid social media efforts are where you acquire new customers, but organic social media is how you keep them. Whereas paid social media is about advertising and promotions, organic social media is about relationship building and making connections. Well-managed organic social media improves customer retention, which means you can spend less money on customer acquisition—including paid advertising.

So if organic social media is important, what does it mean to do it well and do it right? Consider these five tips.

1 Remember that organic social media is about building connections with customers. To that end, use your profiles to deepen relationships.

Make it known that you check your inbox or direct messages frequently to answer questions or provide other information. Publish posts that ask questions related to your invention or industry, then engage with and respond to followers. Use your social media accounts to create opportunities to interact with your customers and followers, building a community around your invention.

When you use organic social media to build relationships, you’ll enjoy an increase in customer loyalty—and, if you do it well, a decrease in the cost of customer acquisition.

2 Work smarter, not harder; repurpose your content. Even though you have a passion for inventing, there is no need to reinvent the wheel. If you have created content for use elsewhere, reuse it on your page.

Suppose you published an article or blog post with 10 helpful tips related to your industry, similar to this one. You can summarize each tip with one or two sentences, then add a question to the end of each to provide an opportunity for your followers to engage with your post and comment.

Voila! You have 10 things to post on your account. Later, depending on how frequently you post, you can revisit those 10 posts, tweak the language slightly, and post them again.

You can repurpose almost any content in this way. Just don’t make your content too promotional. It’s OK to mention promotions or sales, or to talk about your latest invention or a new product launch, but aim to follow the 80/20 rule and have about 80 percent of your organic social media content be focused on engaging your followers and customers, and have 20 percent more promotional or sales oriented.

3 Don’t be afraid to mix it up. Trying new types of organic posts is painless because you’re not putting money behind the posts. If one post has a lousy performance, that’s OK; you spent no money and you can keep posting as much content as you want.

If you’re not already posting videos, that’s a great place to start! Experiment with publishing different types of videos—from something very promotional to something that shows off your personality like a behind-the-scenes tour, to something fun and outlandish like your team re-creating the latest viral Instagram or TikTok challenge.
Have a plan for managing comments. One of your biggest goals with organic social media should be to increase engagement and comments, but you need to have a plan in place for managing the comments you get. Ask yourself:

- Who will be primarily responsible for monitoring your social media accounts and managing comments?
- Do you plan to respond to most comments? How quickly will you respond?
- How will you handle negative comments?

My recommendation is to have someone monitoring and responding to comments who knows your brand and invention very well, and who can check in and manage comments at least once a day Monday-Friday.

My typical approach to negative comments is four-pronged:

- If it's a negative comment on an ad, I delete or hide it. I don't want to spend money promoting something that someone else is using to drag me down, so I get rid of it.
- If it's a negative comment but can be politely corrected, I do so—maybe if the commenter is misinformed about a feature of your invention.
- If it's negative but more of an opinion (for example, “this is dumb”), leave the comment up but don't engage with it.
- If it's highly inflammatory or offensive, remove it. Remember, it's your page and you get to choose what's on there. Keep in mind that if you routinely delete all negative comments, most likely someone will eventually notice and make a big deal out of it.

Take what's good and make it better.

This tip can be applied in many ways.

For one, pay attention to what types of content get the biggest reach and engagement, and try to shift your strategy to include more like that.

If a piece of content is performing remarkably well, consider taking it to any relevant Facebook groups you are a part of and sharing it there. Posts in Facebook groups often perform much better than posts on Facebook pages.

And finally, one last tip specifically for posting on Facebook. Facebook has a “Boost Post” feature that allows you to pay to turn anything you post into an ad. If a post is performing exceptionally well, reaching more people than normal and seeing great engagement, consider spending a little money to get the post—and your brand or invention—in front of even more people.

Elizabeth Breedlove is a freelance marketing consultant and copywriter. She has helped start-ups and small businesses launch new products and inventions via social media, blogging, email marketing and more.
Operation Ignition

INVENTING FIRST REQUIRES IMAGINATION, CONVICTION, HUMILITY—AND THE COURAGE TO FAIL WITHOUT GIVING UP

BY ALYSON DUTCH

After 30 years as a product launch specialist—working with every sort of entrepreneur, inventor and large company making products ranging from butter-based cookies for Mrs. Fields to basketball shoes that prevent ankle sprains to interchangeable interracial wedding cake toppers to TVs in purses for moms relegated to a life of waiting to shuttle kids to their next soccer game—I realized there is an absolute set of common threads for every business.

Building a business based on these common threads can make any idea a reality (or will clearly illustrate that the idea you have is not worth pursuing in the original manner you intended).

Have an idea or something you have already created that you badly want to make into a viable, sustainable and successful business? Consider these inspirations as you employ the common set of threads I have touched on in earlier columns and again referenced below.

Inspiration at the core

After reading a Steve Jobs biography, it inspired me to finally get this down on paper and turn it into a book, “The POM Principle: 3 Pillars Needed to Start (and Sustain) Any Business.”

How many times in our lives have great ideas come to us that we dismissed or put into the “one day” file drawer of our brains and never acted upon it? Some of us have had the courage to execute on our ideas and failed, losing our life savings and allowing discouragement and fear to keep us from rising from the ashes again.

Jobs and Wozniak had a third partner when they started Apple. But 10 days after writing up their partnership agreement, he bailed for fear of entrepreneurial failure. Had he remained, his shares would be worth $40 billion today (and he was only a 10 percent partner).

Did you know that Richard Branson of Virgin Airlines never graduated from high school and went through bankruptcy before he created the success that now allows him to develop commercial intergalactic airline ideas for fun?

Confidence through failure

The creation of a successful business is probably nothing like what you’ve envisioned.

Do you have the steely conviction of an Olympian and the humble heart of a hungry student? You need to be committed to learning from others and willing to be wrong, fall, lose money, yet get up repeatedly. You must accept that others know more than you do—and continue to embody these attitudes until the day you sell your business.

One of the attributes of successful entrepreneurs is that they are voraciously curious people who are willing to let others help, yet confident enough to push through on their instincts.

It is this brand of recklessness mixed with an eagerness to have fun that best demonstrates how entrepreneurs must be—day in and day out—in order to bring the greatest innovations to the world.

Your innovation may not be a jaw-dropping glamour puss to the world like Apple was, but it can be to an extremely specific customer.
Every product is created out of someone’s need. There are so many great stories behind every product: moms who invent things that make mothering easier, firemen whose products save their brothers’ lives; engineers who hasten mechanical processes; food technologies that prevent starvation; scientists who build quantum computers to measure how thoughts become things; herbs that make impotency a pain they never need to experience again, and artists whose ideas permeate cultures.

Entrepreneurs make the world go around. I have a saying that inspires me through thick and thin: “What would your life look like if you knew you couldn’t fail?”

And while you’re thinking about it, start feeling what it would be like if everything you did was the absolute right thing and there wasn’t even a glimmer of possibility that your dream would not come to fruition.

**Power from hopelessness**

Here is how I learned this. When I was going through a divorce, had just moved to a tiny guest house with $650 to my name and got sick, my boss called and fired me over the phone.

I was so sick; I fell back asleep into my flu delirium and woke up hours later realizing that I had just lost my job. I sat in bed crying a puddle of tears that soaked my sheets and shook my head in disbelief at what happened.

I was physically so weak, I could barely stand. I was completely alone, had no savings and no one from whom to borrow money. The pain was so overwhelming that I did not think I could take all the pressure. I felt I would surely explode or implode.

With the huge weight of bad news and not knowing what to do, I crumbled.

The shattering that occurred, however, was into a massive heart-, mind- and action-stopping surrender. My world as I knew it came to a screeching halt and I fell into what I now call the “fertile void”—a giant black hole of nothingness, but which I later learned contained explosive power.

It took getting kicked from every direction to come to a grand acceptance of the fact this was indeed real, and there was nothing I could do about it except adjust my reaction. The longer I stayed not believing it, the longer I would be in pain. I began to say over and over to myself a mantra I had learned in my self-evolution studies: “pain is resistance to change.”

This is when I discovered the power of just believing that I could create anything I wanted.

You need to be committed to learning from others and willing to be wrong, fall, lose money, yet get up repeatedly.

It resulted in the creation of a business I never knew I wanted to start, gave me the chutzpah to ask for money when I didn’t know how, and the strength to put one foot in front of the other when I was terrified. I ended up buying the Porsche I always wanted, a two-acre compound in Malibu and starting two businesses.

**Imagination is the future**

When I was a teenager, I contemplated how the future was created. I pondered whether the future was just out there in totality, glittering and waiting for us to get there, or were we creating it as we went along? And who was setting the vision for the future?

Visionaries in the form of writers such as George Orwell (“1984”) and Marshall McLuhan (“The Medium is the Message”), wildly artistic scientists such as Albert Einstein and Steve Jobs, political leaders such as Nelson Mandela and Mahatma Gandhi—they all had the audacity to imagine so large that their ideas were completely ridiculous to anyone around them.

But this is how the future is created—through our imaginations. Imagine what a cruel trick it would be to have an imagination and not have the ability to create what we see? We would have long become extinct.

This is how businesses are ignited, too, but the creation of the product is just the beginning. The rest of your life will be spent acquiring customers and building all the operations and marketing required for it to keep growing.

I have distilled the common thread of what makes a business come together into a very simple, easy-to-understand formula—which, no matter the industry, kind of product or service, or the time in which it comes to market, never changes.

P is for product.

O is for operations.

M is for marketing.

Watch for more details on each.

Alyson Dutch has been a leading consumer packaged goods launch specialist for 30 years. She operates Malibu-based Brown + Dutch Public Relations and Consumer Product Events, and is a widely published author.
ASSISTS IS NOT a statistic in tennis. But if it was, Inventors Digest would be credited with one for Jeff Nelson's POP-iT.

About eight years ago, the father of three and former tennis instructor from Towson, Maryland, had one of his many inspirations. "I was always left after a drill or after a lesson picking up 50-plus tennis balls on the courts myself," he says.

Nelson's inventive quest was twofold: to end the cumbersome practice of bending all the way down to pick up the balls while adding utility for his students.

He cut a Whiffle ball in half, lined its inside with Velcro and screwed that to the top of his tennis racquet. "The Velcro sort of stuck to the felt of the tennis balls and I didn't have to bend over anymore to pick up the balls.

“Well, after my students saw me using that, they wanted to try it and they loved using it. That was the genesis, my aha moment!"

11 prototypes
Before long, Nelson began creating fun games using his first POP-iT prototype. This naturally progressed to being part of the lesson—a drill involving shuffle steps, competitions to motivate the kids.

"I discovered that it continued working on so many tennis-related skill sets like distal eye-hand coordination, along with footwork. It was wonderful. The bonus for me was when adults would see us using that POP-iT and ask me where they could buy one, or if I could make one for them.”

He soon discovered a growing need for his creation. But excitement morphed into frustration: Six years and 10 more prototypes later, Nelson didn't know how to manufacture his idea.

This is where Inventors Digest came to the rescue.

“I would sketch drawings on paper and pencil,” he says. "Every season I would get those drawings out, make a few changes and at the end of summer I'd put them away.

“In 2017, I Googled ‘manufacturing and how to make stuff’ and came across an article in Inventors Digest about 3D printers and how they work. That was another aha moment!”

Nelson sought out someone with a 3D printer and embarked on the trial-and-error dance. Finally happy with his ninth prototype, his next step was to find a design firm and a manufacturer.

He found a local design firm for further, latter-stage refinement. "I had a manufacturer all set in China. The hardest part was being patient and sending samples back, asking for certain corrections.” But he knew he could not scrimp on quality in any way, or the product was destined to fail.

2-handed benefits
The invention's utility meets its two original goals. There's the POP-iT that facilitates ball pickup, as well as the POP-iT Program.

“I discovered that (POP-iT) continued working on so many tennis-related skill sets like distal eye-hand coordination, along with footwork. It was wonderful.”

—JEFF NELSON
Nelson says he designed the latter to be “a framework of 25 fun games for tennis instructors, tennis pros and teachers to work from, add to, modify, put a little of their style into it.

“Teaching is a passion, a production, fun and an honor. I wanted to create the POP-iT Program as much for the students as for those using it.”

He also derives great pride in how POP-iT benefits and encourages wheelchair players: “I have a wheelchair tennis pro who utilizes it. She asked me, ‘Where was this 10 years ago?’ She put off learning the game because she didn’t know how she was going to get past the obstacle of picking up the ball.

“I think of all the athletes with limited mobilities, pedestrian or wheelchair players who can now play tennis, which is one of the few lifelong sports.”

The standard POP-iT (fits racquets 27 inches and up, over various grip sizes) and the LIL POP-iT (youth racquets 23 to 26 inches, also various size grips) are available on Amazon, Walmart, at various tennis clubs and the POP-iT website.

After all this time, POP-iT is still patent pending. Nelson explains:

“I feel a lot of inventors jump right from their idea to thinking they have to get a patent immediately. While it is important, patents are relatively expensive for the typical middle-income Inventor. I felt it wasn’t paramount in the beginning; I really needed to see if this was a product that people would want.

“Early on, the POP-iT was the pimple on an elephant’s hind end. I choose to use my funds to manufacture and test the market. Once I discovered there was a need, I filed.”

Opportunity amid COVID

A cursory view of Nelson’s YouTube videos reveals a man with palpable spirit and energy. He’s a natural teacher and ambassador for tennis, as well as for his invention.

“I have done two demonstrations, and it’s a blast! We have seven major events here in the U.S. and Canada, and I was scheduled to do a demonstration at four of them with local schoolchildren.

“However, with the COVID crisis those events have all been canceled. They will be rescheduled, and I hope to again be part of the plan.”

On the other hand, Nelson says there has been “a ton of interest” in using POP-iT to prevent contact with the ball during group youth lessons. Camps and the United States Tennis Association will use POP-iT in their programs to limit ball contact in group settings, he says.

Asked how the pandemic has changed his selling and marketing of POP-iT, Nelson responds: “Online, online, online sales!

“All signs seem to be pointing to tennis camps, academies and clubs being canceled, so I’ve shifted focus to online sales. I’ve utilized low-cost, no-cost social media to drive sales through Amazon. Two clicks and you bought the item you’re looking for: pick, swipe, done, shipped in two days.

“This is perfect time to do promotions and blast social media posts, because everyone is home with lots of time surfing those social media channels. I do three to four Instagram stories a day with music—great ways to share, entertain followers and get the message out. I’ve hosted a live question-and-answer session and have been part of other live social media Q&A sessions.”

Details: popitpickup.com
H ere's a baby carrier with an added advantage. If you have back problems—or want to avoid them while “wearing” your little one—Mamapod features a pole attached to the bottom of the carrier, below baby’s tush, helping to support baby and prevent back strain for the adult.

I spoke with Cindy Wang, a mother and the product’s inventor.

Edith G. Tolchin (EGT): How did Mamapod come about?
Cindy Wang (CW): When my daughter was 18 months old, my husband and I took her on her first trip to Disneyland. I’m a petite mom, so by the end of a full day carrying her around in a soft carrier, I was totally exhausted, stressed out—and my back was killing me.

When we reached the final stop, I searched in vain for something safe to prop her and the carrier up on to relieve the pressure on my body. I thought to myself, “Even a stick would work.”

Necessity was the mother of invention, encouraging me to design a carrier solution that empowers all parents and caregivers with the means to travel with babies and toddlers with less hassle and more joy.

Using my 20 years of experience as an engineer and business development manager in the technology industry, I developed Mamapod, the first ergonomic baby carrier that keeps children close and comfortable while preserving comfort for parents.

Within Mamapod’s first year on the market, we are so pleased to have received a “Seal of Approval” from the National Parenting Center and a “Best Baby Product” award from the National Parenting Product Awards.

EGT: What are Mamapod’s specific advantages over standard baby carriers?
CW: New parents deal with so much physical stress, and Mamapod helps alleviate one of the major sources of that stress—the many hours per day spent carrying a baby who is growing bigger every day. The carrier redefines baby wear by offering ergonomic structural support for both baby and parents, addressing common issues like back and shoulder support, protection for the child, comfort and breathability.

Mamapod uniquely features:

- A detachable support pole that offloads all carrying load to the ground when you stand and rest. The support pole is light (less than 0.9 lbs.) and installs in seconds to the seat via magnet, while foldable to easily store in the seat pocket. It can be adjusted to fit parents between 4’9” and 6’1.”
- Shoulder and waist straps that ensure proper load distribution and extra lumbar support.
- Adjustable leg openings that offer comfort and safety for your baby when facing either inward or outward.
- A foldable seat that supports baby with comfort in addition to a “seat-only” mode, which is convenient for on-the-go activities with toddlers. The parent can push the buttons on either side of the seat to fold it like a fanny pack when not in use.
- A breathable inner mesh layer for maximum comfort, especially on hot days. The mesh baby hood can be buttoned on to keep your child cool and comfortable, whether you’re on the go or if baby is taking a nap.
- Adjustability as your child grows from 4 to 36 months, 12 lbs. to 44 lbs. Baby can snuggle in close, facing you or facing out.

EGT: How involved was your prototyping process?
CW: I kludged many mockups at home to use by myself when my daughter was little. I used all kinds of support sticks from a walking cane to a cleaning pole, tried puffy seats from stuffed animals, baking gloves to a small pillow.

After the mockup proved functional, I shared with my friends who became part of the Mamapod creative team. We worked with our design team to try out different structures of support frame, monopod, tripod, wheels, no wheels. We created different models that function very well but at the end decided...
By the end of a full day of carrying around her 18-month-old daughter in a soft carrier at Disneyland, Cindy Wang “was totally exhausted, stressed out—and my back was killing me.”

on the current Mamapod configuration—because we wished the first Mamapod to be functional yet user friendly, a tool for all the parents, not too big, not too heavy, not too complex, easy to use, and not too costly.

It has been a much longer journey than we expected. It took many iterations, taking in recommendations from industry experts in the field, feedback from Mamapod’s early fans, redesign with experienced professionals. After three to four major revisions, the Mamapod of today’s configuration was born. We are still making small improvements to make it even better.

EGT: Was it difficult to obtain a patent for Mamapod?
CW: We are still going through the process to patent all the breakthroughs. We got some of our invention patented. A lot more are still in the pipeline. The challenge is to distinguish our invention in the scope of application (baby carrying).

EGT: Are you manufacturing in the United States, or overseas?
CW: We manufacture in China. It is very difficult to find the right partner in the United States. The challenge is to go through all the details of our unique design to make sure it is manufacturable, work with the factory to get all the procedure and QC protocols in place, and to manage the process. On top of ensuring the International Organization for Standardization quality standard implemented at our factory, we quality-check each unit to make sure it passes our quality standard.

EGT: How has the Consumer Product Safety Improvement Act affected the manufacture of Mamapod, as well as the certifications needed in order to sell a baby product in general?

CW: Mamapod is compliant to safety standard ASTM F2236, the U.S. safety requirement for consumer safety. We work with Consumer Product Safety Commission-approved labs to obtain this certification. It is crucial to work with authorized testing labs, because their expertise helped tremendously and guided us to ensure our design is safe and compliant.

When we get to the zone of confirming the Mamapod’s unique inventions, such as the innovative leg opening (to help baby sit comfortably yet safely in all positions) and support pole (to help parents carry their baby while alleviating neck, back and shoulder stress), a high-quality lab goes beyond reading and following standards. Their staff interprets the standard and applies the criteria to our specific design to assure safety.

EGT: How many styles and colors are featured?
CW: The Mamapod Baby Carrier has two color variations: natural gray and metallic blue. Customers can also choose between a carrier with or without the support pole.

EGT: What obstacles have you encountered in development?
CW: Although there have been many challenges developing the product, currently our biggest challenge is to let the consumer know about Mamapod. Baby carrying is a vast market, with no shortage of competition. We are still learning the effective way to educate the market. Shortly building up brand awareness is our major task now.

We are learning the new-age marketing, impact of social media, the new landscape and power of combined online and retail sales channels. We find
the early Mamapod fans are parents with bigger, heavier babies; parents who enjoy outdoor activities, hiking, museums, aquariums, concerts; parents who travel with their little ones. A handy tool like Mamapod truly empowers parents to enjoy the precious time with their baby, to explore, discover and see the world together.

**EGT: What advice do you have for inventors looking to develop a baby product?**

**CW:** It is not an easy process! Transforming an idea to a design to a product and then through the market to a consumer requires investment in talents, experience, market input, patience to work through the many iterations and adequate funding.

When the process gets tough, always remember why you began and stick to that. Inject with tenacity to complete and run through the finish line. We are all still learning, and it’s important to always look for inspiration from the many fellow and pioneering inventors ahead of us.

I would also love to share my advice specifically for mom inventors, as I am one myself. It is easier said than done, but balance is the golden rule to handle the workload of business and family. It is perfectly fine to take a break, either at work or at home for whatever reason.

We often hold ourselves to high expectations, and when we can’t fulfill a commitment, we feel guilty. Yet, the world keeps spinning. If we have good resources behind us, our business and family can function perfectly!

Above all else, be proud of your choices, be assertive of your needs, be thankful to your supports, be at ease with yourself, try your best and enjoy the journey.

**Details: mamapod.com**

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Books by Edie Tolchin (egt@edietolchin.com) include “Fanny on Fire” (fannyonfire.com) and “Secrets of Successful Inventing.” She has written for Inventors Digest since 2000. Edie has owned EGT Global Trading since 1997, assisting inventors with product safety issues and China manufacturing.
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FORMER ACTRESS AMANDA HORN ANDERECK INVENTED SEAMLESS BRA THAT ELIMINATES BACK BULGES

“...had a bit of a shopping habit,” says Amanda Horan Andereck, the former co-star of TV’s “B.J. and the Bear,” one of Calvin Klein’s first models at 16, and current CEO of Sassybax.¹

One day in a dressing room, she tried on a tight sweater and noticed the unsightliness caused by her bra straps. So she invented an undergarment to eliminate visible bra lines and became a fashion solution maven, the first to eradicate the look of what many women call “back fat.”

Andereck strived to create a seamless bra, which 44 manufacturers told her could not be done. Her inspiration came from control-top pantyhose: She cut off the legs, flipped them upside down, and slipped them over her head. She put her arms through the leg holes, cut apart her bra and slipped the cups inside, anchoring them with a few hand stitches.

After trying on that tight sweater again, she had completely eliminated the bra strap indentations.

This was the beginning of a wild success story, eventually starring a 360-degree knitting machine that could knit in contours and bra-cup type support. This piece of technology became a seamless garment-making icon now used by popular brands Lululemon, Nike, Athletica and many others.

Her Sassybax brand, founded in 2004, was quickly adopted by women nationally; Neiman Marcus was its first customer. She sold $1 million of product within the first year from her garage in Marina Del Rey, California. The brand soon became an intimates staple at other iconic retailers.

Overwhelming satisfaction

When internet sales began to burgeon, many in the fashion industry never believed that people would buy clothing online because they were used to trying it on.

Andereck says that assumption is particularly false for the intimates sector, especially because women abhor trying on bras.

“If it doesn’t fit, you have to put all your clothes back on, after which the dressing room locks behind you,” says Andereck, who knows how people think after seven years as a clinical psychologist. “You’ve gotta go out to the floor to see if you can find another size and then, if you’re lucky, you’ll find one of the three sales associates staffing an entire department store floor to let you back into the locked dressing room.

“Women hate the experience. It’s worse than trying on jeans and bathing suits.”

When the retail business began to wane more seriously in 2012, Andereck noticed that her online sales were growing and boasted a smashingly low return rate. Most e-tailers plan for up to a 50 percent return rate. Most e-tailers plan for up to a 50 percent return rate. But Sassybax bras hit such a nerve for women that the return rate was a stunning 2 percent.

After a career with more than 30 TV and movie credits, former Calvin Klein model Amanda Horan Andereck used her ingenuity to create a product that manufacturers said was impossible. She founded her Sassybax® brand in 2004.
No one-hit wonder
With dozens of appearances on major TV shows and movies during the 1980s and early ’90s, Andereck always avoided the “one-hit wonder” syndrome. This is also a potential pitfall for entrepreneurs; retailers often turn away brands that don’t have a larger catalogue from which to choose.

Andereck started with the “no back fat bra” she called the Bralette that came in four sizes and four colors, then added length on the body of the design for a mid- and complete-torso option. From there, she used the same seamless knitting technique to craft booty-lifting leggings, and racerback and strapless bras. In 2007, she received a U.S. patent for the unique knit structure she developed to incorporate into her company’s leggings and bottom shapers.

Sassybax eventually expanded its catalogue—developing a line of pretty lingerie-looking shapewear, arm- and thigh-shaping undergarments, slips, briefs, camisoles and tummy-taming thongs.

But as time marched on, she listened more carefully to her customers and decided to get back to basics and hyper-focus on Sassybax’s core products that women voraciously continued to order: the bras.

A patent? Not always
Andereck is a no-frills, tell-it-like-it-is business owner. Having grown up in Kansas and Minnesota, she says she’s “a Midwesterner by ethic.”

Though today she focuses on running the business, she has performed every function from designing to delivery, legal to accounts payable and inventory to marketing.

She generally does not believe in patents in the garment industry. “Sale is proof of utility, and that’s what matters,” she says.

There are important reasons for her not to pursue a patent on her main product: “Patenting in the garment industry is a false sense of security, because someone can change something ever so slightly on that garment and then sell it to compete with your product—and that’s legal. Shocking, but those are the facts.

“In addition, patent law is wildly expensive, with the possibility of long, drawn-out legal battle that’s nearly impossible to prove.”

Marketing is queen
Andereck’s experience as an actress helped her understand the crucial importance of marketing. She says Hollywood agents agreed that “no one went broke underestimating the taste of the American public.

“A lot of companies have been built on genius marketing and less-than-genius products. You can have the best product on the planet, and if no one knows about it, you will not succeed. Though no
one plans to have a mediocre product, it is true that a less-than-amazing product with brilliant marketing wins every time."

She has always made her products in America, having personally witnessed what she says is an unhealthy emphasis on work in Chinese factories.

“I was saddened that the factory employees were treated as if all that mattered was work. The factories are owned by their government, and they are expendable workers. … That’s what kept me from manufacturing there.”

She refused to use toxic fabric dyes, such as the ones used in Chinese factories. For a product such as Sassybax, an undergarment that sits directly on the skin, she felt it imperative that the dyes were non-toxic. Consumers are looking for products that match this health value, so her marketing is changing to bring this to light.

**Inspirational resiliency**

As the coronavirus pandemic dawned, consumers’ points of view have changed dramatically. Being tone-deaf to this could alienate a consumer base; it’s crucial to communicate with customers in a way that makes them feel they are heard and seen.

Often, people schooled in adversity grow into those who are the most resilient and adaptable—the two foremost qualities inherent in the most successful entrepreneurs. Andereck was a Miss Texas USA and a TV star whose personal life was followed in the tabloids, but she is no stranger to adversity.

She built Sassybax through the fallout of being diagnosed with two cerebral aneurysms “that I chose to have surgically corrected via two separate brain surgeries at UCLA, to avoid them rupturing and possibly killing me. Due to brilliant surgeons and Screen Actors Guild insurance which paid $300,000, I am 100 percent corrected and kicking!”

She earned her degree in psychology and built a practice in Los Angeles before getting into the bra business.

She is a woman who never takes no for an answer and is filled with more moxie than most. Perhaps it is a Midwest upbringing that develops a personality like this—but regardless, it is a blueprint for success that most would be fortunate to follow.
LICENSING BASICS

THE 3 PRIMARY FORMS OF AGREEMENTS CONSIST OF DIFFERENT RIGHTS, ADVANTAGES AND DISADVANTAGES

What is an IP license, and how does it work?
Any form of intellectual property—from trademarks to patents to copyrights—can be licensed to third parties. Through licensing, an IP owner grants third parties the right to use his or her IP while retaining ownership. Usually, the IP owner (the licensor) receives payment in the form of royalties for granting another person (the licensee) the right to use his or her IP.

Another way to think of IP licensing is the “leasing” of intellectual property for a fee. Unlike IP assignments that transfers all ownership of IP, licenses provide only limited use—enabling licensees to benefit from IP while protecting ownership rights of the licensor. IP owners can receive royalties for their licensed IP for their lifetime and 70 years after dying (such that even the families of IP holders can benefit from license agreements).

There are three primary forms of licensing agreements, Each provides slightly different rights, advantages and disadvantages.

1. **Exclusive licenses** grant a third party the exclusive right to use the intellectual property. The IP owner cannot use the IP or grant any other third parties the right to use the IP.

2. **Sole licenses** grant a third party the right to use intellectual property while prohibiting the owner from allowing other third parties to use the IP. The IP owner may still use the intellectual property for himself or herself, however.

3. **Non-exclusive licenses** grant others the right to use intellectual property without restricting the owner from using the IP or granting licenses to other third parties.

You can also combine elements of each of these types of licensing agreements, creating your own custom form of licensing. For instance, some licensing agreements may be non-exclusive countrywide but provide exclusive licenses within a certain geographic area.

What are advantages of licensing IP?
- Creates passive income for the IP owner
- Enables a licensor to tap into local markets, a licensee’s productive capacity or unique marketing strategy
- Creates new business opportunities for licensor and licensee
- Enables businesses to enter new markets or industries

What are disadvantages of licensing IP?
- The licensor may lose some control of his or her intellectual property, particularly with exclusive licenses
- Some licensing agreements can be abused and lead to IP infringement if not monitored closely
- Depending on the nature of the licensing agreement, some licensors may be fully dependent on the licensee’s ability to generate revenue with the IP
- A licensee’s actions could damage the reputation of the brand or product
Intellectual property can be just as valuable as (or more valuable than) physical property. This is because IP can be shared with others in exchange for royalty fees—producing a valuable source of passive income for IP owners.

**How do I license my intellectual property?**

The first step is to ensure your intellectual property is registered and protected in the form of a trademark, copyright or patent. Then you can start marketing to (or identifying) potential licensees. Once a third party expresses interest in commercializing your product or idea, a licensing agreement must be negotiated to ensure your rights are protected.

**What is a typical licensing fee?**

“Typical” licensing fees vary based on the IP being licensed. Also, the percentage of sales a licensor retains depends on negotiating skills (and the industry). For instance, “royalty rates” for consumer products may vary between 2 percent to 10 percent of the product’s sale value. Franchises, on the other hand, may require royalty payments of 1 percent to 50 percent of total volume.

If you’re interested in licensing your IP (or licensing someone else’s IP), it will be important to work with a seasoned professional who can help you negotiate a licensing agreement that works for you.


This information was provided by the Michelson Institute for Intellectual Property, an initiative of the Michelson 20MM Foundation that addresses critical gaps in intellectual property education to empower the next generation of inventors. Michelson 20MM was founded thanks to the generous support of renowned spinal surgeon Dr. Gary K. Michelson and Alya Michelson. To access more resources, please visit MichelsonIP.com.

Nothing in this article shall be construed as legal advice, or as creating an attorney/client relationship.
Moving Experience

PANDEMIC FORCED ENGINEERING DEPARTMENT TO BUILD PROTOTYPES WHILE SHELTERING IN PLACE

BY JEREMY LOSAW

On March 26, we in the Enventys Partners Engineering Department had to completely rethink how we build prototypes.

That was the day Charlotte enacted a stay-at-home order as the impact of the coronavirus began to become more widespread. Schools were shutting down; around the world, more people were encouraged to work from home.

Our engineering team had been working remotely when it made sense, but we kept the prototyping shop open so we could continue to use all of our great tools. However, when all non-essential business were required to close, we had to shutter the prototyping shop regardless of our importance to our clients and the innovation community.

So, just two days after we heard the official news, the engineering team had to plan for how we could continue to build prototypes while the team was forced to shelter in place.

It was a stressful 48 hours to game out how we would continue to prototype effectively without the shop. But looking back, I am proud to say that we have been successful in keeping our development programs running and building great prototypes.

Here are some of the ways we have adapted and brought the tools and techniques from our shop into our homes.

3D printing

When people think of prototyping, they often think of 3D printing. Although certainly not the only way to build parts, 3D printers have become an essential part of prototyping and are even starting to be used to create mass-produced parts.

In the past decade, a plethora of desktop 3D printers have come to the market that use spools of plastic filament. We use these at Enventys Partners for some applications. However, most of our needs require high-fidelity parts that are made on professional-grade printers.

One week before the shutdown, we were very excited to commission a new 3D printer called Origin One. It uses a technique called programmable photopolymerization, which uses photocured resins similar to a stereolithography machine.

However, the Origin is great because it runs parts very fast, and materials can be changed quickly without having to switch out an entire tank of material. This makes it well suited for running parts at scale—which is important for us, as we have two products that will use parts from this machine in production.

So, we had this great new technology while our shop was shutting down. As we game-planned, we had one of those “so-crazy-it-just-might-work” ideas.

Unlike some other manufacturing-grade printers, the Origin is pretty small and can fit on
a desktop without too much trouble. So we thought that maybe we could just have someone take it home and run it at their house.

One of our engineers, TJ Root, volunteered. He took the printer and the cleaning equipment home and set up the unit at his place. It was pretty simple and drama free, and we were only without printing capability for a day.

When anyone on the team needs parts, he or she sends the file to TJ and picks up the parts at his house the next day. The scale and quality of the printer allowed us to be very flexible and ensured the team was never lacking 3D-printed parts.

**Electronics**

Approximately 75 percent of our development portfolio is electrified, so it was crucial for us to be able to service those prototypes effectively. The main needs for our electronic prototypes are population of circuit boards, writing firmware (the code that runs on the microcontroller), and testing and troubleshooting of the system as a whole. We attacked each of these needs from home in a different way.

PCB assembly turned out to be fairly easy to do remotely. Our process for creating PCBs for prototypes: Our electrical engineer designs the circuit, we order five or 10 of the design from a PCB board house, then we populate them with components at the Enventys Partners shop.

Fortunately, our PCB vendors are all deemed to be critical businesses, so they never shut down and we were able to manufacture our unpopulated boards fairly quickly. For the initial prototypes, the components typically are purchased from one of the big U.S. supply houses such as Arrow, Digikey or Mouser, which also stayed open throughout the shutdowns.

The components and PCBs were then sent to our technician’s house. He was able to take what few bits of specialized equipment he needed home with him, and has been able to build all of our circuits from his personal workbench to keep our prototypes running.

Because we did not have a slowdown in production of our circuit boards, that left the programming and troubleshooting as the major hurdles.

The programming is easy to do remotely, as writing code can be done from anywhere.
merging of the code with the circuit and the physicality of the prototype that is the trick.

Our lead electrical engineer opted to shelter in place in Colorado, so he was not within driving distance of the rest of the team and we needed a way for him to program and monitor prototypes effectively.

Our solution was remote workstations. The lead mechanical engineer on a project took the circuit home, along with the necessary power supplies and wiring, and set up a laptop with the circuit connected via a USB programming cable. Then we set up a remote access program so that our electrical engineer could take control of the computer and directly interface with the hardware.

Once the program was uploaded, the mechanical engineer ran tests on the program and the team iterated on the code from there. It was a very effective technique that has allowed us to deliver a number of electronic prototypes throughout the lockdown.

**Physical prototyping**

Beyond 3D printing, we use a number of other techniques to build prototypes. All these processes had to be reimagined.

One method that has allowed us to effectively build prototypes remotely is to engage more vendors. We have always used a variety of vendors to help build either parts and pieces that we could not make in-house or did not have the time to do that way. However, without access to our own equipment, we have recently relied more heavily on this network to machine or mold parts for us.

Because the product development team is a group of makers themselves, we all have a decent set of tools at each of our homes. So once we have the custom parts made, they are shipped to our houses and we do the final assembly and testing there.

We have also been able to make some parts from our homes. For example, before the shutdown, we knew we were going to need to mold some parts for a prototype, so our shop technician brought home the pressure pot and other special molding equipment to make sure he could mold the parts.

We have even been doing paint work from our homes. I have done some touchup airbrush work on a prototype in my driveway.

Building a prototype is a very hands-on and intimate process. As product designers, we need to assemble them ourselves to understand how all parts work together and try to find ways to make the products better.

Though the COVID-19 crisis has forced us to move away from the shop, it has not slowed the pace of development on any of our products. We have found creative ways to get things done.

Regardless of when we have full access to our shop, we will continue to maintain the pace of innovation that we need.
The ABCs of Funding

ESSENTIAL CONSIDERATIONS WHEN LOOKING FOR VENTURE CAPITALISTS

BY LAWRENCE J. UDELL

IN TODAY’S economic climate, with or without COVID-19, I hear the same question: “Where can I find investors or venture capitalists?”

Before you as the inventor can ask this important question, you had better be prepared. In the simplest of terms:

- Have you filed for a patent, or at least a provisional patent application?
- Have you visited a patent depository library for assistance?
- Have you conducted a patent search?
- Have you done any extensive market research?
- How much of your own money—cash, not time—have you invested?
- Do you have a business plan with financials and projections?
- Have you built a prototype that works?
- What have you done to validate the product and potentials?
- To whom have you shown this?
- What value have you placed on it?

Be realistic and honest with yourself.

VC IS ON A HIGHER PLANE

Do not even consider venture capital unless you have experience and a qualified management team with credentials. From my 60-plus years of working with and guiding inventors on the path to success, I estimate that about 1 in 1,000 is even qualified or prepared to meet with a venture capitalist.

You will likely need a personal introduction: Money managers do not open their doors to anyone with an idea, invention or whatever unless they know in advance who is calling and the specific reason. If you have a track record and are known for previous startups, the doors may be open.

Besides, VCs are usually looking for investment opportunities requiring millions of dollars, not the $50,000 or $100,000 you think you need. How much do you need—and when it’s gone, how much more?

Therefore, in-depth research is required so you can put together an extensive financial projection. Every time you go back to the funding well, you lose more control and ownership in your company and its product.

FINANCES AND MORE

Once you have either a working prototype or drawings with description, and after you have done your homework to see what it will cost to produce and also to package it, do your financial projections based on market statistics.

Don’t project based on what you think it will or should sell for but actual calculations between the cost of the finished product, the cost of distribution and the retail price for which it will sell. Then start to assemble your promotional package of a brief description of the business.

This will become your executive summary, which will hopefully become details of your business plan.

I always advise inventors to seek out who they know—maybe your accountant to help with the financials, or perhaps your patent attorney or family adviser. And it is interesting that all the very successful and wealthy inventors in my life were both humble and willing to accept constructive criticism.

In summary, if you believe that money in the form of funding is what you need to be successful, consider this question: “Would I personally reach into my pocket and invest in what I am proposing?”

Other simple but important questions: Who is the competition? How long have they been in the business? Why is your product better than theirs? What will be the advantages of your product, if any? How big is the market? And last, but not least—what are your projections for sales and profits?

And perhaps if you have done all that is required: Should I consider licensing rather than go into the business? See my recent article, “Basics of a Licensing Deal,” in the May 2020 Inventors Digest.
Cheers to Innovators

COVID-19 SPOTLIGHTS THEIR IMPORTANCE, AND THE GROWING NEED TO PROTECT THEIR IP

BY LOUIS CARBONNEAU

FIND IT STRIKING that amid the carnage of COVID-19, we are again singularly focused on innovation and having to think outside the proverbial box.

From masks and ventilators to preemptive vaccines or potential cures, everyone has rediscovered the saying that “necessity is the mother of invention.” In these unprecedented times, we witness companies retooling their factories on the fly to crank up test kits or masks and visors, employees quarantining without seeing their families to mass-produce important personal protective equipment components, while others share important medical information in real time to speed the process for a vaccine.

In parallel, the rest of us may not fully appreciate that our ability to often function almost normally while confined at home relies in large part on technology innovations of the past decades. Think of it next time you conduct a team Zoom conference, order food online, crowdfund, produce a webinar, binge watch a new series on Netflix or collaborate with peers around the world.

Many are acting out of the goodness of their hearts. However, once the dust settles, innovators will need reassurances that the game is not rigged against them, as it has been these past years; that their contributions navigating this crisis will not be co-opted by some giant company that easily emulates what they did at a lower cost with complete disregard for their intellectual property.

This period is the perfect time to reflect on the importance of our innovators and that we, as a society, will only go so far if we do not adequately protect their intellectual property rights as was always intended. When it is again safe to socialize without the distance, and after giving the utmost gratitude to our first responders who have put their lives at risk to save others—hug an inventor!

Until then, happy reading and stay safe.

Buyers and sellers

Apple recently agreed to buy NextVR, a California-based company that streams live events to augmented and virtual reality devices, for $100 million. NextVR holds more than 40 patents for those technologies. …

China-based Huawei, still under sanction in the United States for allegedly stealing trade secrets, is said to continue its patent acquisition activities (which are permitted). We hear that Huawei also sold a group of patents to prolific U.S.-based non-practicing entity IP Edge. (Editor’s note: An NPE is an entity that holds a patent for a product or process with no intention of developing it.) These are about the only kinds of assets Huawei can monetize on the U.S. territory because it is barred from selling products. …

South Korean ballast treatment system maker Techcross acquired patents from Mitsubishi Shipbuilding and Hitachi, which it says resolves potential conflicts regarding source technology.

Winners and losers

It has finally dawned on U.S. inventors that they have been given a raw deal by Congress, the United States Patent and Trademark Office, and the courts. There is an unprecedented high in the number of issued patents that inventors have abandoned, rather than pay a few hundreds to a few thousand dollars to maintain for another 4½ years. According to a BlueIron study, companies abandoned their IP protection at nearly twice the normal rate from late February to late March. Much of this preceded the COVID-19 fallout.

BlueIron reports that for both small entities (fewer than 500 employees) and large entities, the normal abandonment rate is about 12.5 percent and 7.5 percent, respectively. In March, the abandonment rate soared to 23 percent and 12 percent.

Given that the last time the American Intellectual Property Law Association published the average cost for obtaining and maintaining a single patent in the United States it was more than $55,000, you can estimate the lost investment is massive. More important, someone who abandons his or her patents will likely not file new ones and has no incentive to go back in the garage and tinker.

With millions of people home and time to spare, the lost faith in the IP system could not come at a worse time. What a missed opportunity!
According to a Bluelron study, companies abandoned their IP protection at nearly twice the normal rate during a recent one-month span. What a missed opportunity!

The venture capital community has often complained about the presence of “patent trolls,” and its assertion against start-ups is also finally reckoning with the damage this situation has done to the innovative engine.

“Society at large is losing out on discoveries that have not been founded, funded or grown because of a weakened patent system,” Gary Lauder, Silicon Valley venture capitalist and technology investor, said recently at the annual Intellectual Property Awareness Summit. “The destruction of the patent system brought about by big (technology) companies and their trade associations is the single most destructive thing they have done.

“The current ‘techlash’ is misplaced on issues of lesser importance. Many lives will be lost.” …

After close to a decade of litigation and surviving several appeals lodged from Apple, the VirnetX case finally ended when the U.S. Supreme Court refused to hear Apple’s last challenge. In its more recent filing, VirnetX, a publicly traded IP company, confirmed that Apple had paid the $454 million it owed the non-practicing entity. This was a lesson in persistence.

Meanwhile, the International Trade Commission opened an investigation into whether Apple’s touchscreen technology infringed patents owned by Ireland-based Neodron.

Handshakes
Companies have taken the COVID guidelines quite literally, so there were no “handshakes” of significance reported lately.

From the bench
A decision from the Eastern District of Texas in October is receiving more attention these days, as it brings into question the wisdom of most corporations’ in-house policy not to look at others’ patents in order to avoid being labeled a “willful infringer.”

In a direct blow to this approach, Judge Rodney Gilstrap stated in Motiva Patents LLC v. HTC Corp.: “A well-pled claim for willful blindness is sufficient to state a claim for willful infringement.”

It will be interesting to see if the United States Court of Appeals for the Federal Circuit will eventually confirm this view. Meanwhile, this reinforces the importance of conducting a thorough Freedom to Operate analysis before launching a product or service. Knowledge is power! …

Patent owners often dismiss the importance of marking their patents (as the law requires). This generally comes back to kick them in the behind later when claiming damages for past infringing activities.

This obligation must also extend to their licensees, as the federal circuit recently reminded us in the Artic Cat v. Bombardier decision. Failing to do
so, there is no constructive notice of infringement and claims to past damages will not be sustained. Licensors beware. …

In a rare dissent with his conservative colleagues in *Thryv, Inc. v. Click-to-Call Tech., LP*, which was on an appeal from the federal circuit, U.S. Supreme Court Justice Neil Gorsuch revealed his pro-patentees support as he championed a patent owner’s ability to obtain judicial review of certain threshold administrative decisions from the Patent Trial and Appeal Board. Unfortunately, he was only joined by Justice Sonia Sotomayor.

Yet his comment is worth noting: “(T)he Court … carries us another step down the road of ceding core judicial powers to agency officials and leaving the disposition of private rights and liberties to bureaucratic mercy.”

**Around the world**

In what could be a harbinger of a more global practice in the future, on March 20 the Chinese Securities Regulatory Commission (similar to the U.S. Securities and Exchange Commission) released the Science and Technology Attribute Evaluation Guidelines (Trial), stating requirements to list on the Shanghai Stock Exchange’s Science & Technology Board. Among other requirements, applicants to list must have Chinese invention patents.

The Shanghai Stock Exchange will formulate specific rules to implement these guidelines. If this practice catches on with other filing authorities, the next step is likely to be a requirement to actually place a value for these patents on the books, something patent owners have been able to avoid so far. …

In Japan, after some initial reports that Japanese courts might not allow injunctive relief for litigants who asserted 5G patents, the Japan Patent Office apparently denied this would be the case. ☛

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**I’LL SEE YOU IN COURT**

With dozens of new cases filed each day, we don’t attempt to cover each of them here. We usually comment on those via LinkedIn or Twitter. Yet a few standout cases are worth mentioning.

IBM sued Airbnb over some online commerce-related patents. IBM much prefers a licensing approach to litigation and uses others only when all other options have failed. The last time IBM did this was against Groupon, resulting in a resounding victory. This one will be interesting to watch. …

Chipmaker Broadcom is suing Netflix, claiming the video streaming service infringes on several patents that cover key parts of Netflix’s platform. In all, Broadcom cites eight patents that deal with data transmission and video playback. …

In Germany, Japan-based electronic giant Sharp (which belongs to Taiwan-based FoxConn) filed a complaint against phone maker Oppo (which belongs to Chinese BBK Electronics) on some 4G/LTE patents. This is one of the few remaining battles around LTE patents, as most of the action is now centered around 5G.

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**NEED A MENTOR?**

Whether your concern is how to get started, what to do next, sources for services, or whom to trust, I will guide you. I have helped thousands of inventors with my written advice, including more than nineteen years as a columnist for *Inventors Digest* magazine. And now I will work directly with you by phone, e-mail, or regular mail. No big up-front fees. My signed confidentiality agreement is a standard part of our working relationship. For details, see my web page:

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Best wishes, Jack Lander
Climb the Charts

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I N ORDER to get exclusive rights on an invention, you must file for and obtain a patent. Many inventors initially opt to file a provisional patent application to initiate the application process, which is perfectly reasonable; this results in a “patent pending” that can even produce a licensing deal. Ultimately, if a patent is desired, a nonprovisional patent application must be filed—and it is this NPA that matures into an issued patent.

U.S. patent laws require that the patent applicant points out and distinctly claims the subject matter that the inventor regards as his or her invention. Any patent, or patent application, contains a variety of different sections that contain different information. Generally speaking, a patent is divided into a specification, drawings and patent claims. Only the patent claims define the exclusive right granted to the patent applicant; the rest of the patent is there to facilitate understanding of the claimed invention. Therefore, patent claims are in many respects the most important part of the patent application because it is the claims that define the invention for which the United States Patent and Trademark Office has granted protection.

When an NPA is filed, a patent examiner reviews it to determine whether a patent can be allowed. The examiner does not review the entire patent application and does not evaluate the invention described in the application. Instead, the examiner spends his or her time evaluating the patent claims submitted in order to determine whether the claimed invention is patent eligible, useful, novel and non-obvious.

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Usually for most inventions outside of the computer software and life sciences arena, patent eligibility is not an issue. Usefulness is also not generally problematic. Thus, patent examiners tend to focus their time on whether the claimed invention is novel and non-obvious.

**Know your sections**

35 USC 112 (Title 35 of U.S. patent code, Section 112) is the statutory requirement for applicants to particularly point out and distinctly claim the subject matter regarded as the invention.

Like most statutes, Title 35 is not very specific about details regarding implementation of its requirements. 35 USC 112 only states that a claim is necessary, but the statute does not provide any information on the structure or format of the claim or claims submitted by the applicant.

So it is necessary to turn to Title 37 of the Code of Federal Regulations, via the USPTO, to expand upon what is actually and formally required. The basic section that deals with claim requirements is 37 CFR 1.75.

**Original claims**

It is necessary to include a complete description of the invention in the initial filing with the patent office. Rearranging of an application is always allowed, but the addition of new material is never allowed. In determining the scope of what is covered by the initial filing, the applicant may rely on the description contained in the specification, any drawings present at the time of filing, and the originally filed claims.

Today, as the result of the Patent Law Treaty Implementation Act, patent claims and drawings are no longer required in order to obtain a filing date on a nonprovisional patent application.

Although patent claims can always be added to an application if the original disclosure as filed will support the claims, it is exceptionally dangerous to file a patent application without drawings. Drawings are almost always required, and adding drawings later will be difficult if not completely impossible because drawings invariably convey more than the textual description of the drawings.

It is essential to file any nonprovisional patent application with drawings, and advisable to file NPAs with claims.

Those claims filed with an NPA are original claims. They can support themselves, meaning those claims that arrive in a patent application at the time the
application is filed are considered a part of the larger, overall disclosure.

Having claims present at the time of filing helps ensure that at least what you are claiming has sufficiently been disclosed in the patent application at the time of filing.

Originally filed claims need not be exhaustive. Throughout prosecution, patent claims can be amended and even added, provided the initial disclosure is broad enough to cover the added or amended matter.

Therefore, when drafting a patent application, it is good practice to spend time drafting quality claims. Do not simply rely upon your ability to add claims later, because invariably you will want to add claims—or elements thereof—that are not described in the specification. Include enough claims with the initial filing to cover the invention and important variations.

**Stringent form rules**

The claim or claims filed in an NPA must begin on a separate sheet and should appear after the detailed description of the invention. Although there is no set statutory form for claims, the practice in the patent office is to insist that each claim be the object of a sentence starting with “I claim,” “The invention claimed is,” or the substantial equivalent thereof. This is accomplished by stating at the top of a clean sheet of paper after the detailed description: “I claim:” or “The invention claimed is......”

Notice the colon, which is important because each claim must contain this preliminary phrase. Having the statement present with a colon followed by a series of numbered claims results in each claim starting with the required “I claim” (or equivalent) statement.

Each claim must be a single sentence, so each claim must begin with a capital letter and end with a period. This is true regardless of how tortured the sentence structure is and how incomprehensible the sentence may be to those not trained in patent claim drafting.

When a claim sets forth many elements or steps, each element or step of the claim can be separated by a line indentation. Because of the “one-sentence rule,” patent claims also tend to make heavy use of commas and semicolons.

Reference characters corresponding to elements recited in the detailed description and the drawings may be used in conjunction with the recitation of the same element or group of elements in the claims. The reference characters, however, should be enclosed within parentheses to avoid confusion with other numbers or characters that may appear in the claims.

Claims should preferably be arranged in order of scope so that the first claim presented is the broadest (i.e., least restrictive). All dependent claims should be grouped together, with the claim or claims to which they refer. Similarly, product and process claims should be separately grouped.

It is essential to file any nonprovisional patent application with drawings and advisable to file NPAs with claims.

Gene Quinn is a patent attorney, founder of IPWatchdog.com and a principal lecturer in the top patent bar review course in the nation. 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.
PTAB Is Supreme
LET'S MAKE THE PATENT TRIAL AND APPEAL BOARD FAIR FOR EVERYONE IN WAKE OF RECENT RULING BY GENE QUINN

The United States Supreme Court has ruled that the director of the United States Patent and Trademark Office, by and through his designees the Patent Trial and Appeal Board, has the unchallengable authority to institute inter partes review proceedings even when they are brought outside the statute of limitations.

It is difficult to believe the above characterization of the Supreme Court’s April 20 decision could be accurate, but it is—and it is no longer open for debate or discussion.

The above description is a fair and accurate summary of the Supreme Court’s decision in Thryv, Inv. v Click-to-Call Technologies, LP. The stupefying nature of the decision comes about because of an extraordinary interpretation of one statute that has consistently been read to trump all logic and accountability: that in Section 314(d) of U.S. patent code, Congress said decisions to institute an IPR (a procedure for challenging the validity of a U.S. patent before the USPTO) are not judicially reviewable.

What the Supreme Court has now said is that Section 314(d) is the sovereign statute, even to the point that it trumps a statute of limitations. This was made clear by the decision in Thryv because Section 315(b) requires IPR petitions to be brought within one year of the petitioner being sued for patent infringement.

So, what if the PTAB were to institute an IPR proceeding on a petition filed more than one year after the petitioner was sued for patent infringement? According to 315(b), the petition cannot be granted.

The language of 315(b) is mandatory and leaves no room for interpretation. Well, at least until recently.

Definitive confirmation
According to the Supreme Court, because Congress has prevented judicial review of institution decisions, that means there is no ability for an Article III court to enforce the statute of limitations in 315(b)—not even the United States Supreme Court.

Thus, we now have definitive confirmation of what opponents of the PTAB have said all along: The PTAB reigns supreme without any checks or balances on its power. Even the Supreme Court says it is helpless to stop a rogue PTAB panel that might openly disregard something as fundamental and basic as a statute of limitations.

Clearly, with the Supreme Court having ruled in Cuozzo that post-grant challenges are constitutional, and then in Thryv ruling that even the high court cannot provide even a modicum of oversight, the PTAB is the most important patent court in the United States.

The PTAB’s decisions on the most fundamental process issues are not subject to any judicial review, and as we have seen over and over again on a substantive level, the United States Court of Appeals for the Federal Circuit refuses to provide any meaningful judicial review.

It is hard to fault the federal circuit, though. The Senate-confirmed Article III judges on the circuit make up an inferior tribunal to those administratively appointed patent judges on the PTAB who are not Senate confirmed, are unconstitutionally appointed officers, and often have only several years of legal experience before becoming judges.

Clearly, the federal circuit wouldn’t want to run afoul of the real judicial power in the patent system.

Make PTAB accessible
This begs an important question that Congress must soon wrestle with regarding access to the PTAB.

We have been told over and over again how essential the PTAB is to the patent system, how necessary the board is with respect to rooting out bad patents...
that never should have issued. And the PTAB has been very good at killing patent claims and patents.

But there is a fundamental unfairness at the PTAB. If it is so important, why are the fees so high? If the PTAB plays such a vital role in correcting the egregious mistakes of patent examiners (of which there are apparently many, given the number of valuable patents that die upon review), why should only those patents that are owned by independent inventors, universities, start-ups and research and development companies be the targets? What about the truly ridiculous patents that are issued to large entities?

Congress likes patents being challenged because those with large patent portfolios control marketing challenges and manufacturing, and they want to implement the inventions of others. The PTAB makes their lives easy. They run no risk of losing anything.

The PTAB continues to grow with power. So, it seems time to use it instead of constantly trying to topple it.

**Fees fiasco**
The USPTO is denying access to the PTAB with exorbitant fees. Such high fees to institute IPR proceedings guarantees that those with money can bring these challenges against upstart innovators, while those upstart innovators who have little funding have no ability to challenge the often clearly unpatriable claims and patents issued to tech giants and pharmaceutical companies. Because unless you believe patent examiners only make mistakes when examining valuable innovations invented by small entities, you must believe patent examiners make mistakes when examining patent applications filed by large entities.

Now, at a time when the world is fighting to stay alive as we collectively fight COVID-19, it seems practically immoral, irresponsible and unconscionable for the USPTO to charge any fee for the institution of an IPR.

Now is the time to be busting patents of those with tens of thousands of patents in search for cures, treatments and solutions for safely reopening the economy.

Now is not the time to have $15,500 fees for the filing of an IPR to challenge bad patent claims that never should have issued in the first place.

**Size should not matter**
If the PTAB is necessary to rid the world of bad patents, let’s rid the world of bad patents—regardless of whether they were acquired by small and mid-size entities or whether they were acquired by large entities. Let’s rid the world of bad patents, regardless of whether the petitioner with knowledge of patent examiner error possesses the $15,500 filing fee or not.

Charging exorbitant fees to file IPR petitions does nothing less than pick winners and losers. It prevents those without money, but with knowledge of egregious patent office mistakes, from helping to liberate non-inventions from the clutches of evil monopolists.

If the PTAB is supreme, let it be supreme. And let everyone have access, regardless of ability to pay.
Devastating LOSS
IP WORLD REELING OVER DEATH OF FORMER USPTO DIRECTOR Q. TODD DICKINSON BY GENE QUINN

IT IS WITH tremendous sadness that I write to say that Q. Todd Dickinson passed away on May 3, 2020. He was 67.

I find myself at a loss for words to describe someone who has been a friend for so many years. I mourn a great man who, through his many accomplishments, did much domestically and internationally within the intellectual property world. I also mourn one of my best, truest friends.

Many remember him as the former under secretary of commerce for intellectual property and director of the U.S. Patent and Trademark Office during Bill Clinton’s second term.

Perhaps the one thing that summarizes my friend best is the fact that he was known by one name—Todd.

Like Madonna or LeBron or Tiger, a select few can truly be identified by one name without causing any confusion. Todd was such a person. Occasionally, his friends would tease him at events when he introduced himself as “Todd Dickinson”—as if “Todd” wasn’t enough.

Many remember Todd as the former under secretary of commerce for intellectual property and director of the U.S. Patent and Trademark Office during Bill Clinton’s second term, a job that he told me on the record was the best job of his life.

Every morning as he would drive into work, he would anticipate how today he might make a decision or two that would improve the system. He was always looking to improve the patent system in any way.

Todd was USPTO acting director when I received my patent attorney registration number, so his is the signature that authorized me to become a member of the patent bar. Years later, after he had also become a good friend, I always thought it was a great honor to have my friend’s name on my registration.

Numerous IP impacts
During his four-decade legal career, Todd served as chief IP counsel for two Fortune 50 companies. He had overall corporate responsibility for all IP, including the management of extensive patent and trademark portfolios.

Todd also served as executive director of the American Intellectual Property Law Association, an association of more than 15,000 members, and as one of the world’s leading policy and advocacy organizations in the field of intellectual property. He played a key role in the drafting and passage of the America Invents Act and the subsequent patent office rules, including all aspects of post-grant review.

Whether it was planning a new patent prosecution program, handling an appeal or amicus brief at the Supreme Court or U.S. Court of Appeals for the Federal Circuit, or understanding the effect of the
latest IP legislation on your company, few attorneys offered such a breadth of experience in both in-house IP management and domestic and global IP policy matters and government relations.

I could tell many stories about my times together with Todd, but the one that always stands out and I will always cherish is one particular evening in San Francisco at the Palace Hotel. It was a chance meeting with several of us there for one conference and several others there for a different event. We drank for hours, told stories, laughed—probably the most enjoyable night I’ve ever spent on the road.

Cheers, Todd! I will miss you very much, my friend.

IANCU PAYS TRIBUTE

USPTO Director Andrei Iancu released this statement about the career of Todd Dickinson:

“As director, he was beloved by USPTO staff and lauded by outside stakeholders. One examiner said that Todd made him proud to serve as an examiner at the USPTO, and another remembered his mantra that the USPTO is the ‘patent office, not the rejection office.’

“Former USPTO Solicitor John Whealan said that everyone’s high regard for Todd as director was a central reason that the USPTO was given more autonomy under his leadership. . . .

“I began working with Todd many years ago when I was in private practice, but that work relationship grew over time—particularly when I became USPTO director. Todd was a mentor, and he was a friend.

“I, the USPTO, and the entire IP community will sorely miss Q. Todd Dickinson. He is survived by his husband Robert Atkins and his brother John Dickinson, to whom we extend our deepest sympathies. May Todd’s memory be an inspiration to all.”
IoT Corner

IoT hardware and platform provider Particle announced a new asset tracking solution. The Tracker One combines cellular connectivity with GNSS (Global Navigation Satellite System) to provide real-time location data that are accurate to less than 2 meters. It also features on-board sensors such as an accelerometer, gyroscope and thermistor to provide shock, orientation and temperature feedback for monitoring condition-critical shipments.

The solution can be deployed with Particle’s hardware, or can be used as a reference design for firms that want to customize the hardware but still use the Particle cloud. The Tracker One comes in an IP-67 rated enclosure to weather the elements. —Jeremy Losaw

Wunderkinds

With one invention, 18-year-old Ezedine Kamil has addressed two problems in his native Ethiopia: hygiene and power blackouts.

As COVID-19 spotlights the need for cleanliness, the natural science student designed a contactless electrical soap dispenser with a built-in sensor that can be operated using a mechanical pedal during blackouts. Fifty dispensers were produced by a local university and distributed in banks and hospitals across rural Welkite.

Ezedine also built a device—he describes it as like a watch with a sensor—to remind people not to touch their faces. Each time a hand approaches the face, the device rings. The teen has 30 inventions, 13 patented by the organization SaveIdeas.

What IS that?

It’s a GIANTCOMICS Funny Tentacle Octopus Beanie Crochet Knit Beard Hat Wind Ski Mask. “Great gift for friends, family or cosplay lovers,” whatever that is. Currently unavailable on Amazon. Bet they didn’t sell out.

17.3%

The percentage increase in the total number of copyright applications filed in 2019 (21,153 total) compared to 2018, per BananaIP Counsels. Most were for literary/dramatic works.

WHAT DO YOU KNOW?

1 Which was invented first—7-Up or Royal Crown Cola?
2 The undisputed greatest invention of all time, per bigthink.com, is:
   A) Optical lenses
   B) The wheel
   C) The nail
   D) The horseless carriage
3 True or false: The chainsaw was invented to cut wood.
4 The oldest American to ever receive a patent was which age:
   A) 108  B) 101  C) 92  D) 86
5 True or false: A patent’s only use is as legal protection.

ANSWERS: 1. Royal Crown Cola in 1905 by Claud Hatcher, 7-Up in 1929 by Charles Leiper Grigg. 2. B. Fire ranked No. 1, but it can be argued that it was discovered and not invented. 3. False. German Bernard Heine invented it in 1830 to speed up amputations by cutting through bone. 4. B. In 2018, Charlie Bliss got a patent for a design to capture carbon dioxide emissions from power plants that burn fossil fuels, to prevent them from entering the atmosphere. 5. False. A patent gives the perception that something is superior and/or unique, and can help add value to an entity.
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