

Annual Report 2021



IP rights in f



es

INFO Trade marks

31,083

-16.3%

in total and change

Online

applications

2./60

-29.5%



868,401 trade marks in force on 31/12/2021

91,613 (+15.1%) registration procedures concluded

68,597 (+13.5%) with registration



INFO Designs

270,447

designs in force on 31/12/2021

5,607 (-7.5%) procedures concluded for a total of 34,487 designs*

4,775 (-6.8%) with registration for a total of 31,083 designs *

* A multiple application may contain up to 100 designs.

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Dear Reader

We live in disturbing times. War, climate change, pandemic: Several epochal crises are challenging us at the same time. We at the German Patent and Trade Mark Office are not excluded from this, of course. We, too, are shocked by Russia's war of aggression against Ukraine. As a modern, cosmopolitan service provider for IP rights, we, together with our customers and partners around the world, are part of a network based on international cooperation. The development of innovations and the creation of trade marks and designs also mean competition. This is a good thing, because competition, as we understand it, is constructive, productive, peaceful and geared towards progress and prosperity. Our ideas of international cooperation stand in the greatest possible contrast to Russia's destructive actions.

You cannot solve every crisis or every problem by technical means. However, where technology can make a contribution, we see ourselves as part of the solution. Because we protect your innovations! And we tackled this task with vigour in the past year. Our examiners granted patents for 21,113 inventions in 2021. This is almost a quarter more than in the same period of the previous year. In total, our colleagues concluded 48,489 patent procedures – the largest amount in more than 30 years. We also saw record numbers in the trade mark area: 68,597 new national trade marks were entered in the register by our experts – more than ever before.

We are very hopeful that innovation will contribute to solving global problems, not least with regard to climate change. Two central topics in this context are climate-friendly mobility and power generation from renewable energy sources. In this annual report, we have explored how patent applications are developing in these areas. A dynamic innovation landscape is indeed necessary in the field of renewable energy sources in order to become, as soon as possible, less dependent on fossil fuels and thus foster the energy sovereignty of Germany and Europe. Carsten Fink, Chief Economist of the World Intellectual Property Organization, whom we interviewed for this report, explains how Germany is doing overall in the global innovation ecosystem.

But our annual report does not only offer interesting stories on technical IP rights. You will also learn, for example, how trade marks, known as use-based trade marks, can be effective without registration. And product designer Nadja Roth explains from her point of view why registered designs are so important for technical devices too.

I hope that this annual report will be an exciting read for you. Stay confident, curious and healthy despite all the crises!

Comelia R. duty - Schaffer

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

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.

The DPMA is the German centre of expertise for all intellectual property rights and operates within the portfolio of the Federal Ministry of Justice. We grant patents, register utility models, trade marks and designs and manage these rights. Furthermore, we inform the public about industrial property rights, implement federal innovation strategies and develop the national, European and international IP systems further.

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 and legal divisions as well as patent, trade mark and utility model divisions, arbitration boards

Jena

Sub-office with administrative and IT units as well as design division, another trade mark division and three patent divisions that are being established

> Berlin

DPMA Information and Service Centre (DPMA-IDZ)

→ Hauzenberg

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

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 40 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 19 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

- » 16 specialist areas in four divisions, occupational 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)



https://www.dpma.de/english/our_office/about_us/organisation/ index.html

Senior management



President Cornelia Rudloff-Schäffer



Vice-President Bernd Maile



Vice-President Ulrich Deffaa

Heads of the Directorates General



Directorate General 1 Patents and Utility Models and

Directorate General 2 Information (acting head) Dr Maria Skottke-Klein



Directorate General 3 Trade Marks and Designs Barbara Preißner



Directorate General 4 Administration and Law Katharina Mirbt

PATENTS

You will find our extensive statistics on patents in the chapter "Statistics" starting on page 73.

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Performance figures in patent examination

The German Patent and Trade Mark Office (DPMA) substantially improved its performance over the past year and concluded more patent procedures than at any time in more than 30 years. The office concluded 48,489 procedures in total, 16.1% more than in the previous year.

The number of patent grants in particular reached a record level: In 2021, the examining sections of the DPMA issued positive decisions for 21,113 inventions an increase of 22.0% compared to the previous year. In this way, the DPMA significantly contributes to the competitiveness of enterprises, makes them more attractive to investors and facilitates more advantageous cooperation ventures. The proportion of procedures completed by the grant of a patent (grant rate) also rose to 43.5% (2020: 41.4%). In 10,322 cases (2020: 8,454), the application was refused - this corresponds to a proportion of 21.3% of completed procedures (2020: 20.2%). 17,054 of the examination procedures were terminated because the applicant withdrew the application or failed to pay the fees, which accounts for 35.2% of the concluded procedures. The high number of concluded procedures meant that the DPMA was able to reduce its backlog of pending examination procedures for the first time in many years.

Development of patent applications

Although the number of patent applications declined in 2021, compared to 2020, by 5.7% to 58,568, the newly filed applications were still at a high level, highlighting the importance of Germany as a location for innovation.

As in the previous year, the economic effects of the coronavirus pandemic probably play a crucial role in the ongoing decline in application numbers. Resurgent



Patent applications at the German Patent and Trade Mark Office

infection rates and multiple lockdowns made it difficult for many companies and institutions to push ahead with the technical development and the preparation of patent applications as usual.

The major part of the 58,568 patent applications received last year, that is 51,668, were filed directly with our office. 6,900 applications entered the national phase as PCT applications filed in accordance with the Patent Cooperation Treaty (PCT) through the World Intellectual Property Organization (WIPO) in Geneva.

The option of filing patent applications electronically is still very popular with our customers, as can be seen from a further increase by 1.6 percentage points in online applications to 88.5% of all national patent applications filed.

At the end of 2021, 134,715 national patents were in force, i.e. 1.8% more than in the previous year.

Baden-Württemberg

Р	Patent aplications in 2021 by countries of origin (applicant's seat or place								
oj	of residence) (applications at the DPMA and PCT applications								
in	the national	phase)							

	Applications	Percentage
Germany	39,812	68.0
Japan	6,128	10.5
USA	5,892	10.1
Republic of Korea	1,558	2.7
Switzerland	866	1.5
Austria	782	1.3
Taiwan	753	1.3
China	568	1.0
France	396	0.7
Sweden	320	0.5
Others	1,493	2.5
Total	58,568	100



Patent applications by German Länder in 2021

(applications per 100,000 inhabitants and number of applications)

Origin of patent applications

In 2021, there was a decrease by 5.8% in applications received from applicants having their domicile or principal place of business in Germany. These applicants filed 39,812 applications in total. This means that the percentage of applications from Germany remained stable at 68% compared to the previous year. The number of patent applications from abroad again dropped to 18,756 (2020: 19,841).

Last year, 3,366 applications came from European countries (2020: 3,228) and 15,390 from non-European countries (2020: 16,613).

There was an increase of 30.7% in applications from France. The number of applications from China (13.8%) and from Switzerland (11.5%) also increased. By contrast, applications from Japan (-15.5%) continued to decrease. The applications from the United States stayed almost flat (+0.2%).

Patent applications by German Länder

The patent applications from Germany can be allocated to individual German *Länder* according to the residence or the principal place of business of the applicant. The German *Länder* ranking is again led by Baden-Württemberg with 13,570 applications (-0.8%), followed by Bavaria with 11,875 applications, which comes again second in the ranking (-6.5%). From North Rhine-Westphalia, which came third, 5,675 applications were received (-11.3%). Lower Saxony came in fourth place with 2,982 applications (-7.8%). Rhine-land-Palatinate was the only German *Länder*, there was a decline in applications compared to the previous year.

If we compare the filing figures to the respective numbers of inhabitants, Baden-Württemberg and Bavaria were again in the lead with 122 applications and 90 applications respectively per 100,000 population. Lower Saxony again came in third (37).

The most active companies and institutions

With 3,966 applications, Robert Bosch GmbH again led the ranking of the most active patent applicants in 2021. Bayerische Motoren Werke AG came second with 1,860 applications in 2021, thus relegating Schaeffler Technologies AG & Co. KG to third place with 1,806 applications.

Daimler AG and ZF Friedrichshafen AG shared 4th place with 1,315 registrations each. The sixth place went to VOLKSWAGEN AG (1,243 applications), thus relegating Ford Global Technologies, LLC (997 applications), which had taken sixth place in the previous year, to seventh place and AUDI AG (747 applications) to eighth place.

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

Inventors and applicants

Last year, 4.5% of our applicants filed more than ten applications each (2020: 4.2%). This means that 69% of all applications were filed by this group of applicants, referred to as large patent applicants.

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. However, in the case of employees with released inventions or independent inventors, the applicant and the inventor are usually identical. In 2021, the applicant and the inventor were identical in 5.7% of the applications (2020: 5.9%).

Main technical areas of patent activity

The International Patent Classification (IPC) is used worldwide as a standard for classifying technological contents. A number-and-letter code organises the entire field of technology in more than 70,000 units. At the DPMA, every patent application is attributed to one or several IPC classes according to its technical content and forwarded to the examining section in charge at our office.

In 2021, too, the technology field "Transport" ranks first among the top technology fields in terms of filing activity

TOP 5 Fields of technology¹



Applications at the DPMA and PCT applications that have entered the national phase

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

with 10,482 applications, which means, however, a slight decline by 2.8% compared to the figure for the previous year. A large proportion of applications came from the automotive industry.

With 7,168 applications (+2.0%), the technology field "Electrical machinery and apparatus, energy" again ranked second, followed by "Measurement", which now comes in third, with 4,490 applications (-2.0%).

In 2021, we saw a substantial decline in the number of applications in the technology field "Medical technology" (-17.0%) and in the technology field "Other consumer goods" (-26.0%). In the field "Medical technology", this concerns, among others, subclasses for disinfection and sterilisation technology and, in the field "Other consumer goods", it concerns protective clothing and face masks. Applications in these areas had skyrocketed in the first coronavirus crisis year of 2020. This trend did not continue in 2021. Compared to the number of applications in 2019, the number of applications in the field of medical technology fell by 8.7%.

	2017	2018	2019	2020	2021
Examination requests received	47,450	47,133	47,344	43,337	43,155
- including requests filed together with applications	26,540	26,201	26,000	23,383	22,671
Search requests pursuant to section 43 Patent Act	15,603	15,679	15,843	14,243	14,920
Concluded searches pursuant to section 43 Patent Act	14,571	14,240	14,943	16,451	15,174
Examination procedures concluded (final)	36,850	38,110	40,185	41,753	48,489
Examination procedures not yet concluded in the patent divisions at the end of the year	211,759	220,500	227,274	228,450	222,697

Selected data on patent procedures

Selected data on patent examination and search procedures

The decline in application numbers due to the pandemic did not further continue for filed requests for the examination of patentability pursuant to section 44 of the Patent Act (*Patentgesetz*). 43,155 examination requests mean that their level is stable.

By conducting a comprehensive and thorough search, the patent examiners identify the relevant state of the art during the examination procedure. The state of the art identified will be taken into consideration to examine whether the subject matter of the application is new and involves an inventive step. It is also examined whether the subject matter of the application is industrially applicable and whether exclusions from patentability possibly exist. Further criteria, for example sufficient disclosure must be met. Then, the examining section can decide whether and to what extent a patent can be granted or whether the application must be refused.

The number of search requests pursuant to section 43 of the Patent Act increased by 4.8% to 14,920 in 2021. Search requests are used to assess patentability in order to file international applications, if promising. The conclusion to be drawn from both key figures is that the demand for patents is not diminishing. However, in 2021, 7.8% fewer isolated searches under section 43 of the Patent Act were concluded and 15,174 search reports were sent out.

Appeal proceedings at the Federal Patent Court

If a party files an appeal against a decision - a patent granted not as requested or a refusal or a decision in opposition proceedings - the Technical Boards of Appeal of the Federal Patent Court will then decide on the further course of action. Compared to the previous year, we again saw a marked decline in appeal proceedings brought before the Technical Boards of Appeal: A total of 123 appeal proceedings were received (-44.1%). The number of concluded appeal proceedings also fell by 21.4% to 312 in 2021. At the end of 2021, 367 appeal proceedings were still pending at the Federal Patent Court.

IN FOCUS

Selected fields of technology

Digitisation

The positive trend in the number of patent applications from the field of digitisation, which has been ongoing for ten years, also continued in 2021. For the analysis we took into account the applications published by the DPMA and the European Patent Office (EPO) with effect in Germany. Patent applications are published after 18 months. Therefore, the analysis can only show to some extent the effects of the coronavirus pandemic in Germany from March 2020 onwards.

Published applications again increased by 4.3% compared to the previous year in the five selected sub-sectors of digital technologies – audio-visual technology, digital communication, computer technology, IT methods for management and semiconductors. The application figures from China in particular increased significantly (+15.1%). The applicants still include small and medium-sized enterprises, but also large companies operating at an international level.

Computer technology

The sector computer technology ranked first in 2021. With a steep increase (+6.3%) to 15,492 applications it has surpassed the sector of digital communication. Applications in this area focus on systems for image data processing, speech recognition or information and communication technology. Developments that use artificial intelligence or involve machine learning are playing a big role in this field.

Digital communication

With a total of 15,132 national and international patent applications, digital communication was only the second largest of the five sub-sectors (+1.4%) in 2021 and no longer at the top like in the two previous years.

Since 2011, the number of applications has risen by more than 94%. Most applications focus on the transmission of digital information, wireless communication networks or what has become known as the Internet of Things (IoT). Furthermore, this area also covers patent applications relating to the new 5G standard in mobile communication.

Due to the contact restrictions during the coronavirus crisis, it was imperative for many companies to further expand these digital communication technologies. These include the communication of machines, control devices and sensors, to enable remote control – for example from a work station at home. In many companies, the use of such highly networked systems on an industrial scale for intelligent process and production control ("smart factory") has become commonplace. At home, too, these technologies are being used for remote-controlled coordination of air conditioning, lighting or electrical appliances ("smart home"). Patent applications effective in Germany¹ by country (residence or principal place of business of the first applicant)

Computer technology^{2,3}

Country	2020	2021	Change compared
USA	5,655	5,943	+5.1%
China	1,513	2,017	+33.3%
Germany	1,600	1,814	+13.4%
Japan	1,577	1,574	-0.2%
Republic of Korea	1,055	1,059	+0.4%
Others	3,169	3,085	-2.7%
Total [®]	14,569	15,492	+6.3%

Digital communication^{2,4}

Country	2020	2021	Change compared
China	4,032	4,308	+6.8%
USA	4,218	4,115	-2.4%
Japan	1,295	1,336	+3.2%
Sweden	1,223	1,267	+3.6%
Republic of Korea	1,249	1,176	-5.8%
Others	2,904	2,931	+0.9%
Total [®]	14,921	15,132	+1.4%

Audio-visual technology^{2,5}

Country	2020	2021	Change compared
USA	1,119	1,234	+10.3%
China	743	1,055	+42.0%
Japan	1,099	1,029	-6.4%
Germany	622	631	+1.4%
Republic of Korea	546	607	+11.2%
Others	1,061	1,116	+5.2%
Total [®]	5,190	5,671	+9.3%

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

² According to WIPO IPC concordance table, available at: www.wipo.int/ipstats/en/index.html#resources. IPC classes valid at the time of retrieval counted proportionately; without claim to completeness; results may be included that do not relate to digitisation.

³ G06C, G06D, G06E, G06F, G06G, G06J, G06K, G06M, G06N, G06T, G06V, G10L, G11C, G16B, G16C, G16Y, G16Z.

⁴ H04L, H04N 21, H04W.

⁵ 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.

⁶ H01L. ⁷ G06Q.

⁸ Due to rounding differences, the values added together deviate from the total.

Audio-visual technology

In the year under review, the sector audio-visual technology was the third largest, with 5,671 applications (+9.3%). The pandemic-induced restrictions prompted more and more people to use audio and video systems, both profession-ally and privately. Audio or video conferences enable entire teams to communicate in real time without being in the same place.

The audio-visual technology field also covers applications in the area of virtual reality (VR) and what is known as augmented reality (AR). Virtual reality refers to a purely digital, computer-created image of the real world. For example, virtual reality can be used to simulate surgical procedures in order to train medical staff for real-life usage. It is also possible to make fully virtual trips or journeys easily while staying at home. The users need virtual reality glasses that allow them to immerse themselves in a completely computer-generated world.

Augmented reality, on the other hand, is the interaction of the digital and the analogue world. The users can be shown additional virtual information that is superimposed on their real-world environment via glasses or simply

Semiconductors ^{2, 6}

Country	2020	2021	Change compared
Japan	1,053	1,020	-3.1%
USA	1,063	884	-16.8%
Republic of Korea	564	820	+45.4%
Taiwan	470	695	+47.9%
Germany	723	646	-10.7%
Others	1,066	1,099	+3.1%
Total ⁸	4,938	5,163	+4.6%

IT methods for business management^{2,7}

Country	2020	2021	Change compared
USA	961	982	+2.2%
Germany	384	373	-2.9%
Japan	324	358	+10.5%
China	122	129	+5.7%
Republic of Korea	102	103	+1.0%
Others	769	711	-7.5%
Total ⁸	2,663	2,656	-0.3%

the camera of a smartphone. A common example is displaying virtual markers during the analysis of a football match. The scene is shown in real time and overlaid with the virtual trajectory of a ball or the distances to players of the opposing team.

Semiconductors

Compared to the previous year, we also saw an increase of 4.6% in the sector of semiconductors. As before, applications have primarily focussed on semiconductor components and solid state electrical components or assemblies of components. These functional components are absolutely essential for making fast-progressing digitisation possible in all fields of application.

IT methods for business management

This was the only sub-sector that saw a slight decline (-0.3%) in the number of applications, which amounted to 2,656. Applications in this field describe IT methods, for example for business management purposes, for industrial manufacturing (4IR), autonomous delivery systems (robots and drones) and networked mobility such as autonomous driving. The networking of an increasing number of terminal devices, control systems and machines generates ever larger amounts of data (big data). Large volumes of data can be processed and stored in a decentralised way by using what is known as cloud computing. Servers, storage media, databases or analysis options are made available via the Internet for this purpose.

Innovation against climate change

German companies are leaders in the field of climate-friendly technologies in the German market. As measured by the number of patent applications effective in Germany, German companies, research institutions and independent inventors are leading the rankings of renewable energy sources and technologies that support climate-friendly mobility.

However, taken as a whole, the dynamism in innovation differs markedly between the two fields of technology: While innovation activity in e-mobility and alternative energy sources has increased significantly in recent years, the development of alternative power generation has stagnated for years and is far below the level of 2012. Last year, the number of patent applications effective in Germany published by the DPMA and the EPO even decreased slightly, compared to the previous year.

Automotive technology/transport

Automotive technology still is a top field of technology in terms of applications in Germany. Application activity has shifted from the internal combustion engine to e-mobility in recent years.

For this analysis, we studied the applications for internal combustion engines, electric motors, batteries and fuel cells as well as what are known as electric fuels (referred to as e-fuels). This relatively new development field comprises synthetic fuels allowing engines to run in a climate-neutral manner as they are produced using electricity from renewable energy sources and carbon dioxide taken from the atmosphere.



Electric drive/internal combustion engine

In 2021, for the first time in several years, the number of published applications for purely electric vehicles saw a slight drop of 3.1%.

As in the previous years, the technical focus of applications is mostly on a costeffective and space-saving arrangement of the electric drive unit. To increase driving comfort and provide more space in the car interior, use is made of smaller batteries and space-saving arrangements of batteries.

For internal combustion engines we have seen a decline in the number of published applications for some years. Compared to 2020, the number again dropped by 25.6%. The development departments currently focus on designing engines that are cost-effective and operate at optimum efficiency and on removing nitric oxides from exhaust gases of diesel engines in order to further reduce climate-damaging greenhouse gas emissions.

Batteries/fuel cells

The upward trend in the field of alternative energy sources for electric motors of recent years has continued. The number of applications in the field of batteries increased by +4.9%. Compared to the previous year, the number of applications concerning fuel cells also increased substantially by 38.0% and confirms the upward trend observed over the past few years.

Electric motors can also be powered by hydrogen. Fuel cells are needed for this purpose. The gaseous hydrogen reacts with oxygen in a chemical process producing water, releasing the energy stored in the hydrogen as electricity. This electricity powers the electric motor without producing any harmful emissions. Fuel cells are wear-resistant and low-maintenance. An advantage of hydrogen-powered vehicles is that they have a longer range than battery electric vehicles.

Renewable energy sources

Renewable energy sources are geothermal energy, wind and solar energy, biomass and hydropower. They can make a substantial contribution to climate protection, thereby slowing down climate change. Either processes taking place in nature are harnessed or electricity, heat or fuel is generated from renewable raw materials. Germany also held a leading position in the ranking of countries with the highest numbers of applications in this field. Germany took first place in solar technology, hydropower and other regenerative energy sources such as geothermal energy and biogas. However, the ranking for wind generators, which represent the field of technology with by far the most applications filed, was led by Denmark; Germany came second.

Overall, the level of applications filed in the field of renewable energy sources was markedly lower than ten years ago. The number of published patent applications continued to decline (-5.6%) – as in previous years. Only the field of solar technology showed a slight upward trend (+2.2%).

Since 2016, the annual number of published applications concerning renewable energy sources has stagnated at 1,100 to 1,200. Possible reasons for this could be worse economic and political framework conditions compared to previous years.

However, various pieces of energy legislation and federal funding programmes are intended to increase the share of renewable energy in the future.



Development of patent applications effective in Germany¹ in selected fields of renewable energy²

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

- ² IPC classes valid at the time of retrieval counted proportionately. Without claim to completeness. Results may also include other uses.
- ³ C12M 1/107, C12M 1/113, F03G 3, F03G 4, F03G 7/00 to F03G 7/08, F24J 3, F24T 10, F24T 50, F24V 40, F24V 50, F24V 99.
- ⁴ F03B 7, F03B 13/10 to F03B 13/26.
- ⁵ F03D.
- ⁶ C02F 1/14, E04D 13/18, F03G 6, F24J 2, F24S, G05F 1/67, H01L 31/04 to H01L 31/078, H02J 7/35, H02N 6, H02S.



125 YEARS AGO

Fig. 3.

Fig. 1

The flying inventor

He is world-famous as the "father of aviation": Otto Lilienthal, 125 years ago, the aviation pioneer died. However, it is less well known that Lilienthal also was a versatile inventor and engineer who, together with his brother Gustav, applied for quite a few interesting patents in the most diverse fields.

Flying was Lilienthal's childhood dream. He was born in Anklam on 23 May 1848. From an early age, he used every spare minute to study the flight of birds. Whether at the grammar school in Anklam, as a student of mechanical engineering in Berlin, as an engineer working in a machine factory or later as an independent entrepreneur in his spare time Lilienthal always engaged in research and experiments to discover the secret of flight.

Before his first flight experiments, Lilienthal was successful as a design engineer: Together with Gustav, he designed a "Schräm-Maschine mit Messerscheibe" (coal cutter with cutting disc) for coal mining (DE2291). He invented a siren foghorn for lighthouses, a new method for draining waste water (DE71479), a screw locking device (DE44700) and a "reading game" (DE44540A). The two brothers also developed a modular set of toy building blocks. In 1880, they applied for a US patent (US233780), but then sold it to the entrepreneur Friedrich Adolf Richter. Richter turned the architectural toy into a global success. The stone building set is still on sale today under the name "Anker-Steinbaukasten" (DE word mark 2011940). It is the "oldest modular toy in the world" according to the manufacturer.

In the 1880s, Otto Lilienthal applied for two patents, which enhanced the safety of steam engines: "innovations to steam boilers" (DE16103A) and "serpentine tube boiler" (DE29080A). The financial success of these patents gave him scope for his interest in flight. Lilienthal built his first gliders using willow and cotton. In June 1891, he jumped with his hang glider off the Mühlenberg hill near Krielow in Brandenburg and glided for about 15 metres - the birth of aviation. Lilienthal made sure that his flight attempts were documented photographically.

A result of his tests was the "Normal-Segelapparat" (DE77916A, DE84417A; see also flying machine US544816). This monoplane glider had a wing area of 13 square metres and a wingspan of 6.7 metres. It was produced at the "Maschinenfabrik Otto Lilienthal" and found buyers from all over the world. Thus it was the first serially produced aircraft. A total of 21 "Normal-Segelapparat" (DE77916) different flying machines are attributed to

Lilienthal. He undertook around 2,000 flight tests and spent altogether about five hours in the air. But then came 9 August 1896. On the Gollenberg hill in Stölln near Rhinow, he was caught by a thermal during his fourth flight of the day. He fell from a height of about 15 metres and died the next day.

"Of all the men who attacked the flying problem in the 19th century, Otto Lilienthal was easily the most important," Wilbur Wright, pioneer of powered flight, wrote in 1912. "The world owes to him a great debt."



Otto Lilienthal around 1895



Reform package strengthens Germany as a location for innovation

Online hearings, extension of time limits, new rules on public holidays: The Second Act to Simplify and Modernise Patent Law, which was adopted last year, brings about many changes for our customers. Some important changes are summarised below.

The last great reform of IP protection was made several years ago. To ensure the outstanding position of Germany as a location for IP protection in the field of industrial property in the future, the legislation adopted significant amendments in the Second Act to Simplify and Modernise Patent Law (2. Patentrechts-modernisierungsgesetz).

Video conferencing in IP procedures

As an important element for procedures before the DPMA, the Second Patent Law Modernisation Act provides for the option to participate in proceedings and hearings and give evidence in IP procedures using image and sound transmission. This means that parties can participate in sessions via video conferencing in suitable cases at the discretion of the DPMA. In many cases, this saves costs and time and can accelerate the procedure. However, it is still possible to directly participate on site. "The coronavirus pandemic has once again clearly shown to us how important it is to have flexible and tailor-made solutions at the ready for our customers," DPMA President Cornelia Rudloff-Schäffer said, and added: "By providing the option to participate in proceedings and hearings and give evidence online via video conferencing, we are expanding our e-government services in keeping with our mission statement as a digital service authority."

Uniform rules on public holidays

The Second Patent Law Modernisation Act will also create uniform rules on public holidays. As the DPMA's offices are in different federal German *Länder*, different public holidays are applicable there. In the future, all public holidays applicable at at least one of the DPMA's offices will be recognised for the purpose of extending a time limit.

PCT applications: Extended time limit for entering the national phase

Another legislative amendment takes into account a longstanding request of the applicant community: The period for



Place of legislation: the German Bundestag

international applications (PCT applications) to enter the national phase at the DPMA as designated office or elected office will be extended from 30 to 31 months. "Experience has shown that many applicants make full use of the period for entry into the national phase," said DPMA President Rudloff-Schäffer and added that a long period of decision-making was very important, especially in the PCT area, in order to assess the chances of success of a patent application entering the national phase, look for possible investors in order to market the invention, or prepare formal steps.

The three amendments mentioned above will enter into force on 1 May 2022. The DPMA will first establish the technical infrastructure necessary to participate in proceedings and hearings and give evidence via video conferencing. In addition, as of 1 May 2022, the annual fees for supplementary protection certificates will be increased and trade mark law will be brought into line with the Madrid system for international trade mark protection.

The primary purpose of further amendments and new provisions in the IP laws that already entered into force on 18 August 2021 pursuant to Article 13 (1) of the Second Patent Law Modernisation Act is to simplify and clarify procedures.

Detailed information on the new provisions is available on our website (.



IN FOCUS

Overcoming the language barrier with artificial intelligence

The search file of the DPMA includes more than 50 million patent documents from Asia, which potentially have to be taken into account for patent grants. The problem: So far, the content of the documents has been difficult to access because of the language barrier. This is now about to change.

The relevant prior art is essential for assessing the novelty and inventive step of an invention. The examining sections of the DPMA conduct prior art searches mainly in **DEPATIS**, the DPMA's internal database, which comprises patent documents from all over the world. Of course, this also includes more than 50 million patent specifications from Asia, especially from China, Japan and Korea. This share precisely is growing, because currently two-thirds of all patent applications worldwide are filed in Asia. The problem is that the contents of these documents are not accessible or can only be accessed with difficulties, due to the language barrier. But how are our patent examiners supposed to conduct searches for these documents and take their contents into account when assessing whether an invention is patentable?

In order to solve this problem, we launched the measure "Access to Asian patent literature" in March 2021. As part of this measure, we first machine translate all available documents from China, Japan and South Korea into English and then add these translations to our internal **DEPATIS** database. This makes Asian patent documents accessible for a full-text search.

For the translation, we use "WIPO Translate" – a translation machine developed by the World Intellectual Property Organization (WIPO), which has been made available to the DPMA as part of its cooperation with WIPO. The core of WIPO Translate is an artificial neural network, which has been specially trained to translate patent literature.

Since March 2021, we have already machine translated more than 13 million Japanese documents, making them searchable in **DEPATIS**. This corresponds to half of our holdings of patent literature from Japan. In October 2021, we also started translating our holdings of more than 32 million Chinese documents.



In 2022, we expect to start translating our holdings of more than six million Korean documents.

The Asian documents are translated at the DPMA's computer centre, where WIPO Translate is running on our own servers. At present, we can translate an average of 90,000 documents per day. Probably, this will make it possible to translate the entire holdings of documents from China, Japan and Korea into English by 2023. Currently, WIPO Translate supports eleven languages. This opens up the possibility to also machine translate patent literature from other countries in the future and make it accessible for full-text searches.

Our "Access to Asian patent literature" measure will enable us, in the future, to use **DEPATIS** to conduct Asian prior art searches without restrictions, without having to resort to external databases. In this way, we create the conditions for more efficient patent searches while maintaining consistently high quality and, on this basis, increase the legal validity of the patents granted by the DPMA.

UTILITY MODELS

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You will find our extensive statistics on utility models in the chapter "Statistics" starting on page 79.

Development of utility model applications

After an interim high in the first pandemic year of 2020, which was due in particular to a huge increase in the technology field of "Other consumer goods" (community masks, respirator masks, etc.), the utility model applications declined in 2021. The development in the individual technology fields was mixed: While the number of applications for "Other consumer goods" almost dropped by half compared to the previous year, there was a remarkable increase, for example, in the field of telecommunications as well as in the technology field of "Materials, metallurgy".

The Utility Model Unit still worked hardly unaffected by the coronavirus pandemic. As utility model procedures – like patent procedures – have been processed fully electronically since 2011 and due to the fact that more than three quarters of the staff of the Utility Model Unit had teleworking posts even before the pandemic, work was not interrupted at all in spite of the special conditions. As the majority of staff worked mainly from home, the few colleagues who were working exclusively in the office building were able to rely on secure and flexible working conditions, especially with regard to the applicable social distancing and hygiene requirements.

Utility model applications at the German Patent and Trade Mark Office



Development of utility model applications in detail

After 12,313 applications in the previous year, a total of 10,577 new applications were received by the office in 2021; this corresponds to a decrease of 14.1%. The German Patent and Trade Mark Office (DPMA) received 64.9% of the national applications electronically. The Utility Model Unit entered 9,972 utility models into the register; this means that 88.0% (previous year: 87.8%) of the concluded registration procedures in 2021 were successful for the applicants. 1,365 applications did not result in a registration because of withdrawals of applications or refusals or for other reasons.

In 2021, the term of protection was renewed for a total of 18,138 utility models (2020: 18,172) after payment of the maintenance fee. The number of utility models which lapsed, for example due to the expiry of the maximum term of protection or because no request for renewal had been filed, dropped from 12,805 in the previous year to 12,126.

At the end of 2021, 72,728 valid utility models were registered at the DPMA.

Utility model applications in 2021 by countries of origin (national
applications at the DPMA and PCT applications in the national phase)

	Applications	Percentage
Germany	7,018	66.4
China	1,189	11.2
USA	355	3.4
Taiwan	352	3.3
Switzerland	221	2.1
Austria	197	1.9
Republic of Korea	150	1.4
France	133	1.3
Japan	130	1.2
Italy	124	1.2
Others	708	6.7
Total	10,577	100

Origin of utility model applications

In 2021, too, foreign applicants still had a strong interest in German utility models, because the share of applications from abroad increased markedly, against the overall trend, both in percentage and absolute terms: from 27.8% (3,419 applications) in the previous year to 33.6% (3,559 applications). The PCT applications in the national phase remained at the high level of the previous year; with 647, the number of these applications was only very slightly lower than in 2020 (651). 7,018

utility model applications (66.4%; 2020: 72.2%) came from Germany. The majority of foreign applications came from non-European countries (2,414; 2020: 2,261), whereas the number of applications from other countries in Europe remained at the level of the previous year: 1,145 (2020: 1,158).

Applicants from the member states of the European Union (without Germany) accounted for 786 applications (previous year: 828).

The People's Republic of China further strengthened its leading position with 1,189 applications (2020: 1,052) and a proportion of 11.2% of all applications, followed by the US and Taiwan with almost equal shares of 3.4% and 3.3%, respectively. Applicants from Switzerland filed 221 applications (2.1%) and those from Austria filed 197 applications (1.9%).

The development of applications from India is remarkable. More and more Indian applicants have been discovering the advantages of the German utility model system: After the maximum number of applications

Baden-Württemberg

from India had been in the single-digit range in the previous years, 77 (0.7% of all applications) were received in 2021, and there are signs that the trend could continue in 2022.

Utility model applications by German Länder

With 1,697 applications, North Rhine-Westphalia is still the undisputed leader in the *Länder* ranking (24.2% of all domestic applications), followed by Bavaria and Baden-Württemberg with 1,534 applications (21.9%) and 1,291 applications (18.4%), respectively. However, seen in relation to the size of the population of each German *Land*, Baden-Württemberg and Bavaria jointly lead the ranking with 12 applications each per 100,000 inhabitants, followed by North Rhine-Westphalia with nine applications.

Split-off option

In 2021, compared to the previous year, the absolute number of splitoffs from patent applications fell only very slightly by 9 to 1,205; at the same time, the percentage of split-off utility model applications in relation to the total number of applications increased from 9.9% of all applications in the previous year to 11.4% of the applications in 2021. This means that many patent applicants still use the application for a low-cost and quickly effective utility model as an accompanying measure to effectively take action against the copying of their innovation as long as the patent sought after has not yet been granted. Detailed information on the procedure for splitting-off a utility model is available on page 18.



Utility model applications by German Länder in 2021 (applications per 100,000 inhabitants and number of applications)

Search pursuant to section 7 of the Utility Model Act

Utility models are registered after an essentially formal examination, that means there is no examination of the invention as to novelty, inventive step and industrial application. This is an essential difference from patents. The applicant can minimise the resulting risk that the IP right may be cancelled later by having a prior art search conducted at an early stage to determine whether anything comparable to the invention was already known at the filing date of the utility model application. For a fee of 250 euros, the patent examiners of the DPMA conduct such a prior art search. In a search report, they list the publications identified that are relevant for assessing the protectability of the utility model. On the basis of the search results, it is easier to assess the prospects of enforcement or defence of the IP right. In the light of the aforesaid, the search is an important part of the system of utility model protection.

Last year, 1,484 effective search requests were received by the DPMA (previous year: 1,817) and 1,742 searches were concluded (previous year: 1,984). The DPMA thus managed to further reduce the number of pending search procedures in utility model matters.

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 recent years, the number of requests for cancellation received in 2021 amounted to 109 and thus increased markedly compared to the previous year. A utility model can be cancelled upon request only. Anyone can file 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.

While the Utility Model Unit is responsible for the registration of a utility model, the Utility Model Division is in charge of handling the cancellation proceedings and deciding on the cancellation request. The panel of the Utility Model Division consists of three members. A lawyer acts as the chair and two patent examiners responsible for the technical field are reporting and associate judges. Normally, oral proceedings are held. The pandemic affected the year under review as it was only possible to a limited extent to hold oral proceedings.

The most frequent reason for cancellation is that the subject matter of a utility model cannot be protected, that means the subject matter is not new compared to the state of the art or does not involve an inventive step. The examination can also check whether there is any inadmissible extension of the subject matter of the utility model, usurpation or whether the subject matter of the utility model has already been protected on the basis of an earlier patent or utility model application. In the year under review, a total of 107 cancellation proceedings were concluded.



Applications at the DPMA and PCT applications that have entered the national phase

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

TOP 5 Fields of technology¹

Valuable instrument for IP strategists

Have you filed a patent application and do you need quick protection? If yes, you can split off a utility model from the application. Please find below some important advice on how to do so.

While a patent grant procedure can take some time, a utility model is usually registered within a few weeks of filing the application. As long as a patent has not been granted, a split-off utility model provides accompanying protection. Upon registration of the split-off utility model, your invention enjoys full protection, provided it is new, involves an inventive step and is susceptible of industrial application – irrespective of the course of the patent procedure.

A split-off utility model is also appropriate if you or your legal predecessor have published the invention prior to filing the patent application. In this case, patent protection is no longer possible because your invention is no longer considered to be new. However, you can file a utility model application within six months of the publication of the invention. In this case, the period of grace applies: Within this period, your published invention is not part of the prejudicial state of the art.

A split-off utility model is an independent utility model application in respect of which the applicants request that the filing date of an earlier patent application effective in Germany (national patent application in Germany, European patent application, PCT application designating Germany) be granted. This requires that the applicant of the utility model and the applicant of the patent be identical and that an identical invention be applied for. The splitting-off declaration must be submitted together with the utility model application.

A utility model application with a splitting-off declaration can be filed until the expiry of two months from the end of the month in which the patent application is concluded or opposition proceedings, if any, are completed; however, the split-off is possible not later than ten years after the date of filing of the earlier patent application.



For the utility model application, application documents identical to those of the earlier patent application must be filed. In the application form, please tick the box indicating that you split off a utility model from an earlier patent application. Please also state the file number and the date of filing of this patent application. In addition, you can also file limiting documents on which the registration is to be based. Furthermore, a copy of the prior application (including a German translation, if necessary) must be submitted. From May 2022, the copy of the prior application will no longer be required if you have filed the prior application with the DPMA.

For a utility model application with a splitting-off declaration, the usual application fee for a utility model has to be paid. The fee is due on the date of filing of the application. The payment period is three months. Upon registration of the utility model, a maintenance fee may also be due.

Further information on split-off utility models and on the related fees is available on our website (...).



70 YEARS AGO

First Mickey Mouse comic book comes out in Germany

Cheer, clap, grin! 70 years ago, the colourful stories about a little mouse conquered the German magazine market and enriched German grammar with the "Erikativ" in the process. Next year, copyright protection for "Mickey Mouse" will expire. However, the Disney Group also owns quite a few trade mark rights.

In September 1951, the number one edition of the "Micky Maus Magazin" came out in Germany. The first real comic book on the black-and-white dominated (West) German print magazine market came as a colourful bombshell. Fusty bourgeois intellectuals used to rail against the comics, calling them "trash". However, that could not stop the triumphant advance of comics in the country of the picture story pioneer Wilhelm Busch.

The "colourful monthly" was produced using four-colour printing and consequently expensive: It cost 75 pfennigs – roughly an average hourly wage at that time. Nevertheless, around 130,000 copies of the first issue were sold. The readership must have been many times larger, because the comic books were passed on among friends. Soon the circulation rose to 400,000. The publication frequency was increased to weekly. It remained that way for almost 60 years.



The German Mickey trade mark (1008802 DE)

Phenomenal penchant for verse

The first editor-in-chief of "Micky Maus Magazin" was art historian Dr Erika Fuchs. As a translator, she brought the language of the original US comic to a snappy literary level. Her hidden quotations from classics, her stave rhymes and, above all, her onomatopoetic neologism are legendary; she reduced verbs to the stem in order to represent sounds and feelings: Brood! Moan! Gulp! Sigh! This new "inflective" was later called "Erikativ" in her honour.

Following German unification, the magazine of the Ehapa publishing house temporarily reached record circulations of one million copies. After a rapid decline, the print run has now settled down to about 70,000 copies and is now published only fortnightly, but often it includes a "gimmick" (DE word mark 954028), an idea originating from its former rival paper "Yps", which meanwhile was taken over by Ehapa.

International career since 1928

When Mickey Mouse (396494501 DE) came to Germany, he was probably the world's best-known comic figure. Mickey had had his debut on 15 May 1928 in the short film "Plane Crazy" (already at Mickey's side was girlfriend Minnie Mouse, IR 151050). However, it was not until "Steamboat Willie" came

WALT DISNEY'S

Front page of the very first edition of Micky Maus Magazin, September 1951

out a few months later that Mickey became famous.

Up to now, the anthropomorphic "Mickey Mouse" has been the trade mark of one of the world's largest entertainment groups with an annual turnover of around 75 billion dollars (2020). In 2023, copyright on this early version of Mickey will expire. The US government had twice extended the legal duration of this IP right - probably in no small part due to the insistence of the Disney group. Now it should be interesting to see what legal strategies Disney will pursue from 2023 onwards in order to keep control of the use of its most famous character. Trade mark rights will play an important role in this context. Currently, the **DPMAregister** database of the DPMA contains more than 1,100 Disney trade marks.



Minnie Mouse trade mark (018144473)

TRADE MARKS

You will find our extensive statistics on trade marks in the chapter "Statistics" starting on page 82.

Development of trade mark applications

In the second year of the coronavirus pandemic, too, the number of trade mark applications continued to increase. Compared to 89,442 applications in 2020, we received 92,317 applications last year, representing an increase of 3.2% and the highest level since the Internet boom 22 years ago. This figure consists of 87,631 applications (+3.6%) filed directly with our office and 4,686 applications for international registrations of marks (-2.8%) transmitted to us by the World Intellectual Property Organization (WIPO). However, as the increase in applications was even markedly larger in the previous year (by 13.5% from 2019 to 2020), we expect the boom in trade mark applications caused by the pandemic to start running out.

The number of registrations again increased significantly. Compared to 60,428 registrations in 2020, we saw 68,597 registrations last year – an increase of 13.5% and an all-time peak. There was a marked decrease in pending application procedures, from 27,075 at the end of 2020 to 23,344 at the end of 2021.

The number of EU trade mark filings with the European Union Intellectual Property Office (EUIPO) increased again. Compared to 177,909 applications in 2020, the applicants filed 197,909 applications for a EU trade mark last year, i.e. an increase of 11.7%. Although 27,571 of these applications came from Germany (previous year: 24,953), Germany was not the top country in terms of applications filed with EUIPO. With 34,377 applications, China led the ranking of applications. With 20,105 applications, the United States took third place.





The figures for filings with our office presented a similar picture. Applications from China continued to increase slightly, as 2,347 applications were filed directly with us in 2021 compared to 2,256 applications in the previous year. This means that by far most of the foreign direct applications with the German Patent and Trade Mark Office (DPMA) came from China. With 675 applications, the United States took second place.



¹ Class heading according to current version of Nice Classiffication, available at: https://www.dpma.de/english/trade_marks/classification/goods_and_services/ nice_classification/index.html.

² A trade mark application can be attributed to several classes.

Trade mark applications by classes

As in the previous years, class 35 (advertising; business management, organisation and administration; office functions) was the class most frequently indicated in trade mark applications in 2021 (indicated in 29,974 applications in 2021). As in the previous year, it is followed by class 41 (providing of training; entertainment; sporting and cultural activities) and class 9 (electrical apparatus and instruments; computer hardware; software; optical apparatus and instruments), indicated in 20,483 and 16,613 applications respectively.

It is noticeable that class 21 (household and kitchen utensils, +18.0%), class 30 (foodstuffs of plant origin; +14.4%), class 29 (foodstuffs of animal origin; +14.7%), classes 32 and 33 (non-alcoholic and alcoholic beverages; +15.0% each) and class 28 (playthings and sporting articles; +16.6%) were indicated significantly more frequently. We assume that people's consumption habits changed due to the pandemic. Where group activities were no longer possible or very restricted, there was an increase in the demand for independent activities.

In our opinion, it is a side-effect of the pandemic that class 5 (pharmaceuticals; plasters, materials for dressings) and class 10 (medical apparatus and instruments; orthopaedic articles) were indicated less frequently, namely with decreases of 7.8% and 20.4% respectively. After these classes had seen significant increases in the previous year, the demand for new trade marks seems to have been saturated.

Applications by German Länder

A look at the origin of the national trade mark applications from Germany shows that most applications per 100,000 inhabitants came from the city states of Hamburg and Berlin. With many companies being based there, this does not come as a surprise. Of the territorial states among the German *Länder*, Bavaria and North Rhine-Westphalia were the ones with most applications per 100,000 inhabitants. This is directly linked to their economic power. There have been no changes in recent years.

Selected data on trade mark procedures

If you compare the number of refusals (9,634) to the number of all procedures concluded (91,613; including 68,597 registrations and 13,066 withdrawals), it is noticeable that only 10.5% of the applications are refused by the trade mark divisions. Only in these few cases, a negative decision is made. Of the 9,634 refusals, 316 were challenged by way of an appeal to the Federal Patent Court. This is a very small portion.

The picture is similar with regard to the decisions made by the trade mark divisions in opposition proceedings. In 2020, 2,745 trade marks were challenged by way of an opposition, compared to 3,225 trade marks in 2021. In 2020 and 2021, 3,225 and 2,973 procedures respectively were concluded, i.e. terminated by a decision of the trade mark division, a withdrawal of the opposition or a surrender of the trade mark. In 2020 and 2021, 253 and 191 decisions respectively were challenged by way of an appeal to the Federal Patent Court.

In our opinion, the small number of decisions appealed is mainly due to the strategy of the applicants, who are not interested in being engaged in disputes but in the renewal and validity of their trade marks. This also mirrors, to a certain degree, an established decision-making practice of the trade mark authorities in Europe. If many questions were still open upon entry into force of harmonised trade mark law in the European Union in 1995, most of them have been solved in the meantime and the outcome of the procedures is often foreseeable.



Trade mark applications by German Länder in 2021 (applications per 100,000 inhabitants and number of applications) Selected data on trade mark procedures

	2017	2018	2019	2020	2021
New applications	72,048	70,534	73,635	84,623	87,631
Registrations	50,954	50,584	55,026	60,428	68,597
Refusals	6,682	7,081	6,883	6,606	9,634

Top companies in terms of registrations

The top companies in terms of new trade mark registrations vary considerably each year. The reason for this is that filings by companies go in waves; this means that even renowned companies with large trade mark portfolios file many successful applications for trade marks in one year and only few successful applications for trade marks in the next year. In 2021, Make Great Sales Ltd., a US company, took first place with 79 registrations, followed by Bahlsen GmbH & Co. KG with 66 registrations and Private Mark GmbH with 65 registrations.

Trade mark administration

About 35 staff of the trade mark administration at the Jena location 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, licensing procedures and cancellations. Furthermore, the trade mark administration staff issue priority documents, certifications of origin and other register extracts.

At the end of 2021, the register contained 868,401 trade marks. With 80,741, the number of recorded changes concerning the proprietor, representative or address for service was significantly above the previous year's figure (68,949). With 35,945, the number of renewals decreased slightly compared to the previous year (39,491). With 45,454, the number of trade mark cancellations due to the non-renewal of the term of protection or a surrender was at the previous year's level (44,804). Licences were entered in the register for 39 trade marks. The declarations of willingness to license or sell/transfer continued to gain importance, as the German Patent and Trade Mark Office received from the proprietors registered in the register non-binding declarations of willingness to grant licences with respect to 18,526 trade marks (previous year: 12,258) and non-binding declarations of willingness to sell/transfer with respect to 9,435 trade marks (previous year: 6,195).

For further statistical data on trade mark administration, please see the "Statistics" chapter on page 82.

Revocation and invalidity proceedings

Pursuant to the Trade Mark Act (Markengesetz), anybody may request cancellation of a registered trade mark. A reason for cancellation must be stated in the request, which is subject to a fee. A reason for cancellation may be the non-use of a trade mark, referred to as "revocation" in the Trade Mark Act. An application for revocation filed on 1 May 2020 or later now allows revocation proceedings to be fully conducted before the DPMA if the trade mark proprietor objects to the application for revocation and cancellation of his/her trade mark and if the person filing such an application pays a fee of 300 euros for pursuing the application for revocation further. Previously, the person filing the application had to further pursue his/her application before the ordinary courts. In 2021, 416 applications for revocation or invalidation were received (previous year: 444). Requests to further pursue revocation proceedings before the DPMA were filed in 229 cases (previous year: 111).

Furthermore, since 1 May 2020, it has been possible to file an application for a declaration of invalidity and cancellation of a registered trade mark with the DPMA – or an application for invalidation of the part of an international registration of a mark extended to Germany – due to the existence of conflicting earlier rights within the meaning of sections 9 to 13 of the Trade Mark Act. Previously, such proceedings were only possible before the ordinary courts. In 2021, 128 such applications were received (previous year: 90).

Another reason for cancellation is the existence of absolute grounds for refusal at the time of filing the application. In 2021, 159 requests (previous year: 259) were based on this reason. Absolute grounds for refusal may exist if the challenged trade mark lacks distinctiveness at the time of filing the application or if it is descriptive of a product. Another absolute ground for refusal is the filing of a trade mark application in bad faith. This reason was given for 82 requests for cancellation (previous year: 125), i.e. for 51.6% of all requests for cancellation based on absolute grounds for refusal. A trade mark application is filed in bad faith if the trade mark proprietor files the application with the intention to impede others in an anti-competitive manner.

BRIEFLY EXPLAINED ... Non-registered use-based trade marks

Protection through prominence

A trade mark is only valid if it is registered? That is not true in every case. Particularly well-known signs may enjoy protection even though they do not appear in the register. But the requirements for protection are high and there are risks involved.

Trade mark protection is almost always associated with the registration of a trade mark in the register. This applies to national trade marks, which are examined and registered by the DPMA, as well as to international registrations of marks and European Union trade marks, which are valid throughout the European Union. The registration of a trade mark in a register has crucial advantages: There is no need for discussions about whether and when it was created or about the subject matter of protection; a glance at the register is sufficient.

Protection by registration in the register does not constitute a rule without exception: There are also trade marks that are actively used but not registered, often because the owner simply has not applied for registration. But legal reasons can also play a role. Until early 2019, for example, the protection of sounds as sound marks was de facto impossible. Sounds were considered incapable of being represented graphically. Since there is no longer a need to graphically represent a trade mark as a condition for registration, it is now possible to apply for and register these trade marks.

Recognition has to be proven

According to the Trade Mark Act (*Markengesetz*), for a trade mark to be valid even without registration, it must have acquired public recognition in the affected trade circles through use. This is not easily achieved. In the case of signs that are by their nature capable of being protected, it means that about 20% to 25% of the potential consumers must recognise the trade mark and also be able to identify it as the trade mark of the user. This is not exactly a small number, because potential consumers include all people in Germany who might be potential buyers of the goods and services. As a rule, proof of "having acquired public recognition" can only be produced by submitting a market survey. Such a survey is expensive and the outcome is sometimes uncertain.

Dispute over the golden bunny

Despite these difficulties, there are trade marks which are referred to as "non-registered use-based trade marks". In 2021, for example, the Federal Court of Justice (*Bundesgerichtshof*) ruled that the Lindt company was entitled to claim a certain shade of golden colour as a colour mark for its "Goldhase" chocolate Easter bunnies. A survey has revealed that 70% of the buyers of chocolate Easter bunnies recognise this golden colour as the golden hue used by Lindt. However, it is not yet clear whether, as a result of this, Lindt can take action against the distribution of a competitor's gold-coloured Easter bunny. The Federal Court of Justice remitted this case to the lower court, the Munich Higher Regional Court.

Therefore, we make a clear recommendation: A registered trade mark is always the simpler, safer and better way.

You can find more information on how to register your trade mark on our website (.....).



INSIDE

"I am really impressed by the creativity of our applicants"

The Head of Directorate General Trade Marks and Designs, Barbara Preißner, on soaring numbers of applications during the lockdown, different needs of customers and the special attraction of the official Trade Mark Journal (*Markenblatt*)

Ms Preißner, the demand for trade marks is greater than ever before. Could you please describe the historic boom in 2021 from your point of view?

In the second lockdown at the beginning of 2021, the number of applications virtually exploded. The first four months saw 28% more applications than from January to April in the previous year when there were already high increases too. This was an enormous challenge for the examiners, many of whom worked from home. The fact that the number of completed cases increased significantly during that period shows that the examiners gave their all. It was also a contributing factor that our electronic file processing was so reliable.

In the course of the year, demand dropped again somewhat.

Yes, fortunately. That gave us some breathing space, which we needed badly. The circumstances were very demanding for many staff, not only at work but also in their private lives. A little slack during the summer was really needed. Many took their first holiday in a long time.

Is it possible to say in which direction the applications developed during the lockdown and afterwards?

In totally different directions. On the face of it, we have had the most sub-

stantial increases in the area of food and beverages in 2021. But the trade marks themselves are as diverse as the goods and services for which they can be applied for. I am always surprised and really impressed by the creativity of our applicants. If you want to get an idea of the vibrancy of our business life, then you should download a copy of the Trade Mark Journal and have a look at all the newly registered trade marks published within a week. These are often almost a thousand trade marks with many good ideas. By the way, the download is free of charge and easy on our website.

Is it possible to discern any long-term trends in application activity?

It seems to me that the option of filing trade mark applications without signature via the Internet has lowered the threshold for filing applications. It is now very easy even for private individuals to apply for a trade mark. The basic fee of 290 euros is not an obstacle for many either. As a result, we have an even broader group of applicants than in the past. In contrast to patents, there are only a few applicants who file a large number of trade mark applications. While there are various companies with more than a thousand patent applications per year, a double-digit number of trade mark applications per year is quite exceptional.



Barbara Preißner

You say that the applicant community in the field of trade marks is highly diverse – from large companies with a lot of trade mark expertise to companies consisting of only one person – how do you take this into account?

For example, we provide plenty of help and support both on our web pages, some of which specifically target small and medium-sized enterprises (known as SMEs), and in the process of filing electronic applications. There should be the right information for everyone. This is not only to ensure that a trade mark applied for is registered, but also that it is valid, i.e. that it is not cancelled due to oppositions or applications for a declaration of invalidity.





https://register.dpma.de/DPMAregister/blattdownload/marken?lang=en&fromSprachWechselLink
https://www.dpma.de/english/services/sme/index.html

Germany's culinary delights

"Spreewälder Gurken" (pickled cucumbers), "Lüneburger Heidekartoffeln" (heath potatoes) or "Schrobenhausener Spargel" (asparagus), Germany has a lot of regional culinary specialities to offer. But these designations not only whet your appetite, they also offer producers and manufacturers legal protection as indications of geographical origin.

In the second summer of the pandemic of 2021, travelling was not quite so easy. To spend the holiday in Germany was definitely a good idea. What culinary delights you can discover in the process is also evident in the large number of regional specialities. So come with us on a culinary journey through Germany – from "Spreewälder Gurken" (pickled cucumbers) to the "Lüneburger Heidekartoffeln" (heath potatoes) to "Schrobenhausener Spargel" (asparagus).

All these foodstuffs are "indications of geographical origin". These names of foodstuffs and agricultural products can be protected at the European level as "indications of geographical origin".

It is characteristic of this IP right that the quality or reputation of a product is closely linked to its origin in a specific geographical area. 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 that name.

For Germany, 92 products are currently registered as protected indications of geographical origin with the European Commission.

Starter: Soused herring of the Far North meets pickled cucumber from the Spreewald region

Let's start our journey in the Far North with "Glückstädter Matjes" (soused herring). In Glückstadt on the lower Elbe river, the tradition of producing Matjes soused herring can be traced back to 1893, when the Glückstadt herring fishery started. Every year on the second Thursday in June, the Glückstadt Matjes Weeks begin here with the traditional Matjes bite. The entire production process must be carried out in the urban area of Glückstadt. Perhaps we should have a few "Spreewälder Gurken" pickled cucumbers to go with it? Theodor Fontane wrote about them in his travelogue "Wanderungen durch die Mark Brandenburg" (Rambles through Brandenburg).

This way, you could go on feasting with relish on regional specialities throughout Germany.

Main course: Potatoes from the Lüneburg Heath with sausages from Halberstadt

For example, the "Lüneburger Heidekartoffeln" heath potatoes from the region which is Germany's largest potato-growing area since the mid-19th century. Thanks to the sandy soils, the heath potato grows particularly well in the Lüneburg Heath. The European Commission added the potato to the list of protected geographical indications of foodstuffs on 4 August 2010. Served together with "Halberstädter Würstchen" (sausages) and "Schrobenhausener Spargel" (asparagus) and accompanied by a "Münchner Bier" (Munich beer) – enjoy your meal!

Plums for dessert

And how about some "Stromberger Pflaumen" (plums) for dessert? The "Stromberger Pflaume" is a very old, mid- to late-season plum variety. Around 1790, it was brought to Rhineland-Palatinate from southern France and Spain by the

district clerk and traveller Ludwig Niedieck and named after its new home. Since 2013, it has been registered as a "protected designation of origin".

On our website (**(**) you will find the detailed description of a "culinary summer's journey through Germany" with suggestions, background information and recipes for many regional specialities.

Examination procedure

The examination procedure for the application for registration of an indication of geographical origin is a two-stage process. First, the application is examined in a trade mark division of the DPMA as the competent national authority. After positive assessment, the application is forwarded by us to the European Commission for examination.

If the European Commission also confirms that the conditions for protection as a geographical indication are met, the IP right is registered and an entry is made in the eAmbrosia database.

Legal basis

The legal basis is Regulation (EU) No 1151/2012. Applicants can apply for PDO (protected designation of origin) status or PGI (protected geographical indication) status. For PDOs, there is a particularly close link between the characteristics of the product and its production in the region of origin. All stages of production must take place in this geographical region. For PGI status, it is sufficient if one of the production stages, for example processing, takes place in the region of origin.

Applications and decisions in 2021

In 2021, applications for the amendment of already protected names were filed. These concerned the indications of origin: "Meißner Fummel" (pastry, PGI) and "Fränkischer Karpfen" (fish, PGI). After positive conclusion of the examination, the DPMA forwarded the application for registration of "Obst vom Bodensee" (fruit) as PGI to the European Commission.

The application for the amendment of the specification of the PGI "Salzwedeler Baumkuchen" (cake) was approved by the European Commission.

The application for the registration of "Hiffenmark/Fränkisches Hiffenmark" (jam) as PGI, on which the Federal Patent Court had issued two decisions, was withdrawn in the procedure before the European Commission.

In the case "Spreewälder Gurken II" pickled cucumbers, which dealt with the legitimate interest of a person filing an opposition to this PGI, the Federal Court of Justice overturned the previous decision of the Federal Patent Court and referred the case back.



DESIGNS

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

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Development of design applications

The number of designs applied for fell again compared to the previous year. In 2021, 36,070 designs were applied for at the German Patent and Trade Mark Office (DPMA), in 5,741 individual and multiple applications. This means that the number of designs applied for dropped by 10.1% and the number of applications by 6.1% compared to the previous year. Last year, we were able to conclusively process requests for entry in the register for 34,487 designs in total. The Design Unit in Jena entered 31,083 of these designs in the design register; this amounts to 90.1% of the completed procedures (2020: 89.8%). Our applicants again made extensive use of the option to combine up to 100 designs in a multiple application: In 2021, this option was used with respect to 57.7% of the applications. On average, about ten designs were filed in a multiple application. Applicants can request not to publish the representations of a registered design (deferment of publication of the representation). This allows them to save costs because the application fee is reduced. However, during that time, they only enjoy protection against copying of a design that has been put on the market by somebody who had knowledge of the design. In that case, design protection ends after 30 months from the filing or priority date unless it is extended to full protection by payment of the extension fee, by which publication of the representation is requested. The proportion of designs applied for for which deferment of publication of the representation was requested dropped slightly to 19.5% (2020: 24.1%).

At the end of 2021, 270,447 designs were registered in our design register.

In 2021, too, an increased number of design applications in connection with the coronavirus pandemic were filed; above all for "mouth and nose protection", "spit screens" or "disinfection equipment".

Origin of registered designs

With 91.1%, most of the designs registered at the DPMA originated again from Germany, as in the previous year. They were filed by applicants having a domicile or principal place of business in Germany (2020: 89.5%). That means that the number of registered designs from abroad again declined slightly. A total of 2,385 registered designs came from other European countries (2020: 3,507), 375 from non-European countries (2020: 410). In 2021, a clear majority of designs registered by applicants from abroad originated from Switzerland (909).

Registered designs at the German Patent and Trade Mark Office



Registered designs in 2021 by countries of origin

	Registered designs	Percentage
Germany	28,323	91.1
Switzerland	909	2.9
Italy	735	2.4
Austria	303	1.0
United Kingdom	172	0.6
China	138	0.4
USA	120	0.4
Czech Republic	89	0.3
Poland	74	0.2
Japan	72	0.2
Others	148	0.5
Total	31,083	100

Registered designs by German Länder

In 2021, most of the 28,323 domestic registered designs (32.4%) came from North Rhine-Westphalia (9,172 registered designs). For thirteen years in a row, North Rhine-Westphalia has been at the top of the list of the German *Länder*. In 2021, it was followed by Baden-Württemberg with 4,869 registered designs (17.2%) and Bavaria with 4,853 registered designs (17.1%). Compared to the previous year, Baden-Württemberg had a slightly higher number of registered designs and thus was able to surpass Bavaria.



Registered designs by German Länder in 2021 (registered designs per 100,000 inhabitants and number of applications)

Registered designs by classes of goods

With 8,192, most designs (16.0%) were again registered in the class of goods 6 (furnishing). The class of goods 2 (articles of clothing and haberdashery) came second with 10.4%, followed by the class of goods 32 (graphic symbols and logos, surface patterns, ornamentation) with 9.8%. Several classes of goods may be claimed for a design and thus 31,038 registered designs were registered in 51,282 classes of goods. The top five classes of goods are shown in the figure on the next page.

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, deferring 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 2021, 19 applications for determination or declaration of invalidity were filed (2020: 59). The application for determination or declaration of invalidity will be served on the owner of the challenged design after receipt of a fee of 300 euros and examination of further admissibility requirements. If the application is not contested within one month, 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. If the application is contested in due time, the Design Division will conduct an official examination 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 2021, a total of 28 design invalidity proceedings were concluded (2020: 63).



TOP 5 Classes of goods



Classes of goods of registered designs¹ at the DPMA in 2021

¹ A design can be attributed to several classes of goods.

PERSPECTIVE

Good design builds trust



Nadja Roth, Industrial Designer at Siemens Healthineers and member of the jury of the DesignEuropa Award 2021

Product designer and juror Nadja Roth talks about attraction at first sight, the conflict between design and technology – and the competitive advantage of registered protection.

As a designer of medical devices, it is not uncommon for me to meet people who are surprised that design plays a role at all in healthcare equipment. After all, they argue, it is all about function.

That is right, it is all about function. However, does not design constitute a part of this very function?

What if a perfectly functioning machine was not accepted by the users because its complex appearance overtaxes them and its application is so complicated that it simply cannot be operated? Does not the design play a crucial role in making a product usable at all? Do we not decide at first glance whether or not we want to find out more about a product?

I am convinced that design can crucially contribute to the success of a product: Good design communicates what a product is, how it works and provides guidance to the user. It makes a product understandable and approachable. Design builds trust. Design reflects the quality and value of the product and has the power to convey the brand identity of a company and take it to the outside world. This does not only apply to everyday products of the consumer sector, but also to medical devices.

Good design facilitates the cleaning of medical devices

The latter pose particular challenges for the design: Numerous clinical, functional and safety requirements must be taken into account in the design and limit the leeway for solutions. This requires very close and iterative cooperation between designer and developer, both sides gradually approaching the optimum state and taking into account the needs of both sides in equal measure. This kind of cooperation is definitely characterised by friction, but in the end it generates products that fulfil both technical and design requirements.

Especially in the field of medical technology, another important factor is added to these requirements that has increasingly become a challenge for design: The hygienic properties of a product are crucial when it comes to reducing dangerous hospital germs. What really matters is to create products that reduce exposure to contamination and are easy to clean. The elaborate shapes, purposefully applied surface topologies and clever detail solutions of the design are consistently geared towards helping to make it easier for the user to prepare the equipment in a hygienic manner.
DESIGNS 33

Basically, medical devices are to support the user in professionally performing demanding tasks. Software components in the form of user interfaces are often an inherent part of multifunctional product solutions and must be seamlessly integrated into the design. For the design of products with extensive hardware and software applications, ergonomics, usability and learnability play an essential role. Therefore, such complex products benefit enormously from a holistic design process that is geared towards the user, while combining various design disciplines. If industrial designers, interaction designers and user interface designers work together in harmony, products can be created that meet all user needs and, in the best case, provide a positive user experience.

If products are similar in technical terms, "soft" criteria can be crucial

In times when products are becoming more and more similar in technical terms, these "soft" properties and emotional aspects of a product are playing an increasingly important role. Design and user experience are increasingly becoming differentiating features, offering companies additional opportunities to stand out from their competitors.

This market advantage must be protected. In addition to patents, utility models and trade marks, companies – whether large or small – can protect their designs from being copied by means of design protection, thus gaining a competitive advantage. The requirement for protection is that the design is new and has individual character.

In the context of the DesignEuropa Awards 2021, as a member of an international and interdisciplinary jury, I had the opportunity to exchange ideas with other experts on what is the essence of good design. Jointly, we assessed the design quality of products for which a Community design has been registered from a wide variety of industries. The broad range of products submitted alone shows that design is becoming an increasingly important economic factor – regardless of the industry, size and complexity of the product.

In any case, design plays an important role when it comes to combining the diverse demands placed on a product and converting them into a product that can be experienced by users. A product that evokes the most positive emotions possible and that we may even grow fond of.



ARTIS pheno, robotic angiograph system, in the hybrid OR



ARTIS pheno in action in a clinical setting

At a glance



Number of staff and recruiting

231 in-house training courses and language courses and lectures were held for our staff in 2021.



Breakdown of income by types of IP





INTERVIEW

"The German patent is highly attractive"



DPMA Vice-President Bernd Maile

DPMA Vice-President **Bernd Maile** was a development engineer in the semiconductor and telecommunications industries. In 2000, he joined the DPMA as a patent examiner. Subsequently, Mr Maile held several executive positions and, for several years, was a technical judge at the Federal Patent Court. Since 2021, he has been Vice-President of the DPMA.

The Unitary Patent is a new option to obtain protection, which is to be offered by the European Patent Office after its introduction. Contrary to the existing bundle of European patents, which allows applicants to choose in which countries they request protection, the Unitary Patent will have a unitary effect in all participating countries after being granted.

Mr Maile, the DPMA saw record numbers both in the patent area and in the trade mark area in 2021. What do you think are the reasons for this?

The number of procedures concluded in the patent area in 2021 was indeed the highest in more than 30 years. The number of patent grants also reached its highest level in the last 30 years. The number of trade mark registrations was also at a record level. In particular in the patent area, our successful recruitment initiatives of the last years in Munich are paying off. From 2022, we also establish patent divisions in our Jena sub-office. Furthermore, we also use artificial intelligence to continuously develop our highly efficient IT landscape, e.g. in order to limit the effects of the rapidly growing amount of prior art on the time and effort necessary for conducting searches while maintaining quality.

High-quality examination and court systems, low fees, procedures that are getting quicker and quicker: DPMA Vice-President Bernd Maile explains why national IP rights will continue to be a good option after the European Unitary Patent has been introduced – for many applicants, even more so than before.

An important issue currently is the European Unitary Patent, which is about to be introduced. What does this mean for the DPMA?

The Unitary Patent will be a new, additional option to request protection. The current system of national and European patents will of course continue – and that is good. Users will have to cope with a more varied legal system in the future. It remains to be seen by which criteria they will make their decisions.

What are the advantages of national IP procedures?

Our patent examination activity firmly focuses on experts who understand the subject matter or method applied for. Our examiners have gained several years of professional experience before joining the DPMA, so in-depth understanding is ensured. At the relevant court instances, too, the national patent system ensures not only legal knowledge but also high-quality technical expertise. In addition, our fees for the national procedure are very favourable. Quick procedures based on appropriate technical expertise and combined with low fees – in my view, this is very attractive for applicants who need IP rights only in a few selected key markets. For an amazingly great share of the European patents, applicants only seek protection in one to two countries, mainly in Germany. We are confident that these applicants will become even more aware of the great advantages of German IP rights, especially now.

Are there any additional unique features of the German system?

We offer the utility model, i.e. an independent technical IP right that does not exist at the European level. Applicants can obtain utility model protection easily, at low cost and at unrivalled speed. There is also the option to split off a German utility model from a patent application effective in Germany – even if the IP rights have been granted by the EPO.

The provisions on the Unitary Patent also provide the option to protect inventions both under a European patent and under a national patent. What are the arguments for this double protection?

Applicants can thus access the established national and the new unified court systems. As a result, it is significantly more attractive to also file a national German first application for a patent when applying for the European patent. If a patent is revoked at the European level, protection will continue in Germany on the basis of the national patent. In our view, in many cases, this important advantage will also make German IP rights even more attractive.

PERSPECTIVE

"Working part-time in an executive position – we'll make it work!"

A good work-life balance is an important strategic goal of the German Patent and Trade Mark Office (DPMA). Among other things, this includes opportunities to work part-time in executive positions. Dr Claudia Summerer, Head of the Central Unit of Internal Communications, Key Support to Senior Management and Strategic Management at the DPMA, talks about the balancing act between managerial responsibility and family duties.

How do you manage the balancing act between work and family? In this context, I understand a true balancing act to mean that I am performing work assignments and family duties simultaneously. I try to avoid such a balancing act as far as possible. When I work, I work. When I play with my daughter, I play with my daughter. That sounds simple, but it requires a lot of coordination. The opportunity to work part-time at the DPMA helps me a lot. I can easily organise my day. We all know that there are 24 hours in a day, six of which I devote to my job as Head of the Central Unit of Internal Communications, Key Support to Senior Management and Strategic Management on four days of the week.

I equally enjoy my job and my family. That's why if I were to draw a comparison I would say my part-time job is more like a swing than an uncomfortable balancing act. To really pick up momentum, you sometimes need outside support, a push, and then it requires coordination to successfully swing back and forth, between work and family responsibilities.

For me the push to accept a part-time executive position was, above all, the certainty that the DPMA is committed to work-life balance. At the DPMA, 13% of the executives work part-time. This means that I have a number of role models at the DPMA who prove to me that a part-time leadership role can work very well; last but not least, these include my superiors, who are supporting and encouraging me.

An important piece of the puzzle: the DPMA crèche

A year ago when I took on the job, I agreed with the office's senior management that we would give this working hour scheme a try and adapt it, if necessary. It did not sound at all like "working part-time in an executive position – is it possible at all?" but more like "working part-time in an executive position – we'll make it work!" So far it has been a success for everyone involved.

An important piece of the puzzle in the overall scheme was that I managed to secure a place in the crèche at the DPMA for my daughter. That is really worth a lot in a city like Munich. Sometimes workplace crèches are the only way to find a suitable place. The crèche at the DPMA is also a really great facility, where my daughter is looked after



Dr Claudia Summerer

with love and care. This is easing the guilty conscience, which I admittedly feel from time to time, because I leave my child in the care of others for as much as seven hours a day in order to be able to work.

Especially in an executive position, you have to ask yourself whether you are prepared to permanently take on responsibility, both at work and at home. Line-management responsibility for the staff, responsibility for decisions, responsibility for the family and your child. In my view, this should not be underestimated.

As every parent knows: With a child, hardly any day goes as planned! It becomes particularly exciting if you do have to get off the swing and do a balancing act; for example, because the child is ill and hence cannot be looked after at the crèche. Then it takes the famous village to raise a child. In my case, this village is a good network, consisting of my family, but also my colleagues at the DPMA, who are very understanding to my situation.

I really appreciate the DPMA's resolve to not only advertise new and flexible working arrangements, but to actually put them into practice. And I also believe – I think so much self-confidence is justified – that, ultimately, employers also benefit from such working arrangements, because in this way they can better tap the full potential of their staff.



TEN YEARS AGO

Milestone anniversary of a "beacon project"



DPMA President Cornelia Rudloff-Schäffer

Digital mode or standstill. These were the two options in many fields of work at the beginning of the coronavirus pandemic over two years ago. Those who were not able to quickly switch to largely contactless work, on the basis of electronic channels, had to let business rest for the time being or were at least severely restricted in their activity. Many sectors - such as the cultural and hospitality sectors - were thus only able to continue their work in an extremely limited way. Other areas where this would have been possible simply did not have the digital infrastructure. Not so the DPMA.

Thanks to the consistently digital work processes in our IP procedures, we had already set up teleworking stations in the homes of many of our staff over the past few years. This enabled us to let another large part of our staff work from home without having to be concerned about our productivity. For ten years, the DPMA has been working with the workflow-supported electronic IP case file – particularly during the pandemic the high degree of digitisation has paid off

The IT system, to which we substantially owe our resilience in the current crisis, went live ten years ago: our electronic IP case file for patents/utility models – DPMApatente/gebrauchsmuster as we call it today.

When this system went live on 1 June 2011, we could not imagine the challenges that we have been facing over recent years. However, what we did know at that time was that after years of preparation, we had scored a great success! The then Federal Minister of Justice, Sabine Leutheusser-Schnarrenberger, called it a "beacon project of the federal government". And a few months later, at the National IT Summit in Munich, the then Federal Chancellor Dr Angela Merkel was the first to inspect our case files online.

The attention was not without reason. E-government was a topic that was already on everyone's lips. However, such a complex project aiming at fully electronic case file processing and currently comprising more than five million lines of code had never before existed in the landscape of German public authorities. The electronic IP case file processes patent and utility model procedures completely digitally and seamlessly from end to end – from the electronic filing of the application to digital processing to the electronic delivery of decisions and office actions. The customers are connected to the system via the **DPMAdirektPro** interface. This enables them to file applications electronically and to also receive

all communications and, ultimately, decisions and office actions digitally. Internally – and this is what is really special – a digital workflow ensures that the electronic case file is always forwarded exactly to where the next step has to be taken.

After years of preparatory work, the project had gained momentum by mid-2005: Business processes were modelled and implemented in IT systems for the electronic workflow. Horizontal services, such as for address and user data and for payment transactions, had to be set up anew and connected with electronic interfaces. In addition, weak points were gradually eliminated and the staff received training in the new work methods.

What was particularly difficult was to migrate the existing case files into the new system - and to do so exactly according to their respective procedural status. 140,000 paper files had to be scanned first. In addition to the technical task, the big challenge was the complex change process aiming at bringing all staff on board. Specially trained colleagues helped us to keep the staff up to date. Colleagues whose jobs in the registry and typing service became redundant underwent further training for new, future-proof tasks. In this way, we were able to offer all staff at least equivalent jobs.

The years of hard work have paid off. Our staff appreciate the digital infrastructure – and not just since the pandemic. Around three quarters of all staff now have the opportunity to work from home. And since 2015, we have also been handling trade mark procedures electronically. The electronic case file for designs is also in the stage of technical implementation. Our electronic case file for patents and utility models now boasts impressive performance data: around 500,000 completed examination and registration procedures, almost 60 million running processes and more than 76 million documents stored in the past ten years. During core working hours, the system is available up to 99.8% of the time. This means that our IT specialists, who constantly maintain and further develop **DPMApatente/gebrauchsmuster**, are on the same level as highly professional IT service providers.

Last but not least, the high reliability and effectiveness encourage us to consistently continue on the path of digitisation. That way, we will hopefully also be well prepared for future crises.



DPMA President Cornelia Rudloff-Schäffer at the ceremony for the introduction of the electronic IP case file on 1 June 2011



Milestones of the electronic IP case file for patents/utility models

Customer care and electronic services

To keep you well informed at all times

Our customer service is a competent and reliable partner at your side. Its primary goal is to "help you to help yourself".

Such assistance is important when preparing the application procedure for all types of IP rights and makes an essential contribution to ensuring the quality of applications. In addition, the DPMA offers services for conducting IP searches and monitoring competitors. We make our IP data available to information providers and grant direct automated access to our services (DPMAconnectPlus). Despite all the restrictions to face-to-face contact with visitors, caused by the coronavirus pandemic, we are there for you.



You can make use of the following services:

7 Our Central Customer Care and Services

You can contact the staff of our Central Customer Care and Services by telephone at +49 89 2195 1000, by e-mail at **info@dpma.de** and by post. You will not only receive information of a general nature but also advice on the correct way to file an IP application and answers to questions on filed applications.

We hope that we will soon be able to again provide face-to-face consultations to you at our enquiry units.

7 Our search support

Searches are possible online any time via our **DPMAregister** and **DEPATISnet** databases. You can also inspect case files online using our **DPMAregister** service. For search support, you can use the contactless services by telephone, e-mail or via the online search.

Our search rooms in Munich and Berlin will be reopened to the public from 1 June 2022. We look forward to meeting you face to face again. Please be sure to make an appointment in advance by contacting our Central Customer Care and Services.

7 Initial consultation for inventors

Free initial consultations for inventors are offered in cooperation with the Chamber of Patent Attorneys, by patent attorneys at various institutions in many towns across Germany. In Munich and Berlin, these consultations will take place again in the rooms of the DPMA from 1 July 2022. The Central Customer Care and Services will be happy to arrange an appointment for you. Consultations are not possible without prior appointment.

7 Our workshops and seminars

For a general introduction to industrial property protection or, specifically, to searches in our databases, we offer various workshops and seminars.

In 2021, due to the coronavirus pandemic, it was again not possible to hold face-to-face workshops and seminars. We have made every effort to offer these events digitally at the proven high-quality level. This enabled us to hold numerous events for many target groups with special consideration to the characteristics and needs of small and medium-sized enterprises (SMEs). The response was very good, as interested parties from

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all over Germany were able to attend these seminars and workshops without having to invest a great deal of time and effort. The workshops and seminars offered by the DPMA are also increasingly noticed and used in German-speaking foreign countries.

For our workshops and seminars, please refer to our website at **https://www.dpma.de/dpma/veranstaltungen/index.html** (in German).

7 Our print and online publications

Formerly, our annual report was available in a print version and electronically in PDF format. From now on, an additional version in HTML format is available to you on our website. This new digital edition is available at **> https://www.dpma.de/jb2021-en**.

But we offer you even more on our website: concise information leaflets and extensive brochures containing information on patents, utility models, trade marks and designs, on searches and on our electronic services. Our focus topics "Milestones" and "Background" and our newsletters provide you with interesting news and everyday information about IP rights. Since 2021, the newsletter "DPMAmitteilungen" has provided you with official information such as announcements, notices and notices of the President.

Via our website, you also 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 on IP protection, including selected court decisions and notifications about patent agents and representatives. Our publication "Erfinderaktivitäten" highlights interesting innovations from research and technology in a detailed scientific way and our series "DPMAinformativ" addresses specific topics concerning patent information. You can also order a number of our publications in print from us.

⊲ Our e-services

In our two databases, **DPMAregister** and **DEPATISnet**, which are publicly accessible on our website, you can carry out 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. Thanks to three different search modes, you can use both a quick entry-level search and extensive search queries. You can use our **DPMAkurier** alert service to monitor IP rights. You will receive the results in automated e-mails. The **DPMAconnectPlus** service offers you automated online access to all official register and publication data from **DPMAregister** and the opportunity to download patent and utility model documents from the **DEPATIS** document archive.

7 The network of local patent information centres

Our information and support services are supplemented by a network of 19 local patent information centres (PIZ) across Germany. The individual patent information centres offer a large variety of services in the area of industrial property protection, especially for SMEs, members of universities and research institutions as well as independent inventors. However, neither the patent information centres nor the DPMA can give legal advice. Legal advice is exclusively provided by patent attorneys and lawyers. For more information about our cooperation with the patent information centres, please refer to our chapter "National cooperation partners" on page 54. You can reach the patent information centres online at **7 www.piznet.de**.

Our activities at trade fairs

In 2021, we participated in trade fairs only digitally, due to the pandemic. However, in that format, too, we presented the DPMA as a modern service provider and a federal centre of expertise on intellectual property at various trade fairs and events. On these occasions, our virtual trade fair stand was used for the first time. The focus of the trade fair stand is to raise public awareness of industrial property rights and provide IP information to the public. Visitors can take an interactive 360° tour of the DPMA and learn about IP rights and search options at the "info points" integrated into the tour. We also place a special focus on information for small and medium-sized enterprises and start-ups.

Would you like to learn more about the DPMA? Please find our virtual trade fair stand here **> https://galerie.** dpma.de/virtueller_messestand/ (in German).

The trade fair agenda for 2022 is available at **↗** https:// www.dpma.de/dpma/veranstaltungen/messen/index. html (in German).

7 Our complaints management

We accept general written complaints – however, no complaints in the legal sense – at a central unit, analyse the requests and respond in close cooperation with the division involved. The analysis repeatedly reveals potential for improvement, which is then discussed and implemented. Please write to us and explain your request if you have not been entirely satisfied with the services of the DPMA. You can contact us by e-mail at **info@dpma.de** or by post.

News from the IT services

In 2021, too, we worked continuously on improving and expanding the electronic case file processing systems.

Expansion of the electronic IP case file for designs

The design area is working intensively on fully completing the **DPMAdesigns** system for electronic case file processing.

We have made continuous progress in the conceptual preparation and the technical implementation of the requirements of the design area so that we were able to implement the first essential technical changes in 2021. In March 2021, the design area was the last IP area to be connected to the DPMA digitisation centre. In April 2021, we included a major part of the system, referred to as "electronic file inspection", into the productive test operation. In the further development, we are now implementing the elementary processes for the design procedure, such as "new design application", "document preparation" or "document distribution". Other important steps are the connection to the required horizontal services, such as **DPMAzahlungsverkehr** (DPMA payment transactions), and the integration of **DPMArecherche** (DPMA search).

We aim to complete the entire system and hand it over to the design area in 2024.

Modernisation of online filing of design applications

In November 2021, we newly implemented e-filing of design applications. Instead of ten designs, you can now combine up to 20 designs in an application (this is called multiple application). In addition, you can now export and import your data. A new modern layout and improved user guidance make the application process even more user-friendly.

More than eight years ago, on 12 November 2013, **DPMAdirektWeb** went live and since then has enabled signature-free applications for trade marks and designs. After the start of the electronic receipt of documents a decade earlier, the foundation for the use of a modern web application was laid in 2012 by abolishing the requirement that applications for trade marks and designs must be filed in writing. Even then, the focus was on user-friendliness and accessibility. The aim was to offer all users the option to apply for trade marks and designs in an uncomplicated way and without an electronic signature by providing a low-threshold service. Since the launch of **DPMAdirektWeb**, more than 300,000 trade mark applications and more than 32,000 design applications have been filed using this service. In total, the DPMA received 78% of all trade mark applications and more than 91% of all design applications in a digital format in 2021.

The technological convergence of **DPMAdirektWeb** and **DPMAdirektPro** creates additional synergy effects that accelerate further development and form the basis for optimising the digital input channels. The latest example of this is the addition of the editor for group titles to the list of goods and services.





New service: online-assisted search

Due to the pandemic, our offices were temporarily closed to the public. In order to make the broadest possible search services available to customers, the DPMA introduced online-assisted searches on the Internet. The focus is on technical explanations of our search tools and individual assistance in using them. This service for interactive personal assistance in online searches is provided by the Berlin office.

You can meet DPMA search experts virtually on the Internet who will provide individual search support to you and explain how to best use our tools and services. For example, our experts will show you how to optimise your personal IP search in our databases. However, we do not provide legal advice. To make an online search appointment, please contact the search room of the DPMA in Berlin. You will receive your access data and further information by e-mail.

During the online search, you can mutually share computer screens with our search experts. This way we can demonstrate to you how to use our search tools and you can show us where you have difficulties using our web services. For more information and the contact details of our search room, please visit our website (\blacksquare).



Electronic services

The following e-services are available to our customers:

DPMAregister

- » Online search in the bibliographic data as well as in the legal and procedural status data
- » You can produce an uncertified excerpt from the register yourself
- » You can inspect the various parts of a patent case file online
- » You can choose between three different search modes: basic, advanced or expert
- » NEW: You can re-run a search simply by using a previously generated search link
- » NEW: The help pages of DPMAregister have been revamped completely. The help text is now combined in one PDF document, enabling a search in the entire help pages
- » **NEW:** You can save up to 100 old search queries in the expert mode

DPMAkurier

» Legal status monitoring of

» You can subscribe to receive

IP gazettes/journals by

» You can submit combinations of applicant/inventor/ owner as well as of classifi-

certain IP rights

cation symbols

e-mail

DEPATISnet

- » Document archive with clearly more than 100 million data records from about 100 countries; you will receive almost 60% of these data records directly as PDF
- » You can conduct online searches for prior art published in patent literature from all over the world
- » **NEW:** Advanced search mode with customisable search form
- » **NEW:** You can save up to 100 old search queries in the expert and IKOFAX modes

DPMAdirektPro/ DPMAdirektWeb

DPMAdirektPro

- » Legally valid online filing of applications for all IP rights
- » You need a special software, which we provide to you free of charge, as well as a qualified signature card
- » You can register for the electronic document mailing service

DPMAdirektWeb

- » Legally valid online filing of applications for trade marks and designs as well as international registration of marks
- » Contrary to DPMAdirektPro, no signature card or special software is required

DPMAconnectPlus

- » Establishment of an interface, which provides automated access to all official register and publication data from **DPMAregister**
- » You can download patent and utility model documents from the DEPATIS document archive through an interface
- » Facsimile documents of DE, DD, EP and WO documents as well as optionally the corresponding bibliographic data
- » We provide you weekly with the current data and documents of the German IP rights in the form of data packages



Detailed information on our IT developments and e-services is available on our website.





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

OUR STRATEGY, OUR PROJECTS

n 2021, too, we were able to successfully complete several important measures as part of our strategy process, thereby pushing ahead with the achievement of our strategic goals.

With reference to our fields of action "Customers" and "Products and Services", two measures are particularly worth highlighting.

We have integrated a powerful translation engine into our patent literature database, which translates Asian texts and enables our patent examiners to conduct fulltext searches in Asian patent specifications. Particularly in view of the rapidly increasing number of Chinese patent applications, this is an important step for our office to be able to continue making full use of the state of the art. Read more about it on page 13.

In addition, we expanded the submission options for **DPMAdirektPro**. Our customers were already able to electronically file any documents in the IP procedures. In a second stage of the measure, the possibility to further specify document types was created.

The completion of the above-mentioned measures enabled us to keep our focus on pursuing the strategic goal of the DPMA to offer our customers enhanced usability and to consistently work through our digital roadmap.

Moreover, in the field of action "Customers", we are working on being able to hold hearings in the examination procedure by using video conferencing. The necessary technical requirements for this are currently being created. For the field of action "Cooperation projects", we have advanced the measure "WIPO Communication" further.

From the third quarter of 2022 on, we want to pilot the electronic file management of our administrative work as part of the measure "electronic administrative work". Subsequently, we will successively switch to electronic file management in the other administrative areas. Using a cloud-based approach, electronic processes and an envisaged interface to the federal archives, we gear our administrative work towards the future.

With this focus on further developing the digitisation of our services, we provide both our applicants and our partner organisations with high-quality, modern and efficient services and tools.

OUR PROJECT

Modern control systems shape the future

High-quality services and the greatest possible efficiency: To achieve this goal, the DPMA has been using consistent and robust business processes for several years. All tasks and workflows of the DPMA have been integrated into a digital process portal on the intranet – this offers various benefits to our staff.

The DPMA is a federal authority with various and complex tasks. Modern business process management has been an integral part of our organisational culture for years, so we can perform these tasks as efficiently as possible. In order to increase the knowledge of our processes within the DPMA, we have established a process portal.

The process portal as a point of concentration of information

The process portal is a pool for the DPMA's workflows and their connections with the services, organisation, strategy and IT systems of our office.

It helps us provide all our staff with transparency about work-flows and competences.

This means that the business processes are the central point of our knowledge. The individual process steps contain all relevant information.



Process step in the process portal

The integrated presentation of the process steps allows guidelines, rules, work instructions and required forms to be found more easily. Prior and subsequent steps as well as competences can easily be viewed too, so it is possible to attribute responsibilities and find interfaces.

Furthermore, the logical relations in the background reveal connections that are not immediately evident.

For example, it is easy to identify the departments that use certain systems. It is also possible to inform them about upcoming changes and involve them in testing new versions. The compilation and update of catalogues of tasks and necessary work equipment is also possible at the push of a button, as it were.

The presentation through process chains allows all of us to better recognise connections and to focus on providing our services in the best possible way.

The process portal is a reliable tool that forms the basis for collecting, sharing and using our comprehensive knowledge. Of particular importance are the various process owners, who gather all information for "their" processes to facilitate process control.

Pioneer among public authorities

Our comprehensive approach to process management, which also integrates the other management systems, makes us a pioneer among public authorities. In view of the expertise and methodology built up at the DPMA over many years, we are an accepted contact and highly respected as such by both the business community and public authorities.

We do not only take a leading role in expert networks and forums. By presenting our system, we also provide other authorities with active administrative assistance in establishing their own process management system.

Our experience has also been considered in the new organisation manual of the federal administration (\blacksquare).



Patent attorney training

Patent attorneys play a crucial role in setting the course for the success of an innovation, a trade mark or a design. They have the technological or scientific expertise and the legal knowledge to advise and represent clients in matters concerning intellectual property and industrial property protection.

How to become a patent attorney

In order to ensure that patent attorneys provide quality services, prospective patent attorneys usually complete about three years of training in the field of industrial property protection after acquiring a university degree in engineering or science and having one year of practical/technical work experience. During their training, they undergo three phases in total. With a minimum duration of 26 months, the first and longest training phase for candidates takes place under the supervision of a patent attorney at a patent law firm or under the supervision of a patent agent at the patent department of a company. The next two training phases are known as the "office year". This training period consists of two months at the DPMA and six months at the Federal Patent Court (*Bundespatentgericht*). Usually, in parallel to the training programme, the candidates attend a compulsory course of study in general law, specifically established at the *FernUniversität* (distance learning university) in Hagen, to round off the qualifying training.

At the end of their training, the candidates take the qualifying examination for patent attorneys. It consists of four written tests and an oral examination. Those who, after completing their studies, can prove having many years of previous experience in advising or representing clients in the field of industrial property protection may also be directly admitted to the examination. In this case, too, a course of study in general law must be completed.



Qualifying examinations for patent attorneys in 2021

At the DPMA, we are responsible for all matters relating to the training and examination of prospective patent attorneys: For example, we decide who can be admitted to the patent attorney training or examination on the basis of their previous qualifications, support the candidates during their training, organise the "office year", which starts in February, June and October of each year and the patent attorney qualifying examinations, which also take place three times a year.

The "office year" and the patent attorney qualifying examination: still influenced by the coronavirus pandemic

Even in 2020, the coronavirus pandemic presented us with considerable challenges in organising the "office year". The experience gained during that time also helped us in 2021.

Once again, we managed to hold our training courses exclusively as video conferences, and we again had to reduce the candidates' face-to-face training time with one of our examiners to a minimum during the practical training. Thanks to their flexibility and commitment, all supervisors succeeded in providing the candidates with the greatest possible insight into the practical work of the DPMA, even under difficult conditions.

In 2021, we continuously assessed the framework conditions under which it was possible to conduct the training and examination, making short-term adjustments in accordance with the infection rates and the applicable legal situation. Thus, during the peak of the second wave of infections, we had to postpone the written patent attorney qualifying examination, which had been scheduled for February 2021, in order to protect everyone involved. By applying the appropriate hygiene measures, we managed to hold the examination at the end of March 2021; the oral examination took place in May. We also successfully held the examinations on the two additional examination dates.

The year 2021 in numbers

In 2021, we admitted 131 candidates to the patent attorney training. This means that the number of candidates admitted increased slightly compared to the previous year. Out of 174 examinees, 166 passed the qualifying examination. Two candidates passed what is known as the qualifying examination for patent attorneys of other European member states under the Act on the Activities of Patent Attorneys from EU Member States in Germany (*Gesetz über die Tätigkeit europäischer Patentanwälte in Deutschland*).

Vocational training committee for trained IP paralegals

At the DPMA we are responsible not only for the training and examination of prospective patent attorneys but also for the appointment of the members of the vocational training committee for trained IP paralegals, formed at the Chamber of Patent Attorneys, in accordance with the Vocational Training Act (*Berufsbildungsgesetz*). We appointed new members for a period of four years with effect from 11 October 2021. The committee consists of representatives of employees, employers and teachers at vocational schools. It deals with all essential issues related to the training and examination of trained IP paralegals.

Further information

Detailed information on the patent attorney training and examination is also available on our website (**(**).

COURSE OF TRAINING





Detailed statistical data on patent attorneys and representatives is available in the chapter "Statistics" on page 92.

https://www.dpma.de/english/our_office/about_us/further_duties/patent_attorney_training/index.html
https://www.patentanwalt.de/en/

Supervision under the CMO Act

Whether music, film or written text – most of these are works protected by copyright, for the use of which the authors are entitled to royalties. Collective management organisations (CMOs) ensure that these royalties reach the authors. The DPMA acts as the supervisory authority for these CMOs.

Anyone who wants to use a work protected by copyright, for example to reproduce text or play a piece of music in public, generally needs the permission of the author. However, users often do not know who to contact for this. Conversely, it is almost impossible for authors to find out about every use of their works in order to assert their claim to royalties. For this reason, there are CMOs that perform these tasks collectively and act in a fiduciary capacity. They grant licences, collect royalties and distribute the revenues to the right holders according to fixed distribution schemes. In addition to their fiduciary position, CMOs usually have a de facto monopoly position in their sector. For this reason, they are subject to supervision by the DPMA. As supervisory authority we act in the public interest and ensure that CMOs comply with their legal obligations pursuant to the Collective Management Organisations Act (CMO Act – Verwertungsgesellschaftengesetz).

The 13 CMOs that are currently holding a permit by the DPMA to conduct business generated revenues of about 1.8 billion euros in 2020. The amount of each individual CMO is listed in the table on page 49. Owing to the restrictions associated with the coronavirus pandemic, such as event bans or the closure of cultural and leisure facilities, works protected by copyright were reproduced less frequently in public as part of face-to-face events. However, streaming and other online uses have increased.

New provisions for the digital market

Even before the coronavirus pandemic, more and more copyright-relevant processes had shifted to the digital space.

The legislator has taken this into account. For the purpose of implementing what is known as the DSM Directive (DSM = Digital Single Market - Directive (EU) 2019/790 of 17 April 2019), the Act to adapt Copyright Law to the Requirements of the Digital Single Market (Gesetz zur Anpassung des Urheberrechts an die Erfordernisse des digitalen Binnenmarkts) came into force on 7 June 2021. On 1 August 2021, the Copyright Service Provider Act (Urheberrechts-Diensteanbieter-Gesetz) followed, which regulates the copyright liability of content sharing sites. It contains three new remuneration claims that can only be asserted by CMOs. The focus of media coverage was put on the implementation of Art. 17 of the DSM Directive and the related discussions, especially concerning the use of upload filters and the scope of legally permitted uses for the purposes of caricature, parody and pastiche. However, the Act also reforms many other areas that affect CMOs and thus our supervision. One example is that in future, collective licences with extended effect can be granted to who are generally referred to as outsiders, that is creative people who have not previously commissioned a CMO to manage their rights. Furthermore, a new related right for press publishers (Presseverleger-Leistungsschutzrecht) was introduced, through which in particular a participation of press publishers in the revenues resulting from the online use of press products is to be achieved. In addition, under certain conditions, by virtue of law, publishers must be given a share in the royalties for legally permitted uses.

Supervision over authorised entities under the Copyright Act

Authorised entities are institutions which offer educational material or provide information products and texts in an accessible format to people with a visual impairment or reading disability on a non-profit basis (for example, libraries for the blind). As of 1 January 2019, pursuant to the statutory permission under section 45c of the Copyright Act, such entities may reproduce published literary works and sheet music to convert them into an accessible format. These accessible copies may be made available by authorised entities to other authorised entities or to people with a visual impairment or reading disability only. This is intended to strengthen their participation in social and cultural life. In return, authorised

entities have to fulfil certain obligations, compliance with which is checked by the DPMA in the function of supervisory authority. An accessible publication of a list of the currently 19 notified authorised entities can be found on our website (\blacksquare).

Register of anonymous and pseudonymous works

Copyright in a work which was published anonymously or under a pseudonym normally expires 70 years after its publication. By registering the name of the author in the register, copyright protection for these works can be extended to the general period of protection, which expires only 70 years after the author's death. Statistical data on this can be found in the table on page 92.

Register of out-of-commerce works

In the course of the implementation of the DSM Directive, the provisions on out-of-commerce works were also revised. Since 7 June 2021, it has no longer been possible to make entries in the register of out-of-commerce works previously managed by the DPMA. Out-of-commerce works can now be entered in the Out-Of-Commerce Works Portal (\blacksquare) managed by EUIPO (European Union Intellectual Property Office). The register previously managed by the DPMA will be closed upon expiry of 31 December 2025 after a transitional period. Until then, the register can still be consulted. Licences issued pursuant to the old version of the CMO Act shall end by virtue of law after the transitional period.

https://www.dpma.de/dpma/wir_ueber_uns/weitere_aufgaben/verwertungsges_urheberrecht/aufsicht_verwertungsges/liste_befugte_stellen/ index.html (in German)

https://euipo.europa.eu/ohimportal/en/web/observatory/outofcommerceworks

Revenues of the collective management organisations in 2020

	Collective Management Organisations	Total budget ¹ in 2020	
GEMA	Gesellschaft für musikalische Aufführungs- und mechanische Vervielfältigungsrechte, rechtsfähiger Verein kraft Verleihung	€958.838m	
GVL	Gesellschaft zur Verwertung von Leistungsschutzrechten mbH	€216.140m	
VG WORT	Verwertungsgesellschaft WORT, rechtsfähiger Verein kraft Verleihung	€210.631m	
VG Bild-Kunst	Verwertungsgesellschaft Bild-Kunst, rechtsfähiger Verein kraft Verleihung	€110.278m	
VG Musikedition	Verwertungsgesellschaft Musikedition, rechtsfähiger Verein kraft Verleihung	€8.993m	
GÜFA	Gesellschaft zur Übernahme und Wahrnehmung von Filmaufführungsrechten mbH	€10.740m	
VFF	Verwertungsgesellschaft der Film- und Fernsehproduzenten mbH	€54.723m	
VGF	Verwertungsgesellschaft für Nutzungsrechte an Filmwerken mbH	€17.641m	
GWFF	Gesellschaft zur Wahrnehmung von Film- und Fernsehrechten mbH	€122.687m	
AGICOA GmbH	AGICOA Urheberrechtsschutz-Gesellschaft mbH	€23.747m	
Corint Media	Corint Media GmbH	€54.828m	
TWF	Treuhandgesellschaft Werbefilm mbH	€15.026m	
GWVR	Gesellschaft zur Wahrnehmung von Veranstalterrechten mbH	€1,920	
Total budget		€1,804.274m	

¹ The total budget includes income from licences, claims to remuneration, income from interest and securities as well as other operating income. The total budget for 2021 was not yet available at the time of going to press.

Arbitration boards at the German Patent and Trade Mark Office

Is it impossible to resolve a dispute? Then, independent arbitrators are often helpful. Two arbitration boards are located at the DPMA: the Arbitration Board under the Employee Inventions Act (*Gesetz über Arbeitnehmererfindungen*) and the Arbitration Board under the Act on Collective Management Organisations (*Verwertungsgesellschaftengesetz*). Their task is to mediate an out-of-court settlement. There is a large variety of contentious issues in practice.

The Arbitration Board under the Act on Collective Management Organisations

Those who want to make use of musical, literary, artistic or similar works have the obligation to pay royalties to the authors. However, it is not always possible for authors to track all uses of their works. For this reason, authors and holders of related rights are usually represented by collective management organisations, which enforce these rights on their behalf. The Arbitration Board under the Act on Collective Management Organisations mainly mediates disputes between collective management organisations and users about the amount of royalties, including disputes about what are referred to as "inclusive contracts". Inclusive contracts are concluded between a collective management organisation or collection agency and users of works who have joined up to form an association.

As in previous years, the Arbitration Board again substantially reduced the number of pending cases in the second year of the pandemic. There were 206 concluded proceedings, including 13 (inclusive) contract proceedings, as against 58 requests submitted. This means that as of 1 January 2022, only 119 proceedings are older than one year, calculated from the date of service, and still awaiting a decision.

In 2021, one focus of the proceedings handled by the Arbitration Board was on inclusive contracts and contracts of use in the field of rights of communication to the public and of cable retransmission. All decisions can be viewed in an anonymised format on the Internet (\blacksquare).

For example, the Arbitration Board proposed a remuneration rate of a maximum of 3.75% of the turnover, a rate that is based on the extent of the respective use, to the parties involved in proceedings on communication of music to the public in music hall performances (Sch-Urh 15/18) and in circus performances (Sch-Urh 94/20) in order to sufficiently distinguish this type of use of music from concerts.

In another case (Sch-Urh 13/18) concerning the communication of television broadcasts for entertainment having no event character and without dancing, the Arbitration Board proposed that the tariff rate of the FS tariff should remain unchanged but that it should only be applied if the user concerned had not already obtained a licence from GEMA for another background music for which royalties had to be paid. In this way, the Arbitration Board takes into account the fact that it is not possible to manage more than one type of music use at a time.

The arbitration proceedings Sch-Urh 08/18 concerned the granting of reproduction rights by GVL (German Organisation for the Management of Neighbouring Rights) for the purpose of communication to the public by the reproducer. In this case, the Arbitration Board decided to leave the surcharge at 20% of the relevant rate of the GEMA tariff VR-Ö subject to the proviso that the tariff feature "per event" of the tariff VR-Ö was not taken into account.

In the period under review, the Arbitration Board also decided several cases on the licensing of online video recorders. The Munich Higher Regional Court (*Oberlandesgericht München*) (29th division) expressly found the objection regarding compulsory licensing to be justified and thus confirmed the settlement practice of the Arbitration Board, according to which online video recorders constituted a case group of (cable) retransmission within the meaning of section 20b of the Copyright Act (*Urheberrechtsgesetz*). Previously, the Munich Higher Regional Court (6th division) had always denied this assumption. For the assessment of the appropriate remuneration, the Arbitration Board took into account the fact that cable retransmission involved data collection by the operator and that these data had an economic value.

Arbitration Board under the Employee Inventions Act

Where was it invented? The answer is clear! According to an estimate of the Arbitration Board more than 90% of the inventions filed for the grant of a patent at the DPMA in 2021 were made by employees within the scope of their employment relationship.

This scenario constitutes what initially appears to be an insoluble legal situation. According to section 6 of the Patent Act (*Patentgesetz*), the inventor has the right to the patent. However, the invention is also a work product and work products belong to the company according to section 611 a of the German Civil Code (*Bürgerliches Gesetzbuch*). Thus, two opposing concepts of assigning ownership conflict with each other in the person of the inventor.

In Germany this legal problem is resolved in the Employee Inventions Act (*Gesetz über Arbeitnehmererfindungen*). While the Act provides that the right to the patent is encumbered from the outset with a right of the employer to claim the invention, the inventor is not left without rights. Because if the company makes use of the right to claim the invention, it does get the patent rights, but the original inventor's right to the patent is not completely lost, but is transformed into a right of the employee to participate. The inventor has the right to receive reasonable compensation from the economic benefits that the company derives from the right to the patent. In terms of economic policy, this philosophy of employee inventions law, which has consistently been practised in Germany since the beginning of the 20th century, has thus relied for nearly 120 years on the innovative power of the workforce – a German recipe for success!

The exact amount of the compensation depends on the commercial applicability of the invention, the duties and position of the employee in the enterprise, and the enterprise's contribution to the invention. In order to be able to take into account the ever-changing economic framework





conditions and business models, the Act thus relies on vague legal terms for determining the amount of compensation. The advantage is a timeless regulatory system, the disadvantage is that opinions of employees on the one side and companies on the other sometimes differ on how great the economic benefits gained by the company were in the individual case.

Since disputes about innovations tend to militate against a profitable and beneficial employment relationship, the legislature has established the Arbitration Board under the Employee Inventions Act as a mediator in disputes and equipped it with legal and technical expertise. Its chairperson is a lawyer qualified to hold judicial office and the two assessors are specifically chosen from among the patent examiners according to their particular technical expertise for the respective arbitration proceedings.

First, the Arbitration Board gives the parties involved in the dispute the opportunity to present their respective views and then submits a proposal for an amicable settlement to them. If the parties involved accept the settlement proposal, they conclude a private-law contract, thereby settling the dispute. In 2021, the Arbitration Board concluded 68 such proceedings, with two thirds of its proposals being accepted.



In 2021, the Arbitration Board dealt with the following questions, among others:

- » "Ideas tracker" and reporting of inventions Arb.Erf. 03/20
- » Typical start-up problems Arb.Erf. 13/19
- » Invention values for confectionery Arb.Erf. 54/16
- » Only one detail of the invention is eligible for protection – Arb.Erf. 60/18
- » Invention provides protection against warranty for defects – Arb.Erf. 21/19
- » Switch to trade secret Arb.Erf. 66/18
- » Operation of large industrial plants Arb.Erf. 67/18
- » Company remuneration schemes Arb.Erf. 70/18
- » Quality of a suggestion for improvement and Act against Unfair Competition – Arb.Erf. 56/18

https://www.dpma.de/english/our_office/about_us/further_duties/arbitration_board_employee_inventions/index.html

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

	2017	2018	2019	2020	2021
Requests					
Total requests received	164	159	143	96	58
including inclusive contracts under sec. 92(1) no. 3 CMO Act	5	5	2	5	1
Cases concluded by					
Settlement proposals of the Arbitration Board	15	69	67	81	95
Partial settlement proposal of the Arbitration Board ¹		2	0	20	13
Order	21	107	135	126	111
Total (without partial settlement proposals)	36	176	202	207	206
Requests pending at the end of the year	583	566	507	396	248
Payment of security/provisional settlement					
Requests	16	19	25	3	4
Orders	3	7	5	32	37

¹ Recorded for the first time in 2018.

Arbitration Board under the Employee Inventions Act

	2017	2018	2019	2020	2021
Receipt of requests	54	71	61	66	53
Arbitration proceedings concluded by					
Settlement proposals and compromises	55	47	43	44	44
Proposals accepted (%)	60.0	68.0	76.7	50.0	65.9
Refusals to participate in arbitration proceedings	16	15	9	19	16
Other cases concluded, in particular, by withdrawal of request, order, provisional proposals, etc.	8	5	6	9	8
Total of cases concluded	79	67	58	72	68
Arbitration proceedings pending at the end of the year	87	91	94	88	73

National cooperation partners

National cooperation projects

The DPMA and its competent partners, everywhere in Germany, form a network for IP rights. Trade associations, chambers of industry and commerce, innovation-promoting universities and customs provide their services locally wherever enterprises – especially small and medium-sized enterprises – and inventors have questions about the protection of their intellectual property.

The **patent information centres** (PIZ) also make an extremely important contribution to this cooperation. They play an important role especially in supporting small and medium-sized enterprises (SMEs). They offer services such as search support, commissioned searches, initial consultations for inventors and advice on strategic IP management, IP portfolio analysis, IP enforcement and the defence against product piracy, and provide information on IP rights.

Last year, the patent information centres, like all facilities where there is customer traffic, had to cope with the effects of the coronavirus pandemic. In addition to the opening of individual facilities to visitors, some of which had to be closed again due to the development of the pandemic situation, they adapted well to the situation, especially by providing remote consultations, and purposefully expanded their services. As the pandemic continued, digital services, which had only been used in special cases until 2020, have increasingly become the norm.

The patent information centres used video conferencing, web tutorials and messenger channels to stay in touch with users, offer advisory services and disseminate information on industrial property protection in Germany, Europe and worldwide. As there were practically no trade fairs or other public events, a lot of creativity was needed to reach the interested public in other ways.

The second year of the pandemic naturally had an impact on the business community, which the patent information centres focus on as contacts in the regions. However, these effects were not exclusively negative, but led to a surge in innovation in many areas. The patent information centres intensively supported this development. The patent information centres are important contacts for SMEs in particular, as they provide information on IP rights and offer special services such as search support, commissioned searches, initial consultations for inventors, strategic IP management, advice on IP portfolio analysis, IP enforcement and the defence against product piracy.

Two PIZ conferences in a year – a first!

Once a year, in late autumn, the DPMA holds a conference with the 19 PIZ. These PIZ conferences have a long tradition and are an integral part of the cooperation between the DPMA and the patent information centres. As the 2020 conference did not take place due to the pandemic, it was held in January 2021 instead.

For the first time, the participants attended by video conference. And since the event was very successful and well attended by a large group, the next conference, which took place in December 2021, was also planned as a virtual event from the very beginning.

Even though many attendees regretted that they had no opportunity to meet face-to-face, one advantage of such virtual meetings is that more staff of the patent information centres than usual were able to attend the conference. Traditionally, the discussions deal with changes at the patent information centres in addition to new developments, plans and projects of the DPMA. Thus, in January, the new responsible body of the patent information centre in Bremen had the opportunity to present itself to a larger audience. The DPMA gave an overview of cooperation with European and international institutions.



Further information on our national cooperation partners can be found on our website.



And a summary of the results of the evaluation of the patent information centres in the years 2015 to 2019 was also included. Intensive discussions dealt with the application of the PATLIB 2.0 standard of the European Patent Office and its significance as a quality benchmark for the work of the patent information centres.

The second PIZ conference in December 2021 focused on information on the envisaged transfer of new awareness-raising tasks to the DPMA by section 26a of the Patent Act (Patentgesetz), which was introduced with effect from 1 January 2022. In addition, an account of the 2021 Action Week of the network of patent information centres (PIZnet) was given and the PIZnet search standard was discussed.

In addition to the regularly covered topics, PIZ conferences provide good opportunities to share information on extensive changes and trends. At the conference in January, this included, above all, the experience gained with the provisions of the Trade Mark Modernisation Act, which came into force in 2020. In December, new funding structures for SMEs by the EU Commission and developments in using AI for the examination of patents were on the agenda.

User Advisory Council on Patents/Utility Models

In spring 2021, the DPMA User Advisory Council on Patents and Utility Models in its partly new composition started its second term of office, which now lasts four years instead of two. The advisory body of the DPMA again comprises highly qualified members, who represent all user groups. Due to the pandemic, the DPMA User Advisory Council held only virtual meetings, in which all members and their representatives were able to participate.

The User Advisory Council of the DPMA intensively discussed numerous topics, including the duration of examination procedures, the use of artificial intelligence in the field of IP rights and the use of video conferencing technology at hearings and oral proceedings at the DPMA. The committee proves to be an important source of inspiration, providing valuable contributions to discussion by delivering diverse feedback and observations. The DPMA thanks all those involved and looks forward with excitement to the forthcoming meetings.



- Locations of the patent information centres
- Cocations of the German Patent and Trade Mark Office

INFORMATION SERVICES OFFERED BY THE PATENT INFORMATION CENTRES IN 2021

- » Search support
- » Commissioned searches
- » Initial consultations for inventors
- » Services relating to strategic IP management
- » Services relating to IP enforcement as well as the defence against and prevention of product piracy
- » IP data management
- » IP assessment/IP portfolio analyses
- » IP analyses/IP statistics

INTERVIEW

"We are service providers for research projects and small enterprises"



Matthias Knöbel, head of the Patent Information Centre Dresden (PIZ Dresden)

Mr Knöbel, the coronavirus pandemic poses challenges for service-oriented sectors that have face-to-face contact with customers and are open to the public. How are you dealing with these challenges at the Patent Information Centre Dresden?

The pandemic of course also presents a great challenge for us. We have made use of the situation to think about our range of services and check what we can also offer virtually. As an institution of TU Dresden (*Technische Universität Dresden*), we benefit from the very good technical facilities and organisational conditions at our university. We have already been able to offer meetings, seminars and lectures as video conferences for some time. In the meantime, we also have a virtual alternative to assisted searches on site, in the search room, in the form of searches via remote access – what is known as remote support. In this way, users benefit from the very refined and effective technologies of commercial IP databases and our expertise, just as in our search room, and obtain sound search results with our help. Matthias Knöbel, head of the Patent Information Centre Dresden (PIZ Dresden), talks about learning processes in the pandemic, attractive information services for start-ups and the importance of his team for future-oriented research projects.

Last year, the European Patent Office awarded the European Inventor Award to Professor Karl Leo from Dresden for his ground-breaking research on organic semiconductors (see also page 61). The Dresden Elbe valley is also called "organic valley" and considered the largest cluster for organic electronics in Europe. How is the Patent Information Centre Dresden supporting innovation at your university and in your region?

We are a service provider for research projects as well as for small and medium-sized enterprises. PIZ Dresden is an institution with a long tradition. Its history as a patent library and patent display office dates back to 1828 and coincides with the founding of the predecessor institution of TU Dresden. After the university library was split off from TU Dresden in 1996, the patent information centre was integrated into the Transfer Department of TU Dresden. Since then, the patent information centre has been directly involved in the innovation activities at TU Dresden. The broad range of technical expertise of several staff with university degrees in engineering enables us to provide informed support to the university's innovation and patent management.

"We offer searches on site and via remote access."

Our IP searches for research projects play an outstanding role within TU Dresden. In the best of cases, this allows us to make a comparison between the planned topics and the global state of the art as early as during the search for new research projects. PIZ Dresden was also involved at a very early stage in the aforementioned research in the field of organic semiconductors. We also support small and medium-sized enterprises (SMEs) in our region by organising a semi-annual seminar series to raise awareness of IP rights and by conducting infringement searches and prior art searches for intended IP applications. The Free State of Saxony supports the Patent Information Centre Dresden in implementing these tasks.

The 19 patent information centres in Germany work closely together in an association that is known as the PIZnet network (Arbeitsgemeinschaft Deutscher Patentinformationszentren e.V.). What is the contribution of PIZ Dresden in this context?

Since the beginning of its membership in 1990, PIZ Dresden has been almost continuously represented on the board of this association and also participates in many joint projects of the German patent information centres. Among other things, we have developed a search standard of the PIZnet network that facilitates cooperation among each other and with our customers. With clearly defined criteria for the individual types of searches, we can ensure high quality searches. We are also involved in the development of the project "PIZnet SME action week". For several years, we have organised this action week every September to support SMEs and start-ups in dealing with industrial property rights and to advise them of the commercial use of IP. PIZ Dresden acts as an intermediary between the DPMA and all patent information centres and provides for the closest possible contact between all institutions.

And how do you as PIZ Dresden benefit from this network?

First and foremost, like our colleagues at the other patent information centres, we benefit from the exchange of experience. Over the many years, a very close relationship of trust has developed, which helps us in our daily work to offer the best possible services. A project management platform, initiated and maintained by the chairman of our PIZnet association, Arne Krüger, enables us to foster this exchange very effectively.

What will be the focus of your work/projects in the next year?

We want to further support and expand cooperation between our university, spin-offs and other young enterprises in our region. We want to even more actively raise awareness of intellectual property among SMEs by using our experience from previous projects and by even more directly approaching the companies, holding on-site seminars and fostering the exchange of ideas.



How does cooperation with the DPMA work?

The DPMA is our most important cooperation partner. We are very grateful to the office for the exceptionally great support of our work. The DPMA and the PIZnet network jointly organise an annual training conference with speakers from both organisations. Every year, on 26 April, DPMA colleagues assist us by giving exciting lectures on current IP topics at our traditional event on the occasion of World Intellectual Property Day, organised together with the Patent Information Centre Chemnitz. The DPMA makes reference to the patent information centres in a prominent place on its website and is the most important point of contact to direct customers to us. On our part, we and eight other patent information centres assist the DPMA by receiving IP applications on its behalf. Furthermore, we attend to DPMA customers in our region and help to improve the quality of IP applications by providing information and search support to SMEs, self-employed people and inventors in order to help them to prepare IP applications.



Further information on the Association of German Patent Information Centres (Arbeitsgemeinschaft Deutscher Patentinformationszentren e.V.) and the contact details of the individual locations can be found on the website of the PIZnet network.



💻 https://www.piznet.de/

INTERVIEW

"Germany is a frontrunner in terms of innovation"



Dr Carsten Fink, Chief Economist of WIPO

Dr Carsten Fink is Chief Economist of the World Intellectual Property Organization (WIPO) based in Geneva. Before that, he was Professor of International Economics at the University of St. Gallen and also held the position of Visiting Professor at Sciences Po in Paris. Prior to his academic appointments, Dr Carsten Fink had worked for more than 10 years at the World Bank. Dr Carsten Fink, Chief Economist at the World Intellectual Property Organization (WIPO), about positive innovation trends during the pandemic, strengths and deficits of Germany in the international innovation ecosystem and the DPMA's participation in the multilateral IP system.

The coronavirus pandemic has posed major challenges to this innovation process. How devastating is the damage to the international "innovation ecosystem"?

Results vary, but overall the innovation balance is surprisingly positive. The global economy experienced a major downturn, which had a noticeable impact on innovation activity. IP filings declined at national and international level during the first phase of the coronavirus pandemic in 2020. However, they recovered and the declines were relatively small, at least globally, in 2021. It is also evident that the measures to counter the coronavirus pandemic affected the diverse sectors in different ways. For example, on the one hand, car manufacturing and many service industries recorded declining investment in research and development (R&D). On the other hand, the medical sector and information technology intensified their R&D activities – not least to find solutions to the coronavirus pandemic and its consequences. Compared to the dotcom bubble at the beginning of the century and the financial crisis at the end of the 2000s, however, it can be stated that innovation performance has withstood the coronavirus pandemic, and some upheavals have even triggered a new and positive dynamism in innovation.

How do you assess the situation in Germany?

The development of international patent applications indicates that Germany was more affected by the coronavirus pandemic than other large economies – especially compared to China, the Republic of Korea and the United States. This is partly due to the fact that the automotive sector and traditional engineering technologies play a significant role in German industry. The German economy was also particularly affected by problems in global supply chains, more so than other European economies. In the meantime, however, the German economy has recovered, and this also applies to the number of applications for IP rights. Just as other countries, Germany has also experienced a remarkable increase in international trade mark applications over the last twelve months. This development indicates that the upheavals resulting from the coronavirus pandemic and the accelerated adoption of digital technologies have triggered new business dynamics that have led to the introduction of many new goods and services into the market. The development and provisioning of new COVID-19 vaccines show that innovation can also be implemented in a very short time. Is innovation perhaps also the way out of the crisis?

Yes, absolutely. We don't know how the coronavirus pandemic would have unfolded without vaccines. But it is clear that vaccines have saved millions of lives and prevented longer and more severe lock-down measures. In our World Intellectual Property Report 2022 we estimate the societal benefit of vaccine innovation at \$70.5 trillion. I was particularly pleased that the vaccine developed by BioNTech in Germany has made such an important contribution to vaccination campaigns around the world. This vaccine is the result of many years of scientific and commercial research based on extensive international cooperation. At the same time, BioNTech's success underlines Germany's performance as a centre of innovation in the field of biomedicine.

"IP protection is a driver for growth and social diversity."

By means of the Global Innovation Index (GII), WIPO annually analyses global innovation trends. What have been the most important findings of the GII recently?

Our latest edition of the Global Innovation Index (GII) – published last September – shows great stability within the world's most innovative economies. Switzerland remains at the top of the GII rankings, followed by Sweden and the United States. The composition of the top ten has changed little in recent years. This is not surprising, because building a dynamic innovation system takes many years and requires a significant amount of resources. The most important long-term trend we can observe in the GII is the rise of the Asian economies. The Republic of Korea moved up to fifth place last year. China is now ranked twelfth, up from 29th ten years ago. In addition, other Asian economies such as India, the Philippines, Thailand and Vietnam have made remarkable progress over the past five years. Germany is, so to speak, the world champion in patent applications. When it comes to other important topics for the future, such as the participation of the population in digitisation, the country has fallen behind. How do you assess Germany's innovative capacity?

Whichever way you look at it: Germany is a frontrunner in terms of innovation. It ranks tenth in the GII, and its great performance cannot be measured by patent applications alone. The German economy and German companies in particular are among those spending the most on research and development (R&D) worldwide. While international comparisons indeed indicate that there are some deficits in the digital sector, there are also distinctive strengths. For example, Germany performs comparatively well in terms of access to information and communication technologies, and the country is also a frontrunner in the logistics sector. Looking ahead, an overarching challenge for Germany will be to build on its strengths in many traditional technology sectors, while at the same time adapting to a new era in which digital technologies have evolved into technologies for all purposes that drive progress and business competitiveness. I have the impression that both policy makers and companies in Germany are well aware of this challenge.

As a UN agency, WIPO brings together the interests of 193 member states and is a central forum for shaping the international intellectual property system. What are currently the main topics of this forum, and what are the greatest challenges?

Our greatest challenge is articulated in WIPO's vision for the future: to foster a world where innovation and creativity are supported by intellectual property protection for the benefit of all. We are working to build a more inclusive intellectual property rights ecosystem. To achieve this, we must continue to provide world-class services to innovative companies, set international standards and bring people together to discuss intellectual property issues. We are working hard to raise awareness of the relevance of these IP rights among the general public. This includes not only experts, but also, for example, young people, small and medium-sized enterprises, artists and musicians. We are intensifying our efforts in terms of public relations to communicate that IP protection is a key driver of jobs, investment, business growth, economic development and social diversity. These issues are among WIPO's biggest challenges today.

Which significance does the DPMA have as a partner of WIPO?

WIPO will continue to rely on its excellent cooperation with the DPMA. German enterprises are among the main users of the international IP system. German applicants account for about 6% of all international patent applications filed under the PCT Treaty, about 7% of all trade mark applications within the Madrid system and about 13% of design applications within the Hague system. Looking at Germany's share of global GDP, it becomes clear that the share of applications from Germany even exceeds Germany's weight in the global economy. In turn, companies from all over the world are very interested in having their intellectual property protected in Germany. The close cooperation between the DPMA and WIPO will continue to ensure balanced protection of intellectual property flowing into and out of Germany. It is enshrined in numerous treaties and is put into practice and implemented on a daily basis. In addition, Germany is very focused on its participation in the multilateral discussions at WIPO, thus demonstrating its commitment to multilateralism.

The DPMA and WIPO – a reliable partnership

With 193 member states, the World Intellectual Property Organization (WIPO) is the global forum for IP services, policy, information and cooperation. WIPO's primary aim is to develop a balanced and effective international IP system that enables innovation and creativity for the benefit of all.

DPMA activity on WIPO bodies

On various bodies, a number of our staff work with colleagues from the 193 member states on technical issues (e.g. on the Standing Committee on WIPO Standards) and legal issues (e.g. on the Standing Committee on the Law of Patents).

WIPO Roving Seminars in Germany

After the seminars had been suspended due to the pandemic, the DPMA held the traditional WIPO Roving Seminar together with WIPO and the national offices of Switzerland and Austria.

In an online seminar in February 2021, IP experts provided information about the services and initiatives of WIPO.

Webinars for developing countries

WIPO's special tasks include providing support to developing countries. By providing regular training, the DPMA, too, is engaged in this important task. Together with WIPO and the Federal Patent Court, the DPMA recently organised a webinar on utility model procedures for the Egyptian Patent Office.



German Patent and Trade Mark Office



Inventor and innovation awards

Innovations are the solution to challenges in many areas. This is particularly evident in the coronavirus pandemic. Innovation awards recognise the achievements of the people behind them. The DPMA actively supports some prestigious awards.

Inventor or innovation awards primarily give recognition to people who create futureoriented 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.

DPMA President Cornelia Rudloff-Schäffer and other senior executives of the DPMA are members of the juries or boards of trustees of some of these awards. In addition, our patent examiners regularly propose outstanding innovations for nomination.

In 2021, the DPMA was involved in the following inventor and innovation awards:

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

www.deutscher-zukunftspreis.de/en

The *Deutscher Zukunftspreis* award now looks back at a history of 25 years. It was established by Roman Herzog in 1997 and has also been awarded by all subsequent Federal Presidents. Since then, 224 creative and courageous people have been nominated, whose innovations have advanced society and industry in Germany. The prize was awarded to 54 male and (so far only) seven female winners out of 87 nominated teams. The nominated innovations initially came from the fields of mechanical engineering and the automotive sector, later chemistry and medicine came to the fore. Now, the focus is on artificial intelligence, the environment, software and robotics. Thus, the *Deutscher Zukunftspreis* award still is the badge for excellent inventions from Germany and comes with prize money of 250,000 euros. DPMA President Cornelia Rudloff-Schäffer has been a member of the board of trustees for many years, which determines the direction of selection decisions.





The DPMA is entitled to nominate projects for the *Deutscher Zukunftspreis* award to the jury: Please draw our attention to your projects! Proposals for nominations for the 2023 *Deutscher Zukunftspreis* award can be submitted at any time until the beginning of November 2022. For more information, visit our website.

The 25th *Deutscher Zukunftspreis* award was presented by Federal President Frank-Walter Steinmeier on 17 November 2021 at an evening event, which was broadcast via live stream and subsequently shown on the German TV channel ZDF. DPMA President Rudloff-Schäffer also paid tribute to the scientists: "The nominated teams are tackling pressing problems which are facing humankind, and are offering impressive solutions in their fields. With a visionary eye, all three of them have been pushing their developments forward for a long time. Their success is the result of hard and persistent research work."

www.dpma.de/english/our_office/about_us/inventor_and_innovation_awards/ deutscher_zukunftspreis_award/index.html The 2021 prize winners are **Prof Uğur Şahin, Dr Özlem Türeci, Prof Christoph Huber** and **Prof Katalin Karikó** of BioNTech SE in Mainz. They have developed a vaccine against COVID-19, an infectious disease, at unprecedented speed, thus providing billions of people all over the world with protection against infection. The main innovation is to use mRNA technology to vaccinate people. Used as a "blueprint" for specific virus proteins, mRNA is delivered into human cells. When the body comes into contact with the virus, the antibodies produced against the virus proteins allow the immune system to fight the virus efficiently.



Federal President Frank-Walter Steinmeier and the 2021 award winners Prof Uğur Şahin, Dr Özlem Türeci, Prof Katalin Karikó and Prof Christoph Huber (from left to right)

"The novel mRNA vaccine developed by the prize winners is key to mitigating one of humanity's problems of our time. Additionally, the founders demonstrated remarkable courage to act as entrepreneurs and build an economically highly successful company in cooperation with investors," the DPMA President praised this outstanding achievement.

The following teams were also nominated for the *Deutscher Zukunftspreis* award:

Dr Carla Recker of Continental AG in Hannover, Dr Christian Schulze Gronover of the Fraunhofer Institute for Molecular Biology and Applied Ecology IME in Münster and Prof Dirk Prüfer of the University of Münster have developed an eco-friendly material from Russian dandelion that replaces natural rubber from the rubber tree in car and bicycle tyres. As the share of natural rubber in tyres is up to 40%, there is a great potential for environment and climate protection.

Prof Thomas Flohr, Dr Björn Kreisler and Dr Stefan Ulzheimer

of Siemens Healthineers AG in Forchheim have enhanced medical imaging with the photon-counting computed tomography. Compared to the currently available apparatuses, the new photon-counting detectors allow images of the body interior – e.g. tissue and bones – to be produced with a significantly higher resolution.

European Inventor Award

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

On 17 June 2021, the European Patent Office (EPO) presented the European Inventor Award as usually in the five categories "Industry", "Research", "Non-EPO countries", "Small and medium-sized enterprises" and "Lifetime achievement" and also bestowed a popular prize. Due to the pandemic, the award ceremony took place as a digital ceremony.

"The European Inventor Award recognises the ultimate top class of international innovators," said DPMA President Rudloff-Schäffer on the occasion of the award ceremony, where, fortunately, a German scientist was also among the prize winners."

The physicist Professor Karl Leo, who does research at the Technische Universität Dresden (TU Dresden) and is active as an entrepreneur, was honoured in the category "Lifetime achievement" for his inventions for the development of organic semiconductors. These semiconductors enable applications in the fields of lighting and photovoltaics. Karl Leo's method combines organic semiconductors with substances that generate freely moving electrons to make the semiconductors more conductive. OLED technology makes electronic displays brighter and enables higher colour resolution. It is also more energy-efficient than other technologies and has helped millions of people to get improved products. "Karl Leo is a brilliant technology pioneer," said the DPMA President. "His OLEDs helped to make a previously underestimated technology utilisable for industrial application and thus contributed to the development of high-tech products such as smartphones and flat screens in their current forms. Inventive scientists like Karl Leo are of outstanding importance for the success of our country as a location for innovation".



Prof Karl Leo, winner of the European Inventor Award 2021 in the category "Lifetime achievement"

Another German scientist and a German research team had also been nominated for one of the prizes. **Dr Metin Colpan**, co-founder of the biotech company QIAGEN was nominated – like Prof Leo in the category "Lifetime achievement" – for his inventions on the separation and purification of nucleic acids. The process enables the cost-effective extraction of ultra-pure DNA or RNA without toxic chemicals and marked a milestone in biotechnology. Today, the developed materials are also used in COVID-19 tests.

Dr Christoph Gürtler (Covestro Deutschland AG, Leverkusen) and Prof Walter Leitner (Max Planck Institute for Chemical Energy Conversion, Mülheim an der Ruhr) were proposed by the DPMA for the shortlist in the category "Industry". They have developed a technology that utilises carbon dioxide as a component for producing high-quality plastics. As a result, oil can be partially replaced in the production of plastics - for example for manufacturing mattresses, sports flooring, textile fibres or insulating materials. "To use a climate-wrecking gas as a valuable raw material for a high-quality product sounds like spinning straw into gold." DPMA President Cornelia Rudloff-Schäffer paid tribute on the occasion of the virtual award ceremony: "The developments of the two scientists are an impressive example of how a highly innovative technology can contribute to preserving resources and protecting the environment."

Innovation Award of Bavaria

www.innovationspreis-bayern.de (in German)

The Innovation Award of Bavaria is jointly awarded every two years by the Bavarian Ministry of Economic Affairs, the Federation of Bavarian Chambers of Industry and Commerce (*Bayerischer Industrieund Handelskammertag*) and the Federation of Bavarian Chambers of Crafts (*Arbeitsgemeinschaft der bayerischen Handwerkskammern*). The next awarding of the prize for outstanding innovative achievements is scheduled for autumn 2022.

Thuringia Innovation Award

www.innovationspreis-thueringen.de (in German)

On 24 November 2021, the four categories of the "XXIV Thuringia Innovation Award 2021" and three special awards were jointly presented 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. The prize money amounted to 100,000 euros in total. Due to the pandemic, the event took place before a small circle of guests at Weimarhalle in Weimar. However, viewers were also able to watch the award ceremony live on the Internet.

Markus Ortlieb, head of the Jena sub-office, once again represented the DPMA in the 19-member jury, particularly clarifying questions relating to the state of the art and IP rights regarding the 81 submitted nominations/ inventions across all categories. The criteria for granting the award, decided on by the jury, include the degree of innovation, entrepreneurial achievement, functionality, practical value and economic success. Furthermore, the competition entries must already have been launched on the market or be about to be launched. Another requirement is that the development and production of the submitted innovation has predominantly taken place in Thuringia.

The winners of the individual categories can be found on the website of the Thuringian Innovation Award: **www.innovationspreis-thueringen.de**.



The award winners of the XXIV Thuringia Innovation Award 2021

Saxon State Award for Design

https://designpreis.sachsen.de/ (in German)

For the 17th time, the Saxon Minister of State for Economic Affairs, Labour and Transport, Martin Dulig, presented the Saxon State Award for Design at Pillnitz Palace in Dresden. The award went to the best design achievements in the categories "Product design," "Communication design" and "Design in crafts and trades" as well as "Innovative design by young talent". For the first time, there was also the special prize in the category "Design makes occupational safety attractive" as well as a public's choice award.

The competition is intended to firmly establish design as an economic factor in Saxon companies, make the performance of Saxon design visible and promote the Saxon design industry and young design talent.

Barbara Preißner, Head of the Directorate General Trade Marks and Designs at the DPMA, is a member of the jury that selects the award winners from the five categories. The distribution of the prize money, which amounts to 50,000 euros in total, is at the discretion of the jury.

Due to the coronavirus pandemic, the award ceremony for the 2020 Saxon State Award for Design was held on 5 July 2021.

The award winners of the individual categories can be found on the website of the Saxon State Award for Design at https:// designpreis.sachsen.de/.

Jugend forscht

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

There is still a great need for top scientists in Germany. The "*Jugend forscht*" youth science contest makes an important contribution to finding and promoting young talent. Through creative and research-oriented learning within the scope of a project, young people can acquire technical and methodological skills at an early stage, which are important, for example, for a later career in research.

part in this year's contest - despite the restrictions due to the pandemic.

In the field of biology, Marik Müller convinced the federal jury with his research on the inactivation of the antibiotic florfenicol. This antibiotic is widely used in aquaculture and veterinary medicine, with residues ending up in soil and water, stimulating the development of antibiotic-resistant germs. The young researcher succeeded in cleaving the antibiotic and thus making it harmless. Later, his project also won him one of the four first prizes at the "European Union Contest for Young Scientists" (EUCYS) 2021 and thus the title of European Champion.

Hence, it is a great success that a total of 4,339 researchers with 2,558 projects took



Award ceremony of the Saxon State Prize for Design 2020



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. The prize was not awarded in 2021.



Events in 2021









DPMAnutzerforum 2021 conference

High number of concluded procedures at the DPMA, the impact of the pandemic on filing behaviour, artificial intelligence and the unitary patent on the home straight: The DPMAnutzerforum 2021 conference provided an overview of current IP topics.

The virtual DPMAnutzerforum conference was a first. Due to the pandemic, we decided not to hold a face-to-face event. The advantage of the virtual conference was that instead of a maximum number of 400 visitors on-site, about 1,000 registered guests from industry, law firms, research institutions, colleges and universities as well as IP service providers were able to watch the DPMAnutzerforum live on the Internet. By the way, most of them followed the online user forum on 30 March 2021 from their offices at home, as a live survey among attendees revealed.

A finger on the pulse of legislation

"Strengthening intellectual property through legislation" was the subject of a dialogue between moderator Ulrich Walter and Dr Christian Wichard from the Federal Ministry of Justice. Among other things, Mr Walter wanted to know which current legislative projects were being discussed. Dr Wichard explained details of the government draft of the Second Patent Law Modernisation Act (2. *Patentrechtsmodernisierungsgesetz*), which was being debated in the German *Bundestag* at that time.

Quo vadis, AI?

The DPMAnutzerforum conference always includes a panel discussion, which on that occasion was partly held as video conference. The discussion focused on the very topical issue of the patentability of artificial intelligence. Artificial intelligence has experienced an enormous boost in recent years. The availability of large amounts of data, large computer resources and advanced methods have led to the development of improved algorithms and neural networks. As a result, machines today have sophisticated cognitive abilities and digitisation is being hugely boosted by artificial intelligence.

The DPMAnutzerforum conference 2021 was rounded off by three online seminars. They focused on the electronic DPMAregister, how to deal with Asian patent literature and the implementation of the Trade Mark Law Modernisation Act (*Markenrechtsmodernisierungsgesetz*).

All topics can be found on our website and partly on our YouTube channel (■).





The PIZnet Action Week

Sixteen out of a total of nineteen patent information centres (PIZs) participated in another PIZnet action week for small and medium-sized enterprises (SMEs) and start-ups, which was held from 20 to 24 September 2021.



Companies received free, neutral and confidential advice on value creation and risk avoidance in dealing with intellectual property (IP) under the heading "IP Strategies for SMEs". In the roughly two-hour orientation consultations, experts from the patent information centres analysed a company's specific IP situation, especially with regard to patents, utility models, trade marks and designs. However, elements of what is known as "soft IP", which include trade secrets and copyright, were also considered. On this basis, those seeking advice received an initial assessment of the opportunities and risks relevant to them in the field of intellectual property with specific recommendations for action – from individual suggestions for the optimum use of their intellectual property to approaches for strategic competitive advantages.

Third Jena Design Law Day

In collaboration with Friedrich Schiller University Jena and the German Brands Association (*Markenverband e.V.*), the DPMA annually organises the event, alternating from year to year between the Jena Trade Mark Law Day and the Jena Design Law Day.

The Third Jena Design Law Day, originally scheduled for 2020 and 2021, had to be cancelled due to coronavirus pandemic and is now expected to take place on 1 September 2022.

Jena lectures 14 January, 9 September, 7 October and 24 November 2021

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.

It was particularly pleasing that it was possible, with the technical support of the Friedrich Schiller University, to offer the events in 2021 online or in hybrid format for the numerous interested guests, despite the restrictions due to the coronavirus pandemic.

As a co-organiser, the centre-east district group of the Association of Intellectual Property Experts (VPP) and the German Association for the Protection of Intellectual Property (GRUR) support the public series of lectures, for which admission is free. In 2021, four Jena lectures were held on the following subjects:

14 January 2021

"The act for strengthening fair competition"

Professor Dr Volker Michael Jänich, Friedrich Schiller University, judge at the Thuringia Higher Regional Court

9 September 2021

"Patents and licences in insolvency"

Professor Dr Sebastian Wündisch, LL.M., lawyer in Dresden, head of the GRUR centre-east district group

7 October 2021

"Annex claims with regard to IP infringement" Michaela Gilch (Dipl.-Wi. Jur.) and Dr Lars Petri Lawyers and IP lawyers in Jena and Würzburg

24 November 2021

"Patents in the pandemic"

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

Would you like to be invited to attend the Jena lectures? Then, please contact Daniela Wagner (telephone: +49 3641 405501, e-mail: **daniela.wagner@dpma.de**).



G7 meeting

At a virtual meeting of the G7 countries, DPMA President Cornelia Rudloff-Schäffer met the heads of the other national IP offices and Daren Tang, Director General of the World Intellectual Property Organization (WIPO). The meeting, also attended by a representative of the Federal Ministry of Justice (*Bundesministerium der Justiz*), discussed, among other topics, intellectual property in healthcare and future technologies as well as the enforcement of IP rights and cooperation with and under the umbrella of WIPO.

In a common statement, the heads of IP offices recognised, among other things, the importance of the global IP system for the development of and access to safe, effective and affordable vaccines and drugs, arguing for flexibility within this system in order to support the development of future technologies.

Furthermore, the participants agreed on improving the global system for the enforcement of IP rights. The heads of IP offices additionally emphasised their support for WIPO's endeavours to promote innovation and creativity worldwide. They expressly welcomed initiatives to highlight the importance of intellectual property for the achievement of the UN Sustainable Development Goals.

Bidding farewell to DPMA Vice-President Christine Moosbauer

At the end of May, Christine Moosbauer, the previous Vice-President of the DPMA, celebrated her retirement and Bernd Maile, her successor, was entrusted with the duties of Vice-President.

"I very warmly thank Christine Moosbauer for the successful collaboration," said DPMA President Cornelia Rudloff-Schäffer. "She had a direct hand in shaping the strategy to change the DPMA from a traditional administrative authority to a modern, digital service provider. During 30 years of farsighted work in different positions at the DPMA, she promoted the digitisation of the office and made it a pioneer in e-government. An expert in management and strategic issues, she additionally set important milestones and initiated future measures," said Cornelia Rudloff-Schäffer, adding: "We will benefit from the IT strategy she developed and the digital roadmap to implement it in the future too."



Christine Moosbauer (in the front) with DPMA President Cornelia Rudloff-Schäffer and DPMA Vice-President Ulrich Deffaa

Christine Moosbauer was born near Passau and lives at Lake Chiemsee. She studied Communications Engineering at the Technical University of Munich. After working for medical technology companies for nine years, she joined the DPMA in 1992 – initially as Deputy Head of section in IT organisation. Subsequently, Christine Moosbauer became a patent examiner and Head of the patent administration at the DPMA with 350 staff. From 2006 onwards, she headed the IT Planning and Development Division. In February 2013, she became Head of a patent division and, in May 2015, Head of Directorate General "Information". In September 2017, she was the first woman to hold the office of Vice-President, focusing on IT and strategic management.

Congratulations also came from Berlin: Ms Kerstin Lubenow, Head of Directorate Z A at the Federal Ministry of Justice, presented her with a personal letter of thanks from the Federal Minister of Justice, Christine Lambrecht.



5

6

6

DPMA Annual Report 2020: innovation trends in automotive technology and digitisation





















29 December 2021 Air taxis and Co.: Steep rise in the number of innovations




A glance at 2022

Expansion of responsibilities of the DPMA under section 26a of the Patent Act

For the first time, the expansion of responsibilities by the newly introduced section 26a of the Patent Act (*Patentgesetz*) gives the DPMA a legal basis for providing information, in a general way, to the public and in particular small and medium-sized enterprises (SMEs) about the protective mechanisms and chances of intellectual property and IP enforcement.

It is also intended to further expand cooperation with other national IP offices as well as European and international authorities.

The legislative initiative was prompted by the fact that there was no central body in the Federal Republic of Germany, especially for SMEs, that is responsible for information and public relations concerning intellectual property issues and the effective use and enforcement of IP rights. Therefore, it is important and necessary that the DPMA shows stronger commitment, since protection of IP rights can offer considerable competitive advantages for companies.

The new provision entered into force on 1 January 2022; the new work unit will be established soon.

145 years of the German Patent and Trade Mark Office

In 2022, the patent office in Germany marks the 145th anniversary of its establishment: In 1877, the Imperial Patent Office (*Kaiserliches Patentamt*) was established in Berlin as the first national institution for intellectual property.

From the Imperial Patent Office to the Patent Office of the German Reich (*Reichspatentamt*) to the DPMA of today: The history of these IP authorities reflects the development of long-established German companies and the course of German history. From the Industrial Revolution and the German Empire to war and destruction under the National Socialists to the reconstruction and economic miracle in the Federal Republic of Germany. The reunification of Germany in 1990 was also a special challenge for the patent system.



IN FOCUS

Good networking

XING, kununu, LinkedIn: The DPMA counts on digital dialogue and strengthens its social media presence. In addition to the networks on the major career platforms, we will also offer useful content on our YouTube channel from 2022.

Last year, the DPMA published about 200 posts on its social media channels: 200 news items on IP rights, legal amendments, (online) events, job vacancies and, last but not least, service notifications. You will also find small and big stories about IP rights there. Would you have known that Melli Beese was the first woman with a "pilot's licence" in Germany? Or do you know who invented the paper punch? Just take a look at our social media channels!

We want to provide our customers with up-to-date information in the fastest possible way and offer direct and user-friendly communication channels. This is why we will continue to expand our social media presence. After joining XING (**7 www.xing.com/pages/dpma**) and kununu (**7 https://www.kununu.com/de/deutsches-patent-und-markenamt**), the DPMA can now also be found on LinkedIn (**7 www.linkedin.com/company/dpma**). In the first 30 days, the DPMA attracted more than 200 new followers on LinkedIn alone. We are looking forward to an open and lively exchange of views in the comments section and to networking with you on that site, too! Take part in discussions, follow the DPMA and give us a like.

On kununu, an employer rating platform, you will find not only the ratings but also the latest information from the DPMA and you can directly communicate with us. The kununu page of the DPMA was visited almost 10,000 times last year. The anonymous ratings by employees provide interested job applicants with a valuable insight into the working atmosphere and culture. The DPMA did very well in the ratings by its staff: The DPMA scored 4.5 out of a possible five stars on average in 2021. The DPMA received ratings such as "Completely satisfied!" (anonymous kununu rating, September 2021) or "Super family-friendly organisation!" (anonymous kununu rating, April 2021) and is pleased that the many work-life balance, health management ("The DPMA is committed to the health of the staff," anonymous kununu rating, September 2021) and equal opportunities ("In my opinion, nobody is discriminated against. Regardless of gender or attitude or other orientation," anonymous kununu rating, September 2021) measures are very well accepted and appreciated by the staff.

In addition to these classic social networks for professionals, the DPMA will also have its own channel on YouTube from 2022 (I). Here you will find live streams of events and seminars, tutorials and recruiting videos. Follow us, it's worth it!

Our posts on social media currently only appear in German, but you are also welcome to contact us in English.



44.1







Online-Seminar

für KMU, Start-ups sowie

Schutzrechte im Überblick

0 - 12.00 Uhr

en und Gründer

https://www.youtube.com/c/DeutschesPatentundMarkenamtDPMA

	DPMA Trade fair and event of	calendar 2022	
	Trade fair	Town	Info
Мау			
			Co-exhibitor at the joint booth of the Federal Ministry for Economic
30/05-02/06/2022	HANNOVER MESSE	Hanover	Affairs and Climate Action
30/05-03/06/2022	IFAT	Munich	Mobile IP experts
June			
21/06-24/06/2022	analytica	Munich	Mobile IP experts
21/06-24/06/2022	automatica	Munich	Mobile IP experts
22/06-24/06/2022	PATINFO	Suhl	Booth, workshop
23/06/2022	BMWK Innovationstag Mittelstand	Berlin	Booth
25/06-26/06/2022	Green World Tour	Munich	Mobile IP experts
July			
13/07-17/07/2022	Eurobike	Frankfurt	Mobile IP experts
13/07/2022	Tag der Gewerblichen Schutzrechte	Stuttgart	Booth
September			
13/09-17/09/2022	Automechanika	Frankfurt	Mobile IP experts
15/09/2022	Potsdamer Gründertag	Potsdam	Booth
27/09-30/09/2022	WindEnergy	Hamburg	Mobile IP experts
28/09-29/09/2022	all about automation	Chemnitz	Mobile IP experts
October			
14/10-15/10/2022	deGUT	Berlin	Booth
			Joint booth with the Central
24/10-30/10/2022	BAUMA	Munich	bureau of intellectual property rights (German Customs)
27/10-30/10/2022	iENA	Nuremberg	Booth
November			
14/11-17/11/2022	MEDICA	Düsseldorf	Joint booth with the Central bureau of intellectual property rights (German Customs)
15/11-18/11/2022	electronica	Munich	Mobile IP experts
25/11-26/11/2022	future for festivals	Berlin	Mobile IP experts
30/11-02/12/2022	Markenforum	Munich	
		-	

For the current status of our trade fair and event calendars, please visit our web pages.

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

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

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To generate the statistical data, we use the dynamic statistics system **DPMAstatistik**. As the system is dynamic, the values 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.

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 (**■**).

1. Patent applications and patents

	Applications at the DPMA ¹			PCT applications in the national phase			Patent applications		
Year	Domestic ²	Foreign ²	Total	Domestic ²	Foreign ²	Total	Domestic ²	Foreign ²	Total
2017	46,741	14,745	61,486	1,045	5,193	6,238	47,786	19,938	67,724
2018	45,626	15,252	60,878	1,006	6,021	7,027	46,632	21,273	67,905
2019	45,531	14,391	59,922	1,101	6,406	7,507	46,632	20,797	67,429
2020	41,096	13,487	54,583	1,171	6,354	7,525	42,267	19,841	62,108
2021	38,969	12,699	51,668	843	6,057	6,900	39,812	18,756	58,568

1.1 Applications at the DPMA and international patent applications with effect in Germany

¹ Applications for a German patent filed with the DPMA.

² Residence or principal place of business of the applicant.

1.2 Applications at the DPMA 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	Total	including applications for which formal examination was concluded	
2017	61,619	20,774	151,492	144,111	
2018	61,021	21,411	151,426	143,970	
2019	60,012	20,799	150,735	144,454	
2020	54,706	20,887	149,048	143,211	
2021	51,748	21,404	143,902	138,764	

¹ New applications and cases referred back by the Federal Patent Court, allowed appeals, reinstatements.

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

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		
2017	47,450	26,540	36,850	15,653	
2018	47,133	26,201	38,110	16,369	
2019	47,344	26,000	40,185	18,255	
2020	43,337	23,383	41,753	17,305	
2021	43,155	22,671	48,489	21,113	



1.4 Patents in force (granted by the DPMA)

Year	Patents entered into force	atents entered into force Patents no longer in force	
2017	15,697	16,280	128,947
2018	16,418	15,854	129,488
2019	18,299	15,746	132,020
2020	17,336	17,002	132,335
2021	21,136	18,707	134,715

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

	2017	2018	2019	2020	2021
National	7.1	6.7	6.4	7.4	7.1
Foreign	2.0	1.8	1.4	1.7	1.7
Total	5.8	5.4	5.2	5.9	5.7

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	2017	2018	2019	2020	2021
Baden-Württemberg	14,530	14,607	15,239	13,686	13,570
Bavaria	15,457	14,903	14,035	12,702	11,875
Berlin	716	719	678	674	525
Brandenburg	329	292	297	295	257
Bremen	129	136	142	121	101
Hamburg	790	883	762	622	461
Hesse	1,930	1,615	1,542	1,568	1,479
Mecklenburg-Western Pomerania	135	145	89	107	98
Lower Saxony	3,513	3,605	3,851	3,233	2,982
North Rhine-Westphalia	7,208	6,846	7,019	6,398	5,675
Rhineland-Palatinate	922	911	834	781	854
Saarland	197	175	215	192	179
Saxony	717	595	668	642	604
Saxony-Anhalt	186	205	194	159	154
Schleswig-Holstein	490	452	469	481	475
Thuringia	537	543	598	606	523
Germany	47,786	46,632	46,632	42,267	39,812

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

		2020		2021			Change from
German Länder	Applications	Percentage	Applications per 100,000 inhabitants	Applications	Percentage	Applications per 100,000 inhabitants	Change from 2020 to 2021 (%)
Baden-Württemberg	13,686	32.4	123	13,570	34.1	122	-0.8
Bavaria	12,702	30.1	97	11,875	29.8	90	-6.5
North Rhine-Westphalia	6,398	15.1	36	5,675	14.3	32	-11.3
Lower Saxony	3,233	7.6	40	2,982	7.5	37	-7.8
Hesse	1,568	3.7	25	1,479	3.7	24	-5.7
Rhineland-Palatinate	781	1.8	19	854	2.1	21	+9.3
Saxony	642	1.5	16	604	1.5	15	-5.9
Berlin	674	1.6	18	525	1.3	14	-22.1
Thuringia	606	1.4	29	523	1.3	25	-13.7
Schleswig-Holstein	481	1.1	17	475	1.2	16	-1.2
Hamburg	622	1.5	34	461	1.2	25	-25.9
Brandenburg	295	0.7	12	257	0.6	10	-12.9
Saarland	192	0.5	20	179	0.4	18	-6.8
Saxony-Anhalt	159	0.4	7	154	0.4	7	-3.1
Bremen	121	0.3	18	101	0.3	15	-16.5
Mecklenburg- Western Pomerania	107	0.3	7	98	0.2	6	-8.4
Germany	42,267	100	51	39,812	100	48	-5.8

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)

	2017	2018	2019	2020	2021
Germany	47,786	46,632	46,632	42,267	39,812
Japan	7,283	8,013	7,956	7,248	6,128
USA	6,085	6,669	6,207	5,880	5,892
Republic of Korea	1,173	1,313	1,262	1,617	1,558
Switzerland	924	814	808	777	866
Austria	907	777	713	765	782
Taiwan	618	686	737	933	753
China	646	492	449	499	568
France	248	345	460	303	396
Sweden	464	393	380	321	320
Others	1,590	1,771	1,825	1,498	1,493
Total	67,724	67,905	67,429	62,108	58,568

German Länder	2017	2018	2019	2020	2021
Baden-Württemberg	67	75	72	66	72
Bavaria	66	59	61	59	44
Berlin	28	19	22	16	12
Brandenburg	19	9	13	14	15
Bremen	20	16	12	12	8
Hamburg	26	17	15	17	16
Hesse	61	54	42	45	44
Mecklenburg-Western Pomerania	19	29	14	19	20
Lower Saxony	62	55	45	43	29
North Rhine-Westphalia	124	129	141	131	131
Rhineland-Palatinate	7	16	11	10	15
Saarland	4	6	13	5	7
Saxony	97	81	120	118	109
Saxony-Anhalt	32	34	26	27	26
Schleswig-Holstein	22	22	19	22	17
Thuringia	46	40	30	26	24
Germany ¹	698	658	655	629	587

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

¹ Due to rounding differences the sum of the figures may differ from the figure for Germany.

1.10 Breakdown of domestic patent applicants by filing activity (%)

Percentage of applicants having filed	2017	2018	2019	2020	2021
one application	65.7	64.7	64.9	66.9	66.7
2 to 10 applications	29.7	30.6	30.4	28.9	28.8
11 to 100 applications	4.0	4.2	4.2	3.8	4.0
more than 100 applications	0.5	0.5	0.5	0.4	0.5
Total	100	100	100	100	100

Percentage of applications by appplicants having filed	2017	2018	2019	2020	2021
one application	12.2	11.4	11.3	13.2	12.7
2 to 10 applications	18.4	18.0	17.9	18.9	18.3
11 to 100 applications	20.0	20.5	21.4	21.2	19.7
more than 100 applications	49.3	50.1	49.4	46.7	49.3
Total	100	100	100	100	100

1.11 Opposition proceedings

	Opposition proceedings concluded					
Year	Oppositions received	Total ¹	(of which) patent revoked	(of which) patent maintained or patent maintained in amended form	Opposition proceedings pending at the end of the year ²	
2017	376	442	142	236	1,420	
2018	338	453	130	256	1,302	
2019	294	415	142	222	1,182	
2020	259	304	102	148	1,138	
2021	252	244	78	113	1,146	

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

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

1.12 Patent applications by technology fields¹ with the most applications in 2021 (applications at the DPMA and PCT applications in the national phase)

	2017	2018	2019	2020	2021		Fields of technology
1	11,614	12,440	12,891	10,781	10,482	— 32	Transport
2	7,255	7,460	7,181	7,025	7,168	— 1	Electrical machinery, apparatus, energy
3	6,306	5,885	5,400	4,581	4,490	10	Measurement
4	4,934	5,008	5,067	4,434	4,080	— 31	Mechanical elements
5	4,578	4,286	3,457	3,143	2,891	— 6	Computer technology
6	2,626	2,560	2,642	2,707	2,298	27	Engines, pumps, turbines
7	2,379	2,308	2,416	2,383	1,980	— 35	Civil engineering
8	2,187	2,287	2,341	2,267	1,977	— 13	Medical technology
9	2,183	2,266	2,335	2,242	1,958	— 26	Machine tools
10	2,008	2,227	2,165	2,166	1,939	8	Semiconductors
				١		25 29	Handling Other special machines

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

	Applicant ¹	Principal pla	ce of business	Applications
1	Robert Bosch GmbH	DE		3,966
2	Bayerische Motoren Werke AG	DE		1,860
3	Schaeffler Technologies AG & Co. KG	DE		1,806
4	Daimler AG	DE		1,315
4	ZF Friedrichshafen AG	DE		1,315
6	VOLKSWAGEN AG	DE		1,243
7	Ford Global Technologies, LLC		US	997
8	AUDI AG	DE		747
9	GM Global Technology Operations LLC		US	704
10	Dr. Ing. h.c. F. Porsche AG	DE		651
11	Mitsubishi Electric Corporation		JP	650
12	DENSO Corporation		JP	453
13	Taiwan Semiconductor Manufacturing Co., Ltd.		TW	451
14	Toyota Jidosha K.K.		JP	415
15	BSH Hausgeräte GmbH	DE		387
16	Intel Corporation		US	385
17	Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.	DE		357
18	OSRAM Opto Semiconductors GmbH	DE		354
19	Infineon Technologies AG	DE		344
20	Miele & Cie. KG	DE		342
20	MAHLE International GmbH	DE		317
22	Hewlett Packard Enterprise Development LP		US	284
22	Deere & Company		US	284
23	International Business Machines Corporation		US	283
24	Hyundai Motor Company		KR	282
25	Carl Zeiss SMT GmbH	DE		265
20	Continental Automotive GmbH	DE		263
			KD	283
28	Kia Corporation	DE	KR	-
29	SEW-EURODRIVE GmbH & Co KG			233
30	Vitesco Technologies GmbH	DE		231
31	Siemens Healthcare GmbH	DE		217
32	Continental Reifen Deutschland GmbH	DE		212
32	Valeo Schalter und Sensoren GmbH	DE		212
34	NVIDIA Corporation		US	207
35	KRONES AG	DE		202
36	Honda Motor Co., Ltd.		JP	195
37	Siemens Mobility GmbH	DE		194
38	Samsung Electronics Co. Ltd.		KR	191
39	Hitachi Astemo, Ltd.		JP	182
40	Continental Teves AG & Co. oHG	DE		181
41	HELLA GmbH & Co. KGaA	DE		180
42	PSA Automobiles SA		FR	179
43	Voith Patent GmbH	DE		157
44	Webasto SE	DE		156
45	Shimano Inc.		JP	155
46	Aktiebolaget SKF		SE	148
47	Illinois Tool Works Inc.		US	146
48	Brose Fahrzeugteile SE & Co. KG, Bamberg	DE		140
49	Deutsches Zentrum für Luft- und Raumfahrt e.V.	DE		139
49	Sony Semiconductor Solutions Corporation		JP	139

1.13 Companies and institutions with the highest number of patent applications in 2021 (applications at the DPMA and PCT applications in the national phase)

¹ Without taking into account any business intra-group affiliations.

2. Utility models and topographies

		Fili	ngs	Procedures concluded			
Year	New applications	Domestic applications	Others ¹	Total	by registration	without registration	Total
2017	13,300	9,480	31	13,331	11,881	1,761	13,642
2018	12,305	8,798	21	12,326	11,294	1,619	12,913
2019	11,665	8,434	14	11,679	10,293	1,540	11,833
2020	12,313	8,894	14	12,327	10,734	1,495	12,229
2021	10,577	7,018	13	10,590	9,972	1,365	11,337

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

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
2017	4,561	81,005	18,821	14,033
2018	3,971	79,266	20,551	13,074
2019	3,816	76,895	18,828	12,682
2020	3,912	74,858	18,172	12,805
2021	3,163	72,728	18,138	12,126

2.2 Topographies under the Semiconductor Protection Act (Halbleiterschutzgesetz)

	New	Р	rocedures conclude	d	Pending	Lapsed due	Registrations in force at
Year	applications received	by registration	without registration	Total	applications at the end of the year	at the end of time	
2017	1	0	1	1	0	2	24
2018	0	0	0	0	0	1	23
2019	0	0	0	0	0	2	21
2020	0	0	0	0	0	1	20
2021	3	1	2	3	0	1	20



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	2017	2018	2019	2020	2021
Baden-Württemberg	1,733	1,624	1,580	1,578	1,291
Bavaria	2,054	1,982	1,901	2,021	1,534
Berlin	322	308	342	343	255
Brandenburg	134	98	164	106	96
Bremen	52	44	34	46	32
Hamburg	156	177	140	154	126
Hesse	628	614	479	615	493
Mecklenburg-Western Pomerania	54	56	43	61	55
Lower Saxony	652	618	563	594	543
North Rhine-Westphalia	2,529	2,181	2,175	2,250	1,697
Rhineland-Palatinate	390	303	351	352	282
Saarland	72	65	49	68	49
Saxony	258	294	222	286	196
Saxony-Anhalt	102	116	98	109	69
Schleswig-Holstein	202	183	167	180	175
Thuringia	142	135	126	131	125
Germany	9,480	8,798	8,434	8,894	7,018

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

	2020			2021		Change from	
German Länder	Applications	Percentage	Applications per 100,000 inhabitants	Applications	Percentage	Applications per 100,000 inhabitants	2020 to 2021 (%)
North Rhine-Westphalia	2,250	25.3	13	1,697	24.2	9	-24.6
Bavaria	2,021	22.7	15	1,534	21.9	12	-24.1
Baden-Württemberg	1,578	17.7	14	1,291	18.4	12	-18.2
Lower Saxony	594	6.7	7	543	7.7	7	-8.6
Hesse	615	6.9	10	493	7.0	8	-19.8
Rhineland-Palatinate	352	4.0	9	282	4.0	7	-19.9
Berlin	343	3.9	9	255	3.6	7	-25.7
Saxony	286	3.2	7	196	2.8	5	-31.5
Schleswig-Holstein	180	2.0	6	175	2.5	6	-2.8
Hamburg	154	1.7	8	126	1.8	7	-18.2
Thuringia	131	1.5	6	125	1.8	6	-4.6
Brandenburg	106	1.2	4	96	1.4	4	-9.4
Saxony-Anhalt	109	1.2	5	69	1.0	3	-36.7
Mecklenburg- Western Pomerania	61	0.7	4	55	0.8	3	-9.8
Saarland	68	0.8	7	49	0.7	5	-27.9
Bremen	46	0.5	7	32	0.5	5	-30.4
Germany	8,894	100	11	7,018	100	8	-21.1

3. National trade marks

3.1 Applications and registrations

		Desistantian					
		New applications		after being		Registration under section 41	
Year	Total	Domestic applications	Proportion of service marks (%) ¹	concluded by the Federal Patent Court	Total	Trade Mark Act (<i>Markengesetz</i>)	
2017	72,048	67,441	47.1	371	72,419	50,954	
2018	70,534	65,661	47.3	356	70,890	50,584	
2019	73,635	68,260	46.1	387	74,022	55,026	
2020	84,623	78,716	44.8	338	84,961	60,428	
2021	87,631	81,815	44.0	290	87,921	68,597	

¹ Proportion of claimed service classes in all claimed classes in national trade mark applications, as a trade mark application may be assigned to several classes.

3.2 Opposition proceedings

		Oppositions receive	d	Opposition proceedings concluded		
Year	Trade marks challenged by oppositions	Number of oppositions	Number of opposing signs 1	without affecting the trade mark	Cancellation in full or in part	Procedure obsolete ²
2017	2,854	4,227	4,227	2,118	616	613
2018	2,793	4,150	4,150	1,798	445	596
2019	2,952	3,398	5,046	1,827	438	607
2020	2,745	2,969	4,613	1,818	521	633
2021	3,225	3,481	5,586	1,712	428	642

¹ Since 14 January 2019 an opposition can be based on several earlier rights (opposing signs) if they belong to the same proprietor.

² (Partial) cancellations in particular due to the surrender of the proprietor.

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
2017	44,117	35,215	811,614
2018	46,495	39,940	815,703
2019	40,311	39,834	830,411
2020	45,172	39,491	845,635
2021	45,805	35,945	868,401



	Арр	tion of marks originating from Ger	many	
		Procedure	s concluded	Concernending
Year	Applications received	Applications transmitted to WIPO ¹ Applications withdraw or refused		Cases pending at the end of the year
2017	4,713	4,636	114	302
2018	4,697	4,513	89	397
2019	4,638	4,651	116	271
2020	4,415	4,255	137	294
2021	4,958	4,779	125	351

3.4 Procedures for the international registration of marks

¹ Not including requests for the extension of protection under Art. 3ter(2) Madrid Agreement; 157 requests for the extension of protection were received in 2021, and 160 requests were transmitted to the World Intellectual Property Organization (WIPO).

		Extensio	ations of marks ori o Germany	ginating			
		Р	rocedures conclude	ed		Requests	received
Year	Requests received ²	Full grant of protection	ll grant Grant of surrender or at the end			Oppositions	Appeals
2017	4,678	3,426	311	512	3,004	280	23
2018	4,828	3,590	264	710	3,267	361	17
2019	5,196	4,123	355	701	3,276	215	14
2020	4,819	3,644	336	772	3,341	172	23
2021	4,686	3,034	372	1,229	3,389	171	26

² Not including other requests and not including renewals.

German <i>Länder</i>	2017	2018	2019	2020	2021
Baden-Württemberg	8,767	8,339	8,540	10,141	9,992
Bavaria	12,506	12,308	12,281	14,470	14,845
Berlin	5,334	5,458	5,459	5,930	6,014
Brandenburg	1,177	1,075	1,208	1,440	1,388
Bremen	587	535	604	633	750
Hamburg	3,377	3,501	3,442	4,091	4,185
Hesse	5,512	5,214	5,553	6,312	6,443
Mecklenburg-Western Pomerania	628	578	670	765	850
Lower Saxony	4,826	4,672	5,119	5,708	6,089
North Rhine-Westphalia	15,135	14,557	15,549	18,124	19,842
Rhineland-Palatinate	3,085	3,043	3,156	3,606	3,815
Saarland	616	548	581	723	636
Saxony	2,109	2,049	2,067	2,316	2,281
Saxony-Anhalt	644	766	815	850	814
Schleswig-Holstein	2,198	2,208	2,275	2,649	2,792
Thuringia	940	810	941	958	1,079
Germany	67,441	65,661	68,260	78,716	81,815

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

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)

		2020		2021			Change from
German Länder	Applications	Percentage	Applications per 100,000 inhabitants	Applications	Percentage	Applications per 100,000 inhabitants	2020 to 2021 (%)
North Rhine-Westphalia	18,124	23.0	101	19,842	24.3	111	+9.5
Bavaria	14,470	18.4	110	14,845	18.1	113	+2.6
Baden-Württemberg	10,141	12.9	91	9,992	12.2	90	-1.5
Hesse	6,312	8.0	100	6,443	7.9	102	+2.1
Lower Saxony	5,708	7.3	71	6,089	7.4	76	+6.7
Berlin	5,930	7.5	162	6,014	7.4	164	+1.4
Hamburg	4,091	5.2	221	4,185	5.1	226	+2.3
Rhineland-Palatinate	3,606	4.6	88	3,815	4.7	93	+5.8
Schleswig-Holstein	2,649	3.4	91	2,792	3.4	96	+5.4
Saxony	2,316	2.9	57	2,281	2.8	56	-1.5
Brandenburg	1,440	1.8	57	1,388	1.7	55	-3.6
Thuringia	958	1.2	45	1,079	1.3	51	+12.6
Mecklenburg- Western Pomerania	765	1.0	47	850	1.0	53	+11.1
Saxony-Anhalt	850	1.1	39	814	1.0	37	-4.2
Bremen	633	0.8	93	750	0.9	110	+18.5
Saarland	723	0.9	73	636	0.8	65	-12.0
Germany	78,716	100	95	81,815	100	98	+3.9

3.7 Classes of national trade marks applied for $^{\scriptscriptstyle 1}$

Ranking	Class	Class essentially includes ²	2020	2021	Change (%)
1	35	Advertising; business management, organisation and administration; office functions	29,351	29,974	+2.1
2	41	Education; providing of training; entertainment; sporting and cultural activities	20,666	20,483	-0.9
3	9	Electrical apparatus and instruments; computer hardware; software; optical apparatus and instruments	16,312	16,613	+1.8
4	42	Scientific and technological services	15,258	15,549	+1.9
5	25	Clothing, footwear and headgear	12,810	13,262	+3.5
6	16	Office requisites; stationery	10,402	10,636	+2.2
7	21	Household and kitchen utensils and containers; articles for cleaning purposes; tableware, dishes; glassware	7,001	8,259	+18.0
8	36	Insurance and financial services; real estate affairs	6,900	7,647	+10.8
9	44	Medical services; hygienic and beauty care; agriculture, horticulture and forestry services	7,195	7,531	+4.7
10	30	Foodstuffs of plant origin; pastries, pasta and confectionery; seasonings, condiments; coffee, tea and cocoa; sugar	6,483	7,418	+14.4
11	43	Services for providing food and drink; temporary accommodation	6,704	6,967	+3.9
12	38	Telecommunications services	6,655	6,717	+0.9
13	37	Building, construction and repair services; installation services	6,916	6,485	-6.2
14	28	Games, sports articles	5,550	6,472	+16.6
15	5	Pharmaceuticals; materials for dressings; disinfectants; dietary supplements	7,005	6,458	-7.8
16	20	Furniture and home decorations	5,437	6,030	+10.9
17	3	Cleaning preparations; cosmetics; perfumery	6,334	5,960	-5.9
18	18	Leather products; luggage and carrying bags	5,347	5,717	+6.9
19	32	Non-alcoholic beverages; beers	4,639	5,335	+15.0
20	39	Transport and travel arrangement; packaging and storage of goods	5,099	4,995	-2.0
21	29	Foodstuffs of animal origin; milk products; processed fruits and vegetables	4,252	4,877	+14.7
22	33	Alcoholic beverages	4,169	4,794	+15.0
23	11	Heating; ventilation; apparatus and installations for sanitary purposes	4,770	4,492	-5.8
24	45	Legal services; security services for the physical protection of individuals	4,557	4,364	-4.2

Ranking	Class	Class essentially includes ²	2020	2021	Change (%)
25	40	Treatment of materials; printing services	4,254	4,250	-0.1
26	24	Woven material and blankets; household linen	3,288	3,855	+17.2
27	7	Machines, motors and engines	3,729	3,838	+2.9
28	14	Jewellery, clocks and watches	3,351	3,510	+4.7
29	12	Vehicles	3,237	3,234	-0.1
30	31	Agricultural, horticultural and forestry products; foodstuffs for animals	2,645	3,181	+20.3
31	10	Medical apparatus and instruments; orthopaedic articles	3,747	2,983	-20.4
32	6	Common metals and goods made thereof for building and construction; small items of metal hardware	2,793	2,772	-0.8
33	1	Chemicals; fertilizers; unprocessed plastics and artificial resins	2,654	2,568	-3.2
34	8	Hand tools; cutlery	2,223	2,193	-1.3
35	19	Non-metallic building and construction materials	2,061	2,113	+2.5
36	4	Industrial oils and lubricants; fuels	1,524	1,738	+14.0
37	26	Haberdashery; decorative articles for the hair	1,612	1,640	+1.7
38	17	Insulating materials; semi-processed goods; flexible pipes, tubes and hoses, not of metal	1,325	1,239	-6.5
39	34	Tobacco, smokers' articles	1,153	1,226	+6.3
40	27	Floor coverings and mats; wall coverings and ceiling lining	1,111	1,124	+1.2
41	2	Paints; varnishes; lacquers; printing inks	1,138	1,008	-11.4
42	22	Ropes; tents, tarpaulins and sails	977	879	-10.0
43	15	Musical instruments	490	504	+2.9
44	23	Yarns and threads	239	213	-10.9
45	13	Firearms	290	183	-36.9
Not class	sified		56	94	
Total			253,709	261,380	+3.0

¹ A trade mark application may be assigned to several classes.
² 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.

	Proprietor ¹	Principal pla	ce of business	Registrations
1	Make Great Sales Ltd.	US		79
2	Bahlsen GmbH & Co. KG		DE	66
3	Private Mark GmbH		DE	65
4	Henkel AG & Co. KGaA		DE	53
4	Rotkäppchen - Mumm Sektkellereien GmbH		DE	53
6	Bayerische Motoren Werke AG		DE	43
6	Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.		DE	43
8	VOLKSWAGEN AG		DE	42
9	Nordbrand Nordhausen GmbH		DE	39
10	ARD-Werbung SALES & SERVICES GmbH		DE	36
10	Heinrich Bauer Verlag KG		DE	36
10	SLV GmbH		DE	36
13	MERCK KGaA		DE	35
14	August Storck KG		DE	34
15	BASF SE		DE	32
15	Boehringer Ingelheim International GmbH		DE	32
17	Boehringer Ingelheim Vetmedica GmbH		DE	31
17	HARIBO Holding GmbH & Co. KG		DE	31
17	Liesegang und Partner mbB, Rechtsanwälte		DE	31
20	Daimler AG		DE	29

3.8 Top companies and institutions in terms of trade mark registrations in 2021 (registrations of trade marks pursuant to section 41 Trade Mark Act)

 $^{\scriptscriptstyle 1}$ Without taking into account any business intra-group affiliations.

4. Designs

4.1 Applications and procedures concluded

		Fili	ngs¹		Procedures concluded			
	Desig	gns in		Designs				
Year	applications with multiple designs	applications with one design	Total	in domestic applications by registration		7 domestic		Total
2017	44,066	2,677	46,743	40,476	47,175	39,840	5,803	52,978
2018	41,643	2,416	44,059	39,016	47,647	42,464	5,569	53,216
2019	40,843	2,256	43,099	36,398	41,145	36,186	3,841	44,986
2020	37,649	2,494	40,143	35,856	37,131	33,214	4,226	41,357
2021	33,643	2,427	36,070	32,819	31,083	28,323	3,404	34,487

¹ Provisional for 2020, 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 proprietor)

German Länder	2017	2018	2019	2020	2021
Baden-Württemberg	6,259	6,645	6,726	5,056	4,869
Bavaria	8,424	8,521	7,950	6,139	4,853
Berlin	1,633	1,960	1,778	1,731	1,875
Brandenburg	531	321	297	172	150
Bremen	272	133	110	98	135
Hamburg	1,210	916	844	715	719
Hesse	1,820	1,590	1,362	1,544	1,351
Mecklenburg-Western Pomerania	165	143	92	188	134
Lower Saxony	3,041	2,747	2,418	2,546	1,729
North Rhine-Westphalia	10,979	13,287	10,957	10,584	9,172
Rhineland-Palatinate	1,462	1,595	1,020	1,114	930
Saarland	243	210	163	308	115
Saxony	1,268	1,825	1,298	1,269	953
Saxony-Anhalt	326	458	274	580	220
Schleswig-Holstein	1,878	1,725	658	892	925
Thuringia	329	388	239	278	193
Germany	39,840	42,464	36,186	33,214	28,323



	Pending designs	Extensions	Designs		Registered and	Invalidity proceedings		
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	
2017	25,787	3,552	15,937	47,716	312,558	63	90	
2018	16,597	3,599	14,563	46,454	313,751	31	71	
2019	14,708	3,386	15,034	51,458	303,438	29	48	
2020	13,492	3,405	15,451	50,005	290,564	59	63	
2021	15,055	3,204	16,412	51,200	270,447	19	28	

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

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

		2020		2021			Change from	
German Länder	Registered designs	Percentage	Registered designs per 100,000 inhabitants	Registered designs	Percentage	Registered designs per 100,000 inhabitants	2020 to 2021 (%)	
North Rhine-Westphalia	10,584	31.9	59	9,172	32.4	51	-13.3	
Baden-Württemberg	5,056	15.2	46	4,869	17.2	44	-3.7	
Bavaria	6,139	18.5	47	4,853	17.1	37	-20.9	
Berlin	1,731	5.2	47	1,875	6.6	51	+8.3	
Lower Saxony	2,546	7.7	32	1,729	6.1	22	-32.1	
Hesse	1,544	4.6	25	1,351	4.8	21	-12.5	
Saxony	1,269	3.8	31	953	3.4	23	-24.9	
Rhineland-Palatinate	1,114	3.4	27	930	3.3	23	-16.5	
Schleswig-Holstein	892	2.7	31	925	3.3	32	+3.7	
Hamburg	715	2.2	39	719	2.5	39	+0.6	
Saxony-Anhalt	580	1.7	27	220	0.8	10	-62.1	
Thuringia	278	0.8	13	193	0.7	9	-30.6	
Brandenburg	172	0.5	7	150	0.5	6	-12.8	
Bremen	98	0.3	14	135	0.5	20	+37.8	
Mecklenburg- Western Pomerania	188	0.6	12	134	0.5	8	-28.7	
Saarland	308	0.9	31	115	0.4	12	-62.7	
Germany	33,214	100	40	28,323	100	34	-14.7	

	Proprietor ¹	Principal pla	ce of business	Registered designs
1	Betty Barclay Group GmbH & Co. KG	DE		960
2	The House of Art GmbH	DE		867
3	AstorMueller AG		СН	804
4	Miroglio Textile S.r.l.		IT	700
5	monari GmbH	DE		519
6	Daimler AG	DE		479
7	OLYMP Bezner KG	DE		444
8	Goebel Porzellan GmbH	DE		363
9	WOFI LEUCHTEN Wortmann & Filz GmbH	DE		359
10	H.W. Hustadt Besitz- und Beteiligungsgesellschaft mbh & Co.KG	DE		313
11	Albani Group GmbH & Co. KG	DE		300
12	GEMINI Schuhproduktions- und Vertriebs GmbH	DE		282
13	Wolf Möbel GmbH & Co. KG	DE		234
14	InnoTex Merkel & Rau GmbH	DE		213
15	VOLKSWAGEN AG	DE		198
16	Räder GmbH	DE		169
17	Urban Products Sacha GmbH	DE		163
18	Paul Green GmbH		AT	153
19	Sichtflug UG (haftungsbeschränkt)	DE		149
20	Bluespoon GmbH	DE		146

4.5 Top companies and institutions in terms of registered designs at the DPMA in 2021 (without partnerships organised under the Civil Code)

 $^{\scriptscriptstyle 1}$ Without taking into account any business intra-group affiliations.

5. Register of anonymous and pseudonymous works

	Works in respect of which		Procedures concluded		Pending applications
Year	the author's true name was filed for registration	Applicants ¹	by registration	without registration	at the end of the year
2017	0	0	0	0	0
2018	3	2	2	1	0
2019	4	3	4	0	0
2020	5	2	0	0	5
2021	2	2	6	1	0

 $^{\scriptscriptstyle 1}$ 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	(section 20 Act on the Activities of European Patent Attorneys in Germany) ¹	companies ¹
2017	183	51	3,762	29	21
2018	153	62	3,853	32	26
2019	156	78	3,931	36	29
2020	157	66	4,022	37	32
2021	158	81	4,099	40	35

 $^{\scriptscriptstyle 1}$ 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
2017	189	183	847	683	32,988
2018	171	165	702	70	33,620
2019	144	137	767	293	34,094
2020	163	155	573	318	34,349
2021	174	166	707	369	34,687

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→ Patent information centres

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