

Annual Report 2019



IP rights in figures

INFO Patents

131,999

patents in force on 31/12/2019

40,124

examination procedures concluded

18,255

grants published

67,437

applications in total in 2019

including applications from abroad

20,803

86.4%

Online

11,668

applications in total in 2019

including applications from abroad

3,240

INFO Utility models



76,919

utility models in force on 31/12/2019



11,833

registration procedures concluded



10,295

with registration

59.0%
Online

INFO Trade Marks

830,319

trade marks in force on 31/12/2019



74,986

registration procedures concluded



55,017

with registration

73,633

national applications in total in 2019

including applications from abroad

5,361

72.5%Online

40,812

registered designs in total in 2019

including
applications from
abroad

INFO Designs



303,069

designs in force on 31/12/2019



6,374

procedures concluded for a total of 44,551 designs*



5,544

with registration for a total of 40,812 designs *

* A multiple application may contain up to 100 designs.

85.5%
Online applications

CONTENTS

2	Tasks	and	organ	isation
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4 Patents

- 8 IN FOCUS Selected fields of technology
- 11 INTERVIEW with the Head of Directorate General 1
- 13 BRIEFLY EXPLAINED Artificial intelligence in the context of patent applications
- 14 70 YEARS AGO How it happened that the patent office is located on the banks of the river Isar

16 Utility Models

20 IN FOCUS 25 years of the DEPATIS search system

22 Trade Marks

- 26 IN FOCUS Initial experience with the Trade Mark Law Modernisation Act
- 28 BRIEFLY EXPLAINED Compulsory use and grace period for non-use
- 29 125 YEARS AGO Launch of the trade mark register
- 30 Indications of geographical origin

32 Designs

35 At a glance

- 38 INTERVIEW with Cornelia Rudloff-Schäffer,
 President of the DPMA
- 40 International cooperation
- 44 VIP4SME project is ending after 48 months
- 46 50 YEARS AGO Patents that brought man to the moon
- 48 Patent attorney training
- 50 Supervision under the CMO Act
- 52 140 YEARS AGO On occasion of Albert Einstein's birthday
- 58 IN FOCUS Implementation of
 - the Marrakesh Directive
- 59 News from the IT services
- 61 Customer care and information services
- 63 National cooperation partners
- 64 INTERVIEW with Peggy Bürger, head of the PIZ Magdeburg
- 66 IN FOCUS DPMA and ZGR continue successful cooperation
- 67 70 YEARS AGO Fraunhofer-Gesellschaft celebrates anniversary
- 68 Events in 2019
- 74 Our strategy, our projects
- 75 BRIEFLY EXPLAINED The User Advisory Council on Patents/Utility Models

54 Arbitration boards at the German Patent and Trade Mark Office

- 76 INSIDE The DPMA as international cooperation partner by Vice-President Ulrich Deffaa
- 78 IN FOCUS Digital roadmap
- 79 OUR PROJECT New Search
- 80 Inventor and innovation awards
- 84 PANORAMA IP rights in popular culture
- 86 A glance at 2020

88 Statistics

Dear Reader,

An annual report is not only a look at the past, but should also encourage and provide motivation for future challenges.

This is what we need in particular in view of the coronavirus crisis. It is about saving human lives. At the same time, the economic standstill threatens the existence of many companies. The ability to have a rethink, the courage to break new ground, creative ideas and inventiveness are more in demand than ever. Dear customers, our future depends on your innovations – not only in an economic sense.

The DPMA is still there for you to protect your innovations. We have already proved in the past that the office can overcome serious crises. In 2019, the office celebrated its 70th anniversary of reopening after the Second World War. On 1 October 1949, the German Patent Office set out to make a fresh start in Munich. After four and a half years without a patent office and complete legal uncertainty, inventors were once again able to have their ideas protected. The Patent Office received a flood of applications for innovations which made an essential contribution to making the German "economic miracle" come true.

Today, we are once again facing a crisis that is causing great concern. Unlike 70 years ago, we do not have to start from scratch in the field of industrial property protection. The DPMA is standing on a solid foundation – with our excellent experts, our refined business processes and our clear strategy. We are benefiting from the fact that, for more than 20 years, we have been consistently pursuing the digitisation process of our office.

Thanks to our electronic case file processing in the IP areas of patents, utility models and trade marks, we have been able to successively increase the number of teleworking positions in recent years: More than 1,000 staff can access all relevant documents and databases from their home offices and move your procedures forward. In spite of all the restrictions imposed by the coronavirus crisis, the DPMA is fully operational. We are continuing the course of digitisation with a digital roadmap, presenting its main features to you in this report.

We have also made preparations for the coming challenges in terms of organisation and personnel. In 2019, we set up seven new patent divisions in response to technological trends, and successfully filled 140 additional patent examination posts. In the patent area, the examiners completed more than 40,000 examination procedures last year – more than ever before.

We provide information on numerous other developments and innovations at the DPMA in this 2019 Annual Report.

I wish you an inspiring read and stay innovative!

Yours sincerely,

Comelia 12-dwy-Sdayer

Cornelia Rudloff-Schäffer
President of the German Patent and Trade Mark Office



2 TASKS AND ORGANISATION Annual Report 2019

Tasks and organisation

The German Patent and Trade Mark Office: First-hand service and quality.

Our staff are able to very closely witness the "Land of Ideas" on a daily basis. It is the ideas of our customers who consciously choose the German Patent and Trade Mark Office (DPMA) to protect their know-how. This is because effective action against plagiarism and counterfeiting is possible, above all, on the basis of IP rights: Patents, utility models, trade marks and designs effectively protect intellectual property – be it a technical invention, a creative trade mark or the colours and shapes of a new product.



PresidentCornelia Rudloff-Schäffer



Vice-President
Christine Moosbauer



Vice-President
Ulrich Deffaa

The DPMA is the German centre of expertise for patents, trade marks and the like and operates within the portfolio of the Federal Ministry of Justice and Consumer Protection. We grant patents, register utility models, trade marks and designs and manage these rights. Furthermore, we inform the public about industrial property rights.

With just under 2,800 staff in more than 100 working entities, the DPMA is based at four locations:

→ Munich

DPMA headquarters including senior management, administration as well as patent, trade mark and utility model divisions

→ Jena

Sub-office with administrative units, the design division and another trade mark division

→ Berlin

DPMA Information and Service Centre (IDZ)

→ Hauzenberg

Branch office with several teams for provision of information and in Customer Care and Services

Press and Public Relations

International Affairs

Internal Communication, Key Support to Senior Management

Central Controlling, Cost/Performance Accounting, Quality Management, Strategic Business Process Management

Internal Audit, Corruption Prevention and Office Data Protection

Arbitration Board under the Employee Inventions Act

Arbitration Board under the Act on Collective Management Organisations (CMO Act) Annual Report 2019 TASKS AND ORGANISATION 3



Directorate General 1
Patents and
Utility Models
Bernd Maile



Directorate General 2 Information Hubert Rothe



Directorate General 3
Trade Marks and
Designs
Barbara Preißner



Directorate General 4 Administration and LawDr Regina Hock

DPMA Information and Service Centre Berlin

Jena Sub-Office

In organisational terms, the DPMA is divided into four Directorates General:

Directorate General 1 - Patents and Utility Models

- » More than 1,000 patent examiners organised in five clusters (Mechanical Engineering, Mechanical Technology, Electrical Engineering, Chemistry and Medical Engineering as well as Physics) with 37 patent divisions in total
- » Utility model and topography division
- » Patent and utility model administration

Directorate General 2 - Information

- » Information services for the public and internal information services: database search, library, classification systems, Customer Care and Services, Internet editorial office
- » Support of the 20 German patent information centres
- » Operation and further development of all information technologies of the DPMA

Directorate General 3 - Trade Marks and Designs

- » 13 teams in three divisions for trade mark examination
- » Trade mark cancellation division
- » Design division with design unit

Directorate General 4 - Administration and Law

- » 17 specialist areas in four divisions, workplace health management
- » All administrative tasks, including personnel and facility management, organisation as well as budget and legal affairs
- » Patent attorneys and other agents as well as supervision of collective management organisations under the Act on Collective Management Organisations (Verwertungsgesellschaftengesetz)



Organisation Chart

PATENTS



You will find our extensive statistics on patents in the chapter "Statistics" starting on page 89.

Annual Report 2019 PATENTS 5

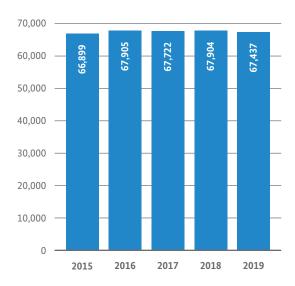
Development of patent applications

In 2019, the high number of applications again proves that German IP rights for technical innovations are very attractive for companies and developers. With 67,437 registered patent applications, the figure corresponds to the very high level of the previous years; filing activity declined by only 0.7% compared to the updated figure for the previous year.

In the past year, 59,930 of 67,437 registered patent applications were filed directly with our office. 7,507 applications entered the national phase at our office as PCT applications according to the Patent Cooperation Treaty (PCT) via the World Intellectual Property Organization in Geneva.

The majority of our customers now make use of the attractive option of electronic filing of applications, which is demonstrated by an increase of 1.2 percentage points amounting to a proportion of online patent applications of 86.4 %. At the end of 2019, 131,999 national patents were in force (+1.9%).

Patent applications at the German Patent and Trade Mark Office



Origin of patent applications

Applicants having their domicile or principal place of business in Germany filed 46,634 applications in 2019; exactly two applications more than in the previous year. This means that the percentage of applications from Germany rose to 69.2% (2018: 68.7%). In contrast, the number of patent applications from abroad fell slightly to 20,803 (2018: 21,272).

Last year, 3,635 applications came from European countries (2018: 3,590) and 17,168 from non-European countries (2018: 17,682).

Applications from Taiwan and France increased by 7.4% and 33.3% respectively. In contrast, applications from China (-8.6%), the United States (-6.9%) and Japan (-0.7%) decreased.

Patent applications by German Länder

The 46,634 patent applications from Germany can be allocated to individual German Länder according to the residence or the principal place of business of the applicant. There was a change at the top of the ranking: In 2019, unlike in previous years, Bavaria was not at the top of the list, but Baden-Württemberg. In the past year, 15,230 applications came from that Land (+4.4%), 14,064 applications from Bavaria (-5.7%). North Rhine-Westphalia followed far behind with 7,022 applications (+2.6%) and again came in third just as in 2018. With 6.6% the increase was particularly strong in Lower Saxony, which registered 3,847 applications. Over the last ten years, the number of applications from that Land rose by 32.2% in total. If you look at the filing figures in relation to the respective size of the population, Baden-Württemberg and Bavaria are clearly in the lead with 138 applications and 108 applications, respectively, per 100,000 inhabitants. Lower Saxony comes third (48).

Patent applications by countries of origin in 2019 (national applications at the DPMA and PCT applications in the national phase)

	Applications	Percentage
Germany	46,634	69.2
Japan	7,955	11.8
USA	6,207	9.2
Republic of Korea	1,262	1.9
Switzerland	810	1.2
Taiwan	737	1.1
Austria	713	1.1
France	460	0.7
China	449	0.7
Sweden	380	0.6
Others	1,830	2.7
Total	67,437	100

6 PATENTS Annual Report 2019

The most active companies and institutions

With 4,202 applications, *Robert Bosch GmbH* again leads the ranking of the most active patent applicants in 2019. It is followed by *Schaeffler Technologies AG & Co. KG* with 2,385 applications and *Bayerische Motoren Werke AG* in third place with 1,773 applications, relegating Ford Global Technologies, LLC with 1,725 applications to fourth place.

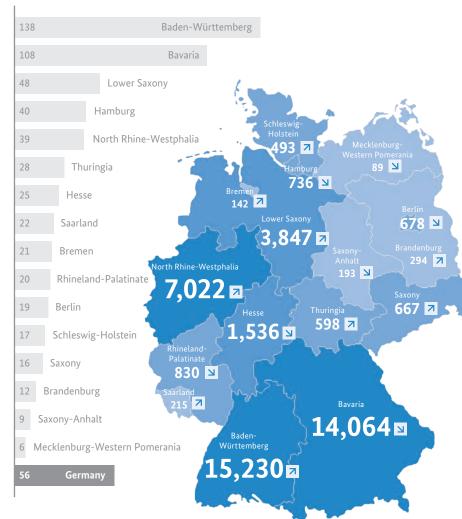
Daimler AG (1,711 applications) and ZF Friedrichshafen AG (1,679 applications) as well as VOLKSWAGEN AG and AUDI AG come next in the ranking.

The individual companies and institutions are shown in the form in which they appear as patent applicants – possible business group affiliations is not taken into consideration.

Inventors and applicants

Last year, 4.6% of our applicants filed more than ten applications each per year (2018: 4.7%). In 2019, unchanged from the previous year, applications filed by this group of applicants, referred to as large patent applicants, accounted for 70.2% of the total of applications received.

Whereas in the case of applications from commercial enterprises, a distinction is made between the company filing the application and the inventor as a natural person, the applicant and the inventor are usually identical in the case of independent inventors or employees with what are known as released inventions. In 2019, the applicant and the inventor were identical for 5.3% of the applications (2018: 5.4%).



Patent applications by German Länder in 2019 (applications per 100,000 inhabitants and number of applications)

Main technical areas of patent activity

The International Patent Classification (IPC) is the worldwide standard for classifying technological contents. A number-and-letter code organises the entire field of technology in more than 70,000 units. We attribute every patent application to one or several IPC classes according to its technical content and forward it to the examining sections in charge.

As in previous years, the technology field "Transport" ranks first among the top technology fields in terms of filing activity with 12,836 applications (+3.2%), a large proportion of applications coming from the automotive industry. With 7,160 applications (-4.2%), the technology field "Electrical machinery and apparatus, energy" ranked second, followed by "Mechanical elements" with 5,390 applications (-8.4%).

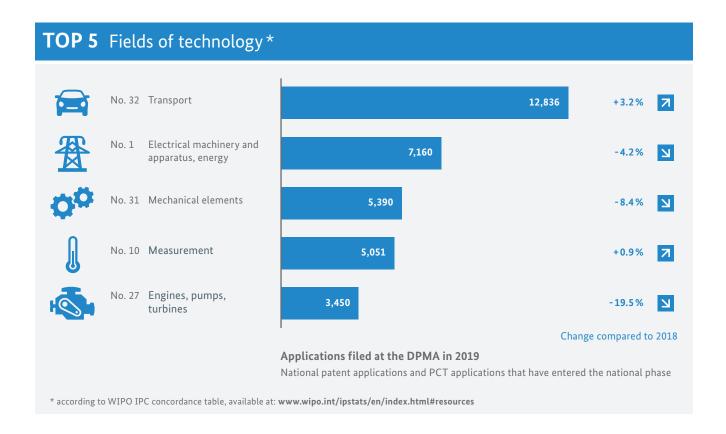
Selected data on patent examination

In 2019, the number of requests received for the examination of patentability under section 44 of the Patent Act (*Patentgesetz*) was 47,205 (2018: 47,127), a slight increase by 0.2%. Similarly, the number of search requests pursuant to section 43 of the Patent Act rose by 0.4% to 15,741. In the past year, 40,124 examination procedures were completed, an increase of 5.3% compared to the previous year. Furthermore, 14,943 isolated searches under section 43 of the Patent Act were performed, just under 5% more than in 2018.

Patent applications in the examination procedure

In 2019, 46,323 examination procedures were validly initiated – a slight decrease of 0.3% compared to the previous year. The examination procedure begins with a comprehensive and thorough search conducted by the patent examiners to identify the relevant state of the art. The state of the art identified will be taken into consideration to examine whether

Annual Report 2019 PATENTS 7



the subject matter of the application is new and involves an inventive step. It is also assessed whether the subject matter of the application meets the required criteria of "sufficient disclosure" and "industrial applicability". Then the examining section decides whether and to what extent a patent can be granted or whether the application must be refused. In 2019, 18,255 patents were granted, i.e. 11.5% more than in the previous year. This corresponds to a proportion (grant rate) of 45.5% of completed procedures (2018: 43.0%). This is the highest result in 11 years. 13,284 (33.1%) of the examination procedures were terminated because the applicant withdrew the request for examination or failed to pay the fees. Refusals amounted to 8,585, i.e. 21.4% of all completed procedures. We are still making every effort to reduce the number of pending examination procedures.

Appeal proceedings at the Federal Patent Court

If an appeal is lodged with the Federal Patent Court against a decision of one of our examining sections, i.e. the grant of a patent or the refusal of an application, the Technical Boards of Appeal of the Federal Patent Court will decide on the further course of action. In 2019, 348 appeal proceedings were received by the Technical Boards of Appeal: a decrease of 5.9% compared to the previous year. The number of concluded appeal proceedings also fell slightly by 3.2% to 459. At the end of 2019, 733 appeal proceedings were still pending at the Federal Patent Court.

Selected data on patent procedures

	2015	2016	2017	2018	2019
Examination requests received	44,683	45,620	47,442	47,127	47,205
- including requests filed together with applications	25,682	26,387	26,536	26,198	25,975
Search requests pursuant to Sec. 43 Patent Act	13,599	14,970	15,603	15,679	15,741
Concluded searches pursuant to Sec. 43 Patent Act	12,615	13,277	14,575	14,240	14,943
Examination procedures concluded (final)	33,569	35,803	36,837	38,106	40,124
Examination procedures not yet concluded in the patent divisions at the end of the year	192,421	201,645	211,728	220,462	226,967

8 PATENTS Annual Report 2019

IN FOCUS

Selected fields of technology

Automotive technology/transport

Automotive technology is a dominant field of technology in Germany; a large proportion of patent applications relate to this sector. In 2019, the public debate on automotive technology centred primarily on the switch from the internal combustion engines to electric drives to prevent climate-damaging emissions. In a special analysis, we examined the development of filing figures for internal combustion engines and electric motors with battery and fuel cell, the most frequently discussed drive technologies.

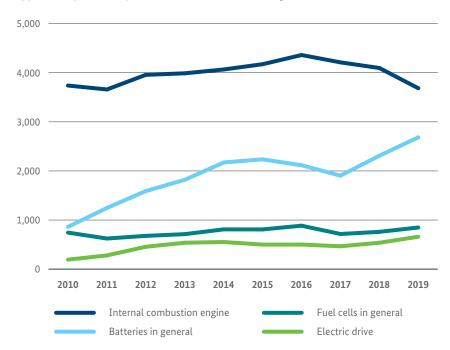
Electric drive/ internal combustion engine

The number of applications for purely electric vehicles saw a substantial increase of 22.7% in the publication year 2019 compared to the previous year. For many years, we have observed a continuous growth in this field.

In most cases, the technical focus of applications is on a simple, cost-effective and space-saving arrangement of the electric drive unit. Above all, this contributes to increasing driving comfort, for example, by means of smaller batteries that allow more space in the car interior.

In the international ranking, Germany is clearly in the lead in this field. Almost 50% of all applications (47.4%) in this field of technology were received from German applicants. It is followed by Japan (17.0%), the US (13.6%), China (4.7%) and the Republic of Korea (3.6%).

Patent applications effective in Germany in selected fields of automotive drive technologies (applications published by the DPMA and the EPO, avoiding double counts)



Year	Electric drive 1, 2	Internal com- bustion engine 1,3	Batteries 1,4	Fuel cells 1,5
2010	194	3,738	861	744
2011	280	3,658	1,246	624
2012	456	3,956	1,590	678
2013	538	3,987	1,819	713
2014	553	4,065	2,172	810
2015	500	4,172	2,236	809
2016	501	4,359	2,116	885
2017	466	4,210	1,903	716
2018	538	4,095	2,309	760
2019	660	3,683	2,684	848

 $^{^{}m 1}$ IPC classes valid at the time of retrieval counted proportionately; without claim to completeness; results may be included that do not relate to automotive drive technologies.

² IPC: B60L 7/12, B60L 7/14, B60L 8, B60L 11, B60L 50, B60L 58, B60L 15/00 to B60L 15/38, B60K 1

³ IPC: F01N 3, F01N 5, F01N 9, F01N 11, F01L 1, F02B, F02D, F02F, F02M, F02N, F02P, F16C 3/18, F16C 3/20, F16F 15/24, F16F 15/31

⁴ IPC: H01M 2, H01M 4/02, H01M 4/04, H01M 4/13 to H01M 4/84, H01M 10

 $^{^{\}rm 5}$ IPC: H01M 4/86 to H01M 4/98, H01M 8

Annual Report 2019 PATENTS 9

In the field of internal combustion engines, German applicants also clearly come out on top. In this technological area, 43.8% of patent applications were accounted for by Germany – almost as many as the combined percentages of Japan (21.1%), the US (18.4%), the Republic of Korea (3%) and France (2.4%).

In contrast to the growing field of electric drives, the number of applications for internal combustion engines fell again (-10.1% compared to the previous year). The applications mostly focus on designing engines that are cost-effective and operate at optimum efficiency and on removing nitric oxides from diesel exhaust gases.

Batteries/fuel cells

The main energy sources for powering electric motors are batteries or fuel cells.

In both areas, we have seen an increase in the number of applications in recent years. However, the rise is much stronger for batteries than for fuel cells.

In the past nine years, the number of patent applications in the field of batteries has more than tripled. Last year, just under 29.7% of applications came from Germany, followed by Japan (21.4%), the Republic of Korea (20.2%), the US (12.0%) and China (8.7%).

With respect to fuel cells, the ranking was led by Japan accounting for 37.9% of the applications, followed by Germany (29.8%), the US (13.1%), the Republic of Korea (7.5%) and France (4.2%). Fuel cells are needed especially for hydrogen-powered vehicles. They contain gaseous hydrogen, which reacts with oxygen in a chemical process, releasing the energy stored in the hydrogen as electricity. This powers the electric motor without producing any harmful emissions.

Patent applications effective in Germany¹ by country (residence or principal place of business of the first applicant) in 2019

Electric drive

Country	Number	Percentage
Germany	313	47.4
Japan	112	17.0
USA	90	13.6
China	31	4.7
Republic of Korea	24	3.6
Others	91	13.8
Total ²	660	100

Batteries

Datteries		
Country	Number	Percentage
Germany	796	29.7
Japan	574	21.4
Republic of Korea	541	20.2
USA	322	12.0
China	233	8.7
Others	217	8.1
Total ²	2,684	100

Internal combustion engine

Country	Number	Percentage
Germany	1,613	43.8
Japan	776	21.1
USA	678	18.4
Republic of Korea	112	3.0
France	89	2.4
Others	416	11.3
Total ²	3,683	100

Fuel cells

. det eette		
Country	Number	Percentage
Japan	321	37.9
Germany	253	29.8
USA	111	13.1
Republic of Korea	64	7.5
France	36	4.2
Others	63	7.4
Total	848	100

¹ Applications published by the DPMA and the EPO avoiding double counts.

Digitisation

Digitisation has now taken hold in almost all areas of business, industry and daily life. The steadily increasing number of patent applications illustrates the enormous importance of this field. Since 2013, the number of annual patent applications in the field of digitisation has increased by 30.6%, from a total of 17,727 applications in 2013 to 23,143 applications in 2019. In the four core areas of digital technologies - communication technology, audio-visual technology, data processing methods for business management purposes and semiconductors - applications from abroad also rose significantly in the past year.

Only in the field of semiconductors and audio-visual technology there was a drop in patent applications from Germany compared to the previous year. Applicants still include small and medium-sized enterprises, but also large companies operating at an international level. Meanwhile, we have also increasingly been receiving patent applications from car manufacturers in this field.

Communication technology

With a total of 12,575 national and international patent applications, communication technology was again the largest of the four core areas in 2019.

² Due to rounding differences, the values added together deviate from the total.

10 PATENTS Annual Report 2019

Since 2013, the number of applications in this field has risen by more than 35%. Most applications focus on the transmission of digital information and wireless communication networks but also on what has become known as the Internet of Things (IoT). These technologies allow machines, control devices and sensors to communicate with each other. Highly networked systems are used both at home – for remote-controlled coordination of air conditioning and lighting – and on an industrial scale – for intelligent process and production control.

Audio-visual technology

The key area audio-visual technology includes television systems or stereophones and arrangements and circuits for controlling display units. Many applications deal with what is known as virtual reality (VR). Computer-generated realities with three-dimensional images and sound generate a virtual reality or audio-visual information is superimposed on the physical world in what is known as augmented reality (AR). There is a broad range of uses, from simple computer games to information dissemination for entertainment to surgical simulators for doctors.

Data processing methods for business management purposes

A large proportion of the applications in this core area deal with data processing methods, for example for business management purposes, for industrial manufacturing (4IR), autonomous delivery systems (robots, drones and the like) and mobility (autonomous driving, car sharing).

The networking of an increasing number of terminal devices, control systems and machines generates ever larger amounts of data (big data). In order to transfer, process and store these data smoothly, a form of decentralised data processing is used, known as cloud computing. Services such as servers, storage facilities, databases or analysis options are made available via the Internet for this purpose.

A further trend in applications can be observed in the field of what is known as block chain technology. Block chain technology uses cryptography to link data records with each other and store them in a decentralised manner. It is used to create databases that are as error-resistant and efficient as possible.

Semiconductors

Even though the number of applications has dropped slightly in recent years, the core area of semiconductors remains the second strongest area of digitisation with over 4,300 national and international patent applications.

Applications filed in this field primarily focus on semiconductor components, solid state electrical components or assemblies of these components. These small functional components of integrated circuits are essential for enabling fast progressing digitisation in all fields of application. Semiconductor-based technologies assist us in all areas of everyday life. They are used, for example, in systems for automatic driving support or efficient energy management.

Patent applications effective in Germany in selected fields of digitisation (applications published by the DPMA and the EPO, avoiding double counts)

Digitisation ¹	2015		2016		2017		2018		2019	
	Ger ²	frg³	Ger ²	frg ³	Ger ²	frg³	Ger ²	frg ³	Ger ²	frg ³
Communication technology⁴	731	9,663	792	9,386	760	10,097	812	10,104	950	11,625
Semiconductors ⁵	1,049	2,967	963	3,044	967	3,257	858	3,189	721	3,596
Data processing methods ⁶	193	1,612	218	1,840	234	2,128	313	2,114	363	2,160
Audio-visual technology ⁷	651	2,713	617	3,083	635	3,001	659	3,015	558	3,170
Total	19,	579	19,	943	21,	079	21,	064	23,	143

¹ The table lists published patent documents which are published 18 months after the filing date in accordance with the statutory time limit. The figures therefore mirror the status of 18 months previously. Source: DEPATIS

² German applicants

³ foreign applicants

⁴ IPC: H04L, H04N21, H04W

⁵ IPC: H01L

⁶ IPC: G06Q

⁷ IPC: G09F, G09G, G11B, H04N 3, H04N 5, H04N 7, H04N 9, H04N 11, H04N 13, H04N 15, H04N 17, H04N 19, H04N 101, H04R, H04S, H05K

Annual Report 2019 PATENTS 11

INTERVIEWS

Bernd Maile, Head of Directorate General 1 – Patents and Utility Models, on up-to-date structures, quality management in the examination area and future staffing requirements

"Quality is our top priority"

Mr Maile, in January 2019, you had just taken over the management of Directorate General 1, when a major reorganisation of the Directorate General was about to happen. What do you think when you take stock one year later?

It was indeed a great challenge and involved a great deal of effort but of course we were able to build on very good preparatory work. The core of the reorganisation was the establishment of seven new patent divisions as of 1 April 2019. On the one hand, it was our intention to distribute the workload as evenly as possible among the individual divisions. On the other hand, we are also responding to technological trends in industry. A large number of colleagues had to quickly and comprehensively become acquainted with partly new examination fields in other divisions. However, our patent and utility model administration staff too did an excellent job in connection with the reorganisation, forwarding more than 50,000 patent procedures to the new target examination sections, without any problems, as of 1 April. Thus it was possible to seamlessly continue to process case files. Not least thanks to our more efficient structure, we were able to increase the number of examination procedures completed in 2019 by a substantial 5.3% compared to the previous year, to over 40,000 completed procedures. On this occasion, I would like to express my sincere praise to all colleagues involved for their dedicated personal commitment. I think that this is ultimately very good news for our users as well.

As you have already indicated, the *Bundestag* approved an additional 177 examiner posts for the DPMA in 2018 and 2019. How much does that help you?

First of all, we would like to thank those who have endeavoured to obtain these additional posts. This does not only help us, but it was a very important signal for our many innovative companies and for Germany as a location for industry in general. Protecting innovation is very important for our economy. Thanks to the new examiners who have already been recruited, we will succeed in processing the pending examination procedures more quickly and limit the growth of the processing backlog. Currently, we are making every effort



Bernd Maile, Head of Directorate General 1 - Patents and Utility Models

to ensure that the new colleagues with technical expertise will be fully qualified to take over an examination post and work autonomously.

What happens in the qualifying phase?

It is a major challenge to qualify and integrate new staff on such a scale, which many experienced examiners from all patent divisions are mastering with great commitment. During the first 18 months after starting employment, the new colleagues receive training on the job directly at the examiners' workplaces, supervised by these mentors. In parallel, they gain theoretical knowledge in courses and workshops, for example on patent law and procedural law. There are also many training courses available on targeted search strategies. In this manner, we train the "junior" examiners step by step so that they can start managing their own examination sections autonomously.

And after 18 months, do the new examiners decide autonomously?

Not quite yet. We first want to see whether our colleagues are able to put everything they have learned into practice comprehensively and autonomously. That is why they will continue to submit all examination and search reports to

12 PATENTS Annual Report 2019

their superiors for another six months. This is to ensure that they perform their duties at the required quality level. Only when this is the case will they be assigned the task of managing an examination section completely autonomously.

What can the DPMA's customers expect now?

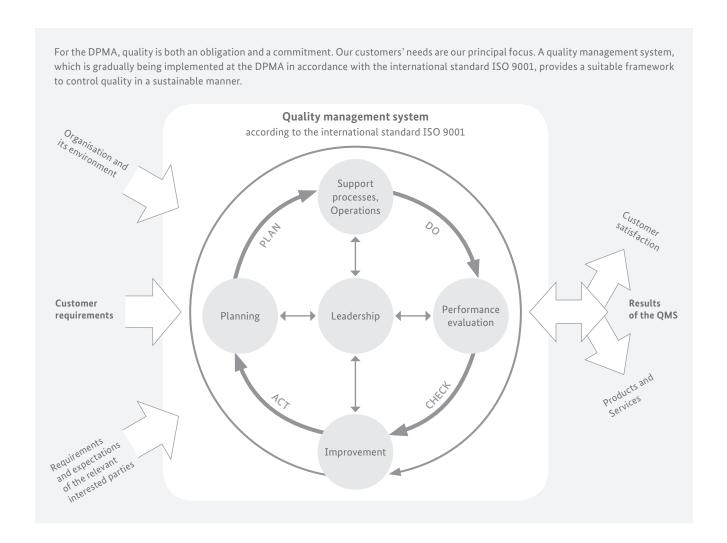
Once the new examiners have undergone their qualifying phase, we expect a substantially increased effectiveness in the patent examination sector or in the searches under section 43 of the Patent Act, given the roughly 15% rise in examination capacity. However, you must not forget the starting point of the increase in the number of posts. In October 2017, our President publicly pointed out the long duration of procedures and the large backlogs regarding patent procedures, which had built up over many years due to an increasing number of patent applications and at the same time more complex requirements due to the exponentially expanding search file. Now we want to gradually shorten the procedural duration by more examination staff and hopefully reduce the backlogs in the medium term. We will also intensify discussions on measures to streamline and accelerate the examination procedure.

Ultimately, however, we are dependent on further additional patent examination posts in order to achieve a real and fast reduction of pending examination procedures.

A speedy examination procedure is one thing but what role does examination quality play?

For the DPMA, quality has always been our top priority. We know that the quality of our work results is crucial for our customers and we will not compromise on this point also in the future. We have just subjected our formal examination to a strict quality check. Our quality management is now focusing on the substantive patent examination procedure. In view of the great impact on the public image, this project is particularly close to my heart. We are aware that the high examination quality is an essential criterion for filing a patent application at the DPMA. A patent granted by the German Patent and Trade Mark Office traditionally enjoys an excellent international reputation – and we are determined that it should remain so.

Mr Maile, thank you very much for the interview.



Annual Report 2019 PATENTS 13



BRIEFLY EXPLAINED

Artificial intelligence in the context of patent applications

Artificial intelligence (AI) is making rapid progress and it is impossible to imagine many areas of research and everyday life without it. For some years now, patent experts too have been looking into the question to what extent artificial intelligence as such is patentable. In addition, everywhere around the world, the question is being explored as to whether inventions made with artificial intelligence can be patented, and if so, upon what.

Basically, what is known as artificial intelligence is divided into "weak" and "strong" forms. Weak AI seeks solutions to quite specific application problems in order to solve them with methods from mathematics and computer science, for example with image, text or speech recognition. These technologies have long become familiar to us in everyday life, such as computer-controlled board games or voice-controlled assistants on smartphones. However, strong AI is said to be involved when the abilities are equal to or even exceed those of a human being. Machines equipped with strong AI would be able to replicate many human capabilities and act independently in the future. Whether this will ever be possible, however, is controversial among experts worldwide who are rather cautious about assessing the prospects of success.

This is why research and development are mainly focused on weak AI at present. A subfield is machine learning. The machine learns on the basis of training data and draws conclusions that determine the future behaviour of the system. This AI works using what

are known as artificial neural networks, i.e. networks of simulated neurons that mimic those of the human brain. Such a machine learns by analysing the training data, in particular by parameterising the connections between the artificial neurons.

Since these innovations involve a great deal of time, work and effort, the developers are very interested in IP rights.

However, AI methods are mostly mathematical solutions implemented by software, i.e. computer-implemented processes, for which patent protection is only available to a limited extent, since computer programs as such are not patentable.

Therefore, the three-step examination approach for computer-implemented inventions is applied to patent applications in the field of AI:

- 1. The invention pertains to a technical field according to section 1 (1) of the Patent Act (*Patentgesetz*).
- 2. The invention serves to solve a specific technical problem by technical means according to section 1 (3) and (4) of the Patent Act.
- 3. The invention is new and involves an inventive step (sections 3 and 4 of the Patent Act), in which only those instructions are to be taken into account which at least influence the solution of the technical problem by technical means.

If these three criteria are met, a patent can be granted. For example, the analysis and editing of medical image data for automated tumour detection as preparation for medical diagnosis may be considered such a technical contribution and consequently be patentable.

The DPMA, too, already uses AI procedures; for example, a classifier implemented as a neural network is used for assigning symbols of the International Patent Classification (IPC) to incoming patent applications. Furthermore, pilot projects are being conducted to investigate how the combination of knowledge-based data systems and learning systems are able to support the search processes used by the examiners.

Finally, the question remains as to whether an IP right can currently be obtained by a strong AI itself? In our opinion, AI is a tool that inventors can use in their work, not a legal entity. Although IP rights can be generated with the help of AI in making an invention it continues to be true that only natural persons can be inventors.



14 70 YEARS AGO Annual Report 2019

70 YEARS AGO

A new start after the war: How it happened that the patent office is located on the banks of the river Isar and Munich became the centre of industrial property protection

Last year, the German Patent and Trade Mark Office (DPMA) celebrated its 70th anniversary since its reopening after the Second World War. On 1 October 1949, the German Patent Office began its operations in Munich. But how did it happen that the office, which had been founded as the Imperial Patent Office (*Kaiserliches Patentamt*) in Berlin in 1877, end up on the banks of the Isar river?

On 21 April 1945, the bombed-out *Reichspatentamt* in Berlin was closed. After this closure, a time began for Germany when there was no patent office. On 1 January 1947, the British and American occupation zones founded the "Economic Council of the United Economic Area". This council set the course for the reconstruction of industrial property rights in western Germany: From 1 October 1948, it was again possible to apply for patents or utility models for inventions and register trade marks. Two receiving offices were set up in Darmstadt and Berlin.

Especially the receiving office in Darmstadt recorded an enormous number of applications with 56,591 filed patent applications within twelve months – even more than in the last year of peace (1938) at the then *Reichspatentamt* (56,217)! Thus the foundation of a "real" patent office in the West was already in the air. But where should it be located?

Bavaria was determined that Munich should host the patent office. Munich mayor Dr Karl Scharnagl declared that the city was extremely interested in getting the bizonal patent office. He suggested that the *Deutsches Museum* should host the patent office. The then Bavarian prime minister, Dr Hans Ehard, said that the patent office could exert an extraordinary attraction and its importance could "not be overestimated".





Main entrance of the German Patent Office (DPA) on the premises of the Deutsches Museum in Munich



The DPA in the Deutsches Museum: reading room in front of the payment counter, receiving unit

On 17 December 1948, the decision in favour of Munich was made when the Economic Council passed the "Act on the Establishment of a Patent Office" (*Gesetz über die Errichtung eines Patentamts*) and, at the same time, voted on the seat of the patent office. Munich prevailed over Darmstadt in a vote of 43 to 40.

On 1 October 1949, a Saturday, the German Patent Office started operations in the rooms of the *Deutsches Museum* with 423 staff. Professor Dr Eduard Reimer was appointed President. The political celebrities of the young republic expressed their congratulations: Federal Chancellor Konrad Adenauer said that he was "particularly gratified" that the patent office was the first higher federal authority in the young Federal Republic of Germany to start its operations. It would be "even more

important than in the past". The opening of the German Patent Office was "of the greatest economic importance," stressed Federal Minister of Economic Affairs Ludwig Erhard.

"This marks the end of one of the saddest chapters in post-war history," wrote the "Süddeutsche Zeitung" on the occasion of the opening. "After four and a half years of total legal uncertainty, German inventors will again be able to calmly take their work out of the drawer, file an application and have it patented."

And sure enough, that's what happened: "We've been inundated with work," President Reimer was quoted by the "Süddeutsche Zeitung". "It doesn't look as if the flood of applications is subsiding. Apparently the inventors in Germany grow on trees" (SZ, 27 September 1949).

Annual Report 2019 70 YEARS AGO 15



May 1956: Excavation site of the south wing



March 1957: Northern part of the excavation site with view of the new south wing

In fact, the large number of applications showed that there was a huge need for industrial property protection in the early stage of the "Wirtschaftswunder" (economic miracle).

The patent office quickly became an important economic factor in Munich: "The Patent Office and its "retinue", patent attorneys, patent law firms, photocopying offices, specialist publishers, etc., provide bread and work to about 2,000 people in our city so that about 6,000 people including family members are economically dependent on the patent office" (SZ, 10 February 1950).

However, the Berliners wanted their patent office back. In October 1949, representatives of Berlin's industry demanded that the newly formed federal government relocate the patent office to Berlin. Berlin's mayor Ernst Reuter also demanded that Federal Chancellor Konrad Adenauer "relocate all those authorities to Berlin that did not absolutely have to be located at the federal seat (Bonn)".

In Munich, the office continued to grow rapidly. In February 1951, 150 patent applications were being filed daily, reported the SZ (10 February 1951). From early 1952 onwards, proper examination of patents was finally resumed at the Office.

The temporary facility in the *Deutsches Museum*, which after all had a rented area of 12,000 square meters, soon reached its limits. While the headcount was only 423 in 1949, it had risen to 1,187 by 1951 – almost three times as many as before. In 1954, the German Patent Office had a staff of 1,809. The plans for a new building for the office quickly took shape. On 21 September 1953, the foundations were laid on *Zweibrückenstraße*. In July 1954, the topping-out ceremony for the first construction phase was celebrated.

Was the question of the location of the patent office in Munich finally settled? No! According to the SZ report of 12 July 1954, confusing remarks could be heard during the ceremony: "The question as to whether the patent office should remain in Munich was cautiously touched upon by *Ministerialdirigent* Dr (Günther) Joel, who said that 'here, too, the final decision can only be made once the borders that still cut through our fatherland have been removed'".

The 30th meeting of the Federal Cabinet of 28 April 1954 also questioned the construction of the new office building for the Patent Office in Munich (estimated costs: 22.7 million marks). According to the minutes, several federal ministers expressed "serious concerns" over the new building: "It has to become apparent, at least externally, that this is only a temporary solution."

State Secretary of Justice Dr Walter Strauß ultimately persuaded his colleagues, stating that the new building of the patent office was most urgently needed, as the current cramped conditions were "no longer acceptable". Subsequently, the "vast majority" of the cabinet voted in favour of the new building.

It took a total of six years, from 1954 to 1959, until the entire new building was completed. The ensemble was designed by two architects, Franz Hart and Helmuth Winkler.

Today, the capital of Bavaria is home not only to the DPMA, the largest national patent office in Europe, but also to the European Patent Office, the Federal Patent Court, the German Chamber of Patent Attorneys as well as many patent law firms and the Max Planck Institute for Innovation and Competition. Thus, a temporary sublet solution became Europe's centre for industrial property protection.



Excavation site of the tower block



View of the construction site of the tower block, in the background the already completed atrium building



In 1959: View of the completed new building



The full story of the 70th anniversary of the DPMA in Munich can be read at www.dpma.de

UTILITY MODELS



You will find our extensive statistics on utility models in the chapter "Statistics" starting on page 95.

Annual Report 2019 UTILITY MODELS 17

Development of utility model applications

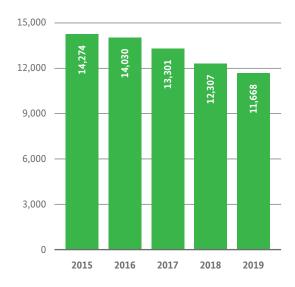
As in the past years, the decline in the number of utility model applications continued also in 2019: In total, 11,668 new applications were received by the DPMA, 5.2% fewer than in the previous year. However, there was a striking opposite trend with regard to the entry into the national phase of a PCT application for the registration of a utility model; the number of such applications amounted to 430 and was thus significantly higher than in previous years.

In 10,295 cases, the application resulted in a registration in the register; this represents a good 87.0% of the applications (2018: 87.5%). 1,538 procedures were concluded without registration. Some of these were due to withdrawals of applications; other applications were refused or were unsuccessful for other reasons.

In 2019, the term of protection was renewed for a total of 18,825 utility models after payment of the maintenance fee. In 12,678 cases the IP right lapsed, for example due to non-renewal or due to abandonment.

At the end of 2019, 76,919 valid utility models were registered at our office.

Utility model applications at the German Patent and Trade Mark Office



Origin of utility model applications

In 2019, a considerable number of utility model applications again came from abroad: Even though the number of applications from abroad fell to 3,240 in total (2018: 3,507), their proportion of the total number of utility model applications was about 27.8%, only slightly below last year's level (28.5%). A total of 1,252 applications came from other countries in Europe (2018: 1,281), whereas the remaining applications (1,988) came from non-European countries (2018: 2,226).

The People's Republic of China ranked first among the foreign applicants with 720 applications (2018: 619) and a proportion of 6.2% of all applications, followed by Taiwan with 4.0% and the USA with 3.6%. Applicants from Austria filed 252 applications (2.2%) and those from Switzerland 237 applications (2.0%).

In the year under review, 8,428 of the applications received came from Germany. This is a share of 72.2% (2018: 71.5%).

Utility model applications in 2019 by countries of origin (national applications at the DPMA and PCT applications in the national phase)

	Applications	Percentage
Germany	8,428	72.2
China	720	6.2
Taiwan	465	4.0
USA	417	3.6
Austria	252	2.2
Switzerland	237	2.0
France	123	1.1
Japan	123	1.1
Italy	115	1.0
Republic of Korea	94	0.8
Others	694	5.9
Total	11,668	100

18 UTILITY MODELS Annual Report 2019

Utility model applications by German Länder

With 2,175 applications, North Rhine-Westphalia once again is the undisputed leader in the *Länder* ranking (25.8% of all domestic applications), followed by Bavaria with 1,895 applications (22.5%) and Baden-Württemberg with 1, 576 applications (18.7%). However, seen in relation to the size of the population of each German *Land*, Bavaria and Baden-Württemberg are on a par at the top of the list with 14 applications per 100,000 inhabitants each. They are followed by North Rhine-Westphalia with twelve applications.

Split-off option

Regularly, many applicants use the application for a low-cost and quickly effective utility model as an accompanying measure to effectively take action against copying of their innovation by others as long as the patent sought after has not yet been granted. The utility model is suitable as an ideal complement to this IP right if it is "split off" from a patent application. The split-off option allows you to claim the filing date of the earlier patent application for the utility model application. That day is then deemed the filing date of both applications.

In the past year, applicants used the split-off option in 1,200 cases; this figure corresponds exactly to that of the previous year despite the overall lower number of applications.

14 Baden-Württemberg Bavaria 14 North Rhine-Westphalia 9 Berlin Rhineland-Palatinate ĸ 8 Hamburg Z 140 N Hesse Brandenburg 42 7 558 № Lower Saxony 164 7 Schleswig-Holstein Z 2,175₽ 6 Thuringia 222 🖭 5 Bremen لا 127 488 🗖 Saarland 351 **a** 5 Saxony V Saxony-Anhalt 1,895 ■ Baden-Württemberg 3 Mecklenburg-Western Pomerania .576₺

Search pursuant to Section 7 of the Utility Model Act

An important part of the system of utility model protection is the search according to section 7 of the Utility Model Act. Unlike the patent, the utility model is merely registered upon filing the application – there is no substantive examination of the invention. The applicant can minimise the procedure-related risk that the IP right may be cancelled later by requesting a prior art search at an early stage.

For a fee of 250 euros, our patent examiners determine whether anything comparable to the invention was already known at the filing date of the utility model application. In a search report they list the publications and documents identified that are relevant for assessing protectability of the utility model. On the basis of the search results, it is easier to assess whether one's own claims can be enforced vis-à-vis third parties or whether the IP right can be defended against attacks by others.

In the last year, 1,889 effective search requests were received by our office (2018: 2,088) and 1,984 searches were concluded by our patent examiners (2018: 2,051).

Utility model applications by German Länder in 2019 (applications per 100,000 inhabitants and number of applications)

Annual Report 2019 UTILITY MODELS 19

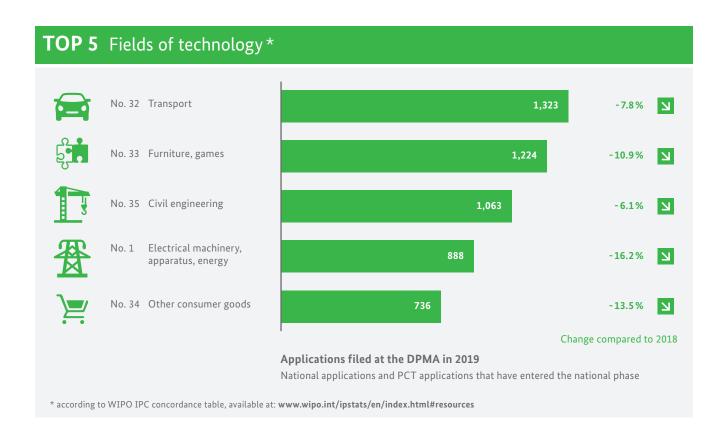
Cancellation of utility models

Cancellation proceedings are an efficient instrument for subsequently clarifying the protectability of an initially unexamined utility model. After a decrease in the past years, the number of requests for cancellation received in 2019 amounted to 98 and thus was stable compared to the previous year (2018: 97). In the year under review, we concluded a total of 100 cancellation proceedings.

A utility model can be cancelled upon request only. Anyone can make a cancellation request, the looming risk of an infringement dispute or an individual's economic interest is not necessary. The request is subject to a fee of 300 euros upon filing. The request for cancellation must contain a sufficient statement of reasons. In particular, any conflicting prior art should be cited in the cancellation request.

Our Utility Model Division handles the cancellation proceedings and decides upon the cancellation request. Normally, oral proceedings are held. The panel consists of three members. A lawyer acts as the chair and two patent examiners responsible for the technical field are reporting and associate judges.

In most cases, utility models are cancelled because the subject matter of a utility model cannot be protected. The requirements for utility model protection of an invention are fulfilled if it is new compared to the state of the art and involves an inventive step. The examination can also check for any inadmissible extension of the subject matter of the utility model.



20 25 YEARS OF DEPATIS Annual Report 2019

IN FOCUS

25 years of the DEPATIS search system

About **25** years ago **START** of the project

"Basic installation **DEPATIS**"

In early **1999**

Predecessor system of **DEPATIS** became operational

80 "search stations"

Data set of **20 million** documents

of which **1.2 million**with searchable full text

DEPATISnet home page



in April 2001 ...

... and today



About 25 years ago, we started the project "Basic installation **DEPATIS**", which originated our today's patent search system, the most important tool of the patent examination sections at the German Patent and Trade Mark Office (DPMA).

The information technology available at that time faced considerable challenges and competitors for the project assignment basically doubted the feasibility of the desired functions. After the project had started, our external service provider's team alone temporarily had more than 100 members; approximately 1.5 million lines of software code were created.

As a result, the system preceding today's **DEPATIS** was launched in early 1999 – with initially 80 "search stations" the users had to share and with a dataset of 20 million documents, of which 1.2 million with searchable full text.

One of the greatest challenges at that time was the requirement to display all documents of the **DEPATIS** archive so quickly and in such a readable form as to enable users to browse them like paper-based documents (turn the page in a second). The second great challenge was to provide a search system with sufficient performance because the demands of the DPMA's patent examiners on a search system are (still) extremely high.

As part of projects such as "Full installation" and "Full supply", this first system was continuously extended, in particular with regard to the searchable documents (e.g. start of the OCR production) and the equipment of the workplaces ("1 to 1 equipment" since 2003).

On 1 April 2001, **DEPATISnet** was launched on the Internet.

In September 2009, after a three-year project phase and a complete functional and technological "redesign", today's system was launched and, as an external client, also provided to the patent information centres.

A centrepiece of **DEPATIS** is the "Permanent Data Integration" (PDI), which integrates all new documents as well as amendments to the existing documents into the **DEPATIS** archive. At present, the PDI integrates more than half a million new documents into the **DEPATIS** archive each month. Together with the continuous change requests including the search file management of the patent examiners, the change requests in the search system amount on average to approximately 200,000 each day.

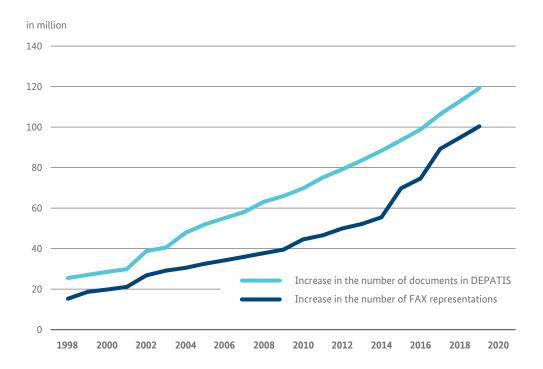
Annual Report 2019 25 YEARS OF DEPATIS 21

The **DEPATIS** archive currently comprises data about more than 120 million documents published worldwide. As the amount of data and the number of users are continuously increasing, the system must constantly be maintained to offer and optimise the short times for turning pages and doing searches as users appreciate. Since the launch of **DEPATIS**, its performance has increased significantly, so patent examiners can now flip in less than half a second between documents that combine image and text representation, with search results being highlighted in colours.

To maintain its performance permanently, the system continuously gets technological updates and thus has a modern, future-oriented technology stack.

Since its launch, the development of the system has been controlled by a change board representing the interests of all user groups. The client now provides a well-stocked and elaborate toolbox tailored to meet the varied and heterogeneous user demands. Currently, the central issues of the development are the integration of an AI-based search tool into **DEPATIS** to allow examiners to use its additional options in their usual working environment and the provision of English translations of documents in Asian languages.





TRADE MARKS





You will find our extensive statistics on trade marks in the chapter "Statistics" starting on page 98.

Annual Report 2019 TRADE MARKS 23

Development of trade mark applications

In 2019, 78,829 trade mark applications were filed, representing an increase of 4.6% over the previous year (75,362 applications). This figure includes 73,633 national applications and 5,196 requests for protection in Germany based on international registrations of marks, which were transmitted to us by the World Intellectual Property Organization (WIPO). Within five years, applications have risen by 11.5%, from 70,679 applications in 2014 to 78,829 applications in 2019, indicating a marked increase in the interest in trade mark protection in Germany.

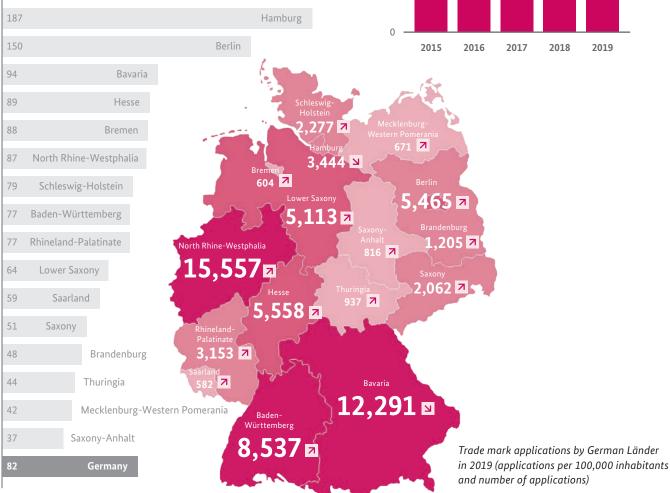
There is a parallel development at the European level. German applications filed with the European Union Intellectual Property Office (EUIPO) in Alicante rose from 21,964 in 2018 to 22,704 in 2019 (3.4%). As in the previous year, Germany is the country of origin with the most applications for European Union trade marks. As in the previous year, the USA and China rank second and third. With 2,098 applications, China is the top foreign country of origin in Germany, followed by the USA with 625 applications. Since 2016, applications from China have developed enormously. In 2016, the number of applications was 952, in 2018, it was 1,568 and in 2019, the number of applications rose by another 530. Last year alone, applications from China thus rose by 33.8% compared to the previous year.

Trade mark applications by German Länder

In absolute terms, most trade mark applications come from the two large territorial states among the German Länder, North Rhine-Westphalia (15,557) and Bavaria (12,291), but in relation to the population size the city states of Hamburg and Berlin come top with 187 and 150 applications, respectively, per 100,000 inhabitants. With 94 applications per 100,000 inhabitants, Bavaria has the highest filing activity among the territorial states, followed by Hesse (89) and North Rhine-Westphalia (87).

National trade mark applications at the German Patent and Trade Mark Office





24 TRADE MARKS Annual Report 2019

Top companies and institutions in terms of registrations

If we look at which applicants accounted for the most registrations in 2019, BMW comes first with 94 registrations, followed by Merck KGaA with 84 registrations and Haribo with 78 registrations. These figures are an indication of the special filing activity of these companies. However, it is striking that the ranking of the most active trade mark applicants changes considerably from year to year, in contrast to the patent sector. Last year, for example, Daimler was ahead of VOLKSWAGEN and Brillux AG. When new products are launched this is often accompanied by many trade mark applications. Applications for these trade marks are usually filed at an early stage, well before the first market appearance. Companies with several new product launches thus quickly reach a high number of applications and registrations. In the subsequent years, companies with different product cycles will then move up in the ranking.

Trade mark applications by leading classes

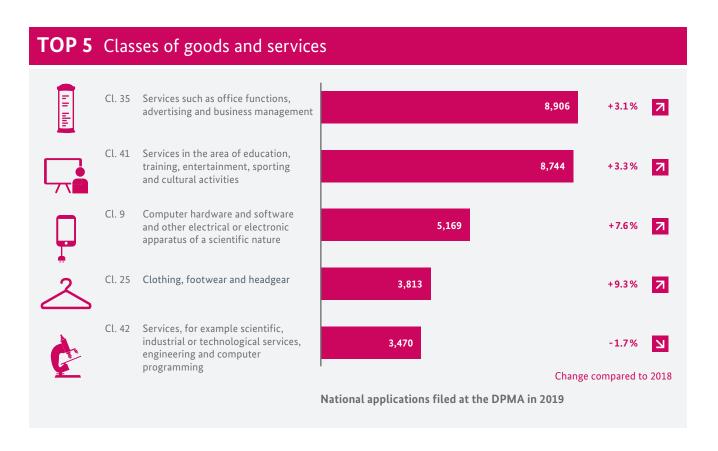
For many years, the leading class 35 (advertising; business management) has been the class most frequently designated in Germany. It was again on top in 2019, with 8,906 applications. The subsequent places have not changed either: the leading class 41 (education; sporting and cultural activities) ranks second (8,744 applications) and leading class 9 (electrical apparatus and instruments) as the top class of goods in terms of applications secures the overall third place with 5,169 applications. The smallest class is class 23 (yarns and threads) with 33 applications. At EUIPO, class 9 is the most frequent class, followed by class 35, which ranks first at our office.

Trade mark procedures

The 73,633 national applications are matched by 55,017 registrations, compared with 50,567 registrations in 2018 this is an increase of 8.8%. The refusals of trade mark applications fell from 7,081 in 2018 to 6,883 in 2019. The procedures pending at the end of the year also decreased compared to 2018, from 22,717 to 21,737 at the end of 2019.

With 42,694 applications, word marks accounted for the vast majority of the 73,633 national applications. Combined word/figurative marks followed with 28,742 applications and pure figurative marks with 2,031 applications. Applications for other types of trade marks remained in the double-digit range.

The proportion of online applications has risen once again. With 72.5% (compared to 69.7% in the previous year), the two filing routes, <code>DPMAdirektWeb</code> and <code>DPMAdirektPro</code>, are by far the most popular. Improvements of the electronic application process helped to avoid numerous formal clarifications. For example, for filing online applications using <code>DPMAdirektWeb</code> without digital signature, only such terms can be selected that have already been approved. Consequently, it is not necessary to clarify the list of goods and services so that registrations can be made more quickly.



Annual Report 2019 TRADE MARKS 25

Selected data on trade mark procedures

	2015	2016	2017	2018	2019
New applications	68,975	69,391	72,048	70,534	73,633
Registrations	46,531	52,198	50,949	50,567	55,017
Refusals	5,535	7,542	6,682	7,081	6,883

Trade mark administration

About 40 staff at the trade mark administration at the Jena location of the DPMA deal with all post-registration and secondary procedures after the definitive registration of a trade mark. These include, in particular, renewals, the recording of changes, restrictions on disposal and cancellations. Furthermore, the trade mark administration staff issue priority documents, certifications of origin or other register extracts. As a result of the Trade Mark Law Modernisation Act, which came into force on 14 January 2019, licences and declarations of willingness to license or sell/transfer can be entered into the Trade Mark Register for the first time.

At the end of 2019, the register contained 830,319 trade marks. The number of 39,834 renewals remained at the high level compared to the previous year (39,940), while the number of trade mark cancellations due to non-renewal of the trade mark fell markedly compared to the previous year, from 44,525 to 38,447 trade marks. With 66,642, the number of recorded changes concerning the proprietor, representative or the address for service is slightly above last year's figure of 66,428 changes recorded. Licences were entered in the register for 63 trade marks. In the case of 4,956 trade marks, the proprietors have made a declaration about their willingness to license the trade marks. For 2,428 trade marks, a willingness to sell/transfer was declared.

Trade mark cancellation proceedings

According to the Trade Mark Act (*Markengesetz*), anybody may request cancellation of a registered trade mark. For this purpose, a reason for cancellation must be stated in the request which is subject to a fee. Such a reason for cancellation may be non-use of a trade mark, called "revocation" in the Trade Mark Act. In 2019, 325 such requests were received. Another reason for cancellation is the existence of absolute grounds for refusal at the time of filing the application. In 2019, 214 requests were based on this reason. Absolute grounds for refusal may exist if the challenged trade mark lacked distinctiveness at the time of filing the application or if it was descriptive. Trade mark applications filed in bad faith may also be challenged for this reason by means of a cancellation request. In 2019, this reason was given for 85 cancellation requests due to absolute grounds for refusal and thus roughly 40% of all cancellation requests. A trade mark application is filed in bad faith if the trade mark proprietor filed the application with the intention to impede others in an anti-competitive manner.

Brexit

In accordance with the Withdrawal Agreement concluded between the European Union (EU) and the United Kingdom, the United Kingdom withdrew from the EU on 1 February 2020. However, European Union law continues to apply for a transitional period until 31 December 2020. As a result, the examination of all European Union trade marks will continue to include the United Kingdom. Older UK rights will continue to be taken into account and European Union trade marks will remain valid in the UK until the end of 2020. However, it is still not possible to predict what status European Union trade marks will have in the United Kingdom from 1 January 2021 onwards.

26 TRADE MARKS Annual Report 2019

IN FOCUS

Initial experience with the Trade Mark Law Modernisation Act

1. The amendments as of 14 January 2019

The Trade Mark Law Modernisation Act transposes the European Union Trade Mark Directive of 2015 into German law. It harmonises European trade mark law to an even greater extent than was previously the case. Here we present to you the most important changes and tell you about our initial experience.

Since 14 January 2019, new types of trade marks are possible, for example, multimedia marks. The certification mark is a newly introduced trade mark category. New grounds for refusal create a Europe-wide uniform basis for examining whether a trade mark can be protected.

Multimedia marks became possible because all the member states of the European Union now keep electronic trade mark registers and make them searchable online. Previously, a requirement was that trade marks had to be capable of being represented graphically. This is no longer required. Today, it is not necessary to print trade marks on paper, but they can also be reproduced via sound and video files.

The **certification mark** confers trade mark protection on test and quality labels, which previously had enjoyed protection as trade marks only to a limited extent. Various supreme court decisions had shown that the use of quality labels does not constitute use within the meaning of trade mark law. This meant that while it was possible to register quality labels for certification services, their use on the product being certified was not protected by trade mark law.

In Europe, different practices existed with regard to taking into account protected geographical indications, protected designations of origin, traditional terms for wine, traditional specialities guaranteed and registered plant variety denominations. Now these are uniformly defined as grounds for refusal and included in the list of grounds for refusal in section 8 (2) of the Trade Mark Act.

In addition to these substantive changes, a number of amended procedural rules have also been applicable since 14 January 2019. In collision proceedings, the second period of use previously applicable in Germany was abolished. Previously, it had to be substantiated that the opposing mark had been used within a period of five years preceding the decision; the second period of use was therefore also referred to as

the moving period of use. In future, there will only be one five-year period for which use of the opposing mark has to be proved, namely five years before the filing date or priority date of the challenged trade mark. Furthermore, an opposition can now be based on different rights. Previously, several oppositions had to be filed in such a case.

2. Initial experience

Initially, the new types of trade marks have been sought after only hesitantly. In 2019, the overall number of such applications is in the mid-double-digit range. Sound marks (German: Klangmarke) were the marks most frequently applied for. This term includes the former sound marks (German: Hörmarke) and - that is new - the application for noises. For example, this could be the slamming of a car door or the reproduction of a heartbeat. Multimedia marks are trade marks consisting of a video sequence with a sound track. So far, three applications for multimedia marks have been filed with the DPMA, one of which has already been registered. The criteria for assessing protectability of the mark are the same as for all other trade marks. However, the brevity or length of a trade mark plays a special role. For word marks, too, it has been acknowledged that long text-like trade mark applications may not be understood as trade marks. The same applies to longer sound or video sequences.

A convergence project involving the offices of the EU member states and the European Intellectual Property Office (EUIPO) focuses on developing uniform standards for assessing the protectability of new types of trade marks.

Even though the certification mark is a new trade mark category and there are still some uncertainties regarding the application requirements, 60 certification marks were already applied for in 2019 and as many as three were registered. The first registered certification mark is the "Grüner Knopf" (green button – see figure).

It stands for compliance with certain social and ecological requirements regarding the production of clothing. In contrast to the origin function of a regular trade mark, the certification mark focuses on the guarantee function. In our opinion, this means that it must be clear from the representation of the trade mark that an examination of certain characteristics has

Annual Report 2019 TRADE MARKS 27



First registered certification mark "Grüner Knopf"

taken place and that compliance with certain standards is guaranteed. With regard to certification marks the principle of neutrality is also important. The proprietor of a certification mark may not be the manufacturer of the goods or provider of the services certified. Thus, for example, quality seals which supermarket chains claim for themselves cannot be protected as certification marks. Details of what is certified and how violations are dealt with are laid down in the regulations governing use, published in the trade mark register.

The examination of the new grounds for refusal has so far required the greatest effort. As a rule, these grounds for refusal can be relevant for all trade mark applications relating to food and beverages. These amount to around 7,000 applications per year. Due to the large number of protected geographical indications, protected designations of origin, traditional terms for wine, traditional specialities guaranteed and registered plant variety denominations, the examiners need a special degree of detective intuition in order to identify existing grounds for refusal. A simple Internet search is usually not helpful, because the trade mark applied for often contains only parts of or allusions to the protected indications. Therefore, the examiners have received training on how to search the European databases containing the protected indications. They can also consult a specialist in this field to whom all cases must first be submitted.

However, the procedural changes did not pose major difficulties. In this respect, the work was already done in the run-up period, as all processes and document templates had to be adapted to the electronic case file.

3. Second step of the trade mark law reform in May 2020

On 1 May 2020, two new official cancellation proceedings were introduced: In future, it will be possible to file an application for the **cancellation of a trade mark due to non-use** (referred to as "revocation") as well as an application for a **declaration of invalidity and cancellation due to the existence of earlier**

rights with the DPMA. The DPMA will then also decide on these applications. As in the past, an application for invalidity due to the existence of grounds for refusal when filing the trade mark application can also be filed with us.

It is true that, previously, it was possible to file a request for cancellation due to revocation with the DPMA. We then forwarded it to the trade mark proprietor, who had the opportunity to object to the cancellation. Only if he had not objected to the cancellation, the trade mark was actually cancelled by us; if he did object, the person filing the request had to file an action for cancellation before the ordinary courts. However, the DPMA did not examine the content of a request for revocation. However, the expertise required for such an examination is available at the office since issues concerning the use of a mark, which maintains rights, have become relevant in numerous opposition proceedings.

Since 1 May, we have also examined the applications as to substance. This means that the person filing the application basically has the choice of whether to go to court or initiate cancellation proceedings before the office. However, both alternatives are mutually exclusive; procedural rules ensure that the other route is blocked once an alternative has been chosen. The new legal situation thus offers a choice and strategic potential. The proceedings before the office can be initiated not only by a lawyer but also by a patent attorney and are considerably more cost-effective. However, in proceedings before the office, the costs are usually borne by the parties themselves, whereas in court proceedings the losing party is ordered to pay the costs. Before the ordinary courts, representation by a lawyer is always required.

Also since 1 May 2020, it has been possible to file an application for invalidity based on the existence of earlier rights. Previously, only opposition proceedings before the office were available, in which opposition against the registration of a trade mark had to be filed within three months of the publication of its registration. The application for a declaration of invalidity, on the other hand, can still be filed after that date; only if the person filing the application has acquiesced in the use of the later sign for five years, an application for a declaration of invalidity is no longer possible. Furthermore, more earlier rights can be asserted in invalidity proceedings than in opposition proceedings, for example rights to a name or the right of personal portrayal.

All applications for cancellation – as before the requests for invalidity due to the existence of grounds for refusal – are decided by a trade mark division composed of three lawyers.

28 TRADE MARKS Annual Report 2019

BRIEFLY EXPLAINED

Compulsory use and grace period for non-use

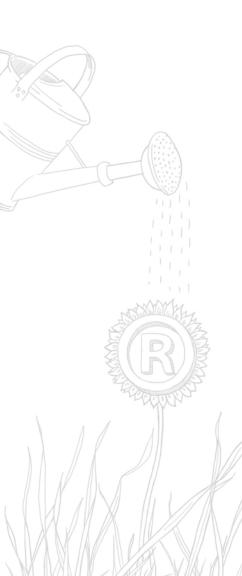
Trade marks confer numerous rights to their proprietors, in particular the exclusive right to use the protected sign. Trade mark proprietors can defend themselves against all encroachments, from quite random analogies to plain plagiarisms. The legal system does not only confer trade mark proprietors this exclusive right of use (as a result of the registration of the trade mark), it also ensures that it can be enforced (e.g. by injunctions). This is quite a privilege, as the trade mark proprietor is granted a monopoly everyone else has to accept.

However, this excellent position of the trade mark proprietor is based not only on the fee paid by them, which covers only the costs for processing the application. It is actually based on the aim of the trade mark protection granted by the state to encourage business activities. A trade mark can secure commitment and investments; trade mark protection promotes these activities, which subsequently benefit society as a whole.

However, this concept is successful only if the trade mark is actually used. To prevent the mere enforcement of the rights pertaining to a trade mark, there are compulsory use provisions. Upon registration of a trade mark, its proprietor is required to use it. If the trade mark is not used, the proprietor can no longer assert rights resulting from the trade mark and the trade mark can be cancelled. Trade mark law refers to this a "defence of non-use of the trade mark" or as a "cancellation due to revocation".

One detail, however, is important: It often takes some time for trade mark proprietors to start their activities. Trade mark protection often marks the beginning of economic considerations in order to prevent other people/entities from having the selected name protected. Therefore, European trade mark law grants applicants a period of five years to start using their trade mark. In the first five years after the expiry of the period for filing an opposition against a newly registered trade mark, it is not possible to challenge it by raising the defence of non-use or filing an application for cancellation.

The European provisions regarding compulsory use and the grace period for non-use are considered well-balanced: They consider the interests both of the trade mark proprietors and of the public. In non-European countries, the compulsory use provisions are still tighter: As a rule, trade marks in the US can be registered only if they are already being used. A renewal of trade marks after their term of protection has expired – a mere formality for us – is possible in the United States only if the relevant trade marks are already being used. Unused parts, i.e. certain goods and services, are cancelled.



Annual Report 2019 TRADE MARKS 29

125 YEARS AGO

Launch of the trade mark register: Major Munich breweries involved right from the start

For 125 years, trade mark protection has existed in a form similar to that of today: Under the then Trade Mark Act (*Warenbezeichnungsgesetz*) of 12 May 1894, the Imperial Patent Office (*Reichspatentamt*) was designated as the central agency for the registration of trade marks and the trade mark register (formerly called "*Warenzeichenrolle*" in German) was established, which still exists today. The Munich breweries, some of the oldest companies in Germany anyway, have taken part in it from the very beginning.

At that time, the register numbers were assigned in the order of receipt of applications. The 510th application of 1 October 1894 was the word mark "Brauerei zum Spaten", which was registered on 23 November 1894 and accordingly was assigned the register number 510. However, for the brewery this is part of its more recent history. It was founded as early as 1397.

The brewery *Löwenbräu* München is much younger. In 1746, it appeared for the first time in the list of beer brews of Munich. However, the trade mark *Löwenbräu* is one of Germany's oldest trade marks. It was registered on 1 December 1894 under the register number 773.

Hofbräuhaus München, founded in 1589, is considerably older, and the corresponding trade mark "HB" was registered under number 935 on 7 December 1894.

All these trade marks can be found in the trade mark register, which has been kept as an electronic register since the Trade Mark Act entered into force on 1 January 1995. Soon after the conversion of the register, we made the first online search options available. Today, all IP rights examined by us can be easily and comprehensively searched via our DPMAregister service ().











Trade mark DE 935

Indications of geographical origin

Agricultural products and foodstuffs are often named after their geographical origin. Famous examples are specialities like "Nürnberger Bratwürste" (sausages), "Parma ham" or "Roquefort cheese".

These names can be protected at the European level as indications of geographical origin. The legal basis is Regulation (EU) No. 1151/2012, provided that the quality or reputation of a product are essentially or exclusively attributable to its geographical origin. For each product there is a product specification with a detailed description of the product. Only products that comply with these requirements may be marketed under the name.

Applicants can apply for PDO (protected designation of origin) status or PGI (protected geographical indication) status. The requirements for PDO status are higher than for a protected geographical indication (PGI). For PDO, all stages of production must take place in the region of origin. For PGI, it is sufficient if one of the stages (production, processing or preparation) takes place in the region concerned.

Two-stage examination procedure

Registration is subject to a favourable assessment of the application by both the competent national authority and the European Commission. In Germany, the competent national authority is the German Patent and Trade Mark Office (DPMA). The application will be published under both the national and the European assessment procedures. This gives other persons the opportunity to notify their opposition if their legitimate interests are affected - in particular other producers of the relevant product.

New eAmbrosia database

The eAmbrosia database replaces the previous specialist databases DOOR, e-Bacchus and e-Spirit. This means that all protected indications of geographical origin (for foodstuffs, wine and alcoholic beverages) are now combined in a single database, available (**_**).

Applications and decisions in 2019

In 2019, the DPMA received four new applications and two applications for the amendment of the specification.

After positive conclusion of the examination, the DPMA forwarded the application for registration of "Peitzer Karpfen" (fish) as PGI as well as three applications for amendment of the specifications of the PGIs "Aischgründer Karpfen" (fish), "Thüringer Leberwurst" (sausage), "Münchener Bier" (beer) to the European Commission.

The Federal Patent Court again issued a decision in the case concerning the PGI "Schwarzwälder Schinken" (Black Forest ham) (30 W (pat) 33/09). The question at issue was whether the slicing and packaging of the ham must also take place in the geographical area, which is only possible in the case of a productspecific reasoning. In the opinion of the Federal Patent Court this was not the case. An appeal on a point of law



Trade mark DE 302018013603 from 2018. collective mark





was lodged with the Bundesgerichtshof (Federal Court of Justice) against the rejection decision.

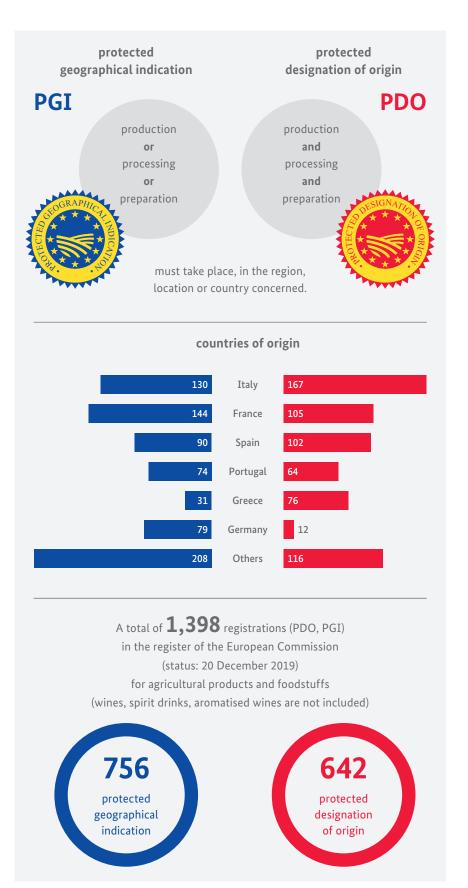
Don Quixote, Rocinante and **Queso Manchego**

The extensive protection of geographical indications - which even includes evocations - was again the subject of several judgments of the Court of Justice of the European Union (CJEU) in 2019.

In the "Queso Manchego" case (C-614/17), the CJEU assumed a rather extensive level of protection. "Queso Manchego" is a protected designation of origin (PDO) for cheese from the Spanish region of La Mancha. The defendant uses labels depicting images reminiscent of Don Quixote de la Mancha and typical landscapes (windmills, sheep) on its cheese packaging. The name of the cheeses ("Rocinante") is also inspired by the famous novel "Don Quixote" by Miguel de Cervantes, set in the region of La Mancha. The Spanish plaintiff considers this to be an unlawful evocation of the PDO "Queso manchego".

According to the CJEU, a PDO may also be evoked through the use of figurative signs. The decisive criterion is whether the element concerned is capable of triggering directly in the mind of the consumer (that means the European consumer including the consumers of the Member State) the image of the product which bears this designation. A mere association is not sufficient. It is now up to the Spanish Supreme Court to assess this.

However, the CIEU ruled in the "Aceto Balsamico di Modena" case that the protection of this name "Aceto Balsamico di Modena" (PGI) does not extend to the use of the individual non-geographical terms of that name ("aceto" and "balsamico") (C-432/18, cf. Annual Report 2018). The Italian consortium of producers wanted to prohibit a German vinegar producer from using the words "Balsamico" and "Deutscher Balsamico". The CJEU held that this was not possible because "aceto" and "balsamico" were generic or common terms for which there were no alternatives in Italian.



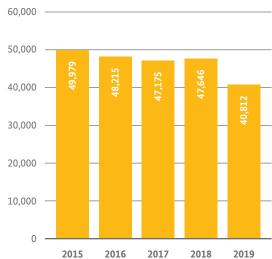


Development of design applications

A slight decline in the number of design applications can again be observed for the year 2019. 42,603 designs in 5,951 single and multiple applications were filed with the DPMA. This means that the number of designs applied for at our office and the number of applications fell by 3.3% and by 4.7%, respectively, compared to the previous year. In 2019, we conclusively dealt with requests for the registration in the register for a total of 44,551 designs. Our Jena sub-office entered 40,812 of these designs in the Design Register; this corresponds to 91.6% (2018: 89.5%). Our applicants again frequently made use of the option of combining up to 100 designs in a multiple application: In 2019, 60.6% of the applicants used this option. About eleven designs on average were filed per multiple application. The applicants may file a request not to publish the images of a registered design (deferment of publication of the representation). This way they can save money on fees because this results in a reduction of the filing fee. However, in that case, design protection ends after 30 months from the filing or priority date if it is not extended by payment of the extension fee. The proportion of designs applied for for which deferment of publication of the representation was requested increased slightly to 28.1% (2018: 24.6%).

At the end of 2019, 303,069 designs were registered at our office.

Registered designs at the German Patent and Trade Mark Office



Annual Report 2019 DESIGNS 33

Origin of the registered designs

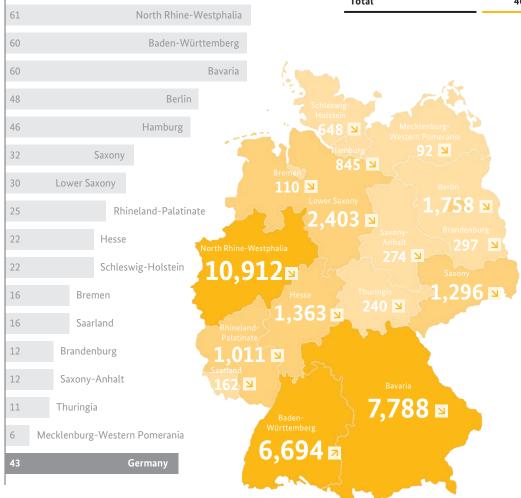
Last year, a large proportion of the registered designs, namely 87.9%, originated from Germany; at the same time the proportion of registered designs from abroad declined (-5.1% compared to the previous year). 4,089 registered designs came from other European countries (2018: 4,403), 830 from non-European countries (2018: 780). The clear majority of registered designs from abroad originated from Italy.

Registered designs by German Länder

For twelve years now, North Rhine-Westphalia has been at the top of the list of the German *Länder*. In 2019, 30.4% of the 35,893 domestic registered designs were filed by individuals or companies based in that *Land* (10,912 registered designs). Bavaria with 7,788 registered designs (21.7%) and Baden-Württemberg with 6,694 registered designs (18.6%) once again follow on the second and third places, respectively.

Registerd designs in 2019 by countries of origin

	Registered designs	Percentage	
Germany	35,893	87.9	
Italy	2,244	5.5	
Switzerland	766	1.9	
Austria	310	0.8	
Japan	285	0.7	
USA	285	0.7	
Poland	245	0.6	
Belgium	189	0.5	
Czech Republic	151	0.4	
China	108	0.3	
Others	336	0.8	
Total	40,812	100	



Registered designs per 100,000 inhabitants and registered designs by German Länder (residence or principal place of business of the owner) in 2019

34 DESIGNS Annual Report 2019

Post-registration procedures

A registered design may enjoy protection for a maximum period of 25 years from the filing date. Changes of the register entry may be effected by various procedures during that period:

» Renewal or cancellation

A term of protection is five years. Renewal fees must be paid at the end of each term to renew protection. If protection is not renewed, we will cancel the registered design in the register.

» Extension

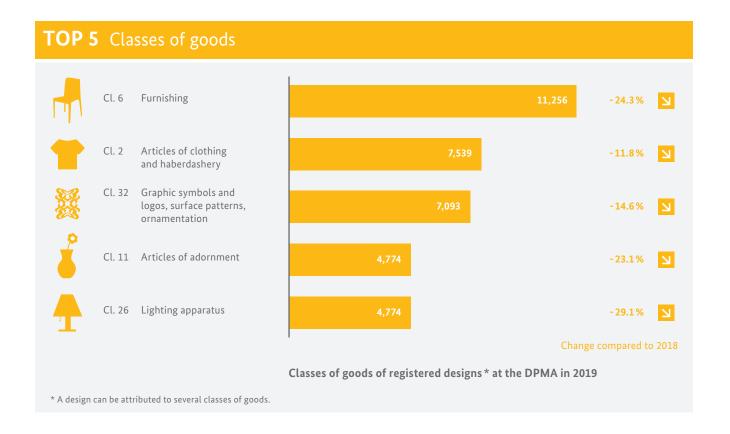
If a design was initially registered only for a 30-month period of protection from the filing or priority date due to deferment of publication of the representation, the owner of the registered design may pay a fee to extend the period of protection to the first five years after the filing date.

» Recording of changes

We will record a change for an IP right in the register, for example, if it is transferred from the owner to another person or if there is a change of representative.

Design invalidity proceedings

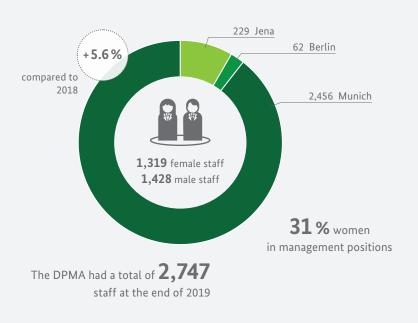
In 2019, 29 applications for determination or declaration of invalidity were filed (2018: 31). The grounds for invalidity specifically indicated in an application for determination or declaration of invalidity filed by a third party, for example, may be that the appearance of the product does not constitute a design or the lack of novelty or individual character. The application will be served on the owner of the challenged design after the receipt of the application fee and the examination of further admissibility requirements. If the application is not contested by the owner within one month, the invalidity shall be determined or declared by decision of the Design Division without further substantive examination and the design in question will be cancelled in the Design Register after the decision has become final. However, if the application is contested in due time, a formal examination will be conducted of the grounds of invalidity (the appearance of the product does not constitute a design, lack of novelty or individual character; exclusion from design protection; earlier conflicting rights). Subsequently, the Design Division will take a decision in proceedings that - also with regard to the costs to be borne - are essentially based on the Code of Civil Procedure (Zivilprozessordnung). In 2019, a total of 48 design invalidity proceedings were concluded.



Annual Report 2019 AT A GLANCE 35

At a glance

Number of staff and recruiting



140
Patent examiners

Trainees

89
Other areas

Incentive bonuses for **721** very committed and high-performing staff members

Balancing work and private life

As a public sector employer, the German Patent and Trade Mark Office (DPMA) offers its staff an adequate framework for the individual phases of life: In addition to a flexible time schedule, part-time and teleworking schemes bring the necessary flexibility in when and where work is carried out in order for our staff to achieve a good work-life balance. In 2019, the work agreement on teleworking was developed further. It now provides that our staff and executives can work from home up to 80% or 50% of their working time, respectively. Until the end of 2020, there will be a total of 1,200 teleworking positions.

There are other successful, well-established achievements we appreciate very much: A non-profit provider has been running a crèche for 36 children at the DPMA since 2007. In addition, we have adequately furnished office rooms, so our staff are able to temporarily bring their children to work if there is an

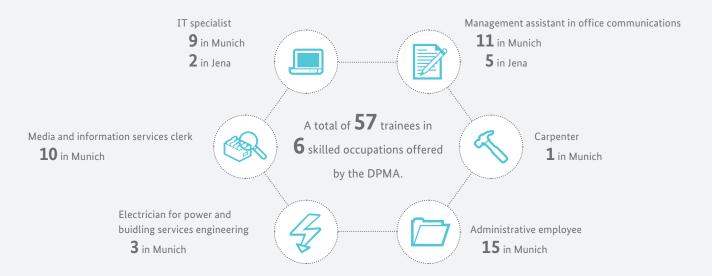
urgent need due to the breakdown of childcare arrangements. Already now, we also set the course for the future: We will have a second office building in the future, with space to house another crèche and a parent-child room.

Furthermore, our staff can consult, free of charge, awo life-balance GmbH, which advises on and procures care for children and elderly or disabled relatives.

In the current gender equality plan, we set ourselves the target to extend the work-life balance measures in place so far. We aim to be awarded the "workandfamily" (berufundfamilie) audit certificate by the Hertie Foundation in order to improve our family-conscious personnel policy and optimise the personnel recruitment process.

36 AT A GLANCE Annual Report 2019

Vocational training



Further training



Career at the DPMA (in German)

5 training days on average were used by staff for personal further training.



525 in-house training courses, language courses and lectures were held for our staff in 2019.

Health promotion and occupational safety

In 2019, the workplace health management of the German Patent and Trade Mark Office (DPMA) focused on the theme "Healthy Work Environment". The campaign involved carrying out a mental and physical risk assessment.

In May, all staff were invited to participate in an online survey on mental stress in the workplace. The aim of this survey was to get basic data for analysing how the working conditions can be improved. The rate of participation was 65%.

The evaluation of the responses gave us a good insight into the existing resources and the stresses and strains experienced by our staff. It also serves as a basis for the subsequent workshops concerning remedial measures, in which all staff are involved in analysing the workplaces and the work environment in detail in order to take targeted measures for improved and healthier working at the DPMA. To carry out the workshops, implement the measures and evaluate their effectiveness will last into 2020.

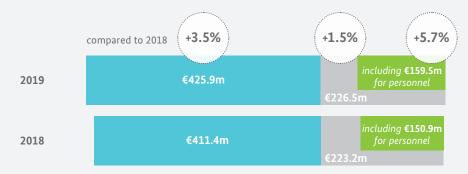
Also, there were targeted efforts to identify and assess physical dangers in some organisational units. The occupational health and safety experts advised the respective executives on identifying dangers and helped them derive measures from their findings, bringing about improvements in the working conditions in some areas: for example, improved lighting conditions in the workplace thanks to additional LED standard lamps and an improved room climate thanks to an examination and, where necessary, reorganisation of single or double occupancy of office space in individual divisions.

In 2020, the workplace health management will continue working on comprehensive improvements to the working conditions of the DPMA's staff.

Annual Report 2019 AT A GLANCE 37

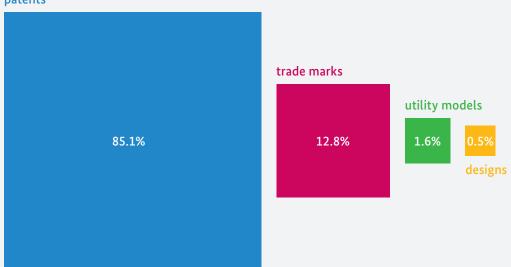
Finances

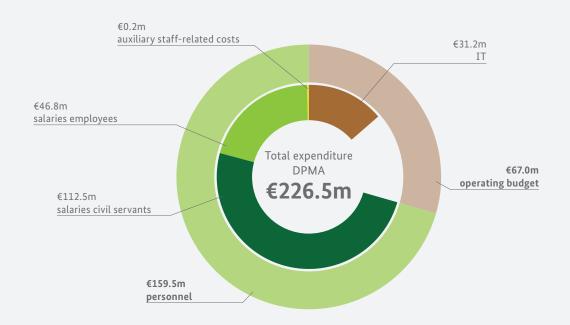
Income and expenditure



Breakdown of income by types of IP

patents





38 INTERVIEWS Annual Report 2019

INTERVIEWS

DPMA President Cornelia Rudloff-Schäffer about the battle for the brightest minds in the labour market, the advantages of digital business processes – and about IP rights during the coronavirus crisis

"We are offering our staff the greatest possible flexibility"

Ms Rudloff-Schäffer, the coronavirus pandemic in spring 2020 almost paralysed public life and the economy at times. What impact does this have on industrial property protection?

The consequences of the pandemic are not yet fully foreseeable. According to the German government's spring forecast, we must expect a massive economic slump this year. This will also have consequences for industrial property protection. The financial crisis has shown from 2008 onwards that a significant drop in the number of applications for patents, utility models, trade marks and designs may occur in economically difficult times. This is particularly true for trade marks, because they often depend directly on the economic success of a company or business. During a phase of recession, for example, markedly fewer new companies are founded. But one thing is clear to me: We can only recover quickly from the crisis with creativity and inventiveness. That is why I am now placing my hopes particularly on our many highly innovative customers.

Recently, large employers have had rather different problems: The unemployment rate in Germany is still low, and more and more baby boomers are retiring. Are you worried that the DPMA, as the central service provider for industry, will run out of highly qualified experts?

It is clear that we are competing for new personnel with the large technology companies. Like Bosch, BMW and Google, for example, we are again and again looking for highly qualified engineers, scientists and lawyers. In the battle for the brightest and best, we must make an effort to compete. So far, we have been very successful. Last year alone, 140 new colleagues joined us in the patent examination area. This is by no means a matter of course in a region like Munich, where international tech groups are located in our immediate vicinity and where there is almost full employment.



What makes the DPMA attractive as an employer?

On the one hand, this is our special task: The protection of technical innovations, of brands and designs is a very central and responsible service in our globally oriented, competitive economy. Technology trends that will shape the market in the future reach us years earlier and are of course also shaped by our work to some extent. This is a very attractive environment for many engineers, scientists and other specialists. And we make every effort to offer our staff secure jobs and very good working conditions.

To reconcile work and private life is particularly important to many people today. What does the DPMA offer?

We offer our staff the greatest possible flexibility. Our working schemes are designed to best suit the needs of our staff. To this end, we use part-time work, teleworking and shared management tasks. We offer childcare facilities in our in-house crèche and also fitness courses. Family friendliness is now part of our corporate DNA. We also try to respond as well as possible to other private circumstances. Let us not forget our attractive and central locations in Munich, Berlin and Jena. We believe that a very important factor in recruiting personnel is that the place of work is easily accessible and has good transport links.

Annual Report 2019 INTERVIEWS 39

Teleworking is also an important issue in this context. What is your experience at the DPMA?

The coronavirus crisis demonstrates that there is much more at stake here than the work-life balance of staff. The expansion of home office arrangements also has a strategic dimension for the employer: Flexibility of work options makes public agencies and companies more resilient to crises. Our experience is very positive. The staff working at home are very productive. Even before the crisis, we had well over 1,000 staff working regularly from home. By the end of 2020, we want to achieve our target of 1,200 teleworking posts. Needless to say, we greatly benefit from our digital workflows.

How digital is the DPMA now?

For years, our IP procedures for patents, utility models and trade marks have been fully digital – from filing the application to processing of digital case files to dispatching decisions and office actions. Everyone involved in these business processes can access the necessary documents electronically at any time. We also want to achieve this objective in the design area in the coming year. In early 2020, we launched the project to introduce the electronic administrative file; in 2023, those areas not directly involved in IP procedures are also expected to use digital files. We are constantly seeking to improve IT services for our users: electronic interfaces, information services, access to databases. In our New Search project, which aims at supporting our examiners in electronic searches, we use applications based on what is known as artificial intelligence.

Family friendliness, flexibility – are these advantages still appreciated by women above all?

We have noticed that more and more men also welcome such conditions. But indeed, we are obviously a very attractive





employer for women in particular. Last year, a study conducted by BRIGITTE magazine ranked us among the top 120 employers for women in Germany. Our flexibility was rated particularly highly. I think that this is also increasingly reflected in our personnel structure: Almost one third of our executives are female. We have a female president and a female vice-president, and two out of four directorates general are headed by women. In total, almost as many women as men work at the DPMA. It is true that the percentage of women in one or the other patent division is still not very high. But this is going to change, too.

How does the DPMA raise its profile as an employer?

We have found that many new staff members come to us as a result of personal recommendation by friends and acquaintances. This is a sign of high job satisfaction among our colleagues. But of course we do not rely on this alone. Last year, we had a very successful campaign to recruit examiners, which was developed and designed at our office. Since May 2019, we have also been active in the social media: on the XING career portal and on the kununu portal for employers, where we are happy about every new follower. A profile on LinkedIn is planned for 2020. Our ratings as an employer on kununu are extremely positive. We are working to live up to this image.

Ms Rudloff-Schäffer, thank you very much for this interview.

International cooperation

Global network

In times of a global network of economic systems, cooperation between the German Patent and Trade Mark Office (DPMA) and the leading national IP offices is an important strategic goal. As the fifth largest national patent office in the world, we provide new impetus to promote efficient structures and new processes that lead to improved protection of innovation worldwide.

Through cooperation with multinational organisations such as the World Intellectual Property Organization (WIPO), the European Patent Office (EPO) and the European Union Intellectual Property Office (EUIPO), we continued to play an active role in shaping the international intellectual property system last year.

Cooperation with the World Intellectual Property Organization (WIPO)

In close cooperation with WIPO, a specialised agency of the United Nations based in Geneva, the DPMA has organised annual seminars in Germany since 2013. On 27 November 2019, more than 100 experts met at the DPMA forum for the seminar "WIPO Services and Initiatives". Participants obtained information from WIPO experts on the specific features and developments relating to the Patent Cooperation Treaty (PCT), the Hague Agreement on Industrial Designs and the Madrid system. WIPO also presented its global intellectual property databases and other tools for the networked knowledge society. An overview of the work of WIPO's arbitration and mediation centres rounded off the seminar.

In another seminar on 28 November 2019, WIPO experts informed DPMA staff about specific aspects of the PCT procedure and about the information offered by the extensive WIPO databases.

Cooperation with the European Patent Office (EPO)

Germany is represented in the Administrative Council of the European Patent Organisation (EPOrg) by the DPMA. Our experts regularly attend meetings of the Administrative Council and also participate in numerous work groups and committees to contribute to shaping the European patent system: In meetings at working level on special subjects, such as the CPC classification or information technology of the two offices, we intensified cooperation through personal contacts also in 2019.

At the meeting of the Technical and Operational Support Committee (TOSC) in November 2019, DPMA experts gathered information on future cooperation in IT projects. In 2020, the DPMA will be represented by numerous experts in special multinational IT project work groups and work groups on the convergence of the examination practice in the Member States.



WIPO seminar "WIPO Services and Initiatives" at the DPMAforum on 27 and 28 November 2019



DPMA Vice-President Ulrich Deffaa welcomes attendees to the 2019 WIPO seminar.



Cooperation with the European Union Intellectual Property Office (EUIPO)

In individual projects, EUIPO and the national trade mark offices of the European Union and user associations are working to harmonise the differences in the trade mark and design examination practices. The DPMA participates in meetings of the Management Board of EUIPO and in the regular liaison meetings and is also involved in various European convergence programmes.

Vice-President Deffaa represented the DPMA at the multinational IP Executive Week 2019 in Alicante, hosted by EUIPO in cooperation with the EPO. Together with other high-ranking representatives of the national offices, Mr Deffaa discussed the ongoing digitisation and the future role of artificial intelligence in science and other economic sectors.

The importance of the topic of artificial intelligence at an international level was also demonstrated at the Intellectual Property Horizon 5.0 Conference, organised by the EUIPO in Alicante in September 2019. At this event, DPMA Vice-President Christine Moosbauer gained information on the latest developments and initiatives regarding artificial intelligence in the field of intellectual property. Ms Moosbauer intensively exchanged views with representatives of the world's leading IP offices, international companies and IP practitioners on the opportunities of global e-commerce and the future of industrial property protection.



DPMA Vice-President Christine Moosbauer and EUIPO Executive Director Christian Archambeau at the Intellectual Property Horizon 5.0 Conference in Alicante

International patent law harmonisation (Group B+)

The discussions on international substantive patent law harmonisation having been held since 2014 within the framework of what is known as Group B+ (EU member states and EPOrg member states, the EU Commission, the EPO, Australia, Japan, Canada, New Zealand, the Republic of Korea and the US) were continued with the involvement of DPMA representatives as well as representatives of the Federal Ministry of Justice and Consumer Protection at a meeting in Geneva in October 2019 among others.

The members of the Group B+ discussed in particular topics such as prior art, grace period/non-prejudicial disclosures, conflicting applications and prior user rights. This year, Mr Peter Strömbäck, Director General of the Swedish Intellectual Property Office, was elected chairman by the Group B+.



Cooperation with other national offices



United Kingdom

In May 2019, three patent examiners of the DPMA visited the United Kingdom Intellectual Property Office (UK IPO) as part of the annual patent examiner exchange and discussed specific aspects of the patent examination procedure. In addition, the discussions focused on the experience gained with the UK IPO quality management system and, in particular, the quality assessment criteria for patent examination procedures.

Peru

On 30 September 2019, Vice-President Deffaa met Mr Ivo Gagliuffi, the Head of the National Institute for the Defense of Free Competition and Intellectual Property Protection (INDECOPI), in Geneva. Vice-President Deffaa exchanged views with the Peruvian delegation on issues including the utility model procedure and utility model cancellation proceedings at the DPMA.



France

On 27 March 2019, a meeting was held at the DPMA with representatives of the National Industrial Property Institute of France (INPI) on the implementation of the EU trade mark directive. The experts discussed the tasks and special features of the implementation of the directive in Germany.

Belarus

On 29 October 2019, Mr Uladzimir Rabavolau, Director General of the National Center of Intellectual Property of the Republic of Belarus (NCIP), visited the DPMA within the scope of a study tour organised by the IRZ Foundation (Deutsche Stiftung für internationale rechtliche Zusammenarbeit). Vice-President Ulrich Deffaa welcomed the delegation. Introductory lectures provided our guests with information on the tasks of the DPMA, the patent examination procedure and trade mark law. A lively discussion followed the presentation of the effects of the implementation of the EU trade mark directive on trade mark law in Germany.



Republic of Korea

On 7 August 2019, a representative of the Korean Intellectual Property Office (KIPO) visited the DPMA. Mr Ortlieb, Head of the Jena Sub-Office, explained to the KIPO expert the effects of German reunification on the intellectual property system in Germany.

Under the exchange scheme, four KIPO patent examiners visited the DPMA from 18 to 22 November 2019. At bilateral meetings at the DPMA, the discussions between the experts of the two offices covered, among other things, the patent examination procedure in the fields of medical technology, machine elements, and engines and machines.



Annual Report 2019 INTERNATIONAL COOPERATION 43

Russian Federation

On 7 October 2019, Director General Grigoriy Ivliev of the Federal Service for Intellectual Property (Rospatent) and his delegation visited the DPMA. Vice-President Moosbauer outlined the latest filing trends and developments in the strategic process of the DPMA. Director General Ivliev explained current projects of Rospatent.







Singapore

During the Assemblies of the Member States of WIPO (WIPO Assemblies), Vice-President Deffaa also met with Daren Tang, the Chief Executive of the Intellectual Property Office of Singapore (IPOS), to exchange views on current developments at the two offices and discuss projects for further cooperation, such as a workshop for patent examiners.



Japan

On 17 June 2019, Vice-President Moosbauer welcomed a delegation from the Japan Patent Office (JPO) to the DPMA, headed by Director General Tomoki Sawai. The talks focused on the latest developments at both offices. A special focus was on the DPMA's recruitment campaign in the fields of electrical engineering, physics, mechanical engineering and mechanical technology.

In November, two patent examiners from Japan continued the patent examiners exchange with the JPO, which has now been in place for 19 years.

Bilateral case analyses and discussions between the patent examiners of the two offices enhance understanding of the examination procedures and results at the respective other office.

Vice-President Deffaa met with the JPO Deputy Commissioner Kunihiko Shimano at the WIPO Assemblies in Geneva on 1 October 2019. Topics were the further exchange of key figures of the GPPH system and the use of artificial intelligence in conducting searches in the patent examination procedure.

China

A highlight of the year 2019 was the symposium "40 years of German-Chinese cooperation in the field of intellectual property", jointly organised with the China National Intellectual Property Administration (CNIPA), held at the DPMA in Munich on 26 March 2019. After the welcoming address by President Cornelia Rudloff-Schäffer and CNIPA Deputy Commissioner Mr He Hua the two offices presented the current situation of utility models from their own point of view and that of the users. In the afternoon, the participants in workshops discussed the issues "Perspectives for the future" and "Utility model cancellation proceedings".

In a Heads Meeting on 27 March 2019, Deputy Commissioner He Hua provided information on the progress made in restructuring the CNIPA, which is now also responsible for trade mark protection. Further topics were the current developments and the business figures of the offices. The heads of office again emphasised the great importance of bilateral cooperation between the DPMA and the CNIPA for both countries.

On 6 September 2019, President Rudloff-Schäffer welcomed the vice-chairman of the Legislative Affairs Commission of the People's Republic of China, Mr Liu Junchen and his delegation consisting of members of the National People's Congress (NPC) Standing Committee of the People's Republic of China to the DPMA. Mr Liu Junchen was particularly interested in patent and utility model procedures and German design law.

On 17 September 2019, another high-ranking CNIPA delegation, headed by Deputy Commissioner Gan Shaoning, visited the DPMA. A central concern of the delegation was the extension of the newly to be concluded agreement on cooperation. From 2021, the existing patent examiner exchange programme will be supplemented by a trade mark examiner exchange programme. Another purpose of the meeting was to organise a planned trip to Beijing of a DPMA delegation headed by Vice-President Deffaa.

Vice-President Deffaa and Deputy Commissioner He Hua also discussed this visit in the margins of the WIPO Assemblies in Geneva on 30 September 2019 and talked about the criteria and contents of the planned exchange of trade mark examiners. Deputy Commissioner He Hua invited Vice-President Deffaa to a symposium to celebrate World IP Day 2020. However, due to the coronavirus pandemic, this visit did not take place.

At the end of November 2019, three DPMA patent examiners participated in the exchange of patent examiners at the CNIPA, hosted by the two offices on a rotating basis, as part of the long-standing cooperation with the CNIPA.

In addition, numerous groups of IP specialists from different provinces of the People's Republic of China visited us to gain information on the work of the DPMA.



VIP4SME project

is ending after 48 months

As a new framework programme for research and innovation, the programme called "Horizon 2020" has united all funding programmes of the European Commission pertaining to research and innovation since 1 January 2014. It succeeds the 7th Framework Programme for Research and Technological Development (FP). As a funding programme, it aims to promote a knowledge- and innovation-based society and a competitive European economy as well as to contribute to a sustainable development.

Against this background, the General Directorate for Research and Innovation published a call for proposals on its website on 11 December 2013 for the project with the title: "IPorta 2 – H2020-INNOSUP-2014-2015". This was done in order to promote the sustainability of the then ongoing IPorta project and, at the same time, to focus on the strategic elements that have proved particularly successful. In line with the calls for proposals, other institutions apart from the national patent and trade mark offices, such as the Chambers of Commerce and Industry and research and development institutes, were also eligible.

The Commission's aim was to support a minimum of 3,500 small and medium-sized enterprises (SMEs) around Europe with the identification, management and enforcement of intellectual property rights and to inform them on European IP rights in particular.

Since 1 April 2014, a total of 19 partners have participated in the project titled VIP4SME (Value Intellectual Property for SME) as co-beneficiaries. Among them were the patent and trade mark offices of Austria, Denmark, France, Greece, Croatia, Hungary, Poland, Portugal, Serbia, Turkey, the UK as well as the following facilities and institutions: CRP Henri Tudor (LU), CATT Innovation Management GmbH (AT), Fraunhofer-Gesellschaft (DE), the Estonian Intellectual Property and Technology Transfer Centre (EIPTTC) (EE), the French Competitiveness Clusters Alliance Association (F2CA) (FR), the Foundation for Research and Technology Hellas/PRAXI Network (GR), the Chamber of Commerce of Venice (IT), the Slovak Centre of Scientific and Technological Information (SK) as well as another 31 "associated" partners from all over Europe, such as Austria Wirtschaftsservice mbH (AT) and the Instituto Pedro Nunez (PT).

Initially, the research institute CRP Henri Tudor, Charge de Direction du Centre de Veille Technologique, in Luxembourg had been tasked with the general coordination. In the course of the project, the coordination was passed to Fraunhofer IAO in Stuttgart.

With the signature of the grant agreement by the President of the German Patent and Trade Mark Office, Ms Cornelia Rudloff-Schäffer, the European Commission's project contract with the project consortium formally came into effect on 15 December 2015 and ended on 14 December 2019. For its participation in the project, the DPMA was allocated financial resources of a total of 199,977.36 euros from the nearly three million euro budget. The majority of the DPMA budget was used for the cost of personnel and a smaller portion for the travel expenses in connection with the project management.

The kick-off meeting, which was attended by all partners, took place in Brussels on 9 March 2016.

The project's aim was for the national offices for intellectual property (of EU members and countries participating in the Horizon 2020 programme) to develop, adjust and efficiently implement training contents, services and instruments to address the needs of SMEs with the help of an array of local partners which are in close contact with SMEs and with the support of international organisations (such as the European Patent Office, the European Union Intellectual Property Office).

The following four fields of action have been defined:

- » Field of action 1: Knowledge management/development and improvement of IP services for SMEs
- » Field of action 2: IP support measures for SMEs/ implementation of pilot actions and training courses for SMEs on a national level in all partner countries and in cooperation with chambers and research facilities
- » Field of action 3: Communication and public relations
- » Field of action 4: Project management

Within the framework of the DPMA's participation in VIP4SME and apart from an array of information events and workshops to raise awareness in the area of intellectual property, the DPMA guaranteed to plan, coordinate and implement appointments for individual consultations in Germany relating to field of action 2 together with the second German project partner, Fraunhofer IAO.

In addition, the DPMA was part of the project management board, which has had to implement financial and content-related adjustments during the 48-month period of the project's progression. This was necessary in cases when, for example, project partners withdrew during the project's duration freeing up financial resources as a consequence, which then had to be redistributed.

On 15 November 2016, the first out of four project-related VIP4SME INFODAYs took place in Berlin, which has been planned and carried out partly in collaboration with the European Patent Office.

As appointments for individual consultations with SMEs do not pertain to the statutory duty of the DPMA, the DPMA facilitated individual consultations in cooperation with the patent information centres (PIZ).

Thus, within the framework of the VIP4SME project, three campaign weeks for SMEs (II) took place in patent information centres (PIZ) in 2017, 2018 and 2019 using the IP pre-diagnosis method introduced into the VIP4SME project by the National Industrial Property Institute of France, INPI France. In a roughly two-hour orientation consultation session, experts from the patent information centres (PIZ) analysed specific IP situations of the enterprises. In this context, the focus was particularly on intellectual property protection (patents, utility models, trade marks and designs) but also on aspects of what is referred to as "soft IP", including trade secrets and copyright issues. Based on this, numerous enterprises received an initial assessment of the economic opportunities and risks pertaining to their intellectual property alongside specific recommendations for action in the form of an auditor report.

Due to the highly positive feedback from the participating SMEs (over 80% were pleased or very pleased with their consultation sessions) as well as from the participating PIZs (70% of the SMEs that had been advised have been gained as new customers), the SME campaign week has since been added to the PIZs' annual programme and now supplements the programme offered in connection with World IP Day and Startup Week, carried out in close cooperation with the DPMA.

In the course of the project, several webinars and info videos have been created. These are available on social media channels such as YouTube:

https://www.youtube.com/channel/UCi2W5die4EYdOTvpCNvVnDQ

https://www.youtube.com/watch?v=cAcgrD2PFxY&feature=youtu.be

https://www.youtube.com/watch?v=fjgFMrxKonU

https://www.youtube.com/watch?v=M-JsdRCZE0c

https://www.youtube.com/watch?v=Qc5SzY26oww

https://www.youtube.com/watch?v=CL_kG4o7lUo

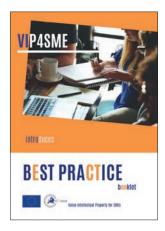
https://www.youtube.com/watch?v=Vur92cFJ_g

https://www.youtube.com/watch?v=kqIhbiHPFF4&list=PLMxW-0BnyVfkfGAC_Ov7T2zE8KB10A1SW

Within the framework of the project and in cooperation with the organisation Start-Up Your Future, workshops (**!**) to provide IP information to people with migrant and refugee backgrounds were successfully carried out in Berlin and Munich in October 2018.

Furthermore, within the framework of the project, three high-profile panel discussions with enterprises from different sectors relating to intellectual property protection took place in May 2019 under the title "Business Talk IP".

Important impetus for European cooperation in the area of intellectual property protection was provided by the project work in Germany and national initiatives and partners, such as the patent information centres (PIZ), have been promoted worldwide on the website www.innovaccess.eu (). In addition, Germany was awarded for its outstanding achievements in the project's "best practice" brochure.



Despite its delayed start due to the change of coordinators, 4,189 SMEs in all partner countries received IP advice and their awareness of IP was raised. The initial goals have thus even been surpassed.

- https://www.dpma.de/english/services/ public_relations/press_releases/ 20180830.html
- https://www.dpma.de/english/ our_office/publications/guestsatdpma/ infoday/index.html
- https://innovaccess.eu/

46 50 YEARS AGO Annual Report 2019

50 YEARS AGO

Successful landing: patents that brought man to the moon

One small step for Neil Armstrong, but one giant leap for mankind: 50 years ago, the first astronaut walked on the moon. Landing on another celestial body for the first time was an adventure that eclipsed all previous expeditions.

Half a century later, this historic moment was remembered all over the world. The US space agency NASA's first lunar landing as part of the Apollo programme was a highly complex mission that required a number of new technical developments. In 2019, in celebration of the anniversary, the German Patent and Trade Mark Office recalled on its website some patented inventions that made the lunar landing of Apollo 11 possible.

Pioneers in Massachusetts and Reinickendorf

As early as 1913, the American rocket pioneer Robert Goddard (1882-1945) applied for a patent for a "Rocket Apparatus" (US1102653A). Unappreciated and thought of as a dreamer during his lifetime, he succeeded in launching the first liquid-fuelled rocket in Massachusetts in 1926. Also at the root of the Apollo programme was the German Society for Space Travel (*Verein für Raumschifffahrt*): In 1928, rocket pioneers like Wernher von Braun and Hermann Oberth experimented with rockets using liquid-fuelled engines in Berlin-Reinickendorf. In 1929, Oberth filed one of the earliest patent applications in this connection, namely a device for driving vehicles by the thrust of escaping combustion gases (*Vorrichtung zum Antrieb von Fahrzeugen durch den Rückstoß ausströmender Verbrennungsgase*, DE570511A).

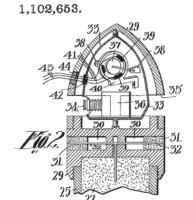
The roots of the Saturn rocket

Wernher von Braun built rockets first for the National Socialists in Germany, then for the Americans. His "Aggregat 4" was the first rocket to reach space in 1944. What became known by its propaganda name "Vergeltungswaffe (retaliation weapon) 2" (V2) claimed thousands of lives – both when it was built by forced labour and when it was used as the first ballistic ground-to-ground missile.

After the Americans had "taken over" Braun and other German rocket pioneers after the Second World War, Braun developed the first large rockets, which were also propelled by liquid fuel. Braun's rocket, US patent no. US2967393A, was the basis for the development of the mighty Saturn V rocket, which took Neil Armstrong and his colleagues to the moon.

Engines for 100-meter rockets

In order to send a manned landing vehicle to the moon, it is necessary that the rocket be very powerful. The moon rocket therefore had several propulsion stages (the 111-metre-high Saturn V rocket had three stages). Moreover, very powerful engines were developed, e.g. the engine described in US3077073A that propels rockets by burning hydrogen and oxygen.



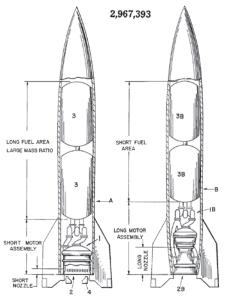
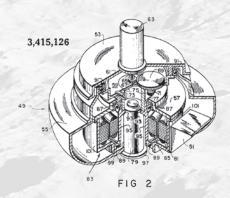
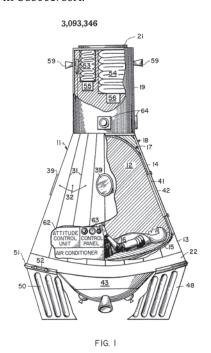


FIG.1



Annual Report 2019 50 YEARS AGO 47

In addition to the construction of a moon rocket, a capsule to transport people had to be developed. US3093346A shows a space capsule put on the top of the rocket. This space capsule had an emergency escape system that could be activated in case of failure, as described in US3001739A.



Navigation for difficult manoeuvres

A sophisticated navigation system was needed for the flight to the moon and for the (un)docking of two spaceships in the moon's orbit, a process necessary to land on the moon. In this connection, US3104545A shows a gyroscope-based guidance and navigation system ("Guidance system" by

Charles Draper), whereas US3415126A describes a guidance and navigation system designed to precisely align spacecraft ("Azimuth laying system") that was used in the Saturn rockets.

Aligning spacecraft precisely is necessary in particular for a docking manoeuvre between two spaceships, like that performed during the Apollo mission. The Apollo capsule was rotating to stabilise its flight attitude. US3752993A shows a flight attitude sensor for a rotating spacecraft that is capable of scanning the horizon.

Soft landing was decisive

For the moon landing itself, a special lunar module had to be developed, as shown for example in US219690S. This manned lunar module ("Eagle") was undocked from the space capsule ("Columbia") in the lunar orbit, and then descended to the lunar surface.

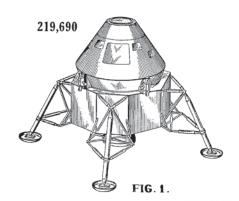
As the surface of the moon is a very hostile place for humans, special suits had to be developed in order to make a short stay on the moon possible. US3463150A describes a life support system for a moon suit.

Returning home safely

After the Apollo astronauts had left the lunar surface, they were brought back to Earth with the space capsule. That meant performing another difficult

manoeuvre: the re-entry of the space capsule into the Earth's atmosphere. Since its velocity was still high upon this re-entry, the space capsule was heated up to very high temperatures by air friction. The space capsule thus needed a heat shield (US3130940A). Finally, the Apollo space capsules splashed down in a controlled descent into the ocean. US3484826A describes a soft landing system for a space capsule.

After the sensational first moon landing and five subsequent missions that landed a total of ten (male) astronauts on the Earth's satellite, NASA's Apollo programme ended in 1972. At that time, no one would ever have expected that there would be no landings on the moon for more than half a century. In the meantime, NASA has announced that it will return to the moon in 2024 – and finally take a woman there.



Apollo's women - heroines in the background

Even today, everybody knows the name of the first man on the moon, Neil Armstrong. The second man on the moon, Edwin "Buzz" Aldrin, is well-known to date, too; even the name of the third crew member, Michael Collins, who remained in the spacecraft in the lunar orbit during the moon landing, is still known by many people. Only few people, however, knew until recently that some women had also played a decisive part in the millennium project "landing on the moon". In recent years, the names of some of these heroines have become known to a wider public. On the occasion of the anniversary last year, we introduce some of them in a small series on our website **www.dpma.de**.

https://www.dpma.de/english/our_office/publications/ingeniouswomen/apollosfrauen/index.html

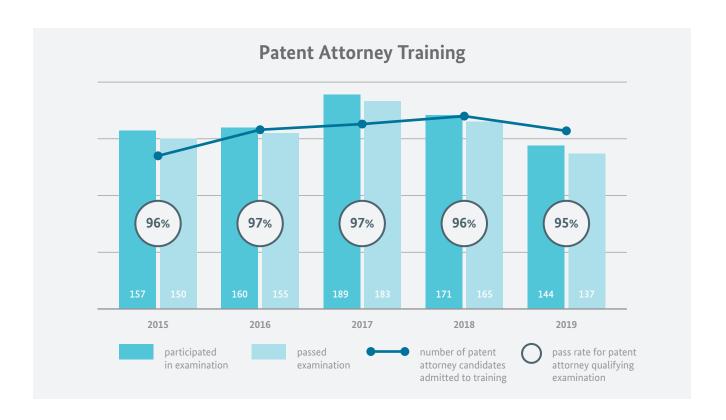
48 PATENT ATTORNEY TRAINING Annual Report 2019

Patent attorney training

Patent attorneys assist inventors as well as enterprises in protecting their newest developments and in enforcing protection. At the intersection of natural science, technology and law, they make a crucial contribution to the success of a patent, trade mark or design by sharing their expert knowledge. For that reason, demands placed on our future patent attorneys will continue to be high. The DPMA is responsible for all matters associated with the training and qualifying examination of future patent attorneys.

Admission to patent attorney training

Those who wish to be admitted as candidates to the patent attorney training have to prove their technical qualification first. To that end, the applicants must have completed their studies in the field of natural science or engineering and worked at a practical technical job for one year. However, which university degree is to be considered scientific or technical? Answering this question has become increasingly difficult due to the changes in the academic landscape in the past years and decades. The Bologna Process and the accompanying conversion of many degree programmes to Bachelor and Master with different orientations have resulted in an enormous increase in the variety of fields of study. There has been a decrease in Diplom programmes due to the reform, though some universities have once again started and are currently offering degree programmes awarding a Diplom. Thus, there are still going to be engineers with a Diplom degree in the future. However, not only the variety of fields of study have increased. Often, students can also strongly influence the main focus of their studies through their subject selection. Whether a course of study is to be considered scientific or technical can therefore no longer be derived solely from the name of the course of study. The decisive factor for the admission is rather that the technical qualification can be proven through the specific structure of the course of study.



Annual Report 2019 PATENT ATTORNEY TRAINING 49

The course of the training

With the admission as a patent attorney candidate, the first and longest training element, lasting for a minimum of 26 months, begins in a patent law firm or in the patent department of a company. For this period, the Chamber of Patent Attorneys organises local working groups, in which participation is obligatory. The general law studies at the *FernUniversität* (distant learning university) in Hagen, which the candidates go through, also takes place during that period. The following second and third training elements pertain to the training at the patent authorities. The candidates spend two months at the DPMA and the subsequent six months at the Federal Patent Court (*Bundespatentgericht*). Both the DPMA and the Federal Patent Court closely coordinate the training and its contents.

The new examination board for the term of office from 2019 to 2021

At the end of their training, the candidates take their qualifying examination. The examination board is formed at the DPMA and the section responsible for the patent attorney training acts as its administrative office. As of January 2019, the Federal Office of Justice as the responsible body appointed a new examination board for the three-year term of office until the end of 2021. Due to the reformed Patent Attorney Training and Examination Ordinance (Patentanwaltsausbildungs- und Prüfungsverordnung), which came into effect in October 2017, the workload of the board members has significantly increased as the number of exams has doubled from two to four. Each exam is marked by two members of the examination board. According to the new legal situation, both reviewers have to exchange views and reconsider their evaluation should the respective evaluations deviate by more than two points. As a means to relieve the workload of the examiners, the number of deputy chairpersons has been increased from three to a minimum of four and the number of examiners from among the patent attorneys and patent assessors has been increased from 40 to a minimum of 60. Further, the entire compensation system for the voluntary activities of the members of the examination board has been fundamentally reworked. As the compensation, last adjusted at the turn of the year 1989/1990, was considered too low, it was also reformed to be determined on the basis of the time involved in completing the tasks. This way, for instance, the creation of an exam question is now being compensated for, which was not the case according to the previous regulation.

The year 2019 in numbers

In 2019, we were able to admit 157 candidates to the patent attorney training. Interest in the multifaceted profession of the patent attorney is thus consistent with the high level of the past years. Out of 144 examinees, 137 successfully passed the German qualifying examination in 2019. The pass rate was at 95.1 %. By this, the patent attorney candidates have again achieved very good results.

Further information

On the following website, we offer detailed information on the patent attorney training and qualifying examination (**_**).

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For detailed statistical data on patent attorneys and representatives, please see the "Statistics" chapter on page 108.

https://www.dpma.de/english/our_office/about_us/further_duties/patent_attorney_training/

https://www.patentanwalt.de/en/

University degree

in science or engineering

+ one year of
(work) experience
in a field
of technology

almost three years of training

at a patent attorney's office, at the DPMA and the Federal Patent Court

patent attorney qualifying examination

written component (four exams) oral component

after passing the qualifying examination

you may call yourself "Patentassessor" or "Patentassessor" (patent agent)

Supervision under the CMO Act

Authors have a right to receive appropriate remuneration for each use of their own work. For example, a composer is entitled to require that an orchestra obtain a licence to perform his or her piece of music and pay remuneration for it. The uses under consideration are very diverse and take place on such a massive scale that it would be an extremely arduous task or an almost impossible one for an individual to find out about every use in order to make a claim for remuneration This is why collective management organisations perform this task collectively and in a fiduciary capacity for all creative people interested in this service. They monitor the use of their respective repertoires, grant licences and collect the royalties due to the rightholders.

In this respect, the collective management organisations are mostly specialised in one sector, so that, in addition to their fiduciary functions, they usually have a de facto monopoly. Due to this monopoly and fiduciary position they are subject to the supervision by the German Patent and Trade Mark Office (DPMA). We act in the public interest and ensure that collective management organisations comply with their obligations under the Act on Collective Management Organisations (Verwertungsgesellschaftengesetz - CMO Act). To fulfil this task, we have, among other things, a comprehensive right to obtain information and can participate in the meetings of the various bodies of the collective management organisations. In 2019, we attended 90 meetings in total. As a rule, we intervene ex officio but comments and suggestions from users and rightholders also prompt us to carry out our supervisory investigation.

One of the obligations of a collective management organisation under the CMO Act is to obtain an authorisation before starting to conduct business. In agreement with the Federal Cartel Office (Bundeskartellamt), we grant this authorisation if a collective management organisation meets all statutory requirements. At present, 13 collective management organisations in Germany are authorised to conduct business. In 2018, they generated total revenues of about 1.74 billion euros (the 2019



figures were not yet available at the copy deadline). The income of each individual collective management organisation is listed in the table on page 51.

In view of technological progress and increasing digitisation, the way in which copyrighted works are being used and exploited is subject to constant change. Consequently, law is also constantly evolving. On 6 June 2019, a new copyright directive came into force (Directive 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the digital single market and amending Directives 96/9/EC and 2001/29/EC). The member states must transpose the provisions of the directive into national law by 7 June 2021; this also affects the collective management organisations and thus our supervision.

Cross-border use and licensing of copyrighted works is increasing in step with the digital options available. In 2019, several collective management organisations based within the European Union notified us of their collective management activities in Germany. Among other things, they grant cross-territorial – usually pan-European – licences to online service providers such as YouTube or Spotify.

Register of Anonymous and Pseudonymous Works

Our division in charge of supervision under the CMO Act also keeps the Register of Anonymous and Pseudonymous Works. In this register, authors may have their real name registered for works which they have created or published anonymously or under a pseudonym in order to benefit from a longer period of copyright protection. Normally, copyright in their works expires 70 years after creation or publication of the work. However, upon entry in our register, the standard period of protection under the Copyright Act begins to run so that copyright does not expire until 70 years after the death of the true author. Statistical data are provided in the table on page 108.

Register of Out-of-Commerce Works

Furthermore, we also keep the Register of Out-of-Commerce Works. It provides information about the intention of a collective management organisation to license rights to a certain out-of-commerce work, i.e. a work that is no longer available, so that non-profit organisations, for example libraries or archives, can digitise them and make them available to the public. The register does not document all works that are out of commerce in Germany. It is freely accessible via our website. By the end of 2019, 27,500 works were registered.

Revenues of collective management organisations in 2018

	Collective management organisations	Total budget¹ 2018
GEMA	Gesellschaft für musikalische Aufführungs- und mechanische Vervielfältigungsrechte, rechtsfähiger Verein kraft Verleihung	€1,019.173m
GVL	Gesellschaft zur Verwertung von Leistungsschutzrechten mbH	€229.796m
VG WORT	Verwertungsgesellschaft WORT, rechtsfähiger Verein kraft Verleihung	€265.796m
VG Musikedition	Verwertungsgesellschaft Musikedition, rechtsfähiger Verein kraft Verleihung	€7.276m
VG Bild-Kunst	Verwertungsgesellschaft Bild-Kunst, rechtsfähiger Verein kraft Verleihung	€57.555m
GÜFA	Gesellschaft zur Übernahme und Wahrnehmung von Filmaufführungsrechten mbH	€7.444m
VFF	Verwertungsgesellschaft der Film- und Fernsehproduzenten mbH	€28.083m
VGF	Verwertungsgesellschaft für Nutzungsrechte an Filmwerken mbH	€11.231m
GWFF	Gesellschaft zur Wahrnehmung von Film- und Fernsehrechten mbH	€32.058m
AGICOA GmbH	AGICOA Urheberrechtsschutz-Gesellschaft mbH	€22.926m
VG Media	Gesellschaft zur Verwertung der Urheber- und Leistungsschutzrechte von Sendeunternehmen und Presseverlegern mbH	€54.583m
TWF	Treuhandgesellschaft Werbefilm mbH	€6.048m
GWVR	Gesellschaft zur Wahrnehmung von Veranstalterrechten mbH	€10,966
Total		€1,741.984m

¹ The total budget includes income from licenses, claims to remuneration, income from interest and securities as well as other operating income.

52 140 YEARS AGO Annual Report 2019

140 YEARS AGO

Patent examiner and icon of science: on occasion of Albert Einstein's birthday

A genius of the century, an icon of natural sciences, "person of the century": There are no more superlatives to describe Albert Einstein, who was born in Ulm 141 years ago, on 14 March 1879. In his young years, however, Einstein did not only enjoy success: He dropped out of secondary school in Munich and did not pass the entrance examinations for the Federal Polytechnic School in Zurich (now: the Federal Institute of Technology Zurich).

After passing the Swiss "Matura" in Aarau, Switzerland (contrary to legend, with quite good grades!) and completing his studies as a mathematics and physics teacher in Zurich, Einstein repeatedly applied for academic assistant positions without success. He was forced to make a living as a supply teacher and tutor, living on the breadline. With the help of a friend, he ultimately secured a probationary employment at the Federal Office for Intellectual Property in Bern.

"Level III expert"

From 23 June 1902 onwards, Albert Einstein worked as a "technical expert – level III", examining patent applications in the field of mechanics. He regarded his work as a patent examiner as a "bread-and-butter job" that did not fully satisfy him; in his spare time, he devoted himself to theoretical physics and worked on his doctoral thesis. Later, he wrote that "the peace of that worldly cloister and the material reassurance for hard times" were very helpful for him. While working at his standing desk in room 86 at the corner of Speichergasse and Genfergasse, the young patent examiner sometimes played the violin, which allegedly helped him think.

When his probationary period ended in 1904, Einstein was employed on a permanent basis. At first, a promotion was postponed because the director of the patent office thought that Einstein would have to become better acquainted with mechanical engineering. Occasionally, Einstein's thoughts might indeed have been elsewhere, as he published some of his most important works alongside his work as a patent examiner. In 1905, Einstein published, among other works, the paper on the photoelectric effect (which later earned him the Nobel Prize) and his Special Theory of Relativity (including the famous equation $E = mc^2$).

"Honorable federal ink pisser"

At the time, Einstein described his work as an examiner in a letter: "I am doing well; I am an honourable federal ink pisser with a regular salary. Besides, I ride my old mathematico-physical hobbyhorse and saw on my violin." In April 1906, he was promoted to "class II expert" after all.

Einstein had successfully submitted his doctoral thesis in 1905, whereas his habilitation was first rejected by the University of Bern in 1907. Only one year later did Einstein obtain habilitation, allowing him to work also as a *Privatdozent* at the University of Bern. He gave his lectures before or after his working hours at the patent office: from 7:00 to 8:00 or from 18:00 to 19:00.

Annual Report 2019 140 YEARS AGO 53

$E=mc^2$

Einstein's most productive years

In 1907, in the peace and tranquillity of his office, he had a flash of inspiration which he later called "the happiest thought of my life": "I was sitting in my armchair in the patent office in Bern when, all of a sudden, this thought occurred to me: 'If a person is in free fall, he does not feel his own weight.' I was astounded. This simple thought left a deep impression on me. It took me towards a theory of gravity" – and thus on the path to the general theory of relativity.

Einstein worked at the Swiss patent office for seven years. In 1909, he finally became an extraordinary professor for theoretical physics at the University of Zurich, allowing him to devote himself solely to science. His possibly most important works, however, were produced during his time as a patent examiner.



Albert Einstein (1879-1955) in Laeken, Belgium



Arbitration boards at the German Patent and **Trade Mark Office**

Two very important Arbitration Boards are based at the German Patent and Trade Mark Office (DPMA). They submit settlement proposals to the parties, which can be accepted as binding by them. However, the parties can also object to the proposals or reach their own agreements outside the office. The special feature: Both Arbitration Boards are autonomous panels.

The Arbitration Board under the Act on Collective Management **Organisations**

Its responsibilities under the Act on Collective Management Organisations (CMO Act) are varied:

The Arbitration Board

- » mediates in disputes between users and collective management organisations,
- » proposes contracts between cable network operators and broadcasting organisations as well as between partners to inclusive contracts and
- » develops proposals for regulating the statutory remuneration claims for storage media or reproduction devices and, in this context, also for provisionally securing the remuneration claims of the Zentralstelle für Überspielungsrechte (ZPÜ) (the German central organisation for private copying rights).

Last year, the Arbitration Board was again able to successfully reduce its pending proceedings. 143 requests received were matched by 202 completed proceedings; this means that the number of proceedings was reduced by 59 compared to 2018.

Cable retransmission at IPTV

In several cases, the Arbitration Board had to deal with cable retransmission in the retransmission format "Internet Protocol Television" (IPTV). In contrast to pure "Over the Top Content Services" (OTT), IPTV involves the delivery of broadcasting signals via proprietary or at least controlled networks of the cable company to the end user. It has not yet been conclusively clarified whether IPTV constitutes a cable retransmission analogous to conventional cable television (in which case the right of retransmission would be affected) or a linear on-demand service (in which case the right of public access would be affected). This distinction is important because it is only in the case of retransmission that broadcasters have an obligation to contract. The Arbitration Board decided that IPTV is a specific technical form of signal processing within the cable retransmission type of use.

Copyright levy on devices

In 2019, the Arbitration Board continued to develop its settlement practice regarding levies on devices. After the Munich Higher Regional Court (Oberlandesgericht München), in its ruling of 14 March 2019, had for the first time determined the levy for PCs placed on the market between 2008 and 2010 also in single-user proceedings, the Arbitration Board also applied the levy rates awarded to the subsequent years 2011 to 2013. The background to this settlement proposal is that due to the self-referential approach to giving reasons in the judgment of the Higher Regional Court, the consequence of any other levy rate for PCs of 2011 and the following years - in contrast to the rates set by the Higher Regional Court - would have been that the levy for PCs placed on the market between 2008 and 2010 would have had to be reduced. However, even after this decision, it remains open whether these levy rates must now also be assessed as appropriate remuneration for all devices placed on the market in the subsequent years and whether the Arbitration Board will propose different levy rates when applying its remuneration model.

The Arbitration Board did not continue its settlement practice with regard to the levy of what are known as business devices, because the Higher Regional Court considers the question of whether or not remuneration is payable for products supplied to commercial end users to have been decided by the highest court, and it is not to be expected that there will be any change in case law.

Neighbouring rights of event organisers

Furthermore, the Arbitration Board had the opportunity to comment on the tariffs "reproduction of audio and video carriers" and thus for the first time on a tariff of the still rather young collective management organisation Gesellschaft für die Wahrnehmung von Veranstalterrechten (GWVR). In general, the tariffs were confirmed, but at a significantly lower rate of remuneration and also with a calculation basis narrower than that for the tariff.

It is remarkable that the Arbitration Board rejected the retroactive applicability of the tariff to the unauthorised recordings of events and reproductions prior to the publication of the tariff. This means that rights assigned to the organisation for collective management cannot be collectively managed for the period preceding the publication of the tariff.



The above-mentioned decisions are available (in German) on the DPMA website.



Arbitration Board under the Employee **Inventions Act**

Did you know that more than 90% of the patent and utility model applications at the DPMA are based on inventions made by employees and that the right to the patent does not initially belong to the company but to the individual who made the invention?

For although work results always belong to the employer under labour law, the inventor principle applies at first. This means that pursuant to section 6 of the Patent Act (Patentgesetz), the inventor has the right to the patent regardless of whether or not the invention was created as part of an employment relationship.

This conflict is resolved by the Employee Inventions Act (Gesetz über Arbeitnehmererfindungen). Employees have the obligation to report an invention made during the employment relationship to the employer. In return, the employers, on the one hand, have the obligation to apply for an IP right for a reported invention and, on the other hand, are entitled to transfer the right to the patent to themselves.

If a company makes use of this option, the employee receives a claim to remuneration vis-à-vis the employer as a compensation for the loss of the right to the patent. This remuneration claim does not constitute a salary but is a claim of its own kind.

Pursuant to section 9 of the Employee Inventions Act, the commercial applicability of the invention, the duties and position of the employee in the enterprise, and the enterprise's contribution to the invention" are relevant for the amount of the remuneration claim. In other words, the employee is meant to participate appropriately in the economic benefits (proportional factor) which accrue to the employer from the right to the patent (value of the invention).

However, as the extent of the remuneration claim is only determined by vague legal terms, this can easily lead to different assessments and consequently sometimes even to disputes between the parties involved, which should not put a strain on the employment relationship.

That is why the legislature has set up the Arbitration Board under the Employee Inventions Act at the DPMA. Its standard composition consists of a chairperson qualified to hold judicial office and two patent examiners. While the chairperson holds the position on a permanent basis, the patent examiners are specifically appointed for the respective arbitration proceedings according to their particular technical expertise. This ensures that the Arbitration Board is always equipped with the best possible legal and technical expertise.

Both the employee and the employer can initiate arbitration proceedings. It is not necessary to be represented by a lawyer.

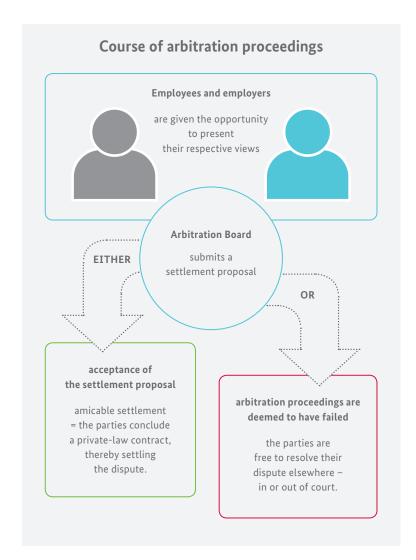
First, the Arbitration Board gives the employees and employers involved the opportunity to present their respective views and then submits a settlement proposal to them. If the parties involved accept the settlement proposal, they conclude a private-law contract, thereby settling the dispute. Otherwise, arbitration proceedings are deemed to have failed and the parties are free to resolve their dispute elsewhere – in or out of court.

In 2019, the Arbitration board concluded 58 of such proceedings, with the parties accepting 77% of the settlement proposals made by the Arbitration Board.

The Arbitration Board dealt with the following questions, among others:

- » Deriving the value of an invention used in a plant from a consulting, know-how and license agreement concluded for a similar plant – Arb. Erf. 63/16
- » Maximum licence rate for a medicinal product not protected by patents on active substances upon entry into the market – Arb.Erf. 16/17
- » From the idea to the invention: Who is to be considered the inventor? Proportional factor for a head of a sales group – Arb.Erf. 39/17
- » Proportional factor for a biological-technical assistant Arb.Erf. 36/17
- » Value of an invention that is used in an internal corporate social network Arb.Erf. 38/18

For more details about these and other published settlement proposals of the Arbitration Board (in German) as well as information, leaflets and legal texts concerning employee inventions law and arbitration proceedings, please visit our website ().



Arbitration Board under the Act on Collective Management Organisations (CMO Act)

	2015	2016	2017	2018	2019
Requests					
Total requests received	118	162	164	159	143
including inclusive contracts under Sec. 92(1), no. 3 CMO Act	2	1	5	5	2
Cases concluded by					
Settlement proposals of the Arbitration Board	32	28	15	69	67
Partial settlement proposal of the Arbitration Board ¹				2	0
Order	32	62	21	107	135
Total (without partial settlement proposals)	64	90	36	176	202
Requests pending at the end of the year	383	455	583	566	507
Payment of security 2/provisional settlement					
Requests		10	16	19	25
Orders		0	3	7	5

 $^{^{\}scriptscriptstyle 1}$ Recorded for the first time in 2018

Arbitration Board under the Employee Inventions Act

	2015	2016	2017	2018	2019
Receipt of requests	60	72	54	71	61
Arbitration proceedings concluded by					
Settlement proposals and compromises	44	44	55	47	43
Proposals accepted (%)	75.0	69.8	60.0	68.0	76.7
Refusals to participate in arbitration proceedings	15	12	16	15	9
Other cases concluded, in particular, by withdrawal of request, order, provisional proposals, etc.	15	15	8	5	6
Total of cases concluded	74	71	79	67	58
Arbitration proceedings pending at the end of the year	111	112	87	91	94

² Introduced by the CMO Act; first-time filing of requests in December 2016



IN FOCUS

Supervision over authorised entities under the Copyright Act

Since 1 January 2019, the German Patent and Trade Mark Office (DPMA) has had a new task: It supervises libraries for the blind and similar institutions (referred to as authorised entities), which produce accessible texts and other contents for people with visual or reading disabilities, exchange this material with other authorised entities all over the world and make it available online.

Initial situation

Books and other printed texts and materials are indispensable for active participation in social, political and cultural life. However, access to them has so far been considerably impeded for people with visual or reading disabilities. For example, only about 5% of all published works of literature, science and art are available to people with visual or reading disabilities in a suitable accessible format (in Braille, large print or as an audio book).

Legislative development

To improve the situation of people with visual or reading disabilities in particular, the Marrakesh Treaty, an international law treaty, entered into force in 2016. On the basis of this treaty, the European Union created a uniform legal framework for all its member states in 2017: The Directive (EU) 2017/1564, referred to as "Marrakesh Directive", modifies the copyright provisions in European Union law, while Regulation (EU) 2017/1563 regulates the cross-border exchange of accessible copies between the European Union and third countries.

The Directive has been transposed into German law with effect from 1 January 2019 by the Gesetz zur Umsetzung der Marrakesch-Richtlinie über einen verbesserten Zugang zu urheberrechtlich geschützten Werken zugunsten von Menschen mit einer Seh- oder Lesebehinderung (Act Implementing the Marrakesh Directive on Improved Access to Works Protected by Copyright for the Benefit of People with Visual or Reading Disabilities).

Current legal situation

Each use of a work protected by copyright requires either a licence or legal permission. The new sections 45b to 45d, introduced into the Copyright Act by the implementation of the Marrakesh Directive, allow people with visual or reading disabilities to produce accessible copies of certain works for their own use. In addition, authorised entities are also allowed to produce accessible copies, make them available to people with visual or reading disabilities and exchange these copies with other authorised entities.

Obligations of the authorised entities and supervision by the DPMA

Authorised entities must comply with specific care and information obligations: In particular, they must ensure that the accessible copies are in fact only transmitted to people with visual or reading disabilities or to other authorised entities. They are to prevent distribution to non-authorised users. In addition, they must provide information about the works of which they possess copies, about the accessible formats of the copies and about other authorised entities they exchange accessible copies with.

The DPMA supervises compliance with these obligations. Within the DPMA, Division 4.4 (Supervision under the Collective Management Organisations Act) is in charge of this task. Duties and supervision are governed by the "Verordnung über befugte Stellen nach dem Urheberrechtsgesetz" (Ordinance on Authorised Entities under the Copyright Act).

List of authorised entities

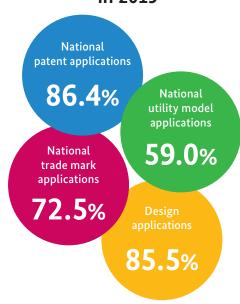
The authorised entities notify the DPMA by letter, fax or e-mail. A special e-mail address (Aufsicht.befugteStellen@dpma.de) is available for the notification. The DPMA publishes a list of authorised entities in accessible format on its website (). This list provides people with visual or reading disabilities with a central location to obtain information about where they can get works in an accessible format.

Annual Report 2019 NEWS FROM THE IT SERVICES 59

News from the IT services

Information technology is changing all the time. New technological developments offer many opportunities the German Patent and Trade Mark Office (DPMA) wants to take advantage of, too.

Online applications in 2019



Electronic record keeping

In the past years, one of the main IT projects in the DPMA has been to introduce IT systems for electronic record keeping.

As early as 2011 an electronic case file processing system was introduced with respect to patents and utility models. We have since been pushing the further development of that system; numerous functions have been added and existing functions have been improved continuously.

For example, technical changes were required by the amended Ordinance on Electronic Legal Transactions with the German Patent and Trade Mark Office (*Verordnung über den elektronischen Rechtsverkehr beim deutschen Patent- und Markenamt* (ERVDPMAV)), to which the file processing system had to be adjusted. In addition, individual software components were integrated in such a way that they can also be used for the electronic file system concerning designs.

Since 2015, an electronic case file system has been in place with respect to trade marks. Its further development requires considerable effort and resources. Particularly extensive in 2019 were the efforts we took to implement the reform of European trade mark law. In addition, the trade mark client was converted to the 64-bit technology and there were several technical upgrades at the server level.

The development of the electronic file system for designs focuses in particular on the reusability of existing software components. It is intended to introduce a fully electronic file processing system with an electronic process management and to also integrate existing horizontal services, such as the address system, the payment system and the digitisation centre, into the new system. We expect this IT system to go live in 2021.

It is intended to replace our existing personnel management system EPOS with PVS+, the new personnel management system for federal authorities in 2020. Furthermore, the preparations for the introduction of an electronic administration file began.

Electronic services for our customers

In addition to the exciting developments concerning the electronic record keeping, the services we provide to our customers were also developed further. In the spring of 2019, there were considerable extensions of the possibilities of electronic filing via <code>DPMAdirektPro</code>. Because of the possibility to submit documents or requests concerning IP rights or IP applications in the form of a subsequent submission, there are now scarcely documents concerning IP procedures that cannot be submitted electronically.



60 NEWS FROM THE IT SERVICES Annual Report 2019

DEPATISNET and **DPMAregister** now contain links that allow our customers to give feedback. The layouts of **DEPATISNET** and **DPMAregister** have been changed to mirror that of the DPMA's website. The list of results in **DEPATISNET** has so far been limited to 1,000 results. Because of the growth of the **DEPATIS** archive, however, the number of search results is higher in many cases. Therefore, the search for patents and utility models can now show up to 10,000 results. The "Download search results" function now allows the user to download the complete list of results (up to 10,000 entries) rather than, as previously, only the results indicated on a page. What is also new is that the expert search now allows the user to search for the CPC (Cooperative Patent Classification). The "CPC" field can be shown as a separate column in the list. These are only a few of the many improvements in **DEPATISNET** and **DPMAregister** that were implemented last year.

As from 2020, the new web service interface **DPMAconnectPlus** will be introduced. After a one-time connection fee of 200 euros (excluding annual charges) has been paid, this interface can be used to obtain data so far provided via three different services, namely **DPMAdatenabgabe**, **DPMAconnect** and **DEPATISconnect**. None-theless, it will remain possible to use **DPMAdatenabgabe** as before.



Information security

Information security has always been a very important issue at the DPMA. We make tremendous efforts to continuously optimise the high level of protection of our IT systems and adjust them to new threats and security issues. In 2019, too, the level of protection was increased by technical measures concerning the workstations in order to make it still harder for attackers to get malware into the DPMA. Our backup strategy is being optimised. In 2019, too, we continued to direct our staff's attention to IT security issues. We continuously improve the protection of our IT server systems and our networks by taking a number of measures in order to protect the DPMA from attacks.

Thus, the staff in the DPMA's IT units face a lot of new challenges time and again!

- https://www.dpma.de/english/services/efiling/index.html
- https://www.dpma.de/english/search/index.html



Customer care and information services

How to stay well informed

The primary goal of the customer service is to help people to help themselves.

Support such as this is an important aspect in preparing the application procedures of all types of IP rights and makes a substantial contribution to the quality of applications. Furthermore, the DPMA offers services that allow searches and monitoring of competitors. In order to assist information providers, the office's IP data can be supplied on a regular basis or direct, automatised access to the services of the office can be established (DPMAconnectPlus). The following services are at your disposal:



You can contact us in person via our Central Customer Care and Services, our search rooms and at numerous trade fairs. Our customer service can be reached by telephone at all locations under the central telephone number +49 89 2195-1000, by e-mail at info@dpma.de and by ordinary mail. Our Central Customer Care and Services will not only provide information of a general nature but will also give advice on the correct application of an IP right and answers to questions on existing applications. You can also visit our enquiry units in Munich, Jena and Berlin.

对 Our search rooms

In addition to the services of the Central Customer Care and Services. we offer detailed information and support for all types of searches that you wish to perform in relation to industrial property rights in both of our search rooms in Munich and Berlin. In these search rooms, you can of course also inspect files, should you not already use this online feature via our **DPMAregister** service.

◄ Initial consultation for inventors

In cooperation with the Chamber of Patent Attorneys, a number of institutions in various cities nationwide offer free initial consultations performed by patent attorneys. In Munich and Berlin, these consultations take place at the DPMA itself. At both of these locations, the Central Customer Care and Services is happy to set a suitable date with you.



Please note:

Due to the spread of the coronavirus (COVID-19), all enquiry units and search rooms of the DPMA are currently closed. There are no on-site consultations. The same applies to the initial consultation for inventors. This measure is essential in preventing a possible spread of the coronavirus (COVID-19) at the DPMA and reducing the risk of exposure to staff and visitors. We apologise for the inconvenience caused by this measure and will inform you as soon as the enquiry units and the search rooms open up again.

Our customer service staff can be reached by telephone and by e-mail at:

Central Customer Care and Services Phone +49 89 2195-1000 E-mail info@dpma.de

Hotline for database users

+49 89 2195-3435 Phone E-mail datenbanken@dpma.de

7 Our workshops and seminars

For the general introduction to the subject area of industrial property protection or specific searches on our databases, we offer various workshops and seminars in Munich and Berlin several times a year. For all of our workshops and seminars offered, please refer to our website at:

https://www.dpma.de/dpma/veranstaltungen/index.html (in German)

对 Our print and online publications

We have compiled everything you need to know about patents, utility models, trade marks and designs on our website. There, you also find compact leaflets with information on IP rights, searches and our electronic services as well as extensive brochures containing information on all four types of IP rights, our annual reports and the publication "Erfinderaktivitäten". Via our websites, you have free access to the most recent issue of the publication "Blatt für Patent-, Muster- und Zeichenwesen", published once a month by Carl Heymanns Verlag. This gazette covers acts, ordinances and official notifications from the overall IP area, including selected court decisions and notifications about patent agents and representatives.

In our series **DPMAinformativ**, we go deeper into specific topics, especially concerning patent information. We always keep you up to date with current news and our newsletter. The background information and milestones regarding our projects are also an exciting read.

You find all of our publications on our websites at: https://www.dpma.de/english/our_office/publications/index.html

→ Our e-services

On our two databases **DPMAregister** and **DEPATISnet**, publicly accessible on the Internet, you can carry out a variety of free searches on patents, utility models, trade marks and designs: You can use **DPMAregister** to consult the register of legal and procedural status information; **DEPATISnet** gives you an overview of the global state of the art. **DPMAkurier** is an alert service, which you can use to monitor IP rights. You will receive the results through automated e-mails.

You find extensive information on our websites at: https://www.dpma.de/english/search/index.html

DPMAconnectPlus offers you direct online access to all official register and publication data from **DPMAregister** through automated interfaces. It further offers you the opportunity to download patent and utility model documents from the **DEPATIS** document archive.

On our websites on data supply, you can find further information: https://www.dpma.de/english/search/data_supply_services/dpmaconnect/index.html

→ The network of local patent information centres

Our information and support services are supplemented by a network of 20 local patent information centres (PIZ) across Germany. The individual PIZ offer a large variety of services in the area of industrial property rights, especially for small and medium-sized enterprises, members of universities and research institutions as well as individual inventors. Please note, however, that neither the PIZ nor the DPMA is authorised to give legal advice. Legal advice is exclusively provided by patent attorneys and lawyers.

You can find out more about our cooperation with the PIZ in our chapter "National cooperation partners" on page 63. You can reach the PIZ online at www.piznet.de (in German).

→ Our activities at trade fairs

In 2019, we have once again presented ourselves as a modern service provider and a federal centre of expertise for intellectual property at various trade fairs and events. The focus of our work at trade fairs is to raise public awareness of industrial property rights and provide IP information to the public. The many questions we receive at the fair stands about the importance of intellectual property, the different IP procedures and search possibilities but also ways to combat trade mark piracy and counterfeiting have shown us that there is a strong need for information in this area.

→ Our complaints management

We accept general written complaints – not complaints in the legal sense, however – at a central unit, gather the content of the comments of potentially dissatisfied customers, analyse the requests and formulate responses in close cooperation with the field involved. Should there already be an agreed-upon response for a specific case, the processing is performed entirely by the central complaints management. The relevant DPMA divisions will receive a copy of the response for their information. If the analysis contains potential for improvement, it will be implemented. Please write to us and let us know if you have not been entirely satisfied with the services of the DPMA.



National cooperation partners

The German Patent and Trade Mark Office (DPMA) has strong partners all over Germany. Together with the DPMA they form a competent network for the protection of industrial property rights. Trade associations, chambers of industry and commerce, innovation-promoting universities and the customs authorities are active locally wherever companies – in particular small and medium-sized enterprises – and inventors have questions on the protection of their intellectual property.

The patent information centres (PIZ) also make an extremely important contribution to this network. 20 patent information centres at 21 locations throughout Germany have joined together to form the working group of German patent information centres (*Arbeitsgemeinschaft Deutscher Patent-informationszentren e.V.*). The patent information centres help to raise awareness of the importance of intellectual property among companies and research institutions. They offer comprehensive information on industrial property rights (patents, utility models, trade marks, designs), provide access to electronic databases and offer workshops tailored to the needs of specific target groups and seminars for the public. In addition, some of the patent information centres act as official receiving offices which accept IP applications on behalf of the DPMA with the purpose of securing priority.

The Information and Service Centre (IDZ) of the DPMA in Berlin is responsible for supporting the patent information centres. In 2019, the Information and Service Centre was again able to offer customised training courses to the staff of the patent information centres, for example on how to deal with Asian patent literature and on "IP strategies for innovative start-ups". In addition, the Information and Service Centre successfully planned and implemented the annual conference of patent information centres in 2019 and supported them in raising awareness of industrial property protection and intellectual property at trade fairs and events throughout Germany.

As part of a project financed by the European Commission, the patent information centres also participated in the IPA4SME support programme (**(**) for companies in 2019,

Information services offered by the patent information centres in 2019

	Number
Search support	6,171
Commissioned searches	2,400
Initial consultations for inventors at the patent information centres	2,720
Services relating to strategic IP management	1,817
Services relating to IP enforcement as well as the defence against and prevention of product piracy	1,326
Seminars	274
Publications	290
Information events	163
Participation of experts of the patent information centres as speakers at third-party events	96
Trade fair stand hosting	76
In-house training courses	59
IP data management	666
IP assessment/IP portfolio analyses	559
IP analyses/IP statistics	256

which provides non-bureaucratic funding to identify, protect and manage intellectual property.

The patent information centres continue to be our most important cooperation partners and also made a crucial contribution to increasing awareness of intellectual property among the public, the business community, research institutions and universities in 2019.

On page 64 we would like to present a more detailed introduction to one of the patent information centres: the Magdeburg patent information centre.

INTERVIEWS

Peggy Bürger, head of the patent information centre PIZ Magdeburg, on current challenges, the services offered by the PIZ and cooperation with the DPMA

"Every week we meet people with courage and drive"

Ms Bürger, on 1 November 2019, you took over as head of the PIZ in Magdeburg. What especially motivates you about this task?

It is especially motivating for me to be close to innovative ideas and to talk to inventors from all sorts of subject areas about their developments. I want to pave the way for smart minds in order for them to be able to concentrate fully on their research and development.

Every week, we meet people at the PIZ Magdeburg as well as during events who dive into new adventures with courage and a thirst for action. It is great to see that my colleagues are able to make the appropriate knowledge and information available to these people by sharing their expertise. This way, they can confidently take the next steps towards the realisation of their ideas.

What are the particular challenges you meet at the PIZ Magdeburg and the region of Saxony-Anhalt?

As the only patent information centre in Saxony-Anhalt, we have to raise our profile at universities and at other institutes of higher education in Saxony-Anhalt as well as at small and medium-sized enterprises (SMEs) and the wider public. Whenever we tell people about our various services, there are surprised faces in the audience. It is all about a process that we have to resume and keep running continuously.

As a part of the Otto von Guericke University with its technical orientation, we oversee a variety of inventions made within the university context – and we do so quite successfully. In the national comparison, the universities in Saxony-Anhalt have achieved a comparatively high number of patent applications. On the whole, however, there is still room for improvement.

From my perspective, this is not necessarily due to a lack of awareness regarding IP rights. On the one hand, only enterprises with an extensive patent portfolio or a development unit are prepared to spend money on posts for their own patent engineers. In this area, there is still a shortage in Saxony-Anhalt. On the other hand, some of the IP applications do not find their way into the statistics of the German *Land*, since



Peggy Bürger, head of the patent information centre PIZ Magdeburg

the applications are filed by the legal departments in the companies' headquarters located in other German *Länder* or even abroad.

What services do you provide to meet these challenges?

We can mainly raise our name recognition via talking to people and increasing our public visibility. I had already started working on this during my first weeks as head of the PIZ Magdeburg and had attended numerous events – industry seminars and expert talks or smaller student initiatives. In close cooperation with the Transfer and Entrepreneur Centre (Transfer- und Gründerzentrum (TUGZ)), which oversees a variety of university spin-off companies and inventions made within the university system, we are going to continue providing individual support. This support includes not only our services as a PIZ. In addition, we are a DIN Standards InfoPoint and aim to unite both topics, IP rights and the importance of the standardisation of innovations, in our seminars offered at universities, the chambers of commerce or for start-up support. Our programme further includes joint events designed along with promoters of economic development in Saxony-Anhalt. In the long term, we would like to approach enterprises from all over Saxony-Anhalt in an increased manner.

Small and medium-sized enterprises are among the key customers of the PIZs. What challenges do these enterprises have to solve and how can the PIZs support them in this undertaking?

In the past years, it has become increasingly difficult for many enterprises to hold their own in the global market. They are under pressure to cut costs and raise efficiency while dealing with ever more complex technologies, though already existing solutions to a variety of technical issues are available in national as well as international databases for IP rights and standards. Ever shorter product life cycles and the rising shortage of specialists make it increasingly difficult for enterprises to cover complex topics such as patent search. At exactly this point, we, the PIZ, can help out with a variety of services: Beginning with introductions to IP and standards searches as well as the provision of otherwise not freely available databases at an undisturbed work location such as the library, right up to comprehensive commissioned searches conducted by experienced searchers or initial consultation for inventors provided free of charge by patent attorneys.

How does the DPMA assist you with your work?

The DPMA assists us in particular with information events for members of PIZnet, by providing speakers for information events and by exchanging ideas for discussion formats with us. At the PIZ conference in Berlin in December of 2019, I was able to get a good impression of these services. The fact that the DPMA and the PIZ always attempt to act on equal footing, even when debates become heated sometimes, struck me as positive. In this partnership, we continuously work together to adopt a common approach to the promotion of IP rights.





IN FOCUS

The DPMA and the Central bureau of intellectual property rights of the customs services (ZGR) continue successful cooperation

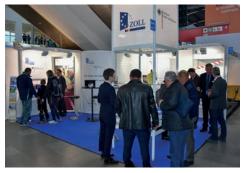
The DPMA as the national centre of expertise for intellectual property protection in Germany and the Central bureau of intellectual property rights of the customs services (ZGR) continue their proven cooperation also in 2019.

"Together for successful protection" – this has been the slogan of cooperation between the DPMA and the ZGR in the field of public relations since 2006. The focus of cooperation is on the importance of industrial property rights and the support of right holders in implementing and protecting their rights.

In 2019, the DPMA and the ZGR shared information stands on industrial property rights at three important trade fairs: at bauma in Munich – with 614,000 square metres of exhibition space, some 3,700 exhibitors from 63 countries and more than 620,000 visitors the undisputed world's leading trade fair for construction, building material and mining machinery, construction vehicles and construction equipment – at IFA in Berlin and at MEDICA in Düsseldorf. The DPMA and the ZGR intend to continue working closely together in the future and will again share a stand at the world's largest medical trade fair MEDICA in Düsseldorf in November 2020.

With the joint information initiative at trade fairs, we want to provide information on IP rights and how to enforce them in order to enable inventors and companies to take effective action against unfair competition from brand and product pirates. Thanks to our longstanding partnership with the ZGR, we always have appropriate exhibits for our joint trade fair participation to compare original products and counterfeits, suitable for each specific trade fair theme: An eyecatcher for the trade fair stand, which graphically illustrates the risks posed to consumers by cheap counterfeits.

"You have an idea – we protect it" will remain the slogan and the motivation of the ZGR and the DPMA also in the future for raising awareness of the importance of the intellectual property protection among German companies.



bauma (08-14/04/2019)



IFA (06-11/09/2019)



MEDICA (18-21/11/2019)



Annual Report 2019 70 YEARS AGO 67

70 YEARS AGO

Research and practice: Fraunhofer-Gesellschaft celebrates anniversary

It is Europe's largest organisation for applied research – and one of the most active applicants at the German Patent and Trade Mark Office (DPMA): the Fraunhofer-Gesellschaft, which celebrated its 70th anniversary in 2019. In 2018 alone, Fraunhofer applied for 434 new patents at the DPMA.

On 26 March 1949, a solemn ceremony took place in the Bavarian Ministry of Economic Affairs to found the Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V. In its first years, Fraunhofer's task was primarily of an administrative nature: to make public subsidies, funds provided by members and donations available to business-oriented research.

Positive effects of the economic miracle

The aim was to establish the newly founded Fraunhofer-Gesellschaft as the third force in the German research landscape, besides the Deutsche Forschungsgemeinschaft (DFG) and the Max Planck Society (MPG). On 1 June 1954, the first Fraunhofer Institute, the Institute for Applied Microscopy, Photography and Cinematography, was founded in Mannheim. There was a new spirit of optimism in the Federal Republic of Germany, the economic miracle unfolded, investments in research and development services increased.

The Fraunhofer-Gesellschaft also benefitted from this development. In 1955, it founded the Patent Center for German Research in Munich, which provided advice to independent inventors, supported them in exploiting their inventions and acted as an intermediary between science and industry. In 2007, the Patent Center for German Research was dissolved for tax reasons.

In 1956, the Fraunhofer-Gesellschaft was assigned another important task: defence research. For years, the Federal Ministry of Defence accounted for more than half of Fraunhofer's research budget.

The "Fraunhofer model"

In 1972, the "Fraunhofer model" was created, tying funding to performance. This model required a consistent market orientation of Fraunhofer's research and development work. From then on, the basic state funding was increased according to the success in acquiring research contracts.

30 years after its foundation, the Fraunhofer-Gesellschaft had 27 research institutes. Its 2,200 employees generated a financial volume of roughly 187 million German marks. With the annual award of the Fraunhofer Prize, the Fraunhofer-Gesellschaft has been providing researchers with an additional incentive since 1978.

Within a period of ten years from 1979, the Fraunhofer-Gesellschaft tripled its key figures: In 1989, almost 6,400 employees worked in 37 institutes and generated almost 700 million German marks per year. In 1991, many research institutions in the new *Länder* were integrated into the Fraunhofer-Gesellschaft.

Worldwide success with mp3

In 1989, the Fraunhofer Institute for Integrated Circuits IIS applied for a patent for a method of audio coding that would become Fraunhofer's probably best-known development. Almost ten years later, the mp3 format was accepted around the world as the leading standard for music transmission on the Internet (DE3912605B4).



mp3 inventors Dipl.-Ing. Bernhard Grill, Dr Karlheinz Brandenburg, Dipl.-Ing. Harald Popp of the Fraunhofer IIS (from left to right)

And now? The Fraunhofer-Gesellschaft now employs more than 26,600 people in 72 institutes and research institutions. Its annual research volume amounts to more than 2.5 billion euros. The Fraunhofer-Gesellschaft generates approximately 70% of this amount through contracts with industry partners and through publicly funded research projects.



68 EVENTS IN 2019 Annual Report 2019



Events in 2019

24 January, 28 February, 27 June and 7 November 2019 Jena Lectures

The very popular Jena lectures on industrial property and copyright have been held since 2001. They were launched by our Jena sub-office in cooperation with Professor Dr Volker Michael Jänich (Gerd Bucerius Chair of Civil Law with German and International Industrial Property Protection, Friedrich Schiller University, Jena). Since then, IP experts have presented and discussed current intellectual property issues within the scope of this lecture series several times a year.

The centre-east district group of the Association of Intellectual Property Experts (VPP) are supporting the public lecture series, for which admission is free, as coorganiser.

In 2019, four Jena lectures were offered on the following subjects:

"Practice of the Arbitration Board under the Employee Inventions Act"

Dirk-Herwig Rabe, Chairman of the Arbitration Board under the Employee Inventions Act at the German Patent and Trade Mark Office, Munich

"Patent quality - What is it and why is patent quality important?"

Professor Dr Christoph Ann, LL.M., Corporate and Intellectual Property Law, Technical University of Munich

"From Whistleblowing to Reengineering - the new Act on the Protection of Trade Secrets"

MR Jörg Rosenow, Head of Division, Federal Ministry of Justice and Consumer Protection, Berlin

"Protection of artificial intelligence and of the results generated by AI"

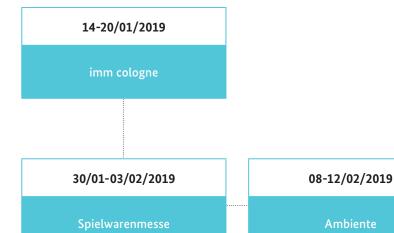
Professor Dr Lena Maute, Junior Professor for Civil Law, University of Augsburg

Our trade fair schedule

Are you interested in attending the Jena lectures? Then, please contact Carmen Lüders (telephone: +49 3641 405501, e-mail: carmen.lueders@dpma.de).

22-25/02/2019

INHORGENTA



Annual Report 2019 EVENTS IN 2019 69

A highlight of the year 2019: German-Chinese Utility Model Symposium in Munich on 26 March 2019

On 26 March 2019, we and the National Intellectual Property Administration of the People's Republic of China (CNIPA) organised a joint symposium on utility model protection to celebrate 40 years of cooperation between our offices. The CNIPA Deputy Commissioner, He Hua, responsible for international cooperation, came to Munich on this occasion as head of a high-ranking Chinese delegation. The Chinese Consul General, Zhang Yue, also did us the honour of attending the event.

After words of welcome from the DPMA President, Cornelia Rudloff-Schäffer, the Deputy Commissioner, He Hua, and the representative of the Federal Ministry of Justice and Consumer Protection, *Ministerialdirigent* Dr Johannes Christian Wichard, accounts of the current situation of utility models in China and Germany were given by the Director General for Utility Models, CNIPA, Qu Shujun, and the Head of Directorate General Patents and Utility Models of the DPMA, Bernd Maile. The German attendees learned that the number of utility model applications in China had increased enormously recently. In contrast, the German speakers – for example Dr Tobias Wuttke, lawyer in Munich – invited the Chinese guests to join them in thinking about how the attractiveness of the often underestimated IP right could be increased in Germany in view of the steady decline in the number of applications. The statement that utility models offer an attractive option for protection, especially for small and medium-sized enterprises, was a recurrent theme throughout the conference.

In an afternoon workshop moderated by Beat Weibel, Head of Siemens IP, Cui Haying, Director of the CNIPA IP Protection Department, and patent attorney Paul-Alexander Wacker presented an outlook for the utility model from a Chinese and German perspective, respectively. At the same time, patent attorney Sven-Erik Braitmayer moderated a discussion on aspects of utility model cancellation proceedings between the Director General of the CNIPA Beijing Patent Examination Cooperation Center, Guo Wen, the Deputy Director of the CNIPA Patent Examination Administration Department, Zhao Shuang, and the presiding judge at the Federal Patent Court, Hans-Christian Metternich.

We look forward to continuing the exchange with our customers on questions of utility model law also in the future and to maintaining and further intensifying the successful cooperation with our Chinese partners and friends.

Our press releases





11 April 2019: DPMAnutzerforum

13-17/03/2019

17-19/03/2019

01-05/04/2019

Internationale Handwerksmesse

ProWein

HANNOVER MESSE

70 EVENTS IN 2019 Annual Report 2019

Girls' Day 2019 on 28 March 2019

For the 14th time our office participated in the nationwide action day "Girls'Day". About 30 girls aged 13 to 14 from the 8th and 9th years of school received information on the world of work at the DPMA: The girls had a lot of fun when they gave their full attention to solving a quiz on patents and trade marks and learning in a playful manner about the patents on game consoles and VR glasses. Furthermore, the schoolgirls had the opportunity to watch "live" a patent examiner at her workplace and learn about the dual technical and non-technical apprenticeship programmes and career opportunities at the DPMA.



Logo of the nationwide Girls' Day



The exhibition presents famous Munich trade marks.

Exhibition to mark 70 years of the German Patent and Trade Mark Office in Munich

The German Patent and Trade Mark Office (DPMA) – founded as the Imperial Patent Office (*Kaiserliches Patentamt*) in Berlin on 1 July 1877 – has been based in Munich since its reopening on 1 October 1949. To mark our anniversary – 70 years of headquarters in Munich – we presented an exhibition on the office's Munich history, including a richly illustrated timeline. The information provided at the exhibition, which ran from July to December 2019, was illustrated by exhibits of prominent Munich brands from the world of fashion, media and mobility to culinary art and football, all protected by German trade marks.



DPMA Annual Report 2018: German carmakers innovative in internal combustion engines and electric drives





Historical Munich beer brands

01/07/2019

E-invoice: Further step towards
a paperless office

04-07/04/2019

08-14/04/2019

09/05/2019

FIBO

bauma

Innovationstag Mittelstand of the Federal Ministry for Economic Affairs and Energy Annual Report 2019 EVENTS IN 2019 71

29 August 2019 13th Jena Trade Mark Law Day

The German Patent and Trade Mark Office (DPMA) organised the 13th Jena Trade Mark Law Day in collaboration with Friedrich Schiller University Jena and the German Brands Association (*Markenverband e.V.*).

Professor Dr Volker Michael Jänich (Friedrich Schiller University, Jena), Dr Alexander Dröge, Head of Law and Consumer Policy (German Brands Association), and Markus Ortlieb, Head of the Jena sub-office, invited experts from industry, law firms, patent information centres and agencies to attend the event at JenTower.

Four speakers presented papers on the following topics:

"Current developments at the DPMA and news from trade mark law practice"

RD Karsten Lindner, DPMA

"European trade mark law and the decision practice of EUIPO from the perspective of the 2nd Board of Appeal"

Sven Stürmann, European Union Intellectual Property Office (EUIPO)

"The future of the European Union trade mark – problems and opportunities"

Professor Dr Ulrich Hildebrandt, SKW Schwarz Rechtsanwälte law firm

"Consumer perception of 'third-party products' in the hit lists of online search engines?"

Dr Almut Pflüger, Pflüger Rechtsforschung GmbH (legal research institute)

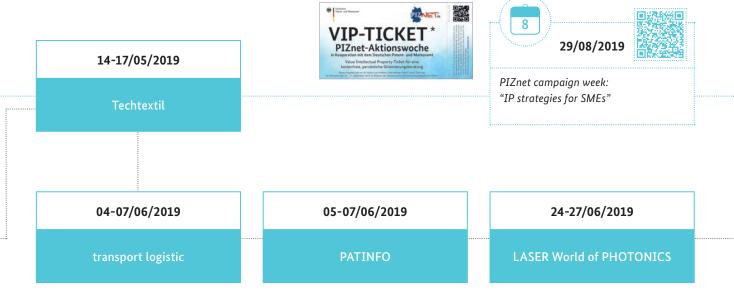
In 2020, the third Jena Design Law Day will be organised by the DPMA in cooperation with Friedrich Schiller University Jena and the German Brands Association.

Visit by State Secretary Dr Margaretha Sudhof on 6 September 2019

The State Secretary at the Federal Ministry of Justice and Consumer Protection, Dr Margaretha Sudhof, who had been appointed in July 2019, came to Munich for an inaugural visit in early September. She was accompanied by Ministerialdirektorin Eva Schmierer, Head of Directorate Z. DPMA President Cornelia Rudloff-Schäffer and DPMA Vice-President Ulrich Deffaa presented the structure, position and strategy of the office and emphasised the need for new posts in view of the high workload placed on staff in all areas. A purpose of the visit was also to exchange information on the current challenges in the four Directorates General and to meet the representatives of the staff councils, the equal opportunities officer and the representatives of disabled people for an initial exchange of views.



State Secretary at the Federal Ministry of Justice and Consumer Protection, Dr Margaretha Sudhof, and President Cornelia Rudloff-Schäffer



72 EVENTS IN 2019 Annual Report 2019

22 November 2019 "Science Night in Jena"

On 22 November 2019, the seventh Science Night took place in Jena. Over 10,000 visitors at more than 350 events were able to experience science and its results in all their diversity at 65 locations throughout the city. Interested people of all age groups were able to take a look behind the scenes at laboratories and research institutions, such as Friedrich Schiller University and Ernst Abbe University, as well as research-based Jena companies and at service providers, such as the DPMA. Exciting lectures on science and research as well as numerous activities and experiments, e.g. on the pressure load of a football, an x-ray view into a Kinder Surprise Egg and experimental surgery on a pig foot are just a few examples of the huge range of attractions on offer during the six-hour science night.

Together with the Service Centre for Research and Transfer and the Patent Information Centre of Friedrich Schiller University and the German Optical Museum (*Deutsches Optisches Museum*), which is currently being established, the DPMA hosted a joint stand, where it presented an exhibition on coffee. While drinking coffee at the food stand of a local supplier, visitors could have a look at our posters on

the most popular pick-me-up drink in Germany. Together with the German Optical Museum (https://www.deutschesoptisches-museum.de), the Service Center for Research and Transfer exhibited optical devices and instruments from Jena, for which a patent had been applied for successfully. The discovery of UV light, fluorescence in microscopy, the development and introduction of single-vision lenses and the development of anti-reflection coatings for optical surfaces clearly demonstrated that Jena has also earned its reputation as an exceptional location for optical research with a large number of practically useful inventions.

Furthermore, in cooperation with the company Rooom AG from Jena, the DPMA offered visitors the opportunity of an impressive experience of the new dimension of digital, three-dimensional vision in the form of virtual reality and augmented reality, for example by virtually walking through the rooms of the future German Optical Museum, but also through realities with dinosaurs and other virtual objects.

The eighth Science Night is planned to take place in 2021.



Annual Report 2019 EVENTS IN 2019 73



6 November 2019: Bayern Innovativ – symposium on artificial intelligence



Online since May 2019: The DPMA's presence on the XING career portal

Flexible working schemes, secure jobs, exciting assignments: The DPMA is an attractive employer. Many of our staff first heard about our office through acquaintances. However, of course, we do not only rely on personal recommendations when recruiting staff but also use various means to enhance our profile as an employer. Since last year we have also been active in the social media. In May 2019, we launched our profile on the XING career portal, where we provide information on the office and current vacancies. Furthermore, the DPMA can be rated as an employer on the kununu portal. Since then, the number of our XING followers has increased continuously – and the ratings on kununu are extremely positive. We would be glad if you would also visit the sites!



Serious case of fraud: German Patent and Trade Mark Office warns of misleading payment requests



15 November 2019: Expert discussions with judges of German trade mark courts



3 December 2019: Expert network process management in public administration

31/10-03/11/2019

18-19/10/2019

iEN.

12-15/11/2019

18-21/11/2019

productronica

MEDICA

OUR STRATEGY, OUR PROJECTS

Our fields of action

We would like to provide information to you about the further progress of our strategy process at this usual place in the annual report.

We define our strategic goals in four fields of action:

- » Products and services
- » Customers
- » Staff
- » Cooperation projects

This year we are focusing in particular on the field of action "Cooperation projects". Our overriding goal is:



We are actively involved in shaping a future-oriented intellectual property system at the European and international levels.

On the following pages Vice-President Ulrich Deffaa will talk about the particular importance of European and international cooperation projects for the DPMA.

In early 2019, we continued to implement the field of action "Customers", not only in theory but also in practice. On 28 March 2019, the User Advisory Council for patents and utility models started work. You can read our detailed report on this subject on pages 75.

On the following pages, we also have information for you on our other fields of action. We present our Digital Roadmap (page 78) and the "New Search" project (page 79).

BRIEFLY EXPLAINED

The User Advisory Council on Patents/Utility Models

"The DPMA engaging in customer dialogue"

Early in 2019, the User Advisory Council for the technical IP rights, patents and utility models, was founded at the German Patent and Trade Mark Office (DPMA). In the course of the strategic development of the DPMA, the field of action "customers" has taken on considerable significance (cf. annual report 2018, page 87). Thus, the primary objective is: "We are in dialogue with our customers and incorporate their feedback into our agenda". The establishment of user advisory councils forms part of the DPMAstrategie and is an important measure to realise this goal.

Composition and method of operating

The committee consists of 15 external members whom the DPMA President, Ms Cornelia Rudloff-Schäffer, has appointed for a two-year period. The aim is to ensure a well-balanced representation of all relevant customer groups. For that reason, the council consists not only of patent attorneys and representatives of the large-scale industry and small and medium-sized enterprises (SMEs) but also of representatives of search providers, providers of software for patent management and patent exploitation agencies as well as currently two experts in the field of IP rights, who have been appointed in a personal capacity.

The committee's work is based on rules of procedure agreed upon with the Federal Ministry of Justice and Consumer Protection. An administrative

office located in the Information and Service Centre Berlin (DPMA-IDZ) assists the work of the User Advisory Council in this regard. The User Advisory Council meets twice a year in closed session. Furthermore, there is an internal network within the DPMA consisting of contact persons from the subject areas involved.

Contents/issues

The content-related range of the User Advisory Council's work is wide and not conclusively determined. The focus is placed on patent and utility model procedures including application procedures, electronic business transactions, information of patents and utility models with regard to publication, register, databases, web services as well as customer service.

Before and during a meeting, the committee members and the subject areas of the DPMA can submit requests for particular topics. The requests are gathered in a pool of topics and are subsequently prioritised by the members. Further feedback is received via inquiries among the members on selected topics.

The proactive role of our customer representatives

The User Advisory Council acts as an external advisory committee. The regular exchange with representatives of the relevant customer groups provides important impulses for our service portfolio. The user needs and suggestions that are identified are

subsequently passed on to the subject areas, so they can take the results into account in their daily work and, if needed, set processes of change in motion. Due to the exchange at an early stage and the discussion on planned modifications, our user representatives have gained a proactive role. One of our guiding principles in the development of our services is the focus on the needs of our customers. In that sense, a well-informed and active User Advisory Council enriches the work of the DPMA.

Positive interim result

The work in the User Advisory Council promotes a mutual understanding of the interests of both sides. After the first two meetings, the members gave us unanimously positive feedback. They declared themselves satisfied with the meetings' procedure and content as well as with the committee's composition. The members embraced, and were committed to, their own active role. The active customer participation provides us with a larger basis for decision-making and increases the quality and transparency of our actions.

We want to make the most of our experience and findings gained from the establishment and activities of the User Advisory Council on Patents/Utility Models and are, for this reason, going to evaluate the committee in the year 2020. Based on this evaluation, the second User Advisory Council on Trade Marks/Designs will subsequently be established.

INSIDE

The DPMA as international cooperation partner

The DPMA is actively involved in shaping a future-oriented intellectual property system at European and international level. This is an important part of our strategy. How important is international cooperation for IP protection and how can it be successful even in times of the coronavirus pandemic? We asked Vice-President Ulrich Deffaa about these issues.

Actually, I wanted to take this opportunity to tell you about our business trip to China. In April 2020, we planned to visit our Chinese partners of the China National Intellectual Property Administration (CNIPA) in Beijing. Our delegation was to consist of the DPMA senior management and representatives of the German industry. In Beijing, we wanted to renew the recently expired German-Chinese partnership agreement. But, sadly, that did not happen. By mutual agreement, we had to indefinitely postpone the trip due to the coronavirus pandemic.

Of course, this is not the end of the partnership agreement; we can also exchange the declarations of renewal by post. However, for the time being, it is more difficult to establish personal relationships, which are built up during face-to-face meetings and also make many a technical discussion easier. This is not only true for our partners in China. We must assume that some bilateral or international meetings cannot be held in the usual form in the near future.

This poses great challenges for all involved. We have to find new ways to bridge the physical distance - for example, with improved virtual conferences. One thing should be clear in any case: International cooperation must not be allowed to suffer, even at the level of public authorities. Harmonised systems and processes are more important than ever in this area, which is essential for business and industry. Worldwide quality standards and the greatest possible legal certainty must remain central goals of the international IP system. As the largest national patent office in Europe and the fifth largest patent office in the world, we have long felt committed to contributing to shaping cooperation; this also applies under the current changed conditions.



DPMA Vice-President Ulrich Deffaa

In the patent area, we need above all predictability and legal certainty across national borders. It is true that comparable criteria formally apply as necessary prerequisites for the grant of a patent, such as novelty, inventive step and industrial application. However, how these criteria are defined and evaluated in concrete terms considerably differs between the major patent regions of Asia, Europe and the US.

Since 2014, we - and our colleagues from the Federal Ministry of Justice and Consumer Protection - have been participating in informal discussions on the international harmonisation of substantive patent law, one of the central issues dealt with by the World Intellectual Property Organization (WIPO) in Geneva, within the framework of what is known as Group B+. In addition to representatives of the EU member states and the other EPO member states, the group includes representatives of the EPO, the European Commission as well as South Korea, Japan, Australia, Canada, New Zealand and the US.

A common quality-oriented standard for the patent examination procedure is also of particular importance. Initial approaches to this topic can be found in what is known as Patent Prosecution Highway (PPH) pilot programme, which was essentially initiated by the Japan Patent Office together with the USPTO in 2006. The aim of the PPH pilot programme is to enhance efficiency of the patent examination procedure and improve international patent quality. Under certain conditions, applicants can request accelerated examination at the participating patent offices if one partner office has already found the application to be basically patentable. The offices provide each other with the respective examination results although the use of the results it is not mandatory for the receiving offices.

According to a user survey conducted in 2014, our applicants attach great importance to the PPH pilot programme. Therefore, the DPMA joined the multinational network Global Patent Prosecution Highway (GPPH) pilot programme in 2015, which comprises various forms of the PPH and replaces and standardises the hitherto bilateral agreements for all participating patent offices. Apart from the DPMA, 25 other patent offices worldwide are currently participating in the GPPH pilot programme. The DPMA also has a bilateral PPH agreement in place with CNIPA, the National Intellectual Property Administration of the People's Republic of China. Until the end of 2019, the DPMA processed 6,577 PPH requests, of which 4,987 were from Japan, 1,275 from the US and 112 from the United Kingdom.

Another pillar of our international cooperation is the regular exchange of patent examiners with other national offices. Parallel applications at the DPMA and at the other national patent office are being handled independently by the examiners. The results are later compared and analysed in face-to-face discussions between the examiners involved. We and also our partner offices have a very positive view of the patent examiner exchange programme and would like to see it continued and, if possible, extended to the trade mark area. The DPMA also supports the efforts of the European Patent Office (EPO) to further develop the framework conditions of IP protection in the interest of the applicants. From 2020, as part of the EPO's convergence programmes, special working groups will compare practices at national offices, analyse differences and define best practices - for example on unity of invention, designation of inventor and search. The EPO is planning further cooperation programmes for IT projects and for raising public awareness of the importance of intellectual property protection. The DPMA will also be actively involved in these projects in the interest of its users.

Not only in the patent area, but also in the trade mark and design area, there are differences between the national examination procedures. Since 2011, the European Intellectual Property Office (EUIPO) in Alicante and the national trade mark offices of the EU as well as user associations have been dealing with these differences within the framework of convergence projects. Here, too, the DPMA has been actively involved in numerous working groups for years. The results of this European Intellectual Property Network (EUIPN) are regularly published in the form of Common Communications. They serve as guidelines for a common practice and aim at increasing transparency, legal certainty and predictability.

In 2020, numerous experts will also represent the DPMA in multinational IT project working groups of the EPO, EUIPO and WIPO. Thus, the DPMA will continue to be a reliable international cooperation partner - be it through electronic communication or soon again - I hope - during mutual working visits.

IN FOCUS

Digital roadmap

Nowadays, the term "digitisation" is omnipresent and closely associated with modern computer technology and the Internet. Originally, digitisation merely meant the conversion of analogue data into digital data. For many years, German government offices had mainly stored data in the form of paper files. Today, this form is no longer upto-date. Even in the administration, files are increasingly kept electronically. Due to its introduction of an electronic case file processing system for the IP rights, patents, utility models and trade marks, the DPMA plays a pioneering role in this this respect.

If one restricts the term "digitisation" solely to the electronic storage and, potentially, the electronic processing of previously analogously stored data or data that has been printed on paper, digitisation would be defined too restrictively since it offers far more possibilities today. By digitisation we thus also refer to processes that have been modified and optimised for further digital processing. In a digital world, it is not sufficient to have the staff process an electronic file in the same manner as a paper file. Instead, the working processes have to the optimised with regard to the new possibilities offered by the electronic file. For example, electronic files allow for the automatic forwarding of work assignments and their parallel processing by several users simultaneously. Smart algorithms can even take over entire work packages thus freeing the person working on them up from this task. Thus, the term "digitisation" also ought to include digitally optimised processes.

However, even such a definition would still be too narrow. Digitisation of data also offers entirely new administration services for customers. For instance, digital communication is made possible to a greater extent. Furthermore, customers may access files independently and without a waiting period, thus making the working procedure even more efficient.

As outlined above, the DPMA has already introduced electronic file systems for the IP rights, patents, utility models and trade marks, over the past years and is able to communicate securely with its customers in a digital manner. An appropriate solution is being developed for the remaining IP right, design. Furthermore, the DPMA is going to introduce an electronic administrative file in the course of the next years and will thus reach another major milestone.

Against the backdrop of this extended definition of "digitisation", we still see a great necessity to continue along our path by making sensible use of currently available and future technologies. For that reason, we are currently working on a digital roadmap. The starting point of such a roadmap is putting together the inventory. We must identify those tasks of ours which are, so far, still paper-based or which might be better supported by IT.

There are many starting points for this. Optimised electronic opportunities for collaboration using features for video conferencing at work and for joint processing of files might not only replace conventional telephony in times of a

pandemic but allow for online conferences, replace many business trips and further simplify working from home.

Despite the available electronic interfaces with our customers, communication is still very much paper-based. However, also in areas in which electronic communication is already generally possible, for instance electronic filing of applications, the question arises which of these (electronic) applications might be made superfluous via a self-service portal for our customers in order to ensure that contact with the DPMA is as non-bureaucratic as possible.

Unfortunately, our resources for further development are limited. Therefore, the roadmap, which is to be created, will prioritise our ideas and organise them in a time frame. Our digital roadmap is going to be integrated into our office strategy and serve its four fields of action "products and services", "customers", "staff" and "cooperation projects".



OUR PROJECT

New Search

In 2019, the main focus of the project "New search", which supports the "Products and services" field of action of our **DPMAstrategie** in a sustainable manner, was on the completion of the basic service "DPMArecherche" and its integration into the application systems of the German Patent and Trade Mark Office (DPMA). The keyword for future development is "integration" - we combine the search in various data sources and application areas as well as various search technologies, especially the functionalities of the classical accurate search, with the new methods of artificial intelligence.

The "case file search", i.e. the new option to search in published and unpublished case files in the electronic IP rights management system **DPMApatente/-gebrauchsmuster**, will be made available to all internal users after completion of the test phase in early 2020.

For "patent search", i.e. the new search option for documents in the **DEPATIS** patent information system, a new release was made available in mid-2019, implementing many of the improvement requests from the previous test phases. Currently, it is a search system with a web client, which is available in parallel to the **DEPATIS** system. The patent search is subject to continuous further development through new versions, which are made available almost every month. The training courses on patent search have been continued since September 2019 and will also be offered in the future.

The "cognitive search", implemented to complement the accurate patent search, was also improved and trained on the basis of new data. The highlights are the pre-search function, the automatic determination of synonyms and other search options such as the combination of search terms and documents, the filtering of the results of the cognitive search by

means of a Boolean search and the storage of the searches. It is intended to make the cognitive search available to all examiners in the first quarter of 2020.

Since mid-2019, the IT teams at the DPMA have turned to a new challenging task - integrating the new patent search into the **DEPATIS** user interface. The long-term goals of integration are to improve the speed and accuracy of patent searches, the use of cognitive search methods and the use of a modern, future-proof search engine. It is planned to gradually integrate the new search engine into DEPATIS. In a first step, to be completed as early as the first quarter of 2020, the result list will be automatically transferred from the web client of the new patent search to **DEPATIS**. In a second step, the functionality of the new patent search (accurate and cognitive) will be provided within **DEPATIS**.

In 2020, we plan to expand and improve the search functions of the individual use cases and to integrate classic enterprise search and cognitive search in order to combine the best search options of both worlds.

Furthermore, the new electronic classifier was completed after a successful test and evaluation phase. Since October 2019, it has been in productive use for the electronic pre-classification of patent and utility model applications at the DPMA digitisation centre. The new classification service is also available as an interactive classification tool, available to all examiners, which allows to assign several IPC proposals to any text and thus better support a variety of business processes at the DPMA

Other ongoing projects and strategic measures

Electronic administrative work

We prepare the electronic administrative work at the DPMA. In this process, we follow the procedural model "Introduction of the federal e-file" of the Federal Office of Administration (Bundesverwaltungsamt). The advantages of electronic case file management are greater efficiency, flexibility and independence of location.

Electronic IP case file design

We are implementing the fully electronic IP case file design. For this purpose, we use the existing service-oriented architecture of the DPMA. At the same time, we carry out organisational, personnel and qualification measures and assist the staff during the changes.

Continuity management

Contingency measures and/ or emergency plans are in place to ensure the functioning of all processes at the DPMA that are critical for business operations and the fulfilment of tasks. This helps us to perform tasks without interruption, even under difficult conditions.

In addition, there are numerous other measures of strategic importance, from our business process management and quality management to the establishment of user advisory councils (we provide information about the User Advisory Council for patents and utility models on page 75).

Inventor and innovation awards

I firmly believe that we can look to the future with confidence despite all the social and political upheaval. And the main reason for this is that many women and men in our country do not regard the future as inexorably preordained, but instead strive to shape it. (...) The Deutscher Zukunftspreis shows that we can have faith in our ability to design a better future and to put our ideas into practice. With that in mind, let us try out new paths together!

> - Federal President Frank-Walter Steinmeier on the occasion of the presentation of the Deutscher Zukunftspreis 2019 award -

Inventor or innovation awards are primarily intended to give recognition to people who through their work achievements have created leading-edge solutions in the technical field. At the same time, these awards encourage inventiveness, innovative spirit and progress.

The prizes awarded to individuals or teams also impressively demonstrate how important it is to protect these innovations, for example in order to support further research or create new jobs.

This is why the German Patent and Trade Mark Office (DPMA) is supporting prestigious inventor and innovation awards. President Cornelia Rudloff-Schäffer and other senior executives of the DPMA are members of the juries or boards of trustees. In addition, our patent examiners regularly propose outstanding innovations for nomination.

In 2019, the DPMA was involved in the following innovation awards:

Deutscher Zukunftspreis - the Federal President's Award for Innovation in Science and Technology

www.deutscher-zukunftspreis.de/en

The Deutscher Zukunftspreis award is the badge for excellent inventions; it recognises the level of scientific and technical innovation, successful marketing and the creation of sustainable jobs. This award is presented personally by the Federal President of Germany. President Cornelia Rudloff-Schäffer is a member of the Board of Trustees, which determines the direction of the selection decisions



The DPMA is entitled to propose projects for the Deutscher Zukunftspreis award to the jury: Please draw our attention to your projects! Proposals for nominations to the 2021 Zukunftspreis can be submitted at any time until the beginning of November 2020. For more information, visit our website.

On the occasion of the award ceremony, at which Federal President Frank-Walter Steinmeier presented the Deutscher Zukunftspreis 2019 award to Celonis, DPMA President Cornelia Rudloff-Schäffer congratulated the founders of the software start-up Celonis SE. "Alexander Rinke, Bastian Nominacher and Martin Klenk are outstanding entrepreneurs, who are in great demand in Germany," said Rudloff-Schäffer and added: "In an impressively short period of time Celonis was able to convince top international customers of its product - and especially in a market that is otherwise dominated by American companies." She stated that the recent investor assessment of 2,500 million dollars and the associated classification of the company as one of the few "unicorns" in Germany spoke for itself. "This shows that German companies with an outstanding technology can also succeed in the digital economy," said the DPMA President.

The fundamental technology, referred to as "process mining", offered by Celonis bridges the gap between traditional, model-based process analysis and data-centric analysis techniques such as data mining. It makes every step of a process visible in real time and in detail, making processes more efficient and revealing potential for further improvement. This reduces costs, sometimes substantially. This means, for example, lower material consumption in manufacturing processes, more on-time arrivals of trains and planes and shorter waiting times for patients in hospitals.



Federal President Frank-Walter Steinmeier and the award winners 2019 Alexander Rinke, Martin Klenk and Bastian Nominacher (from left to right)

Two other teams were nominated for the *Deutscher Zukunftspreis* 2019 award:

Dr Christoph Gürtler, Dr Berit Stange (both of Covestro Deutschland AG, Leverkusen) as well as Professor Dr Walter Leitner (Chair of Technical Chemistry and Petrochemistry of the RWTH Aachen University) have developed a technology that uses climate-damaging carbon dioxide as a component for high-quality plastics. Based on customised catalysts, the inert carbon dioxide was utilised to produce polyols, which serve as starting materials for plastics in a variety of different applications.

Dr Christina Triantafyllou (Siemens Healthcare GmbH, Erlangen), Professor Dr Mark E Ladd (German Cancer Research Center, Heidelberg) and Professor Dr Arnd Dörfler (Universitätsklinikum Erlangen) have achieved a breakthrough in precision medicine with their 7 Tesla magnetic resonance imaging (MRI) scanner Magnetom Terra. Compared to previous technologies, the MRI scanner achieves imaging with much higher resolution. This makes it possible, among other things, to detect neurological diseases earlier.

European Inventor Award

www.epo.org/learning-events/ european-inventor.html

The European Patent Office (EPO) presented the 2019 European Inventor Award in Vienna on 20 June 2019. The EPO presents the award, which is annually bestowed in five categories, to honour outstanding individuals from science, research and development. The DPMA contributed to this competition by submitting five nomination proposals.

The award winners:

- » In the "Industry" category the award went to the two Austrians, Klaus Feichtinger and Manfred Hackl, the managing directors of EREMA. They succeeded in turning a wide variety of plastic waste into pellets, which can be reused to produce plastics, indistinguishable from new plastics. During the recycling process, the waste material is fed into an extruder and rotated in the opposite direction to the movement of the extruder screw. Thanks to this process, the material can be processed at faster rates and at lower temperatures than previously possible.
- » In the "Research" category the winner was the French immunologist Jérôme Galon. Digital images of tumour samples are used to measure the number of positive immune cells found at tumour sites. Based upon the strength of their immune response, it is possible to predict the chances of recovery of cancer patients. This allows to tailor therapies to individual patients.
- » The Japanese scientist Akira Yoshino received the European Inventor Award in the "Non-EPO countries" category. Since 1983, he has developed safe lithium ion batteries, which today are indispensable for powering smartphones, electric vehicles and

numerous other devices. The unstable lithium metal at the anode was replaced by a safe electrically conductive plastic, the battery cathode material was swapped for lithium cobalt oxide. A heat sensitive membrane based on polyethylene introduced between the reactive layers prevents the whole structure from catching fire.

- » The winner in the "Small and medium-sized enterprises" category was the Dutch inventor Rik Breur for his anti-fouling fibre wrap for boat hulls, which improves fuel efficiency by up to 40% and removes the need to use paints that contain heavy metals. The self-adhesive wrap is directly affixed to a vessel's hull. Its surface is covered with nylon fibres, like the spikes of a sea urchin, to prevent the growth of algae, mussels, barnacles and other marine life.
- » The Spanish scientist Margarita Salas Falgueras was recognised for her Lifetime Achievement and is also the winner of the Popular Prize. The phi29 DNA polymerase, which she discovered and isolated from viruses, makes it possible to replicate trace amounts of DNA faster and almost without error, thus enabling full genomic testing. Today, it is hard to imagine oncology, forensics and archaeology without DNA amplification based on phi29 DNA polymerase.



Margarita Salas Falgueras (†2019)

German Innovation Award

www.der-deutsche-innovationspreis.de (in German)

For more than ten years, the German Innovation Award has been presented in three categories. DPMA President Cornelia Rudloff-Schäffer is a member of the jury of this innovation award.

- » The Airbus Defence and Space GmbH won the award in the category "Large Enterprises" with its project "Crew Interactive MObile companioN (CIMON)". The robotic assistance system enables human-machine interaction. The system was the first to bring artificial intelligence that can interact with the crew on board the ISS.
- » In the category "Medium-sized Enterprises", Celonis SE was recognised for its process mining project, which also won the Deutscher Zukunftspreis 2019 award.
- » The award winner in the category "Start-Ups" is Blickfeld GmbH. The company has developed a laser scanning technology (LiDAR) with corresponding software. LiDAR produces high-resolution depth maps that are perfectly suited for detection of the surrounding environment. The technology has a variety of applications, including autonomous transportation, robotics and smart cities.

Jugend forscht

www.jugend-forscht.de/information-in-english.html

At Germany's best-known youth contest "Jugend forscht" in the STEM fields (science, technology, engineering, mathematics; German: MINT) 190 young scientists (28% of them girls), aged between 12 and 22 years, entered 111 projects at the national finals in Chemnitz at the end of May 2019 in order to present these projects to an expert jury and the public and, of course, to win one of the coveted prizes. Since 1981, all prize-winners in the national competition have also been invited to a personal reception at the Chancellery.

Anton Fehnker and Simon Raschke won the Chancellor's special award for the most original entry. They devised a clever experimental set-up to find out how roads and paths develop unpleasant ripples. Their results show that ripple formation follows a chaotic set of rules.

The two winners in the chemistry category, Paul Kunisch and Thomas Derra, showed that the commitment of young people to environmental issues is not limited to demonstrations, but also extends to research. They developed a novel, low-cost binding agent to combat oil spills on water bodies. For this purpose, they impregnated cellulose, cotton, sawdust and nonwoven fabrics with a sizing agent used in the paper industry, thus achieving higher absorbency than conventional oil binding agents. We wish all winners continued success.

Thuringia Innovation Award

www.innovationspreis-thueringen.de (in German)

On 27 November 2019, the four categories of the "XXII Thuringia Innovation Award 2019" and a special award with a total of 100,000 euros in prize money was presented at a ceremony in Weimar by the Thuringian Minister of Economic Affairs, Science and the Digital Society, Wolfgang Tiefensee, the Foundation for Technology, Innovation and Research of Thuringia (STIFT), TÜV Thüringen and the Ernst Abbe Foundation.

Markus Ortlieb, head of the Jena sub-office, once again represented the DPMA in the 17-member jury; he also dealt with questions relating to the state of the art and industrial property rights across all categories.

The following innovations were honoured with the 2019 Thuringia Innovation Award

- » in the "TRADITION & FUTURE" category: the flying wing aircraft of HORTEN Aircraft GmbH, which put an old idea into practice which has the potential to revolutionise aviation.
- » in the "INDUSTRY & MATERIAL" category: flexible metal-free heating materials based on polymers for an efficient thermal management, which is likely to have great potential, in particular, for efficient heating systems in electric vehicles and for seating in public areas, developed by the Thuringian Institute for Textile and Plastics Research Rudolstadt e.V.,
- » in the "DIGITAL & MEDIA" category: TORY, the modular service robot for the retail trade, developed by MetraLabs GmbH, which automatically registers and passes on data on stocks and positions of products,
- » in the "LIGHT & LIFE" category: an optical sorter for the high-quality treatment of fine seeds by Röber Institut GmbH (PETKUS Group), which selects and offers plant seeds with a significantly improved sorting accuracy, a high level of varietal purity and without impurities by using a new optical sensor technology, customised nozzles and efficient algorithms.
- » The "SPECIAL AWARD FOR YOUNG ENTREPRENEURS" went to ICO-LUX GmbH (Jena) for their AI-based authenticity check of paper documents.
- » The "ERNST ABBE AWARD FOR INNOVATIVE ENTREPRENEURSHIP 2019" was awarded to Frank Orschler, managing director of Königsee Implantate GmbH, in recognition of his contribution to the advancement of Thuringia as a science and technology location.

Innovation Award of Bavaria

www.innovationspreis-bayern.de (in German)

The Innovation Award of Bavaria was not bestowed in 2019. In 2020, President Rudloff-Schäffer will take over the jury duties from former DPMA Vice-President Günther Schmitz, who was a jury member of the Innovation Award of Bavaria from 2010 to 2018.

women&work award for female inventors

www.erfinderinnenpreis.de (in German)

Since 2017, women&work, Europe's leading career fair for women, has been honouring female inventors. President Rudloff-Schäffer, as a member of the jury, participated in selecting the award winners. Dr Fill, head of patent division, took part in the award ceremony, which took place during the women&work fair in Frankfurt.

The award winners:

- » Dr Karin Weigelt has developed an electrically conductive printing ink that can be used in conventional, industrial printing machines. Print products can thus be equipped with an electronic interface to smartphones and digital services.
- » Dr Jenny Müller has developed a process that keeps fruit fresh for up to 10 days after cutting by using vitamin C and inert gas, thus helping to avoid food waste. The process was developed in cooperation with the start-up company DIE FRISCHEMANUFAKTUR and with University of Applied Sciences Weihenstephan-Triesdorf and with the support of 3M.
- » Kim Eisenmann has developed a bracelet to test drinks for the most common knockout drops. Besides the test itself, the bracelet provides preventive protection by deterring potential offenders.
- » In 2019, for the first time, the **Humanism** 4.0 special award was bestowed: "Humanism 4.0" is committed to a cooperative society aiming at jointly solving the challenges of the present for a humane and environmentally friendly future. The architect Marcella Hansch won the special award for her project to cleanse the oceans of plastic.

84 PANORAMA Annual Report 2019

IP rights in popular culture

Since its relaunch in late 2017, you can regularly find articles on the website of the German Patent and Trade Mark Office (DPMA) that illustrate the DPMA's whole working area. At first glance, one might not necessarily associate the DPMA with topics in the field of popular culture. However, behind Mickey Mouse, Donald Duck or Darth Vader there are interesting and at times complex IP issues since valuable brands are concerned. By engaging in these topics, we can illustrate our work beyond the circles of experts and raise public awareness about the meaning of intellectual property rights.



Apart from Mickey Mouse (international registration of the word/figurative mark 135377, see figure), who is already aged 92, Donald Duck is probably the most famous brand of the Walt Disney Company. In 2019, Donald celebrated his 85th birthday: On 9 June 1934, Donald had his first appearance as a supporting actor in the animated film The Wise Little Hen.

Aged 85, Donald is still hot-headed, dogged by bad luck, chronically broke and "lone uncle" to triplets. It is exactly this humanness that made the figure so popular. Walt Disney cleverly utilised the intellectual property rights in order to market his creations exclusively and effectively. Virtually all popular cartoon characters in Disney stories are protected under trade mark law.

Asterix turns 60: world literature with wild boars

His French colleague is a bit younger. The 60th birthday of the short Gaul was not only grandly celebrated in France with specially made commemorative coins, stamps or exhibitions. On 29 October 1959, he had his first appearance in the pilot edition of the French youth magazine "Pilote". 380 million copies of the comic series with the potion-guzzling, winged helmetwearing Gaul have been sold around the globe so far; they were published in 80 countries and 111 languages as well as dialects, with the addition of various films.

The 38th volume was released in the autumn of 2019 starting with an international print run of five million copies; thereof, 1.6 million were published in Germany alone. Germany seems to be the home to the most loyal fans of the unyielding Gauls, since around a third of all Asterix volumes have been sold over German counters. Furthermore, there are various dialect versions of the adventures amounting to 29 German vernaculars.

Gauls well protected

The series exhibits a few interesting "inventions". The most famous, of course, is the magic potion by druid Getafix (Miraculix in German - German trade mark 1022703), which endows the drinker with superpowers. Even though recipes are not patentable as such, a potent tonic having such a striking impact would surely be amenable to protection under patent law.



ASTERIX et OBELIX

Both the authors and the publisher naturally remembered to protect their boar-loving ruffians well: Not only the title characters' names Asterix and Obelix (international registration of the word/figurative mark 373128, see figure) are protected, but also supporting characters like Unhygienix (Verleihnix in German - word mark 425269), Fulliautomatix (Automatix in German - 425270), Cacofonix (Troubadix in German - 1068120) or Justforkix (Grautvornix in German - 305077236).

(Duff) beer is where the fun stops

They are yellow, chaotic - and incredibly popular: 30 years ago, "The Simpsons" appeared for the first time on American television. 31 seasons and over 650 episodes later, it is the most long-lived and successful series in the United States and, thanks to licencing and merchandising, a billion-dollar business, which is protected by the whole range of intellectual property rights.

With biting satire and absurd humour, the Simpsons creators surrounding Matt Groening (himself a trade mark: 004827176) manage to lampoon topics like pollution, religious double standards, narrow-mindedness, consumerism and the glorification of the "American way of life". At the premiere in 1989, Matt Groening could probably not have imagined the series to become a global success. Apart from various awards, the series "The Simpsons" has even received its own star on Hollywood's legendary Walk of Fame.

The FOX broadcasting company has had numerous trade marks related to the Simpsons, e.g. 1183601, 1184435, DD648048 registered with the DPMA; furthermore, European Union trade marks such as 000143248, 001521285, 002991586, 012720421. Naturally, there are Simpsons mugs, clocks, bedding, books, shirts, hats, chess or computer games. And much, much more.

Annual Report 2019 PANORAMA 85

In the series, Homer Simpson likes to drink – a lot of – beer, preferably the (originally) fictitious brand "Duff beer". Numerous merchandising products relating to the series therefore show Duff beer cans. Due to reasons of youth protection, however, the creators of the series have rejected real Duff beer as a merchandising product.



When an Australian brewery introduced a "Duff" beer to the market in the 1990s, FOX enjoined them from producing it. A brewery from New Zealand, named after its owner Duff, is said to have been forced by the media company to rename itself. When a "Duff" beer entered the German market, FOX took action as well. A German company had applied for the relevant trade marks with the DPMA and produced a "Duff" beer. FOX attempted to have the trade mark cancelled and to stop the distribution, yet they failed before the Federal Patent Court in 2004. The reason for the decision stated:

"Though by submitting extensive documents, the opponent has shown credibly that this series has by now achieved a high degree of recognition in Germany, the opponent has not even come close to proving that the term 'Duff BEER' has also achieved a degree of recognition of at least 60% among the domestic public". (BPatG 26 W (pat) 113/03)

FOX took over the trade mark 302009021478 from the defendant Duff Beer UG in early 2014 – and then had it cancelled.

Comic of the century: The well-behaved boy with the protected quiff

Billions of blue blistering barnacles! Could it really be true that Tintin is already 90 years old? On 10 January 1929, the magazine "Le Petit Vingtième" published the first episode of Tintin, probably the most influential comic strip of all of Europe. Over a period of half a century, a total of 24 adventures of the young reporter and his white Fox Terrier appeared. Generations have grown up with Tintin, Captain Haddock, Professor Calculus, and Thomson & Thompson.



Vord/figurative mark 004084471

The stories have been translated into more than 80 languages and sold more than 230 million copies worldwide. Naturally, such a successful product is protected by a trade mark: the French original "Tintin" is protected as an EM word mark (000145151) and as a combined word/figurative mark (004084471). For German-speaking countries, the publisher has had the word mark "Tim und Struppi" (998406, 3020100084553) registered for a variety of Nice classes (16, 28, 38, 41). "Captain Haddock" is also protected as an EU word mark (001088608). Tintin's famous quiff was also protected several times as a combined word/figurative mark (001844521, 002329670). Even the author "Hergé" is registered as a word mark (005856497).

The Force and the Merchandising: Intellectual property rights surrounding "Star Wars"

Star Wars is one of the world's most commercially successful film series. According to estimates, merchandising around the films has generated over 30 billion dollars so far. And this became possible thanks to a clever IP strategy of its creator George Lucas, who secured several merchandising rights and protection for toy figures of the protagonists and had their names registered as trade marks.

The brand of evil

The figure of Master Yoda, for example, was registered as a design under number US265754S. Darth Vader is registered as a three-dimensional European Union trade mark (005896601). The villain's name is further protected under the word mark "Lord Darth Vader" (990370); his opponent Obi-Wan Kenobi is registered as word mark 39609975. Naturally, the famous Star Wars lettering is protected as a combined word/figurative mark (971996). In his global marketing, Lucas did not fail to secure the German pronunciation of his characters, such as the word mark "Erzwo-Dezwo R2D2" (971997). Also, the titles of his films - the latest being The Rise of Skywalker - were registered as European Union trade marks (EM 018051545).

Well protected and galactically successful

Even the grotesque or cute minor characters, which only make short appearances in the films, were protected by registered designs when their toy figures came onto the market, such as "Jabba the Hutt" (US 277211S), bounty hunter "Boba Fett" (US264109S) or the cute blue animal "Max Rebo" (US 277883S). Let us not to forget the fantastic machines such as the elephantine combat robot "AT-AT" (US266777S), used by numerous children to re-enact the battle of the "dark side" against the Jedi.

Lucasfilm, which has been part of Disney for some years now, has not only perfected its commercial exploitation of the films, but is also always advancing cinematic visual effects. In the past years, the company applied for numerous patents in the field of computer graphics/CGI. In **DEPATISnet**, Lucasfilm currently holds a respectable 307 entries (status: 19 December 2019).



86 A GLANCE AT 2020 Annual Report 2019

A glance at 2020

In connection with the European Commission's Start-up and Scale-Up Initiative, the DPMA will be actively involved as a contact office in IPA4SME (a campaign under the European Union's COSME programme, grant agreement no. 836042) in 2020 too.

The IPA4SME support covers 100% of what is known as IP pre-diagnostic services, which can largely be described as IP audit measures, in small and medium-sized enterprises (SMEs). The German Patent and Trade Mark Office (DPMA) as a contact office nominated, and the responsible consortium (CARSA S.A., Alicante, Spain) approved, the patent information centres in Germany as experts at carrying out IP pre-diagnostics (an element carried out as a pilot project in only eleven European countries, including Germany). In 2020, too, the DPMA will conduct a formal quality check of a part of the IP audit reports prepared by the patent information centres and contribute to an unproblematic reimbursement of the costs of the patent information centres.

Within the scope of the IPA4SME campaign, the patent information centres already provided a significant number of advisory services until the end of 2019. And they will be able to offer corresponding services in 2020.

Thanks to the DPMA's commitment to its regional partners, it was possible for the first time in Germany to make IP-related funding of the European Commission available directly to the patent information centres.





Due to the coronavirus pandemic, the DPMA is participating in fewer events this year than usual. Even the events listed may still be subject to changes Annual Report 2019 A GLANCE AT 2020 87

2020 DPMA trade fair calendar							
	Trade fair	Town	Internet				
January							
07/01-09/01/2020	PSI	Düsseldorf	psi-messe.com				
07/01-10/01/2020	heimtextil	Frankfurt	heimtextil.messefrankfurt.com				
February							
07/02-11/02/2020	ambiente	Frankfurt	ambiente.messefrankfurt.com				
March							
01/03-04/03/2020 CANCELLED	Internationale Eisenwarenmesse	Cologne	eisenwarenmesse.de				
10/03-12/03/2020 CANCELLED	LogiMAT	Stuttgart	logimat-messe.de				
15/03-17/03/2020 POSTPONED TO 21/03-23/03/2021	ProWein	Düsseldorf	prowein.de				
31/03-03/04/2020 POSTPONED TO 19/10-22/10/2020	analytica	Munich	analytica.de				
April							
18/04-19/04/2020 CANCELLED	VELOBerlin	Berlin	veloberlin.com				
20/04-24/04/2020 CANCELLED	HANNOVER MESSE	Hanover	hannovermesse.de				
Мау							
04/05-08/05/2020 CANCELLED	IFAT	Munich	ifat.de				
June							
11/06/2020	Potsdamer Gründertag	Potsdam	gruendung.wfbb.de				
16/06-19/06/2020 POSTPONED TO 08/12-11/12/2020	automatica	Munich	automatica-munich.com				
September							
08/09-12/09/2020 POSTPONED TO 14/09-18/09/2021	Automechanika	Frankfurt	automechanika.messefrankfurt.com				
22/09-25/09/2020 POSTPONED TO 27/04-30/04/2021	InnoTrans	Berlin	innotrans.de				
23/09-24/09/2020	all about automation	Chemnitz	all-about-automation.com				
October							
09/10-10/10/2020	deGUT	Berlin	degut.de				
15/10/2020	MUT	Leipzig	mut.business				
29/10-01/11/2020	iENA	Nuremberg	iena.de				
November							
10/11-13/11/2020	electronica	Munich	electronica.de				
16/11-19/11/2020	MEDICA	Düsseldorf	medica.de				
	-						

Statistics

With the introduction of the electronic case file, we have adapted a new statistics system for all IP rights. We now use a dynamic statistics system called **DPMAstatistik**.

Data are no longer captured in so-called "counting jars", which are definitely established at the conclusion of a year. Rather, the values are dynamic and can change over time, for example, when a legal status change has a retrospective effect. For this reason, the values depend on the respective date of retrieval.

The following statistics are based on data retrieved in February 2020. Tables 1.9 and 1.13 now also include PCT applications in the national phase. Since the number of designs applied for is only determined upon conclusion of the registration procedure, Tables 4.2, 4.4 and 4.5 previously contained provisional data for the respective current reporting year. For this reason, these tables now show registered designs.

More detailed statistics are available in the March edition of the gazette *Blatt für Patent-, Muster- und Zeichenwesen* (*Blatt für PMZ*) published by Carl Heymanns Verlag (...).

Pate	ent applications and patents	89
1.1	National patent applications and international patent applications	
	with effect in Germany	89
1.2	Patent applications before entry into the examination procedure	89
1.3	Patent applications in the examination procedure	89
1.4	Patents in force	90
1.5	Percentage of patent applications for which the applicant is identical with the	
	inventor, broken down by residence or principal place of business of the applicar	nt 90
1.6	Patent applications by German Länder	90
1.7	Patent applications, percentages and applications per 100,000 inhabitants by German <i>Länder</i>	91
1.8	Patent applications by countries of origin	91
1.9	Patent applications by countries of origin Patent applications filed by universities by German Länder	92
1.10	Breakdown of national patent applications from Germany (domestic)	32
1.10	by filing activity of applicants	92
1.11	Opposition proceedings	93
1.12	Patent applications by technology fields with the largest number of	23
1.12	applications in 2019	93
1.13	Companies and institutions with the highest number of	23
1.10	patent applications in 2019	94
	patent appared for in 2015	٥,
11431	ity models and tonographics	95
	ity models and topographies	
2.1	Utility models	95
2.2	Topographies under the Semiconductor Protection Act (Halbleiterschutzgesetz	
2.3	Utility model applications by German Länder	96
2.4	Utility model applications, percentages and applications	07
	per 100,000 inhabitants by German <i>Länder</i>	97
Nati	ional trade marks	98
3.1	Applications and registrations	98
3.2	Opposition proceedings	98
3.3	Cancellations, renewals, trade marks in force	98
3.4	Procedures for the international registration of marks	99
3.5	National trade mark applications by German Länder	100
3.6	Trade mark applications, percentages and number of applications	
	per 100,000 inhabitants by German <i>Länder</i>	101
3.7	National trade mark applications by leading classes	102
3.8	Top companies and institutions in terms of trade mark registrations in 2019	104
	•	INE
Desi	<u> </u>	LUS
4.1	Applications and procedures concluded	105
4.2	Registered designs by German Länder	105
4.3	Pending designs (applied for) and registered designs in force;	
	invalidity proceeding	106
4.4	Registered designs, percentages and number of designs filed	
	per 100,000 inhabitants by German <i>Länder</i>	106
4.5	Top companies and institutions in terms of registered designs	
	in 2019	107
Oth	er topics	L08
5.	Register of anonymous and pseudonymous works	108
6.	Patent attorneys and representatives	108
		_00

- 1. Patent applications and patents
- 1.1 National patent applications at the DPMA and international patent applications with effect in Germany (PCT applications in the national phase)

	National applications ¹		PCT applications in the national phase			Applications (national and PCT national phase)			
Year	Domestic ²	Foreign ²	Total	Domestic ²	Foreign ²	Total	Domestic ²	Foreign ²	Total
2015	46,466	13,990	60,456	921	5,522	6,443	47,387	19,512	66,899
2016	47,316	14,264	61,580	1,174	5,151	6,325	48,490	19,415	67,905
2017	46,740	14,744	61,484	1,047	5,191	6,238	47,787	19,935	67,722
2018	45,626	15,251	60,877	1,006	6,021	7,027	46,632	21,272	67,904
2019	45,534	14,396	59,930	1,100	6,407	7,507	46,634	20,803	67,437

¹ Applications for a German patent filed with the DPMA / ² Residence or principal place of business of the applicant

1.2 Patent applications before entry into the examination procedure

	Total Procedures concluded		Patent applications pending at the end of the year			
Year	applications received ¹	before filing of examination request ²	National applications	including applications for which formal examination was concluded		
2015	60,611	20,904	148,099	140,384		
2016	61,768	20,157	150,850	143,475		
2017	61,616	20,760	151,512	144,131		
2018	61,020	21,402	151,461	144,001		
2019	60,013	20,779	150,947	144,510		

 $^{^{\}mathrm{1}}$ New applications and cases referred back by the Federal Patent Court, allowed appeals, reinstatements

1.3 Patent applications in the examination procedure

	Examination re	quests received	Examination procedures	Patent grants published	
Year	Total	(of which) together with applications	concluded		
2015	44,683	25,682	33,569	14,795	
2016	45,620	26,387	35,803	15,652	
2017	47,442	26,536	36,837	15,649	
2018	47,127	26,198	38,106	16,369	
2019	47,205	25,975	40,124	18,255	

² Withdrawals, non-payment of application or annual renewal fees, examination request not filed and refusals

1.4 Patents in force (granted by the DPMA)

Year	Patents entered into force	Patents no longer in force	Patents in force at the end of the year
2015	14,845	14,750	129,531
2016	15,702	15,667	129,538
2017	15,693	16,266	128,940
2018	16,414	15,849	129,490
2019	18,289	15,712	131,999

1.5 Percentage of patent applications for which the applicant is identical with the inventor, broken down by residence or principal place of business of the applicant

	2015	2016	2017	2018	2019
National	7.7	7.7	7.1	6.7	6.5
Foreign	2.0	2.1	2.0	1.8	1.5
Total	6.3	6.3	5.9	5.4	5.3

1.6 Patent applications (applications at the DPMA and PCT applications in the national phase) by German Länder (residence or principal place of business of the applicant)

German Länder	2015	2016	2017	2018	2019
Baden-Württemberg	14,220	14,383	14,508	14,586	15,230
Bavaria	15,345	15,865	15,478	14,920	14,064
Berlin	840	829	715	721	678
Brandenburg	358	332	329	289	294
Bremen	158	141	129	136	142
Hamburg	806	790	771	860	736
Hesse	1,906	1,936	1,930	1,614	1,536
Mecklenburg-Western Pomerania	155	105	135	145	89
Lower Saxony	3,486	3,701	3,514	3,608	3,847
North Rhine-Westphalia	6,877	7,076	7,208	6,847	7,022
Rhineland-Palatinate	938	1,076	921	910	830
Saarland	214	196	197	175	215
Saxony	907	812	719	596	667
Saxony-Anhalt	200	228	186	205	193
Schleswig-Holstein	463	501	509	474	493
Thuringia	514	519	538	546	598
Germany	47,387	48,490	47,787	46,632	46,634

1.7 Patent applications, percentages and applications per 100,000 inhabitans by German Länder (residence or prinicpal place of business of the applicant)

		2018		2019		Change from	
German <i>Länder</i>	Applications	Percentage	Applications per 100,000 inhabitants	Applications	Percentage	Applications per 100,000 inhabitants	Change from 2018 to 2019 in %
Baden-Württemberg	14,586	31.3	132	15,230	32.7	138	+ 4.4
Bavaria	14,920	32.0	114	14,064	30.2	108	- 5.7
North Rhine-Westphalia	6,847	14.7	38	7,022	15.1	39	+ 2.6
Lower Saxony	3,608	7.7	45	3,847	8.2	48	+ 6.6
Hesse	1,614	3.5	26	1,536	3.3	25	- 4.8
Rhineland-Palatinate	910	2.0	22	830	1.8	20	- 8.8
Hamburg	860	1.8	47	736	1.6	40	- 14.4
Berlin	721	1.5	20	678	1.5	19	- 6.0
Saxony	596	1.3	15	667	1.4	16	+ 11.9
Thuringia	546	1.2	25	598	1.3	28	+ 9.5
Schleswig-Holstein	474	1.0	16	493	1.1	17	+ 4.0
Brandenburg	289	0.6	12	294	0.6	12	+ 1.7
Saarland	175	0.4	18	215	0.5	22	+ 22.9
Saxony-Anhalt	205	0.4	9	193	0.4	9	- 5.9
Bremen	136	0.3	20	142	0.3	21	+ 4.4
Mecklenburg- Western Pomerania	145	0.3	9	89	0.2	6	- 38.6
Germany	46,632	100	56	46,634	100	56	0.0

1.8 Patent applications by countries of origin (residence or principal place of business of the applicant) (applications at the DPMA and PCT applications in the national phase)

	2015	2016	2017	2018	2019
Germany	47,387	48,490	47,787	46,632	46,634
Japan	6,424	6,839	7,282	8,013	7,955
USA	6,151	5,860	6,084	6,670	6,207
Republic of Korea	1,423	1,203	1,173	1,313	1,262
Switzerland	887	953	922	814	810
Taiwan	520	598	618	686	737
Austria	1,026	977	907	777	713
France	260	270	248	345	460
China	636	551	646	491	449
Sweden	527	517	464	393	380
Others	1,658	1,647	1,591	1,770	1,830
Total	66,899	67,905	67,722	67,904	67,437

1.9 Patent applications filed by universities by German Länder (applications at the DPMA and PCT applications in the national phase)

German Länder	2015	2016	2017	2018	2019
Baden-Württemberg	98	74	63	71	69
Bavaria	84	81	71	64	65
Berlin	33	20	28	19	22
Brandenburg	15	6	19	9	13
Bremen	12	9	20	16	12
Hamburg	21	21	26	17	15
Hesse	64	60	61	54	42
Mecklenburg-Western Pomerania	40	22	19	29	14
Lower Saxony	58	50	62	55	46
North Rhine-Westphalia	94	106	124	129	141
Rhineland-Palatinate	10	7	7	16	11
Saarland	3	7	4	6	13
Saxony	157	135	97	81	120
Saxony-Anhalt	30	40	32	34	26
Schleswig-Holstein	9	19	22	22	19
Thuringia	40	43	46	40	30
Germany ¹	765	699	699	659	657

 $^{^{\}rm 1}\,{\rm Due}$ to rounding differences the sum of the figures may differ from the figure for Germany.

1.10 Breakdown of national patent applications from Germany (domestic) by filing activity of applicants (in %)

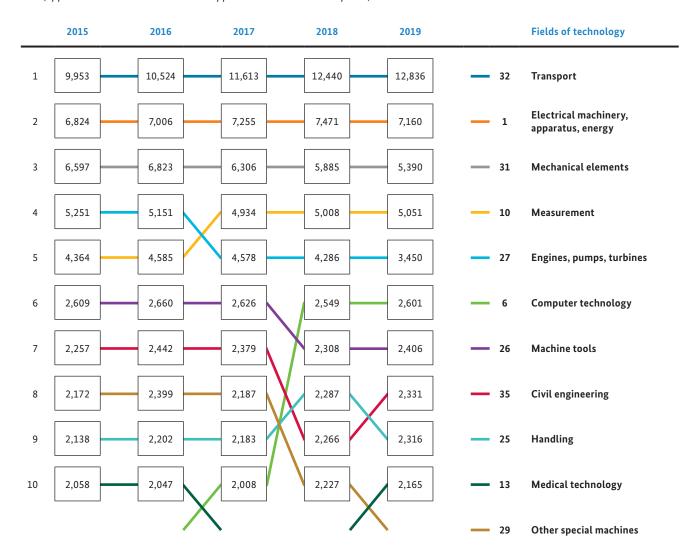
Percentage of applicants having filed	2015	2016	2017	2018	2019
one application	66.4	66.7	66.3	65.1	65.6
2-10 applications	29.3	29.0	29.2	30.1	29.8
11-100 applications	3.9	3.8	4.0	4.2	4.1
more than 100 applications	0.5	0.5	0.5	0.5	0.5
Total	100	100	100	100	100
Percentage of applications by appplicants having filed	2015	2016	2017	2018	2019
one application	13.5	13.0	12.6	11.8	11.7
2-10 applications	19.2	18.8	18.5	18.0	18.0
11–100 applications	20.9	20.2	20.4	20.9	21.7
more than 100 applications	46.4	48.0	48.5	49.3	48.5
Total	100	100	100	100	100

1.11 Opposition proceedings

		Орр				
Year	Oppositions received	Total¹ (of which) patent revoked		(of which) patent maintained or patent maintained in amended form	Opposition proceedings pending at the end of the year ²	
2015	402	479	161	231	1,740	
2016	416	459	126	256	1,698	
2017	376	433	142	229	1,641	
2018	338	448	130	248	1,531	
2019	294	410	141	212	1,415	

¹ Opposition proceedings concluded by surrender, non-payment of the annual renewal fee, revocation, maintenance, maintenance in amended form

1.12 Patent applications by technology fields ¹ with the largest number of applications in 2019 (applications at the DPMA and PCT applications in the national phase)



 $^{^1\,}According\ to\ WIPO\ IPC\ concordance\ table,\ available\ at:\ www.wipo.int/ipstats/en/index.html\#resources$

² Including a substaintial part of the proceedings pending before the Federal Patent Court

1.13 Companies and institutions with the highest number of patent applications in 2019 (applications at the DPMA and PCT applications in the national phase)

	Applicant ¹	Principal pla	ce of business	Applications
1	Robert Bosch GmbH	DE		4,202
2	Schaeffler Technologies AG & Co. KG	DE		2,385
3	Bayerische Motoren Werke AG	DE		1,773
4	Ford Global Technologies, LLC		US	1,725
5	Daimler AG	DE		1,711
6	ZF Friedrichshafen AG	DE		1,679
7	VOLKSWAGEN AG	DE		1,567
8	AUDI AG	DE		1,173
9	GM Global Technology Operations LLC		US	1,050
10	Mitsubishi Electric Corporation		JP	760
11	Dr. Ing. h.c. F. Porsche AG	DE		718
12	DENSO Corporation		JP	616
13	Intel Corporation		US	596
14	FANUC Corporation		JP	583
15	Toyota Jidosha K.K.		JP	558
16	BSH Hausgeräte GmbH	DE		483
17	Taiwan Semiconductor Manufacturing Co., Ltd.		TW	466
18	Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.	DE		402
19	Infineon Technologies AG	DE		399
20	Siemens AG	DE		387
21	Miele & Cie. KG	DE		352
22	Continental Automotive GmbH	DE		316
23	OSRAM Opto Semiconductors GmbH	DE		312
24	Continental Reifen Deutschland GmbH	DE		291
25	MAHLE International GmbH	DE		288
26	Valeo Schalter und Sensoren GmbH	DE		283
27	Henkel AG & Co. KGaA	DE		279
28	Hyundai Motor Company	DE DE	KR	278
28	Kia Motors Corporation		KR	278
30	Siemens Mobility GmbH	DE	KK	251
31	Deutsches Zentrum für Luft- und Raumfahrt e.V.	DE		244
32		DE		233
33	Vitesco Technologies GmbH Shimano Inc.	DL	JP	232
34	Carl Zeiss SMT GmbH	DE	J.F	232
35	Continental Teves AG & Co. oHG	DE		231
		DE	JP	217
36	Honda Motor Co., Ltd.	DE	JP	
36	Phoenix Contact GmbH & Co. KG	DE	ID	217
38	Panasonic Intellectual Property Management Co., Ltd. SEW-EURODRIVE GmbH & Co KG	DE	JP	213
39		DE		209
40	KRONES AG	DE		206
41	Airbus Operations GmbH	DE		200
42	Voith Patent GmbH	DE		197
43	thyssenkrupp AG	DE		191
44	FEV Europe GmbH	DE	116	189
45	Deere & Company		US	178
46	Hitachi Automotive Systems, Ltd.		JP	176
47	Aktiebolaget SKF	5-	SE	172
48	Siemens Healthcare GmbH	DE		167
49	HELLA GmbH & Co. KGaA	DE		166
50	SMS group GmbH	DE		165

 $^{^{\}rm 1}$ Without taking into account any business group affiliations

2. Utility models and topographies

2.1 Utility models (applications at the DPMA and PCT applications in the national phase)

		Fili	ngs	Procedures concluded			
Year	New applications	Domestic applications	Others ¹	Total	by registration	without registration	Total
2015	14,274	10,361	52	14,326	12,255	1,949	14,204
2016	14,030	10,100	25	14,055	12,442	1,889	14,331
2017	13,301	9,481	29	13,330	11,882	1,761	13,643
2018	12,307	8,800	22	12,329	11,295	1,619	12,914
2019	11,668	8,428	14	11,682	10,295	1,538	11,833

¹ Cases referred back by the Federal Patent Court, allowed appeals, reinstatements

Year	Pending registration procedures at the end of the year	Utility models in force at the end of the year	Renewals	Lapsed utility models
2015	5,157	85,117	19,733	14,653
2016	4,878	83,144	20,208	14,446
2017	4,565	81,027	18,822	14,033
2018	3,976	79,289	20,554	13,072
2019	3,823	76,919	18,825	12,678

2.2 Topographies under the Semiconductor Protection Act (Halbleiterschutzgesetz)

	New	P	Procedures concluded		Pending	Lapsed due	Registrations in force at
Year	Year received	by registration	without registration	Total	applications at the end of the year	to expiry of time	the end of the year
2015	0	0	0	0	0	4	20
2016	9	7	2	9	0	1	26
2017	1	0	1	1	0	2	24
2018	0	0	0	0	0	1	23
2019	0	0	0	0	0	2	21

2.3 Utility model applications (applications at the DPMA and PCT applications in the national phase) by German Länder (residence or principal place of business of the applicant)

German Länder	2015	2016	2017	2018	2019
Baden-Württemberg	1,886	1,872	1,729	1,612	1,576
Bavaria	2,358	2,285	2,060	1,991	1,895
Berlin	335	300	322	307	342
Brandenburg	112	150	136	104	164
Bremen	47	52	52	44	34
Hamburg	194	158	154	175	140
Hesse	628	623	630	624	488
Mecklenburg-Western Pomerania	78	71	54	56	43
Lower Saxony	709	698	649	609	558
North-Rhine Westphalia	2,708	2,645	2,528	2,182	2,175
Rhineland-Palatinate	452	402	390	304	351
Saarland	73	72	72	65	49
Saxony	330	301	258	294	222
Saxony-Anhalt	120	128	100	110	97
Schleswig-Holstein	191	193	204	186	167
Thuringia	140	150	143	137	127
Germany	10,361	10,100	9,481	8,800	8,428

2.4 Utility model applications, percentages and applications per 100,000 inhabitants by German Länder (residence or principal place of business of the applicant)

	2018			2019		Change from	
German <i>Länder</i>	Applications	Percentage	Applications per 100,000 inhabitants	Applications	Percentage	Applications per 100,000 inhabitants	2018 to 2019 in %
North-Rhine Westphalia	2,182	24.8	12	2,175	25.8	12	- 0.3
Bavaria	1,991	22.6	15	1,895	22.5	14	- 4.8
Baden-Württemberg	1,612	18.3	15	1,576	18.7	14	- 2.2
Lower Saxony	609	6.9	8	558	6.6	7	- 8.4
Hesse	624	7.1	10	488	5.8	8	- 21.8
Rhineland-Palatinate	304	3.5	7	351	4.2	9	+ 15.5
Berlin	307	3.5	8	342	4.1	9	+ 11.4
Saxony	294	3.3	7	222	2.6	5	- 24.5
Schleswig-Holstein	186	2.1	6	167	2.0	6	- 10.2
Brandenburg	104	1.2	4	164	1.9	7	+ 57.7
Hamburg	175	2.0	10	140	1.7	8	- 20.0
Thuringia	137	1.6	6	127	1.5	6	- 7.3
Saxony-Anhalt	110	1.3	5	97	1.2	4	- 11.8
Saarland	65	0.7	7	49	0.6	5	- 24.6
Mecklenburg- Western Pomerania	56	0.6	3	43	0.5	3	- 23.2
Bremen	44	0.5	6	34	0.4	5	- 22.7
Germany	8,800	100	11	8,428	100	10	- 4.2

3. National trade marks

3.1 Applications and registrations

		New applications				Registration under section 41 Trade Mark Act	
Year	Total	Domestic applications	for service marks	Others ¹	Total	(Markengesetz)	
2015	68,975	65,259	33,661	264	69,239	46,531	
2016	69,391	65,321	34,007	391	69,782	52,198	
2017	72,048	67,442	33,603	363	72,411	50,949	
2018	70,534	65,662	33,122	328	70,862	50,567	
2019	73,633	68,272	33,860	385	74,018	55,017	

 $^{^{\}rm 1}$ In particular, cases returned by the Federal Patent Court

3.2 Opposition proceedings

		Oppositions received		Opposition proceedings concluded			
Year	Trade marks challenged by oppositions	Number of oppositions	Number of opposing signs	without affecting the trade mark	Cancellation in full or in part	Surrender by the proprietor	
2015	2,737	4,068	4,068	1,800	395	512	
2016	3,263	4,859	4,859	2,048	445	623	
2017	2,886	4,276	4,276	2,118	616	637	
2018	2,830	4,205	4,205	1,799	445	640	
2019	2,978	3,428	5,096	1,828	438	637	

3.3 Cancellations, renewals, trade marks in force

Year	Cancellations as well as other disposals	Renewals	Trade marks in force at the end of the year
2015	43,001	34,218	797,420
2016	44,892	34,127	804,734
2017	44,117	35,215	811,555
2018	46,496	39,940	815,621
2019	40,313	39,834	830,319

3.4 Procedures for the international registration of marks

	Appl	Applications for international registration of marks originating						
		Procedure	Procedures concluded					
Year	Applications received	Applications transmitted to WIPO ¹	Applications withdrawn or refused	Cases pending at the end of the year				
2015	4,520	4,425	127	391				
2016	4,893	4,833	82	366				
2017	4,686	4,636	81	326				
2018	4,676	4,512	72	424				
2019	4,616	4,651	98	275				

¹ Not including requests for the extension of protection under Art. 3ter(2) Madrid Agreement; 206 requests for the extension of protection were received in 2019, and 225 requests were transmitted to the World Intellectual Property Organization (WIPO).

		Extension of protection of international registrations of marks originating from Madrid Union countries to Germany							
		P	rocedures conclud		Requests	Requests received			
Year	Requests received ²	Full grant of protection	Grant of protection in part	Refusal, surrender or cancellation in the International Register	Cases pending at the end of the year	Oppositions	Appeals		
2015	4,528	3,441	302	459	2,955	299	18		
2016	3,467	3,043	380	415	2,580	192	14		
2017	4,678	3,426	311	512	3,006	280	23		
2018	4,828	3,590	264	711	3,268	361	17		
2019	5,196	4,123	355	701	3,277	215	14		

² Not including other requests and not including renewals

3.5 National trade mark applications by German Länder (residence or principal place of business of the applicant)

German Länder	2015	2016	2017	2018	2019
Baden-Württemberg	8,407	8,241	8,759	8,339	8,537
Bavaria	11,343	11,830	12,497	12,308	12,291
Berlin	5,057	5,245	5,338	5,461	5,465
Brandenburg	999	1,121	1,178	1,074	1,205
Bremen	544	522	586	535	604
Hamburg	3,608	3,569	3,380	3,501	3,444
Hesse	5,344	5,346	5,512	5,211	5,558
Mecklenburg-Western Pomerania	606	651	629	578	671
Lower Saxony	4,891	4,558	4,831	4,670	5,113
North Rhine-Westphalia	14,722	14,881	15,145	14,562	15,557
Rhineland-Palatinate	3,029	3,047	3,078	3,039	3,153
Saarland	717	564	616	548	582
Saxony	2,091	2,077	2,111	2,049	2,062
Saxony-Anhalt	717	690	644	767	816
Schleswig-Holstein	2,314	2,182	2,198	2,210	2,277
Thuringia	870	797	940	810	937
Germany	65,259	65,321	67,442	65,662	68,272

3.6 Trade mark applications, percentages and number of applications per 100,000 inhabitants by German Länder (residence or principal place of business of the proprietor)

		2018		2019			Change from	
German Länder	Applications	Percentage	Applications per 100,000 inhabitants	Applications	Percentage	Applications per 100,000 inhabitants	2018 to 2019 in %	
North Rhine-Westphalia	14,562	22.2	81	15,557	22.8	87	+ 6.8	
Bavaria	12,308	18.7	94	12,291	18.0	94	- 0.1	
Baden-Württemberg	8,339	12.7	75	8,537	12.5	77	+ 2.4	
Hesse	5,211	7.9	83	5,558	8.1	89	+ 6.7	
Berlin	5,461	8.3	150	5,465	8.0	150	+ 0.1	
Lower Saxony	4,670	7.1	59	5,113	7.5	64	+ 9.5	
Hamburg	3,501	5.3	190	3,444	5.0	187	- 1.6	
Rhineland-Palatinate	3,039	4.6	74	3,153	4.6	77	+ 3.8	
Schleswig-Holstein	2,210	3.4	76	2,277	3.3	79	+ 3.0	
Saxony	2,049	3.1	50	2,062	3.0	51	+ 0.6	
Brandenburg	1,074	1.6	43	1,205	1.8	48	+ 12.2	
Thuringia	810	1.2	38	937	1.4	44	+ 15.7	
Saxony-Anhalt	767	1.2	35	816	1.2	37	+ 6.4	
Mecklenburg- Western Pomerania	578	0.9	36	671	1.0	42	+ 16.1	
Bremen	535	0.8	78	604	0.9	88	+ 12.9	
Saarland	548	0.8	55	582	0.9	59	+ 6.2	
Germany	65,662	100	79	68,272	100	82	+ 4.0	

3.7 National trade mark applications by leading classes

Class	Class includes 1	2018	2019	+/- in %
1	Chemicals for use in industry, science and photography, as well as in agriculture	851	993	+ 16.7
2	Mainly paints, varnishes, lacquers	239	286	+ 19.7
3	Mainly cleaning preparations and toiletry preparations	2,140	2,366	+ 10.6
4	Mainly industrial oils, lubricants, fuels and illuminants	357	341	- 4.5
5	Mainly pharmaceuticals and other preparations for medical purposes	2,224	2,288	+ 2.9
6	Mainly common metals and their alloys and goods made of common metals not included in other classes	835	887	+ 6.2
7	Mainly machines, machine tools, motors and engines	1,394	1,617	+ 16.0
8	Hand tools and implements (hand-operated); cutlery; side arms; razors	409	470	+ 14.9
9	Computer hardware and software and other electrical or electronic apparatus of a scientific nature	4,804	5,169	+ 7.6
10	Surgical, medical, dental and veterinary apparatus and instruments	856	896	+ 4.7
11	Apparatus for lighting, heating, steam generating, cooking, cooling, drying, ventilating, water supply and sanitary purposes	1,242	1,287	+ 3.6
12	Vehicles; apparatus for locomotion by land, air or water	1,231	1,494	+ 21.4
13	Firearms; ammunition and projectiles; explosives; fireworks	111	102	- 8.1
14	Mainly precious metals and their alloys and goods made of precious metals or coated therewith, not included in other classes	807	862	+ 6.8
15	Musical instruments	128	137	+ 7.0
16	Mainly paper, goods made from that material and office requisites	1,915	2,030	+ 6.0
17	Mainly rubber, plastics in extruded form for use in manufacture; packing, stopping and insulating materials; non-metallic flexible pipes	260	265	+ 1.9
18	Leather and imitations of leather, and products made therefrom, travelling bags and umbrellas	984	974	- 1.0
19	Mainly non-metallic building and construction materials and asphalt	587	565	- 3.7
20	Mainly furniture, mirrors, picture frames and goods made, for example, of wood, cork, reed, cane, wicker	1,298	1,299	+ 0.1
21	Mainly household or kitchen utensils and containers; combs and sponges; articles for cleaning purposes, glassware, porcelain and earthenware	981	1,273	+ 29.8
22	Mainly ropes, string, nets, tents, awnings, tarpaulins, sails, sacks and bags (not included in other classes)	102	162	+ 58.8
23	Yarns and threads, for textile use	33	33	0.0
24	Textiles and textile goods not included in other classes; bed blankets; tablecloths	420	433	+ 3.1

Class	Class includes 1	2018	2019	+/- in %
25	Clothing, footwear and headgear	3,487	3,813	+ 9.3
26	Lace and embroidery, ribbons and braid; buttons, hooks and eyes, pins and needles; artificial flowers	112	123	+ 9.8
27	Carpets, rugs, mats and matting, linoleum and other materials for covering existing floors; wall hangings (non-textile)	107	112	+ 4.7
28	Games, toys and playthings; gymnastic and sporting articles	1,019	1,106	+ 8.5
29	Meat, fish, poultry; frozen, dried and cooked fruits and vegetables	1,370	1,359	- 0.8
30	Mainly foodstuffs of plant origin, prepared or preserved for consumption, as well as auxiliaries intended for improving the flavour of food	2,232	2,367	+ 6.0
31	Mainly grains and agricultural, horticultural and forestry products; live animals; fresh fruits and vegetables; seeds	690	670	- 2.9
32	Beers; mineral and aerated waters and other non-alcoholic beverages; fruit beverages and fruit juices; syrups and other preparations for making beverages	1,456	1,343	- 7.8
33	Alcoholic beverages (except beers)	1,828	1,879	+ 2.8
34	Tobacco; smokers' articles; matches	813	690	- 15.1
35	Services such as office functions, advertising and business management	8,640	8,906	+ 3.1
36	Services relating to insurance, financial affairs, monetary affairs, and real estate affairs	2,661	2,610	- 1.9
37	Building, construction; repair services; installation services	1,222	1,397	+ 14.3
38	Telecommunications services	832	831	- 0.1
39	Services related to transport, packaging and storage of goods, and travel arrangement	1,313	1,271	- 3.2
40	Services related to the treatment of materials	612	601	- 1.8
41	Services in the area of education, training, entertainment, sporting and cultural activities	8,461	8,744	+ 3.3
42	Services, for example, scientific, industrial or technological services, engineering and computer programming	3,530	3,470	- 1.7
43	Services for providing food and drink; temporary accommodation	2,309	2,354	+ 1.9
44	Medical services; veterinary services; hygienic and beauty care for human beings or animals; agriculture, horticulture and forestry services	2,558	2,700	+ 5.6
45	Legal services; security services for the physical protection of tangible property and individuals; personal and social services rendered by others to meet the needs of individuals	984	976	- 0.8
	Not classified	90	82	- 8.9

¹ Class headings in accordance with the current version of the Nice Classification are available at: https://www.dpma.de/english/trade_marks/classification/goods_and_services/nice_classification/index.html

3.8 Top companies and institutions in terms of trade mark registrations in 2019 (registrations of trade marks pursuant to section 41 Trade Mark Act)

	Proprietor ¹	Principal plac	e of business	Registrations
1	Bayerische Motoren Werke AG	DE		94
2	MERCK KGaA	DE		84
3	HARIBO Holding GmbH & Co. KG	DE		78
4	Brillux GmbH & Co. KG	DE		59
5	Henkel AG & Co. KGaA	DE		55
6	VOLKSWAGEN AG	DE		53
7	Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.	DE		48
8	Katjes Fassin GmbH + Co. KG	DE		47
9	DAW SE	DE		45
9	Heinrich Bauer Verlag KG	DE		45
11	Dermapharm AG	DE		43
11	Evonik Operations GmbH	DE		43
13	August Storck KG	DE		42
14	Daimler AG	DE		39
15	Rotkäppchen - Mumm Sektkellereien GmbH	DE		38
16	AUDI AG	DE		33
16	Nordbrand Nordhausen GmbH	DE		33
18	Bothmer Pyrotechnik GmbH	DE		32
18	Dirk Rossmann GmbH	DE		32
20	Vodafone GmbH	DE		31

 $^{^{\}mbox{\tiny 1}}$ Without taking into account any business group affiliations

4. Designs

4.1 Applications and procedures concluded

		Filir	ngs ¹		Procedures concluded				
	Desig	gns in		Designs by registration					
Year	applications with multiple designs	applications with one design	Total			domestic	without registration	Total	
2015	55,235	2,679	57,914	47,099	49,979	38,552	4,492	54,471	
2016	54,535	2,774	57,309	48,040	48,215	40,727	4,756	52,971	
2017	44,066	2,677	46,743	40,476	47,175	39,840	5,804	52,979	
2018	41,645	2,416	44,061	39,018	47,646	42,463	5,569	53,215	
2019	40,262	2,341	42,603	35,902	40,812	35,893	3,739	44,551	

¹ Provisional for 2019, as the actual number of designs applied for is not known before completion of the registration procedure.

4.2 Registered designs by German Länder (residence or principal place of business of the owner)

German Länder	2015	2016	2017	2018	2019
Baden-Württemberg	5,735	5,749	6,276	6,664	6,694
Bavaria	8,757	10,539	8,402	8,451	7,788
Berlin	2,137	1,925	1,638	1,965	1,758
Brandenburg	257	392	510	319	297
Bremen	213	167	273	133	110
Hamburg	953	928	1,214	919	845
Hesse	2,006	1,967	1,824	1,574	1,363
Mecklenburg-Western Pomerania	275	258	165	143	92
Lower Saxony	2,706	3,009	3,040	2,754	2,403
North Rhine-Westphalia	10,000	10,952	11,011	13,324	10,912
Rhineland-Palatinate	1,812	1,180	1,435	1,598	1,011
Saarland	195	309	244	211	162
Saxony	1,428	1,669	1,271	1,830	1,296
Saxony-Anhalt	350	247	327	458	274
Schleswig-Holstein	1,468	1,112	1,880	1,730	648
Thuringia	260	324	330	390	240
Germany	38,552	40,727	39,840	42,463	35,893

4.3 Pending designs (applied for) and registered designs in force; invalidity proceedings

	Pending designs	Extensions	ons Designs Registered and	s Registered		Invalidity p	roceedings	
Year	(applied for) at the end of the year	of registered designs	maintained/ renewed	Cancellations	in force at the end of the year	Applications filed	Proceedings concluded	
2015	27,790	2,443	15,076	42,171	313,452	56	27	
2016	32,086	2,929	15,279	48,603	313,064	70	30	
2017	25,802	3,552	15,937	47,716	312,523	63	90	
2018	16,589	3,599	14,563	46,454	313,715	31	71	
2019	14,625	3,372	14,798	51,458	303,069	29	48	

4.4 Registered designs, percentages and designs per 100,000 inhabitants by German Länder (residence or principal place of business of the owner)

		2018		2019			Change from
German <i>Länder</i>	Registered designs	Percentage	Registered designs per 100,000 inhabitants	Registered designs	Percentage	Registered designs per 100,000 inhabitants	2018 to 2019 in %
North Rhine-Westphalia	13,324	31.4	74	10,912	30.4	61	- 18.1
Bavaria	8,451	19.9	65	7,788	21.7	60	- 7.8
Baden-Württemberg	6,664	15.7	60	6,694	18.6	60	+ 0.5
Lower Saxony	2,754	6.5	35	2,403	6.7	30	- 12.7
Berlin	1,965	4.6	54	1,758	4.9	48	- 10.5
Hesse	1,574	3.7	25	1,363	3.8	22	- 13.4
Saxony	1,830	4.3	45	1,296	3.6	32	- 29.2
Rhineland-Palatinate	1,598	3.8	39	1,011	2.8	25	- 36.7
Hamburg	919	2.2	50	845	2.4	46	- 8.1
Schleswig-Holstein	1,730	4.1	60	648	1.8	22	- 62.5
Brandenburg	319	0.8	13	297	0.8	12	- 6.9
Saxony-Anhalt	458	1.1	21	274	0.8	12	- 40.2
Thuringia	390	0.9	18	240	0.7	11	- 38.5
Saarland	211	0.5	21	162	0.5	16	- 23.2
Bremen	133	0.3	19	110	0.3	16	- 17.3
Mecklenburg- Western Pomerania	143	0.3	9	92	0.3	6	- 35.7
Germany	42,463	100	51	35,893	100	43	- 15.5

4.5 Top companies and institutions in terms of registered designs at the DPMA in 2019 (without partnerships organised under the Civil Code)

	Proprietor ¹	Principal place	ce of business	Registered designs
1	Miroglio Textile S.r.l.		IT	2,099
2	Betty Barclay Group GmbH & Co. KG	DE		1,537
3	Goebel Porzellan GmbH	DE		654
4	WOFI LEUCHTEN Wortmann & Filz GmbH	DE		632
5	AstorMueller AG		СН	623
6	OLYMP Bezner KG	DE		622
7	monari GmbH	DE		608
8	Albani Group GmbH & Co. KG	DE		600
9	VOLKSWAGEN AG	DE		413
10	The House of Art GmbH	DE		381
11	Daimler AG	DE		356
12	Nova Via Polstermöbel GmbH	DE		355
13	SHOE CONZEPT Handels GmbH	DE		303
14	VISUAL STATEMENTS GmbH	DE		291
15	Wolf Möbel GmbH & Co. KG	DE		286
16	InnoTex Merkel & Rau GmbH	DE		280
17	REHAU AG + Co	DE		275
18	H.W. Hustadt Besitz- und Beteiligungsgesellschaft mbh & Co.KG	DE		235
	Swing-Modelle Bekleidungs-GmbH	DE		216
	Innostyle-Möbelvertriebs GmbH & Co. KG	DE		204
	Koinor Polstermöbel GmbH & Co. KG	DE		203
	Stolkom Sp. z o.o.		PL	200
	Best Light Production Ltd.	DE		195
	August Gerstner Ringfabrik GmbH & Co. KG	DE		184
	GEMINI Schuhproduktions- und Vertriebs GmbH	DE		182
26	Paul Green GmbH	DL DL	AT	176
	INDEX LIVING GmbH	DE	AI .	170
	Alfons Venjakob GmbH & Co. KG	DE		162
	Wohnmanufactur Grünberger s.r.o.	DL DL	CZ	151
	BTV Batovi Handels- & Vertriebs UG (haftungsbeschränkt) & Co. KG	DE	CZ	150
	CAWÖ Textil GmbH & Co. KG	DE		143
		DE		
	Dr. Ing. h.c. F. Porsche AG	DE		142
	Willibald Völsing KG			142
	Dallmer GmbH & Co. KG Franz Schröder GmbH & Co. KG	DE DE		141
				138
	Räder GmbH Heinrich Sieber & Co - GmbH & Co. KG	DE DE		135
				134
	Scheurich GmbH & Co. KG Keramikfabrik	DE		134
	Bayerische Motoren Werke AG	DE	110	127
	Ford Global Technologies, LLC	5.5	US	127
	JOB-Jockenhöfer Order Börse GmbH	DE		124
	inStein GmbH	DE		118
	SMC Corp.		JP	116
	ambigence GmbH & Co. KG	DE		111
	Think Schuhwerk GmbH		AT	111
	Fehn GmbH & Co. KG	DE		110
	Artis Design GmbH	DE		109
	Oberland M & V GmbH	DE		109
	BRE-Light GmbH	DE		107
50	Candy Polstermöbel GmbH	DE		106

¹ Without taking into account any business group affiliations

5. Register of anonymous and pseudonymous works

	Works in respect of which the author's true name was	Applicants 1	Procedures concluded		Pending applications	
Year	filed for registration	Applicants ¹	by registration	without registration	at the end of the year	
2015	3	2	3	2	0	
2016	3	3	1	2	0	
2017	0	0	0	0	0	
2018	3	2	2	1	0	
2019	4	3	4	0	0	

 $^{^{\}rm 1}\,{\rm Some}$ applicants may have submitted several applications or applications for several works.

6. Patent attorneys and representatives

		Patent attorneys 1		Foreign patent attorneys as members of the German Chamber of Patent Attorneys	Patent attorney
Year	entered in register	Cancellations	registered at the end of the year	(Sec. 20 Act on the Activities of European Patent Attorneys in Germany) ¹	companies ¹
2015	158	59	3,543	19	17
2016	146	59	3,630	21	19
2017	183	51	3,762	29	21
2018	153	62	3,853	32	26
2019	156	78	3,931	36	29

 $^{^{\}scriptscriptstyle 1}$ Source: German Chamber of Patent Attorneys

	Qualifying examination for patent attorneys		General powers of attorney		
Year	Number of examinees	Sucessful candidates	entered in the register	cancelled	registered at the end of the year
2015	157	150	733	105	32,120
2016	160	155	792	88	32,824
2017	189	183	847	683	32,988
2018	171	165	702	70	33,620
2019	144	137	767	293	34,094

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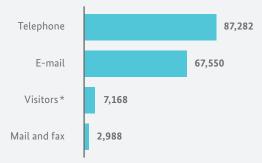
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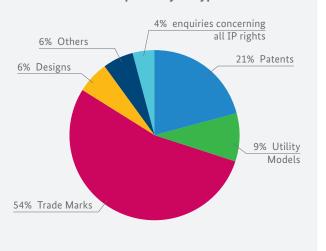
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