

OCTOBER 2020

The Newsletter of the Institute of Inventors and Innovators

III – A non-profit organization. A home for inventors. Run by inventors. Supporting inventors.

III – South Africa Business Award Winner – MEA Markets 2019

<https://www.mea-markets.com/latest-issues/>



If you are a 'once in a blue moon person' doing some things only rarely, then October is your month as it is a 'blue moon' month having two full moons, one on the 1st and the second on the 31st. The next chance you will get to strut your blue moon stuff will be in some 32 months time when the next blue moon will be here! Go on then – defy the odds, invent something and get it to market by then! We dare you! By the way, our next **ZOOM Pitch it to the Panel™ is on 24th October 2020** so be sure to book your seat, there are only 3 places available. Feel free to communicate, telephone or email because it's business as usual. When last did you visit the website www.iii.org.za ?

Main ideas in this issue: ♦ Maker Spaces – what are they, do we need them? Yes we do! ♦ **The III Inventors Club** Wednesday program for October ♦ Caveats to consider: What is prior art? ♦ Spinning Lizzie, a South African Invention ♦ Michael Jordon on success ... or is it perseverance?

What is a Maker Space?

Wikipedia defines a makerspace "as a community-operated workspace where people with common interests, often in computers, machining, technology, science, digital or electronic art, can meet and collaborate. ... in a makerspace, people share supplies, skills, ideas, and work together on projects."

It is likely that many others could add to this definition because these spaces differ so in all aspects including machinery to be found in place, in form and function, in scope and for what purpose they have been established.



So. In trying to cover this wide and far-reaching subject adequately (sorry Reader, but there's some work that follows for you) the approach taken is one of links and extra internet time. The work is for you to spend time and follow the links provided, then listen and learn. If you do this you will understand what an amazing phenomenon the Maker Space Movement represents for Inventors and Innovators. That's the catch though – you have to spend the time and do the work. It's okay. Nice. Informative.

The Wikipedia definition above seems easy enough to understand, but then when you start thinking about what you've just read, questions might overtake more quickly than available answers.

So then this came to hand:

'**The Future we Make**': https://www.youtube.com/watch?v=Ze2G149b4Jk&feature=emb_logo – which is a fine link and explains what a maker space and a makers faire can do as well as a lot of the *raison d'être* behind the movement. It's a 2-minute YouTube video produced by **Maker Faire** -

<https://makerfaire.com/> and **Make: magazine** - <https://makezine.com/> (two American websites you need to visit). These in turn then led me to a lot of interesting and amazing information on this topic.

Jamie Leben is passionate about makerspaces and the wonderful community of makers, hackers, and tinkerers that build, work, and create in them. The international makerspace movement has led to the rapid opening and growth of independent spaces, as well as spaces in schools where the approach to education is changing. School maker spaces provide hands-on, creative ways which encourage students to question, solve, design, experiment, build and invent; but please, not to forget libraries. There are many different motivations for establishing makerspaces, and no two projects are ever the same. **'Come for the tools and stay for the people'** – the link below will take you to a 2015 TED talk (9.49) that is as relevant today as it was new then <https://www.youtube.com/watch?v=CQnXaShzuHw> A final link in this introductory set is this one https://www.youtube.com/watch?v=9whal5o7yWc&feature=emb_rel_end which is a walk around the **MakeHaven** community maker space in New Haven (USA). It is a good example of what could be found in a makerspace near you.



Are there Maker Spaces in South Africa?

A resounding yes and we are spoilt for choice! Dr Google (and other search engines you use) will lead you to them. The following links each contributed a lot of information and explanation and are just so encouraging, more so because they are dotted around South Africa, some with links to the rest of the continent. To help you, here are a few specially chosen to save you time.

Go to **The Makerspace** (Durban) <http://themakerspace.co.za/> and watch the excellent video (4.49) which tells you more than just about what this company does; explore their site too OR go here to visit **Tshimologong** <https://tshimologong.joburg/make/maker-space/> OR go here to **Made in Workshop** <https://madeinworkshop.co.za/> -they've just moved to Strijdom Park and are still settling in so it may be better to call them to find out more about what they offer OR go to the University of Pretoria here <https://www.library.up.ac.za/makerspace/index.htm> OR see what is available at UNISA by visiting their site <https://libguides.unisa.ac.za/c.php?g=492401&p=3372538> OR if you enquire at a university or college in your town you may be surprised with what they have on offer. Of course there are others.

When you come to think of it, we have been surrounded by maker spaces throughout life. The plainest example for instance is a kitchen. Here you find the simple and the sophisticated. Essentially you make things in a kitchen, you cook, bake, preserve, dry and produce food with a variety of tools to hand from a hotplate to a modern multi-range or few and essential items to every modcon under the sun like blenders, mixers, juicers, microwaves, icecream makers, bread makers, freezers and ... well, you get the picture. Other domestic maker spaces obviously include the home workshop housed in garages. Even tool shed can be one. All one has to do is extend this thinking and it is easy enough to understand the implications and advantages that an 'industrial' maker space has for an inventor.

Let's face it, we never have all the tools we want or need. Some are silly big and heavy to fit inside ordinary home and work spaces, others too expensive or infrequently used to make owning one sense. Makerspaces, however, give makers and tinkerers access to those less-than-convenient tools to build projects that might otherwise be impossible. Consider here the multi-spec 3-D printer to CNC machines, laser cutters, soldering irons or welding equipment, digital and electronic machines and so on and on.

Now, it's very likely that you have a basic question as an inventor or innovator. How does one protect an idea or work or product or prototype when using a 'public' makerspace? This is a good question but it's one that cannot be answered in a Eureka!NEWS article like this one. Still, many hands make light work they say and so too can many minds hone an idea with faster and leaner results. Maybe IP ownership issues can be sorted out before exposing your invention idea? Maybe or maybe not, but then the general idea of makerspaces isn't necessarily only about developing products and making prototypes. They're more about collaborating, experimenting and access to sharing space, tools and materials; and they're more about being hands-on and skills-building while doing so. Food for thought.

The Maker movement is a global phenomenon that impacts the future of work, product development, education, inventing, innovating, learning, upskilling and so much more. What exciting times these are!

Eureka!MEET is now part of the III Inventors Club!

The III Inventors Club is a public MEETUP group especially for Inventors and Innovators and other creative people, the first in South Africa.

As you may know, Meetup is a platform for finding and building local and international communities and groups made up of like-minded people with similar interests ... and now that **Meetup uses Zoom** – anyone can join any group anywhere in the world. If you haven't joined us yet go to www.meetup.com or see our direct link below ...

<https://www.meetup.com/en-AU/inventors-club/>



... and because it's a virtual world out there (okay), physical location doesn't matter anymore. This really suits us because it means that **YOU** can attend no matter where you are, it's just up to you to take action. It's FREE to join the Club so go ahead – all sorts of advantages will be yours for the taking. The club will most usually meet on the **first three WEDNESDAYS** of the month (except sometimes!)

October 2020 – Club Meetings – we can't help you if you don't join!

7th October 17h30-18h30 CAT

KIDS CLUB MEET – Liberate your creativity and join us to find out how 3-D printing can help you turn your thoughts into things!

14th October 17h30-18h30 CAT

Special guest from the USA Trina MacFarland of TinkerTini offers advice and answers questions on how the licensing model works for professional inventors as well as how they get paid.

21st October 17h30-18h30 CAT

A discussion and Q&A session about which the best route for you to take to get your invention to market could be ... licensing or venturing? Such a wide and important subject. Be there!

The X5 Sterilizing Wand to combat sanitising our Surroundings.

The COVID-19 pandemic made disinfecting surfaces and objects even more important than ever. But some things, such as keyboards, carpets, and sofas, are harder to disinfect than others. A **company called 59S** has created a portable wand that is able to destroy 99.9% of germs and bacteria in under three minutes. It cleans without damaging any surfaces, it is non-toxic, and leaves no residue or odour. Made up of 20 UV-C LED lights, it gets the job done by destroying the DNA and RNA of germs and bacteria.



With its built-in smart sensor, the X5 Disinfection Wand shuts down automatically if overturned during the disinfection process; it comes with safety goggles and a child lock as a further safety feature and may be purchased only by 18 years and older customers. Furthermore, it is battery-powered and can last up to 10 000 hours on a single charge. No, Malcolm Gladwell did not invent it.



AIR INK What if we could capture pollution in the air around us and turn it into something useful? Engineer and Inventor Anirudh Sharma shares how he created AIR-INK, a deep black ink that's made from PM 2.5 pollution.

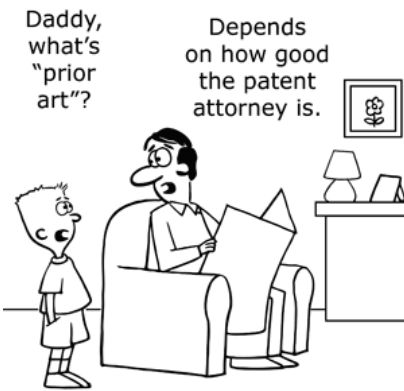
See how he hacked together a clever way to capture these tiny particles – and make the world just a little bit cleaner in the process.

https://www.ted.com/talks/anirudh_sharma_ink_made_of_air_pollution/transcript#t-262744



What Is Prior Art?

Jokes aside, this is a serious subject that needs close attention. Prior art essentially it means **anything that previously exists in the public domain** anywhere in the world.



Prior art can include: Printed publications; conference handouts; presentations; books; web postings; newspaper articles; general informational articles; other patents, patents pending or patent applications; private or public offers for sale of a product and it's possible there's a lot more. Further, it does not matter where the prior art or material was published, in what form it was published or in what language it was published.

Be careful too as prior art may also include orally presented material, such as discussions at conferences, disclosures to competitors, certain disclosures to colleagues in a field of endeavour, other public statements ... you could compromise yourself just by chatting to a friend at a braai!

CAVEAT INVENTOR – Inventor beware. Potentially you could create prior art against yourself by publicly disclosing (friends included) an invention prior to the filing of a provisional patent application. Public knowledge of the invention idea is considered prior art.

If you intend to do your own search brainstorm keywords which describe your invention, search the patent databases and go beyond these, save all the relevant results (you will need to refer to them) but know when to stop searching for searching sake. Don't chase your tail.

There are some exceptions as to what is considered prior art and these would include when some public use is considered experimental or if an invention idea, previously thought of by another inventor, has been abandoned or the patent has lapsed. There are a lot of grey areas when it comes to prior art and as with other aspects of inventing, when the crunch comes, if you are trying to validate your own work or invention idea, you are encouraged to speak to a professional.

Inventors Steps



Don't fall in love with your idea – fall in love with the problem (and then the solution) but first make sure the problem you intend to solve is worth solving.

When inventors get too attached to their specific idea/s, they become selective in the feedback that they 'hear' and ignore the messages they *should* listen to. We've seen this happen at Pitch it to the Panel™ sessions.

The Inventive process includes coming up with tons of ideas and inventors must accept that many ideas will not make it.

Wise inventors need to accept this and listen ... or pay the fine!



Also Inventors – do not over-invent. Multi-tasking is one concept that seems to work for many, but not when it comes to inventions that try to solve too many problems-in-one. Hark, hark the lark.

Now why didn't I think of that? The WaterWalker & SPA



<https://www.youtube.com/watch?v=9HTniTKPy1s> If you're into fitness or health, you're likely to want to put this aqua treadmill on your Christmas wish list! The Water Walker & Spa combines treadmill exercising in water by having a moving surface at the bottom for walking and/or running. The best part is that you can fine-tune the speed and workout at your own pace, cushioned by the water. What's more, it also works as a spa bath for after workout pleasure. The cost? Win the Lotto and you can buy one for around

\$89,000 **OR** you can follow this Youtube version ... for a DIY weekend project <https://www.youtube.com/watch?v=2tXAEyVlrHA> It's not as fancy by any means, but it does the job!

“The Spinning Lizzie is a 100% proudly South African Invention that is produced (injection moulded), assembled and packaged in Uitenhage,” so tells **inventor Nicholas Neil-Boss**, of Sundays River. It was actually invented, designed and patented some 37 years ago when it was initially trademarked as a toy called the ROTO BALL, but regrettably the patent and trademark lapsed due to lack of funds, focus and foresight.” But all is not lost!



With help and encouragement from wife Carolyn, it as taken some 2½ years to get **Spinning Lizzie** onto the market. The ‘much-more-than-a-toy’ Roto Ball product has now been completely redesigned, renamed, is now referred to as a ‘body-gadget’ (rather than a toy) and was relaunched in December 2019 just when Covid was brewing and getting ready to put the world on lockdown notice starting March earlier this year. What bad luck!



What is it? What do you do with a Spinning Lizzie? How do you use it?

Well each person will get what they will get out of their-choice-of-colour-Lizzie, but it is lightweight, circular in shape and has a weighted steel ball encased between two identical halves. Once the ball is set in motion in the track it can be kept spinning indefinitely at the right angle and momentum. The skill to keep the ball rotating in a smooth motion in this circular ‘biscuit’ takes some concentration and needs focus, offers exercise and develops balance and ambidextrous skills. Be warned though, that darn ball has a mind of its own and needs to be taught who’s boss! It takes practice and has an inbuilt smile factor! Currently Spinning Lizzie is only available online, but watch this space as they say for who can guess what’s being planned?

Here is some of the backstory. Nick accepts now that his inventor’s journey followed a rocky road where the many mistakes he made surely taught their lessons. He is a musician and his work experience was in the tubular steel industry in the corporate world, though he has been inventing and experimenting for as long as he can recall. “Being highly impulsive by nature I would always produce a simple drawing of an idea and then try to make something that resembled the drawing of these thoughts. Some of these ideas lived on to be worked but most just died.” But back to Spinning Lizzie.

“I discovered the original proto-types of Roto-Ball during a garage clean out and was re-inspired to get going again. I had always been amazed at the ‘wild fire success’ of the Fidget Spinner which I studied in depth and while I wanted to emulate a similar gadget, I did NOT copy it in any way.

I retained the concept of a rotating ball in a circular holder of the Roto-Ball, scaled down size but ended up completely redesigning the product. All the trials and various samples were made in my garage using wood board laser cut components and then I made flexible rubber moulds from these to produce polyester resin samples which were fully functional. With a prototype in hand, I attended a Ill Pitch it to the Panel session in May 2018. I highly recommend this confidential service by the way – and following my presentation and taking on advice and encouragement given, I successfully filed for and self-funded a provisional patent.

Bringing an invention to market takes a lot of very hard work and relentless effort and with **Spinning Lizzie**, I wouldn’t change a thing. I would love to sell the entire package as a promotional product and I have already made moves in this direction; Covid has knocked a lot of my tradeshow and other marketing plans on the head though.



Still inventing? Yes, I am an inventor and have two exciting projects well underway.” Good stuff Nick!

Please email info@iii.org.za if you would like a copy of the full interview given by Nick. He details a lot more of his inventor’s journey and it would be worthwhile if you want to read all about ‘what someone else did.’

Glossary: Definitions and meanings of words, concepts, actions or manufacturing to do with inventions and innovations. **You may know the meanings but many may not.** Send us an email if you've got something you're not sure of and we'll get back to you! What is **Open innovation?**



An 'open innovation' company means one that is open to listening to or receiving ideas from outside and independent inventors, maybe taking action by licensing them in exchange for the payment of royalties. An independent inventor is someone not beholden to a company for IP as in the case of many inventive people who work for corporate entities or universities. An independent inventor works 'alone' and 'owns' his own IP.

It seems that there aren't many (if any) open innovation companies in SA (unless a branch of an overseas international – such as Proctor and Gamble) though our world is changing as it continues to shrink with modern life practices. One hopes it will or our South African inventors are likely to license their ideas to international companies and our country will lose a lot. Watch these two short clips from YouTube for a nice enough explanation of this concept.

What is OPEN INNOVATION – a short cartoon explanation <https://www.youtube.com/watch?v=GD2wCS2xwWQ> and then Dr Henry Chesbrough rethinks his 2003 definition. https://www.youtube.com/watch?v=LbiJ_9W7UHM



benefit statement value proposition attention alert headline thinking selling the sizzle and not the steak getting to yes immediately
Start thinking about this now: Can you describe the benefits of your invention idea in a maximum of **8 words**? That's all you get, 8 words. What does it do for the customer? What it **IS** doesn't matter here, it's what it **DOES** or what problem it solves that matters. Don't stop thinking about this until you've got it.



PITTP –

Pitch it to the Panel™ –

is a confidential and professional service for members.

The next Pitch it to the Panel™ is on **Saturday 24th October.**

THERE ARE ONLY THREE SPOTS AVAILABLE AT PITTP
Will one of them be yours?

How many times have you thought of a great idea, then done nothing about it? Don't let the voices in your head talk you out of taking action just because it 'might' not work. You'll never know until you try, so why not ask the experts? It might turn out to be better than you thought and you will find your way forward.

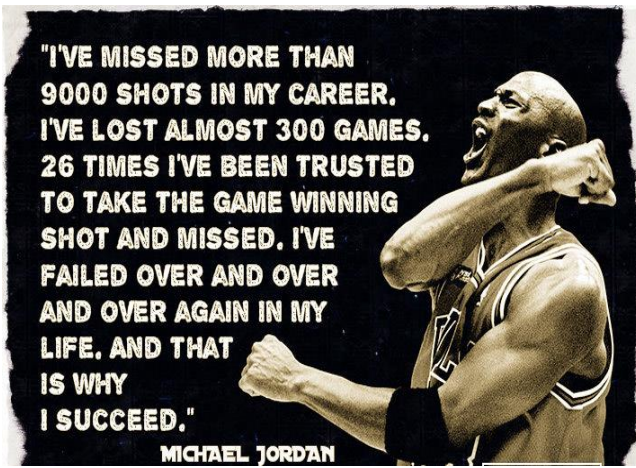
At a Pitch it to the Panel meeting you get a chance to speak to a knowledgeable group of professionals, specialists, entrepreneurs and inventors. Confidentiality is assured as you get guidance, assistance and invaluable advice to get you to your next step.

Members can book a **PITTP** session by going to the website and booking online – www.iii.org.za

It's easy! Do it soon! Secure your place!

"I had the privilege to 'pitch it to the panel' earlier this year. May I use this opportunity to thank you and the Panel. I highly recommend your inexpensive, professional service to inventors. Get an expert opinion on the viability and novelty of your idea before spending a fortune on development and patent registration. I will certainly use your services again in the future.

Thanks a million." Johan van Wvk PITTP July 2020.



Noah McNeely on perseverance

'Don't give up', 'Keep trying', 'Failure is just a step closer to success' – these are the mantras of those who support us in reaching our goals ... It seems that the collective wisdom of the world wants us to keep trying until we succeed. But that can be a very hard thing for an inventor to do. Most inventors are busy just living life and it can be a real challenge to keep going ... but there are many reasons why some inventors persevere ... I've come to believe that the biggest motivator for **inventor perseverance** is having an idea you really believe in, an idea that you are passionate about ..."

Membership Matters!

This is a reminder that all III members who have not yet renewed their fees since March 2019 should do so. **As a non-profit organisation we are dependent on the loyalty of our members** to sustain our efforts to communicate and promote the relevance and importance of what the Institute does.

There are a lot of very bright people around. **Send this newsletter on to others** and **encourage them to join us**. It's easy – just go to the website, visit the membership page, read all about it, fill out the form and submit it from there ... or there'll come a time when speaking Latin will be useful!



'They get to read the first page for free, but if they don't subscribe the rest appears in Latin.'

**Next Eureka!NEWS will be out by 5 November ... look out for it.
Greetings to you all.**

In November we'll talk about 'Sell sheets' ... and other stuff

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WHICH ARE OPEN TO ALL INVENTORS WORLDWIDE**

<https://www.ifia.com/upcoming-events/>

Be a nice pumpkin this Halloween – treat, don't trick.

