

JAHRESBERICHT 2017

PREFACE

'I'm more interested in the future than in the past, because

THE FUTURE IS WHERE I INTEND TO LIVE,'

said Albert Einstein, surely the world's most famous patent examiner. Instead of looking back, as is customary in annual reports, I welcome you to look forward with us.

I invite you to experience our day-to-day life, which is filled with our clients' IDEAS. Find out about the role of women in the patent world, the inventions that can be found in everyday items like mobile phones, what the typical day of a patent examiner is like, and the services we offer to make life easier for our clients. Of course, you'll find the facts and figures for 2017 too.

And please join us in experimenting a little. Our annual report is transformed by **AUGMENTED REALITY** wherever your see this symbol . Download the free Artivive app to your mobile phone to see static images come to life and points in time become continuous.

PLEASE DIVE IN. Loose leaves, stories, services and statistics, held together by an elastic band. Each sheet stands alone. If you find some of the pages interesting and useful, we'd be delighted should you put them up on your whiteboard.

I wish you great fun looking at things a little DIFFERENTLY.

Mariana Karepova, President of the Austrian Patent Office

THE ARTIST: JAKOB KRINZINGER

Jakob Krinzinger is an artist and shoemaker. He is a student of graphic design and printmaking techniques at the Academy of Fine Arts Vienna. He completed fashion school in Hetzendorf, where he also trained as a SHOEMAKER. Since that time he has been fascinated by unconventional materials, such as snakeskins, seeds, cornmeal, wax, stones or anything else that comes to hand. He loves to EXPERIMENT. Reduction and minimalism are hallmarks of his work. Jakob Krinzinger lives and works in Vienna, and has also recently made The Hague his home.

THE COVER: SIMPLY MECHANICAL OR ORGANIC

We asked students of the Academy of Fine Arts Vienna to design a cover for us. Jakob

Krinzinger presented a MINIMALIST WORK that creates a visual space through connected objects. Is it two-dimensional or three-dimensional? Is it biological or mechanical? Is it in motion? Everyone interprets it in their own way. While it was originally a design for an installation, we found that it also works very well as a screen print. With no further ado, Jakob Krinzinger turned his design into a cover for us.

AUGMENTED REALI

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DIGITAL NOMAD: LITTO

Litto is a freelance artist. She has enhanced the annual report with Augmented Reality elements for us. Her work revolves around and is inspired by system disruptions (of all kinds, both digital and analogue). Litto lives and works in the Hernals district

of Vienna.

STAFF OF THE PATENT OFFICE CHAT WITH FEDERAL MINISTER NORBERT HOFER

Hofer: Hello everyone!

- Karepova: Hello Minister. We're an incredibly creative nation our innovations are exported around the world. All fold, some 12,000 patents last year. How do you feel about that?
 - **Hofer:** That's fantastic. I'm delighted that the Patent Office is helping these great inventions succeed on global markets.
- Karepova: You're an engineer yourself. Have you ever invented anything?

Hofer: Ahead of an exam, I once 'invented' a simplified method to calculate the angle at which a

Norbert Hofer, Federal Minister for Transport, Innovation and Technology



ladder starts to slip depending on the friction coefficient of the surfaces. That method of calculation can't have been new, but it hadn't been seen before at my school and, after submitting my paper, I had to show on the board that it was correct. Aside from that, I specialize in engine technology. That was my job as an engineer for an Austrian airline. As everyone surely knows by now, I'm a technophile and have the utmost respect for people who invent things that enhance our lives.

- Scheichl: I deal with trademarks. Are trademarks and brands important to you?
 - Hofer: I'm not a brand fetishist when it comes to clothes, but technology is another matter. I've always been fascinated by Graupner and Webra model aviation products, Schleicher gliders, Puch automotive technology and Bose headsets. Of course I want to know which company is behind a given product or service – trademarks stand for quality.
 - Mandl: One of my tasks is to market our services. May I be so bold as to ask what the Hofer brand stands for?
 - **Hofer:** I'm a good troubleshooter. That was true during my time as an active engineer and also now as a politician.
 - T: We often have to deal with tricky questions here at the Patent Office, so I have a tricky question for you. Minister, do you know how many patents there are in an aircraft?
 - fer: Thousands, from tiny engine components to the avionics or de-icing system. Software is also increasingly important. Earlier the captain and first officer had a flight engineer and navigator alongside them in the cockpit. Inventive brilliance made flight possible in the first place and then made it safer and more convenient.



Dr Dietmar Trattner, Vice-President Technology



Christoph Mandl, Executive Communication



Dr Stefan Harasek

Executive Strategy

- May I jump in and ask who you consider to be the greatest inventor of all Harasek: time?
 - Hofer: I'm in awe of Nikola Tesla. However, for me the greatest inventor of all time is the unknown person who invented the wheel.
- Harasek: What still needs to be invented?
 - Hofer: Perhaps functioning and stable nuclear fusion, but biotechnology inventions to save and improve people's lives are of particular importance.
- Karepova: Minister, I'd like to ask about another topic. Retweeting, sharing ... today people have a relaxed approach to the works of others. Should that remain the case or is there need for action?
 - Hofer: Intellectual property is still property. Ideas are sometimes stolen even if people often don't think of it as theft. I have great faith in the Patent Office in this regard - I see it as the contact point for such questions.

Scheichl:

Dr Andrea Scheichl Legal and Support

- You're in charge of so many things, including space. Where do you see the Patent Office in your universe? After all, going by the name of the Ministry, we cover two-thirds of your remit (innovation and technology).
- Vice-President Hofer: After my first Christmas party at the Ministry, I spoke with many staff from the Patent Office and guickly realised how enthusiastic they are and how highly they think of the Patent Office's President. Don't blush, Madam President! ;-) In any case, the Patent Office is in near orbit in my universe.
 - Karepova: You have a daughter who might want to become an engineer like you. How many girls were at your Higher Technical School?
 - Hofer: At my Higher Technical School? I don't know the number unfortunately, but certainly far too few. There was only one class for aeronautics and there wasn't a single girl in it. If I know her interests well, my daughter won't choose a technical profession, though she'd have great aptitude for it, as I can tell by how she handles her Enduro.
 - Karepova: Is there anything coming up ahead that you're looking forward to?
 - Hofer: The Austrian Patent Awards ceremony is highlighted in my diary. And please don't tell me the winners in advance. I want to be surprised at the awards ceremony on 8 November.
 - Karepova: I think we can manage that. Thank you, Minister. We look forward to working together.

Mariana Karepova. President

Hofer: Thank you all for this interesting chat. It was great to do things a little differently. That suits the Patent Office and is right up my street! We sometimes use WhatsApp or similar technology for non-bureaucratic coordination within the Federal Government too.



THE MOBILE PHONE AND ITS PATENTS

THOUSANDS OF PATENTS IN YOUR POCKET

MOBILE PHONES ALSO CONTAIN

MANY AUSTRIAN INVENTIONS.

Today we take it for granted that we have a telephone book, map, appointment diary, wallet, television, music player, camera and much more IN OUR POCKET. Thirty-five percent of all patent applications worldwide since 1990 are in the few CUBIC CENTIMETRES of our smartphones. The design of the given user interface is usually also protected.

Such property rights are of enormous value to companies, even if their products are not all that successful – or have ceased to be successful – on the market. For instance, Nokia generated USD 1 billion in licence fees in 2016. The figure for Ericsson in the same year was USD 1.2 billion.

Emporia – smart and simple The tinz-based company specialises in simple and highly user-friendly phones (including smartphones) for elderly people. The company holds numerous patents, such as a keyboard in the form of a cover that, thanks to an electrically conductive coating, can also be used with GLOVES or a PROSTHETIC HAND. Emporia holds a patent for an emergency call wristband with integrated telephone. And a swivelling keyboard makes it possible to switch between using the touchscreen

NXP Semiconductors – contactless payment-Near Field Communication (NFC) turns the mobile phone into a MOBILE PAYMENT DEVICE. The underlying idea originates from Gratkorn in Styria, where the basis for NFC was developed back in the 2000s. Franz Amtmann from Styria was awarded the EUROPEAN INVENTOR AWARD in 2015 for the development of NFC technology.

NYS

Austrian Institute of Technology – mobile health The Austrian Institute of Technology (AIT) has patented a device that enables changes in SKIN CONDITION to be measured. A self-adhesive film is placed on the skin

ans



Frequency hopping with Austrian roots Bluetooth, a key communication technology today, has a truly unique history. It is based on frequency hopping technology, which was co-invented by Hedy Lamarr, an Austrian-born globally renowned film star. Conceived for torpedo guidance in the Second World War, FREQUENCY HOPPING was never used for that purpose, but is integral to Bluetooth technology today. Hedy Lamarr, who died in 2000, did not live to see the breakthrough of her invention.

ams – interface expertise

ams, which is based in Styria, currently holds some 150 patents and patent families related to mobile phones. The latest inventions of ams involve, for example, secure communication between mobile phones and DOOR OPENERS, and light sensors for FACIAL RECOGNITION.



NOKI? NOKIA? NUKI!

Noki (standing phonetically for 'No Key') had pulled off the MOST SUCCESSFUL CROWDFUNDING campaign to date for a hardware project. A total of 2,038 backers contributed the combined amount of € 385,524 – several times the original financing target.

It made the news in MID-2015 – Austrian start-up

The concept behind Noki was to have the smartphone act as a smart KEY. The door opens automatically when you enter the house and locks when you leave. The 'hardware' is mounted on top of the existing door cylinder and key, opening and locking the door from there. It can be installed by the users themselves, fits all standard locks and communicates with the smartphone via Bluetooth.

As a result of the success, mobile phone manufacturer NOKIA got wind of Noki and challenged the trademark. Instead of entering into a lengthy legal battle with the Finnish mobile phone giant, the Austrian start-up came up with a pragmatic solution. NOKI ('No Key') became NUKI ('New Key'). The trademark is now well PROTECTED – and not just in Austria. In 2017 Nuki expanded into the international market, and has a growing workforce.

The trademark dispute was far from a naive start-up fail and ultimately did the company no harm, as founder and CEO Martin Pansy notes today: 'We were always highly aware of that risk and had that new scenario as a backup plan from the start. In retrospect, we benefited from the attention.'

www.nuki.io



HAVE YOU HAD A DATE WITH ALBERT YET?

SHOO-BE, DOO-BE or DOO-BE-DOO? When

coming up with a logo for your products or services, you need to be not just creative, but also original. But how unique is your trademark idea really?

Our tip: bring Albert on board. **ALBERT** can tell you about all the trademarks in Europe. What's more, he's here for you around the clock, including on weekends and public holidays. Don't hesitate to make use of Albert's wealth of knowledge, which currently extends to some 40 million trademarks.

Albert helps you save **TIME AND MONEY**. Albert will alert you immediately if a logo is already around. If Albert reports that he's 'already got that one!', then you should take a closer look, analyse your idea in detail with our experts and, if necessary, rethink it – even if it's hard to say goodbye to a brainwave. We want your trademark to be distinctive so that it won't be challenged by your competitors.

NEW! For all those who are already acquainted with Albert, did you know that Albert has

sent a **FRIEND REQUEST** across the world to **ALEX** in Australia? She's rather far away, but Albert has yet to find a fellow chatbot in the nearby patent offices. On this side of the globe, Albert is more or less the only chatbot that offers such a service.

> P.S. Albert wants to get even smarter and is currently attending chatbot university. Soon he'll also be able to provide information about fees, funding and courses at our new IP Academy.

www.patentamt.at/en/albert/



FROM METAL SIGNS TO HOLOGRAMS

Old METAL ADVERTISING SIGNS have their CHARM and are coveted by NOSTALGIA FANS, but they are no longer relevant to modern advertising strategies. Logos have changed greatly in form as technology has progressed.

The first HOLOGRAM TRADEMARK was filed with the Austrian Patent Office in 2017. We've had SOUND TRADEMARKS in our register for some time now. At the EU Intellectual Property Office in Alicante it recently became possible to file MOTION TRADEMARKS and multimedia trademarks. SCENT TRADEMARKS (smell marks) don't yet exist, but are already being considered.

However, one thing hasn't changed – you can't market your product or service effectively without a distinctive logo. The Patent Office advises against leaving your logo unprotected. Once a trademark has been registered, new and similar logos stand no chance against it!

Filing your own trademark COULDN'T BE EASIER. Thanks to our new

'Fast Track' filing option, you can get your own registered logo in 10 DAYS. With the (\mathbb{B}) for 'registered', you can confidently do business on the markets of your choice.

Our tip: protect your logo now – because filing a trademark is simple and inexpensive!

THE BEST IP-HUBBERS* BY YOUR SIDE



Are you a RESEARCHER, INVENTOR, START-UP

or other CREATIVE looking for funding, advice and events related to IP (intellectual property)?

If so, then we have something for you: the PHUB.

Patents, utility models, trademarks, designs, licences, copyright ... don't let IP jargon make your head spin. Whether you're developing an innovative method in Vorarlberg, tinkering on a new app in Burgenland or creating an original logo for your service business in Carinthia, come

to the IP Hub, where you'll find AUSTRIA'S LARGEST NETWORK of specialists. Tell us who you are, where you are based and what you are looking for. The IP Hub will suggest the best partners and services. There are plenty near you, as you would expect of good IP hubbers.

Through the IP Hub, you can gain information such as where to get FREE START-UP ADVICE nearby, how to obtain a PATENT VOUCHER or who to contact to turn your trademark idea into a registered trademark. All the contact people are listed there with their telephone number, email address and photo.

Our tip: stay creative and get 'hubbing'!

*An IP hubber is on first-name terms with the world of intellectual property and will also help you protect your ideas and innovations.

www.ip-hub.gv.at



FEMALE INVENTORS - FORGET THE CLICHÉS

FEMALE INVENTORS – FORGET THE CLICHÉS

We can confidently dismiss the commonly held stereotype that women are simply less suited to technical professions than men. That's backed up by the preliminary findings of the ongoing SIUDY on 'Women and Patents' that the Vienna University of Economics and Business is conducting on behalf of the Federal Ministry for Transport, Innovation and Technology and the Austrian Patent Office.

WHAT ABOUT ELSEWHERE?

In CHINA, for example, around half of all international patents are applied for by women. Female inventors are nothing out of the ordinary in RUSSIA either. A high proportion of female inventors is also a matter of CULTURE. In international terms, there are particularly high numbers of patents by

women in biotechnology (57.6%), but fewer in mechanics (10.9 %). The global gender gap has narrowed significantly in the field of digital communication and telecommunication. While women have no less aptitude for solving technical problems, it certainly seems that women are somewhat more drawn to certain technical fields. The proportion of women depends partly on which technologies play a leading role in the given country.

WHAT'S THE PICTURE IN AUSTRIA?

The highest number of patents was filed in the 'Performing operations; transporting' section. That includes LOCOMOTIVES, AIRCRAFT, mechanical METAL-WORKING and methods for the production of NA-NOSTRUCTURES. Eighteen percent of all inventions by women and 25 % of all inventions by men are applied for in that section.





The prime years - viewed differently.

COMPANIES IN THE SPOTLIGHT

The vast majority of patents in Austria are applied for by companies. But who are the people inventing for those companies? The study looked at precisely that question at the TOP 15 COMPANIES. It found that EIGHT OF THE TOP 15 name women as inventors. That might seem positive

at first glance, but closer inspection reveals that the proportion of patents applied for inventions by women did not exceed 10 % at any of those eight companies. All in all, THE RESULTS ARE SOBERING. But what about at universities? At 35 %, the proportion of women in academic research is more than twice as high as in industrial research.



proportion of women reflected in the patents filed? UNFORTUNATELY NOT.

Proportion of women who invent for companies.

Patents applied for by universities do not list women as inventors any more frequently than those applied for by companies.

INVENTORS IN THEIR PRIME

The peak age for inventing is between 46 and 55, but by then women account for just 6 % of inventors. Yes, that's right. By that age, the proportion of female inventors is right down. That's why innovation scene observers have been speaking about a LEAKY PIPELINE for some time now. Here's the low-down. More than 50 % of pupils at general secondary schools (AHS) in Austria are girls. Female pupils account for roughly 30% of pupils at Higher Technical Schools (HTL). That gap continues at universities. While 50 % of students in Austria are female, women account for just 25 % of technology and engineering students. Nevertheless, in natural sciences, the proportion of female graduates is over 60 %.

AUGMENTED REALITY

18 %

Proportion of female and male inventors applying for patents in the 'Performing operations; transporting' section.

In other words, there isn't a striking **GENDER GAP** there. Forty percent of all patents applied for by female inventors are in the 'Human necessities' section. That includes items such as **SPORTS** EQUIPMENT and SURGICAL INSTRUMENTS. Such inventions represent Austria's second largest patent section.

ventors aged between 26 and 35, that figure is down to 11 %, and is less than half of that again in the 36-45 age group at 4.3 %. It isn't until the 46–55 age group that the proportion of female inventors is slightly up again at 6 %. That shows the need for action. BUT WHAT SHOULD BE DONE? Are the difficulties of combining work and family life the reason? Or is the much cited glass ceiling at fault?

WE WANT TO GET TO THE BOTTOM OF IT. THE FIGURES ARE NOW IN. ANALYSIS WILL FOLLOW.



ADVOCATUS INVENTI - A TRULY UNIQUE SPECIES.

5 QUESTIONS FOR DANIEL ALGE,

President of the Austrian Patent Bar Association

Are you more patent or more attorney? Are the two compatible?

I'm 100 % of both – and that's how it should be. Those two sides complement each other very well and make my daily work so enjoyable.

What has been your greatest success? Are you allowed to divulge it?

For me, my greatest success is working each day as a member of this 'truly unique species'. Each day we encounter new scientific findings and interesting technical questions and have to solve exciting intellectual problems. The real thrill comes from mental puzzles. However, the great responsibility and independence that patent attorneys have also make the job enjoyable, important and exciting. After all, industrial property rights are often the key assets of an innovative company.

What do you warn inventors about?

I warn them not to publish their inventions before their carefully composed patent application has got the receipt stamp of the Patent Office.

Can you recognise a perpetual motion machine when you see one? How long does it take you to detect one?

I know an interesting book about the patenting of such 'inventions'. Some of them even I would have recognised despite being a chemist and not being particularly well versed in mechanical inventions, although of course I know the first principles of thermodynamics. However, in some of those cases, the perpetual motion machine was so well hidden in the patent that not only did I not recognise it, but neither did the examiners at the patent office, who actually gave it their seal of approval. However, there aren't any Austrian patents among the examples in the book.

What still needs to be invented?

All the things that we can't yet imagine.

Book tip: Stanislav Michal: Das Perpetuum mobile - gestern und heute [The past and present of the perp etual motion machine], published by VDI Verlag Deutscher Ingenieure(ISBN-13: 978-3184004880



WHERE INSPIRATION STRIKES

WHERE INSPIRATION STRIKES

Who's the inventor? Often Austrian inventors lie behind great innovations, especially in certain industries. As the bedrock of Austria's innovation scene, those fields can be relied on, even in a crisis. In the past decade they've been joined by new industries, with highly promising growth figures. Incidentally, inventing is going on all across Austria, but that hasn't always been the case. We took a look at the fields of innovation in Austria and the regions where creative processes are taking place.

HERE AND NOW

Our top technologies, i.e. the fields in which Austrians have applied for the most patents worldwide, are as follows:



The 'electrical machinery, apparatus and energy' sector in particular is **BOOMING**. Twice as many patent applications in that field in 2015 as in 2005. The 'mechanical components' field has also recorded a PEAK in recent years in patent terms.

In brief, those are our TECHNO-LOGY MAINSTAYS.



The young, dynamic fields all revolve around the digital revolution. To sum up the past five years:

'digital communication' has grown by 66 % and the 'semiconductor' field has seen an increase of over 50 %. 'Basic communication processes' and 'computing' have also been high-performers, with an almost 50 % increase in patents in the past five years.

Organic fine chemistry Production of heterocyclic and carbocyclic compounds, production of hydrocarbons, methods of organic chemistry

20 YEARS IN 20 SECONDS

'Today the utopia of the morning is the reality of the afternoon,' commented the American author TRUMAN CAPOTE back in the mid-20th century. That's truer than ever! Brainwaves have been coming even thicker and faster since the start of the digital revolution.

Looking at patent applications in the past 20 years, 2008 marked a turning point as the global financial and economic crisis MADE ITSELF FELT. Austrian patent activities were also hit by the crisis. But did all industries bear the brunt of it in the wake of 2008? No, not all. Austria specialises in fields of technology that are dependable. 'Electrical machinery' – our technology pillar – was relatively UNSCATHED by the crisis. There was a slight decline in 2008, but the industry bounced back very quickly. All in all, Austria's innovation scene is fairly crisis-resistant. By contrast, the 'new economy' struggled during the crisis years. 'Computing' recorded an absolute peak in 2007, before experiencing a sharp downturn. 'Digital communication' and 'basic communication processes' showed a similar trend. Interestingly, not

only was there a drop in the number of patents, but the number of companies applying for patents also fell.

Patent applications related to 'Industry 4.0' painted a different picture. Though the numbers of patents applied for were down here too, the number of Industry 4.0 companies applying for patents rose even during the crisis. A decade before the number of patent applications had positively rocketed.

'GREEN TECHNOLOGY' has

experienced a different trajectory. That industry initially took the crisis in its stride. There was an increase both in patents applied

for and in the number of companies applying for them. That all changed in 2011. Since then fewer patents have been applied for each year, with a smaller number of companies applying for them.

AUGMENTED REALITY

'Organic fine chemistry' has underperformed other industries. Both the number of patents applied for and the number of

companies applying for them are a quarter of what they were in 2011.



HERE, THERE, EVERYWHERE

Vienna was where it was all happening in patent terms until the '90s. Then new regions came onto the scene. They are giving the capital a run for its money, but haven't replaced it in importance. Patents are increasingly being applied for in Upper Austria, AS WELL AS IN AND AROUND THE FOLLOWING FEDERAL STATE CAPITALS: Graz, Salzburg, Innsbruck and Klagenfurt. Vorarlberg stands out with the highest number of patents applied for per capita.

Takeaway: inventions were made not only in cities, but also in remote villages in 2017.



THE 'HANGING GARDENS' OF BRUCK AN DER LEITHA

What do you think of when you hear the

word ALGAE? Your last holiday by the seaside? Or the seaweed you ate during your last visit to a Japanese restaurant? The town of Bruck an der Leitha is probably far from your mind,

although the future of algae production lies there. **ECUDUNA** built its 'hanging gardens' here for the production of micro-algae after six years of development, fine-tuning and patenting,' says Silvia Fluch, COO of Ecoduna.

What are algae good for? According to Ecoduna, the answer is 'everything'. They are used for energy production, in cosmetics and for nutritional purposes, either directly as 'superfood' (rich in omega-3 fatty acids) or indirectly, e.g. as fish feed. The multi-talented algae are produced highly

efficiently in a closed loop, with oxygen being the only 'waste product'. Algae are the WORLD CHAMPIONS' OF PHOTOSYNTHESIS.

Ecoduna's facility is unique. The algae grow in meter-high tubes, colouring them bright green. The long, thin tubes maximise the surface area for photosynthesis. That conserves resources.

And everything is **FULLY DIGITALISED**. The purpose-built control software and sensors ensure that the algae have the optimal conditions and can flourish.

PROTECTING ITS INNOVATION is of

vital importance to Ecoduna. Its sales are very healthy, making expansion to other countries an attractive prospect both for Ecoduna and for its competitors. 'Patent protection lets us establish or run facilities in other regions through licence agreements or cooperation contracts, without the risk of our ideas being stolen,' says COO Silvia Fluch.

www.ecoduna.com

THE 'SILK ROAD' OF INNOVATIONS



THE 'SILK ROAD' OF INNOVATIONS

Patents are 'monopoly rights'. They are valid for 20 years and are countryspecific. Where should you hold your patents? It's most important to patent your inventions in the countries where you want to bring them to market and where your competitors are based. That's why Austrian companies also apply for many patents abroad. THE WORLD MAP OF PATENTS is a rich source of information and gives us insight into Austria's economy.

Who applies for which patents where tells us a lot about where the lucrative markets are and WHICH TECHNOLOGIES ARE BOOMING.*

Traditionally Austrian companies have chiefly set their sights on GERMANY, THE USA, FRANCE, THE UK and ITALY, exporting and applying for their patents there. But is that still the case today? We studied the figures for 2006 to 2016 and found that change is afoot.

REAUTY

Austrian companies tend to apply for their **FIRST** PATENT in AUSTRIA. Not only does that allow them to protect their innovation on the domestic market, but they also benefit from the expertise of Austrian patent examiners. Our clients value the possibility for straightforward discussion of their innovations as equal partners and the client focus of our experts. We give you an initial assessment of the likelihood of obtaining a patent and you ensure the 'priority' date (the BIRTH **DALE** of your invention), so that you can make it big on European and international markets. That is part of the strategy of many companies. For them, the Austrian Patent Office is a springThe situation in China, however, is nothing short of a phenomenon, with growth of a whopping 260 % in ten years. There is great Austrian interest in China, with even greater numbers of patent applications made there than in some traditionally important European countries. In 2007, more Austrian patents were applied for in Beijing than in Warsaw. China outstripped the Netherlands in 2010 and Spain in 2012, and in 2016 Austrians applied for roughly the same number of patents in China as in Italy. Looking into the crystal ball, if the trend in China continues at even half that speed, BY 2026 it will become one of the TOP THREE TARGET MARKETS for Austria's innovative companies and inventors.

*) Note: Calculated using the figures reported by the national patent offices of the World Intellectual Property Organization in Geneva. Validations in the various countries were extrapolated for the European patent applications.



board to global markets. That approach is taken by well-known businesses such as the Styrian role model AVL LIST, the Voralberg-based global player JULIUS BLUM and the international success story MIBA AG from Lower Austria, as well as most SMEs and start-ups.

When expanding abroad, most Austrian companies first seek to gain a foothold in Austria's NEIGHBOUR TO THE NORTH. That was true ten years ago and remains so today. For Austrians, Germany is still the leading sales market for new technologies. Germany topped the RANKING of key target At the time of going to press, a 'Patent Highway' to China is set to be established for Austrian patents. During an Austrian state visit to China, the agreement will be signed by President of the Republic Van der Bellen in the presence of Federal Minister Norbert Hofer

markets in 2016 too.

The USA is close at its heels in second place. At 114 %, the growth rate of patents applied for by Austrians in the United States in the past ten years was TWICE AS HIGH as the growth rate in Germany. France, the UK and Italy are also major target markets for Austrian innovators. The annual growth rates of up to 15 % in the mid-2000s are currently out of reach, but our applications in those countries are still on the rise.

and Patent Office President Mariana Karepova. That will make it significantly easier and quicker for Austrian companies to obtain patents in China.

> Tell us which country you would like to patent your innovation in. Where should we negotiate further international agreements?

> > Let us know at www.patentamt.at/en/pph/

HAPPY BIRTHDAY VELOCIPEDE!



The BICYCLE celebrated a big BIRTHDAY IN 2017. It was

200 years old last year. 'Isn't the wheel much older than that?' you might be thinking. And you'd be right. The wheel itself dates back more than 5,000 years, but it wasn't until

June 1817 that the German Karl Drais had the idea of assembling IWO WHEELS in a line. Having first filed the patent for his bicycle, he rode some 8 miles on the day of his maiden voyage. The two-wheeler was invented, and has inspired fresh innovations ever since.

In 1869, the bicycle gained chain-drive propulsion, but since that proved TRICKY when cycling downhill, the freewheel and backpedal brake were invented in the decades that followed. The patent

for pneumatic tyres was granted to the British **VETERINARY SURGEON** John Boyd Dunlop in 1888, and the first oil lamps for bicycles were also developed at around the same time. Bicycle gears were likewise an invention of the 19th century.

And that was just the start. The innovations have kept on coming. A milestone was reached on the path towards the modern e-bike with the filing of a patent application in 1982 for the pedal-assist bike (pedelec), which makes the level of motor assistance dependent on the rider's pedalling.

This year's annual report presents you with a fine example from our collection of historical patents. It shows an enhanced velocipede, called the 'Reise-Velocipede', by Stanisław Szatkowski and Franz Neuner. The 'privilege' (as the patent was known back then) was granted on 10 July 1869.



Reise - Velocipede

mit einer Vorrichtung zum Schutz gegen Umstürzen und neuartiger Radbremse, verbessert von Itanisl. Izatkowski u. Franz Neuner



Anm. Die mit Buchstaben bezeichneten Theile sind Gegenstände der Verbesserung

Munisland Szatkowski A. R. Jafn. Officand. in Meld r. gray was fiftow Infitita Swann Meuner



STAATSPREIS PATENT 2018

8. November

2018

Austrian Top Inventions and Trademarks on Stage.

Sofiensäle, Vienna

www.staatspreis-patent.at

TIPS FOR PITCH CONTESTS

OUR TIPS FOR YOUR NEXT PITCH

Have you been invited onto a TV SHOW or will give a presentation on stage at a PITCH CONTEST? Don't risk your million-euro idea! Once you've divulged, published, or presented it, you may have forfeited the chance to register a patent or unique trademark.

We have quick and easy ways of preventing precisely that, like the **PROVISIONAL PATENT APPLICATION** for just EUR 50 or the Fast Track trademark application. The brief **'PIT STOP'** with us pays off.

It's always a good idea to visit the Patent Office before your pitch.

www.patentamt.at/en/advice-competitions/

Austrian Patent Office Customer Centre Team Your point of contact for questions about intellectual property +43 (0)1 53424 info@patentamt.at



IP ACADEMY

Do you keep your money under your mattress? No, you take it to the bank and let it work for you. But what about your ideas? Do you keep

your INVENTIONS, LOGOS and DESIGNS under lock and key in a drawer? Or have you uploaded them to the cloud?

At the Patent Office's IP Academy you'll find out how best to protect your MILLION-EURO IDEA.

Are you a **BUDDING INVENTOR** or an **EXPERT** in the IP field? We offer courses for every level on a wide range of topics, from the basics through to highly specific hot topics and philosophical questions. Everything from 'can I patent my software' to 'can life be patented?' is covered. You learn from experienced patent and trademark examiners and renowned commercial practitioners. We learn too – from your experiences.

www.ip-academy.at

Austrian Patent Office Ursula Höfermayer




PRIO – PROVISIONAL PATENT APPLICATION



PRIO - PROVISORISCHE PATENTANMELDUNG

A patent is a strong 'weapon' - it gives the inventor a 20-year head start over the competition to reap the BENEFI of the invention and secure a return on investment. Admittedly, filing patents isn't a walk in the park. It takes time and effort. With us, you can take the first steps even if you haven't yet set out every detail of your invention.

If you want to talk with INVESTORS, have a pitch planned or want to report on your innovations in a publication or at a conference, play it safe and file a provisional patent application.

IT WORKS

HOW File a provisional application online at www.patentamt.at/prio-anmeldung

- Your innovation is kept in our 'safe'
- You get an internationally valid priority date, including an official stamp, for your invention
- _ You can pitch, advertise and present everything that's in the application without worry
- _You have twelve months to upgrade it to a standard patent application
- We assist you and alert you to the steps you need to take

A provisional patent application costs \in 50.

www.patentamt.at/en/patents/patents-service/ prio-application-provisional-patent-application

Austrian Patent Office

Katharina Fastenbauer is your contact person for PRIO applications katharina.fastenbauer@patentamt.at +43 (0)1 53424 - 447





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Have you invented something and are now keen to know whether

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YOU We study your innovation and give you answers within six weeks. GET ANSWERS That helps you ...

- _ conduct negotiations with business partners,
- _ make decisions on R&D projects,
- _ analyse your potential competition,
- _ file a possible patent or utility model application,
- whether nationally or internationally
- HOW _ You order the service online
- IT WORKS _ We have an initial meeting to discuss your questions
 - _ We perform the search you determine its focus
 - _ You receive our report by email
 - _ We have a second meeting to discuss our answers

www.patentamt.at/en/focussearch

Austrian Patent Office

Hannes Raumauf is your contact person for our Focused Search service hannes.raumauf@patentamt.at +43 (0)1 53424 - 342





PATENT VOUCHER

Have you invented something? Are you a startup or SME and want to protect your invention? Do you have limited funds and are uncertain how to make the best use of them? The Austrian Research Promotion Agency (FFG) and the Patent Office have something for you: the Pa-

tent Voucher. It's your ENTRY TICKET to protecting your invention.

HOW The FFG team issues you the Patent Voucher

YOU BENEFIT You contact the Patent Office with the voucher

- _ We tell you whether your innovation has a prospect of being patented If so, you can use the voucher to
- _ fund the assistance of a patent attorney right through to the national and international patent application stage and pay the patent application costs
- _ 80 % of all costs are covered by the Patent Voucher up to a maximum of € 10,000, including the patent application and patent attorney fees
- HOW _ Apply for a Patent Voucher at www.ffg.at/patentscheck
- IT WORKS Order a joint search with our patent experts at the touch of a button
 - _ Does it make sense to file a patent application? If so: national patent application
 - On the international market: PCT application

www.patentamt.at/en/patentcheck

Austrian Patent Office

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PATENT FAST TRACK

Do you want us to examine your patent FASTER? Patent Fast Track is the quickest way to get your search result. We send it to you within 4 MONTHS. Of course that also requires your assistance – your documents should be as complete as possible.

- HOW You register by smart card*
- IT WORKS _ Your application meets all the formal requirements
 - _ The description of the state of the art is backed up by bibliographical references
 - You tell us why you need it so fast
 - _ We deliver the search result within four months
 - * Currently Patent Fast Track is in the pilot phase and is only available to holders of the European Patent Office smart card.

www.patentamt.at/en/fasttrackpatent

Austrian Patent Office **Dietmar Trattner** is your contact person for Patent Fast Track dietmar.trattner@patentamt.at +43 (0)1 53424 - 446





TRADEMARK PRE CHECK

Have you got an idea for a LOGO? Then you naturally want to know whether it's unique and can be protected. The aim is to have

a trademark that's distinctive and well **PROTECTED** against trademark theft. Pre Check gives you the answers!

- WE _ whether your trademark concept can be protected,
- TELL which older trademark rights are similar and could pose
- YOU a threat, and
 - _ whether there are companies in the commercial register with a similar name.
- HOW 1. You order the service online at
- IT WORKS www.patentamt.at/precheck
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www.patentamt.at/en/precheck

Austrian Patent Office Markus Stangl

Your contact person for the Pre Check service markus.stangl@patentamt.at +43 (0)1 53424 - 234



DA DAY IN THE LIFE of a PATENT EXAMINER

6.20 a.m. Mr Schlechter is an early bird. He's been at his desk for 20 minutes already. His MORNING DRUG OF CHOICE: 1 cup of Earl Grey tea.

8.10 a.m. His morning meeting with his boss goes well. Unlike Mr Schlechter, Dietmar Trattner, Vice President Technology, IS A COFFEE JUNKIE. Fuelled by some seven cups of espresso, they discuss a planned presentation at a START-UP EVENT.

> **8.30 a.m.** Back in the office. A company has filed a patent for a new SPARK PLUG – looks interesting. Mr Schlechter, the consummate expert, gets straight down to work.

9.30 a.m. He launches EPOQUE, the electronic research tool for patent professionals – let's go! It throws up over 70,000 SIMILAR INVENTIONS in the spark plug class. Reading and comparing them all is a job for workaholics with a passion for detail.

10 a.m. Mr Schlechter STAYS COOL – for him it's all in a day's work – there are even more publications in other technical classes. For good measure, he brews himself a second cup of tea and further filters the EPOQUE results. A specific search term does the trick

- Mr Schlechter uses 'earthed electrode' to narrow the search. The results are still in the four figures.

10.45 a.m. Mr Schlechter decides to search by technical DRAWINGS. Sometimes it's worth searching by keywords. This time, however, pictures say more than a thousand complicated words. The search has been narrowed down to 500 patents.

12.30 p.m. What feels like a thousand clicks later, he's found nothing. Good news! Congratulations to the inventor – HE WINS THE FIRST ROUND! The filed spark plug might really be a global innovation*. To establish that with certainty, Mr Schlechter will have to wade through vast numbers of patent documents at least once more. He wants to REFLECT on today's findings until tomorrow at least – that's his tried-and-tested method.

1 p.m. Lunch break with colleagues. The topic of conversation? Spark plugs.

2 p.m. The in-tray for paper-based applications (yes, there still are some) also has to be checked.

3 p.m. The PowerPoint presentation for the start-up event needs to be updated. Mr Schlechter likes to give examples to shed light on **BEST** and **WORST** practices. Unfortunately, there are cases of start-ups proudly pitching their invention and forfeiting the novelty of their idea and patent protection. Mr Schlechter wants to spare start-ups that wretched experience. Soon he has found two current cases and the presentation is up-to-date.

4 p.m. Mr Schlechter packs his briefcase, logs out of the time tracking system and walks happily towards the S-BAHN TRAIN STATION. 'It's a little draughty here. Perhaps somebody will invent something against draughts one day,' he thinks to himself and smiles.

> 0.45 a.m. Mr Schlechter is fast asleep and dreaming – surprisingly, not about spark plugs ;)

*) In order to be patented, the inventions for which patent protection is being sought needs to be new worldwide. To find out whether that's the case, patent examiners search through international databases containing some 100 million patent documents!





2017 IN THE BLINK OF AN EYE

We'll keep it very BRIEF, but we'd like to take this opportunity to PAT OURSELVES ON THE BACK A LITTLE. We PULLED OUT ALL THE STOPS in 2017,

had lots of new ideas and made sure that the world continues to take us seriously.

1. We have new SERVICES for you – to name just a few that were launched in 2017: an online discount for inexpensive trademark registration, a search service that is available even without filing a patent application (Standard Search and Focused Search), Patent Fast Track, and the IP HUB, an information hub for services, funding and events related to intellectual property. All the information is on our website, which was also newly launched in 2017.

2. You'll find US wherever inventors and start-ups are gathered, be it the Pioneers Festival, TedX Vienna or the Austrian Federal Economic Chamber (WKO) Start-up Days. The Patent Office's team of experts was at all those events to provide information and advice. And as part of the Technology Symposium in Alpbach, the Patent Office helped students with ad-hoc research during the Innovation Marathon.

3. Our new colleague **ALBERT** the patent bot began work in summer 2017. He's the first chatbot in the service of the Federal Republic and your digital trademark adviser.

4. We successfully defended our mination authority. That means we'll count as one of the world's leading patent offices for the next ten years, since only 21 of the 204 patent offices around the world enjoy that status. Our experts are among the first worldwide to view and examine international innovations. In other words, we're still at the top of our game!

That's enough of congratulating ourselves! Now we'd also like to praise our clients: it's your ideas that make our work so interesting and spur us on! We hope 2018 will be just as exciting and successful.



STATISTICS

INVENTIONS IN NUMBERS



So many ideas want to be patented or registered as a utility model. Our examiners study each one in detail.



2. RANKING OF AUSTRIA'S FEDERAL STATES

Upper Austria wins gold. Styria takes the silver. Vorarlberg has the highest number of inventions per capital-

3. TOP 3 INDU

Austrians are part

in these fields.



USTRIES ticularly inventive		Technical sector	Number	Percentage
	5	Mechanical engineering		
		(incl. transport)	995	38 %
	others	Other fields		
		of technology	603	23 %
	P	Electrical engineering	436	17 %

Ranking Name Number AVL LIST GMBH 155 1 2 TRIDONIC GMBH & CO KG 84 3 JULIUS BLUM GMBH 81 4 ZKW GROUP GMBH 69 5 ZUMTOBEL LIGHTING GMBH 38 TRUMPF MASCHINEN AUSTRIA GMBH & CO. KG. 29 6 ENGEL AUSTRIA GMBH 29 4 PLASSER & THEURER, EXPORT VON BAHNBAUMASCHINEN, GMBH 27 8 VIENNA UNIVERSITY OF TECHNOLOGY 26 FILL GESELLSCHAFT M.B.H. 25 9 SIEMENS AG ÖSTERREICH 24 10



6. AND THE WINNERS ARE ...

Austria's patents on the international stage – target countries.



Total applications

4th place: $CN \longrightarrow$ has the highest growth rate

4. GRANTED PATENTS AND UTILITY MODELS 1.450 AUSTRIAN TRADEMARKS These applications met the strict standards of our patent examiners IN NUMBERS 5. PATENTS AND UTILITY MODELS IN EFFECT 1. FILED TRADEMARKS 5.541 The number of inventions in Austria that are currently protected by .393 A must-have this year too: a national patent or utility model: a logo in Austria inventions 149,781 2. RANKING OF AUSTRIA'S FEDERAL STATES The trademark capital: Vienna 10.277 6.093 AUSTRIAN DESIGNS Austrian innovations ustria | 715 passed through our hands. na |1754 trademarks IN NUMBERS 682





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