KPMG Law

Protecting Value

The VI. Intellectual Property Report of KPMG Law 2022/23

In cooperation with

LexisNexis® PatentSight®

July 2023

Contents

Introduction

Dear Reader,

Intellectual property is of critical importance to the modern, digital economy in which many multinational companies operate. It is of great value to businesses and can generate additional revenue through licensing. However, the intellectual property sector has faced numerous challenges in recent years, including the war in Ukraine, the energy crisis, and the Covid-19 pandemic. These events have disrupted supply chains, made it more difficult to obtain resources and caused widespread economic disruption, all of which have made it more challenging for businesses to protect and monetize their intellectual property. This has put added pressure on intellectual property departments to manage costs, speed, and quality while also becoming more involved in strategic decision-making.

The rapid pace of digital development and the emergence of new technologies, such as artificial intelligence and the Internet of Things, have further complicated this situation. In order to address these challenges and ensure long-term efficiency and cost savings, it is important for intellectual property departments to reorganize and optimize their operations.

This report provides you with information on which measures have already proven effective in many of the world's largest IP departments to help you successfully master these challenges. The many quantitative metrics that we present here introduce a more transparent picture of IP departments and can serve as orientation parameters and objective benchmarks for IP department heads.

We look forward to discussing these issues with you.

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Foreword

Dear Colleagues in IP department management,

We are proud to present "Protecting Value – The Intellectual Property Report of KPMG Law 2022/23" to our global audience.

For the sixth time, the report brings greater transparency to the general structure and best practices used to master the daily challenges encountered in staffing, cost reduction and outsourcing practices. As the database is able to distinguish between internal and external operations, it offers a broad set of adapted quantitative and qualitative key performance indicators to adequately compare your department's performance.

Our consistently high participation rate shows that we continue to meet the demands for truly reliable performance and cost data comparisons in the IP environment.

We would like to express our gratitude to the entire advisory board for the valuable support during the past year. In particular, we would like to thank: Joachim Bee, Bosch; Frederica M. Benvenuti, Solvay; Peter Berg, Infineon; Dr. Roman Bonn, Continental; Jean-Marc Brunel, Safran; Filip de Corte, Syngenta; Michael Gollwitzer, Siemens; Arne Lang, Evonik; Klaus Mannsperger, Daimler; Dr. Uwe Over, Henkel; Silke Reinhold, Volkswagen and Norbert Schwenk, Clariant.

In addition, we would like to thank PatentSight® for this year's cooperation and their expertise, which enabled us to analyze additional valuable findings.

We also would like to extend our thanks to our colleague Chloé Lybaert, as well as the entire KPMG Law team for their support in preparing this report.

Düsseldorf, July 2023

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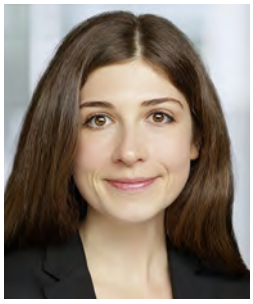
is a Partner and the Cluster Lead for Legal Operations & Technology Services at KPMG Law. For 16 years he has been advising legal and intellectual property departments on their (digital) transformation journeys, supporting them to achieve a faster, more efficient and even more risk-conscious set-up. He is the contact person for all questions concerning legal and IP operations, in particular strategy, organization and process optimization as well as benchmarks.

Chloé Lybaert, LL.M.,

works in the Legal Operations & Technology Services team and, together with Andreas Bong, is responsible for KPMG Law's regularly published benchmark reports in the area of law and intellectual property. In addition, she advises legal and IP departments of globally operating companies on benchmarking in the context of process analysis and optimization as well as on other organizational and operational matters.



Aoife Madden

is a member of the Legal Operations & Technology Services team and assists in producing KPMG Law's regularly published benchmark legal and intellectual property reports. She also holds joint responsibility in conducting benchmarks for legal and IP departments and advises legal departments and organizational and operational matters including service portfolio analysis and optimization and process design.

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Management summary

Patents

274

Number of R&D employees per patent professional

659

Number of patents per patent professional (granted patents, pending property rights and design patents)

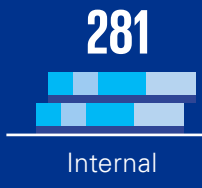
213

Number of patent families per patent professional

253

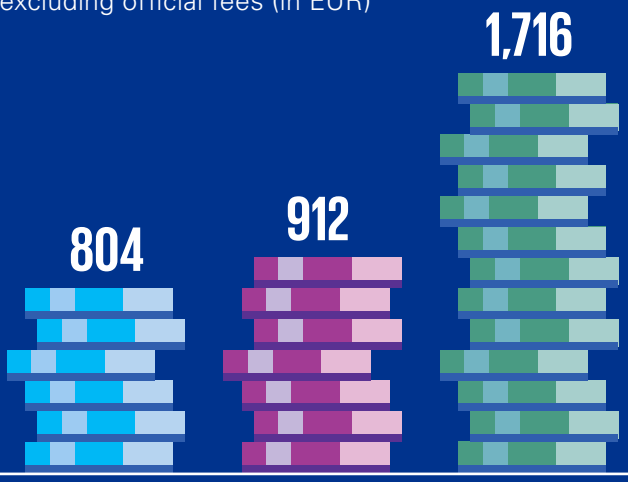
Number of pending property rights per patent professional

Internal total costs per hour per patent professional (in EUR)



Internal

Internal, external and total costs per patent excluding official fees (in EUR)



Internal External Total

Insourcing/outsourcing ratio – excluding fees

All values reflect the average of the entire participant group.

Interested in finding out more about the report? Please scan the QR code here.

Trademarks

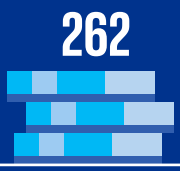
2,424
Number of marketing employees per trademark professional

5,066
Number of trademarks per trademark professional (existing trademarks)

688
Number of trademark families per trademark professional

170
Number of new trademarks per trademark professional

Internal total costs per hour per trademark professional (in EUR)



Internal, external and total costs per trademark excluding renewal costs (in EUR)

Insourcing/outsourcing ratio – excluding renewal costs

All values reflect the average of the entire participant group.

1 Demographics on participating companies

1.1 Allocation of participants per country and industry sector

The survey for this edition of our IP Report began in June 2022. For the first time in its history, its growing pool of participants includes companies from the United States. The evaluation ended in September 2022 with a database consisting of more than 170 respondents from IP departments of international enterprises. The evaluated cost and performance data represent the calendar year 2021 and provide a picture of the situation at the height of the Covid-19 pandemic.

This year's report includes enterprises based in Austria, Belgium, France, Germany, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom and the United States.

German participants represent the majority of all respondents (56 percent), followed by those from France (9 percent), Switzerland (7 percent), Austria (6 percent), Sweden (5 percent), the Netherlands (5 percent), Belgium (4 percent), the United Kingdom (4 percent), the United States (2 percent), and Norway (2 percent) (Figure 01, page 13).

In order to provide a plausible assessment of the different structures and performance across industry sectors, it was essential to achieve industry diversity. Almost three quarters of the participants from all countries operate in five dominant sectors (multiple answers were possible): automotive manufacturers and suppliers (27 percent), chemical manufacturing and processing (15 percent), retail and consumer products (12 percent), healthcare, life sciences and pharmaceuticals (11 percent), and electrical engineering and electronics assembly (8 percent) (Figure 02, page 13).

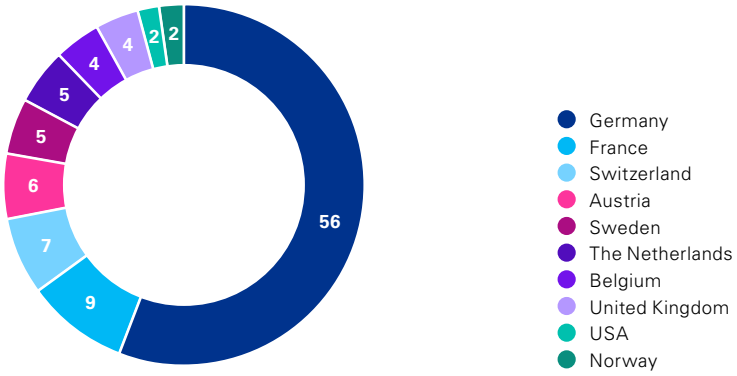
Throughout the report, we will provide industry-specific and regional insights for selected results.

For the first time, we have added a long-term analysis[1] to the report, based on a patent peer group (patent KPI) and a trademark peer group (trademark KPI) in order to ensure the comparability of results throughout the years. By doing this, we eliminate discrepancies in results due to larger or smaller new participants.

The long-term patent group includes those companies that have a patent portfolio of more than 15,000 patents (Figure 03 and 04, page 14). The long-term trademark group includes those companies that have a trademark portfolio of more than 15,000 trademarks (Figure 05 and 06, page 15).

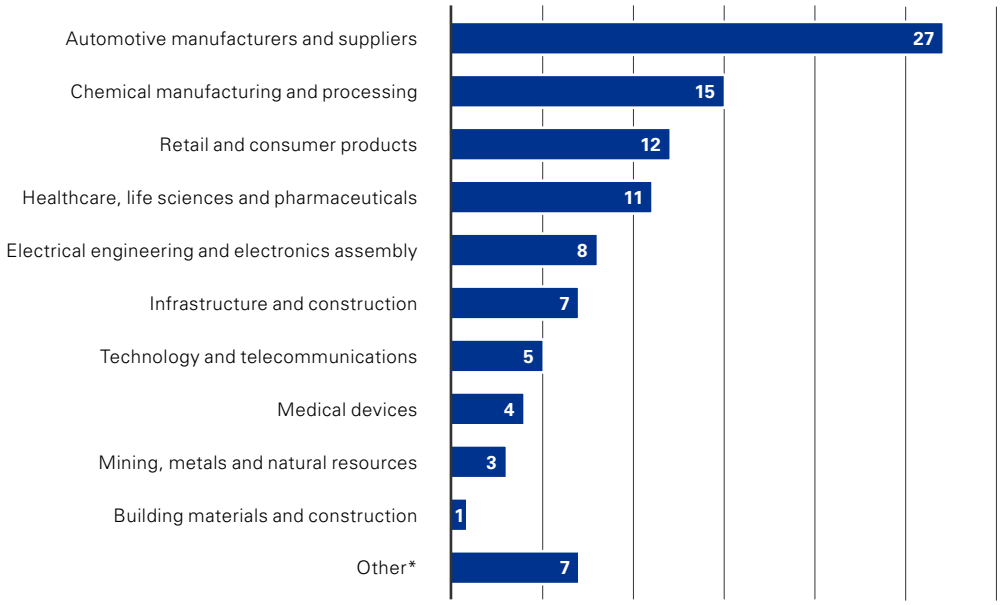
1 Note: As certain KPI have been added to the IP Report throughout the years, the long-term analysis for selected KPI begins with the first year in which these KPI were evaluated.

Figure 01:
Allocation of participants per country



Source: KPMG Law, 2023; figures in percent

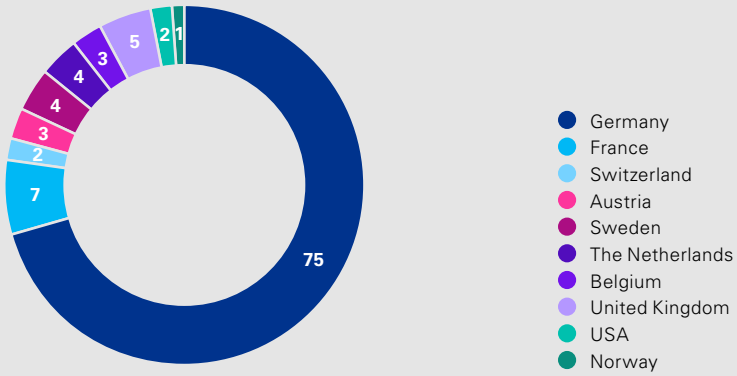
Figure 02:
Allocation of participants per industry



* e.g. Wood, Packaging, Household appliances

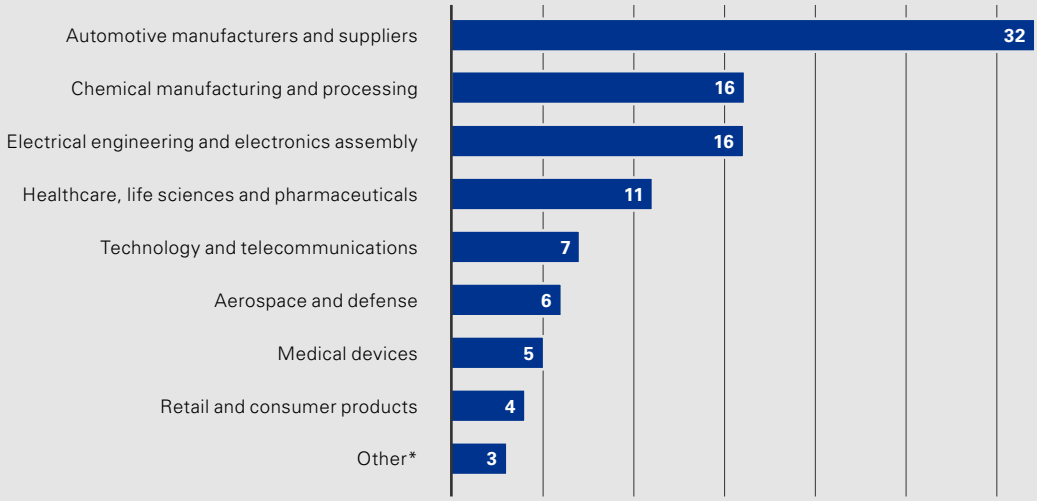
Source: KPMG Law, 2023; figures in percent

Figure 03:
Long-term patent peer group: Allocation of participants per country – patents



Source: KPMG Law, 2023; figures in percent

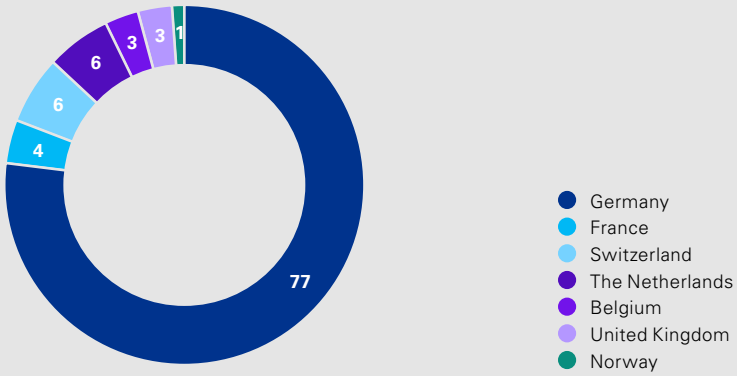
Figure 04:
Long-term patent peer group: Allocation of participants per industry sector – patents



* e.g. Wood, Packaging, Household appliances

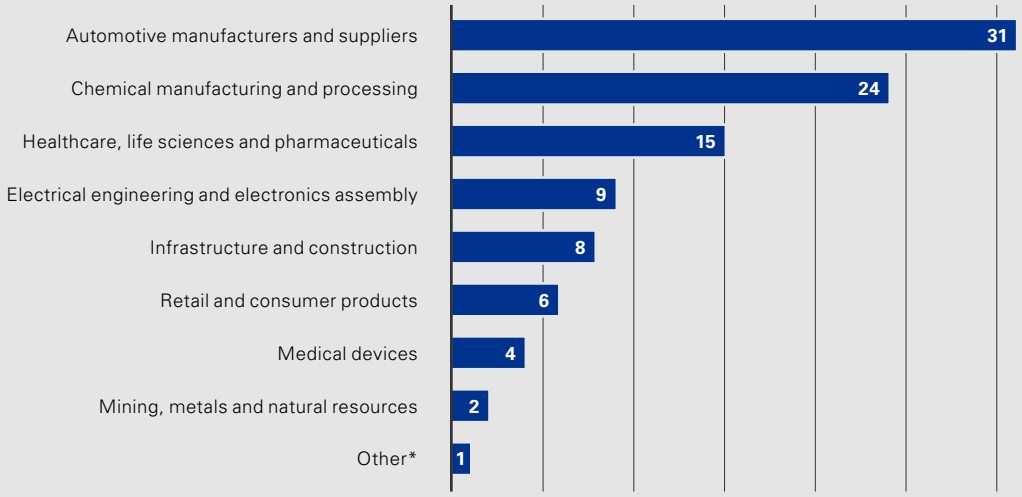
Source: KPMG Law, 2023; figures in percent

Figure 05:
Long-term trademark peer group: Allocation of participants per country – trademarks



Source: KPMG Law, 2023; figures in percent

Figure 06:
Long-term patent peer group: Allocation of participants per industry sector – trademarks



* e.g. Wood, Packaging, Household appliances

Source: KPMG Law, 2023; figures in percent

1.2 Size of participating companies

A look at the most important companies in Europe reveals that the majority of patent and trademark applications are held by only a few study participants, followed by at least the same number of companies with medium-sized or smaller IP portfolios.

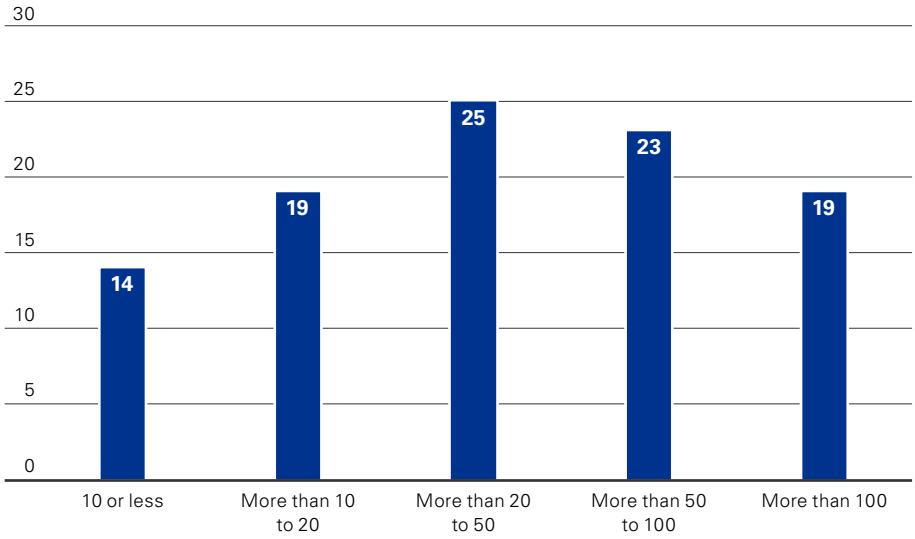
This distribution is also reflected in this study's findings on employee figures worldwide and annual turnover, as illustrated in the two charts on the right.

67 percent of all participating companies have more than 20,000 employees worldwide; 33 percent of participants employ a workforce of up to 20,000 employees (average of 57,971 employees; median of 34,502 employees) (Figure 07, page 17).

The five largest participating companies in terms of employees worldwide each have a workforce of more than 170,000 employees, whereas the five companies with the smallest workforce each have fewer than 2,500 employees.

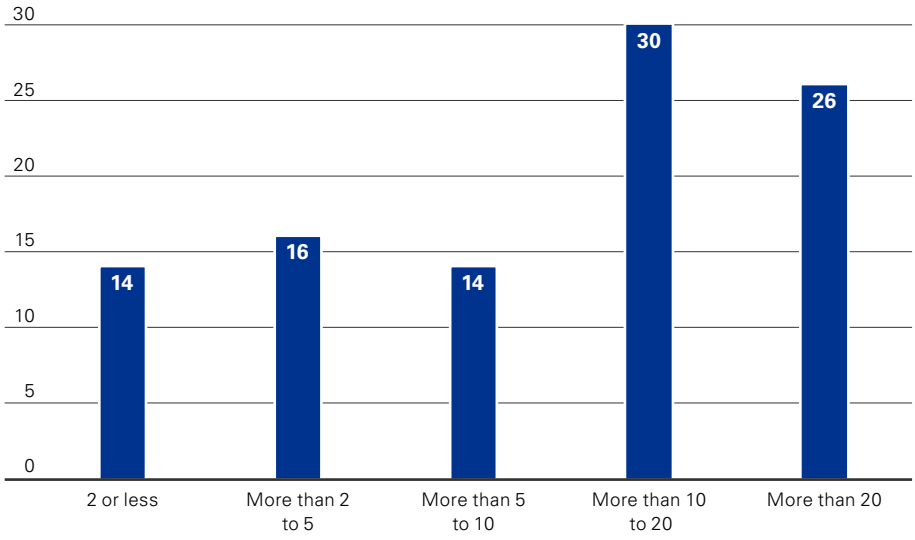
56 percent of all participants generated revenues of more than EUR 10 billion, while 14 percent of participants reported revenues between EUR 6 and 10 billion. 30 percent of participants generated EUR 5 billion or less in revenues in 2021 (average: EUR 19.2 billion; median: EUR 10.7 billion) (Figure 08, page 17).

Figure 07:
Number of employees in thousands, 2022



Source: KPMG Law, 2023; figures in percent

Figure 08:
Revenue in EUR billion, 2022



Source: KPMG Law, 2023; figures in percent

1.3 Patent and trademark portfolio of participants

This report addresses a target group of companies with numerous IP activities, since the challenges – such as capacity forecasting and allocation of staff, performance elevation, cost optimization, measures for raising efficiency, and collaboration with law firms – are more extensive and complex for a certain number of recurring processes.

41 percent of participants have a portfolio of more than 10,000 granted patents and pending property rights; for 23 percent, this figure lies between 5,001 and 10,000; a further 36 percent of respondents hold 5,000 or fewer granted patents and pending property rights in 2022 (average: 17,842; median: 7,766) (Figure 09, page 19).

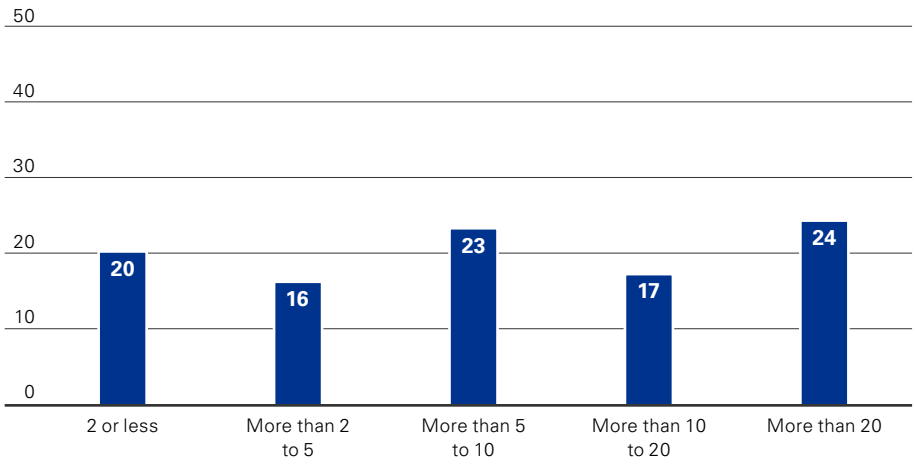
In terms of patent portfolios, the five largest participants each have 64,500 or more patents, while the five smallest participants each hold fewer than 1,400 patents. The breakdown of the trademark portfolio shows a continuation of the trend toward increasing the number of trademarks: 51 percent of all participants hold a trademark portfolio with 5,000 or fewer trademarks and 36 percent have more than 10,000 trademarks, and the remaining 13 percent have a portfolio consisting of between 5,001 and 10,000 trademarks (average: 13,375; median: 4,047) (Figure 10, page 19).

In terms of their trademark portfolios, the five largest participants hold more than 58,000 trademarks, and mainly operate in the chemical manufacturing and processing or retail and consumer products industries. The five smallest participants have less than 280 trademarks and mainly operate in the automotive manufacturers and suppliers industry.

92 percent of all participants hold a design portfolio with 5,000 or fewer designs, while 6 percent have more than 10,000 designs. The remaining 2 percent have a portfolio consisting of between 5,001 and 10,000 designs (average: 2,513; median: 197) (Figure 11, page 19).

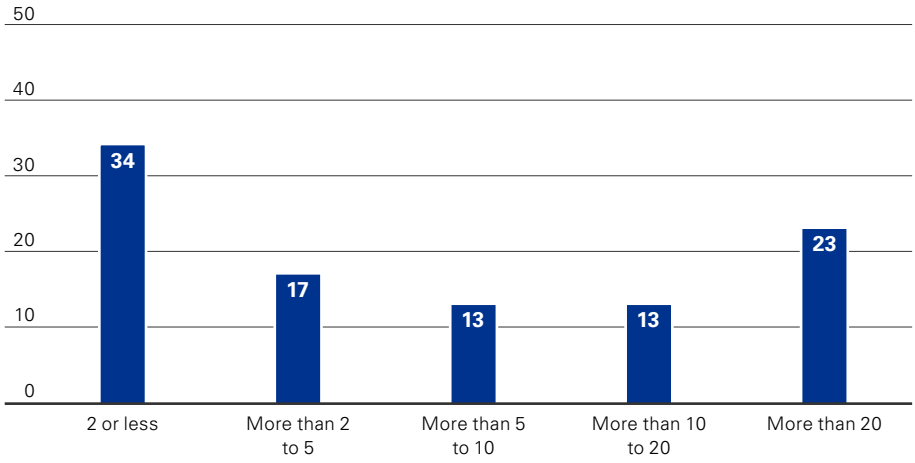
The report's diversity offers the option of creating additional targeted benchmarks concerning economies of scale for patent processes, such as the number of processed invention disclosures or first filings per internal professional, as well as for trademark processes, such as the number of trademark applications per internal professional. Please contact us with any further questions you may have regarding individualized benchmarking with a dedicated peer group.

Figure 09:
Number of patents in thousands, 2022



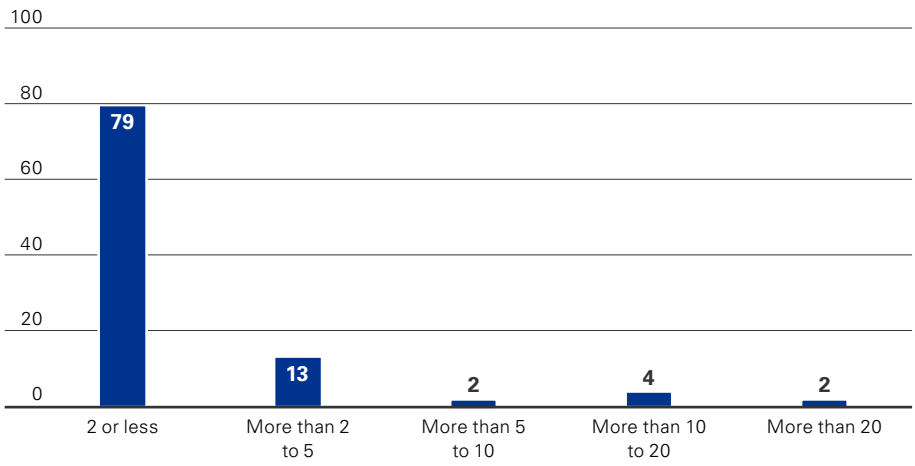
Source: KPMG Law, 2023; figures in percent

Figure 10:
Number of trademarks in thousands, 2022



Source: KPMG Law, 2023; figures in percent

Figure 11:
Number of designs in thousands, 2022



Source: KPMG Law, 2023; figures in percent

1.4 Patent and trademark family portfolio of participants

Participants were also asked to indicate the number of their patent families, trademark families and design families.

68 percent of participants had a portfolio of 5,000 or fewer patent families, 13 percent held between 6,000 and 10,000, and only 19 percent held over 10,000 patent families in 2022 (Figure 12, page 21). The average ist 5,003; the median 2,137.

In terms of their patent family portfolio, the five largest participants account for 14,000 plus patent families and mainly operate in the automotive manufacturers and suppliers and electrical engineering and electronics assembly industries.

The five smallest participants account for less than 200 patent families and operate in highly diverse industries such as healthcare, life sciences and pharmaceuticals, technology and telecommunications or electrical engineering and electronics assembly.

In terms of trademark family portfolios, the distribution is even more defined: 90 percent of all participants have 5,000 or less trademark families, 2 percent between 6,000 and 10,000 trademark families, and 6 percent between 11,000 and 20,000, which means that only 2 percent have a portfolio of more than 20,000 trademark families (average: 1,673; median: 541) (Figure 13, page 21).

In terms of their trademark family portfolio, the five largest participants account for more than 5,600 trademark families and mainly operate in the chemical manufacturing and processing, retail and consumer products or electrical engineering and electronics assembly industries.

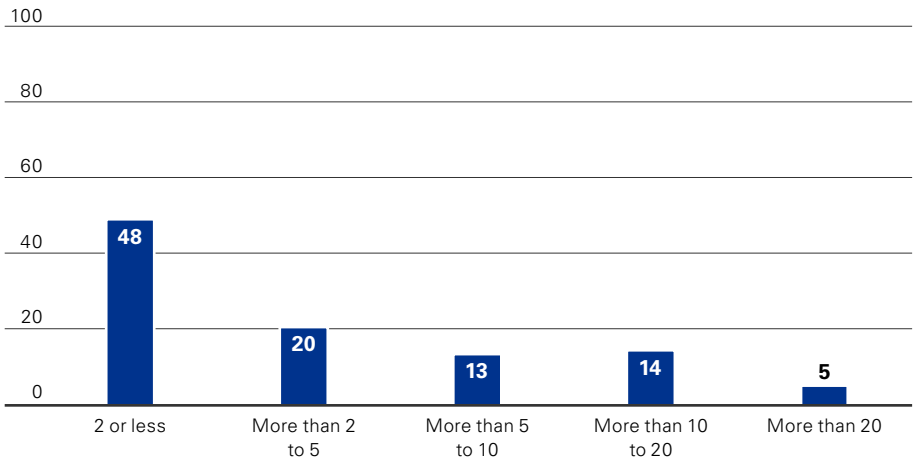
The five smallest participants account for less than 90 trademark families and operate in the automotive manufacturers and suppliers, mining metal and natural resources or electrical engineering and electronics assembly industries.

The distribution of design family portfolios is even more defined: 94 percent of all participants hold a design family portfolio of 2,000 or less, 3 percent between 3,000 and 5,000, 2 percent between 6,000 and 20,000, which means that only 1 percent had a portfolio of design families of more than 20,000 (average: 302; median: 68) (Figure 14, page 21).

In terms of their design family portfolio, the five largest participants account for more than 800 design families and mainly operate in the automotive manufacturers and suppliers or electrical engineering and electronics assembly industries.

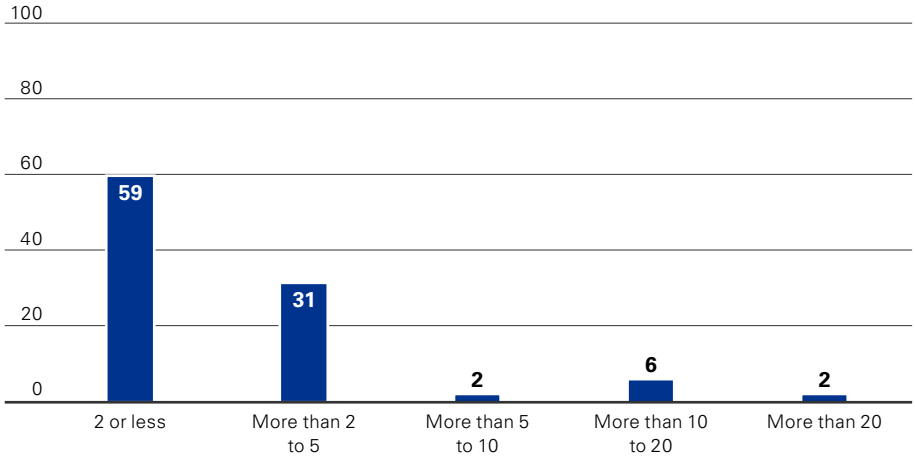
The five smallest participants account for less than 11 design families and operate in the automotive manufacturers and suppliers, mining, metals and natural resources or electrical engineering and electronics assembly industries.

Figure 12:
Number of patent families in thousands, 2022



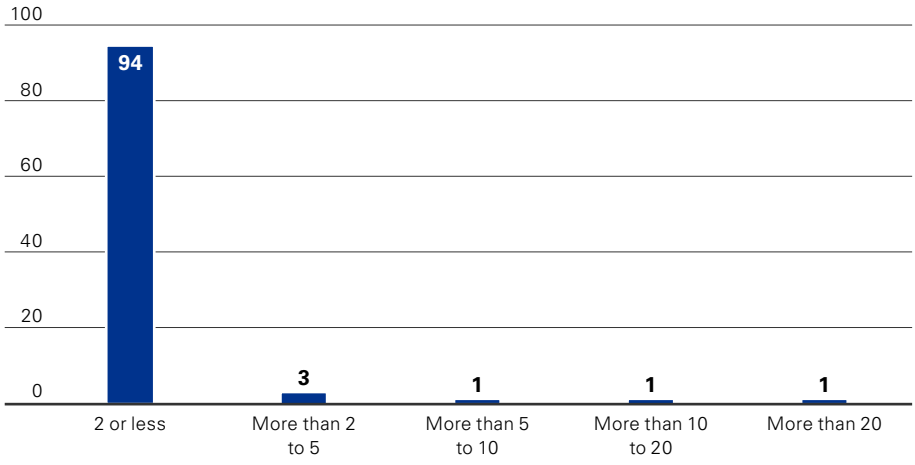
Source: KPMG Law, 2023; figures in percent

Figure 13:
Number of trademark families in thousands, 2022

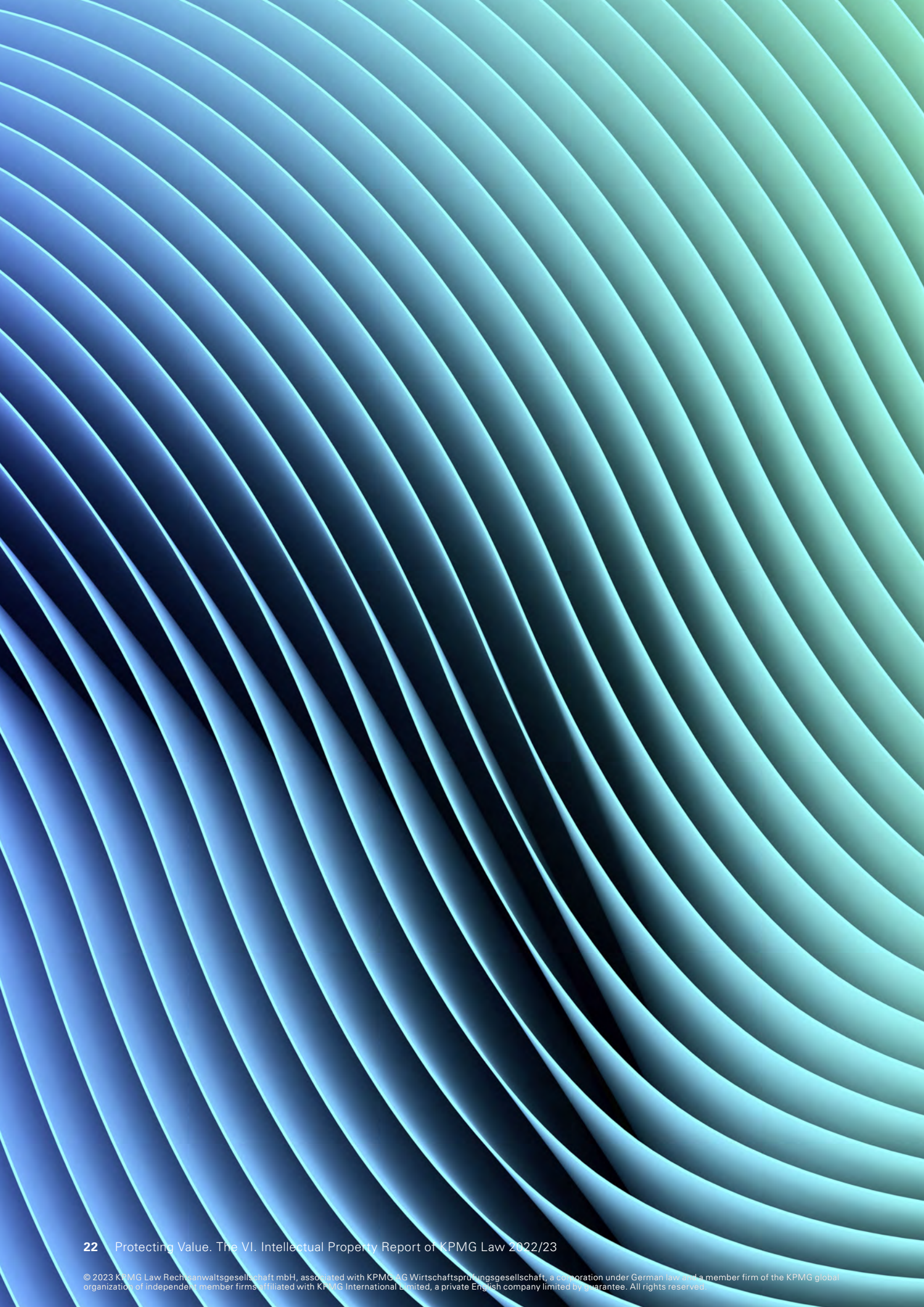


Source: KPMG Law, 2023; figures in percent

Figure 14:
Number of design families in thousands, 2022



Source: KPMG Law, 2023; figures in percent



2 Organization of IP work

2.1 IP structure and integration in the company

This report evaluates data collected on the patent and trademark business, regardless of whether the departments have a unified management structure (i.e., one Head of IP) or if they are based in two different units with no consistent overall management (separate Head of patent department and Head of trademark department).

In order to learn more about the situation in the top IP companies, participants were asked about the organizational structure of the IP department in their company.

65 percent of all participants have unified intellectual property management with one Head of IP, whereas the remaining 35 percent have separate patent and trademark departments (Figure 15).

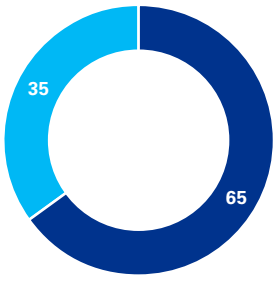
The companies of more than half of all participants that have two separate departments are mainly active in the healthcare, life sciences and pharmaceutical as well as the chemical manufacturing and processing industries, followed by the retail and consumer products industry, and operate mainly in the B2C market.

The IP department should be deeply involved in the company's forward-thinking decision-making processes, as this ensures – among other things – freedom to operate in supporting the development and launch of new products, or when entering new domestic or international markets.

Given the steady increase in the importance of IP within the context of a highly globalized economy, critics often claim that its organizational integration is not consistent with its relevance.

Against this background, the management level of IP heads and their position in the reporting line were analyzed (the Head of the patent/trademark department, respectively).

Figure 15:
Organizational setup of IP



- Patents, designs and trademarks fall under consistent overall management (Head of IP)
- Patents, designs and trademarks do not fall under consistent overall management (Head of Patent Department, etc.)

Source: KPMG Law, 2023; figures in percent

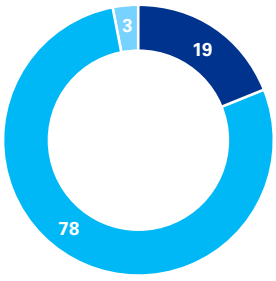
The participants' positions in the company were mostly ranked at executive board level –2 (78 percent of all participants), i.e., one management level exists between the Head of IP and the company's executive board; 19 percent of all participants are at executive board level –1 and 3 percent at executive board level –3 (Figure 16).

55 percent of the participating Heads of IP (the Head of the patent/trademark department, respectively) report to the Chief Legal Officer (CLO)/General Counsel and another 23 percent report to the Chief Technical Officer (CTO), followed by 13 percent reporting to the Head of R&D (in the case of patents) or Head of marketing (in the case of trademarks), and 3 percent to the Chairman of the Management Board or Chief Executive Officer (CEO). 6 percent hold other positions (Figure 17).

This increasing focus on reporting to the Chief Legal Officer (CLO)/General Counsel could be due to a shift in focus of the patent department. In recent years, it has increasingly used its expertise in different areas, supporting the legal department in IP-related disputes. In order to overcome silo thinking and gain the highest efficiency from this cooperation, this reporting line may have been a logical consequence of that change.

In addition, it is interesting to observe the governance structures of centralized and decentralized departments and the extent to which the decentralized departments have acquired autonomous decision-making power – this analysis is presented in detail on the following page.

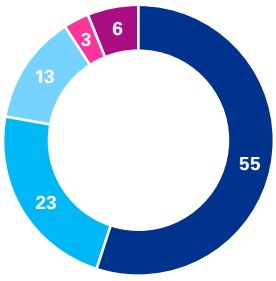
Figure 16:
Management level of Head of IP



- Executive board level –1
- Executive board level –2
- Executive board level –3

Source: KPMG Law, 2023; figures in percent

Figure 17:
Reporting line of Head of IP



- Chief Legal Officer (CLO)/General Counsel
- Chief Technical Officer (CTO)
- Head of R&D/Head of Marketing Department
- Chairman of the Management Board*/ Chief Executive Officer (CEO)
- Other

* No designated IP member of the board

Source: KPMG Law, 2023; figures in percent

2.2 Organization of the IP department

Based on the report's selected peer group, a broad range of companies with centralized IP departments can be expected. This is due to the size of the participating companies, their patent and trademark portfolios, and the scope of IP-related challenges that require activities to be bundled. Considering the international nature of the activities, numerous participants also have several decentralized IP departments, which – to a certain extent – are controlled by one main department.

In order to gain an overview of the organizational structure of the IP departments in the top 400 companies, participants were asked to provide information on IP staff allocation within the organization and the structure established by the company.

While 88 percent of all participants stated that the global IP staff is assigned to the parent company, only 9 percent are partially and 3 percent fully organized as a separate IP legal entity (Figure 18). The continuing centralization is due to the fact that companies have to ensure a consistent corporate policy – precisely because globalization in all areas in industries leads to decentralization. In order to combine the advantages of close ties to the head office with the benefits of regional freedom of action, companies opt either for a solid or a dotted line connection.

38 percent of the participants have a central IP department with no local units; if local units are involved, they are mostly managed with a solid line approach (30 percent) or a dotted line approach (26 percent). 6 percent of all participants use a mixed approach, while 0 percent of participants have decentralized units without functional management (Figure 19).

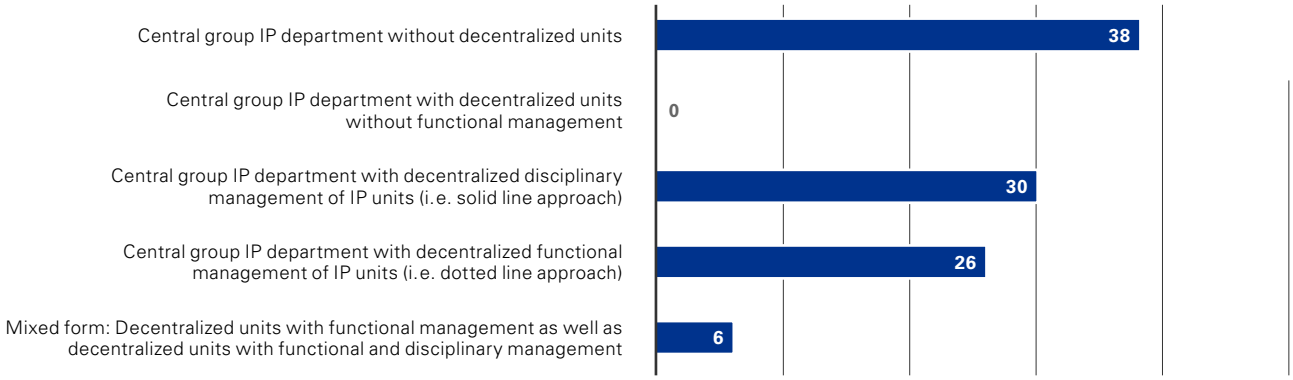
Participants who are partially organized in their own IP legal entity operate mainly in the healthcare, life sciences and pharmaceuticals industry as well as in the automotive manufacturers and suppliers and infrastructure and construction industries.

94 percent of the participants from this year's report have a centralized IP department with at least one functional management system in place for decentralized units.

Figure 18:
Organization of IP staff

Source: KPMG Law, 2023; figures in percent

Figure 19:
Forms of IP department organization



Source: KPMG Law, 2023; figures in percent

2.3 Role of the IP department

In order to better understand the reputation and integration process of top IP departments, respondents were asked to evaluate their role within the global IP decision-making process.

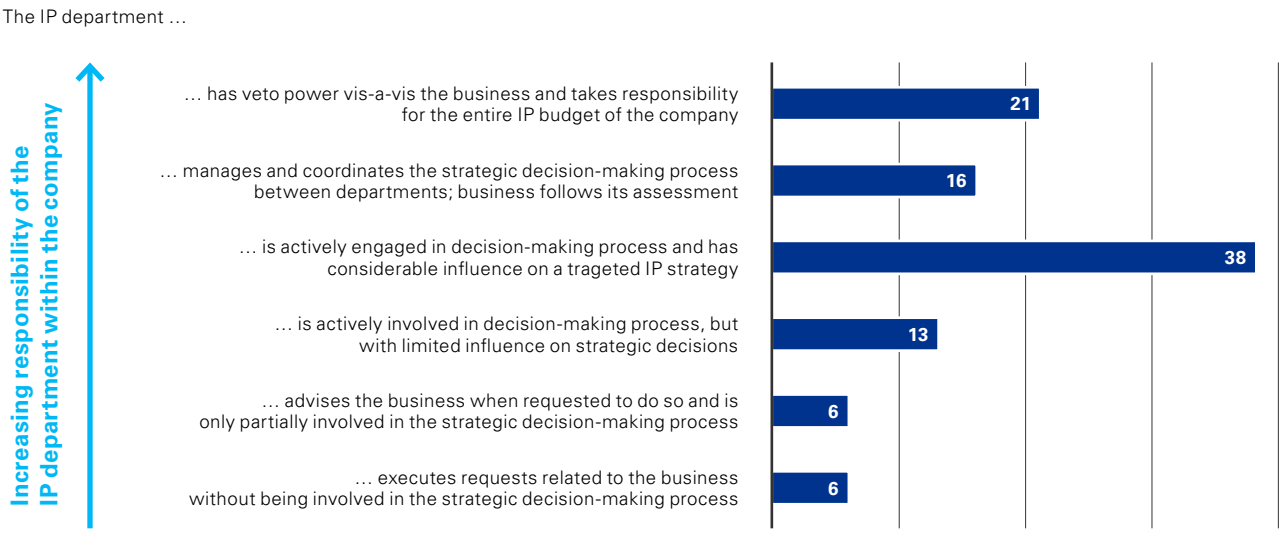
The two dominant factors used to evaluate the role of the IP department in this context are the IP department's decision-making authority (including veto power) and budget authority.

Three categories prove to have little influence on processes, while the other three categories have high to very high influence, including power of veto and budget authority.

38 percent of all participants are actively engaged in the decision-making process and hold limited to high influence on a targeted IP strategy, while 21 percent even have budget authority and veto power. Only 12 percent of participants are not or only irregularly involved in the decision-making process (Figure 20).

As in previous years, an analysis of the role of the IP department in relation to the size of a company's patent and trademark portfolio confirms the hypothesis that the larger the portfolio, the more responsibility and influence the IP department has on the strategic decision-making process.

Figure 20:
Role of IP department in the global IP decision process



Source: KPMG Law, 2023; figures in percent

2.4 Use of patent coordinators

Patent coordinators are not part of the IP department, but are assigned to business or R&D units. They are considered the interface between the patent and the R&D departments and filter ideas and invention disclosures. They not only ensure uniformity of correspondence but, most importantly, that research activities remain in line with the company's IP strategy.

Participants were asked if there are dedicated patent coordinators in other departments who are formally part of the business organization and, if so, how many coordinators the company has worldwide.

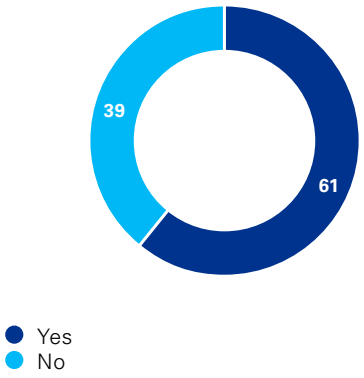
Just as in the previous survey of 2020/21, 61 percent of all participants responded that they have dedicated patent coordinators (Figure 21).

But there is a significant difference among the countries: While 65 percent of German participants replied in the affirmative, only 56 percent of the other European countries benefit from having patent coordinators.

The number of patent coordinators is very unevenly distributed: 80 percent of participants have fewer than ten and 10 percent have more than twenty patent coordinators (in FTE); if patent coordinators are in place, the average number is 7.4 FTE (median: 5.0 FTE) (Figure 22).

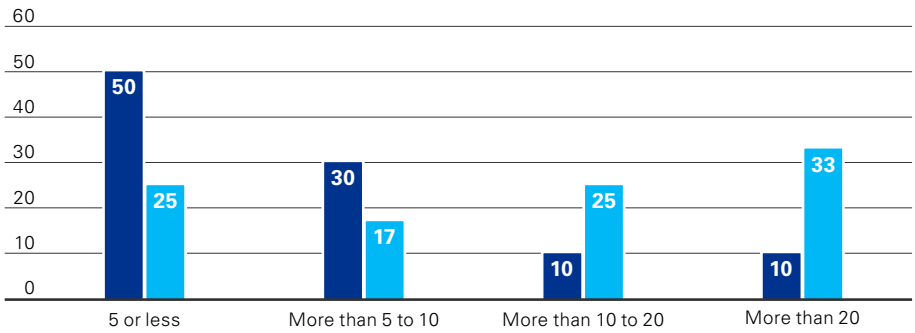
A comparison of portfolio size in IP departments revealed that there are no clear differences between the IP departments, resulting in the conclusion that the presence of patent coordinators likely depends on the actual processes rather than on industry sector or portfolio size.

Figure 21:
Use of patent coordinators outside the IP department



Source: KPMG Law, 2023; figures in percent

Figure 22:
Number of patent coordinators



Source: KPMG Law, 2023; figures in percent

2.5 Management sphere of Head of IP

The criteria for adequate decision-making in relation to the right number of direct reports are: the required functional support, the homogeneity of tasks, the size of the required staff and their qualifications, as well as the complexity of the internal clients.

First, the IP department must determine the organizational and operational IP setup, such as according to a regional cluster, client groups, diversity of the field of activity, or according to defined hybrid forms.

Organizational theory assumes an average number of direct reports to be between 6 and 10, depending on the abovementioned criteria. The smaller the size of a department, the flatter the organization, while larger departments usually incorporate additional layers of management in order to reduce the number of direct reports.

79 percent of the participating Heads of IP have the optimal number of no more than 10 direct reports (36 percent less than 5, 43 percent 5 to 10 direct reports). 14 percent of participants have between 10 and 20 direct reports, while 7 percent have more than 20 direct reports (Figure 23). There could be room for improvement here by flattening the organizational structure. Typically, however, the complex functional requirements make it less possible to reduce the management sphere.

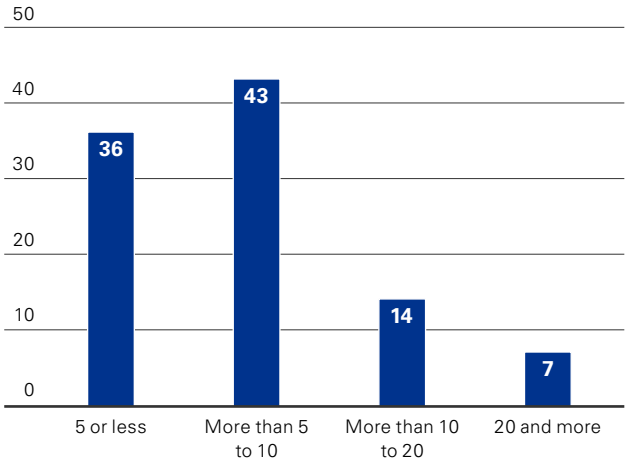
The average management sphere is 9.0 (median: 8). The minimum number of direct reports of all participants is 1 and the maximum is 89.

The survey also asked about the number of management layers within the IP department.

The relative majority of participants have 2 layers (48 percent), 28 percent of participants have 3 layers, 22 percent of participants have 1 layer, while only 2 percent have 4 or more layers (Figure 24).

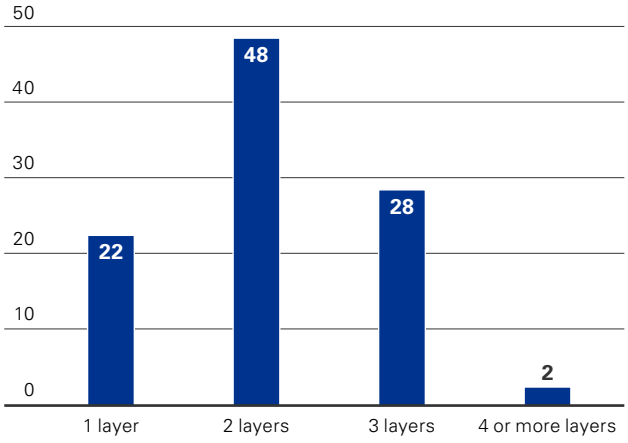
Taking into account the number of direct reports and the number of management layers, no clear trend emerges among the participants.

Figure 23:
Management sphere of Head of IP



Source: KPMG Law, 2023; figures in percent

Figure 24:
Management layers within the IP department



Source: KPMG Law, 2023; figures in percent

2.6 Regional allocation of employees

In order to understand the relevance of cross-divisional coordination and knowledge transfer, the global allocation of employees must be examined. The analysis focuses on the work location of employees, not on the assignment of regional tasks in day-to-day business.

Participants were asked to divide their global workforce into four regions: home country (country of headquarters), EMEA (Europe/Middle East/Africa) excluding home country, APAC (Asia Pacific) and the Americas (North and South).

If the patent department is composed of centralized and decentralized units, participants allocate 63 percent of their patent staff to the home country, followed by EMEA (17 percent), the Americas (10 percent) and APAC (10 percent) (Figure 25, left).

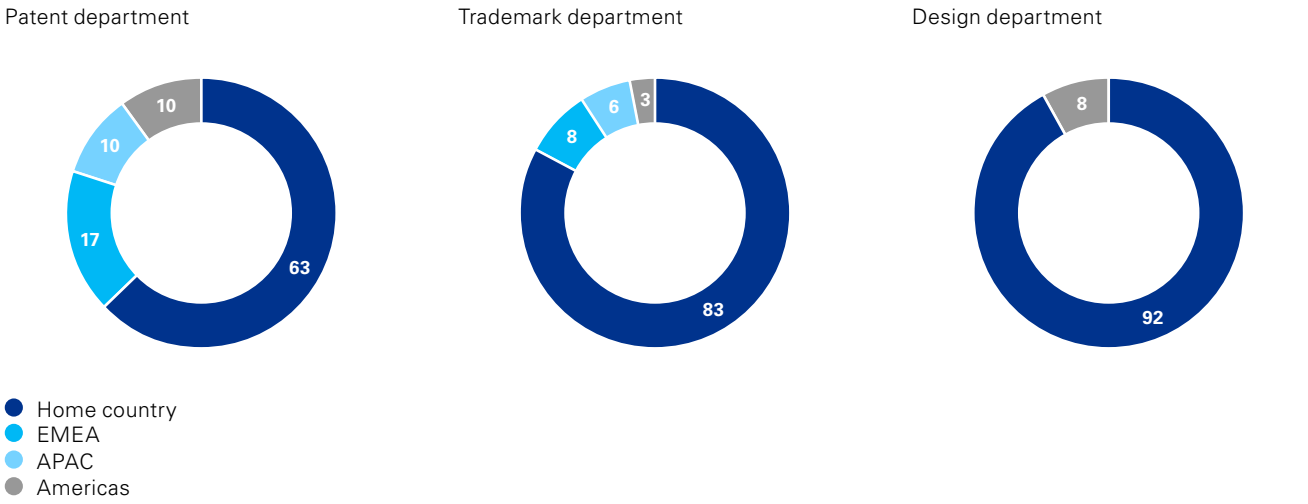
The global distribution of personnel for the trademark department shows a similar degree of centralization: In locations where the trademark department consists of centralized and decentralized units, participants allocate 83 percent of their trademark workforce to the home country, followed by EMEA (8 percent), APAC (6 percent) and the Americas (3 percent) (Figure 25, center).

The global allocation of staff for the design department shows a higher degree of centralization than the patent and trademark departments. In locations where the design department consists of centralized and decentralized units, participants allocate as much as 92 percent of their design staff to their home country, followed by the Americas (8 percent) (Figure 25, right).

This allocation in the trademark department shows that there is no need for enhanced geographic distribution. Since the trademark strategy is centrally managed by the parent company, the majority of the workforce is assigned to the home country.

The patent department is more widely dispersed, as it has research locations and filing activities worldwide that require local patent expertise.

Figure 25:
Employee distribution per region



Source: KPMG Law, 2023; figures in percent

2.7 Allocation of employee levels within the IP department

The performance of patent and trademark professionals is essentially determined by their efficiency, which is supported by information professionals, paralegals, assistants and an administrative staff over the course of the entire year and not only in times of high workloads. These qualified employees relieve legal professionals of any additional work that is not related to their core responsibilities and provide the necessary services in a more cost-efficient way for the entire IP department.

In order to obtain clarity on the support ratio in the top IP departments, the number of patent and trademark professionals was considered in relation to the number of administrative staff and assistants; the figures are given as full-time equivalents (FTE).

In participating patent departments, patent professionals, e.g. attorneys, account for more than half of all FTE (52 percent), followed by paralegals/administrative staff (27 percent), information professionals (13 percent) and assistants (8 percent) (Figure 26, page 32).

The allocation of employees varies across industries. Results from the chemical manufacturing and processing and automotive manufacturers and suppliers industries are in line with the overall results, but indicate a significantly lower number of information professionals. Retail and consumer products still have a very high number of professionals (65 percent on average), but the share of support functions is lower than the overall results.

Making up more than 58 percent of the IP department, the healthcare, life sciences and pharmaceutical industry employs an above-average number of patent and trademark professionals. The construction industry reports a higher share of support functions than that of patent and trademark professionals. The electrical engineering and electronics assembly industry, on the other hand, has a high share of assistants. Interestingly, the healthcare, life sciences and pharmaceuticals industry has a lower number of professionals, but, in absolute figures, more information professionals. In contrast, the technology and telecommunications industry, which also has a lower number of professionals, employs more information professionals and other support functions.

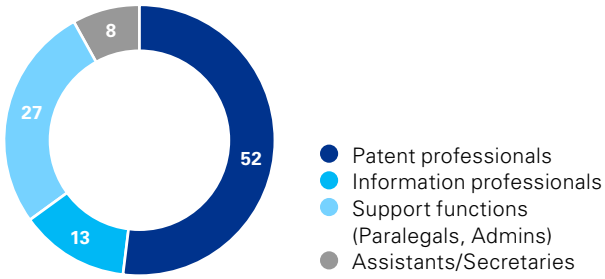
The results on trademark departments show a distribution of 50 percent trademark professionals, 40 percent paralegals/administrative staff, 7 percent assistants and 3 percent information professionals (Figure 27, page 32).

There are hardly any differences in the allocation of employee levels within the trademark departments across the various industries. Notable is, however, that the chemical manufacturing and processing, retail and consumer products and technology and telecommunications industries higher ratio of support functions compared to other industries.

In comparison to the trademark departments, the results on design departments show a split of 44 percent design professionals, 42 percent paralegals and administrative staff, 2 percent information professionals and 12 percent assistants (Figure 28, page 32).

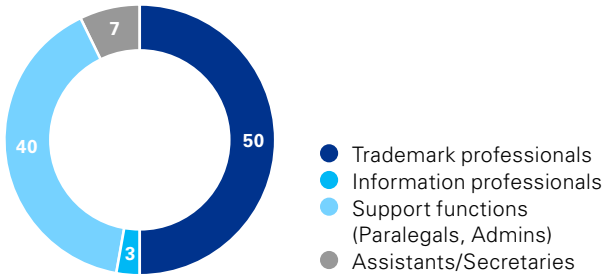
The resulting questions, i.e., if and how this diverse distribution of patent and trademark FTE across industries affects the performance and cost of service delivery, will be answered in sections 3.3 – Number of patents per patent FTE (page 47) and chapter 4 – Costs of IP work (page 73).

Figure 26:
Distribution of FTE within the patent department



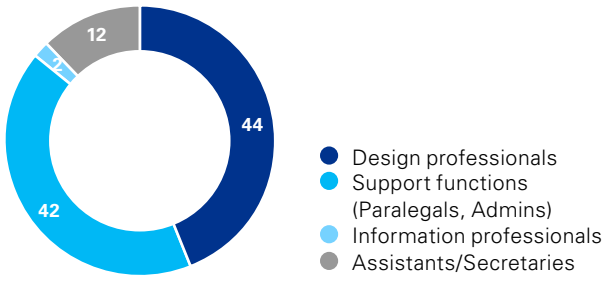
Source: KPMG Law, 2023; figures in percent

Figure 27:
Distribution of FTE within the trademark department



Source: KPMG Law, 2023; figures in percent

Figure 28:
Distribution of FTE within the design department

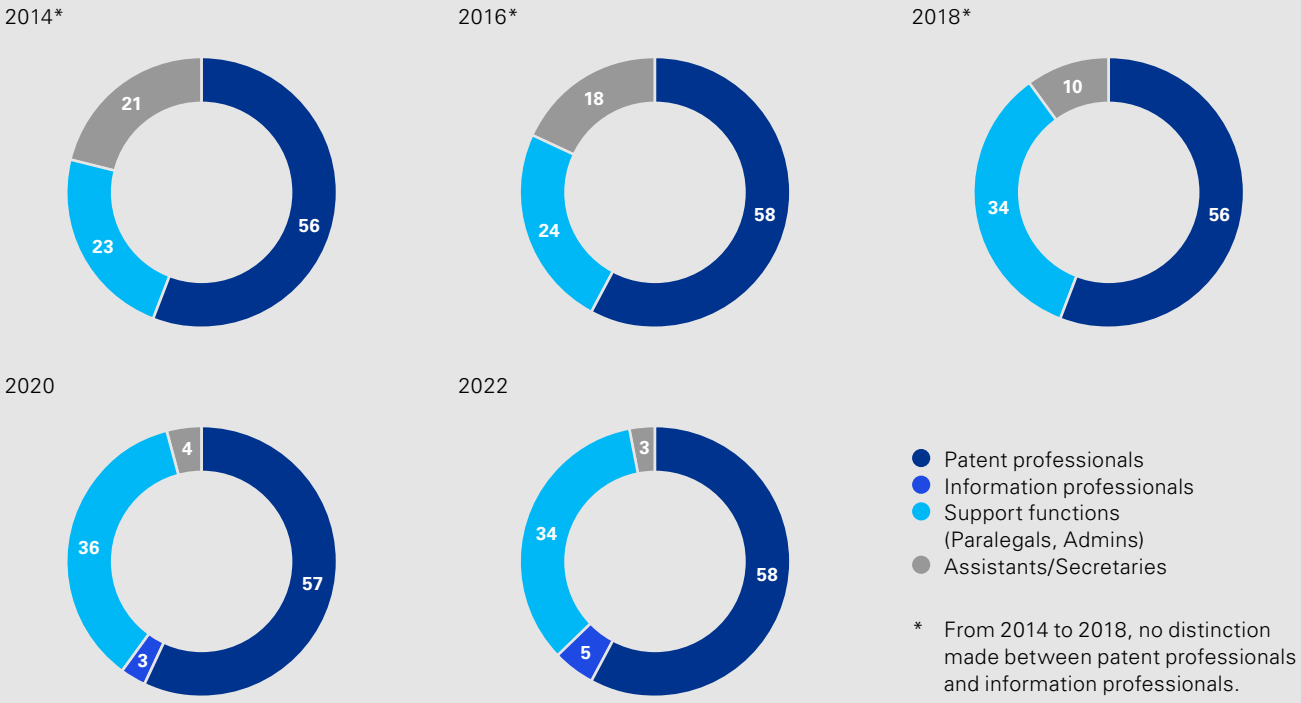


Source: KPMG Law, 2023; figures in percent

The long-term analysis of the patent peer group indicates that there has been an ongoing trend toward employing support staff instead of assistants, even if it is not reflected in the numbers this year (2020: 36 percent, 2022: 34 percent). Despite this drop of 2 percent, there is a clear trend: The administrative work formerly done by patent professionals has been handed over to less expensive administration colleagues in order to allow professionals to focus on their core tasks and increase process efficiency. The number of patent information professionals has also increased (2020: 3 percent, 2022: 5 percent). The reason for that is mainly to internalize resources for the sake of reliability, quality and confidentiality (Figure 29, page 33).

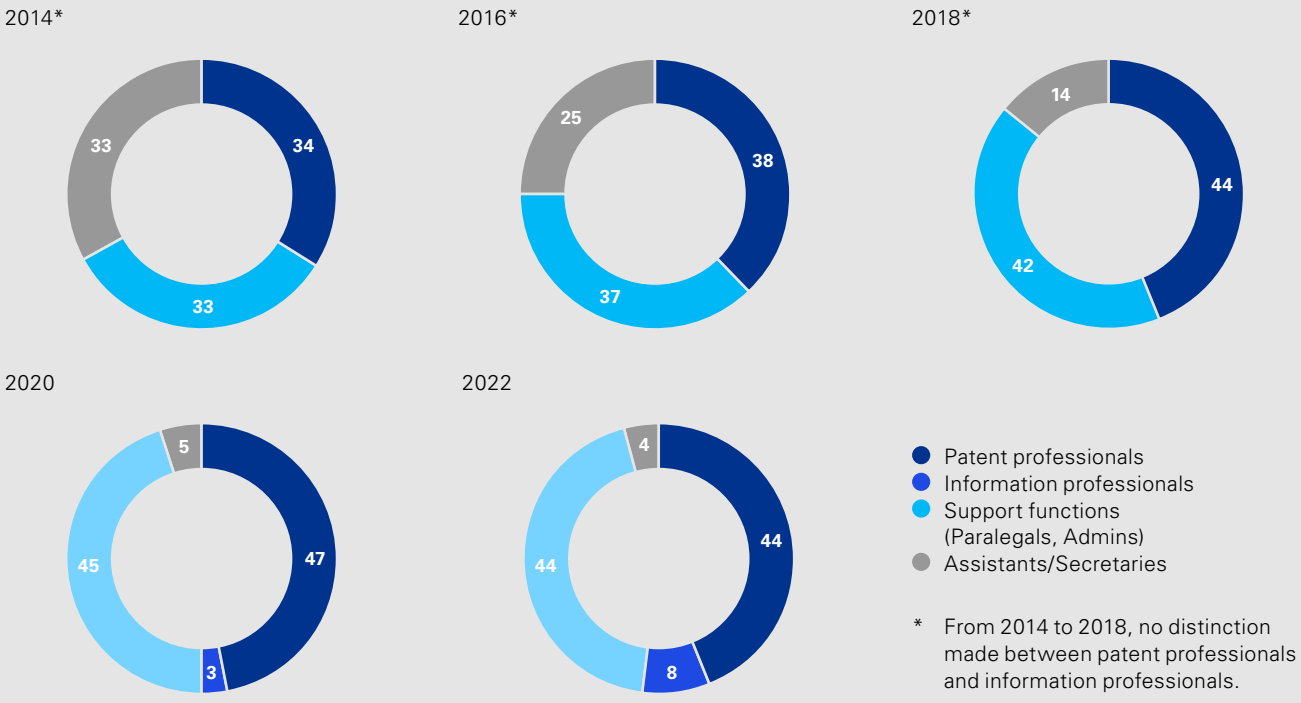
Digitalization and the use of artificial intelligence are expected to further reduce the number of tasks for which specialist knowledge is not required. Accordingly, we were able to observe a strong increase in information professionals within the trademark peer group, accompanied by a slight decrease in trademark professionals (Figure 30, page 33).

Figure 29:
Long-term patent peer group: Patent professionals, support functions



Source: KPMG Law, 2023; figures in percent

Figure 30:
Long-term trademark peer group: Trademark professionals, information professionals



Source: KPMG Law, 2023; figures in percent

2.8 Ratio of the IP department to total company employees

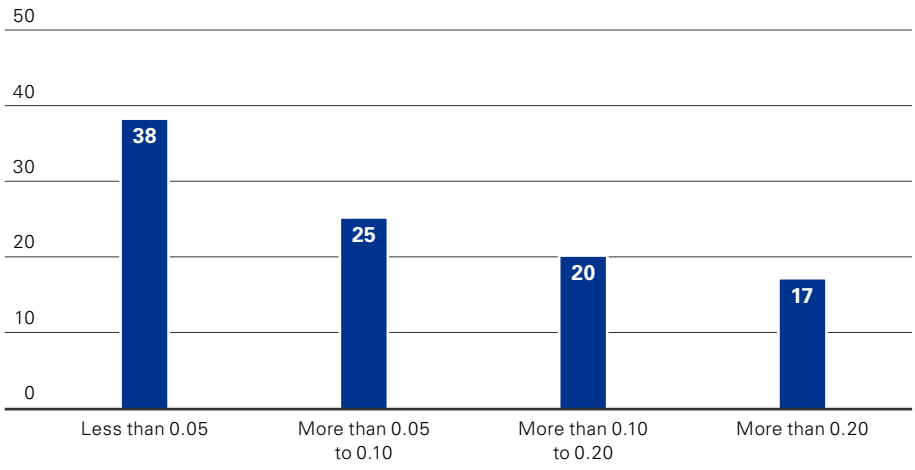
There are several ways to benchmark the ratio of the entire IP department to the total size of the company. If the focus is not on additional cost or performance figures, the most dominant KPI is the size of the IP department compared to the company's total workforce.

This report focuses on this KPI first, to provide an approximate overview before breaking down the IP department into patent and trademark departments.

63 percent of all respondents report that the IP department is below the 0.10 percent mark compared to the company's total workforce (Figure 31). The average for this KPI is 0.13 percent, the median 0.05 percent. This value was lower for German participants (average: 0.1 percent, median 0.05 percent) than for other countries (average: 0.2 percent, median 0.07 percent).

This overall situation varies across the industry sectors. The trend for the automotive manufacturers and suppliers, aerospace and defense, and retail and consumer products industries persists: They appear to have fewer IP staff than average, while participants from the chemical manufacturing and processing and electrical engineering and electronics assembly industries exceed the overall assessment.

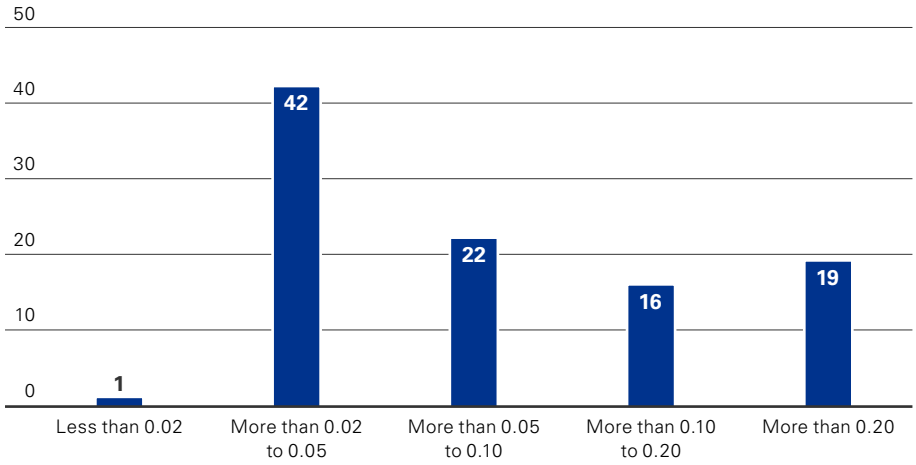
Figure 31:
FTE IP to total company employees



Source: KPMG Law, 2023; figures in percent

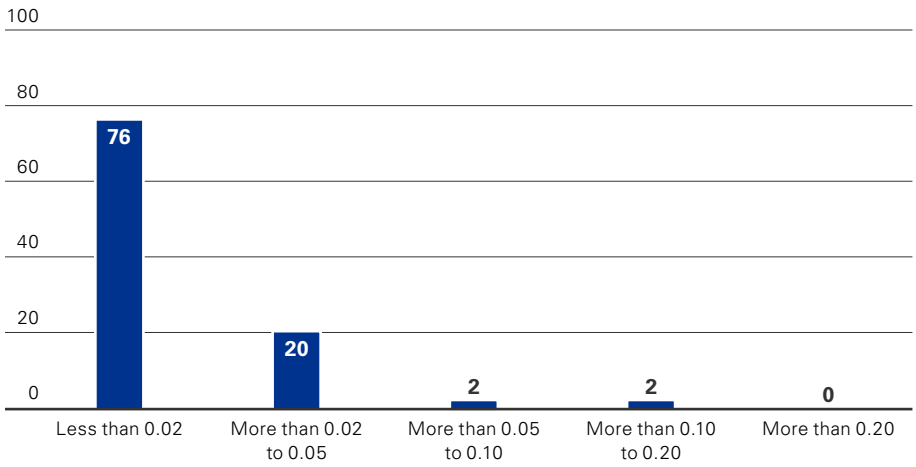
When breaking down the IP department into patent and trademark departments, the ratio of each department to the total number of company employees shows a clear difference in the setup of the departments: while the patent department mostly ranks between 0.02 percent and 0.05 percent (Figure 32; average: 0.12 percent, median 0.05 percent), 76 percent of the trademark departments account for less than 0.02 percent of the total company workforce (average: 0.015 percent, median 0.008 percent) (Figure 33).

Figure 32:
FTE IP patents to total company employees



Source: KPMG Law, 2023; figures in percent

Figure 33:
FTE trademarks to total company employees



Source: KPMG Law, 2023; figures in percent

2.9 Ratio of the patent department to R&D

The R&D department has greater influence on the organizational and operational structure of the patent department than any other internal client. The ratio of the number of R&D employees conducting research that results in invention disclosures to the FTE of a patent department is therefore one of the most important KPIs for determining a transparent personnel benchmark, without taking other criteria into account, such as the number of inventions or internal costs.

Participants were asked to provide the number of R&D and patent employees in order to gain an accurate overview of the current status quo and any developments since the last report on this particular KPI in Europe.

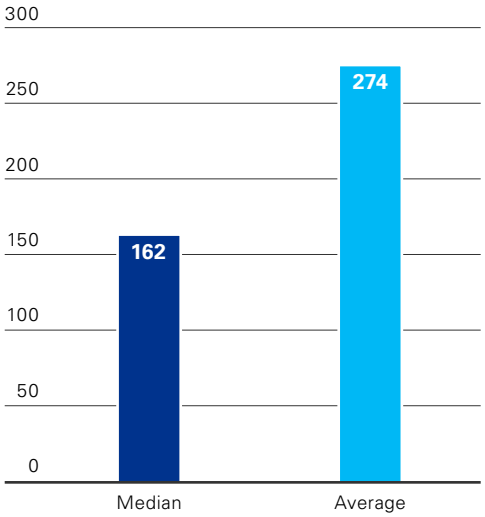
On average, one internal patent professional serves a workforce of 274 R&D employees, with a median of 162 R&D employees (Figure 34), whereas one internal patent employee (professionals, administrative staff and assistants) serves 148 R&D employees, with a median of 101 R&D employees (Figure 35). Compared to the last report, both KPIs have decreased slightly.

Considering the different industry sectors of participants, this KPI appears to be dominated by the apparent complexity of the patent portfolio. Regardless of the country of origin, participants with a focus on one industry sector, e.g. the automotive manufacturers and suppliers industry, increase the ratio of R&D employees to FTE patent professionals; companies operating in numerous industry sectors or which have more complex portfolios, e.g. in the chemical manufacturing and processing industry, decrease this ratio.

What effect this FTE ratio has on the efficiency within the IP department will be examined in section 4.4 – R&D costs per invention disclosure and first filing (page 81).

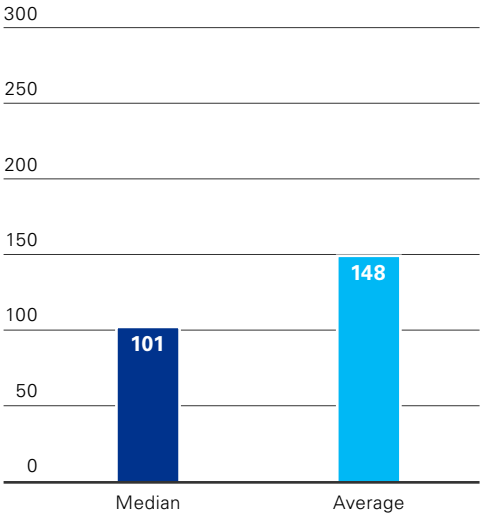
The long-term analysis of the patent peer group indicates a clear decline in the relation R&D FTE to patent professional (2020: 331; 2022: 343) as well as the relation of R&D FTE to total FTE patents, which has declined by 9 percent (2020: 197; 2022: 179) (Figure 36, page 37).

Figure 34:
Number of employees R&D per patent professional FTE



Source: KPMG Law, 2023; figures not adjusted for outsourcing ratio

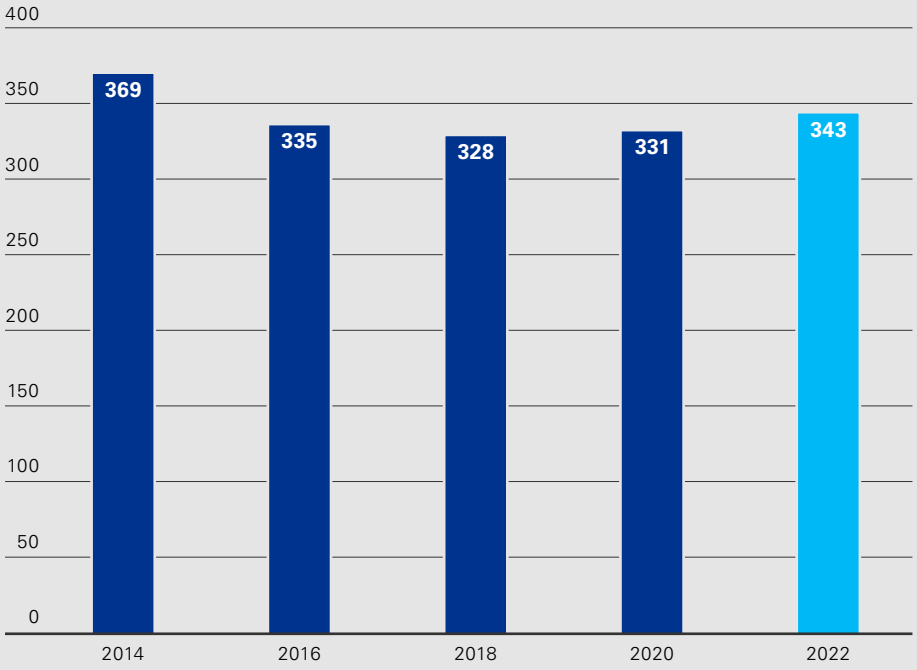
Figure 35:
Number of employees per total FTE patents



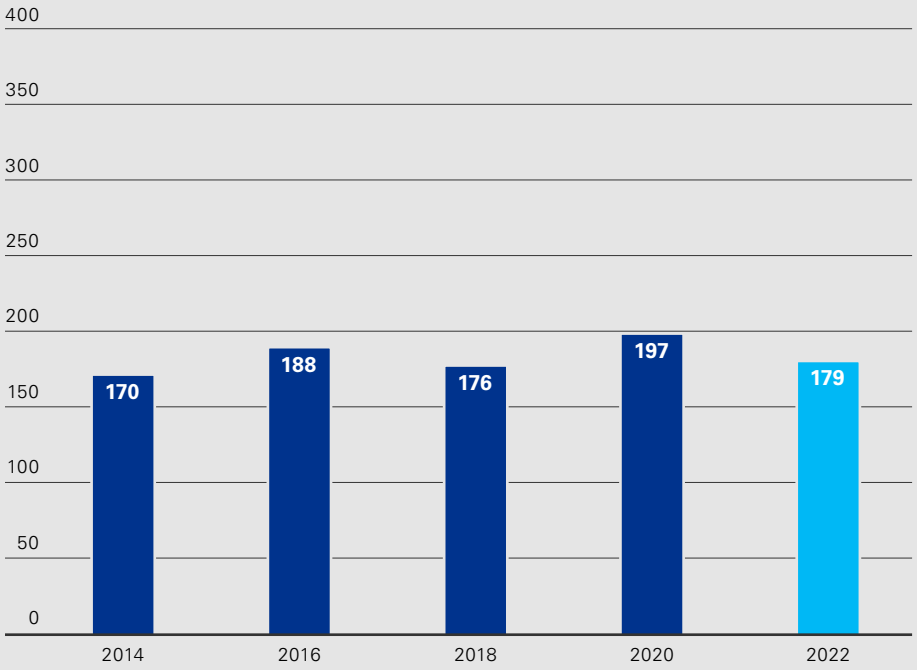
Source: KPMG Law, 2023; figures not adjusted for outsourcing ratio

Figure 36:
Long-term patent peer group: Ratio patent professionals to R&D FTE

Number of R&D FTE per patent professional FTE



Number of R&D FTE per total FTE patents



Source: KPMG Law, 2023

2.10 Ratio of the trademark department to marketing

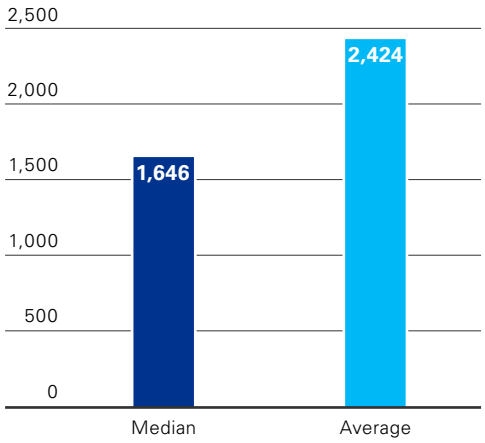
Just as the R&D department has a great influence on the organizational and operational setup of the patent department as a key client, the trademark department is strongly associated with a company's marketing department. The ratio of the number of marketing staff responsible for inventing or renaming trademarks, to the total number of FTE in the trademark department is therefore one of the most important KPIs needed to establish an accurate workforce benchmark, without taking into account the amount of activities, such as the number of new trademarks or internal costs.

Participants were asked about the size of their marketing and trademark staff in order to gain an accurate overview of the current status quo for this particular KPI in Europe.

On average, one internal trademark professional serves a workforce of 2,424 marketing employees, with a median of 1,646 marketing employees (Figure 37, page 39), while one internal trademark employee (professionals, administrative staff, information professionals and assistants) serves 1,845 marketing employees, with a median of 833 marketing employees (Figure 38, page 39).

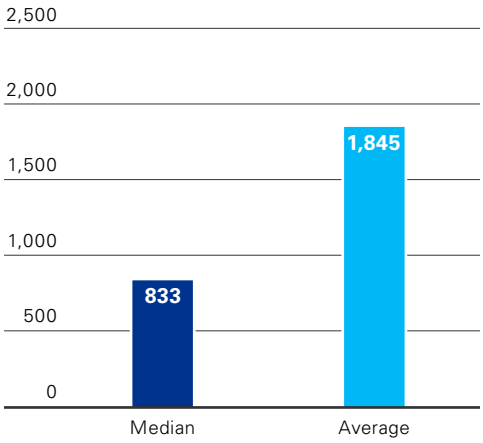
The number of marketing staff in companies includes all staff involved in the entire marketing supply chain, from layout and advertising to sales.

Figure 37:
Number of marketing employees per trademark professional FTE



Source: KPMG Law, 2023; figures not adjusted for outsourcing ratio

Figure 38:
Number of marketing employees per total FTE trademarks



Source: KPMG Law, 2023; figures not adjusted for outsourcing ratio

2.11 Trends in IP department resources

In addition to the overall allocation of staff in the IP department, participants were also asked to anticipate resource trends for 2023.

For the patent department, 52 percent of participants stated that they expect an increase in professional staff, whereas the trend concerning information professionals, administrative staff and assistants is expected to remain mostly neutral (Figure 39).

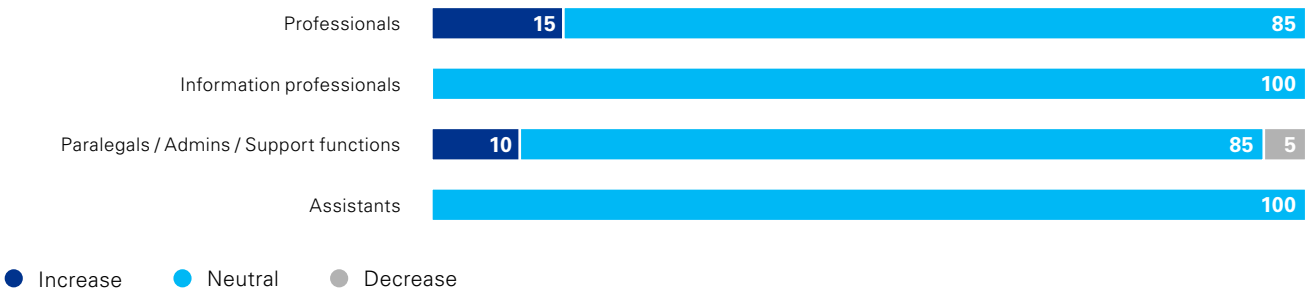
Figure 39:
Trends for the patent department

Source: KPMG Law, 2023; figures in percent

Figure 40:
Trends for the trademark department

Source: KPMG Law, 2023; figures in percent

Figure 41:
Trends for the design department



Source: KPMG Law, 2023; figures in percent

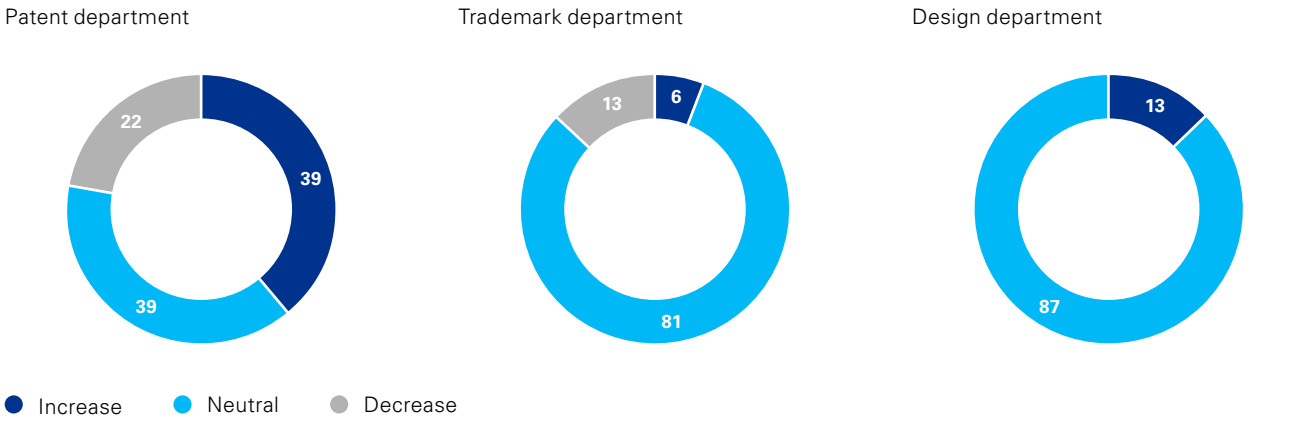
The results reveal an interesting divergence in terms of portfolio sizes: Medium-sized and large IP departments (according to their FTE numbers) expect an increase in professionals, while small IP departments anticipate no change in their staffing levels, which will clearly widen the already existing gap.

It can be assumed that IP departments with a large number of employees tend to increase their workforce in order to support their company's expansion and research activities. Another reason may be to increase the insourcing ratio (Figure 100, page 87, and sections 3.6 – Outsourcing practices of the patent department, page 56, and 3.11 – Outsourcing practices of the trademark department, page 65).

In contrast to the expected growth of the number of professionals in the patent departments, the trademark and the design departments generally do not expect a change in their staff headcount, but perhaps a slight increase in professionals and paralegals/administrative staff (Figures 40 and 41, page 40).

Figure 42 shows a general overview for the development of the resources in the IP department.

Figure 42:
Trends for resources in the IP department (overall)



Source: KPMG Law, 2023; figures in percent

3 IP department activities

3.1 Cycle time for patent completion

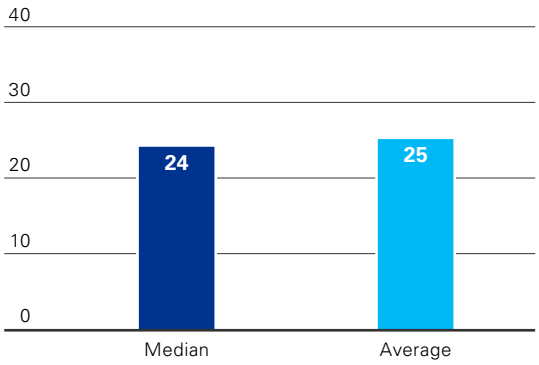
For this year's report, participants were asked to name the number of active inventors, meaning those who were involved in an invention in 2021, in relation to the absolute number of inventors.

The average of this ratio shows that overall only 25 inventors out of 100 inventors were involved in invention disclosures in 2021 (Figure 43).

In order to have a better understanding of the patent completion process, we have split the process into two steps: firstly, the completion of the invention disclosure to patent application, then the patent application to patent completion. On average it takes 125 days (median: 120 days) to obtain a patent application from a signed invention disclosure (Figure 44, page 45). The second step lasts for 1,379 days on average (median: 1,408 days) (Figure 45, page 45).

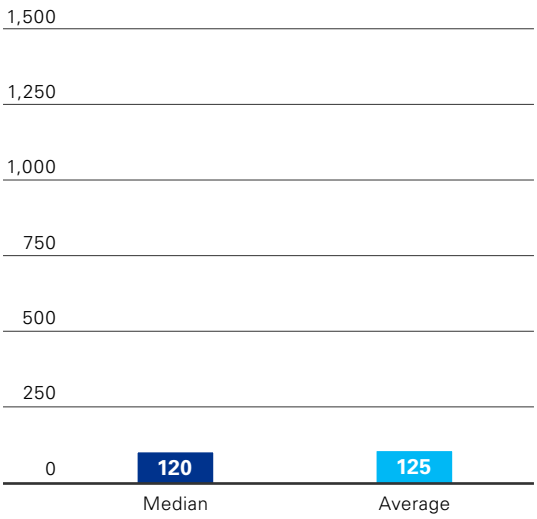
The process of a patent completion lasts in total 1,179 days (median: 1,330), meaning that the share of the first step contributes on average 13 percent to the entire process duration (Figures 46 and 47, page 45).

Figure 43:
Ratio of active inventors to absolute number of inventors



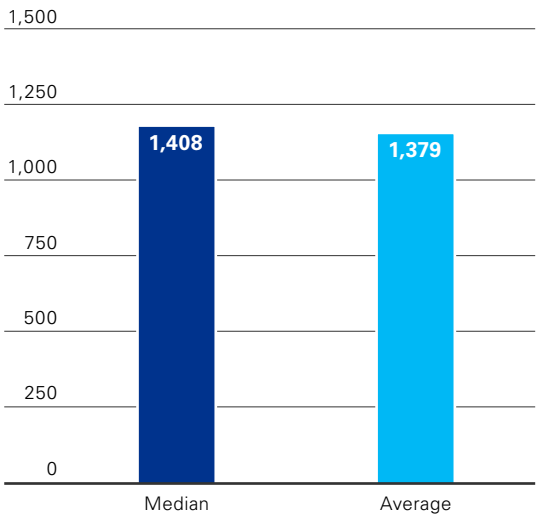
Source: KPMG Law, 2023; figures in percent

Figure 44:
Completed signed invention disclosure to patent filing



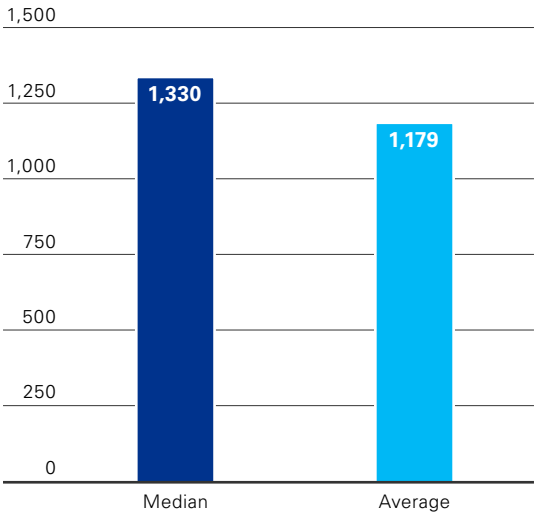
Source: KPMG Law, 2023; figures in days

Figure 45:
Patent filing to patent grant



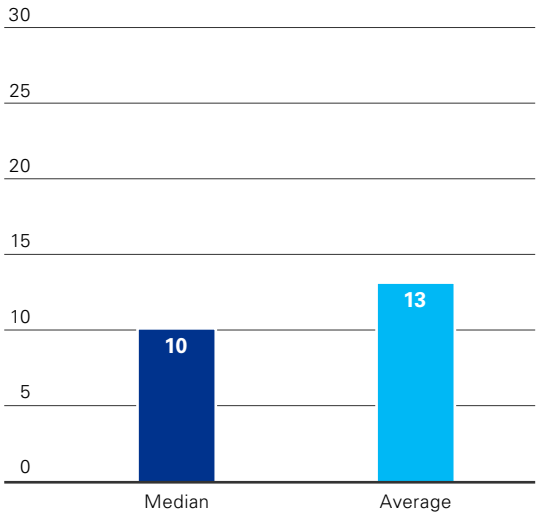
Source: KPMG Law, 2023; figures in days

Figure 46:
Average time for patent activities



Source: KPMG Law, 2023; figures in days

Figure 47:
Invention disclosure to first filing within the patent application process



Source: KPMG Law, 2023; figures in percent

3.2 Patent application strategy

To learn more about the allocation of submissions, participants were asked to indicate the channel of submission for each of their first and subsequent applications, i.e., national, Patent Cooperation Treaty (PCT) or European Patent Office (EPO).

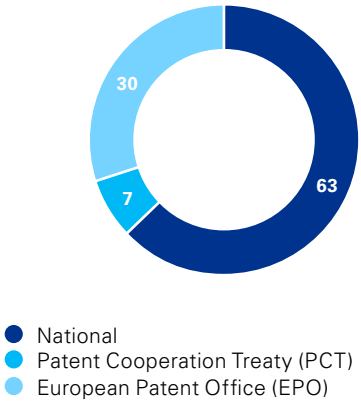
63 percent of all first filings were submitted via the respective national patent offices, 7 percent via PCT and 30 percent via EPO, which gives a very clear idea about the application strategies of the participating companies (Figure 48).

For a deeper understanding of the filing strategy, or in order to assess the efficiency of the research process, it is necessary to evaluate the number of first filings in relation to invention disclosures.

On average, 71 percent of the invention disclosures of all participants are being filed (median: 69 percent) (Figure 49). The industries, however, clearly differ in their results: electrical engineering and electronics assembly has an average ratio (average: 71 percent, median: 66 percent) while chemical manufacturing and processing has a higher ratio (average: 78 percent, median: 75 percent). The reasons for this may be found in the work, the time horizon of research and the possible coordination time – the longer the life cycle of a product, the more precise the coordination and planning process.

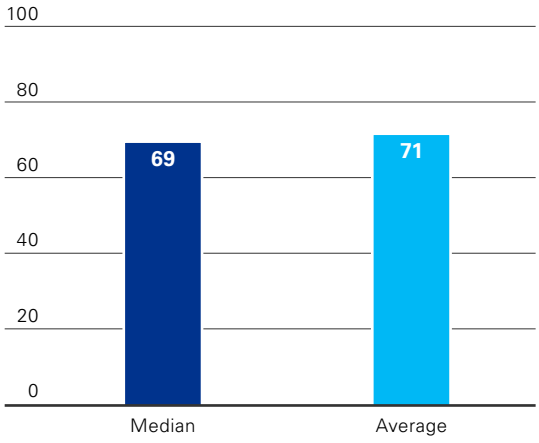
Regarding the filing of subsequent applications, the results are similar across countries. The majority of participants file subsequent applications via PCT (70 percent), followed by national patent offices (21 percent) and EPO (9 percent). The overall results have changed significantly compared to the 2020 results (Figure 50). Two years ago, the share of subsequent applications via PCT was 46 percent, while national patent offices still accounted for 40 percent.

Figure 48:
Distribution of first filings in 2022



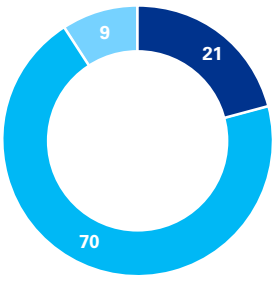
Source: KPMG Law, 2023; figures in percent

Figure 49:
First filing per invention disclosure



Source: KPMG Law, 2023; figures in percent

Figure 50:
Distribution of subsequent filings in 2022



Source: KPMG Law, 2023; figures in percent

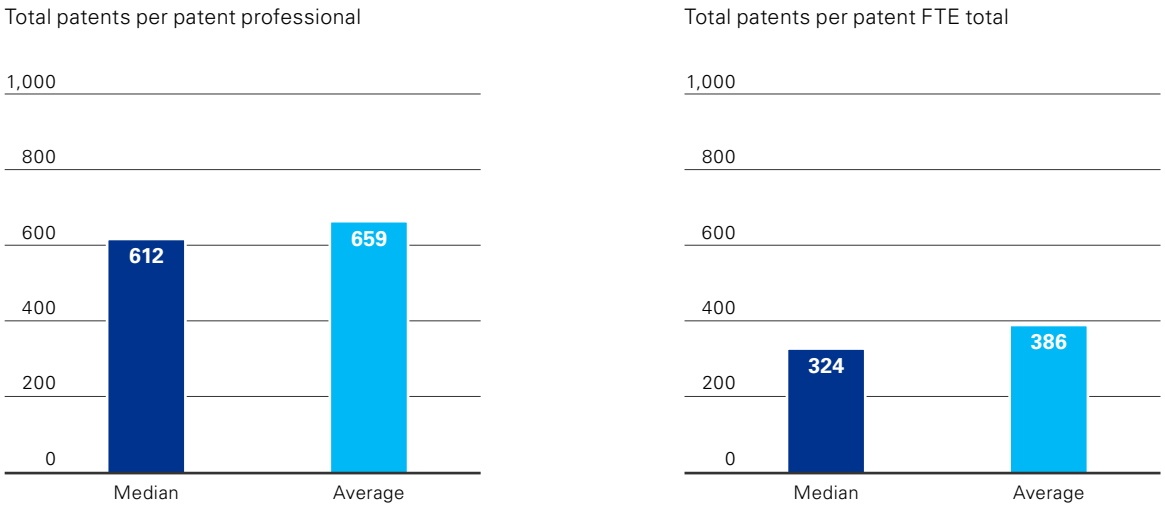
3.3 Number of patents per patent FTE

One aim of the IP report is to measure performance in order to obtain an accurate sense of how IP patent departments are staffed. As a result, the following pages contain an analysis of FTE efficiency, separated into professionals and support staff (including information professionals, paralegals/administrative staff and assistants).

One patent professional manages 659 patents (granted patents, pending patents and design patents; median: 612) and 386 patents (median: 324) are managed by the total patent FTE (Figure 51). However, the industries show considerable differences. At automotive manufacturers and suppliers, 783 patents are managed by one patent professional (median: 747) and 458 patents (median: 433) by one total patent FTE. At infrastructure and construction, on the other hand, one patent professional is on average only responsible for 300 patents (median: 279), with an average of 175 patents per total patent FTE (median: 172).

In comparison, 213 patent families are managed by one patent professional (median: 183), while the total patent FTE managed 128 patent families (median: 108) (Figure 52, page 48). Here, too, there are considerable differences between the industries. In chemical manufacturing and processing, one patent professional took care of just 88 patent families on average (median: 86), while the total patent FTE had 49 patent families on average (median: 41) to look after. In infrastructure and construction, on the other hand, one patent professional managed on average 212 patent families (median: 238), while the total patent FTE in this industry was responsible for 133 patent families on average (median: 149).

Figure 51:
Number of total patents per patent workforce



Source: KPMG Law, 2023; total patents include granted patents, pending property rights and design patents; figures not adjusted for outsourcing ratio

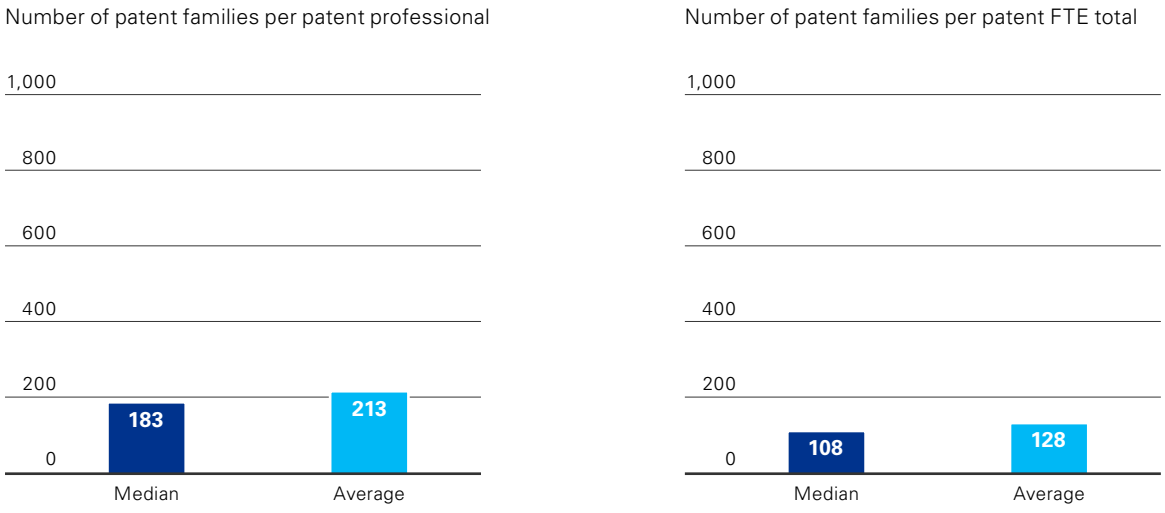
Correlating the number of total patents per patent professional with the number of patent families per patent professional, yields an average of about 3 country applications per participant.

However, focusing solely on existing patents does not allow for a meaningful assessment of the performance of the patent department, as existing patents hardly require any work. Hence, the following pages will focus on more precise performance indicators in order to better analyze FTE efficiency within the patent department.

In our long-term patent group, we have observed a slight increase in efficiency in recent years. In 2020, one patent professional was responsible for an average of 971 patents. Two years later, the figure was only 919, a decrease of 7 percent. The number of patents per patent FTE also fell by the same proportion, from 587 to 543 (Figure 53, page 49).

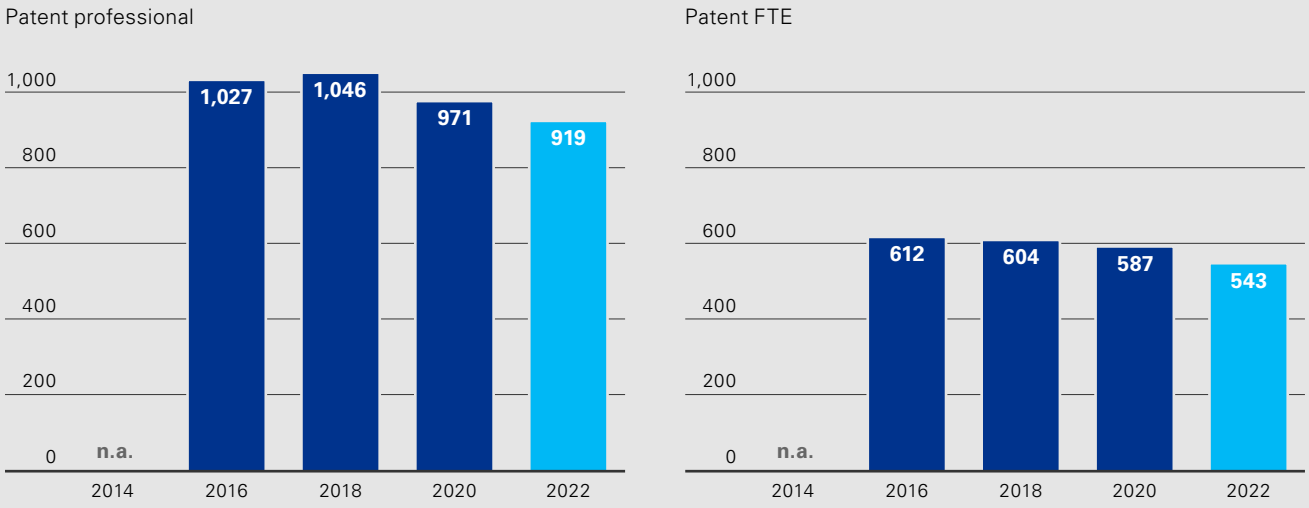
However, a patent professional manages an average of 298 patent families (2020: 284) – a increase of 5 percent compared to 2020. In terms of patent FTE, the number of patent families managed rose from 160 to 178 – an increase of 11 percent (Figure 54, page 49).

Figure 52:
Number of patent families per patent workforce



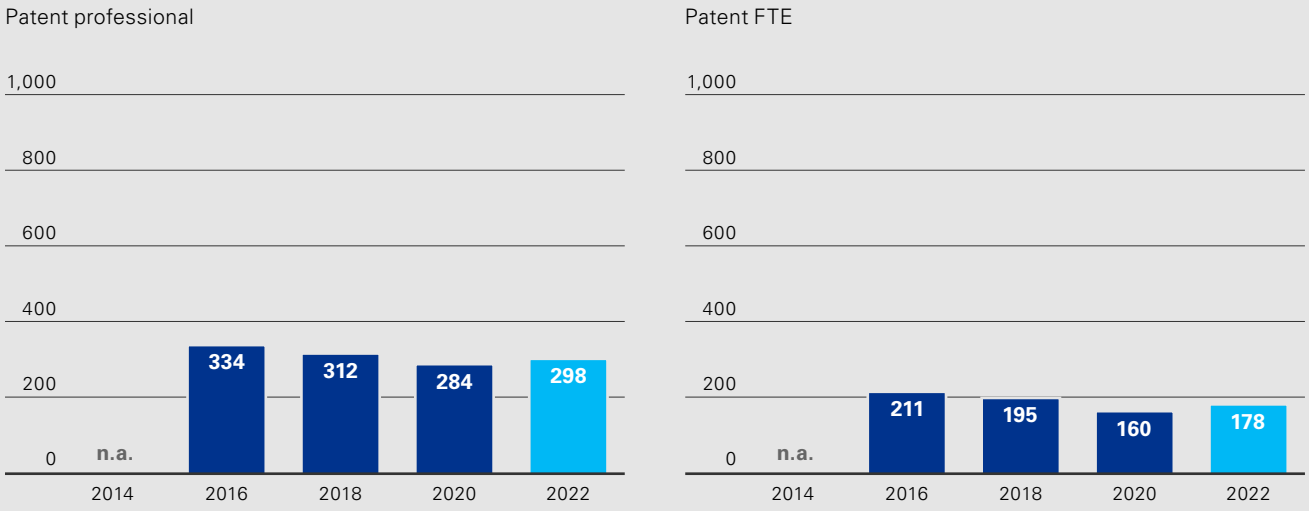
Source: KPMG Law, 2023; total patents include granted patents, pending property rights and design patents; figures not adjusted for outsourcing ratio

Figure 53:
Long-term patent peer group: Number of patents per patent workforce (total)



Source: KPMG Law, 2023

Figure 54:
Long-term patent peer group: Number of patent families per patent workforce (total)



Source: KPMG Law, 2023

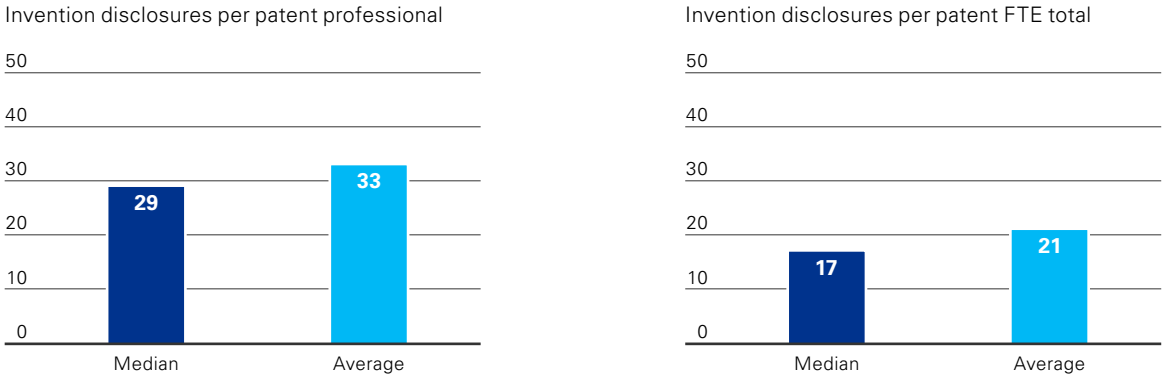
3.4 Number of tasks per patent FTE

In addition to the observations made in the previous sections (2.10 – Ratio of the trademark department to marketing, page 38; 2.11 – Trends in IP department resources, page 40), which focused on the relative size of the IP department, the report will now examine the performance of patent professionals and the total patent FTE in terms of the amount of work processed.

On average, a patent professional processed 33 invention disclosures (median: 29) within one year (Figure 55) and 21 first filings (median: 17) (Figure 56). A patent support function processed 58 subsequent filings (median: 41) (Figure 57, page 51). In comparison, the total patent FTE processed on average 21 invention disclosures (median: 17) within one year (Figure 55), 13 first filings (median: 10) (Figure 56) and 28 subsequent filings (median: 22) (Figure 57, page 51).

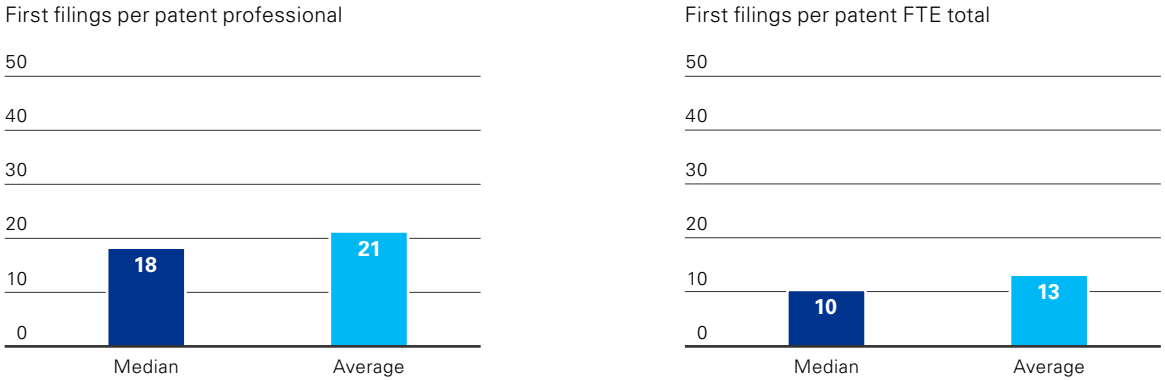
An analysis of industry sectors reveals that patent professionals of automotive manufacturers and suppliers process more first filings (average: 32, median: 27), while their counterparts in electrical engineering and electronics assembly are processing fewer (average: 15, median: 14). Accordingly, the total patent FTE of automotive manufacturers and suppliers also lies above average when it comes to first filings (average: 20, median: 17). The corresponding numbers for first filings per total patent FTE in electrical engineering and electronics assembly are below average (average: 8, median: 9).

Figure 55:
Number of invention disclosures per patent workforce



Source: KPMG Law, 2023; figure not adjusted for outsourcing ratio

Figure 56:
Number of first filings per patent workforce



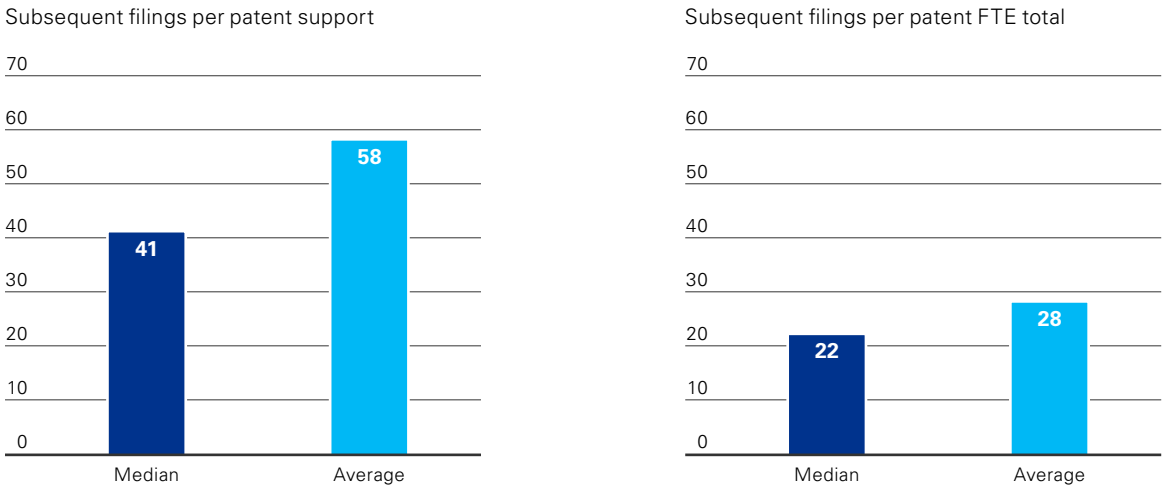
Source: KPMG Law, 2023

Furthermore, a patent specialist processed 253 pending property rights (median: 190) per year, while the total patent FTE processed an average of 157 pending property rights (median: 125) (Figure 58).

Those numbers are, of course, influenced by the outsourcing practices of the participants. The more the department outsources to law firms, the higher the number of tasks per patent professional. Participating departments vary widely in the type and number of tasks they perform, from exclusive in-house processing of the entire "IP value chain" (processing invention disclosures, first filings, subsequent filings, portfolio care, abandonment of property rights, etc.) to the partial outsourcing of dedicated process steps to the outsourcing of the entire process chain for dedicated products.

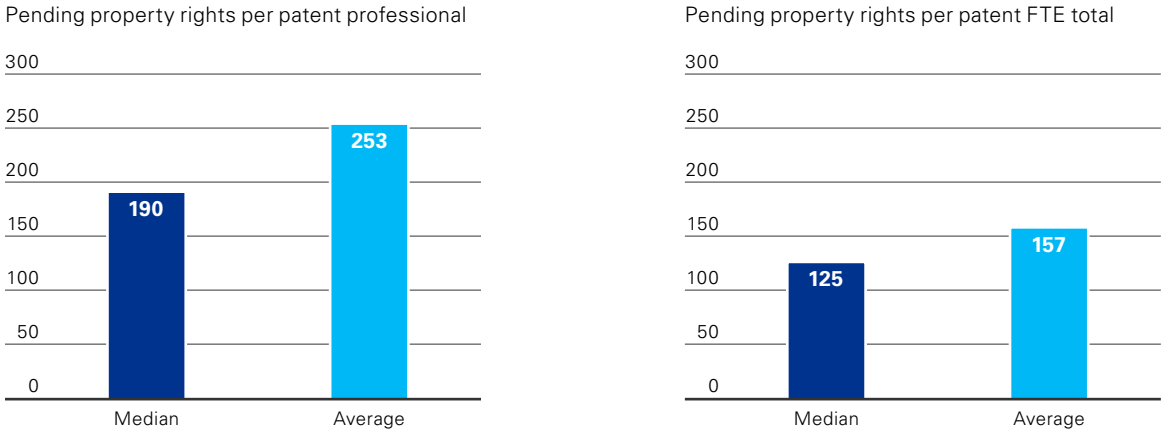
Only when these external work hours are adjusted, is it possible to make reliable comparisons of the actual performance. This provides a more resilient basis for comparing internal work. The figures on the following pages include internal daily work time and outsourcing quotas.

Figure 57:
Number of subsequent filings per patent workforce



Source: KPMG Law, 2023

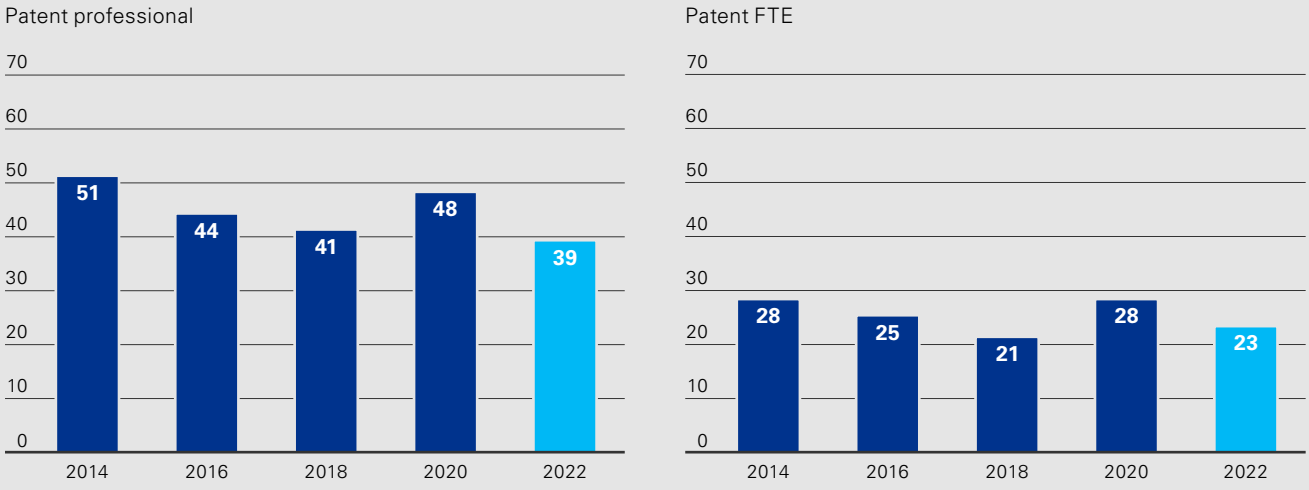
Figure 58:
Number of pending property rights per patent workforce



Source: KPMG Law, 2023; figures not adjusted for outsourcing ratio

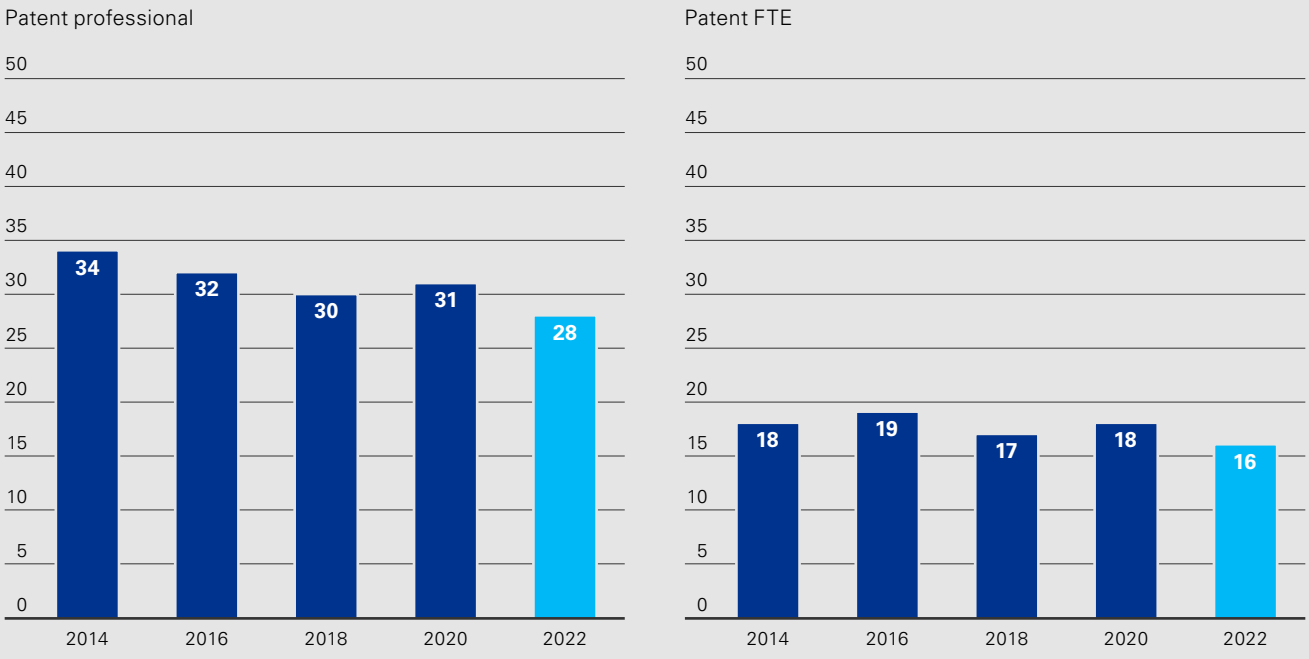
In our long-term patent group, in 2022 a patent professional processed on average 39 invention disclosures within one year – a significant decrease of no less than 19 percent compared with 2020 (Figure 59). While the number of first filings per patent professional fell by 10 percent over the last two years, the number of subsequent filings climbed by 11 percent to 57 (Figure 60; Figure 61, page 53).

Figure 59:
Long-term patent peer group: Number of invention disclosures per patent workforce



Source: KPMG Law, 2023; figure not adjusted for outsourcing ratio

Figure 60:
Long-term patent peer group: Number of first filings per patent workforce

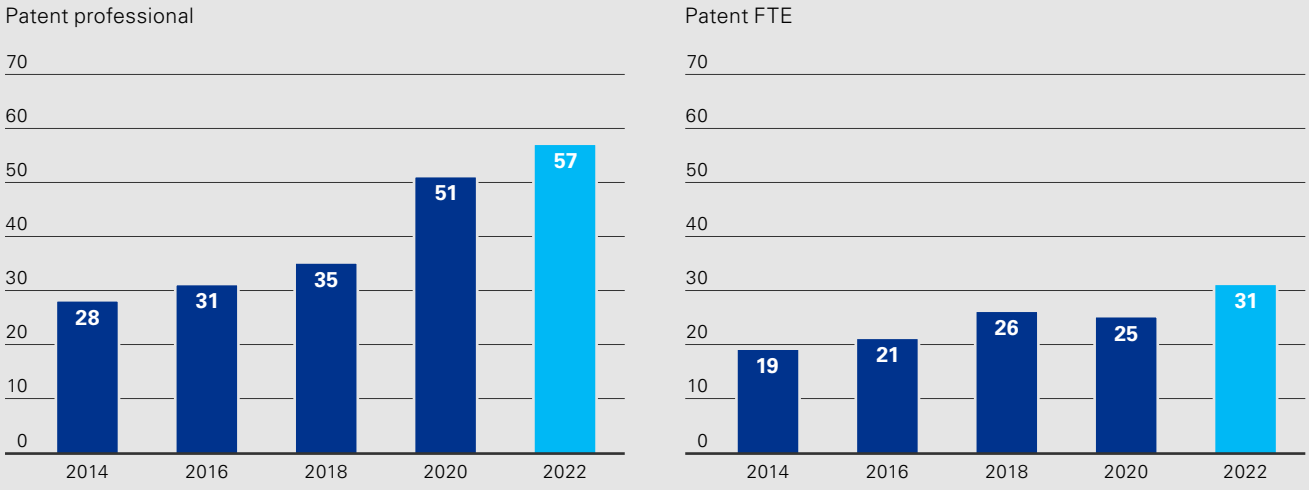


Source: KPMG Law, 2023

Furthermore, in 2022 one patent professional processed 330 pending property rights – 6 percent less as compared with 2020 (Figure 62).

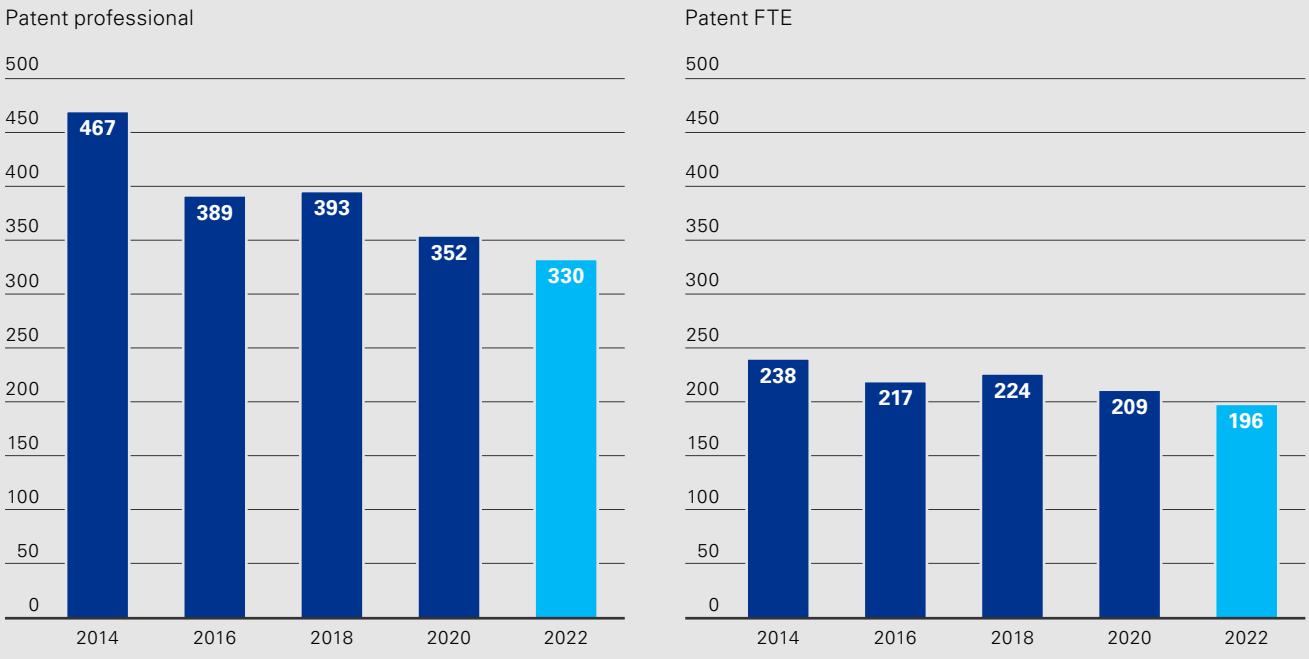
Similar developments in all four categories can also be observed in regard to patent FTE.

Figure 61:
Long-term patent peer group: Number of subsequent filings per patent workforce



Source: KPMG Law, 2023

Figure 62:
Long-term patent peer group: Number of pending property rights per patent workforce



Source: KPMG Law, 2023

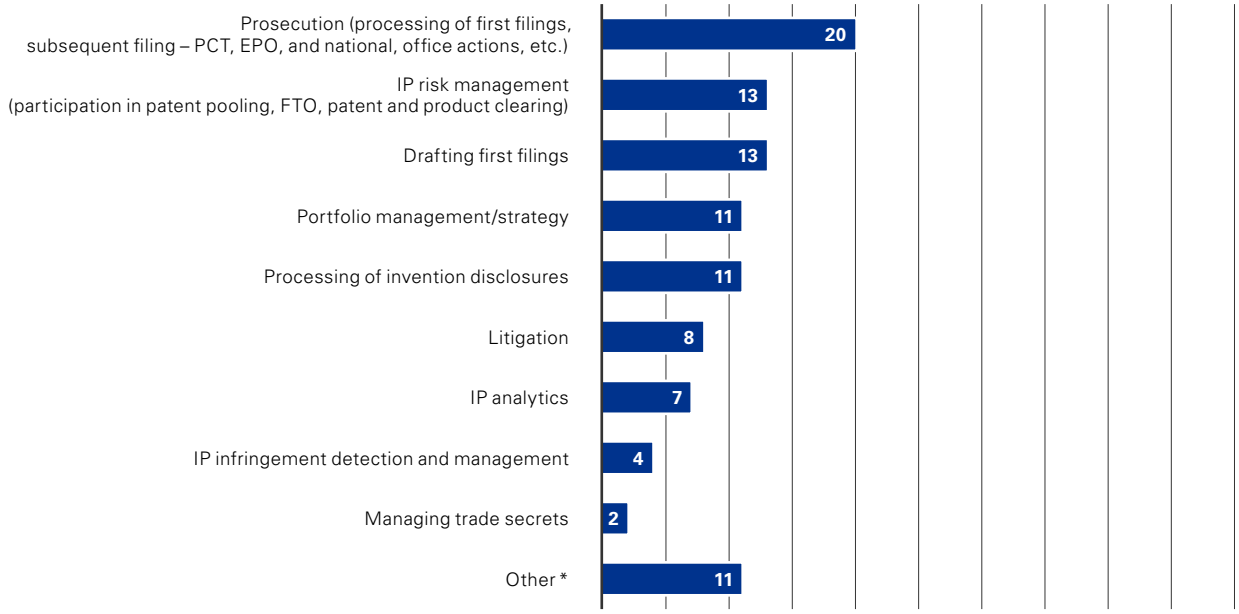
3.5 Allocation of internal work time in the patent department

The participants were asked to allocate a percentage of the internal daily working time for the defined collective patent tasks, divided among professionals and administrative staff.

When the effort required for the tasks is broken down into the daily working time of professionals and administrative staff, a clear distribution of tasks emerges: Professionals invest most of their time in three major tasks, usually prosecution of violations, IP risk management and drafting first filings. The administrative staff, on the other hand, spend their time mostly on prosecution, processing invention disclosures, IP analytics and IP infringement detection and management.

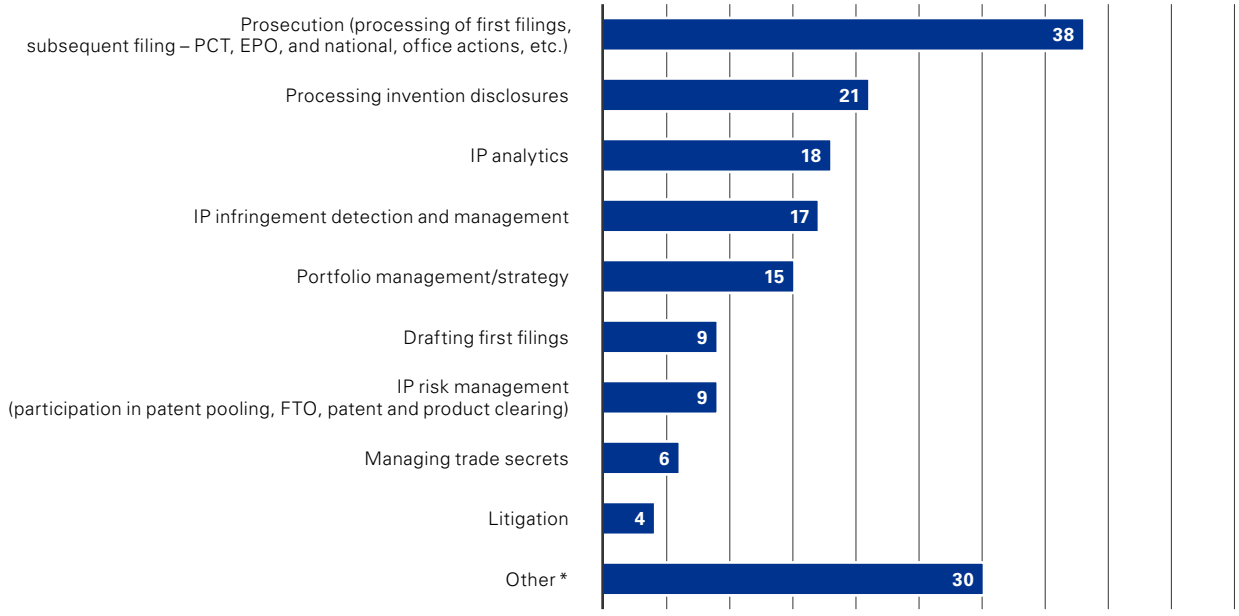
Comparing the tasks performed by professionals and administrative staff and their daily working time (Figures 63 and 64, page 55) clearly reveals that tasks with high value creation are not only mostly handled internally (section 3.6 – Outsourcing practices of the patent department, page 56), but also under the supervision of a professional, while tasks with lower value creation tend to be handled by the administrative staff or are even outsourced.

Figure 63:
Allocation of internal daily work time – professionals



Source: KPMG Law, 2023; figures in percent

Figure 64:
Allocation of internal daily work time – administration



Source: KPMG Law, 2023; figures in percent; multiple answers possible

* "Other" include contract work, training and awareness, inventor compenzation, payments such as fees, outside vendors etc., other business counseling such as M&A, licensing, etc.

3.6 Outsourcing practices of the patent department

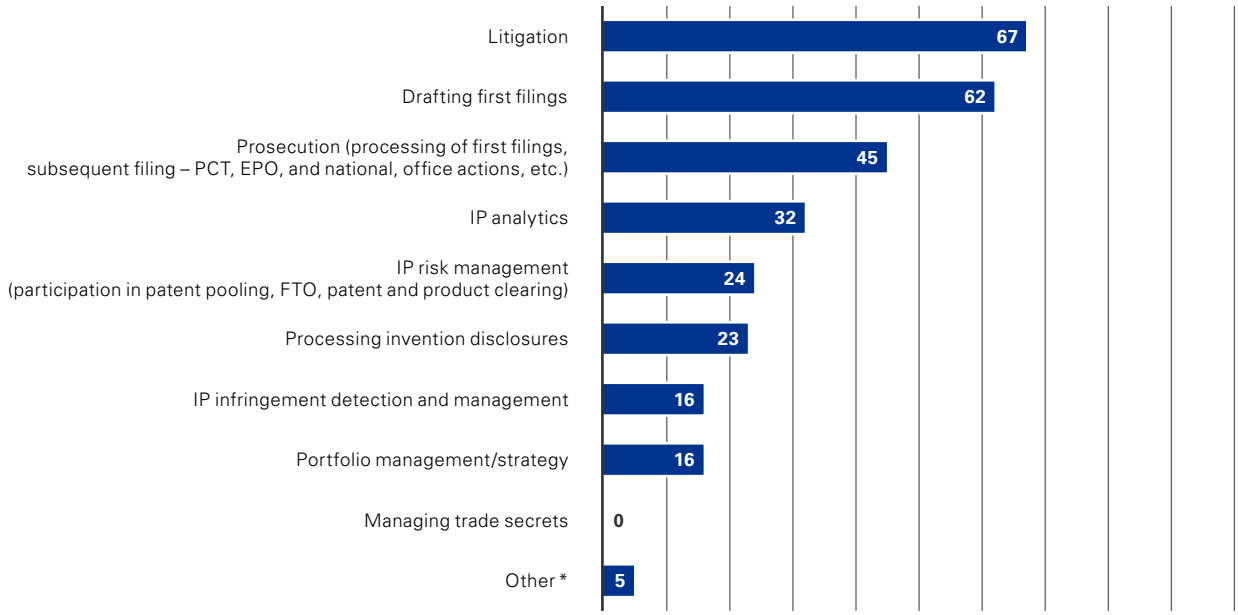
A patent department that executes all incoming tasks without any external support is extremely rare. Given the wide range of daily challenges, it is simply uneconomical to keep all potential expertise available in-house, especially for smaller patent departments. They are more likely to opt for a lighter setup and assign some specific tasks to outside counsel, while keeping most of the tasks with the highest value creation in-house. (4.1 – Cost allocation of the patent department, page 74)

In order to test this hypothesis and obtain an up-to-date view on which tasks are outsourced and which are more likely to be performed in-house, study participants were asked about their external contracting practices, i.e., for which specific tasks they use external support and to what extent.

The questionnaire addressed the same most common patent department tasks as above (section 3.5 – Allocation of internal work time in the patent department, page 54), such as quantifiable activities like "Processing of invention disclosures", "Prosecution" (including processing of first filings, subsequent filing and office actions), but also tasks such as "Portfolio management/strategy", "IP risk management" or "Other".

"Litigation", "Drafting of first filings" and "Prosecution", which includes the processing of first and subsequent filings, have the highest outsourcing rates. In contrast, tasks such as managing trade secrets, portfolio management/strategy and IP infringement detection and management are mainly handled internally with outsourcing rates below 20 percent.

Figure 65:
Outsourcing ratio of patent activities



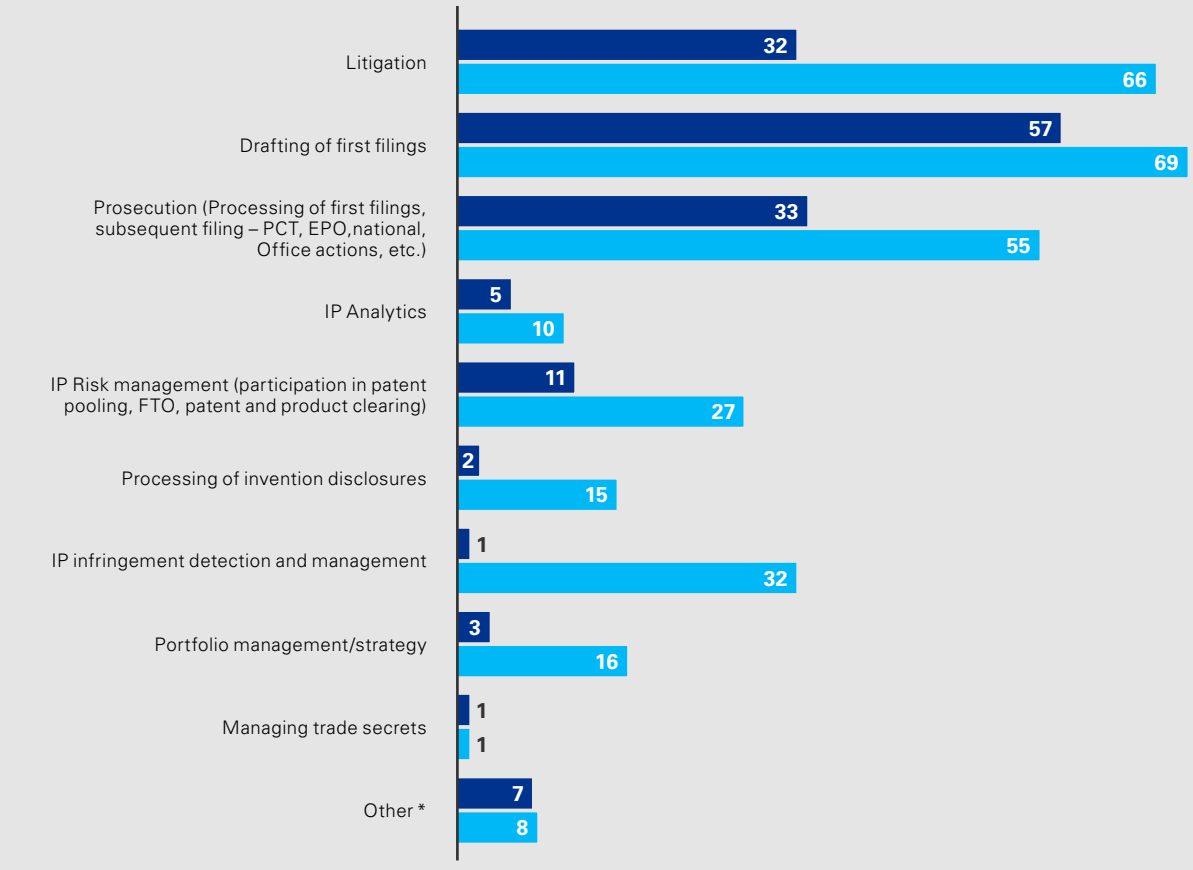
Source: KPMG Law, 2023; figures in percent, multiple answers possible

* "Other" include contract work, training and awareness, inventor compensation, payments such as fees, outside vendors, etc.; other business counseling such as M&A, licensing, etc.

With an outsourcing ratio of 45 percent, prosecution is in fact not a top priority for the internal service provision in all participating countries. That puts the amount of first filings per patent workforce (Figure 65, page 56), and the number of subsequent filings per patent workforce (Figure 57, page 51), into perspective.

In our long-term patent group we not only observe differences compared to all participants, but also significant changes within this group in the last two years. The outsourcing ratio of litigation has more than doubled from 32 to 66 percent. Prosecution also climbed from 33 to 55 percent. Only the drafting of first filings has an even higher outsourcing ratio – it increased from 57 to 69 percent, making it the main task outsourced in the patent department in 2022 (Figure 66).

Figure 66:
Long-term patent peer group: Outsourcing ratio of patent activities



* "Other" include contract work, training and awareness, inventor compensation, payments such as fees, outside vendors, etc.; other business counseling such as M&A, licensing, etc.

Source: KPMG Law, 2023; figures in percent, multiple answers possible

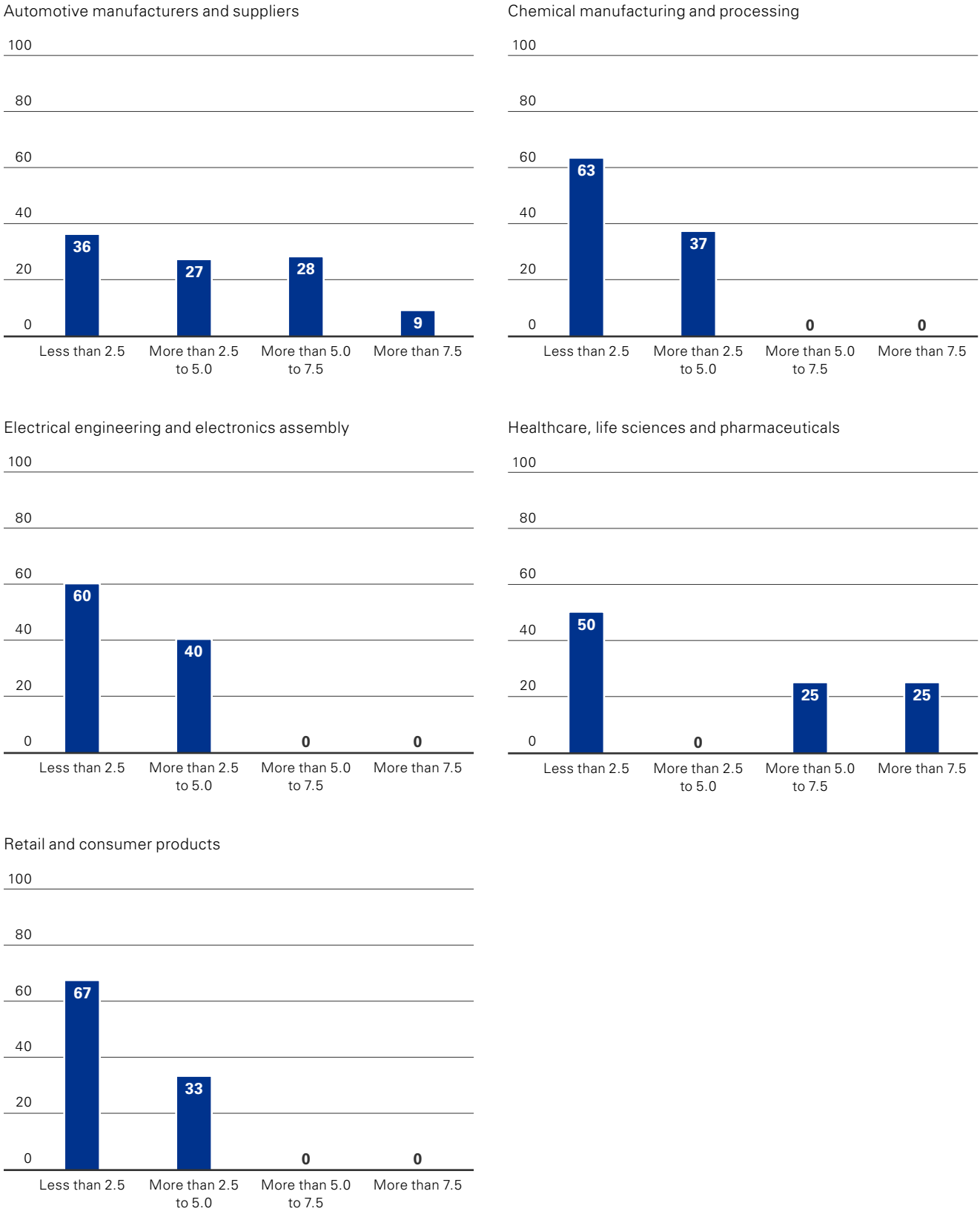
3.7 Theoretical patent portfolio renewal rate

Data on how many first-time filings are submitted per year and their share of the total patent portfolio can help to assess the innovative strength of a company or even of an entire industry sector. The number of first filings submitted nationally, via EPO or via PCT, also depends on the filing strategy of the company. In addition, the actual lifetime of a patent, especially when less than 20 years, can create a certain variance in the numbers as well as in how many patent families are represented in the number of existing patents and first filings. This theoretical renewal rate assesses neither the quality of the patent portfolio nor whether it is advantageous to submit more first filings.

However, in order to develop a sense of the differences between industry sectors and ultimately their innovative capacity, it was estimated how fast each company's patent portfolio theoretically revolves by determining the number of submitted first filings per year. Under the hypothesis that the patent portfolio has a lifetime of 20 years, a theoretical renewal rate of 2.5 percent would imply that it would take the respective participant approximately 40 years to revolve its entire patent portfolio, while a theoretical renewal rate of 10 percent would allow the portfolio to revolve within 10 years.

The results show significant differences in the theoretical renewal rate among industries: Unsurprisingly, the patent portfolios of healthcare and life sciences companies have a large turnover: 25 percent each have a theoretical renewal rate of more than 5 or even more than 7.5 percent. The other half, however, have a rate of less than 2.5 percent. The automotive manufacturers and suppliers industry also has a lot of first filings per year – 27 and 28 percent respectively have theoretical renewal rates of up to 5 or more than 7.5 percent and nearly one out of 10 companies of this industry (9 percent) has a rate of more than 7.5 percent. Other industries such as chemical manufacturing and processing, electrical engineering and electronics assembly as well as retail and consumer products all have theoretical renewal rates of less than 5 percent (Figure 67, page 59).

Figure 67:
Theoretical patent portfolio renewal rate



Source: KPMG Law, 2023; figures in percent

3.8 Trademark registration strategy

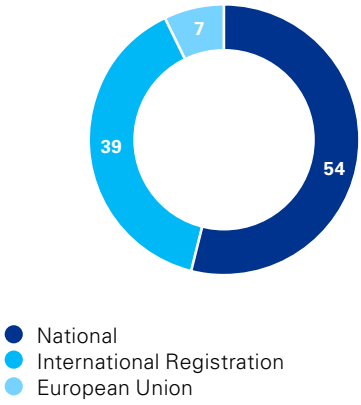
Companies can register trademarks through their local trademark office. Alternatively, they can seek a European Union Trademark (EUTM), which guarantees uniform protection in all member states of the European Union, by filing a single application at the Office for Harmonization in the Internal Market (OHIM) in Alicante (Spain). As a third option, companies can apply for international registration (IR), which must be filed with the World Intellectual Property Organization (WIPO) via the national IP office of the basis registration.

The questionnaire addressed the topic of registration strategy by asking participants to indicate which channels they use for their existing and newly registered trademarks: national, European or international.

Both existing and new trademarks were predominantly registered through the national trademark offices (existing trademarks 54 percent, new trademarks 52 percent), which has some advantages over the EU or IR procedure (Figure 68). Apart from the fact that registering at local offices is faster and cheaper, the likelihood of interference with a competitor's existing trademarks is considered rather low. The IR procedure ranks second for both existing and new trademarks (39 and 33 percent, respectively), presumably because it can be handled much more individually than with the community registration process, which does not allow the geographic scope of protection to be limited to certain member states.

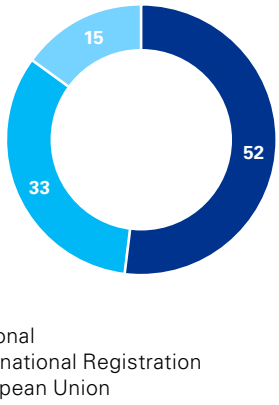
The EUTM was chosen by the companies only as the third popular option (existing trademarks 7 percent, new trademarks 15 percent). (Figure 69)

Figure 68:
Distribution of existing trademarks



Source: KPMG Law, 2023; figures in percent

Figure 69:
Distribution of new trademarks



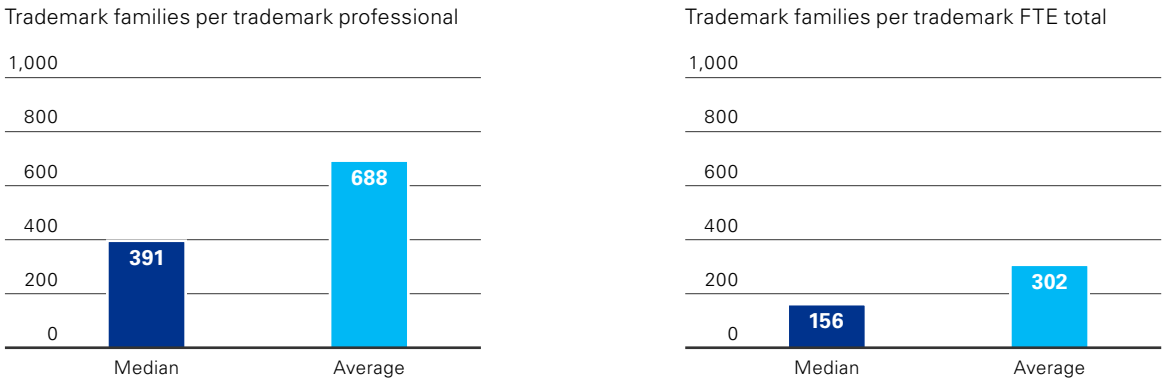
Source: KPMG Law, 2023; figures in percent

3.9 Number of tasks per trademark FTE

In addition to the observations made in section 2.11 – Trends in IP department resources (page 40), where the focus was on the relative size of the trademark department, the report now evaluates the performance of trademark FTE in terms of the amount of work handled. Figures 70 to 72 (pages 61 and 62) display the number of trademark families, existing trademarks and new trademarks processed per trademark professional and per total internal trademark FTE.

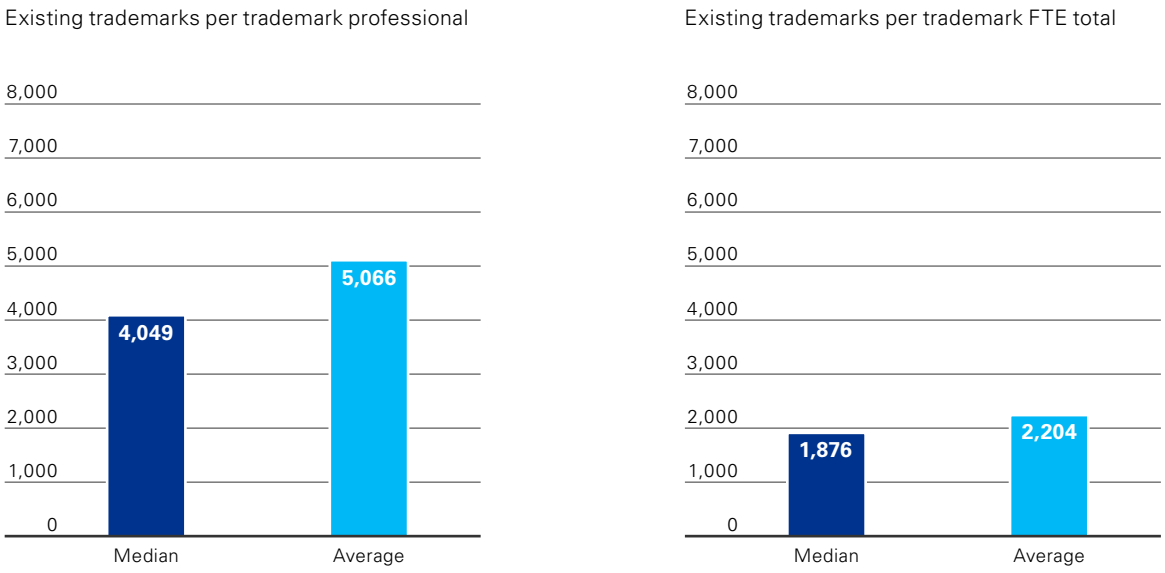
On average, a trademark professional managed 688 trademark families (median: 391) (Figure 70, left), 5,066 existing trademarks (median: 4,049) (Figure 71, left) as well as 170 new trademark registrations (median: 107) in one year (Figure 72, page 62, left). In comparison, total trademark FTE (professionals plus information professionals, paralegals and assistants) handled 302 trademark families (median: 156) (Figure 70, right), an average of 2,204 existing trademarks (median. 1,876) (Figure 71, right) and 69 new trademarks (median: 41) annually (Figure 72, page 62, right).

Figure 70:
Number of trademark families per trademark workforce



Source: KPMG Law, 2023

Figure 71:
Number of existing trademarks per trademark workforce

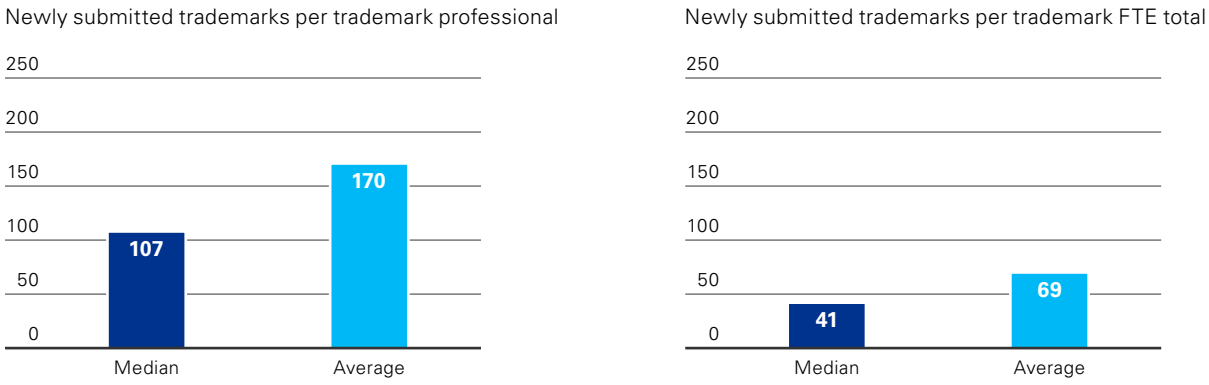


Source: KPMG Law, 2023

The number of trademark families and of new trademarks per trademark professional varies considerably between industries: While healthcare, life sciences and pharmaceuticals have numbers of tasks per FTE in these two categories that are notedly above average, the automotive manufacturers and suppliers are well below average. With regard to the figures for existing trademarks per trademark professional, chemical manufacturing and processing shows above-average values, while electrical engineering and electronics assembly are both more than 50 percent below average.

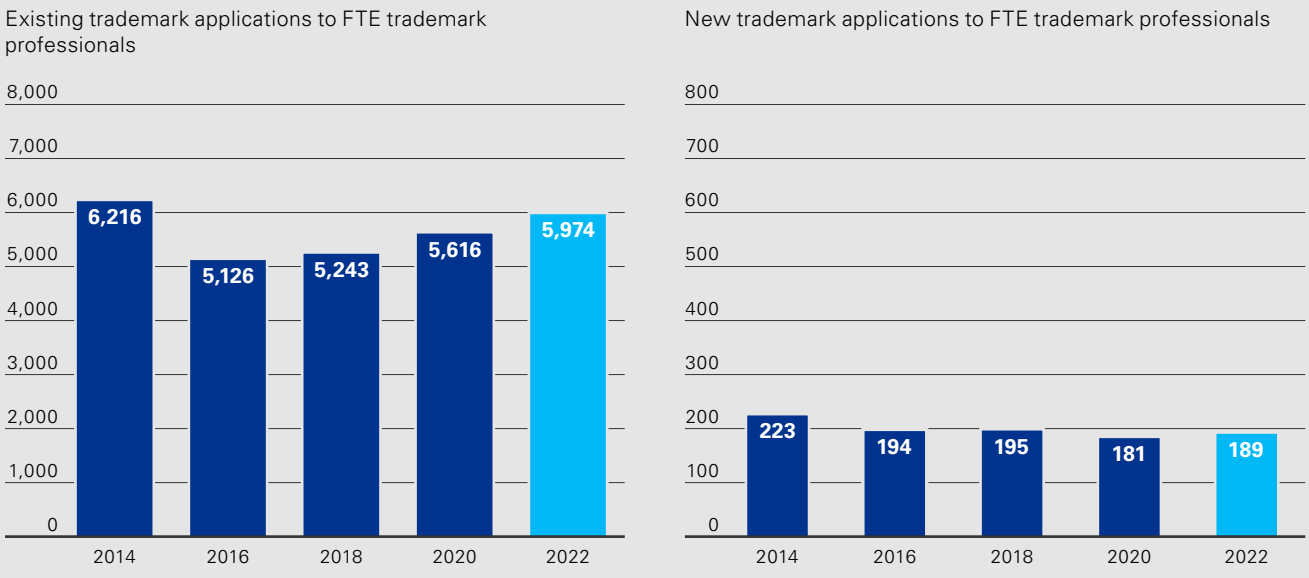
In our long-term trademark comparison group, we observe an increase in the number of existing trademarks to FTE trademark professionals by 6.4 percent, as well as a slight increase of new trademark applications to FTE trademark professionals by 4.4 percent between 2020 and 2022 (Figure 73).

Figure 72:
Number of new trademarks per trademark workforce



Source: KPMG Law, 2023; figures not adjusted for outsourcing ratio

Figure 73:
Long-term trademark peer group: Number of trademarks to FTE trademark professionals



Source: KPMG Law, 2023

3.10 Allocation of internal work time in the trademark department

Participants were asked to allocate a percentage of the internal daily work time spent on the defined nine common tasks in the trademark department, distinguishing between professionals and administrative staff.

The results for the entire trademark department (both professionals and administrative staff) show that clearance (advising marketing for trademark projects, creation of trademark names, etc.), prosecution (trademark applications, etc.), portfolio maintenance and conflict management require the most internal daily work time. While clearance requires the most internal daily work time for professionals, filing applications for trademarks is more time-consuming for administrative staff. Tasks like domain disputes and copyright-related work require very little time per day.

If the portfolio sizes of the participants are taken into account, it can be stated that the smaller trademark departments invest more time in conflict management, disputes and portfolio maintenance than the larger trademark departments – but spend less time on trademark applications, advising management on strategic and other issues.

When evaluating the daily work time spent by professionals and administrative staff on the various tasks, a clear distribution pattern is evident: Professionals invest most of their time on the three major tasks of counseling internal customers and advising marketing on trademark projects (clearance), conflict management and prosecution (Figure 74). However, administrative staff spend most of their time on trademark applications and portfolio maintenance (Figure 75, page 64).

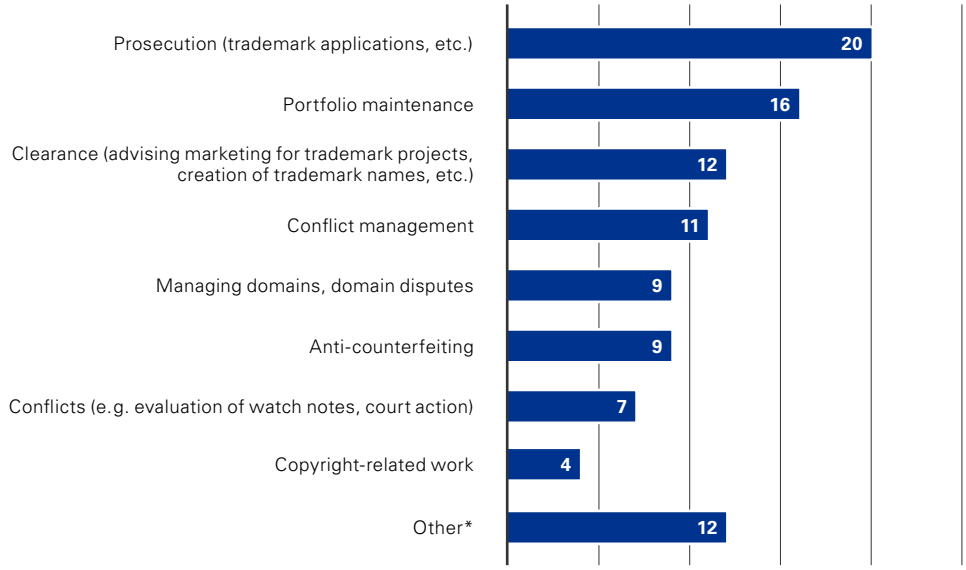
Figure 74:
Allocation of internal daily work time – professionals

* Assignment of trademarks, etc.

Source: KPMG Law, 2023; figures in percent

In addition, a closer look at the tasks and daily work time of both professionals and administrative staff clearly shows that tasks with high value creation are not only mostly handled internally (section 3.11 – Outsourcing practices of the trademark department, page 65), but also under the supervision of a professional, while tasks with lower value creation are handled by the administrative staff or even outsourced.

Figure 75:
Allocation of internal daily work time – administration



* Assignment of trademarks, etc.

Source: KPMG Law, 2023; figures in percent

3.11 Outsourcing practices of the trademark department

In addition to the patent departments, participants were also asked about outsourcing practices in their trademark departments. This made it possible to determine which tasks tend to be performed in-house. The questionnaire addressed the nine most common trademark department tasks, including quantifiable tasks like "Clearance (advising marketing on trademark projects)" and "Prosecution (trademark applications)", but also "Portfolio maintenance" and "Conflict management".

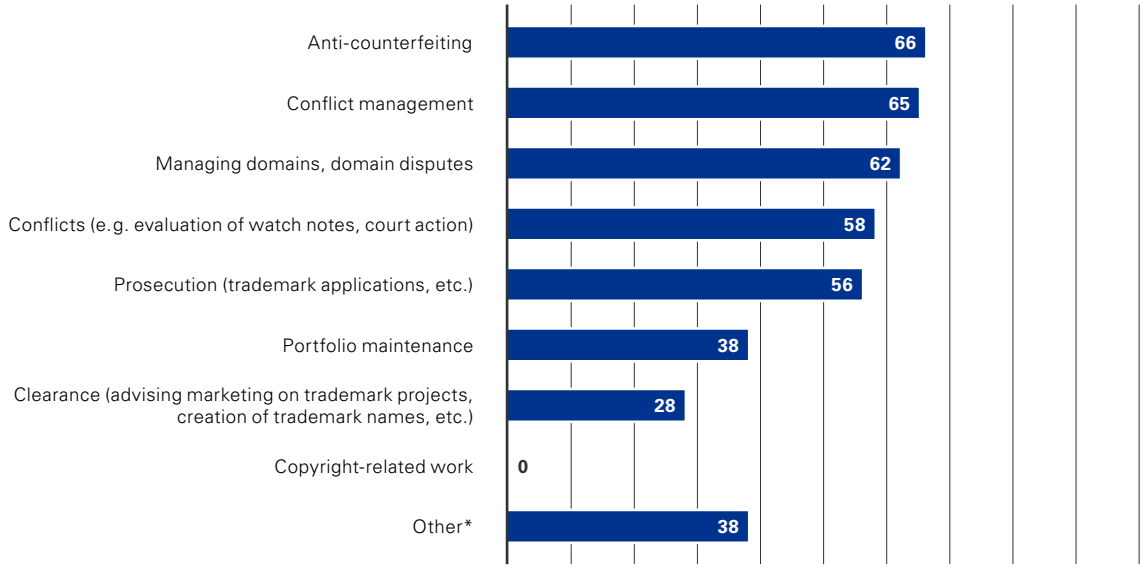
Tasks related to conflict management, conflicts, managing domains, trademark applications, as well as anti-counterfeiting have the highest outsourcing rates. Tasks related to clearance or copyright-related work are mostly handled internally with a very low outsourcing rate (Figure 76).

Taking into account the size of the portfolio, smaller IP departments have a higher outsourcing rate for conflict management than larger IP departments.

The individual countries, however, show no relevant differences in their outsourcing ratios.

Filing trademark applications is not a top priority for the provision of internal services in any countries surveyed, which puts the numbers of new trademarks per professional and per total trademark FTE from Figure 72 (page 62) into perspective.

Figure 76:
Outsourcing ratio of trademark activities



* Assignment of trademarks, etc.

Source: KPMG Law, 2023; figures in percent; multiple answers possible

3.12 Theoretical trademark portfolio renewal rate

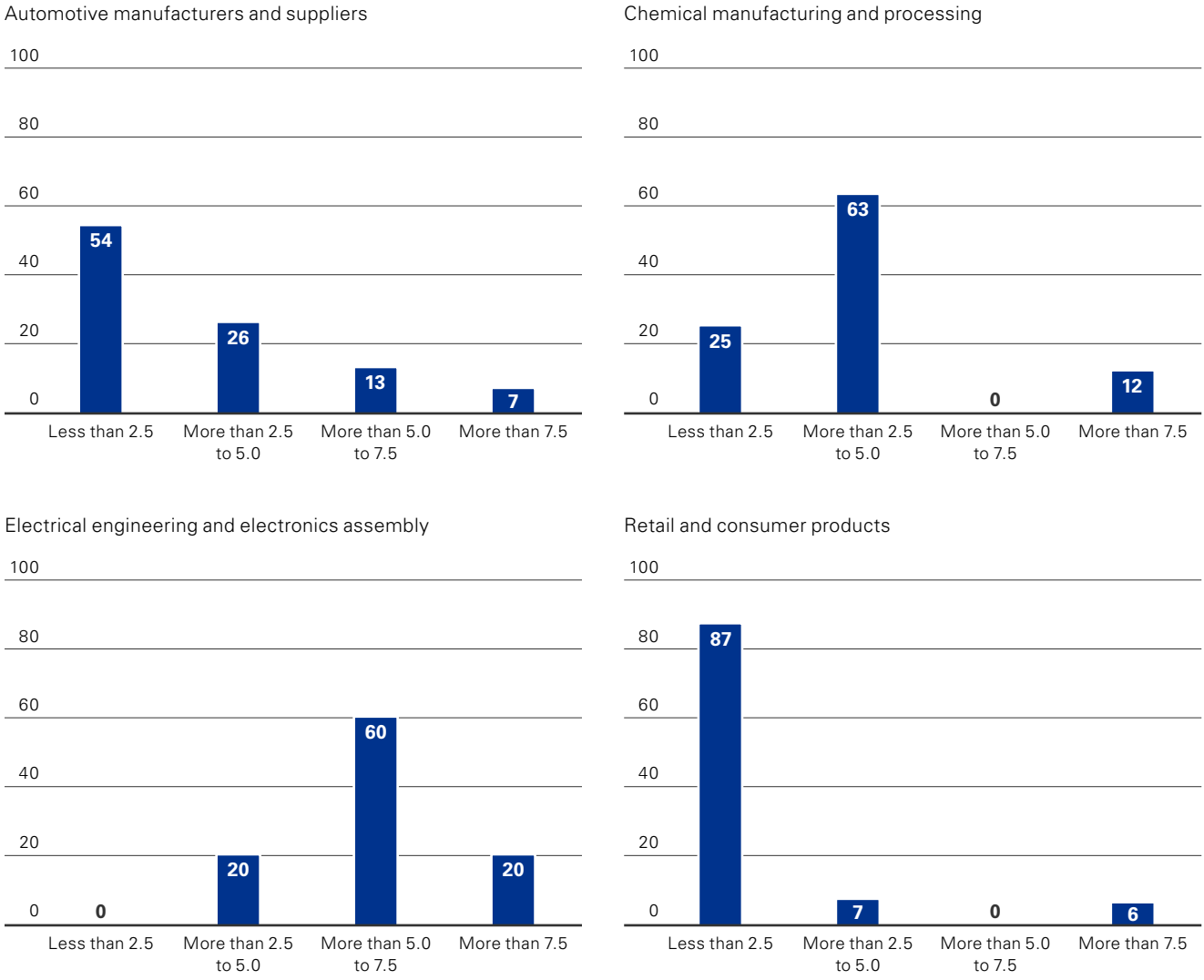
The number of new trademarks registered per year and their share relative to the total trademark portfolio is useful for assessing a company's – or even an entire industry sector's – capacity of trademark innovation. Of course, the number of new trademark applications filed nationally, via EU or via IR, also depends on the company's trademark application strategy; the number of trademark families represented in the trademark portfolio also plays a role. The growth rate, of course, does not indicate the quality of the trademark portfolio or whether it is advantageous to continuously increase the number of global trademarks. This analysis also excludes the assessment of the economic value of the trademark portfolio.

However, in order to identify any possible differences between industry sectors – comparable to the theoretical patent portfolio renewal rate in section 3.7 (Theoretical patent portfolio growth rate, page 58) – it was necessary to evaluate how rapidly the trademark portfolio of each company could theoretically grow each year.

Under the hypothesis that the trademark portfolio will not decrease due to trademark annulation, a theoretical growth rate of 2.5 percent would imply that the respective participant would need approximately 40 years to double its total trademark portfolio, while a theoretical growth rate of 10 percent would allow a company to double its portfolio within 10 years.

Unlike those in previous reports, the results show some noteworthy differences in the theoretical renewal rate of the trademark portfolio among industries (Figure 77, page 67). The highest renewal rates can be found in electrical engineering and electronics assembly: Six out of ten companies in this sector have a theoretical renewal rate of their trademark portfolio of more than 5 percent. 20 percent each have a rate up to 5 percent or more than 7.5 percent. The majority of the chemical manufacturing and processing industry have a renewal rate between 2.5 and 5 percent. In the automotive manufacturers and suppliers industry, 26 percent of manufacturers have a renewal rate of less than 5 percent, even 54 percent of less than 2.5 percent. With 87 percent, the vast majority of retail and consumer products suppliers have a theoretical renewal rate in regard to the trademark portfolio below 2.5 percent.

Figure 77:
Theoretical trademark portfolio renewal rate



Source: KPMG Law, 2023; figures in percent

3.13 Priorities of the IP department for 2022/23

In order to identify the current priorities of IP department heads, participants were asked to prioritize 30 challenges taken from seven different major thematic areas: "Handling cost and budget restrictions", "Improvement of cooperation with internal clients", "IT", "Improvement of work processes and organization", "Human resources", "External effects" and "Collaboration with law firms".

For the first time in our periodically published IP Report, Human Resources (57 percent) is the top priority for IP departments among above mentioned seven major thematic areas, shown as dark blue bars in Figure 78, page 69. While many boomers stay within the company until they retire, following generations such as Generation X (born between 1965 and 1980), Generation Y (1981 to 1995) and Generation Z (1996 to 2010) change jobs more frequently in order to pursue their various life goals. The growing importance of employee retention is reflected by the staggering increase from 16 percent in 2020 to 56 percent in 2022. More than half of the participants see this as a top priority now. Human resources development and the acquisition of employees have also gained importance, but to a lesser degree. Changes in the working environment, such as the possibility to work several days a week at home, have a large impact on maintaining employee satisfaction or attracting them. It also allows companies to significantly expand their candidate pool, as new employees no longer necessarily have to move to the employer's location. Flexibility and less rigorous structures will become ever more decisive for winning the war for talent.

The "Improvement of cooperation with internal clients" (54 percent) is the second most important priority for IP departments for 2022/23 and remains nearly unchanged when compared to 2020. Tied at 46 percent are the top third and fourth categorical priorities of "Handling of cost and budget restrictions" and "Improvement of work processes and organization". The single highest priority for the coming year in all participating countries remains the challenge presented by improving the advising and management of clients (R&D/marketing department) with an astounding 75 percent. Detecting and reducing IP risks across all group companies (68 percent) and handling an increased workload with the same staff (67 percent) are also clearly reflected in the prioritization of the topics.

"Handling external effects" and "Collaboration with law firms" were not identified as top priorities in any country/industry.

Interestingly, the importance of the issue of "Cost optimization/cost reduction" has decreased compared to the last report from 67 percent to 50 percent; the "Improvement of cooperation with management" went down from 58 percent to 46 percent (Figure 79, page 70).

In addition to evaluating the highest priorities for 2022/23, this report also analyzes the completion rate of these topics (Figure 80, page 71).

The top thematic area that is seen as completed is the "Collaboration with law firms" (19 percent) showing that there is already a well-integrated process for the management of external service providers in many of the top IP-valued firms.

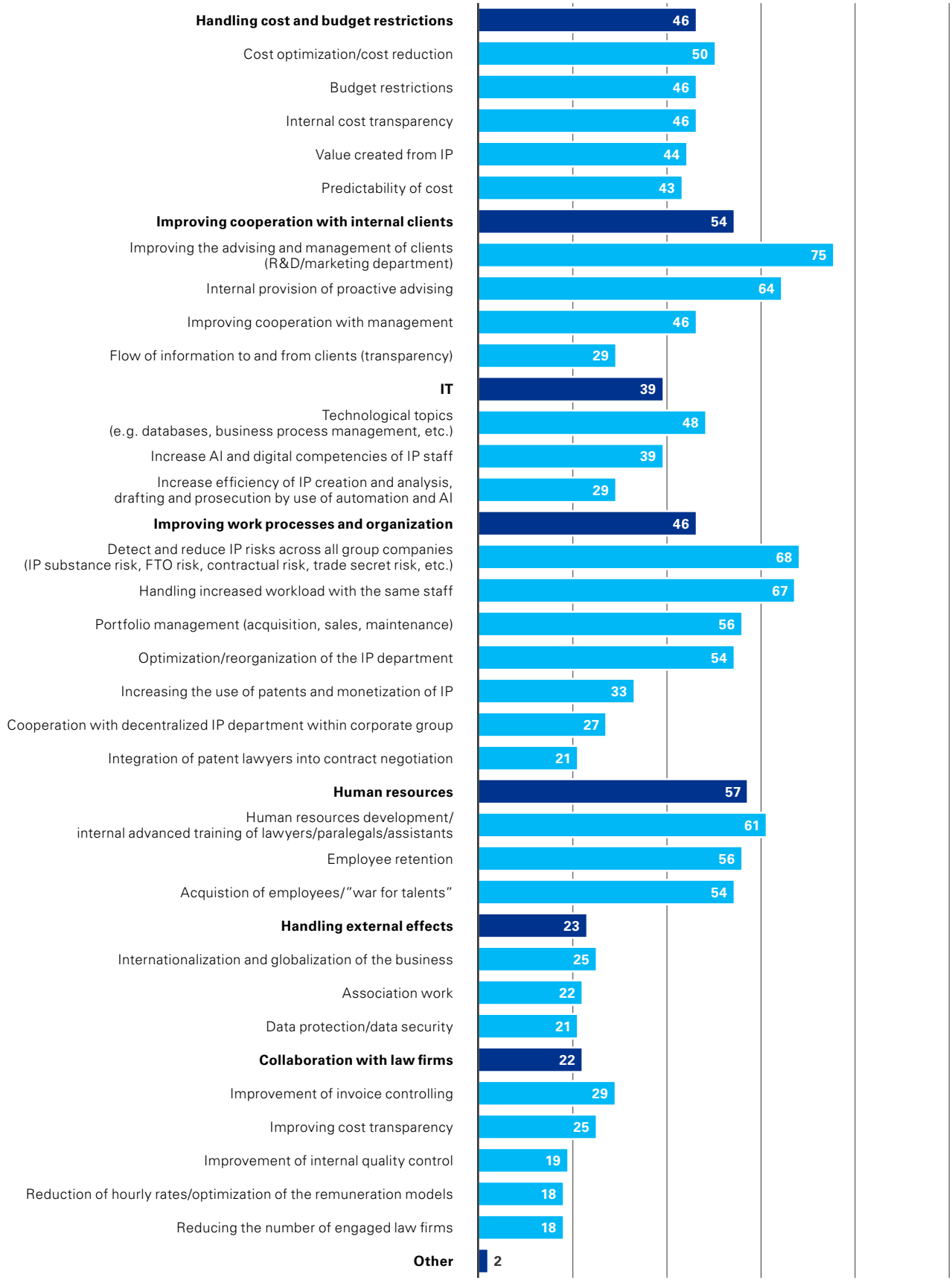
Unsurprisingly, human resources topics again rank very last at 4 percent, showing that it remains a dominant issue, especially in times of a growing shortage of qualified candidates.

Most of the challenges, which have been identified as already completed, are related to controlling, transparency and collaboration/cooperation.

The topic with the highest completion rate among all participants is the "Improvement of invoice controlling" at 25 percent, showing that IP professionals have established smooth processes for handling this task. Tied at 21 percent, "Reducing the number of engaged law firms" and "Integration of patent lawyers into contract negotiation" are equally considered being completed.

Once again, handling cost and budget restrictions has declined in being perceived as completed since the previous survey, from 9 percent (2020/21) to 5 percent (2022/23). This shows that the constant need for optimizing and developing the IP department never comes to a halt. It may as well be a first indication of the impact of recent events on the future of IP departments, such as Covid-19 and soaring energy prices in the wake of the war in Ukraine.

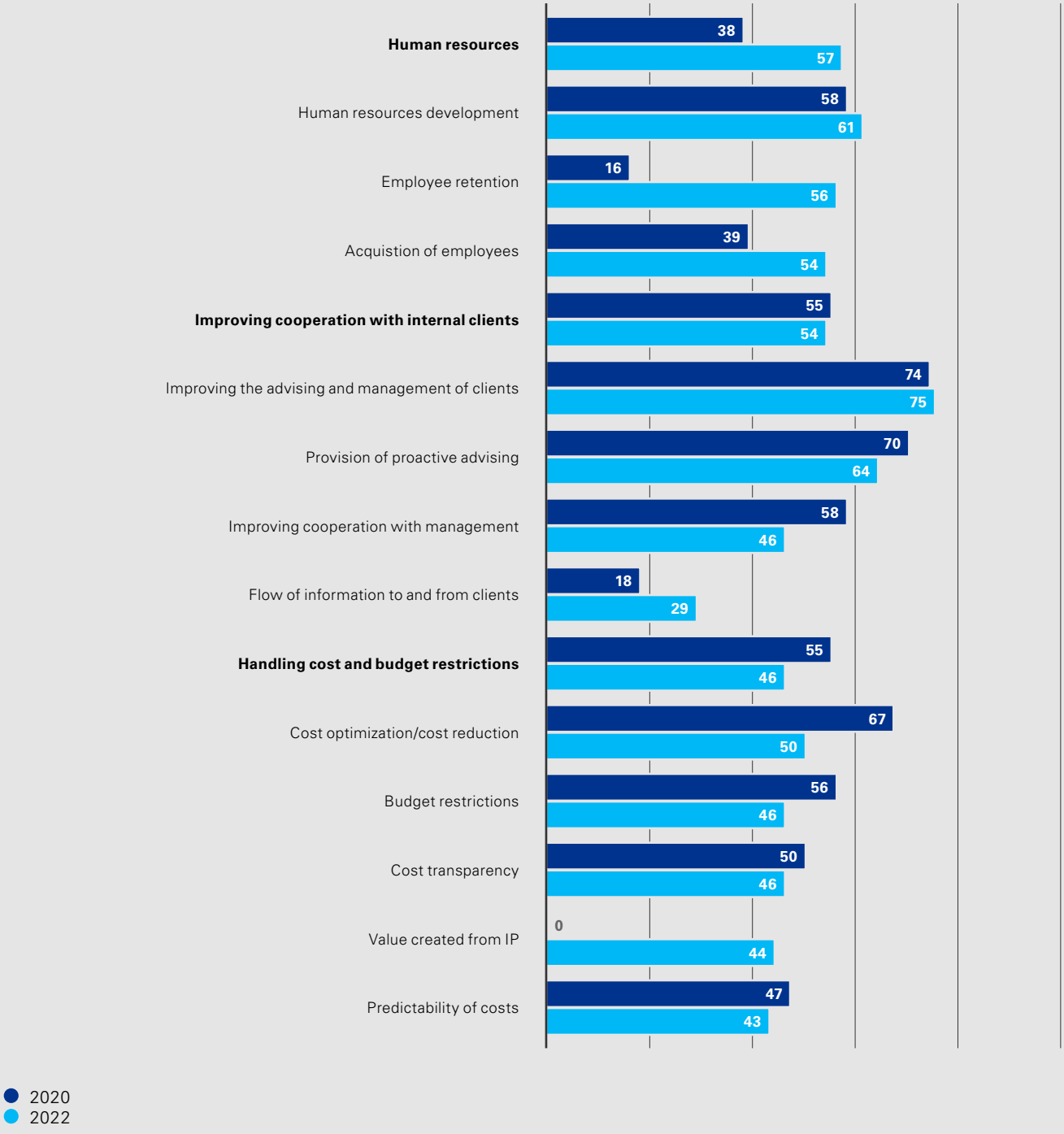
Figure 78:
Priorities for 2022/23



Source: KPMG Law, 2023; figures in percent; multiple answers possible

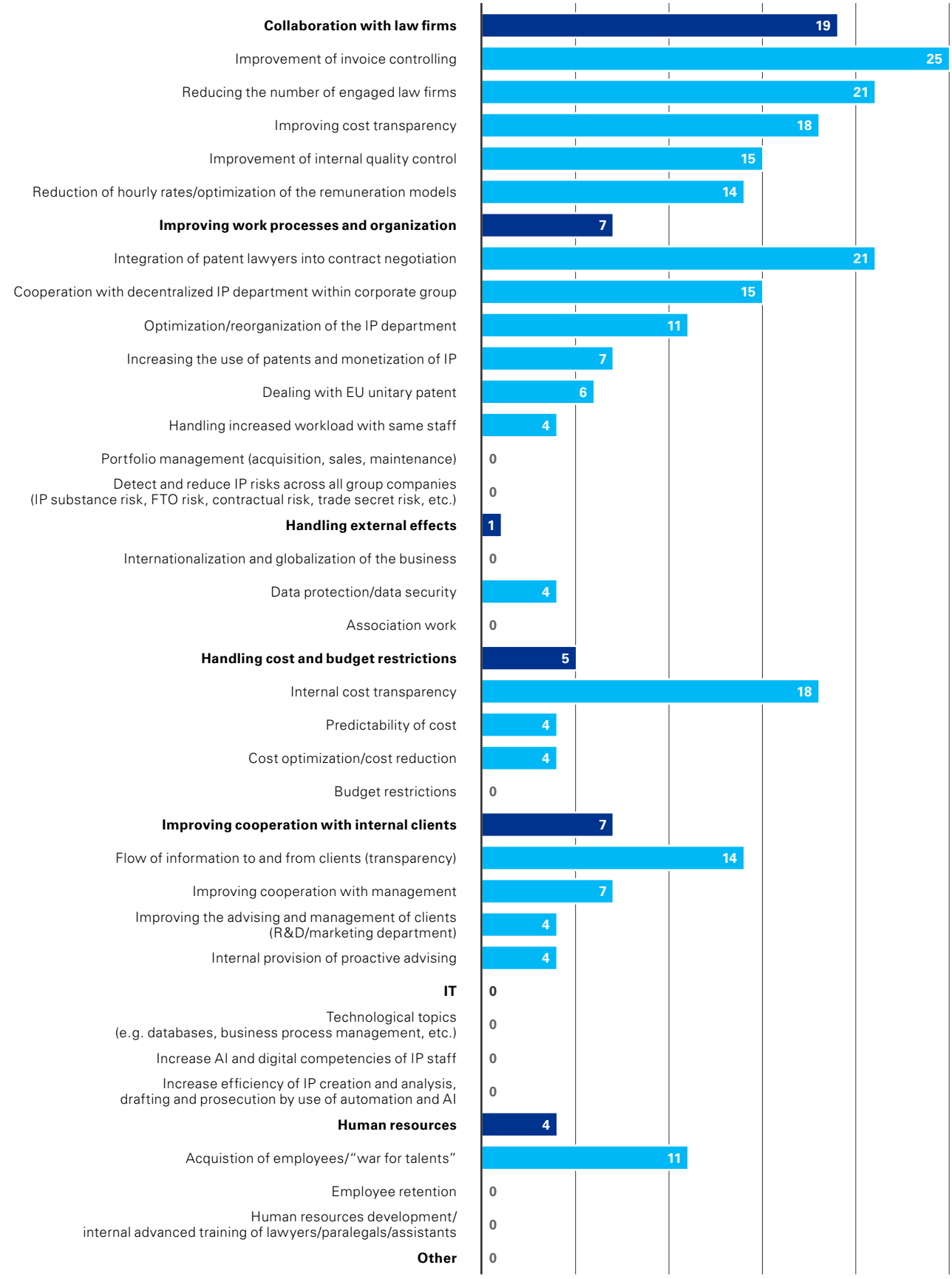
Figure 79:

Long-term peer group: Top priorities for the organizational and strategic challenges of the IP department in 2022/23



Source: KPMG Law, 2023; figures in percent; multiple answers possible

Figure 80:
Already completed topics



Source: KPMG Law, 2023; figures in percent; multiple answers possible

4 Costs of IP work

4.1 Cost allocation of the patent department

The size of the internal patent department mainly depends on the number of requests from the internal client, the depth and diversity of knowledge required to carry out these requests and the expected variation between the two topics. The head of the patent department will optimize human resources in terms of quantity and quality in order to meet the requests in the most cost-efficient manner. Nevertheless, there will always be reasons to outsource some tasks, e.g. due to lack of internal resources (quantity and/or quality) or the fact that certain country-specific topics are not covered internally.

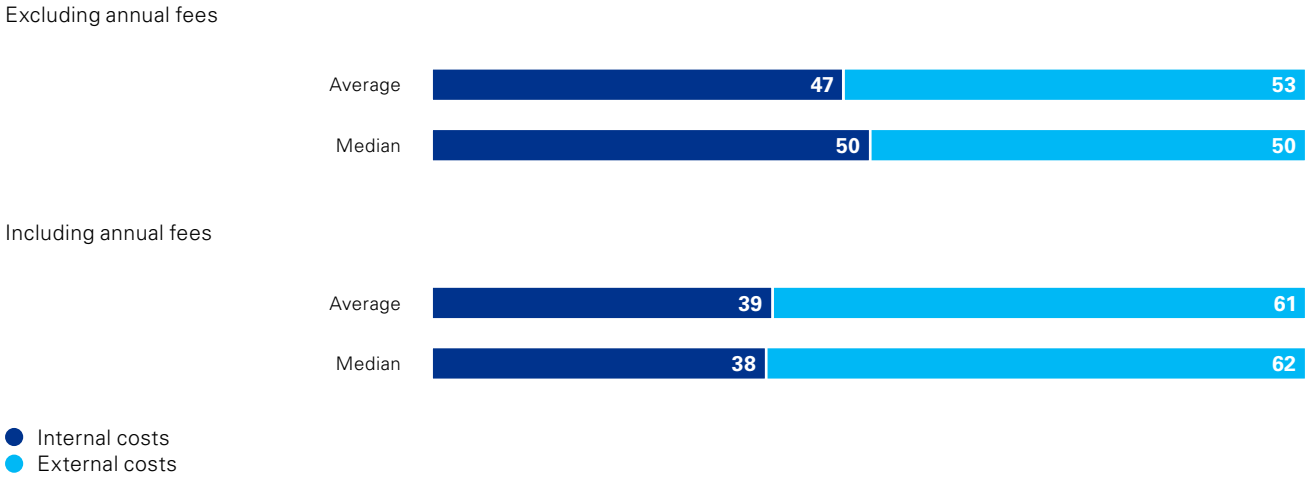
On average, the relation of internal to external costs in the cost distribution for all participants is 47 to 53 percent (median: 50 percent/50 percent), excluding annual fees.

The share of external costs increases, of course, when annual fees for patents are added. The internal costs then amount to 39 percent versus 61 percent (median: 38 percent/62 percent) (Figure 81, page 75).

The question is whether there is a correlation between patent portfolio size and external costs. The results suggest an interesting trend: Although the numbers do not develop in a linear way, it is evident that the larger the patent portfolio, the higher the volume of external costs. Departments with fewer than 10,000 patents have the lowest percentage of external costs (48 percent without annual patent fees and 59 percent including fees), while departments with more than 10,000 patents have the highest percentage (50 percent without annual patent fees and 59 percent including fees). This means that larger departments actually suffer negative scale effects in terms of cost. The reasons for this may lie in the complexity and international nature of the portfolio and the subsequent need to outsource selected tasks.

The analysis of the long-term patent peer group (Figure 82, page 75) shows that there was a slight increase in outsourcing (2020: 51 percent; 2022; 53 percent). This indicates that an increased percentage of patent work is being outsourced and less expertise is being brought into the company.

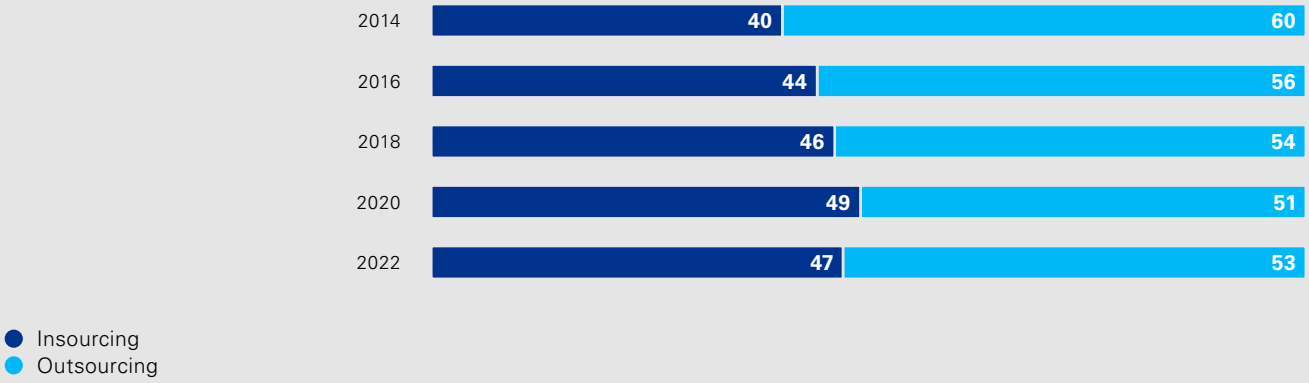
Figure 81:
Cost allocation of the patent department



Calculation based on financial allocation, not on tasks covered
External costs including application costs, without litigation and official fees

Source: KPMG Law, 2023; figures in percent

Figure 82:
Long-term patent peer group: Development of outsourcing ratios in the patent department



Excluding annual patent fees and litigation

Source: KPMG Law, 2023; figures in percent

4.2 Ratio of patent costs to company turnover and R&D costs

Figures 83 and 84 show the total costs for patents and their percentage share of the company's revenue and R&D costs. These figures must not, however, be overemphasized or allowed to eclipse the value added by the patent departments. Instead, it is advisable to install a controlling system that would identify the added value for the business, such as the freedom to operate or even the amount of turnover that could only be realized by having the respective patents available. This is all the more important given that patent department heads are often required to disclose (and possibly even defend) the costs incurred as a result of their activities. Indeed, the management board will often want to see how those costs stack up against the total revenue or R&D costs.

On average, participants stated that patent costs amount to 0.50 percent of the company's revenue, excluding annual fees. This figure increases to 0.70 percent when fees are included. The median of both KPIs is 0.11 percent and 0.14 percent respectively (Figure 83, page 77).

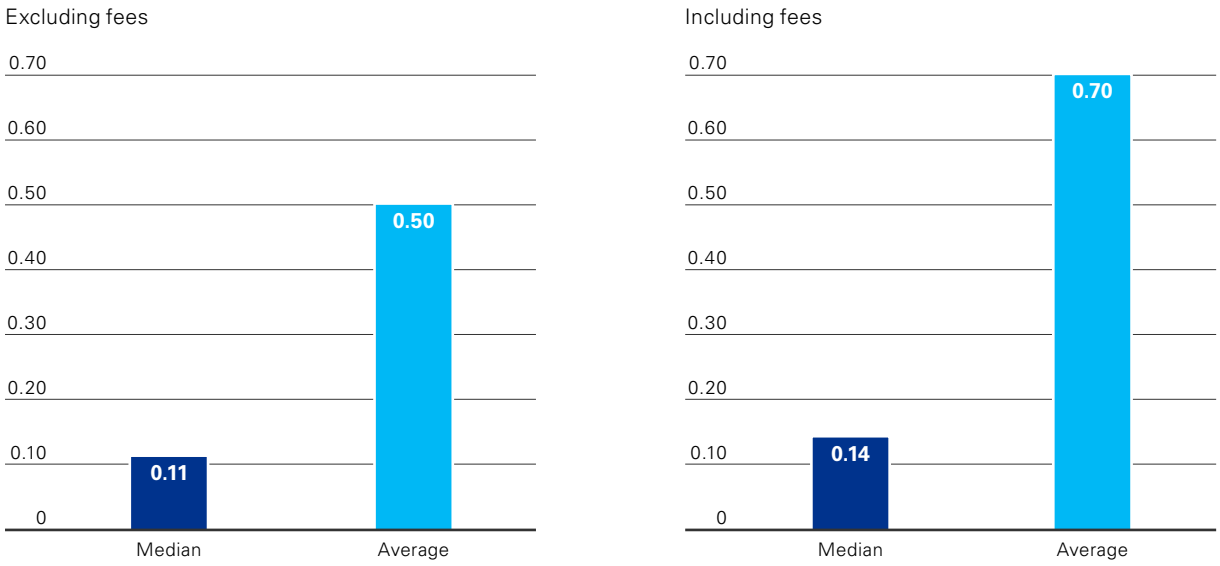
The second KPI evaluated is the share of costs for patents relative to total R&D costs. Excluding fees, participants state that average costs represent 2.74 percent of the company's R&D costs and 3.42 percent when including annual patent fees (median: 2.37 and 3.17 percent, respectively) (Figure 84, page 77).

The average internal total costs for patents amount on average to EUR 804, the median is EUR 499 (Figure 85, page 78).

Considering the participants' different industry sectors, these KPIs appear to be dominated by the apparent complexity of the patent portfolio. Regardless of the country of origin, participants with a focus on the automotive manufacturers and suppliers increase the average ratio of total patent costs to company revenue by 2 (median: 1); companies operating in chemical manufacturing and processing increase the ratio on average by 5 (median: 5).

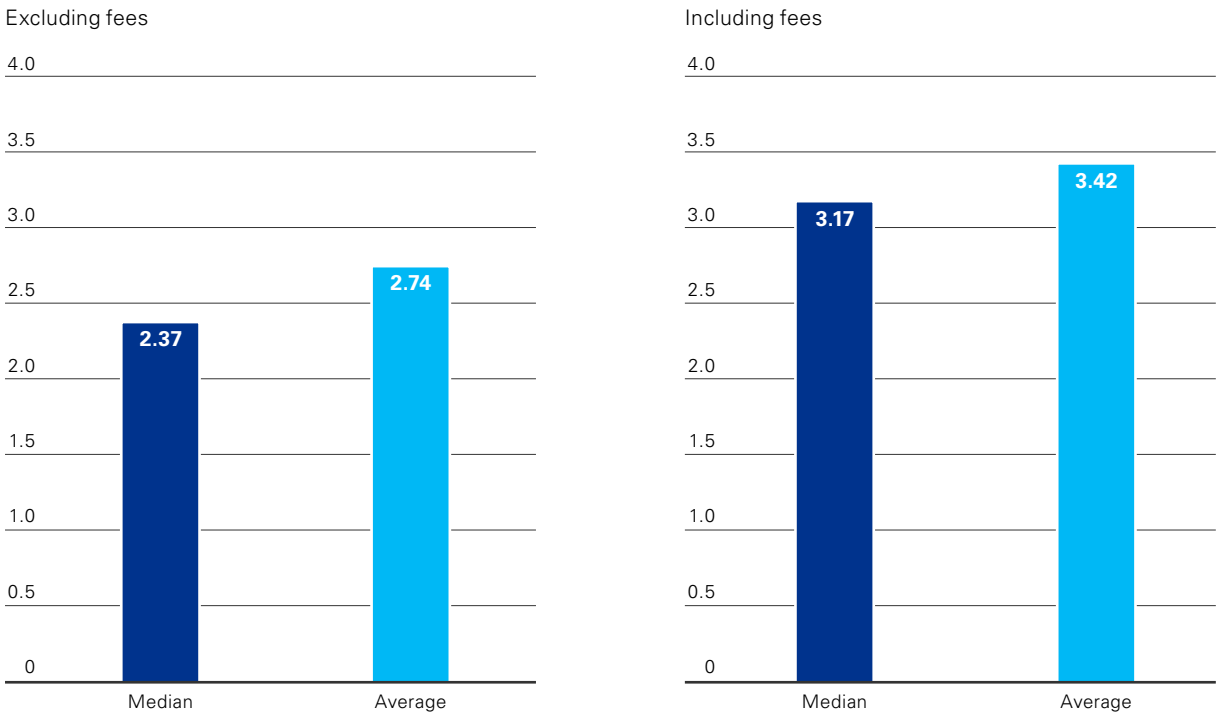
Further considerations should be made by using the KPIs without annual fees, as they can only be influenced to a very limited extent by the management of the patent department.

Figure 83:
Total costs patents to company revenue



Source: KPMG Law, 2023; figures in percent; total costs for patents comprise internal costs, external costs and application costs; all numbers without litigation and official fees

Figure 84:
Total costs patents to R&D costs



Source: KPMG Law, 2023; figures in percent; external costs including application costs, without litigation and official fees

4.3 Costs per patent

Section 3.6 of the report (Outsourcing practices of the patent department, page 56) addresses the outsourcing practices of participants in relation to typical patent department tasks, such as quantifiable tasks like "Processing invention disclosures", "Prosecution including processing", "First filings", "Subsequent filings" and "Office actions", but also work such as "Portfolio management/strategy", "IP risk management" or "Other". The degree of outsourcing has a major impact on the total cost of providing patent services, which is assessed by looking at the internal, external and total costs per patent (in this case: granted patents, pending property rights and design patents), as shown in Figures 85 to 87 (pages 78 and 79).

The average internal costs per patent (all figures in EUR) amount to 804 (median: 499). Compared to the last evaluation this means a increase of about 8 percent (Figure 85). External costs per patent amount to an average of 912 and to a median of 488 (excluding fees) and to an average of 1,412 and a median of 746 (including fees) (Figure 86, page 79).

The comparison to the 2020/21 IP report indicates that not the internal costs but the external costs (obviously due to rising fees) have greatly increased by 18.8 percent.

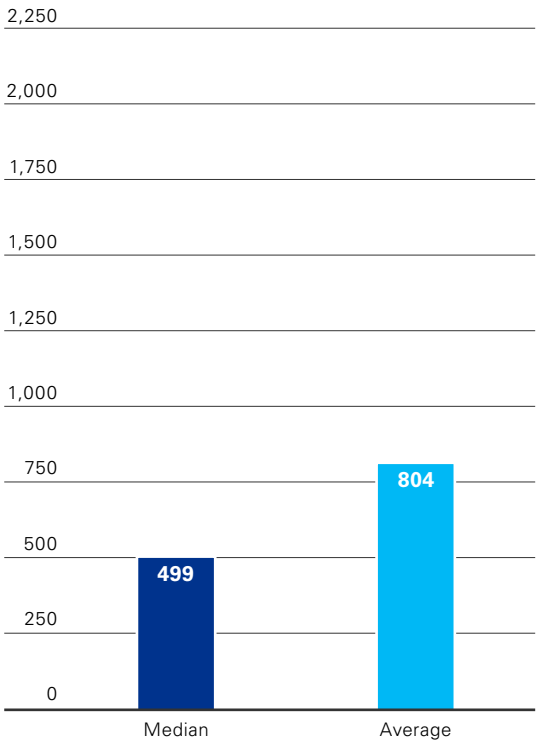
On average and excluding fees, the total costs per patent increased compared to the last evaluation to 1,716 (+12 percent), being highest among automotive manufacturers and suppliers (average: 2,213, median: 1,224) and lowest in the electrical engineering and electronics assembly industry (average: 1,143, median: 915) (Figure 87, page 79).

Including fees, the average increased to 2,216 (median: 1,382) which shows an increase between 2020/21 and 2022/23 of 12 percent, being lowest in the electrical engineering and electronics assembly industry (average: 1,246, median: 1,231) and highest in the automotive manufacturers and suppliers industry (average: 2,398, median: 1,362).

Previous studies have already shown that an increase in total costs per patent correlates with increased outsourcing of patent-related work. Historically, the automotive manufacturers and suppliers, electrical engineering and electronics and mining, metals and natural resources industries have lower external costs, the aerospace and defense industry has similar external costs relative to the overall results, whereas the retail and consumer products industry is well above average. This seems to have changed in recent times.

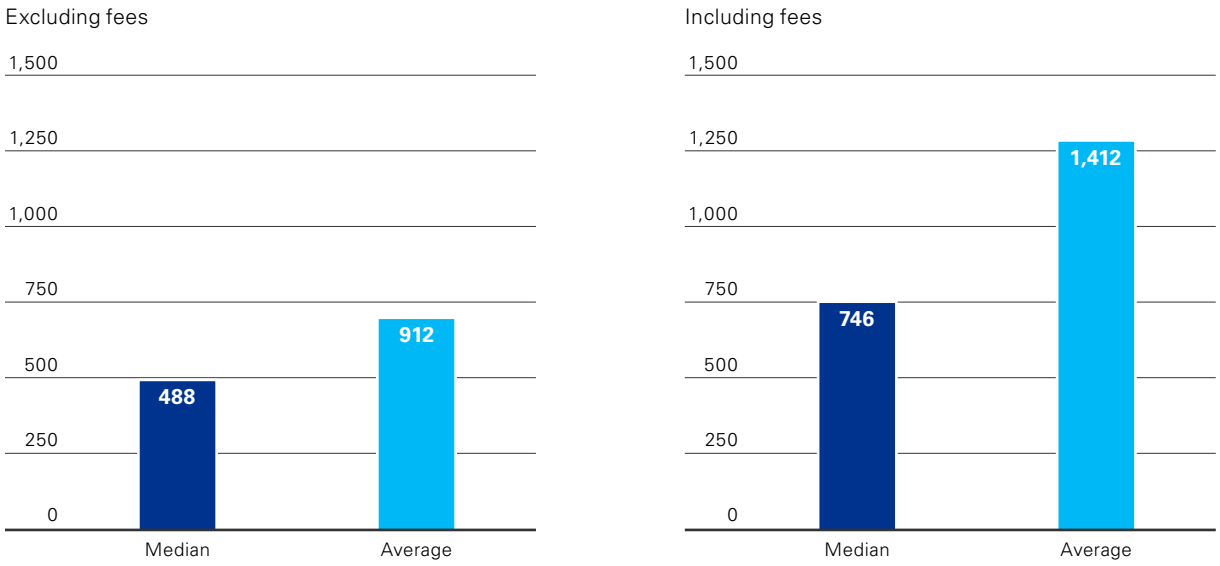
Furthermore, as mentioned in section 4.1 (Cost allocation of the patent department, page 74), the size of the patent portfolio greatly impacts the volume of external costs and drives up the average costs in the respective countries depending on the size of the portfolio.

Figure 85:
Internal costs per patent



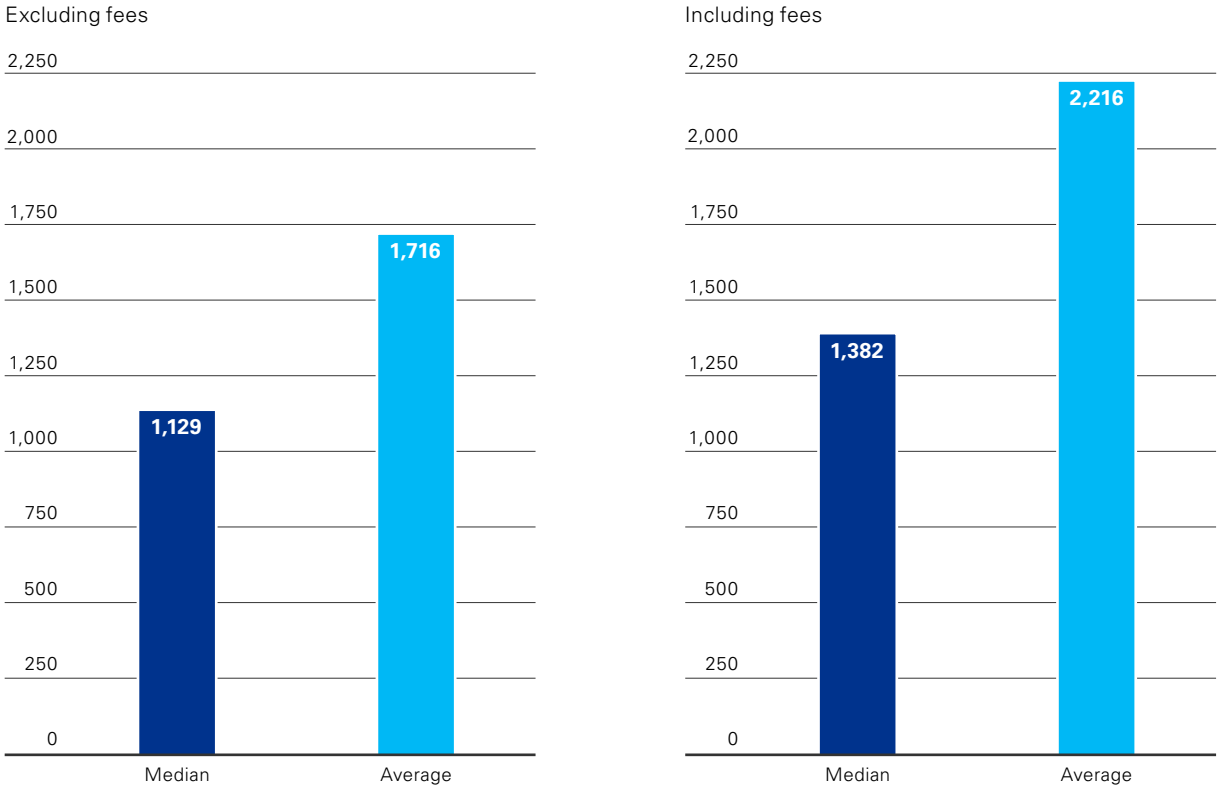
Source: KPMG Law, 2023; figures in TEUR

Figure 86:
External costs per patent



Source: KPMG Law, 2023; figures in EUR

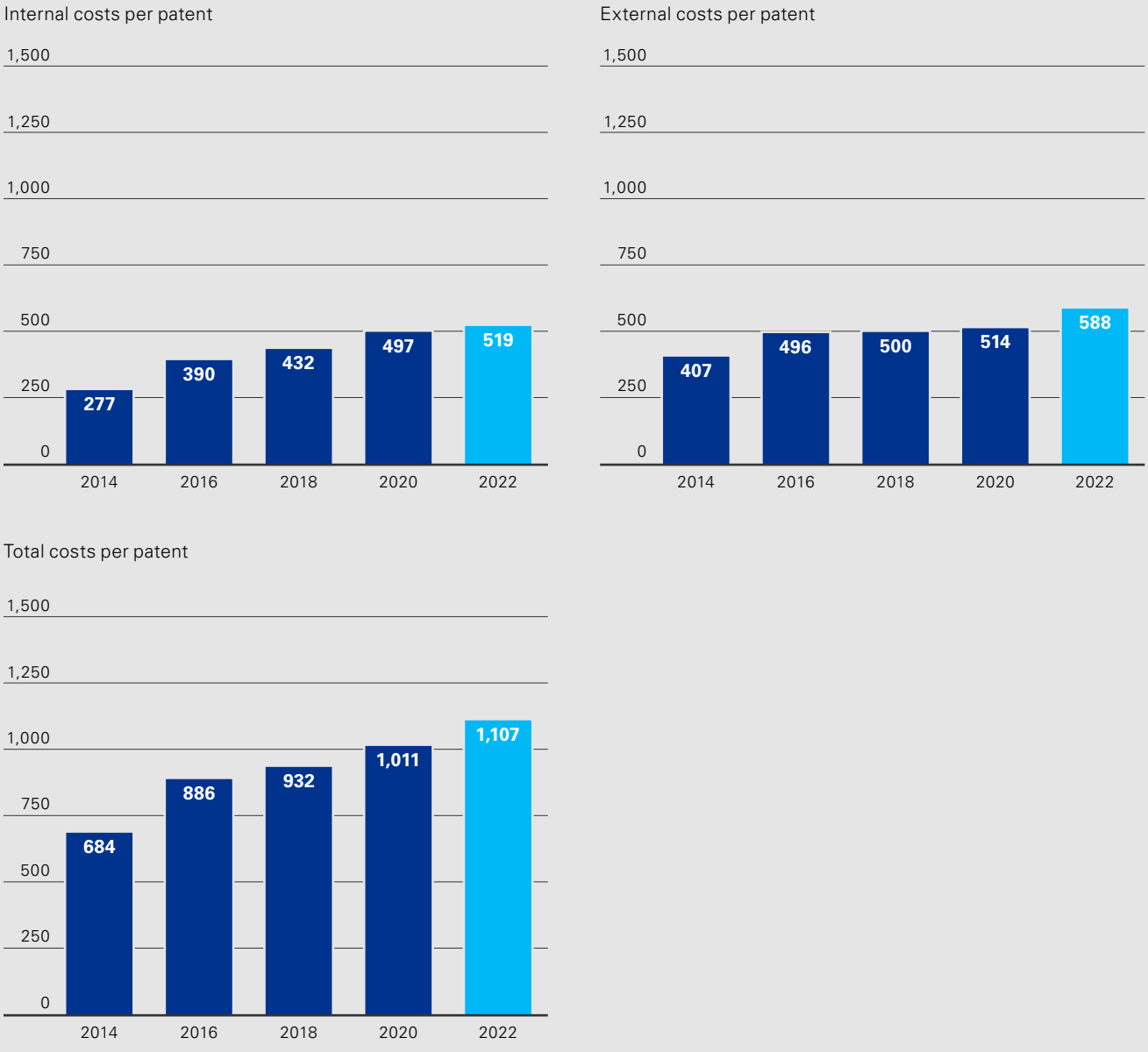
Figure 87:
Total costs per patent



Source: KPMG Law, 2023; figures in EUR

Within the long-term patent peer group, we observed an increase in internal costs per patent (+ 4 percent) and a significant increase in external costs (+ 14 percent) between 2020 and 2022. Overall, this leads to a higher total cost per patent of 9 percent (Figure 88).

Figure 88:
Long-term patent peer group: Costs per patent



Source: KPMG Law, 2023; figures in EUR; average from 2020 to 2022; total patents, including granted patents, pending property rights and design patents; external costs including application costs, excluding litigation, official fees and annual patent fees

4.4 R&D costs per invention disclosure and first filing

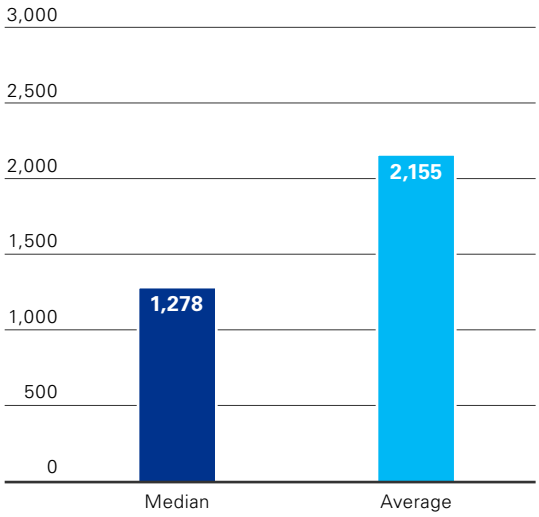
R&D costs, time frames and R&D personnel vary considerably between industries.

On average, R&D costs of TEUR 2,155 (median: TEUR 1,278) were required to generate one invention disclosure (Figure 89), while participants spent an average of TEUR 2,887 on R&D (median: TEUR 1,810) for a first filing (Figure 90).

Taking into account that on average, only 71 percent of invention disclosures are filed (section 3.2 – Patent application strategy, Figure 50, page 46), 29 percent of R&D costs were spent without any IP-relevant output.

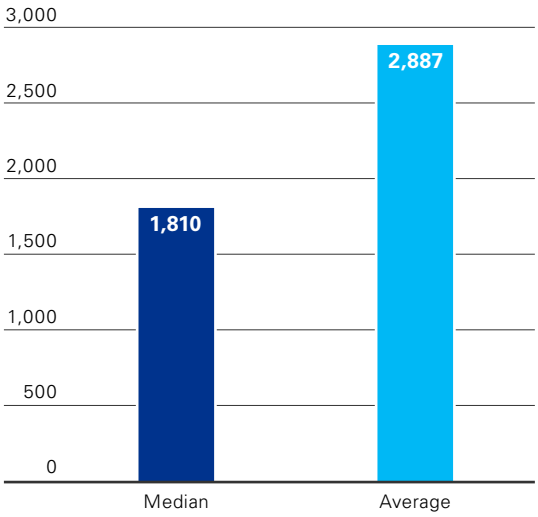
Apart from that, it takes an average of 13.3 – R&D FTE (median: 8.3) to generate one invention disclosure (Figure 91), and 18 R&D FTE (median: 11.9) were required for one first filing (Figure 92).

Figure 89:
R&D costs per invention disclosure



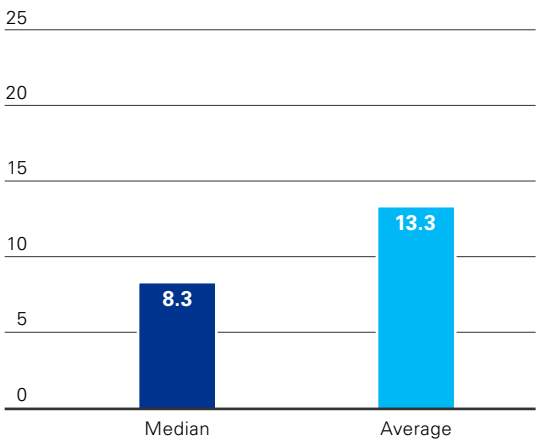
Source: KPMG Law, 2023; figures in TEUR

Figure 90:
R&D costs per first filing



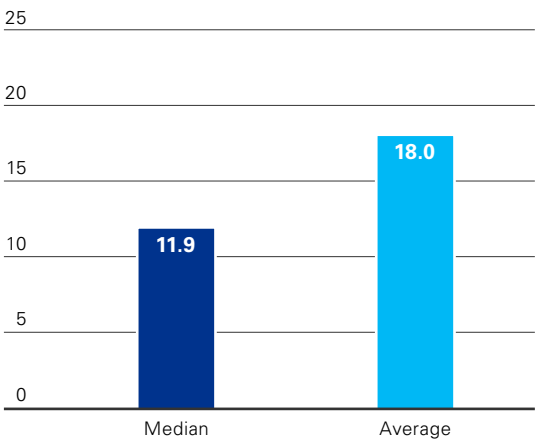
Source: KPMG Law, 2023; figures in TEUR

Figure 91:
R&D FTE per invention disclosure



Source: KPMG Law, 2023

Figure 92:
R&D FTE per first filing

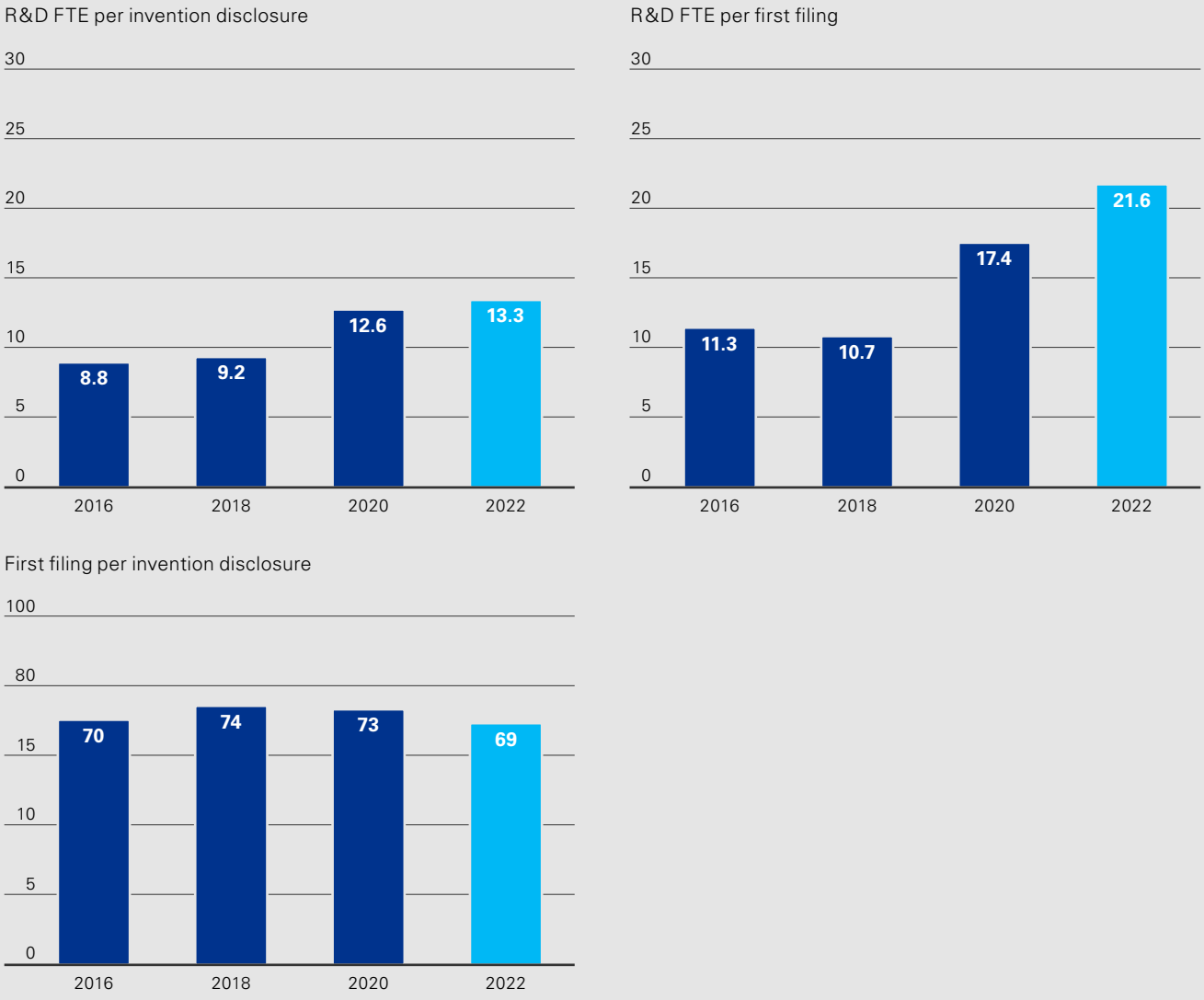


Source: KPMG Law, 2023

By putting this KPI in relation to the respondent's R&D FTE per patent professional, we observe that those IP departments belonging to the long-term patent peer group with a higher amount of R&D FTEs per professional have a lower rejection rate (proportion of unfiled invention disclosures), which is 69 percent compared to 71 percent of the total participant's group (Figure 93). Conversely, those with a low number of R&D FTE have a substantially higher rejection rate.

This can hardly be explained by less advanced strategic decision-making caused only by a smaller number of R&D FTEs. Instead, having more time for each R&D officer could lead to better integration into strategy and risk processes and for managing R&D activities earlier and more comprehensively, thereby avoiding unnecessary resource investments.

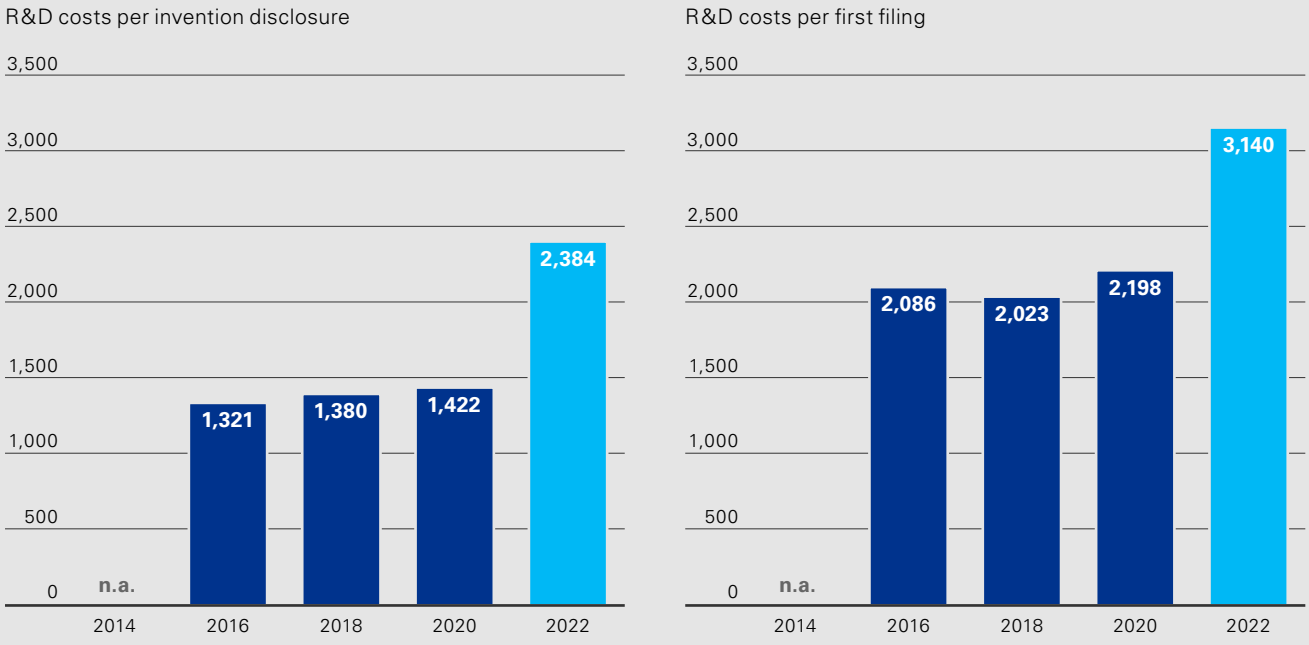
Figure 93:
Long-term patent peer group: First filings being brought to invention disclosure



Source: KPMG Law, 2023; figures in percent

In line with the higher number of R&D FTEs per patent professional since 2020, the R&D costs per invention disclosure of the patent peer group has strongly increased (+67.7 percent). The increase in R&D costs per first filing was not quite as high at 43 percent (Figure 94).

Figure 94:
Long-term patent peer group: R&D costs per invention disclosure



Source: KPMG Law, 2023; figures in TEUR

4.5 Internal total costs per patent professional

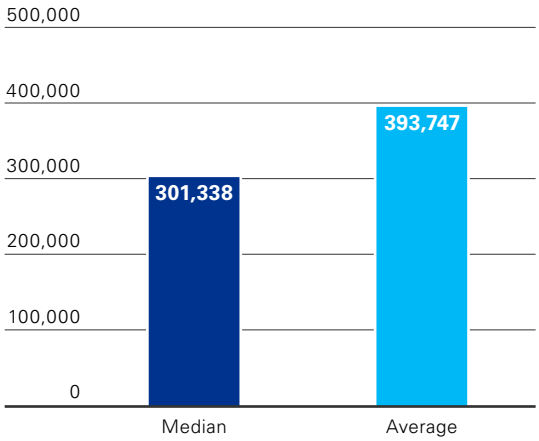
Particularly when making a strategic decision on how to allocate patent tasks – either by in-house processing or outsourcing – the department head must assess the total costs of in-house professionals versus the costs that would be incurred by hiring an external service provider. It is generally recognized that using in-house professionals regularly has the advantage of not incurring costs for acquisition or sales and marketing costs, as these costs can be significant when using external providers. The total costs for personnel, infrastructure and administration generally do not differ much. For the purpose of comparison, the internal total costs of participants – including personnel costs for administration and assistants as well as internal non-personnel costs – have been divided by the total number of professionals. The annual work time was calculated based on the following assumption: 220 working days of 8 hours each and a capacity utilization of 80 percent, resulting in approximately 1,400 productive billable hours per year.

The median total cost per in-house patent professional is EUR 301,338 (average: EUR 393,747), which means that the median hourly rate of an internal patent professional is EUR 215 (average: EUR 281) (Figures 95 and 96).

Although this number is calculated by dividing internal total costs by the number of patent professionals, it should be noted that this number is influenced by the remuneration for each employee; the biggest influence on this number is the support ratio within the department. To underline the difference, we have calculated the internal total costs per patent FTE which is comprehensibly much higher than the number of dedicated patent professionals as, for instance, attorneys (Figures 97 and 98, page 85). The median total cost per inhouse patent FTE is EUR 202,456 (average: EUR 218,568). That means that the median hourly rate of an internal patent FTE amounts to EUR 145 (average: EUR 156).

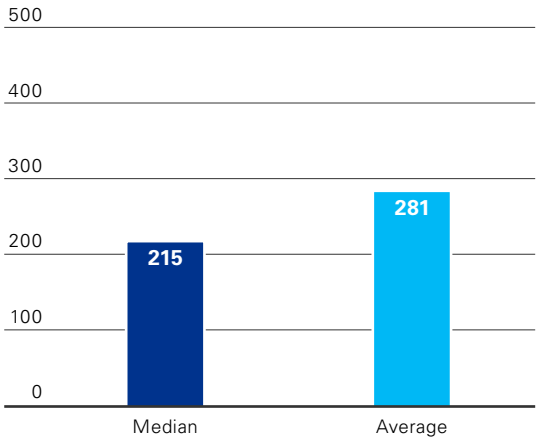
Companies of the long-term patent peer group have a different structure of internal total costs. Here the internal total costs per patent professional, although higher than 2020/21 (+7 percent), amount to EUR 359,895 on average. This increases the hourly rate per patent professional to EUR 257. Also higher (+6.5 percent) are the internal total costs per patent FTE in 2022 (EUR 201,874) as well as the hourly rate per patent FTE (EUR 144) (Figure 99, page 85).

Figure 95:
Internal total costs per patent professional



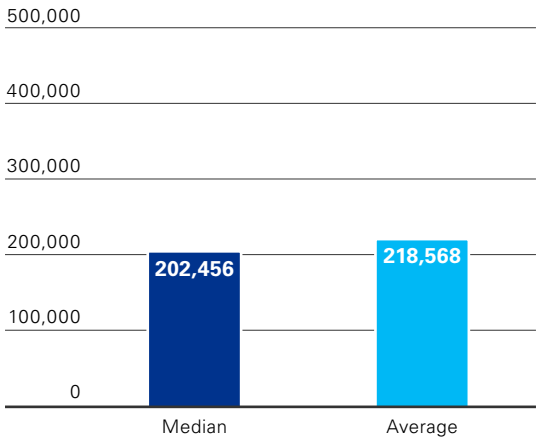
Source: KPMG Law, 2023; figures in EUR

Figure 96:
Hourly rate per patent professional



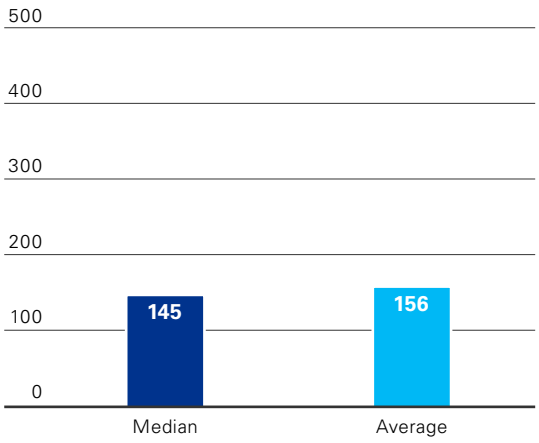
Source: KPMG Law, 2023; figures in EUR

Figure 97:
Internal total costs per patent FTE



Source: KPMG Law, 2023; figures in EUR

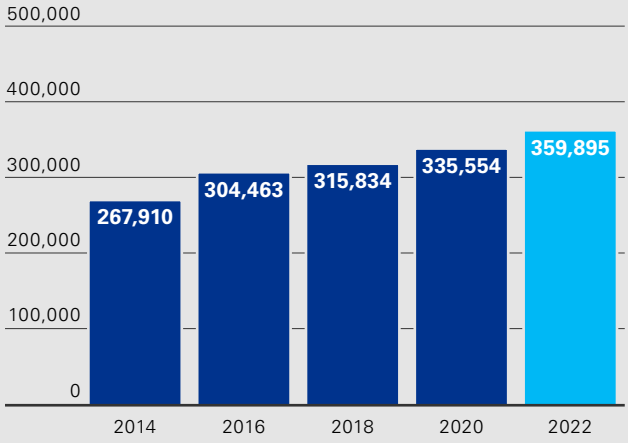
Figure 98:
Hourly rate per patent FTE



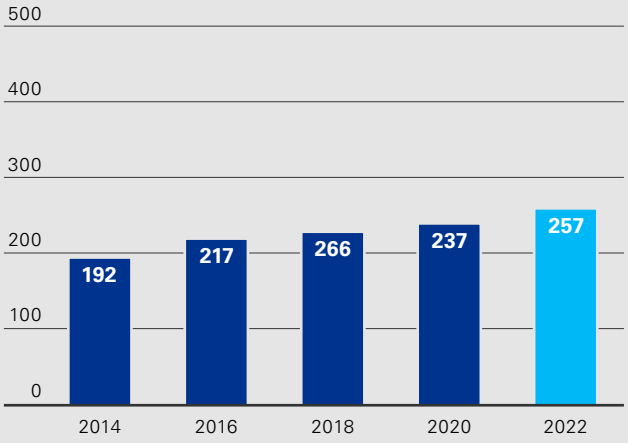
Source: KPMG Law, 2023; figures in EUR

Figure 99:
Long-term patent peer group: Internal total costs per patent professional and patent FTE

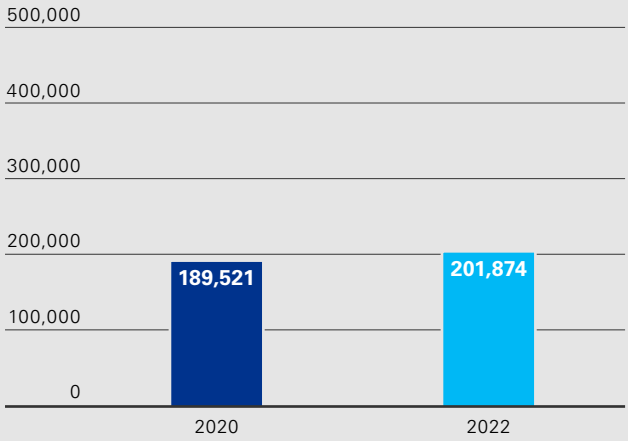
Internal total costs per patent professional



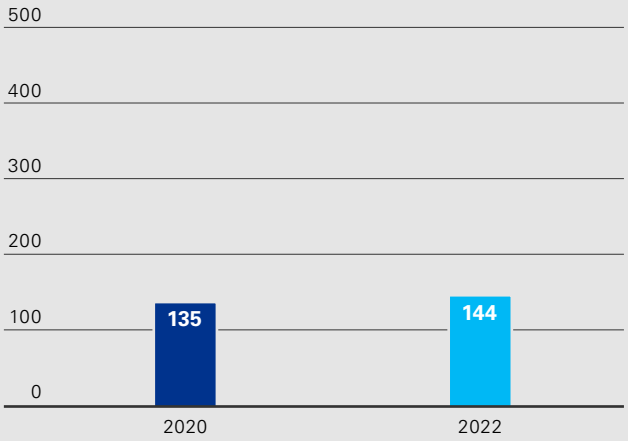
Hourly rate per patent professional



Internal total costs per patent FTE



Hourly rate per patent FTE



Source: KPMG Law, 2023; figures in EUR

4.6 Cost allocation of the trademark department

As with the patent department, the size of the internal trademark department depends primarily on the number of requests from the internal client, the depth and diversity of the knowledge required to carry out these requests and the expected variation between the two. The head of the trademark department will optimize the workforce, in terms of both quantity and quality, in order to fulfill the requests in the most cost-efficient manner. Nevertheless, there always will be reasons to outsource some tasks, due to e.g. a lack of internal resources (quantity and/or quality) or the fact that certain country-specific topics are not covered internally.

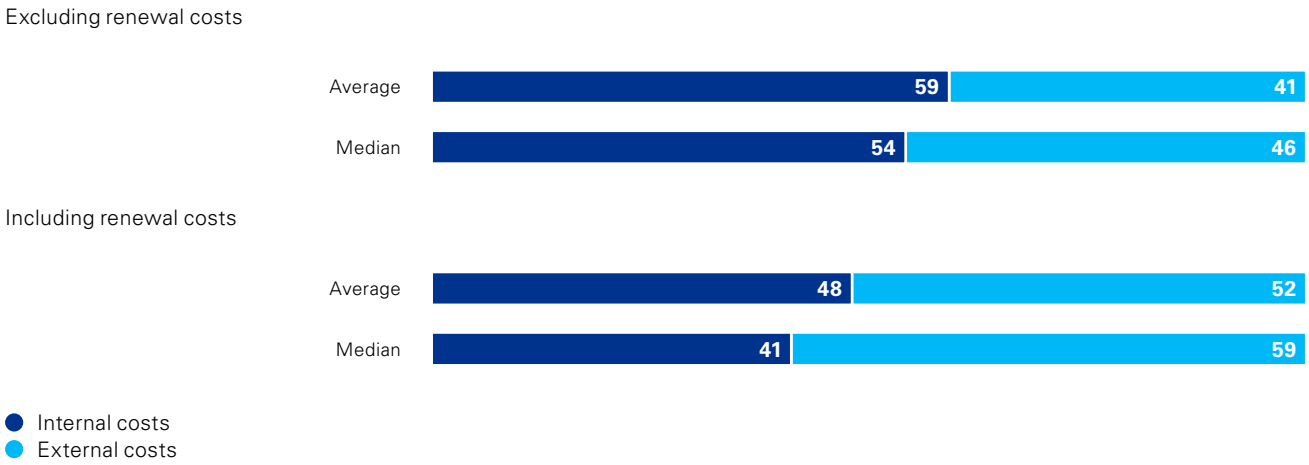
On average, the share of internally and externally allocated costs for all participants is 59 percent and 41 percent, respectively (median: 54 percent/ 46 percent), excluding renewal costs. Compared to the patent department, the share of internal costs is higher for the trademark department (Figure 79, page 70). The percentage of external costs increases, of course, when the trademark renewal costs are added. Participants then show an average share of 47 percent (internal) to 53 percent (external) costs (median: 41 percent internal versus 59 percent external) (Figure 100, page 87).

Compared to last year's report results, the proportion of internal and external costs has shifted again toward higher internal costs, indicating that this year's participants also tend to have greater overall insourcing activity.

The question is whether there is a correlation between the trademark portfolio size and external costs. As with the patent department (Figure 79, page 70), it can be stated that the larger the trademark portfolio, the higher the volume of external costs. Departments with less than 5,000 trademarks have a lower percentage of external costs (45 percent), while departments with more than 5,000 trademarks exhibit a slightly higher share (49 percent). This means that, as with the patent department, larger departments actually suffer negative scale effects in terms of costs. The reasons for this may lie in the complexity and international nature of the portfolio and the subsequent need either to outsource some tasks or hire more experienced specialists to the patent department.

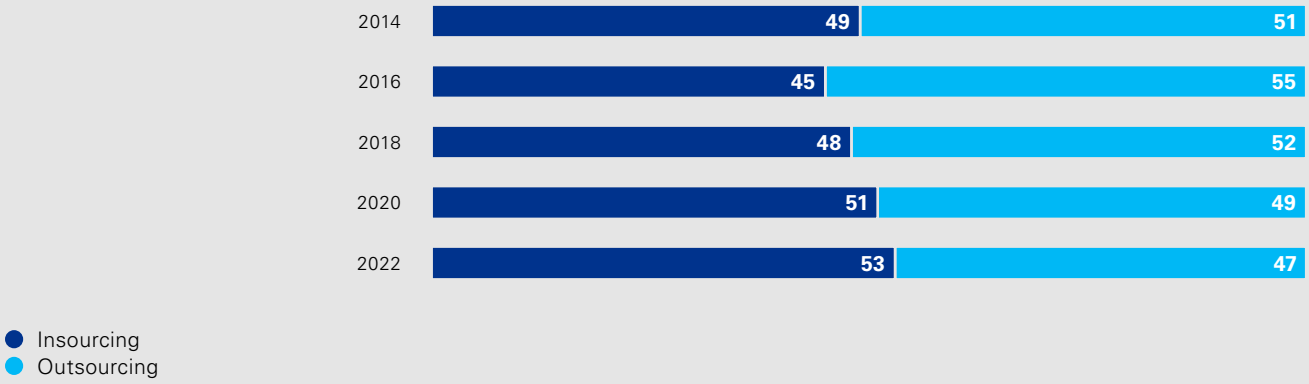
At least companies of the trademark peer group probably tend toward the latter. Figure 101 (page 87) indicates that the outsourcing rate is steadily declining (2020: 49 percent, 2022: 46 percent). It seems that instead of outsourcing parts of the patent work, more expert knowledge is brought into the company.

Figure 100:
Cost allocation of the trademark department



Source: KPMG Law, 2023; figures in percent

Figure 101:
Long-term trademark peer group: Development of outsourcing ratios in the trademark department



Source: KPMG Law, 2023; figures in percent; average from 2014 to 2022; excluding renewal fees and litigation

4.7 Ratio of trademark costs to company turnover and marketing costs

Figures 102 and 103 show the total costs for trademarks and their percentage share of the company's revenue and marketing costs. As in section 4.2 – Ratio of patent costs to company turnover and R&D costs (page 76), these figures must not be overemphasized or allowed to eclipse the value added by trademark departments. As mentioned for the patent department, it is also highly advisable for the trademark department to install a controlling system that would identify the added value for the company. This is even more important since heads of trademark departments are often required to disclose (and possibly even defend) the costs incurred by their activities. In fact, the management board will often want to see how those costs stack up against the total revenue or marketing costs.

On average, the total trademark costs of participants amount to 0.024 percent of the company's revenue when excluding renewal costs. When the renewal costs are included, the average for participants amounts to 0.028 percent. The value of both KPIs is lower when the median (0.009 percent each) is taken into account (Figure 102).

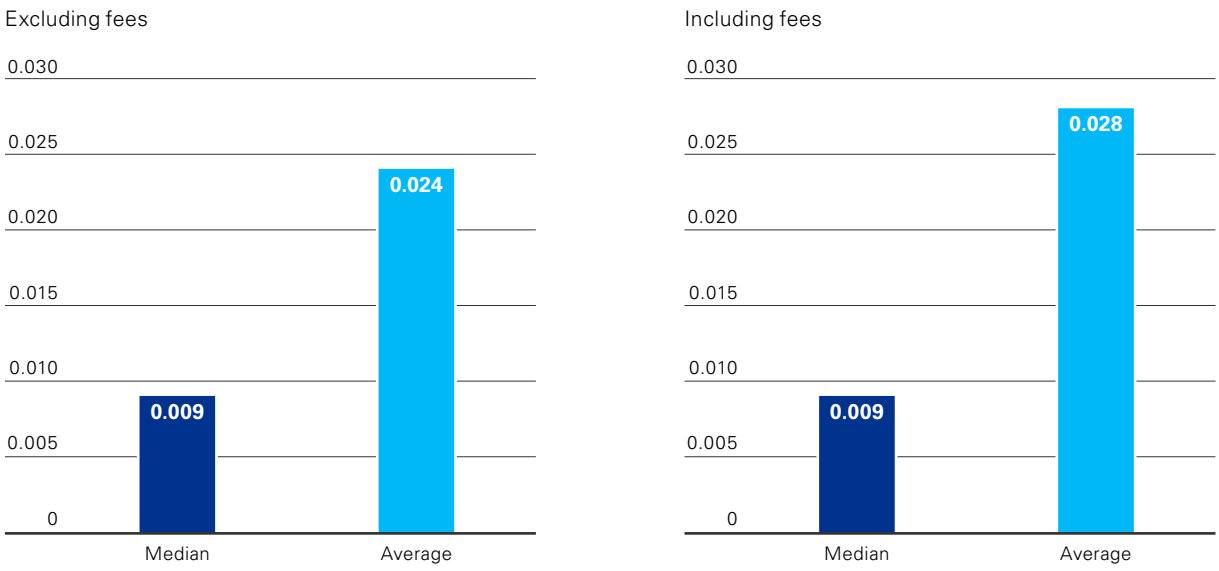
Let's take a look at specific industries. Below-average costs have been incurred by the chemical manufacturing and processing industry (average: 0.01, median: 0.01), we find automotive manufacturers and suppliers above average (average: 0.06, median: 0.01), both numbers excluding fees. Even when taking these figures into account, the chemical manufacturing and processing industry is below average (average: 0.02; median: 0.01) while the automotive manufacturers and suppliers industry is significantly above (average: 0.07, median: 0.01).

The second KPI evaluated is the percentage of the total trademark costs relative to the total marketing costs. Excluding renewal costs, the average value of trademark costs for the participants represents 0.15 percent of the company's marketing costs, and 0.18 percent when the renewal costs are included (median: 0.11 percent and 0.13 percent) (Figure 103, page 89).

Due to the low geographic dispersion and the fact that applications for new trademarks are mostly handled internally, participants with large portfolios can benefit from economies of scale.

Further considerations should be made by using the KPI without renewal costs, as they can only be influenced to a very limited extent by the trademark department management.

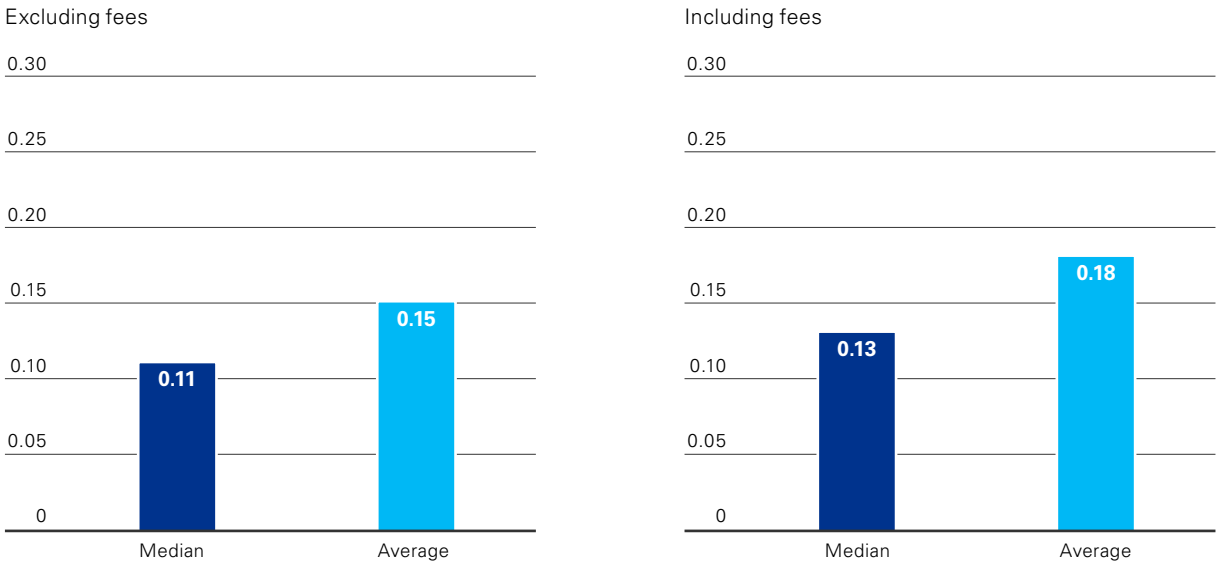
Figure 102:
Total costs trademarks to company revenue



Source: KPMG Law, 2023; figures in percent; external costs including application costs, without litigation and official fees

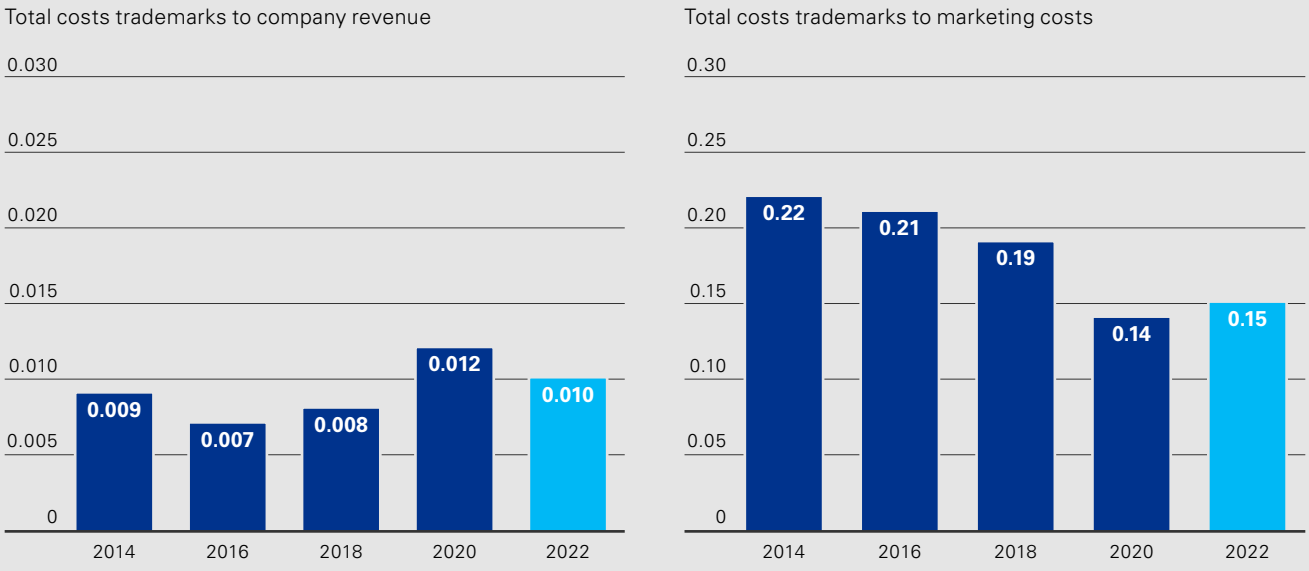
The analysis of the long-term trademark peer group signalizes a new trend. Since 2020, we observe a decrease in total costs for trademarks to company revenue and an increase in marketing costs (Figure 104).

Figure 103:
Total costs trademarks to marketing costs



Source: KPMG Law, 2023; figures in percent; external costs including application costs, without litigation and official fees

Figure 104:
Long-term trademark peer group: Total cost of trademarks to company revenue and marketing costs



Source: KPMG Law, 2023; figures in percent; excluding renewal fees and litigation

4.8 Costs per trademark

Section 3.11 of the report (Outsourcing practices of the trademark department, page 65) focused on the outsourcing practices of the participants in relation to typical trademark department tasks, such as quantifiable activities like "Advising marketing on trademark projects" and "Trademark applications", but also "Portfolio maintenance" and "Conflict management". The degree of outsourcing has a major impact on the total cost of providing trademark services, which can be seen by looking at the internal, external and total costs per trademark in Figures 105 to 107.

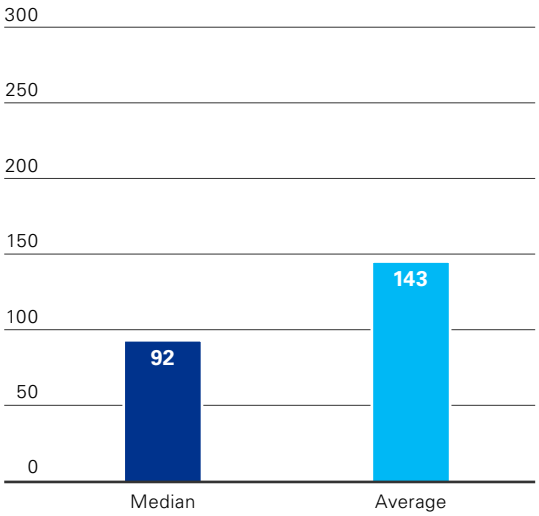
On average, the internal costs per trademark amount to EUR 143 (median: EUR 92) (Figure 105).

In addition, the degree of outsourcing greatly impacts the total cost of providing trademark services, which can be seen by looking at the external costs per trademark. The average external costs per trademark amount to EUR 101 (median: EUR 59). External costs that include renewal costs amount to EUR 152 (median: EUR 85) (Figure 106, page 91).

The average total costs per trademark amount to EUR 244 (median: EUR 153), including renewal costs EUR 296 (median: 175) (Figure 107, page 91). Greater cost efficiency per trademark is seen in healthcare, life sciences and pharmaceuticals (average excluding fees: 162, median: 148; average including fees: 191, median: 175).

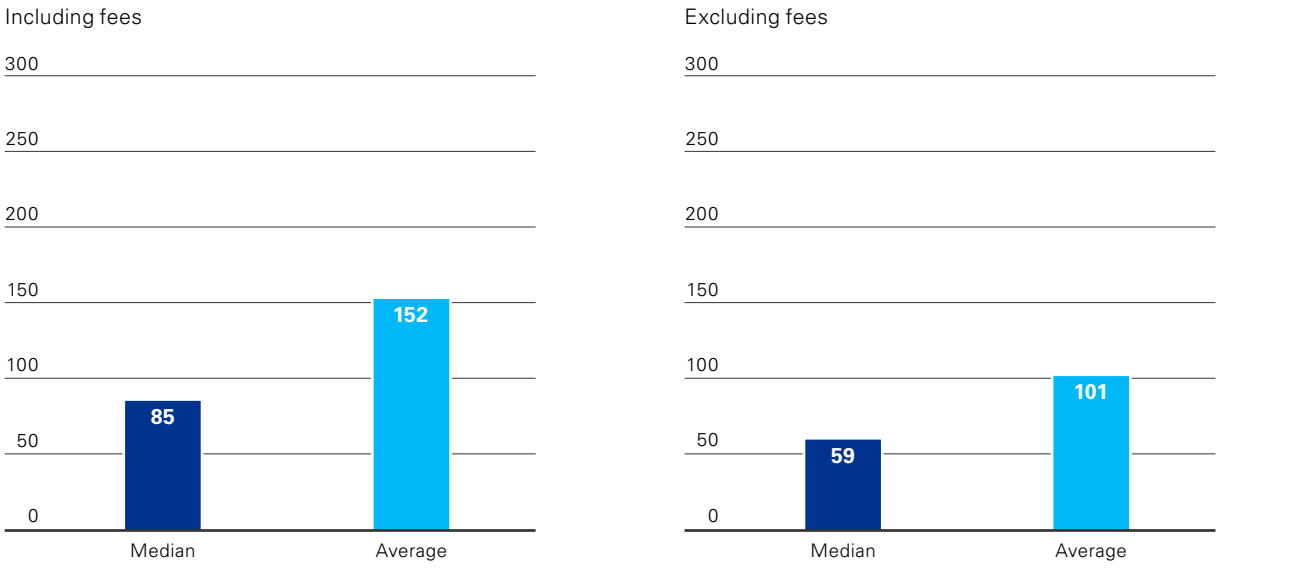
The long-term analysis of the trademark peer group indicates a decline in total costs, showing a decrease of 11 percent between 2020 and 2022 (Figure 108, page 92).

Figure 105:
Internal costs per trademark



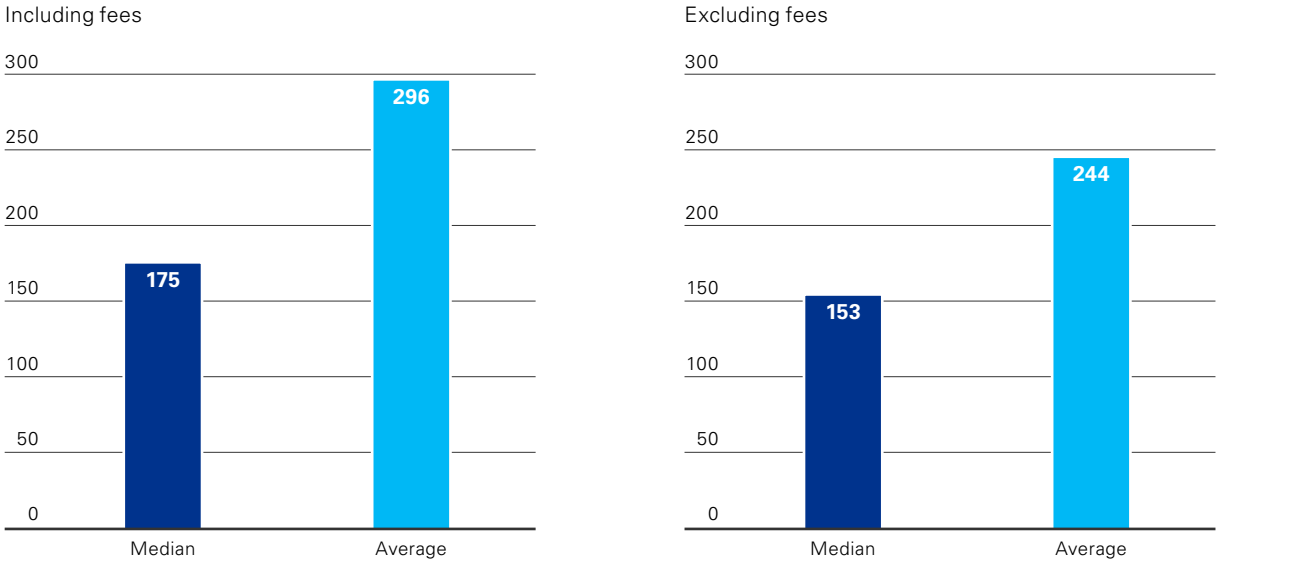
Source: KPMG Law, 2023; figures in EUR

Figure 106:
External costs per trademark



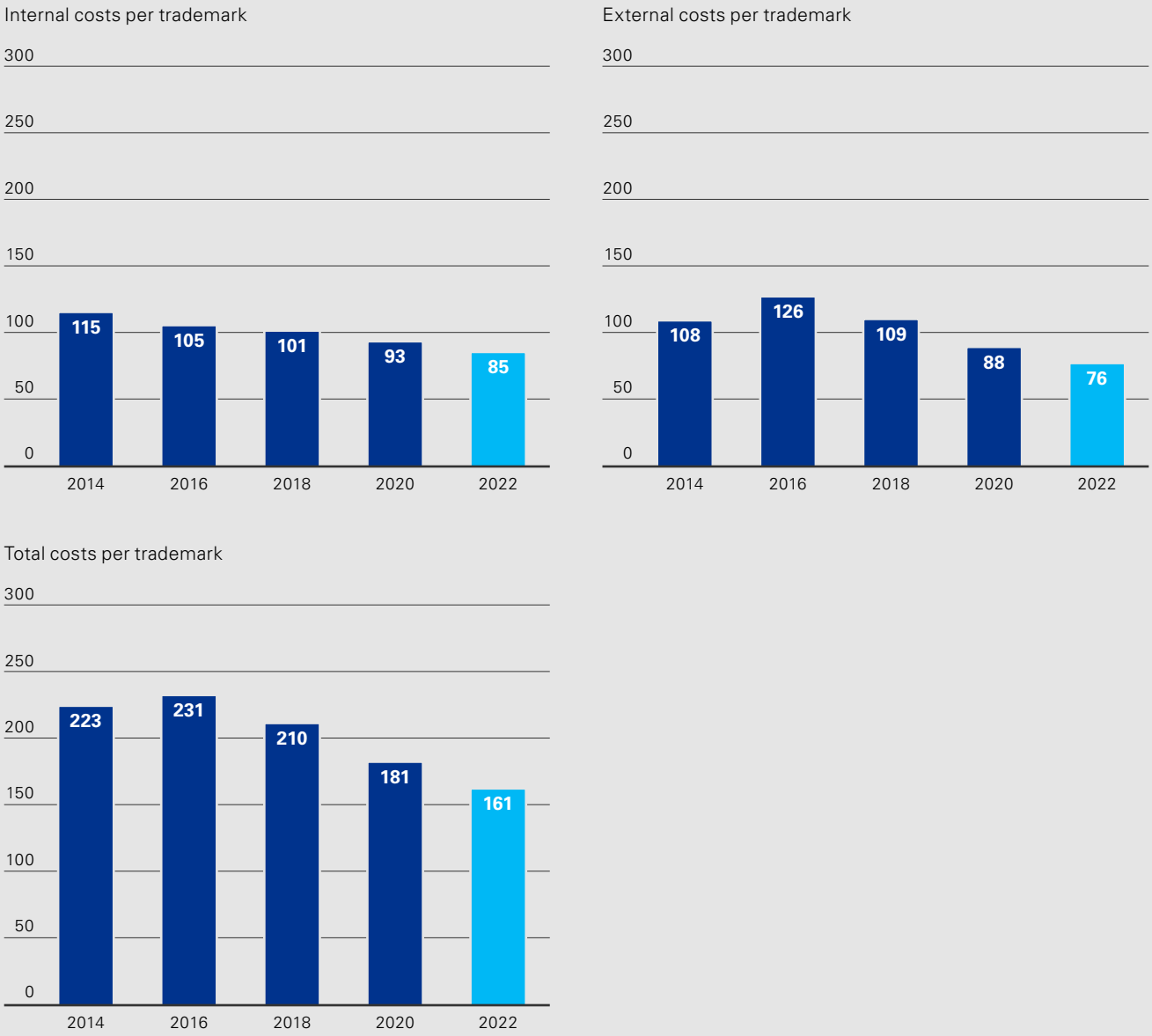
Source: KPMG Law, 2023; figures in EUR

Figure 107:
Total costs per trademark



Source: KPMG Law, 2023; figures in EUR

Figure 108:
Long-term trademark peer group: Costs per trademark



External costs excluding litigation and renewal fees

Source: KPMG Law, 2023; figures in EUR; average from 2020 to 2022

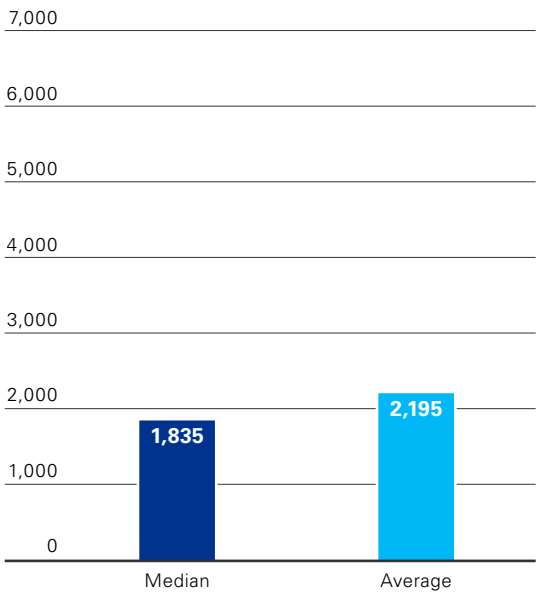
4.9 Collaboration with the marketing department

Having examined the activities in the trademark department, the next step is to undertake a comprehensive analysis of the collaboration between the trademark department and the marketing department. Since the R&D department influences the organizational and operational setup of the patent department as a key client, the trademark department is strongly linked with the company's marketing department.

On average, marketing costs per trademark family amounted to 2,195 (median: 1,835), while 6,083 in marketing costs (median: 4,247) were spent per new trademark (Figures 109 and 110).

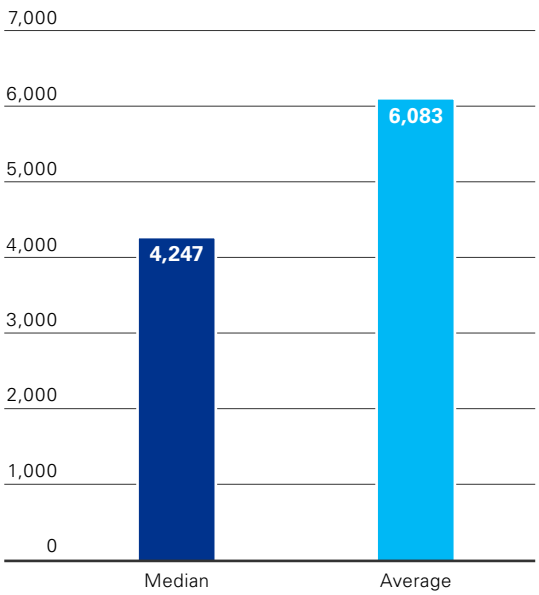
Due to the low geographic distribution and the fact that applications for new trademarks are mostly handled internally, participants with large portfolios showed enormous economies of scale.

Figure 109:
Marketing costs per trademark family



Source: KPMG Law, 2023; figures in TEUR

Figure 110:
Marketing costs per new trademark



Source: KPMG Law, 2023; figures in TEUR

4.10 Internal total costs per trademark professional

Previous analyses have shown that total costs increase with greater provision of external services. Particularly when deciding on how to allocate trademark tasks – either by handling them internally or outsourcing them – the head of the department must assess the total cost of in-house counsel versus the costs that would be incurred by engaging an external service provider. It is generally recognized that using in-house trademark professionals, e.g. attorneys, regularly has a cost advantage since no acquisition costs or sales and marketing costs are incurred. These can otherwise be significant if external providers are used. There is generally not much difference in costs for personnel, infrastructure and administration.

For the purpose of comparison, the internal total costs of participants have been divided by the total number of professionals. As with the patent department, the annual working time was calculated based on the following assumption: 220 working days of 8 hours per day and capacity utilization of 80 percent, resulting in approximately 1,400 productive billable hours per year.

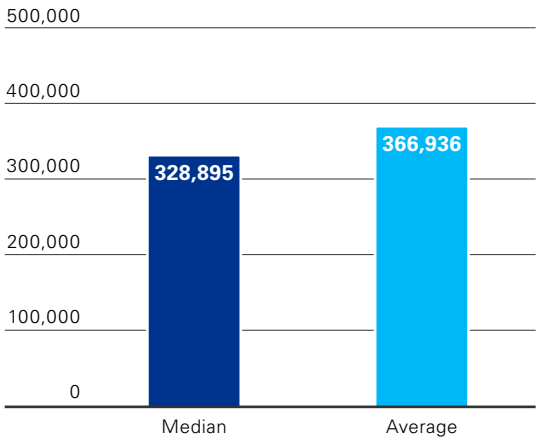
The total median cost per in-house trademark professional is EUR 366,936 (median: EUR 328,895) and the average hourly rate of an in-house trademark professional is EUR 262 (median: EUR 235) (Figures 111 and 112, page 95).

Internal total costs per trademark FTE amount to EUR 171,798 (average), respectively EUR 147,420 (median). That means that the median hourly rate of an internal patent FTE amounts to EUR 123 (average) with median EUR 105 (Figures 113 and 114, page 95).

It should be noted that although this number is influenced by the remuneration of each staff member, by allocating all internal costs to the number of trademark professionals, it is mainly influenced by the support ratio within the department.

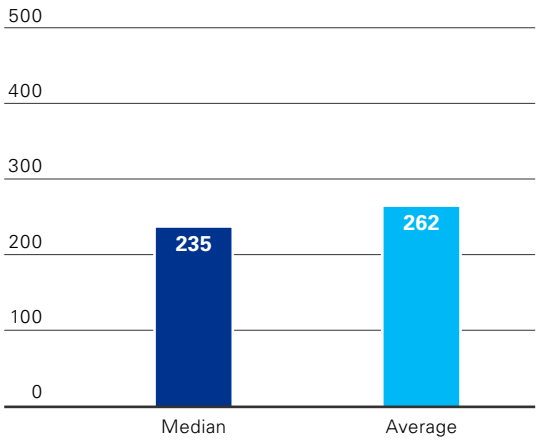
Within the long-term trademark peer group, the internal total costs per trademark professional in 2022 amount on average to EUR 374,166. Compared to 2020, that means an increase of 5.2 percent. Accordingly, the hourly rate per trademark professional increased by 5.1 percent to EUR 267. The internal total costs per FTE increased by 8.3 percent to EUR 173,691 which leads to an average hourly rate of EUR 124 (+8.3 percent) (Figure 115, page 96).

Figure 111:
Internal total costs per trademark professional



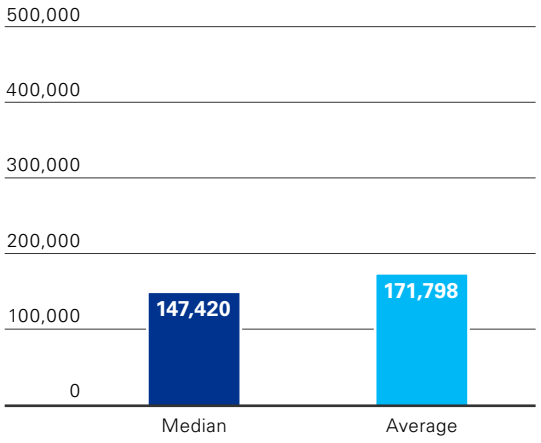
Source: KPMG Law, 2023; figures in EUR

Figure 112:
Hourly rate per trademark professional



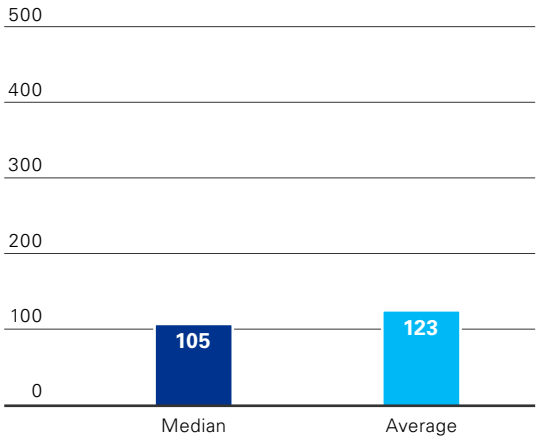
Source: KPMG Law, 2023; figures in EUR

Figure 113:
Internal total costs per trademark FTE



Source: KPMG Law, 2023; figures in EUR

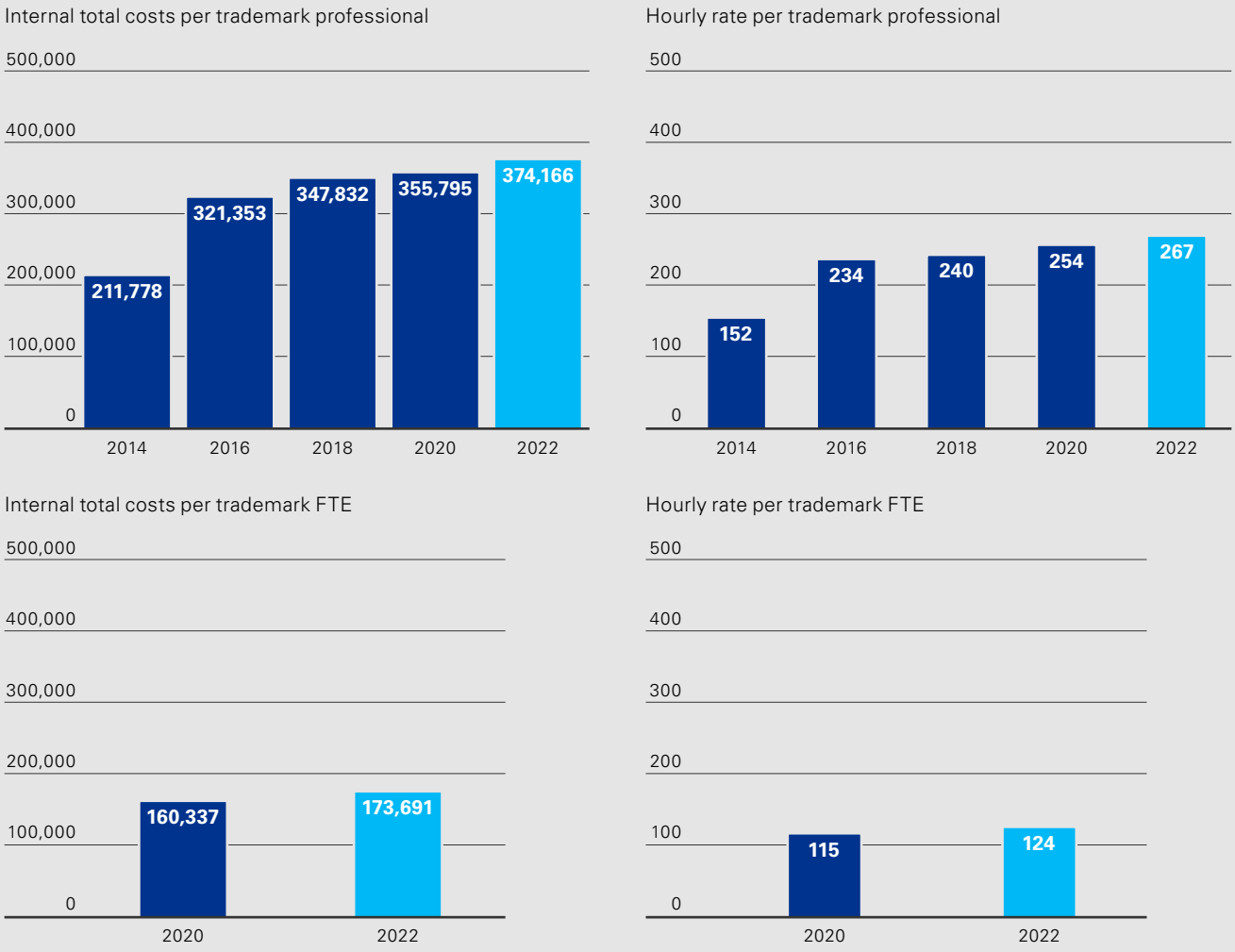
Figure 114:
Hourly rate per trademark FTE



Source: KPMG Law, 2023; figures in EUR

Figure 115:

Long-term trademark peer group: Internal total costs per trademark professional and trademark FTE



Source: KPMG Law, 2023; figures in EUR

4.11 Expected IP budget changes in 2022/23

Although the crisis triggered by the Covid-19 pandemic appears to have been largely resolved, political and economic insecurity has not diminished. Accelerating cost pressure has an ever-greater impact on all industry sectors. Rationalizations focus primarily on labor-intensive but low-skilled work. Levels and functions with high value creation are less affected by this tendency – or are even allowed to increase their budgets. This undoubtedly includes the IP department and its highly qualified staff, which secures the company's freedom to operate. Outsourcing to the greatest possible extent is only acceptable in exceptional cases, as relevant competencies are to be kept in-house.

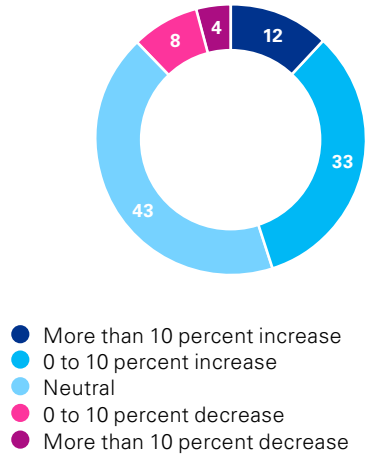
Participants were asked about their expectations regarding budget changes for intellectual property for 2022/23. This response is interesting, as about only 12 percent of participants assume a decrease in their budgets (2020/21: 44 percent), while almost four times as many (45 percent) expect budgets to increase (Figure 116).

12 percent of participants expect an increase of more than 10 percent and 33 percent anticipate an increase below 10 percent. In contrast, 8 percent assume that the decrease will be limited by 10 percent and only 4 percent believe it will be over 10 percent. However, 43 percent of participants expect no budget changes at all.

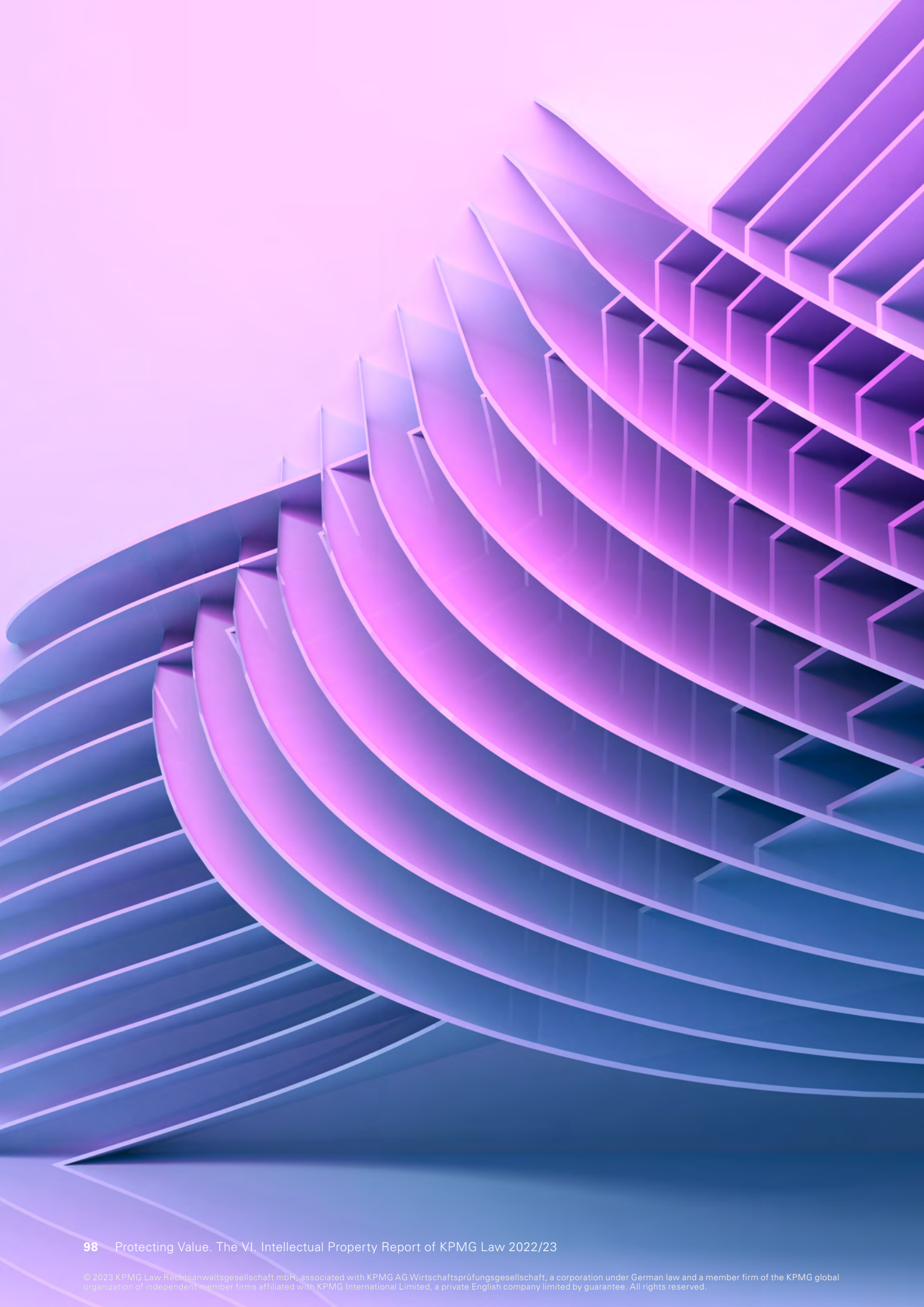
This paints quite a different picture compared to the 2020/21 results. It reflects the sigh of relief after the pandemic subsided and expresses cautious optimism. Almost half of participants have positive expectations for the business year lying ahead and its impact on the size of their budgets.

Across industries, the expectations are largely consistent: a budget increase is anticipated for automotive manufacturers and suppliers (67 percent), chemical manufacturing and processing (60 percent), electrical engineering and electronics assembly (58 percent) and healthcare, life sciences and pharmaceuticals (63 percent). Retail and consumer products are neutral.

Figure 116:
Expected IP budget in 2022/23



Source: KPMG Law, 2023; figures in percent



5 Tech and automation in IP departments

5.1 IT solutions in 2022/23

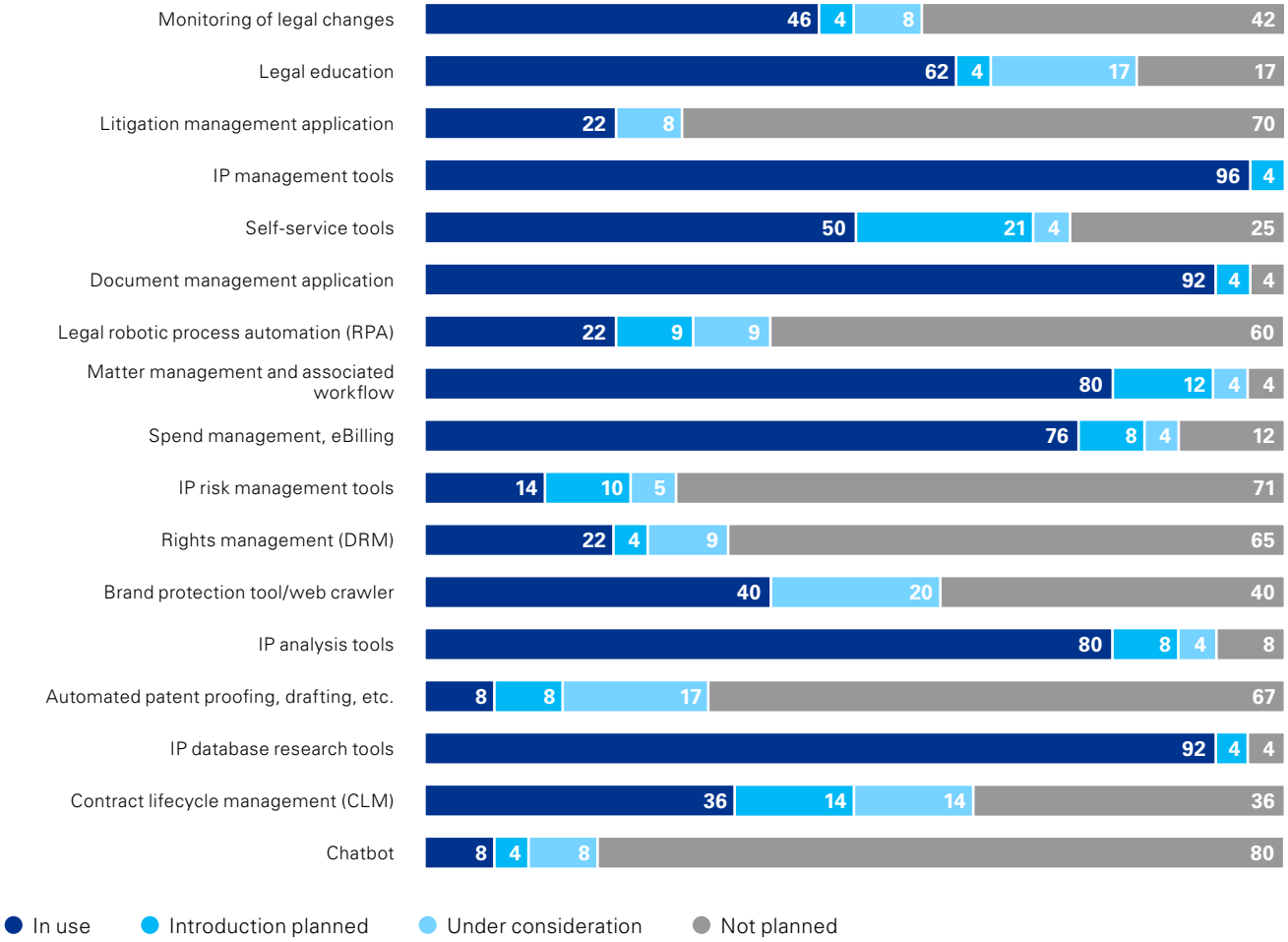
Automation and digitization only promise success if they are based on a precise needs analysis and a dedicated investment strategy. The use of tech and automation is likely to be of decisive help to IP departments in successfully mastering current and future challenges.

While the costs of acquisition, implementation, staff training and regular updates of IT solutions can be calculated quite accurately, the benefits are more difficult to quantify. It is therefore important to select application areas or solutions that are most likely to help the IP department. The following overview of the IT solutions already in use and those planned for usage shows what these are (Figure 117, page 101).

Almost all IP departments are acquainted with IP management tools (96 percent), IP database research tools (93 percent) and document management applications (92 percent). With regard to IP analysis tools (81 percent), matter management and associated workflow (80 percent), send management/eBilling (76 percent), legal education (63 percent) and self-service tools (50 percent), at least half of all IP departments already use high-tech solutions such as legal tech and automation.

In addition to contract lifecycle management (CLM), which 28 percent of the participants plan to introduce or at least consider investing in, self-service tools (25 percent) and legal education (21 percent), three further areas of activity can be identified for the future in which more tech solutions are likely to be used. High on the agenda are matter management and associated workflow (16 percent), IP risk management tools (15 percent) and DRM (13 percent). The use of chatbots and legal robotic process automation (RPA) is not yet planned by most IP departments.

Figure 117:
Use of IT solutions in 2022/23



Source: KPMG Law, 2023; figures in percent

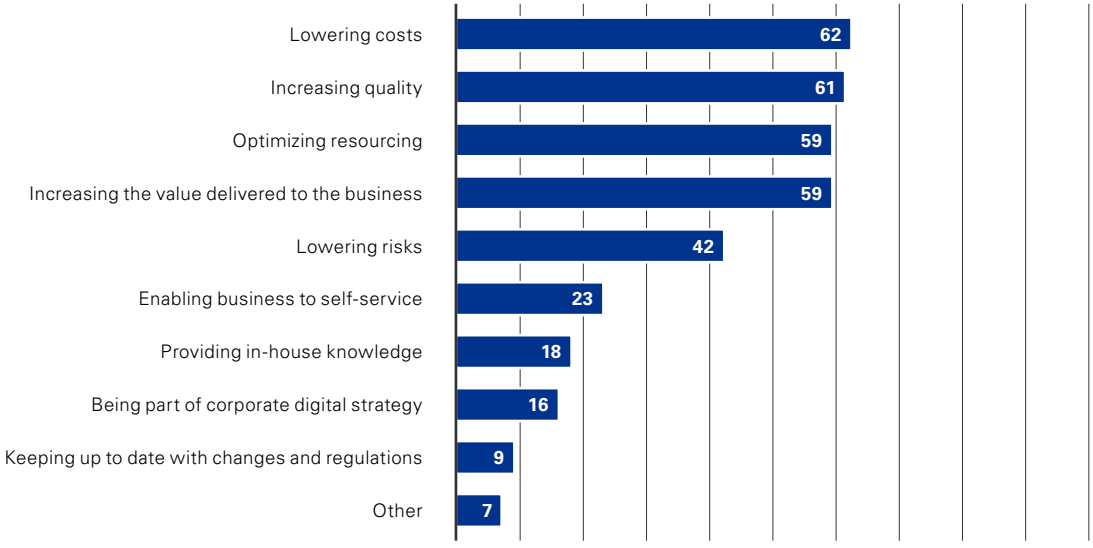
5.2 Drivers for technology investments

The fierce competition faced by companies is also leading to increased cost pressure in the IP departments. Hence, it is important to optimize the use of resources in order to make more efficient use of existing resources.

For more than three in five participants (62 percent), lowering costs is the imperative driver for technology investments. Almost as important are enhancing the quality (61 percent), optimizing resourcing (59 percent) and increasing the value delivered to the business (59 percent). 42 percent of respondents attach importance to risk minimization, and almost a quarter (23 percent) the intention of enabling business to self-service.

Further drivers for investments in technology and automation are being part of corporate digital strategy (16 percent) and keeping up to date with changes in regulation (9 percent) (Figure 118).

Figure 118:
Strongest drivers for technology investments



Source: KPMG Law, 2023; figures in percent; multiple answers possible

5.3 Expected cost reduction in 2022/23

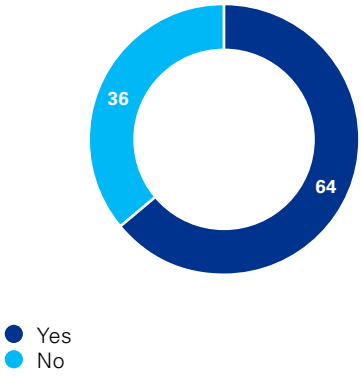
Tech and automation are important levers to increase the efficiency of the IP department and to improve their KPI. This is indicated not only by the current use of tech and automation, but also by the plans for future investments (section 5.1 – IT solutions in 2022/23, page 100).

Digitalization also plays a crucial role in the increasingly difficult task of recruiting specialists and managers. After all, talent is no longer won with a free coffee and fruit baskets. In the competition for qualified employees, there are various factors that make companies more attractive as employers. An important role in highly complex business fields like IP, is played by upgrading the workplace through high-tech and automation. Moreover, repetitive routine tasks are less enjoyable than solving tricky challenges. Digitization can make tedious tasks easier or take them over completely, allowing professionals to focus on more interesting topics.

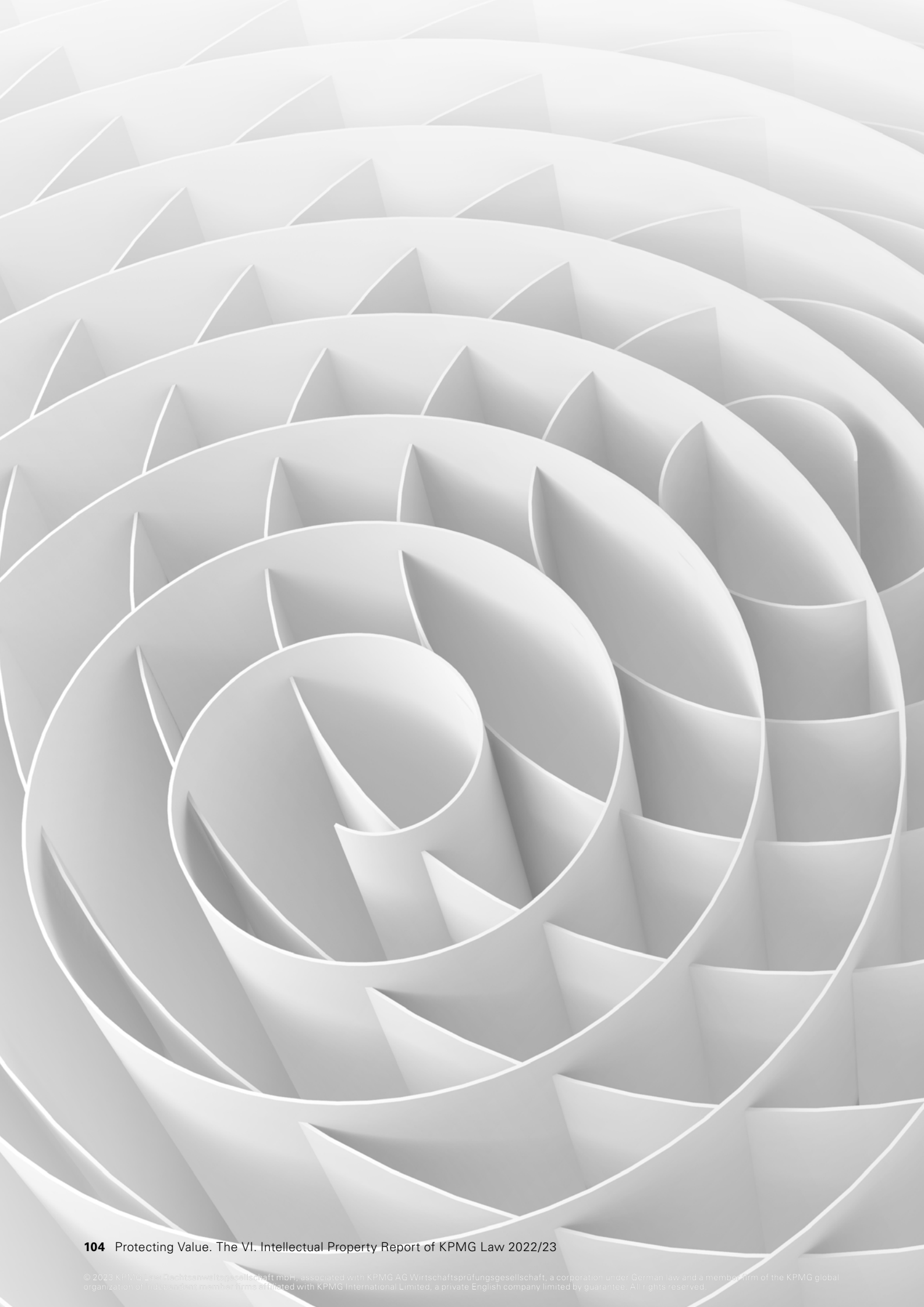
Digitization will not lead to a quantitative loss of jobs within the IP department, but to a change and broadening of work profiles. This is not a process that will take place in the future. It is already here. An indication of this is the increased number of support staff working in IP departments (section 2.7 – Allocation of employees levels within the IP department, page 31).

However, although the need to catch up on digitization in the company, reputation, employer attractiveness and other aspects are likely to play a role in the installation of IT solutions, their use is mostly based on a cost-benefit consideration. For the majority of participants, the assessment is positive. Almost two-thirds (64 percent) expect their costs to fall in 2022/23 due to the use of tech and automation (Figure 119). On average, 26 percent more efficient and faster processes can be observed, resulting in an average cost reduction of 8 percent of the total budget.

Figure 119:
Cost reduction through automation



Source: KPMG Law, 2023; figures in percent



6 Cooperation with law firms

6.1 Number of law firms in use

Large international IP departments rely on the service of many law firms worldwide, especially in the context of cross-border issues or those in countries that are not covered internally. However, if a certain threshold is exceeded with regard to the number of law firms, the time and effort required for information exchange, management, controlling and coordination is counterproductive for cost efficiency, especially in the absence of master agreements.

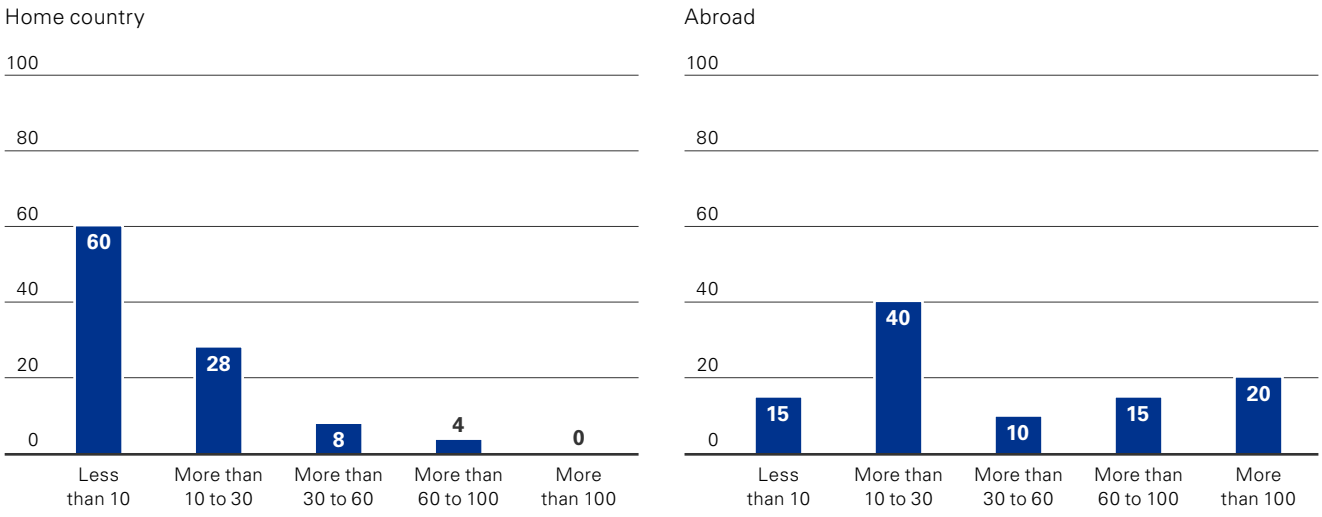
Participants were asked to assess the number of law firms worldwide with which they cooperate for their patent and trademark activities. Law firms with master agreements were only to be counted once, since coordination is usually less complex in this case; participants were also instructed to distinguish between domestic/local and international law firms.

The majority of participating patent and trademark departments cooperate with fewer than 10 law firms in their respective home countries (60 percent and 95 percent, respectively) (Figures 120 and 121, page 107).

Looking at the number of international law firms, the distribution is very similar for the patent and trademark departments; however, the majority of participants use up to 60 international law firms (65 percent for the patent department, 69 percent for the trademark department) (Figures 120 and 121, page 107).

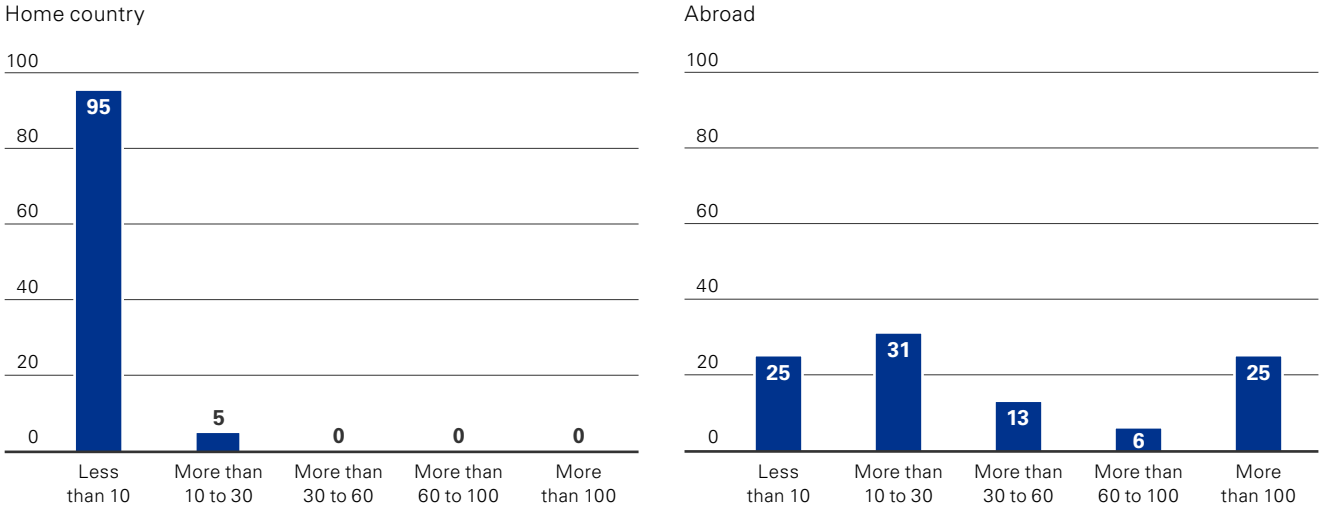
These results confirm some of the hypotheses made in the previous sections: Due to the low geographic distribution of trademark departments, most internal professionals are located in the home country, and therefore the use of law firms is very low.

Figure 120:
Number of law firms of patent department



Source: KPMG Law, 2023; figures in percent

Figure 121:
Number of law firms of trademark department



Source: KPMG Law, 2023; figures in percent

6.2 Reasons for outsourcing

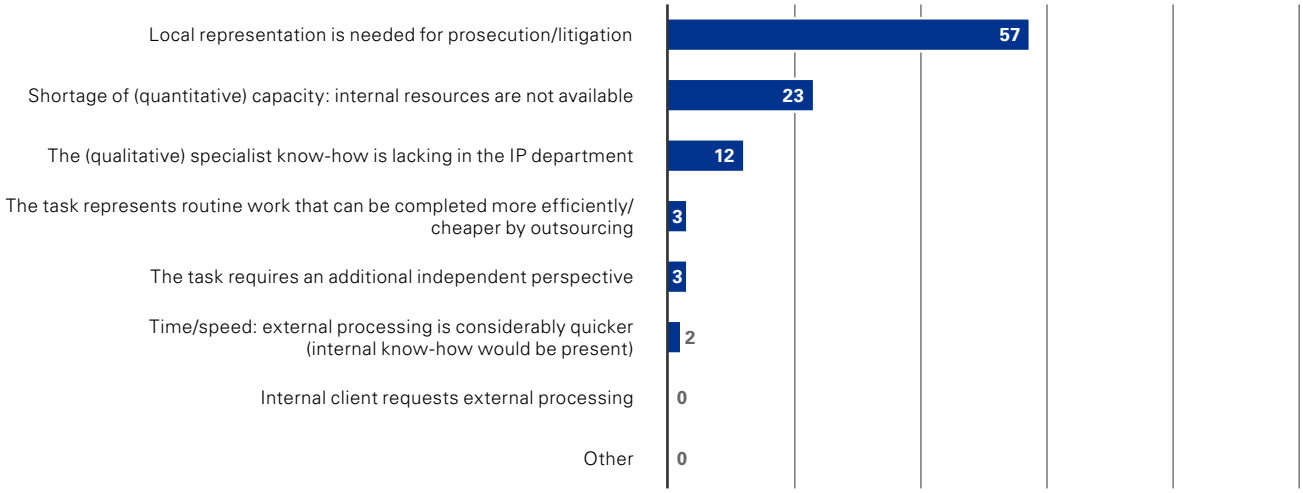
Each company has specific reasons for outsourcing patent and trademark tasks to law firms. It may be driven by a lack of local representatives, internal resources in terms of quantity or quality, or by economic reasons when it comes to standardized issues, as those can sometimes be handled even more inexpensively or quickly by outside professionals. Outsourcing with the aim of obtaining a second opinion, or due to a client request, should be treated with caution, since this could have a serious impact on the reputation of the in-house IP department.

In order to assess the current reasons for outsourcing, participants were asked to indicate the extent to which seven given reasons for outsourcing played a role in their make-or-buy decision.

The most important reason for outsourcing is the need for a local representative for prosecution/litigation (57 percent), followed by the quantitative shortage of internal resources (23 percent). The high percentage for the first category correlates with the hypothesis from section 4.1 – Cost allocation of the patent department (page 74), which anticipates that the more countries the company is active in, the higher the external costs tend to be, due to the inevitable need for a local representative in regions without internal coverage. The third-ranking reason for outsourcing, a lack of qualitative expertise in the IP department, is 12 percent. The remaining four categories are far less important reasons for outsourcing. Respondents indicated that they delegate an average of 3 percent of tasks due to the need for an independent perspective. It can be assumed that even when the process is outsourced, the internal department was most likely already heavily involved in the request.

Only 5 percent of respondents indicated that they outsource certain tasks because doing so is more economical (at an average rate of 3 percent) or quicker (2 percent). No respondents mentioned that tasks are outsourced due to an internal client request (Figure 122).

Figure 122:
Reasons for outsourcing to law firms



Source: KPMG Law, 2023; figures in percent

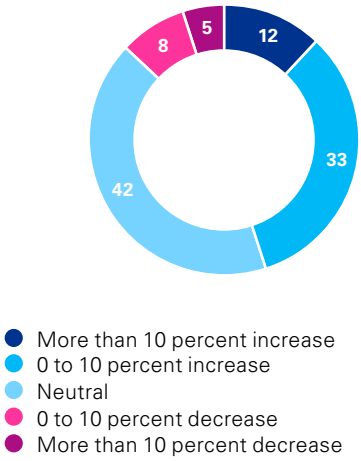
6.3 Expected changes in the engagement of law firms in 2022/23

Participants were asked about their expectations regarding changes in the engagement of law firms in 2022/23.

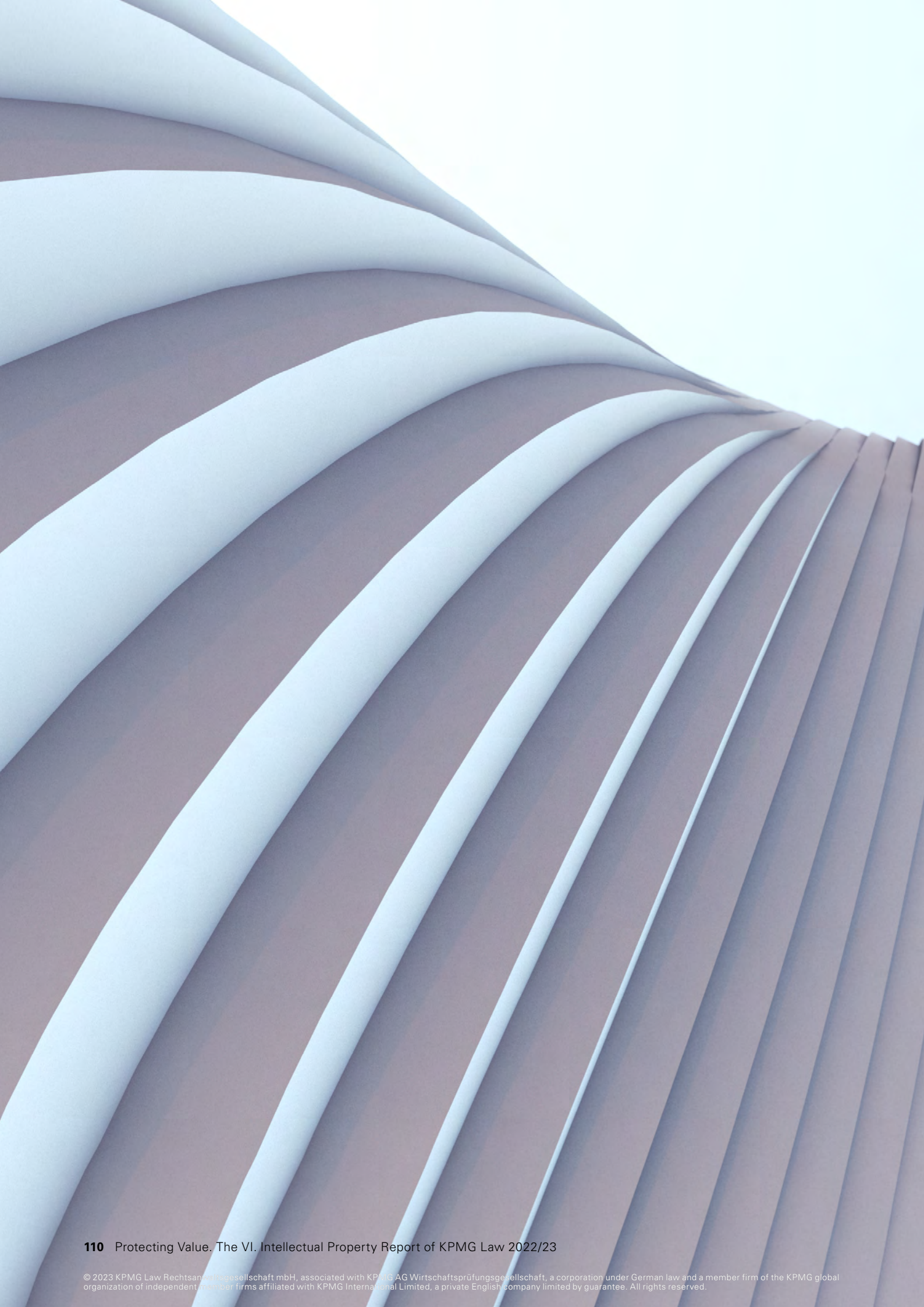
Compared to the 2020 results, the picture has changed significantly: Two years ago, only 20 percent of Heads of IP estimated engagement to increase. Now 45 percent expect a rise in engagement, with 12 percent anticipating an increase of more than 10 percent while 33 percent expect an increase of up to 10 percent. Two years ago, one out of three participants thought that the engagement of law firms would decrease. This was most likely due to Covid-19 and the subsequent necessity to reduce costs. In contrast, for 2022/23 only 13 percent expect a decrease, with 8 percent anticipating a decrease of up to 10 percent, while 5 percent think it will exceed 10 percent. However, 42 percent of participants expect no changes at all (Figure 123).

There are also some differences among the industries: The overwhelming majority in retail and consumer products expects an increase of more than 10 percent in the engagement of law firms. The automotive manufacturers and suppliers also mainly estimates an increase, but only of up to 10 percent. Expectations in chemical manufacturing and processing are less clear. While some also expect an increase, others remain neutral or even estimate a decrease. The majority of participants in healthcare, life sciences and pharmaceuticals either see no change at all or a decrease of up to 10 percent.

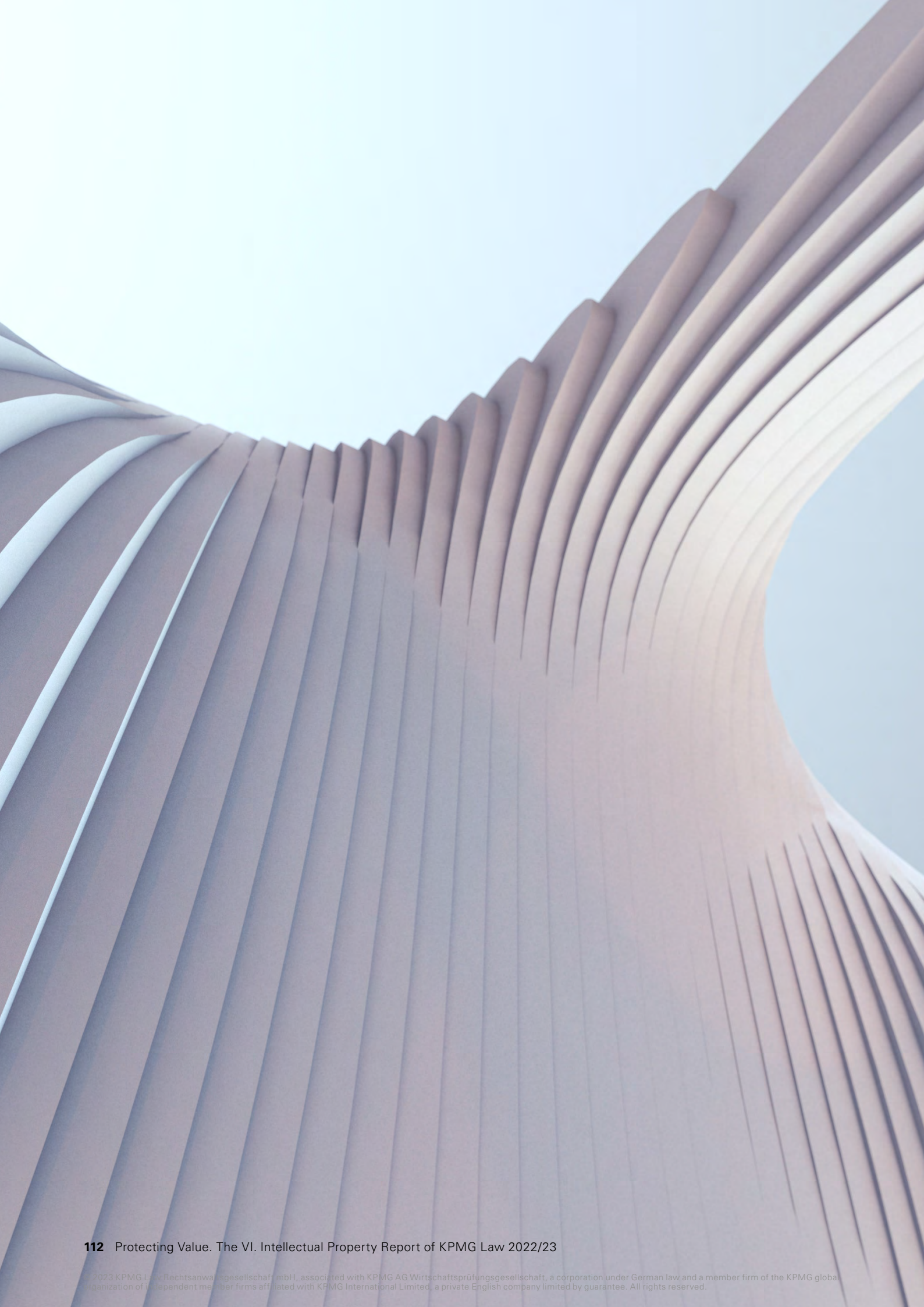
Figure 123:
Expected changes in the engagement of law firms in 2022/23



Source: KPMG Law, 2023; figures in percent



7 Excursus: The qualitative edge



Introduction

With the evaluation of "The VI. Intellectual Property Report of KPMG Law", many insights can be gained with relevance to the development, structure, strategy and performance of the IP department. This allows for a quantitative analysis in terms of the impact that the organizational structure of an IP department, its sourcing strategy and many other elements have on its internal and external spend and performance.

While this provides a foundation and deeper understanding for Heads of IP to question and review the current structure and strategy of their IP department, a qualitative analysis regarding the impact of these decisions on the patent portfolio is currently missing. In order to fill in this gap, KPMG Law has teamed up with LexisNexis® Intellectual Property Solutions, leveraging their IP intelligence solution, PatentSight®. Combining our extensive database with their proprietary and transparent metrics to evaluate patent relevance provides the foundation for this qualitative review.

Within this detailed discussion, we present three preliminary results that we believe to be of interest, with relevance to growing the database further, looking at long-term effects and further verifying our proposed hypotheses. As can be seen in the following section, many of our tested hypotheses did not lead to conclusive and specific results. In the next few publications of the Intellectual Property Report, we will be able to explore these findings in greater detail, review their evolution over time and develop new theories.

We look forward to discussing these findings with you.

7.1 Development of the Competitive Impact of the patent portfolio per country

LexisNexis® PatentSight® has developed a set of patent indicators to more accurately measure the quality and strength of patents. The scientifically proven and published Patent Asset Index methodology indicates the aggregate portfolio strength of all patents contained in a portfolio. The quality of each individual patent is measured by its Competitive Impact, which consists of two dimensions: Technology Relevance and Market Coverage.

Technology Relevance is based on forward citations. However, it benchmarks these citation figures for common fallacies impeding the usability of forward citations. It adjusts forward citations as a result of variations in citation practices by different patent offices and in different fields of technology, as well as for varying patent ages. Technology Relevance identifies whether patents and the inventions and technologies protected by those patents will find application and use in the future.

Market Coverage indicates the size of the global market that is protected by a patent family and its patent rights. An invention has greater business value if the patent rights cover more international markets. Market Coverage is measured as the size of the markets in which a patent family is protected when benchmarked against the world's largest national market – the USA.[1] Consolidating these two dimensions allows us to measure the Competitive Impact of each individual patent in relation to all other patents in the same field. A value of three means, that the patent is three times more important than the average patent in the same field.[2] By combining the geographic scope of protection and impact of patents, it is ensured that high quality patents must be implementable in large markets and find a high level of future use.

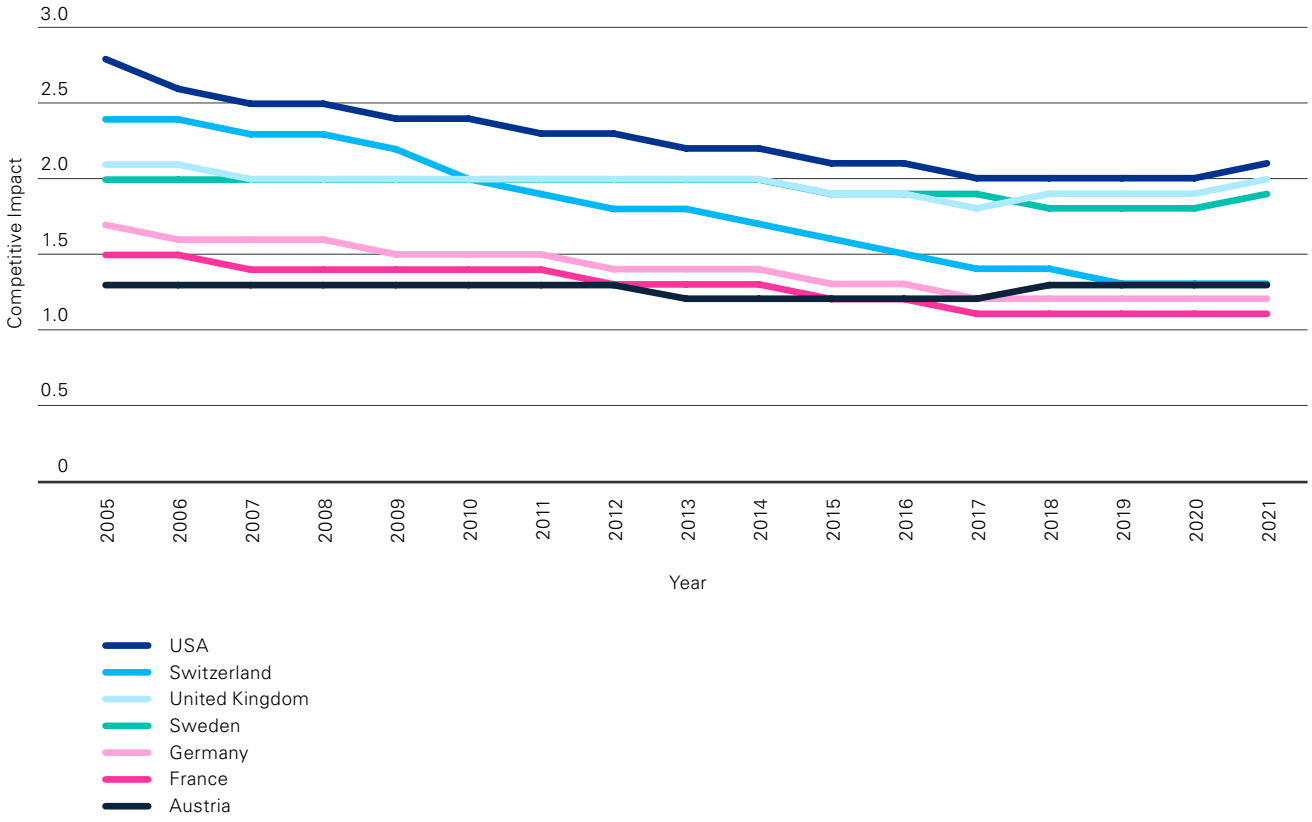
To be able to assess how the various home bases of the respondents in our report have developed overall in terms of their national patent portfolio since 2005 and whether a clear trend can be seen, we observed the evolution of their Competitive Impact. Contrary to expectations and the strong lead of the USA in 2005, it is remarkable that all countries had managed to close the gap in recent years.[3] Not because of their own strength, but due to the gradual decline of the two leading countries: the USA and Switzerland. This time, however, it's a different story.

The gap has widened again. In terms of Competitive Impact, three out of seven countries[4] are on the rebound. Both the USA and the United Kingdom increased their Competitive Impact since 2020 from 2.0 to 2.1 and 1.9 to 2.0 respectively. Sweden is also clearly back on track. With 1.9, it has almost regained its strength from before 2014 (Figure 124, page 115).

The largest decline since 2008 can be seen in Switzerland, which went from a Competitive Impact of 2.4 in 2005 to just 1.3 in 2021. Germany, Austria and France have remained relatively stable, but have not managed to increase their Competitive Impact over the past year.

1 Ernst, H./Omland, N.: The Patent Asset Index – A new approach to benchmark patent portfolios. In: World Patent Information, 33 (1) 2011, pages 34 – 41
2 For more information: ibid.
3 For all countries measured according to priority patent families
4 All countries referring to countries of participating companies

Figure 124:
Development of Competitive Impact of the patent portfolio per country



Source: LexisNexis® PatentSight®, 2022

7.2 Performance of the patent portfolio in relation to the share of R&D FTE

In a previous section (4.4 – R&D costs per invention disclosure and first filing, page 81), we proposed the hypothesis that a higher number of FTEs in R&D per patent professional leads to a decrease in the rejection rate (proportion of unfiled invention disclosures), which in turn reduces costs. The rationale behind it being that having more time for each R&D officer would lead to better integration in strategy and risk processes and allow better management of R&D activities at an earlier stage, thus avoiding unnecessary resource investments.

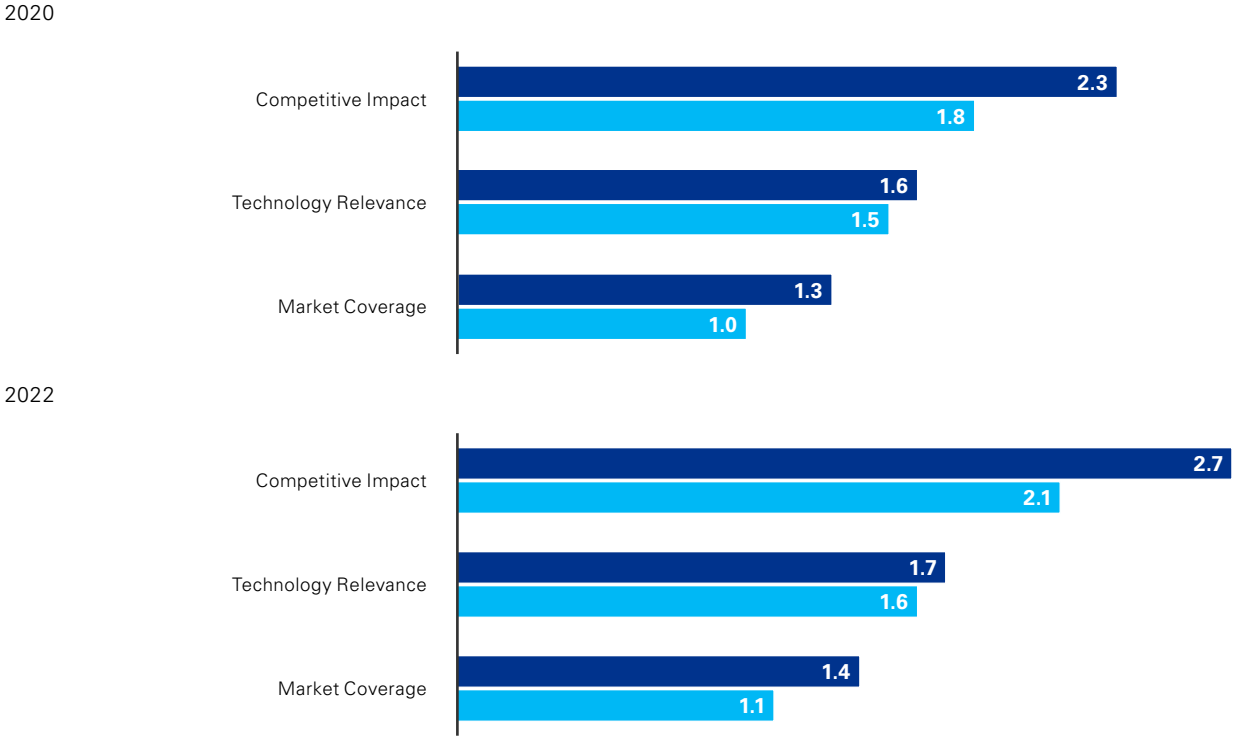
This is, however, merely from a cost perspective and does not lead to insights about the quality and relevance of the patent portfolio. In order to gain more clarity on this, we divided our participants into two groups: those with a low proportion of R&D FTEs in relation to their patent professionals and those with a high proportion. When looking at the Competitive Impact, which combines the dimensions Technology Relevance and Market Coverage (section 7.1 – Development of the Competitive Impact of the patent portfolio per country, page 114), it is remarkable that those with low R&D FTEs per patent professional have better Competitive Impact, Technology Relevance as well as Market Coverage than those with a high ratio (Figure 125, page 117).

One explanation might be that the patent department is able to be more involved and spend more time on strategic discussions. In general, we notice a shift in the work of the IP department from mere administration and management of the portfolio to actual strategic involvement and advising of business departments.

Furthermore, the better performance may indicate that a lower ratio of research staff could not only reduce costs in R&D investments, but also increase the quality of the patent portfolio.[5] Of course, it is of great importance to realize that these results may be strongly influenced by other criteria, such as divergent patenting strategies or the industries in which these companies operate. This will be examined in greater depth as the database grows and our analysis continues in future publications. This current outcome, however, provides us with a first indication toward the confirmation of our hypothesis. We are very interested in hearing your thoughts on this, so please let us know.

5 Only patents that have received a citation are considered in the analyses.

Figure 125:
Performance indicators in relation to the R&D FTE ratio



Source: LexisNexis® PatentSight®, 2022

7.3 Performance of the patent portfolio in relation to the insourcing ratio

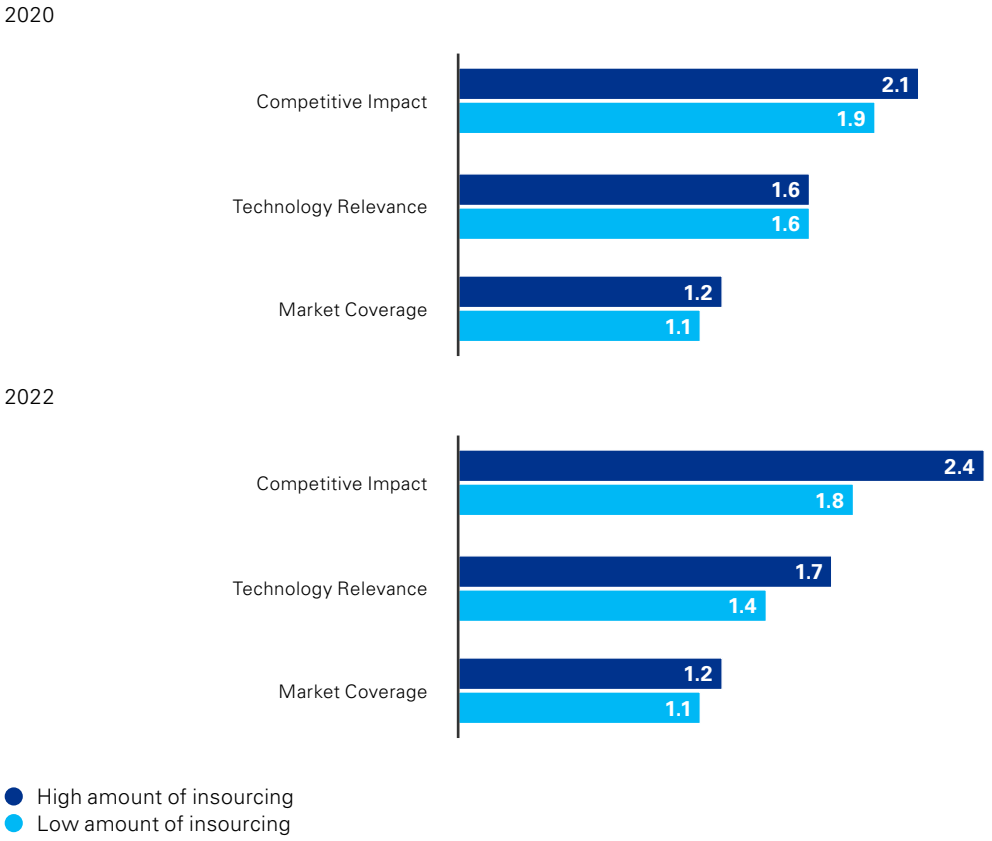
Since the launch of the KPMG Law Intellectual Property Report in 2012, we have observed a trend toward stronger insourcing, resulting this year in a rate of 54 percent, compared to 46 percent for outsourcing[6]. From a cost perspective, greater insourcing appears to reduce the overall cost per patent (section 4.3 – Costs per patent, page 78). Just as in the previous section, we were interested in examining the qualitative impact of this insourcing trend.

Those respondents with a low insourcing ratio show a significantly higher Competitive Impact, which can be attributed to higher Technology Relevance and greater Market Coverage (Figure 126, page 119). This continuing trend can be interpreted as a conscious decision to file own technologies on a larger geographic scope. Furthermore, when considering the number of attacks in relation to the insourcing ratio, we observe an overall lower number of attacks among respondents with a tendency to keep many tasks in-house as compared to those who mandate a high percentage of external law firms. When setting this proportion of attacks in relation to the overall patent portfolio, it can be perceived that at 3.5 percent for those with a high insourcing ratio, a more moderate impact is present than in comparison to the 3.6 percent for those with a high outsourcing ratio[7] (Figure 127, page 119). However, we noticed that the share of attacks per patent family increased. Still, those who tend to keep more tasks in-house still seemed to have less attacks.

It must be emphasized that these results are liable to reflect other factors, such as company size: Large multinational firms often have to outsource more tasks due to differences in local jurisdictions, as well as a higher number of litigation processes and failing rights of representation. Due to their size and international presence, it is likely that they are more inclined to have higher Market Coverage and the results presented here are merely a reflection of these considerations. What other elements do you think play a role in these results? We look forward to discussing these findings with you and further developing this analysis.

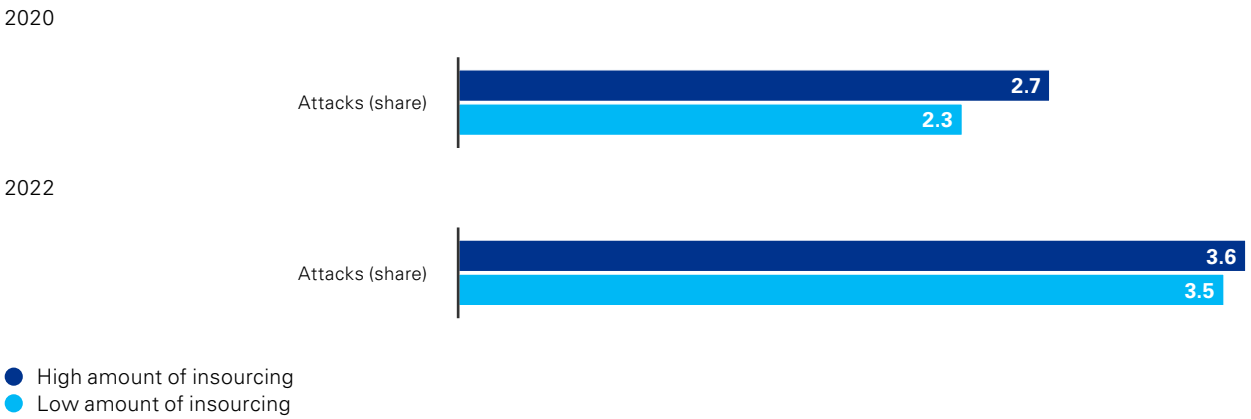
6 Excluding annual fees
7 Only patents that received a citation are considered in the analyses.

Figure 126:
Performance indicators in relation to insourcing ratio



Source: LexisNexis® PatentSight®, 2022

Figure 127:
Attacks in relation to insourcing ratio



Source: LexisNexis® PatentSight®, 2022

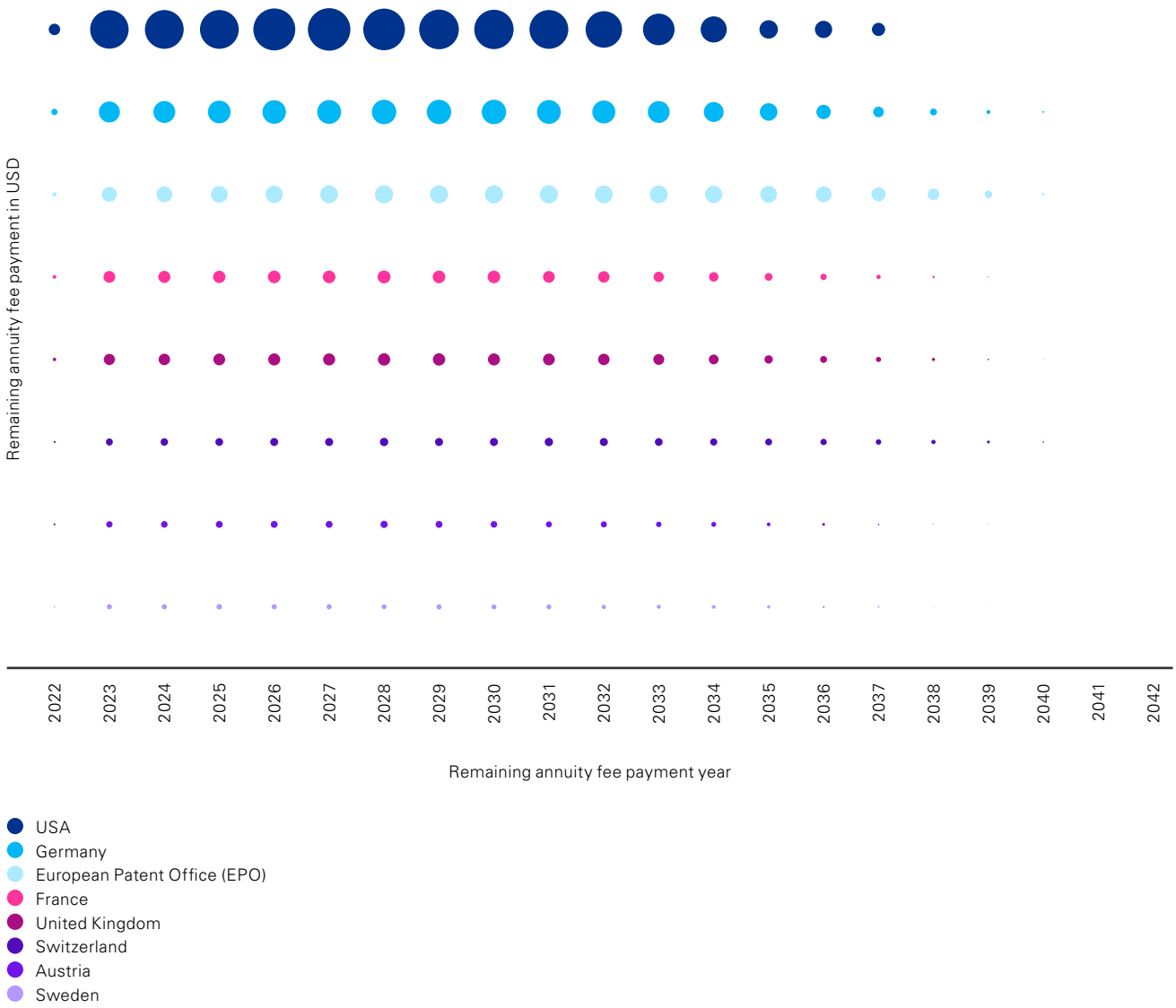
7.4 Annuity fee costs per country

In order to provide an overview of annuity fee costs per country, the following graph (Figure 128, page 121) depicts the main countries[8] within our pool of participants in which companies can still expect annuity fees in the coming years. It also helps indicate the minimum revenue streams that must be generated in the coming years in order to break even with regard to the expenses incurred by active patents. In addition, it delivers valuable information on where to apply leverage for active portfolio management. In the graph, potential new patent families are not assessed, leading to the bubbles fading over time.

We also looked at the differences in annuity fees for the group that has a high insourcing ratio compared to those with a low insourcing ratio. We found no significant differences in outstanding annuities and therefore no basis for a cost strategy with regard to the sourcing strategy.

8 On the basis of the calculation by PatentSight®, the European Patent Office has been to the depicted list of participant countries.

Figure 128:
Annuity fee costs per country and year[9]



Source: LexisNexis® PatentSight®, 2022; figures in USD

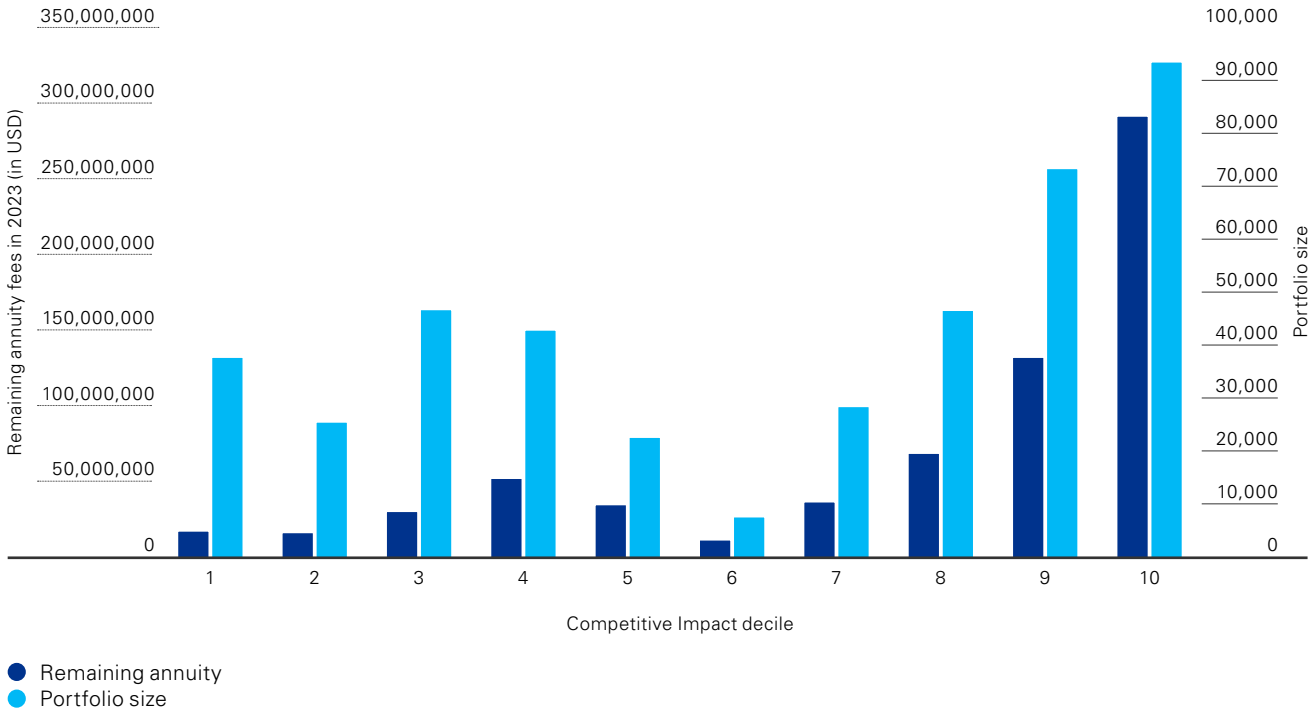
9 Note: This chart focuses on participant countries and the annuity fees due at their patent offices for the currently active patent portfolio. New patent families have that have not yet been filed are not included, causing the bubbles to fade out over time.

7.5 Annuity fees saving potential for 2023

We analyzed the remaining annuity fees that are still outstanding for 2023. In order to do so, we split up all patents of all participants with regard to their Competitive Impact (section 7.1 – Development of the Competitive Impact of the patent portfolio per country, page 114) in ten deciles.

Patents that lie below the fourth decile of Competitive Impact should be reviewed in order to ensure a cost strategy that takes the quality of the patent portfolio into consideration (Figure 129). However, it must be emphasized that this strategy needs to be examined in detail. Not all patents below the fourth decile of Competitive Impact should be excluded automatically. But in theory, this could lead up to an overall cost saving of EUR 114 million for 2023 for the four lowest deciles for all participants. This figure does not take into account further cost savings in the foreseeable future, as no annuity fees would have to be paid for these patents in 2024 and beyond.

Figure 129:
Annuity fees saving potential for 2022



Source: LexisNexis® PatentSight®, 2022

Why LexisNexis® PatentSight®?

LexisNexis® PatentSight® has developed software as a service (SaaS) and data solutions to understand the innovation space, enabling its customers to benchmark their innovative strength, analyze individual patents or technologies – or even forecast trends and create what-if scenarios. Many Fortune 100, over half of the DAX and dozens of Nikkei companies work with LexisNexis® PatentSight®, often even utilizing the data in their investor communications or annual reports. LexisNexis® PatentSight® has not only solved the underlying problems of patent data, it also made it easily accessible, analyzable, and ultimately actionable.[10]

10 See also LexisNexis® PatentSight® white paper "A Handbook for Patent Data Quality. The Prerequisite for Reliable Patent Analytics"

List of abbreviations

AI	Artificial intelligence
Americas	North and South America
APAC	Asia-Pacific Economic Cooperation
B2B	Business-to-business
CEO	Chief Executive Officer
CLO	Chief Legal Officer
CTO	Chief Technical Officer
DAX	Deutscher Aktienindex (German stock index)
EMEA	Europe, Middle East, Africa
EPO	European Patent Office
EU	European Union
EUR	Euro
EUTM	European Union Trademark
FTE	Full Time Equivalent
FTO	Freedom to Operate
IP	Intellectual Property
IR	International Registration
IT	Information Technology
KPI	Key Performance Indicator
M&A	Mergers and Acquisitions
OHIM	Office for Harmonization in the Internal Market
PCT	Patent Cooperation Treaty
R&D	Research and Development
SaaS	Software as a Service
TEUR	Thousand Euro
WIPO	World Intellectual Property Organization

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Questionnaire

"Protecting Value – The Intellectual Property Report of KPMG Law" addresses IP departments of globally operating companies in the field of intellectual property and was evaluated in summer 2022. This global benchmarking initiative provides valuable insights into the most crucial aspects of managing an efficient and modern IP department. It includes questions on the organization of IP work, IP department activities, trends and development costs as well as cooperation with law firms. To ensure the reliability of the results, the questionnaire was developed in consultation with an advisory board of 16 IP experts from renowned companies.

Are you interested in learning more? Please scan the QR code below or contact us directly.

Would you like to take part in the next evaluation? Please scan the QR code below.

https://kpmg-law.de/rechtsgebiete-uebersicht/protecting-value/

Notes

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