

Quality Report 2024

Annex to the Annual Review



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Executive summary

The granting of high-quality European patents is built on the strong foundations of the European Patent Convention (EPC), the deep expertise of our highly skilled staff, supported by the development of new tools as well as the partnerships we build. In 2024, the EPO launched the Strategic Plan 2028 (SP2028), in which sustainability moved from being a goal to being *the* goal, based on five drivers: people, technologies, high-quality products and services, partnerships and financial sustainability.

The EPO's highly skilled staff are key to delivering our goals. In 2024, we recruited 146 new professionals, including 111 examiners. We also invested in supporting our staff to develop and update the skills they need through continuous learning, investing in over 50 000 hours of training in the patent granting process (PGP) and enhancing the new examiner academy.

The EPO is unique amongst offices in having a division of three examiners at examination and opposition stages in the PGP. Since November 2023, the three-person division is systematically applied to every file at the search stage. We expect this to have a positive impact on the quality and consistency of searches and written opinions.

We must embrace technologies and enrich our databases to support our staff throughout the PGP. During 2024, our database of patent documents grew to 160 million and our non-patent literature collection increased by 18 million to 197 million documents, including over 5.5 million standards-related documents. Navigating these enormous databases requires cutting-edge search tools; in 2024 we fully transitioned to ANSERA and retired the legacy Epoque system.

Real-time collaboration through MyEPO has improved both the quality and timeliness of interactions with applicants and in 2024 we reached 100% adoption of the Mailbox for digital communication. In May we launched the Legal Interactive Platform (LIP), an AI-based legal assistant: it was used for 33 000 staff queries in the first eight months and was released to MyEPO users in early 2025.

High-quality and timely products and services are built on transparency. Each year, the Office comprehensively reviews our quality performance, to inform the Quality Action Plan. To further improve transparency, the EPO Quality Action Plan 2024¹ was published externally for the first time and received positive feedback from users.

Alongside the Quality Action Plan, we also developed a new EPO quality dashboard² which enhances transparency for stakeholders by providing clear data on quality targets and performance.

¹[epo.org/en/news-events/news/quality-action-plan-2024#:~:text=Our%20Quality%20Action%20Plan%202024,of%20Appeal%20\(BoA\)%20outcomes.](https://epo.org/en/news-events/news/quality-action-plan-2024#:~:text=Our%20Quality%20Action%20Plan%202024,of%20Appeal%20(BoA)%20outcomes.)

² epo.org/en/about-us/services-and-activities/quality/quality-dashboard.

By focusing on quality at every stage of the PGP and monitoring quality through multiple lenses, we secured a number of improvements in 2024.

We enhanced formalities processes, with better handling of sequence listings and requests for oral proceedings. We achieved 93.3% compliance in formalities quality checks, exceeding the SP2028 target of $\geq 90\%$. With the support of AI-based pre-classification, we reached over 90% accuracy in routing incoming applications to the correct technical areas. During the year, we also fully classified nearly 700 000 documents and reclassified nearly 18 000 document families with the assistance of an AI-based tool to implement three Cooperative Patent Classification (CPC) updates.

In search and written opinion, we enhanced early collaboration for 260 000 search products under Active Search Division (ASD). Since November 2023, every application is routed via the prospective three-person examination division already at the search stage. This is our commitment to excellence, leading to improved written opinion quality. Relevant prior art was cited in 83.7% of search reports and non-patent literature in 28% of search reports. The Directorate Quality Audit (DQA) found that the proportion of searches with no findings related to validity was at over 92% and the number of invalid objections in written opinions fell from 11.5% to 6%.

High-quality examination is about delivering legally robust, thorough and consistent decisions based on constructive engagement with applicants throughout the PGP. In 2024, the number of granted files with no findings related to validity in our quality audits was over 87%. Furthermore, 78% of respondents in our User Satisfaction Survey 2022/2023 rated the examination phase as good or very good. In 2024, we delivered 76% of grants on time, with 146 922 intermediate communications issued during examination. Initiatives taken during the year included a targeted peer review of over 2 200 files in the digital technology area and a comprehensive study of third-party observations.

The oppositions procedure is one of the pillars of the European patent system. In 2024, we invested in enhanced training and workshops for our opposition examiners. Analysis of BoA outcomes pinpointed areas where our opposition divisions can improve and led to the development of new opposition KPIs which are now published on our quality dashboard. We finalised around 2 600 opposition cases and reduced the backlog to 3 500 by the end of 2024.

Quality is a responsibility shared with applicants, member states and global partners. Effective partnerships, dialogue and accessibility are therefore vital to delivering results. During 2024, initiatives included expanding the scope of the SQAPs programme to assess search, grant and refusals across 108 patent files, hosting a Clarity workshop with 72 stakeholders and holding 88 meetings with users and associations. We also welcomed 8 419 participants from more than 50 countries to the EPO User Day 2024 and held a public user consultation to update the Guidelines for Examination.

1. People: developing talents



KEY STRENGTHS

- **A magnet for top European talent:** The EPO attracts and retains highly qualified staff, with career-long learning and knowledge transfer.
- **Continuous learning at every stage:** From the new examiner academy to advanced legal, technical and tools training, staff are supported throughout their careers.
- **Structured training ecosystem:** A digitally managed skills framework, Individual Development Plans (IDPs), a knowledge-sharing culture and tailored learning paths support career mobility, strategic alignment and continuous improvement.



KEY ACHIEVEMENTS

- **Recruited 146 new professionals:** including 111 examiners (66% with PhDs, 56% with industry experience).
- **Enhanced onboarding training for new examiners:** With updated training modules.
- **Delivered technical training:** On 6G technology for wireless communications, batteries and other growing technologies.
- **Expanded legal training:** Online training for updates on the Guidelines for Examination and insights into the Unified Patent Court.
- **Targeted training on the ANSERA search tool:** Including a skills check-up.
- **Held over 250 peer-to-peer learning events:** Boosting collaborative learning and improving quality.

As a knowledge-based organisation, the EPO's quality is founded on its staff and the ability to attract and retain the best European talent. We ensure that the skills and knowledge of our staff remain up to date throughout their whole career – focusing on patent and technical knowledge, training on our latest tools, and on soft skills. Through a process of knowledge transfer, we ensure that the organisation retains knowledge when staff leave. Recruiting high quality staff and investing in their continuous learning and development remains central to the quality of the EPO's products and services.

1.1 The EPO attracts and retains highly talented people

Of the 146 highly skilled people who joined us in 2024, we onboarded 111 examiners. Our new examiners bring exceptional qualifications to the role: 66% hold a PhD and 56% have experience in industry or the private sector.

Our workforce across the office is also strengthened by the Young Professionals³ and seconded national experts (SNEs) programmes with national patent offices. More information on these programmes is provided in the EPO's social report⁴.

³ <https://www.epo.org/en/learning/learning-resources-profile/universities-research-centres-and-technology-transfer-centres/pan-european-seal-professional-programme>

⁴ The Social Report of the EPO is published as annex to the Annual Review

The EPO retains the valuable experience and knowledge of individuals over many years, greatly enhancing the quality of our work. Our staff turnover rates are very low. For example, for examiners in 2024 the rate was only 0.3%, excluding those who retired.

1.2 The EPO invests in training and developing staff

Academy for new examiners

The initial training programme at the EPO is crucial to ensure that new examiners benefit from harmonised, high-quality training to develop the in-depth skills they require. Based on feedback from course participants, presenters, coaches and PGP managers, an evaluation system was implemented to measure the effectiveness of our initial development programme for examiners and its impact on the organisation. This includes measuring the learning of participants after courses and collecting feedback on how the newly acquired skills were applied on the job. In 2024, it was further enhanced by updating and rearranging training modules, balancing time in the academy with field-specific knowledge from personal coaches.

New examiners benefit from 55 classroom training days spread over their first two years at the EPO. During this time, they work closely together with and under the supervision of experienced coaches. Through this combination of classroom training, coaching and their work within examining divisions, new examiners quickly bring their skills up to the targeted level.

Continuing professional development

Figure 1 – Overview of EPO training in the patent granting process



Source: EPO

To ensure the sustained delivery of high-quality work, it is essential that our staff are kept up to date with legal changes, advances in their technical fields and developments in the tools they use. We supply proactive professional development based on the emerging, evolving, expiring skills approach throughout every staff member's career at the EPO. Skills such as adaptability,

collaboration and digital fluency are also essential to effective performance and the delivery of high-quality work. Line managers play an important role in guiding the assessment of their staff's individual skills and needs through their performance management, goal setting, individual development plans and focused learning.

The skills framework sets clear expectations, fosters professional growth and enhances mobility within the organisation. Aligning it with strategic priorities ensures that both staff and the organisation remain future-ready and resilient. Since 2021, we have progressively implemented a flexible, digitally managed skills framework to align talent management with evolving business needs. In 2024, job profiles have been updated in collaboration with business units to include newly defined skills and proficiency expectations. These digitalised profiles now cover 260 roles, reflecting the organisation's diverse skill sets.

Technical training

In-depth understanding of a technical area is a prerequisite for high-quality search and examination. Technology is constantly changing, so we also support examiners in staying up to date with the latest developments in their technical field. Technical training material used by instructors and trainees for the new examiner academy classroom courses, as well as more specific courses, can be accessed by all examiners via the dedicated examiner area in the EPO learning management system. In 2024, there were several dedicated technical training sessions for examiners on subjects such as 6G and battery technology.

Legal training and learning from the Boards of Appeal

Legal training ensures that staff are always up to date on the applicable legal framework. The EPO learning management system portal also provides a curated selection of supplementary training materials on our legal framework. In 2024, for the first time, an e-learning module on the changes to the guidelines was provided to examiners. This module will be updated annually with each edition of the guidelines and will be made compulsory from 2025 onwards.

The decisions of the Boards of Appeal (BoA), national courts and the UPC represent learning opportunities for our examining and opposition divisions, and the Office has monitored decisions from the BoA for many years. We provide internal reports on interesting cases for our staff. In 2024, this practice was extended to include cases and decisions of the Unified Patent Court (UPC). These reports are prepared in a collaborative process by case law monitoring groups comprising experienced examiners and patent law experts from our legal department.

The 2024 Case Law Report comprising selected decisions of the Technical Boards of Appeal and of the Unified Patent Court highlights decisions which signal trends or exemplify the application of the instructions in the Guidelines to specific cases, including in rare procedural situations. The report also feeds into

the activities of various working groups, the preparation of training material and the revision of the Guidelines.

Training on tools

Training on tools is equally as important as legal expertise. In recent years there has been a growing focus on such training, reflecting an acceleration in the digitalisation of our processes and the in-house development of specialised tools. Starting in 2023 and continuing in 2024, over 3 000 examiners followed targeted training aimed at improving their knowledge of the advanced ANSERA search tool. An online ANSERA skills check-up module was organised that allowed examiners to identify any skills gaps requiring additional training, test their knowledge and target their training. As a result, we not only improved examiners' skills in using ANSERA, but we also reached 100% relevant staff use of the ANSERA tool for search and examination. This enabled us to decommission the legacy search tool at the end of 2024.

Training for specific roles

The Office organises and curates a wide range of courses for examiners taking up new roles from classification to opposition, including chairing oral proceedings in examination. Amongst other new courses, opposition first members and chairpersons received training on the LiquidText tool in 2024.

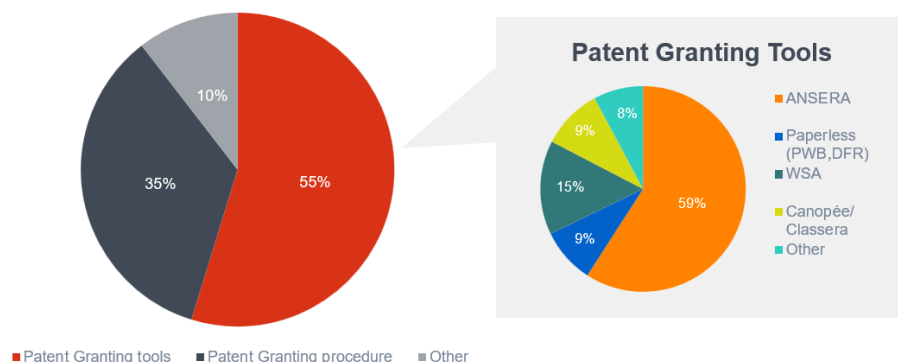
In 2024, tailored learning paths were introduced for formalities officers, with refresher sessions for experienced staff and comprehensive training for newcomers, supplemented by coaching support. Instructor-led training included skills assessments and pre-course self-study, while peer-to-peer coaching enhanced on-the-job learning. Following the success of the 2023 internal EPAC (European patent administration certification) study group, support was expanded in 2024 with tutored exam preparation sessions. A dedicated EPAC study network helped staff to prepare, share insights and gain confidence.

Within the EPO management community, peer-to-peer exchanges and resources are readily available to ensure training and continuous learning for managers. This is essential to ensuring that our managers have the skills to support their teams in realising their potential and delivering their best work.

Peer-to-peer knowledge sharing

Another pillar of knowledge management is the continuous knowledge transfer (CKT) initiative. CKT is a well-established network whose activities foster collaboration and knowledge sharing, providing easier access to relevant knowledge. It involves a team of central knowledge coordinators co-operating with an office-wide network of local knowledge agents that help their teams to identify knowledge sharing needs, plan and promote knowledge sharing activities. In 2023, we gave CKT a home in the Learning area, which led to an increase in the impact of this network.

Figure 2 – CKT events 2024



Source: EPO

CKT "tips" are submitted by staff, validated by experts and then published on the EPO's intranet homepage. In 2024, 177 new tips were published, contributing to the growth of the database of more than 5 000 curated and searchable tips. The tips are very much appreciated by our staff, as can be seen by the 85 000 views recorded for the new tips in 2024. Examples of published tips revolved around PGP tools such as ANSERA or patent workbench and include sharing best practices on ensuring searches are complete through tips on tools or on the CPC or the Japanese classification scheme. As in previous years, staff were given the opportunity to vote for their favourite CKT and formalities officers tips in 2024.

The peer-to-peer events are generally small, local events, where an expert shares knowledge with a group of peers. They are usually tailored to specific needs in a team, addressing a wide range of day-to-day operational issues and covering all aspects of work. In 2024, more than 250 peer-to-peer events were organised for all staff, including around 200 organised for examiners. These peer-to-peer events supported digital transformation and change management, promoting best practices and complementing official training. Key topics for peer-to-peer events were ANSERA, patent workbench and web search assistant.

Five iLearn days took place in 2024. These online hands-on presentations and lively discussions covered practical matters aimed at harmonising and improving the quality of our daily work. More than 2 100 participants attend iLearn events in 2024 aimed at improving consistency in examination. One of the events focused on digitalisation and presentations were given on inventive step, the problem-solution approach, patenting AI, computer-implemented inventions, amendments and sufficiency of disclosure.

The Campus Days also provided in-person learning opportunities for over 4 000 EPO staff members who met on-site during these two days. A wide range of learning activities was on offer at each EPO site.

Reskilling and retraining

With the EPO's business needs changing, careful capacity management is needed to meet both current and future needs alongside the retraining and reskilling of staff. Examiners who change fields are given appropriate support through on-the-job training from experienced colleagues, with dedicated reskilling where necessary. This holistic training includes online webinars on the technical field, as well as the classification scheme used. In addition, on-the-job coaching by fellow members of the examining division embeds both technical knowledge and best practices in search and examination for the new field.

Digitalisation has changed many tasks in different roles across the EPO. For formalities officers, the transformation and the move away from paper to digital files and process has been particularly significant. To support them in the changes in their roles and responsibilities, we completely redesigned the training curriculum for formalities officers. The new training programme emphasises advancing digital skills, combining classroom sessions with on-the-job coaching programmes with peer coaches.

2. Technologies: developing and improving tools to support quality during digital transformation



KEY STRENGTHS

- **End-to-end digital ecosystem:** The EPO continues to develop state-of-the-art, in-house tools supporting the entire patent granting process from filing to publication.
- **AI-powered quality and efficiency:** AI supports examiners and formalities officers in their decision-making in classification, allocation, search and legal queries.
- **Unrivalled prior art resources:** The EPO maintains the world's largest collection of patent and non-patent literature, ensuring comprehensive and high-quality search.
- **Seamless user services:** The MyEPO Services suite provides user-centric digital interaction, supporting quality, efficiency and transparency for applicants and representatives.



KEY ACHIEVEMENTS

- **Expanded prior art collections:** Patent documents reached 160 million; non-patent literature grew by 18 million to 197 million documents
- **Expanded MyEPO usage:** 100% adoption of the Mailbox for digital communication; over 11 million mail items sent electronically
- **Streamlined user tools:** Decommissioned outdated systems like legacy Mailbox, Webform Filing and physical smartcards
- **Launched the legal interactive platform (LIP):** AI-based legal assistant used for 33 000 staff queries its first 8 months; released to users of MyEPO in early 2025



RESULTS

- **High satisfaction with our online services:** 91% of users rated these services as good or very good in the 2022/2023 user satisfaction survey

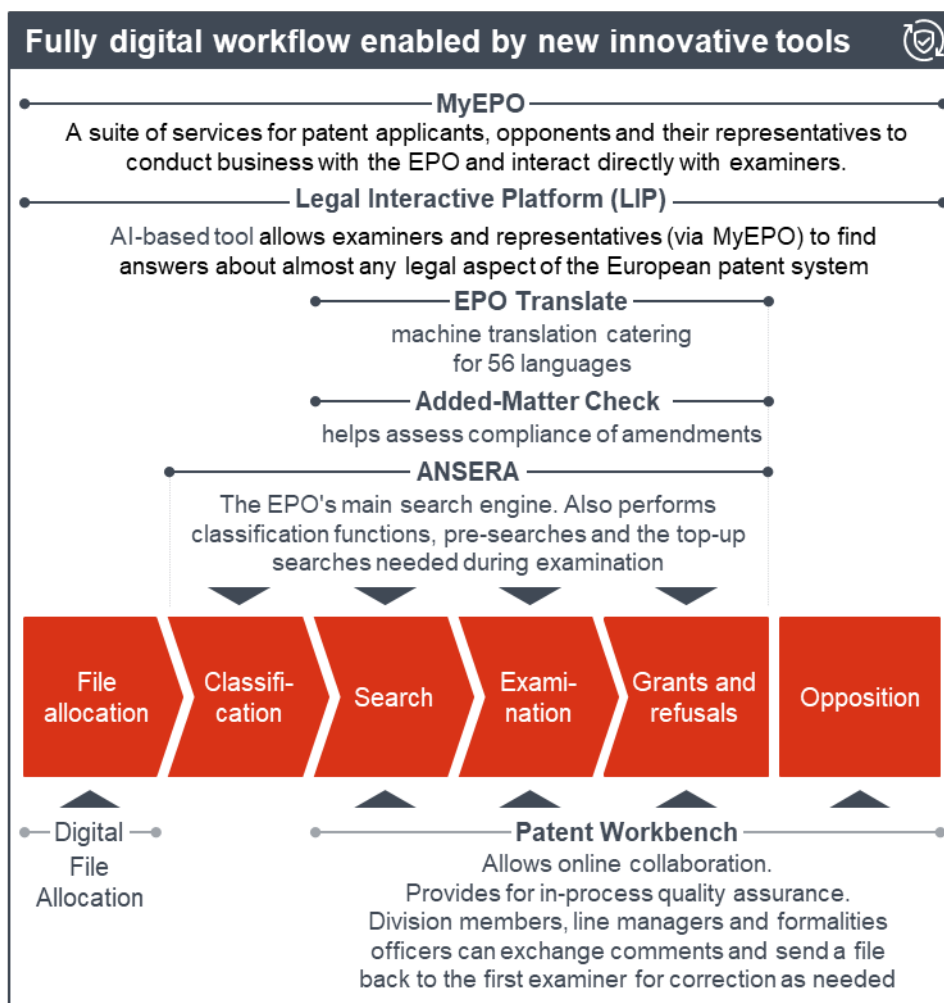
Technology supports quality from patent drafting and filing right through the patent granting process at the EPO. The resources we provide to staff and users are a key component of our quality, which is why we invest heavily in our tools, IT systems and databases. These tools assist our examiners and formalities officers in making the best use of our extensive databases of prior art and legal resources. The improvements in quality and efficiency they bring allow staff to focus their time on the more substantive quality tasks in their roles. The EPO also strives to optimise its platforms and procedures so that users experience as smooth and uncomplicated a patent prosecution as possible.

2.1 The EPO develops tools in-house and makes targeted use of AI

Throughout 2024 the EPO maintained its focus on modernising tools and integrating AI where it can best support examiners, formalities and users. In developing our in-house customised tools, which harness the latest developments in technology, we draw on examiners' needs and experience. The

tools and platforms developed and used by the EPO in the patent granting process are summarised in the figure below.

Figure 3 – Overview of the EPO's PGP tools

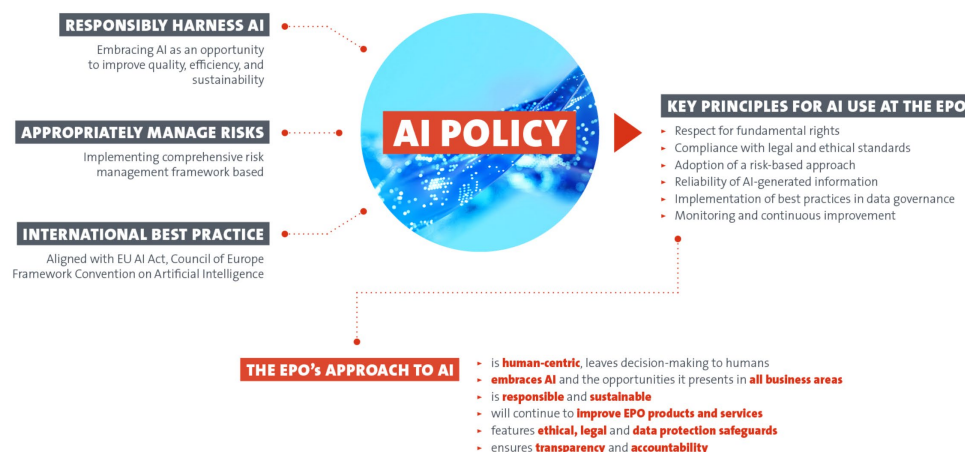


Source: EPO

The tool suite has benefited from the gradual integration of AI to assist examiners in their daily work. In house, AI-supported translations of confidential information are now also available for unpublished patents. Additionally, AI supports processes ranging from allocation to classification, enabling the accurate routing of applications and the selection of appropriately qualified examiners; also in cases spanning different technologies.

With its new AI policy, the EPO commits to continue embracing AI, with a view to improving quality and efficiency. The policy reiterates and codifies essential principles to ensure transparency, accountability and ethical behaviour in AI adoption. Importantly, we take a human-centric approach: AI will support human decision-making, meaning that final decisions will be taken by humans, with whom the accountability and responsibility for these decisions will remain.

Figure 4 – The EPO's approach to AI



Source: EPO

Digital file allocation

To make sure that search reports and written opinions are of the highest quality, applications must be handled by the examiners with the right technical skills. This is a two-step process which involves pre-classifying new applications and allocating them to the appropriate examiners.

The pre-classification process involves assigning CPC classification symbols to the application. Today this is automated, employing an AI-based pre-classification engine. For the second step, we developed the digital file allocation (DFA) tool. Integrated into the patent workbench, this is a fully digital system for allocating work to examiners, with functionality facilitating the best technical match between a file and the examiners in the division. Given the increasing technical complexity of applications – with a single application often covering multiple areas of technology – DFA helps us ensure quality by getting the right file to the right examiner and division at the right time. Since it was rolled out, the human allocation of files has been progressively replaced, resulting in increased accuracy and higher efficiency, allowing examiners to focus on the more substantive elements of their work in search and examination. In 2024, the introduction of a configuration screen for team managers in the DFA application marked a significant stride forward in simplifying allocation processes within the EPO eliminating, the need for manual allocation by managers.

Under its Strategic Plan 2028, the EPO will work to further improve the accuracy of the DFA tool.

Patent workbench: improving quality through collaboration

Patent workbench is the task management interface for all examiners, formalities officers and line managers. It enables collaborative working regardless of where the members of the division are located. It also enables all work in the patent

grant area to be processed digitally and without paper. When an examiner dispatches a search or grant product, it is stored in patent workbench until it receives appropriate clearance by the members of the examining division, the first examiner's line manager and formalities officers. If errors are detected, the product is sent back for revision to the first examiner via the tool. The collaborative features of the patent workbench have proved essential for the roll-out of the active search division, an initiative which ensures that all searches and written opinions are reviewed by all members of the division before they are dispatched to applicants (see section 4.1 in search).

ANSERA: finding the most relevant prior art

ANSERA is our highly sophisticated search tool. It was developed in-house with significant input from examiners and facilitates rapid search and analysis of vast volumes of documents using concept-based search strategies designed by examiners.

Since it was first introduced, ANSERA has been continually developed and improved. At the end of 2024, all examiners were using ANSERA and the old search tool "Epoque" was phased out.

ANSERA's powerful ranking engine brings relevant documents to the attention of examiners earlier. Examiners are assisted at every stage with statistics to improve their search strategies. In 2024, Pre-Search functionalities were enhanced with better ranking models and ANSERA was expanded to include a tool for searching standards. This replaced the legacy SEASTAR tool and significantly boosted the search capabilities of ANSERA across patent literature and non-patent literature

In addition, the newly developed web search assistant (WSA) facilitates the analysis and citation of non-patent literature documents. Throughout 2024, CKT training sessions on WSA and practical guidance documents were provided to examiners.

Machine translation: helping examiners to interpret prior art from across the world

The EPO translate portal gives access to the EPO's powerful machine translation engines, enabling examiners to perform secure translation for both patent and non-patent literature. With a total of 56 languages now supported, it offers confidential translations both from and into English for French, German, Dutch, Italian, Spanish, Greek, Chinese and Japanese.

MyEPO services: improving quality, efficiency and engagement for our users

MyEPO services is an integrated suite of services comprising Online Filing 2.0, MyEPO and Central Fee Payment. MyEPO was first launched in June 2022 for interacting with the EPO on applications. By the end of 2024 the number of active users of MyEPO services had grown to more than 23 000. Over two-thirds of our applications are now filed using Online Filing 2.0.

Our vision for MyEPO services is to increase transparency, predictability and product quality across the IP landscape. We have therefore established eight broad objectives for the evolution of MyEPO services under our online user engagement programme as part of our Strategic Plan 2028.

Figure 5 – The eight objectives for the evolution of MyEPO services



Source: EPO

In delivering MyEPO services, we engage closely with user consultation bodies such as eSACEPO or the Online Communication Committee (OCC), and with pilot focus groups (with 8 meetings and a 30% increase of volunteer pilot companies to over 200 in 2024) to understand user needs.

By harnessing advanced technologies and AI, we aim to provide a seamless, user-friendly experience with a strong emphasis on user-centric design. Stakeholders will have access to robust internal tools and essential information, empowering them to efficiently manage their business online. MyEPO services will offer top-tier service to the entire patent community, regardless of a member's size or location, fostering collaboration, innovation and discovery for a brighter, more sustainable future.

Shared area

To facilitate the dialogue between applicants, their representatives and examining divisions during the examination phase, a new "shared area" within

MyEPO was made available to all users in July 2023. This feature of MyEPO⁵ allows examiners and representatives to upload, review, edit and annotate documents together during live consultations. This real-time interaction increases quality and transparency and saves time, as there is a greater chance that adjustments to substantive content will be right the first time. The legal and procedural framework for consultations involving the use of the shared area remains the same as that applicable to all personal consultations (see Guidelines C-VII, 2.1–2.5⁶).

The uptake of the MyEPO shared area remains relatively low overall, however, it is encouraging that over 500 different applicants have already made use of it. Feedback from those who have engaged with the shared area has been positive and provides some indication of its value. To address the low adoption rate of the shared area, we gathered feedback from examiners and professional representatives over the course of 2024 and are working on making improvements to the platform and taking proactive measures to encourage its wider use.

Mailbox

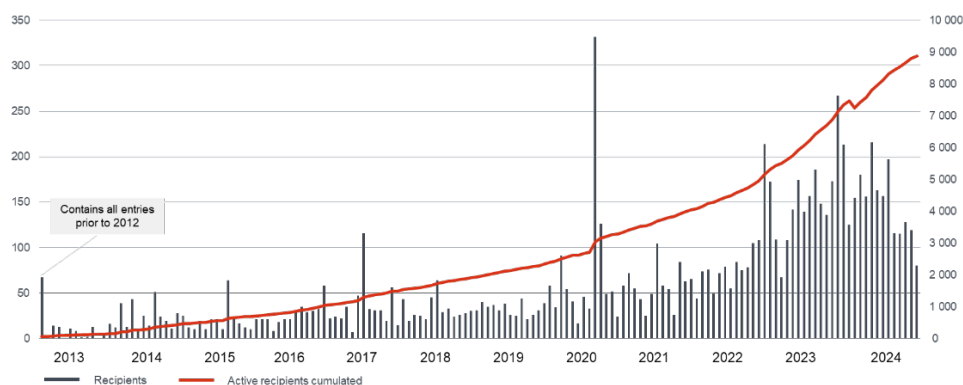
The Mailbox available in MyEPO gives users access to instant, reliably delivered electronic communications from the EPO. This not only saves paper, but it also eliminates the need for manual intervention and the scanning of paper documents. In addition to Mailbox communications and initial filing, these communications now cover information about fees, due dates, bibliographic data, user references and other portfolio information.

2024 saw the increased uptake of the Mailbox in MyEPO, with 100% of companies that work online with the EPO now using it. For the first time, the number of mail items sent electronically surpassed 10 million, and a further 2 056 representatives chose to move away from their paper-based interaction and started working online with the EPO in 2024, representing an increase of 29%. The adoption of the Mailbox is a fundamental pillar of the paperless initiative, supporting the transition to fully digital communications.

⁵ epo.org/en/applying/myepo-services/interact.

⁶ epo.org/en/legal/guidelines-epc/2024/c_vii_2.html.

Figure 6 – Growth in usage of the EPO Mailbox



Source: EPO

Legal interactive Platform – getting the best legal and procedural advice

Launched in May 2024, the EPO's AI-based legal interactive platform, enables staff to query all aspects of the European patent system. It draws on source material including the European Patent Convention, EPC Guidelines, PCT-EPO Guidelines, decisions of the Boards of Appeal, Unitary Patent Related Provisions, Official Journal of the EPO and case law of the Boards of Appeal. The interface is convenient to use, and queries can be formulated in a conversational manner. Structured search results are generated swiftly, complete with short summaries and direct links to the relevant legal documents. Other functionalities include generating summaries of cases from the Boards of Appeal.

Within the first eight months of its launch, EPO staff completed nearly 33 000 queries in the legal interactive platform, which have helped to increase efficiency, improve decision-making and enhance accuracy. Feedback has been overwhelmingly positive, with user suggestions already incorporated to refine the platform's performance. Importantly, staff remain responsible for cross-checking and validating advice provided by the platform.

Following a successful pilot, the platform was launched for public use in February 2025. This groundbreaking legal search tool is now available to all our users within the MyEPO services suite⁷.

Further resources to support applicants

- Espacenet offers free access to over 150 million of patent publications worldwide and can be used, for example, to search and find patent publications.

⁷ <https://www.epo.org/en/applying/myepo-services>

- The European Patent Register is a free, complete and up-to-date source of publicly available procedural information on European patent applications and European patents with unitary effect.
- The Global Patent Index is a powerful online tool for performing detailed searches in the EPO's worldwide bibliographic, legal event and full-text data sets.
- The European Publication Server gives free online access to all the European patent documents published by the EPO.
- Deep Tech Finder includes profiles from over 9 500 startups and 878 universities, categorised into over thirty different industry segments and over fifty different technology fields.
- EP full-text search is a free online tool that enables users to search European patent applications (A documents) and granted patents (B documents), including full-text searching.

The PGP simplification board: supporting our digital transformation

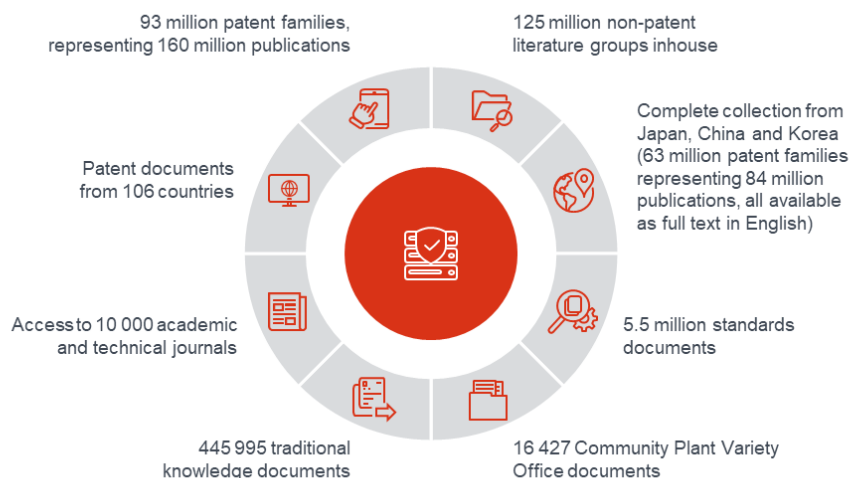
The patent granting process (PGP) simplification board was established to facilitate the promotion of digital transformation and ensure we keep up to date with the needs of our users, while maintaining the highest level of operational and procedural convergence in the implementation of changes to the procedures. The board's work focuses on improving quality at source, enabling more efficient patent procedures for both internal and external users.

2.2 Managing the world's most extensive and growing prior art databases

Access to prior art is crucial for search quality. The EPO holds the world's largest collection of patent and non-patent literature. Alongside this, examiners are also provided with access to extensive external databases. This ensures search reports and written opinions are based on the full spectrum of relevant prior art.

Over the course of 2024, the EPO's extensive prior art collection grew from 333 million documents to over 357 million. Our collection consists of patent and non-patent literature including continuously expanding collections of standards, traditional knowledge and plant varieties documents. The EPO also focuses on making sure that all technologies are comprehensively represented in our prior art collections. In addition to the vast amount of prior art in our internal databases, we provide our examiners with access to many external databases.

Figure 7 – The EPO's prior art collection at a glance



Source: EPO

Patent publications

In 2024, the number of patent publications increased from 153 million to 160 million, with 84 million publications stemming from China, Japan or Korea. In the same period, total patent families increased from 86 million to 93 million. Patent families with a family member from China, Japan or Korea account for 63 million families.

Non-patent literature

Besides patent publications, non-patent literature is an essential source of prior art in many technical fields. In 2024, our non-patent literature database increased by 18 million documents and now comprises 197 million documents, including abstracts and full text documents. For ease of access, corresponding documents are bundled into groups (e.g. relating to the same scientific paper or the same standardisation procedure), yielding 125 million non-patent literature groups. Non-patent literature documents including searchable full text increased from 39 million in 2023 to 41 million full text documents in 2024.

The non-patent literature collection also contains 445 995 English-language abstracts and summaries of traditional knowledge documents originally published in India, China and Korea. Furthermore, the collection contains 16 427 full text records of published applications and grants from the Community Plant Variety Office (CPVO).

Standards documentation

Standards documentation represents an important part of our non-patent literature collection. Standards ensure the compatibility and interoperability of components, products and services while promoting the dissemination of new technologies. In other words, standards constitute a central pillar of the modern knowledge economy. This type of prior art is particularly important in fields such as telecommunications where industry relies on interoperable standards such as 5G to develop. In 2024, the EPO's standards collection grew by 500 000 documents to over 5.5 million standards-related documents.

The EPO has also signed agreements with standards development organisations (SDOs) to ensure that the relevant standards documentation can be used in the patent granting process. EPO patent examiners currently have access to comprehensive literature collections from many SDOs, including:

- Third Generation Partnership Project
- Third Generation Partnership Project 2
- European Telecommunications Standards Institute
- International Telecommunication Union
- Institute of Electrical and Electronics Engineers Standards Association
- International Electrotechnical Commission
- Association of Radio Industries and Business
- Internet Engineering Task Force
- Digital Video Broadcasting Project
- Standards for M2M and the Internet of Things
- Open Mobile Alliance
- Video Technology
- International Association for Cryptologic Research
- Joint Photographic Expert Group Std
- International Standards Organisation

In addition to the final standards issued by SDOs, the EPO's databases include technical disclosures submitted during the standardisation process

2.3 Technologies: results

The key performance indicators (KPIs) for our tools demonstrate that the EPO has provided resilient platforms and tools for staff and users, with the availability of these systems remaining at a very high level in 2024. Moreover, our users gave very high ratings for our online services.

KPI	Result	Goal 2028
Availability of IT systems (internal) ⁸	99.7% (2024)	>= 99.5%
Availability of IT systems (external) ⁹	99.7% (2024)	>= 99.5%
Users rating our online services as good or very good	91% (User satisfaction survey 2022/2023)	>= 91%

⁸ The objective is to build a resilient digital infrastructure that instils confidence in the high availability of the EPO's IT systems. The KPI value monitors the availability of our IT systems driven by technological advancements, proactive disaster preparedness and continuous monitoring. The KPI shows the average availability of existing and new IT tools developed for internal users. The aim is to measure the actual outage (interruption) times of SEO and search/application tools.

⁹ The objective is to build a resilient digital infrastructure that instils confidence in the high availability of the EPO's IT systems. The KPI value monitors the availability of our IT systems driven by technological advancements, proactive disaster preparedness and continuous monitoring. The KPI shows the average availability of existing and new IT tools developed for external users.

3. High-quality, timely products and services: filing, routing and classification



KEY STRENGTHS

- **Skilled formalities officers:** Vital to procedural quality; supported by training, audits and harmonised practices.
- **Robust Cooperative Patent Classification (CPC) system:** Jointly managed with the US Patent and Trademark Office (USPTO) and adopted in 38 countries including 23 member states, ensuring harmonised, up-to-date coverage across technologies.
- **Modern classification infrastructure:** AI-assisted tools like Classera and Canopée ensure accurate and timely indexing of prior art.



KEY ACHIEVEMENTS

- **Enhanced formalities processes:** Improvements based on audits, including better handling of sequence listings and requests for oral proceedings.
- **Fully classified 696 884 documents:** Including 109 526 EPO-published applications.
- **Reclassified 17 745 document families:** Using AI-powered tool to implement three CPC updates.



RESULTS

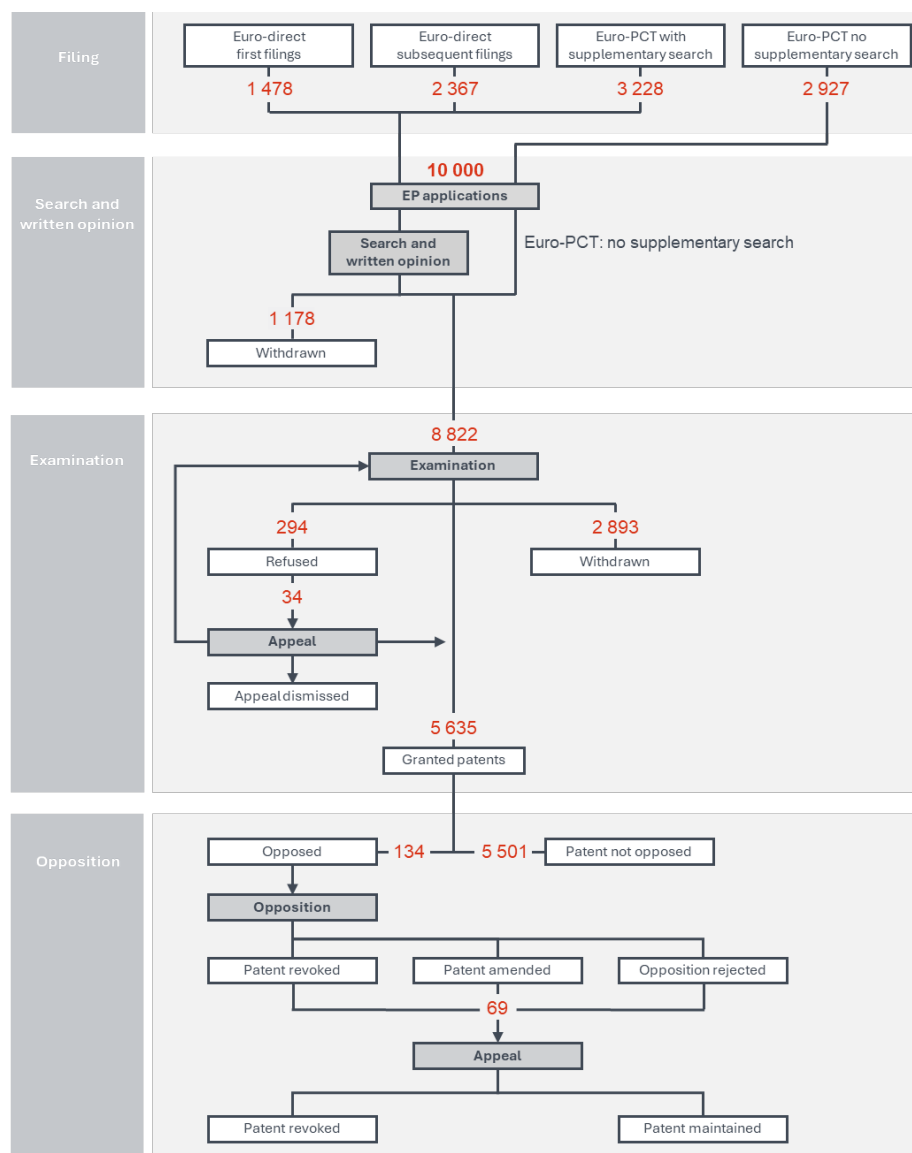
- **93.3% compliance in formalities quality checks:** Exceeding the SP2028 target of $\geq 90\%$.
- **85% of EPO-published patent applications fully classified on publication:** Target met.

Whilst search and examination are crucial to achieving a high-quality patent, there are many factors that contribute to quality throughout the process. Aspects such as ensuring that the application meets the formal requirements for filing, reaches the right technically qualified division of examiners and the correct and timely classification of prior art all contribute to the quality journey. Errors or oversights early in the process can affect the substantive quality of the product or service. This is why the EPO invests in all aspects of quality at every stage of the patent granting process.

3.1 Filing

The chart below shows the journey of a typical population of 10 000 filings through the EPO's patent grant process. The different stages provide opportunities for applicants to decide, based on prior art and reasoned examiner objections, whether or not to proceed with their applications. In the following chapters, we will examine the outcomes at each stage in more detail and the actions we are taking to build on the high quality of our products and services. However, as discussed in this chapter, the journey towards a high-quality patent starts well before the EPO or any patent office sees the invention contained in the application.

Figure 8 – Overview of file flow in the patent granting process: long-term averages



Source: EPO

Improving the quality of applications

Quality begins at source: from the very moment an application is drafted. Applications that are carefully and appropriately drafted help to improve quality and efficiency, as well as the overall quality of the prior-art corpus.

At the EPO we carefully monitor a range of metrics that shed light on the quality of incoming applications and how they are subsequently prosecuted in the search and substantive examination phases. Our analysis shows significant variations between applicants and representatives regarding numerous aspects of the patent granting process. These variations can result in additional cost and inefficiency for applicants and patent offices, as well as increased uncertainty for the public. We see differences in:

- the number of formal errors in applications
- the percentage of applications with lack-of-unity findings at the search stage
- the number of objections for lack-of-clarity, lack-of-inventive-step or other substantive issues
- the frequency of oral proceedings in examination
- how applicant responses and amendments bring the procedure forward
- grant rates

There are many underlying reasons for these differences, but applicant choices do have an impact. We have also observed that some applicants are unaware that their choices result in a more complicated prosecution before the EPO than for comparable applicants. Consequently, in our regular meetings with applicants we share procedural data specific to their applications. We benchmark their data against other anonymised applicants with a similar technical filing profile. This activity is supported by internal tools which provide extensive statistical data on applicants and industrial sectors. We have found that dialogue based on such data has improved both our understanding of the approaches taken by applicants and their understanding of the approach taken at the EPO.

Formal requirements remain an important element in overall quality

The formal requirements that need to be met by an application remain important for ensuring the final quality of a patent. Requirements such as, for example, the allocation of a valid filing date, exist for a purpose. EPO formalities officers conduct numerous checks on incoming applications, including the following aspects:

- information identifying the applicant
- representation
- physical requirements of the application documents, including any sequence listings and the disclosure of biological material
- whether priority is claimed
- the designation of the inventor
- the filing of any drawings

In addition to supporting quality at source through our dialogue with applicants, we have also tried to design out some of these errors through changes in the legal provisions, workflows and by building in more plausibility checks within our tools such as MyEPO.

Formalities officers are highly active throughout the entire patent granting process, ensuring that procedural and formal requirements are met at every stage. To ensure that quality is maintained and that opportunities for improvement are identified, their work is checked and reviewed by quality experts.

In 2024, recommendations from quality audits resulted in initiatives to improve the processing of applications and opposed patents. These included:

- improving the accuracy of coding PCT direct cases in our systems
- ensuring the correct handling of sequence listings and of demands for entry into PCT Chapter II
- improved handling of the PCT international preliminary examination reports, as well as the accurate and timely dispatch of documents to the World Intellectual Property Organization (WIPO)
- harmonising and optimising the handling of external enquiries made by telephone
- enhancing the clarity of the entries made by our formalities officers in free text fields
- improving our offboarding and knowledge transfer processes

At the request of operational units, enhancements were implemented in formalities to:

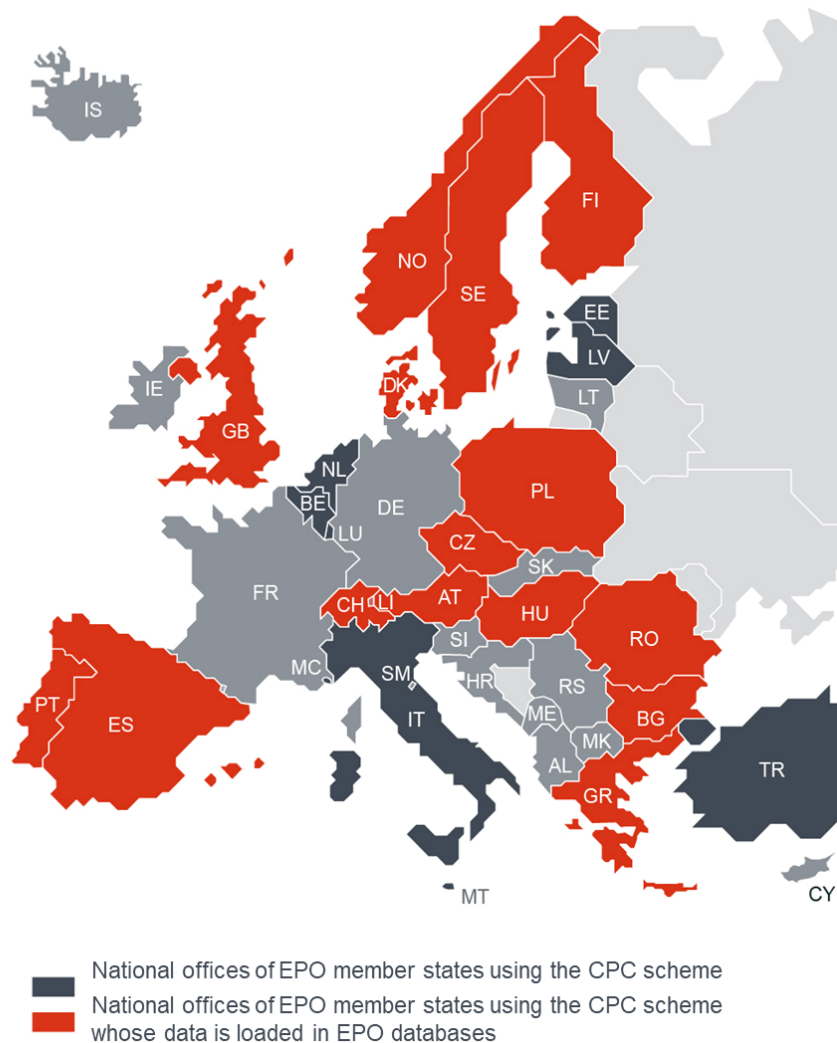
- improve the visibility of the request for oral proceedings by the division
- harmonise the work done by the sequence listings verification team

3.2 Routing and classification

Cooperative Patent Classification supports the correct routing of incoming applications and complete prior art searches

The Cooperative Patent Classification (CPC) scheme, jointly managed by the EPO and the USPTO, provides a single, harmonised, refined scheme that builds on International Patent Classification (IPC). A total of 38 countries have now adopted CPC, including 23 EPO member states. To keep it aligned with technological developments, the CPC was updated three times in 2024.

Figure 9 – Adoption of the CPC by EPO member states¹⁰



Source: EPO

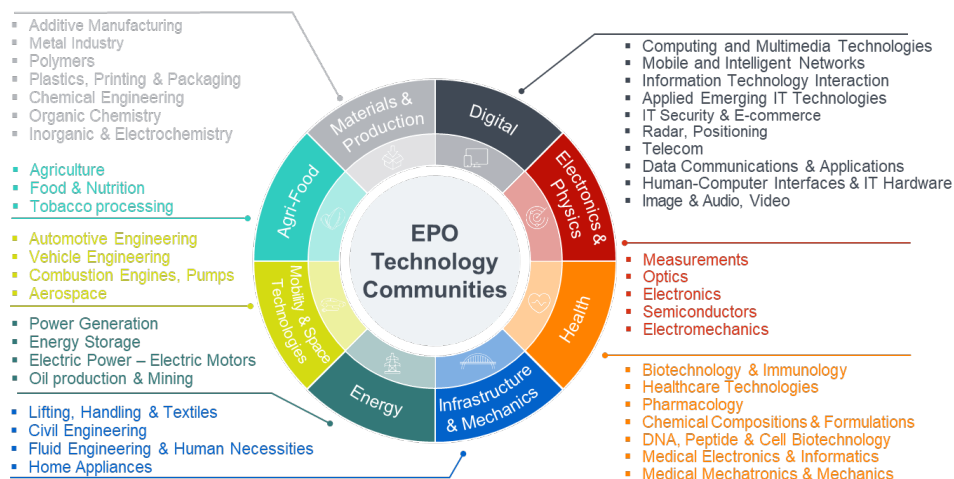
Routing of applications to the appropriate team of examiners

Pre-classification of an application takes place after filing as soon as it is deemed to comply with the EPC's formal requirements for new applications. The addition of a high-level classification symbol at this stage is the basis for subsequent routing of the incoming patent application to the appropriate technical area. As mentioned in chapter 2, the EPO has leveraged recent developments in AI to expand the use of automatic pre-classification. This has had a positive impact, with incoming applications routed based on automatic pre-classification now at over 90% accuracy.

¹⁰ The EPO classifies vast amounts of patent prior art into the CPC, including that of Germany, within four months of publication

To ensure high quality search and examination, an incoming application must be allocated to the examiner and division with the technical skills best matched to the technology in the application. This also requires an organisational structure which supports that goal. We therefore restructured the technical areas that examiners belong to in 2022 to align with developments in industry. This heightened clarity helps us to get applications to the right team and the right combination of expertise.

Figure 10 – The eight EPO technology communities have clearly defined scopes



Source: EPO

More and more incoming applications span various traditional technical fields. In these cases, the allocation of mixed divisions (i.e. divisions where members come from different technical fields) is proposed, so that the most appropriate combination of technical expertise is dedicated to each application. The mixed division concept remains in place throughout the procedure, from search, through examination and in opposition.

Classifying prior art

Accurate and timely classification of our prior art is fundamental to ensuring the completeness of search reports and written opinions. We invest heavily here, classifying a significant portion of the world's patent documentation in addition to the patent applications filed at the EPO. In 2024, the EPO fully classified a total of 696 884 documents into the CPC. We classify the prior-art patent documents within four months of their publication to ensure that they can be retrieved in the search process.

The AI-assisted classification tools Classera and Canopée are part of our ANSERA search platform and support classification tasks by suggesting potential classification symbols for documents that require classification. In 2023, the tools were integrated into patent workbench to further facilitate the classification of applications and in 2024 legacy tools were decommissioned. As a result, all classification tasks are now performed with Classera and Canopée.

Reclassification

As technology evolves, the various classification schemes need to be amended to keep up with developments. The CPC is usually updated three times a year and related documents are reclassified in accordance with the new scheme. In 2022, we introduced an AI-powered reclassification tool which enables precise automatic reclassification of document families. In 2024, this tool facilitated the reclassification of 17 745 document families (including both published patent documents and non-patent literature) to meet full CPC standards.

3.3 Quality results

Formalities operational quality control checks

One of the EPO's KPIs under SP2028 is to improve the quality of the work on formal aspects by our formalities officers. The relevant KPI monitors the results of the operational quality control (OQC) checks performed in the receiving section. It is updated on a quarterly basis. The SP2028 target for this KPI is a compliance rate of 90% or more. The result achieved in Q4 2024 was 93.3%.

KPI	Result 2024	Goal 2028
Quality of formalities (receiving section)	93.3% Compliant files	>= 90% Compliant files

Classification and file allocation quality results

The EPO's SP2028 KPIs reflect our ambitions to perform to a high standard in the interests of the European patent system and its stakeholders. As implementation of SP2028 continues, the benefits of our investments in classification will become increasingly apparent throughout the rest of the PGP.

Of the 696 884 documents classified in 2024, some 109 526 were EPO-published patent applications, where our target was to have 85% fully classified on publication. We successfully met this target. The remaining publications were classified after publication and added to our databases. Operational Quality Control (OQC) on classification is performed by our classification quality nominees who perform a check on a sample of classified documents. The OQC on classification ensures that we monitor the impact of AI-supported classification carefully.

4. High-quality, timely products and services: search and written opinion



KEY STRENGTHS

- **Active search division:** All search products are reviewed by three-person divisions and managers before dispatch, to promote quality, consistency and legal certainty.
- **AI-enhanced classification and search:** Supports examiners in locating the most relevant prior art across global sources.



KEY ACHIEVEMENTS

- **Enhanced early collaboration for 260 000 search products under active search division:** Improving written opinions as reported by users and DQA results - no findings 86.1%, improved from 81.7%; invalid objections 6%, improved from 11.5%.
- **Cited large volume of relevant prior art:** 83.7% of search reports cited a document prejudicial to novelty or inventive step.
- **Covered broad range of non-patent literature:** Cited in 28% of search reports, standards in 4.7% overall; 20% in certain areas (e.g. wireless, IT security).



RESULTS

- **Search quality audit (DQA) KPIs:**
 - Incorrect assessment of novelty/inventive step: 6.2% (target <5%).
 - More relevant prior art found by auditors: 3.0% (target <4%).
- **User satisfaction**
 - 80% of respondents were satisfied or very satisfied with the EPO's search products (2022/23 survey).
- **Search timeliness:**
 - 85.1% of searches delivered on time (target: ≥90%).

Our goal at the search stage is to deliver a complete and accurate search coupled with a comprehensive written opinion in a consistent and harmonised manner. As discussed in previous chapters, the technical expertise of EPO staff, optimised file routing, the EPO's extensive prior art collection and powerful search tools are key components which enable our examiners to perform high quality searches and written opinions.

Our DQA results show that the actions taken in 2024 in search are having a measurable impact on quality and helping us to progress towards our quality KPIs in this area. EPO data also shows the continuing stringent quality in written opinions and the increasing importance of Asian prior art and standards citations in our search reports.

4.1 Actions taken to improve quality of our searches and written opinions

Active search divisions

A well-defined search strategy is also essential for a complete search. Once the closest prior art has been identified, a correct and comprehensive assessment of patentability in the written opinion increases the value of the search product to our applicants and the public.

To improve both the search itself and the assessment of patentability, collaboration at the search stage has always been encouraged and routinely takes place in many forms – for instance by consultation of the chairperson or another expert or a specialist on a specific aspect of an application, by collective group consultation to discuss search strategy or in the form of team search jams.

This practice was strengthened and formalised with the introduction of the active search division (ASD) in November 2023. Since then, the prospective three-person examination division is systematically involved in every application at the search stage. Each search product is also routed via our digital workflow in patent workbench to all three members of the division and the manager for review before being sent to the applicant. In 2024 each of our 260 000 search products benefitted from the increased interaction brought about by this initiative.

Although the active search division has been in operation for over a year, its full impact cannot yet be assessed. Due to EPC and PCT procedures, applications take time to reach substantive examination.

However, preliminary analysis of our data shows significantly more interaction between division members at search stage. This increased interaction has also been reported by team managers in dedicated feedback sessions held with senior managers over the course of 2024. There are other promising early signs that the active search division is having a positive impact on substantive quality. Preliminary findings show:

- Improved assessment of fall-back positions in written opinions, reported both by EPO managers and by users in our meetings with them
- Quality auditors noted that the number of written opinions comprising a detailed analysis addressing all independent claims further improved from 94.8% to 96.6%.
- Quality audit findings related to invalid objections in the search report and written opinion fell from 11.5% in 2023 to 6% in 2024.
- Coaches of new examiners reported that the active search division facilitates more effective onboarding for new examiners.

There are also early indications that the active search division initiative is leading to enhanced legal certainty and efficiency of procedure. For cases treated since its implementation, we observed that:

- Fewer applications proceeded to examination
- Fewer communications needed before grant

These observations suggest that the active search division initiative is leading to more comprehensive written opinions, allowing applicants to take earlier decisions on whether to proceed with their applications and in addressing objections raised at search stage. As more cases that have benefited from the active search division reach the examination phase, we will continue to monitor its impact and conduct a more detailed study and analysis of the data in 2025.

Preliminary study on objections related to clarity (Article 84 EPC/Article 6 PCT)

In preparation for the workshop on clarity held on 20 and 21 November 2024 (see section 7.3), the EPO performed a study on objections under Article 84 EPC/Article 6 PCT raised by examiners at search stage.

An initial analysis using text-recognition software revealed that 69% of written opinions at the European or PCT search stage issued in 2023 contained at least one objection under Article 84 EPC or Article 6 PCT. Manual analysis of 545 applications showed that the most frequent objections were as follows:

Most frequent types of objections under Articles 84 EPC or Art 6 PCT

Independent claims	Dependent claims
Unclear term / formulation (GL: F-IV.4.1)	Unclear term / formulation (GL: F-IV.4.1)
Essential features (GL: F-IV.4.5)	Inconsistencies (GL: F-IV.4.3)
Number of independent claims (GL: F-IV.3.2)	Result to be achieved (GL: F-IV.4.10)
Inconsistencies (GL: F-IV.4.3) General statements (GL: F-IV.4.4)	Essential features (GL: F-IV.4.5)

Given the large proportion of applications concerned and the subsequent investment required by users and the EPO to successfully overcome these types of objections, we continue to focus on ensuring examiners substantiate their objections fully and, where possible, to make suggestions as to how the objections can be overcome.

Harmonised approach to searching in emerging technologies

In addition to practice harmonisation within divisions and teams, there is a need to ensure consistency in the approach taken across teams working in related technical areas. This is particularly important in technology areas which are developing quickly, where case law is still being established and our teams of examiners are growing.

Examiner-to-examiner exchange and discussion are key elements in achieving our goal of increased consistency. The active search division, peer-to-peer

reviews between divisions and the creation of mixed divisions of examiners from different fields of technology and sites are all supporting us in this endeavour.

In 2025, we will extend these initiatives to additional areas of technology where differences in practice or procedure are observed. We will sharpen our focus on improving communication and feedback loops around such exercises (both internally and externally) to promote understanding, best practice and learning opportunities. The mechanism for the sampling of files for peer review will be formalised. These steps will enhance the quality assurance measures carried out by team managers and directors as part of our operational quality control.

Timely searching to deliver complete searches

In 2024, we continued the practice, established in 2022, of performing searches on first filings no earlier than four months after the priority date. This helps to ensure that the prior art has been fully classified, giving our applicants the confidence that all relevant prior art has been consulted at the time of the search. Our timeliness targets for delivering searches and written opinions for different types of incoming applications are as follows:

- EP first and second filings: six months
- First-filing international searching authority (ISA) and searches for national offices: seven months¹¹
- PCT (EPO not ISA): eight months (down from 10 months in 2023)

4.2 Search and written opinion data

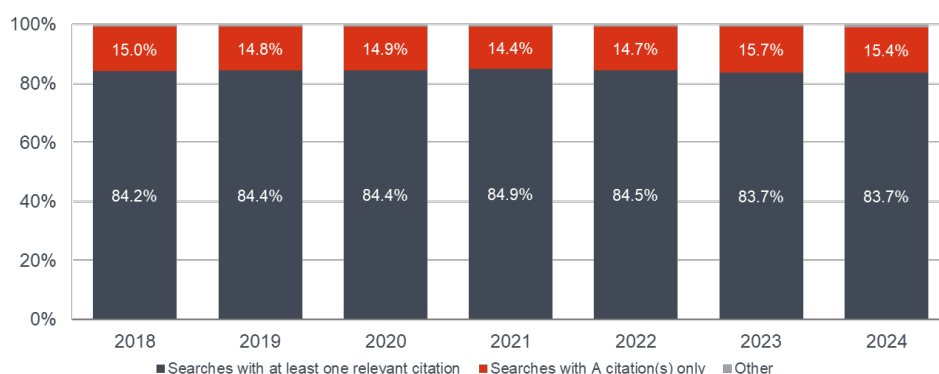
EPO search reports identify a large volume of relevant prior art from diverse sources

We have a strong focus on providing early certainty to our applicants and the public by citing the most relevant prior art right from the start of the procedure in the search report. In 2024, 83.7% of EPO search reports identified at least one document that was prejudicial to the novelty or inventive step of one or more claims.¹² Only 15.4% of searches contained only A-category citations, meaning that no documents prejudicial to novelty or inventive step were found during these searches. Our search reports have remained remarkably consistent in citing relevant documents over the years.

¹¹ The seven-month target applies to applications received within four months of filing

¹² Searches with at least one relevant citation are search reports with citations of categories X, Y and E, as well as citations where X and Y categories are combined with another category. Searches with A citations only are search reports with at least one A-category citation and no XYE-category citation. Other search reports are mainly "no searches" and Euro-PCT bis with no additional citations in the supplementary search report.

Figure 11 – Searches with a least one relevant citation and searches with only A-category citations¹³



Source: EPO

Finding the most pertinent prior art in all languages

The EPO's official working languages are German, English and French and examiners routinely search for prior art in these languages. However, prior art from Asian countries has long been included in EPO search reports. When possible, examiners cite a German, English or French family member of any document deemed relevant enough for inclusion in a search report. This is not always possible and if a document which is not readily understood by the division is cited, a machine translation is usually made and this is then shared with the applicant.¹⁴

The share of search reports including at least one Asian-origin and/or Asian-only patent citation¹⁵ has increased: almost 52% of our search reports in 2024 included an Asian-origin patent citation (up from 49% in 2023), and around 19.4% even included an Asian-only XYE-category patent citation¹⁶ (up from 18% in 2023). This trend confirms the increasing significance of prior art from China, Japan and Korea, as well as the EPO's progress in obtaining and using this documentation.

¹³ Searches with at least one relevant citation: Search reports with citations of the categories 'X', 'Y', and 'E' as well as citations where 'X' and 'Y' categories are combined with another category. Searches with A citation(s) only: Search reports with at least one A-category citation and no XYE-category citation.

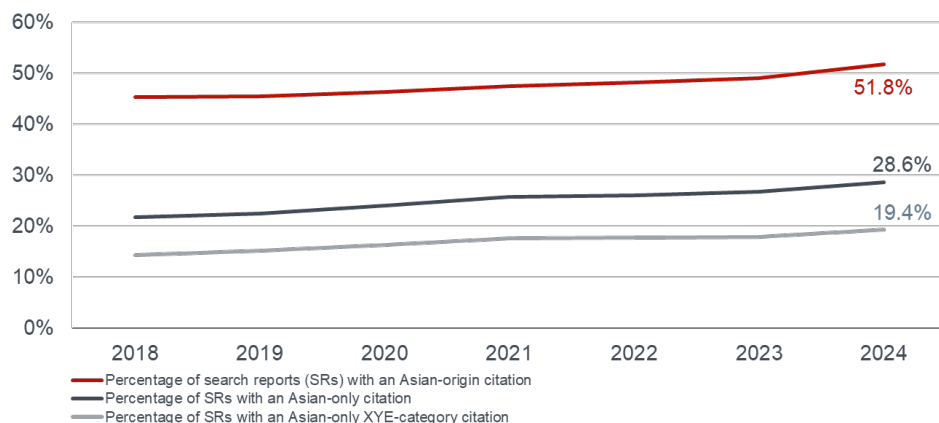
Other: Mainly 'No searches' and 'E-PCT bis' with no additional citations in the supplementary search report.

¹⁴ https://www.epo.org/en/legal/guidelines-epc/2025/b_x_9_1_2.html

¹⁵ An Asian-origin citation is a patent document either in Chinese, Japanese or Korean or with a priority document in one of these languages; an Asian-only citation is a Chinese-language, Japanese- language or Korean-language patent document that does not have any patent family member in an EPO language (English, French or German).

¹⁶ An XYE-category citation is a document which, in relation to one or more independent claims, is: novelty- or inventive step-destroying when taken alone (X category); inventive step-destroying when combined with one or more documents of the same category (Y category); a potentially conflicting patent document regarding the filing or priority date (E category).

Figure 12 – Asian patent prior art citation rates in EPO search reports

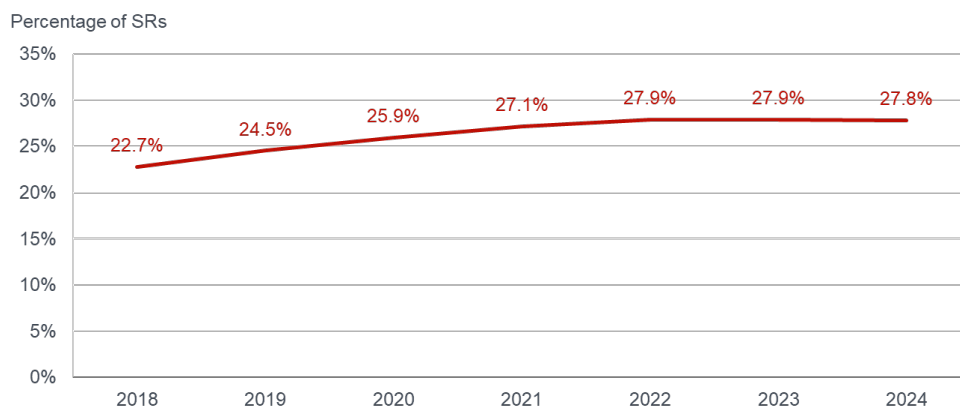


Source: EPO

Non-patent literature coverage

In 2024, around 28% of EPO search reports contained at least one non-patent literature (NPL) citation. The volume of cited non-patent literature varies by technology. In 2024, the highest contribution of NPL to total citations were in the life sciences and chemical technical fields, reflecting the need to search scientific articles in these fields.

Figure 13 – Percentage of EPO search reports containing one or more NPL citations



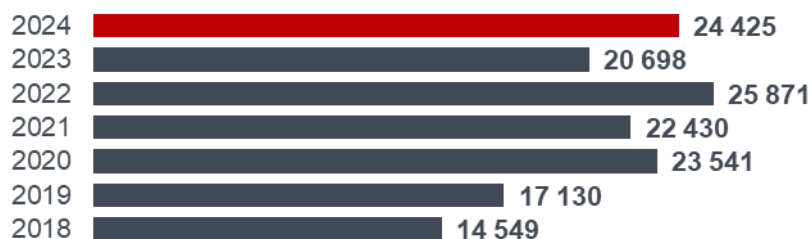
Source: EPO

The EPO searches standards documentation

Overall, 4.7% of EPO search reports contained at least one standards document. The 2023 decrease in search reports containing standards is largely explained by 25% fewer Euro-PCT with supplementary searches being performed, as such applications tend to have an above-average share of standards citations. A total of 99% of the search reports with standard citations were issued in the areas of video coding and transmission, wireless communication, IT security and internet

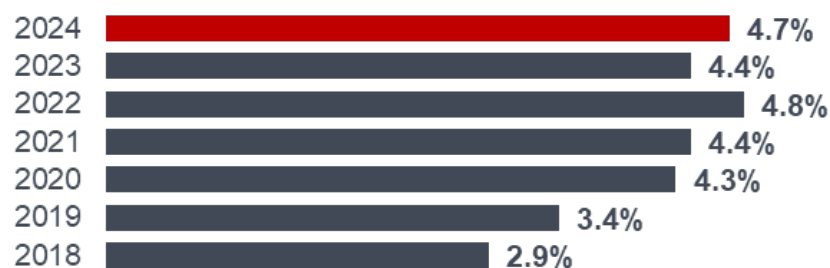
and Internet of Things. 20% of all search reports in these directorates contained one or more standards citations.

Figure 14 – Number of standards documents cited in EPO search reports



Source: EPO

Figure 15 – Percentage of EPO search reports containing at least one standards document

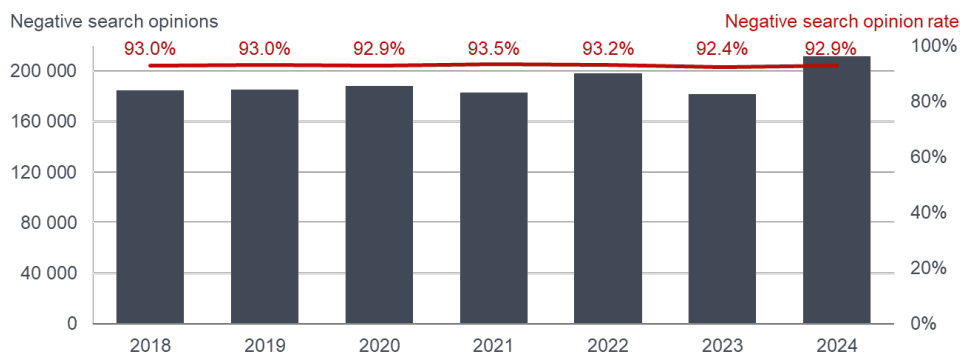


Source: EPO

Comprehensive written opinions at the search stage

EPO searches and written opinions provide applicants with a thorough assessment of patentability, allowing them to make timely and informed choices on further investments in their invention. In addition to the 83.7% of cases where prior art relevant to novelty or inventive step is cited, in approximately 93% of cases we raise an objection to patentability under the EPC. This leaves just 7% of cases where the search division finds no objection to patentability. These 7% of cases could lead to a grant of a patent as a first action in the examination phase without the need to file amendments or convincing arguments to overcome objections. The rate of positive search opinions has remained remarkably stable over the years, illustrating the consistent approach taken by EPO examiners.

Figure 16 – Volume and frequency of negative search opinions issued by the EPO



Negative search opinion rate: ratio of negative search opinions over all EP (incl. Euro-PCT bis) and PCT Chapter I search opinions in respective year.

Source: EPO

Non-standard searches

At the EPO, we strive to provide our applicants with complete searches and written opinions. However, there are cases where this is not possible and examiners must issue partial or incomplete search reports. In 2024, partial search reports due to non-unity were issued in 6% of cases. This figure is stable, ranging from 6.8% to 5.8% between 2015 and 2024. Other non-standard searches remained at a low, stable rate of 1.6%.

4.3 Search and written opinion quality results

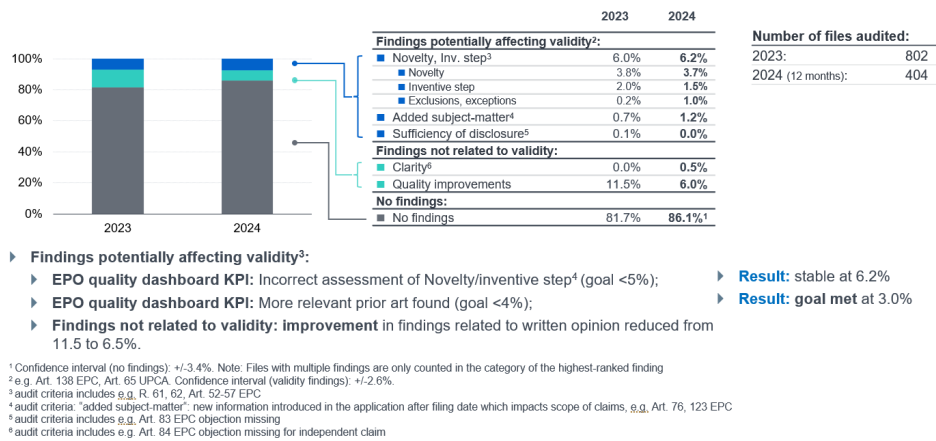
Directorate Quality Audit (DQA) results

The EPO has audited the quality of its search products since 2007. High levels of conformity with criteria related to relevance of the cited prior art have been measured continuously since then. Quality is also a continual dialogue with users. In response to their feedback, the search audit was extended at the end of 2021 to cover five additional aspects relating to the written opinion, in addition to the aspects centred around the relevance of the prior art. This extended audit checks whether the search product provides a complete and correct interpretation of the prior art and whether it clearly communicates the potential patentability of claims.

The number of searches sampled for auditing is selected to deliver a statistically relevant measurement of the percentage of sampled files with "no findings related to validity issues" to a confidence level of 95%. In 2023, the high quality of the main search objectives was found to be improving and this trend was confirmed in 2024. A statistically relevant improvement was seen in the number of 2024 files without any findings, compared to 2023 results, as this figure rose from 81.7% to 86.1%.

The search audit results provide a transparent overview of the major types of findings (see figure 17). Increased granularity in the data, including detailed reasons for the causes of the findings, was established in 2024 and will facilitate more targeted quality actions in 2025.

Figure 17 – Search quality audit findings



Source: EPO

Audits once again confirmed the high quality of the documentation search, with auditors finding a closer (more relevant) prior art document, with a potential impact on considerations of patentability of an application, in only 3% of files in 2024 versus 4% in 2023. Overall findings relating to novelty and inventive step remained stable at 6.2% (the 3% closer prior art is included in this figure), demonstrating that the very high level of quality of search reports overall continues to be maintained, despite the continuously growing collection of prior art.

In 2023, the most frequent issue was the correctness of objections in the written opinion (11.5% of files in 2023). In many cases the examiner had been too strict in raising objections. Clearly our aim is to provide an accurate written opinion in which the objections are fully supported by the relevant legislation and any cited document. Search audit findings for 2024 confirmed the positive impact of quality actions such as the active search division, with findings related to invalid objections raised by examiners significantly decreasing from 11.5% in 2023 to 6% in 2024.

Quality dashboard KPIs for search and written opinion

Based on these DQA results, we set a clear KPI to track the incorrect assessment of novelty or inventive step in our search products.

KPI	Result 2024	Goal 2024
Search and Written Opinion: Incorrect assessment of novelty or inventive step	6.2%	< 5%
Search: More relevant prior art found	3.0 %	<4%

User satisfaction survey results 2022/2023: search and written opinion

KPI	Result 2022/2023	Goal 2024/2025
Users rating our search products as good or very good	80.0% User Satisfaction Survey 2022/2023	>= 80%

Our end-to-end user satisfaction surveys regularly show high levels of satisfaction throughout the patent granting process. The 2022/2023 user satisfaction survey (USS) results again showed strong satisfaction along the PGP. Some 80% of respondents rated our search products as good or very good. The latest cycle of the user satisfaction survey was launched in 2024 and the results will be published on the EPO website as soon as they are available.

Key findings from SQAPs: search and written opinion

The panellists, consisting of EPO experts and European patent attorneys, assessed 36 searches and written opinions across various technical fields.

Some key findings were:

- EPO searches are trusted by users.
- the detailed written opinions provided are very much appreciated
- relevant documents were cited with precise references to passages
- independent claims were addressed in written opinions
- constructive suggestions were offered to overcome objections
- dependent claims could be addressed more completely
- problem-solution approach in inventive step assessments could be more consistent
- structure of written opinions could be improved
- lengthy boilerplate standard clauses should be avoided

These findings mirror feedback we have obtained from other sources and suggestions for improvement have been taken forward in our Quality Action Plan 2025. For more information, please refer to the annex of this report which provides more detail on the 2024 SQAPs.

Search timeliness

KPI	Result 2024	Goal 2028
Timeliness of search	85.1%	>= 90%

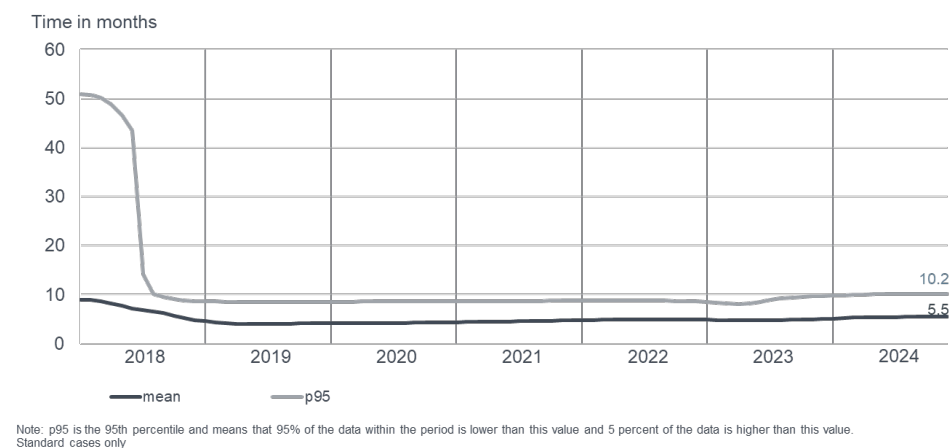
Timeliness of search: The objective is to maintain the timeliness of our products, bringing certainty to the market. The KPI monitors the percentage share of EPO searches that are completed on time. It measures the annualised share of all standard search reports completed within 6 months and is updated on a monthly basis.

Our users need to receive EPO searches and written opinions on time. This is especially the case for first filings because for these applications, applicants must

decide on their next steps before the priority year expires. As a result, we shortened the time for delivery of results to our member states for national searches and delivery of search results on PCT first filings from nine to eight months in 2022, and from eight to seven months in 2023. In 2024 we also reduced our target for PCT BIS searches (where the EPO did not conduct the search under the PCT) from 10 months to 8 months. These steps to harmonise our targets for search, resulted in an increase in search workload in 2024, as we absorbed the additional two months of PCT BIS searches. We also saw an increase in incoming search workload, particularly in the areas of batteries and biotechnology. As a result, we did not reach our 90% target for timeliness in 2024. Timeliness of search will be a focus for us in 2025 and under our SP2028, as we seek to harmonise our target for all search products at six months.

Mean search timeliness for standard searches¹⁷ was 5.5 months. 95% of searches and written opinions ("p95" in figure 18) were dispatched within 10.2 months.

Figure 18 – Search timeliness 2018-2024



Source: EPO

¹⁷ Standard searches exclude (1) non-unity, (2) unclear and (3) incomplete cases.

5. High-quality, timely products and services: examination



KEY STRENGTHS

- **Consistent practice:** Promoted across examiners and technical fields through collaboration, mixed divisions, peer reviews and practice harmonisation dashboard.
- **Dialogue-driven patent granting process:** Constructive engagement with applicants via intermediate communications, oral proceedings and informal conversations.



KEY ACHIEVEMENTS

- **Strengthened convergence of practice:** Within teams and between teams in related technical areas, improvements visible in the practice harmonisation dashboard.
- **Conducted comprehensive study of third-party observations:** Prompted by user feedback; covered 1 422 applications; actions to improve consistency taken.
- **Enhanced feedback on our decisions:** new team-level DQA reports; first SQAP session on refusals analysed appealed refusal outcomes.



RESULTS

- **Grant quality audit (DQA) KPIs:**
 - Incorrect assessment of novelty/inventive step: 6.8% (target <5%); improved from 7.9% in 2023.
 - Incorrect assessment of added subject-matter: 5.9% (target <5%).
- **Examination KPI based on Boards of Appeal ex parte decisions:**
 - In 4.3% of cases, the Boards set aside a decision of the examining division to refuse a patent.
- **High user satisfaction:** 78% of respondents in the 2022/2023 USS rated the examination phase as good or very good.
- **Examination timeliness:**
 - 76% of grants delivered on time (SP2028 target: ≥70%).
 - 79.3% of divisional applications delivered on time (SP2028 target: ≥80%).

Our goal in substantive examination is to provide applicants and the public with legally robust decisions. We achieve this through a detailed and complete examination that correctly assesses the most relevant prior art and applies the relevant legal provisions in a consistent and harmonised way. From our many external engagements, meetings and discussions, we know that our users share these priorities.

Our focus in 2024 was on improving the consistency of our approach to the application of the EPC, particularly in emerging fields of technology and we can see the results of these initiatives in our harmonisation dashboard. Other areas where we conducted detailed analysis include in our handling of third-party observations and in the outcome of Board of Appeal decisions from refusals. These have resulted in quality improvement actions being implemented to address issues identified and a new examination KPI related to the outcomes of refusal decisions at the Board of Appeal.

The impact of the actions taken to improve quality can now be seen in the results from our quality audits on grants, the user satisfaction survey and SQAPs. The results in 2024, although improving, also show areas where we must continue to focus our efforts.

5.1 Actions taken to improve quality of our examination

Improved consistency in application of the EPC through collaboration, mixed divisions and peer review

Harmonisation has been a focus area in recent years (see quality report 2023). Actions initiated in previous years continued, such as promoting early collaboration and consultation within divisions and with professional representatives. We are also continuing the practice of allocating mixed divisions to applications which span different technical fields. This ensures that the most appropriate combination of technical expertise is brought to the assessment of patentability for each patent application.

In addition to practice harmonisation within examining divisions and teams, there is a need to ensure consistency of approach across teams working in related technical areas. Peer-to-peer reviews between divisions help us in this endeavour. In response to requests from users, we focused mainly on practice harmonisation for emerging technology in the digital area in 2024. More than 2 200 files from over 60 applicants in this area were reviewed by examining divisions in neighbouring teams. Cases included, for example, those where there was a summons to oral proceedings issued potentially too early, premature indications of intentions to refuse, or where there had been multiple rounds of communications without a resolution. Encouragingly, in most cases, there were no areas for improvement identified. However, in some 10% of cases quality improvements were identified, either in the summons to oral proceedings or in the further communications.

In addition to the improvements made through this exercise, we have gained valuable insights into how to conduct such a peer-reviews more effectively. In 2025, we are building on our experience and extending the initiative to further technology areas where divergent practice or procedure is observed.

Practice harmonisation dashboard

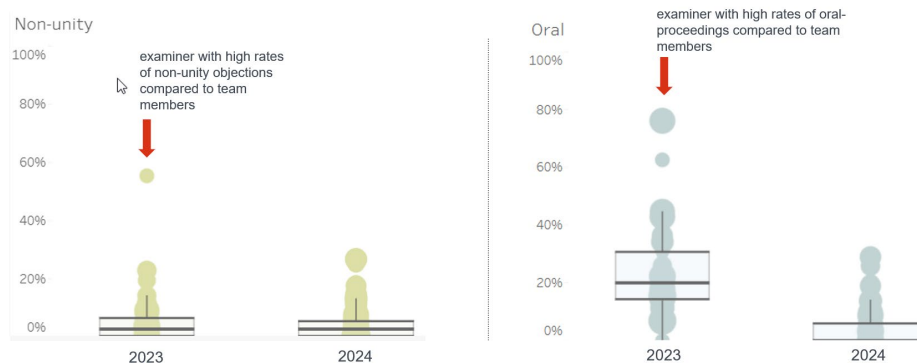
The internal practice harmonisation dashboard, which was launched in 2023, allows teams and individual examiners to see how often they raise objections under Articles 54, 56, 76, 83, 84 and 123 EPC. It also shows the number of search citations, A-only searches, non-unity objections, Rules 62 and 63 EPC (CLAR) invitations, as well as non-patent literature and Asian citation rates. For examination, it gives numbers for grants as first action in the examination phase, telephone communications, actions in examination, summonses to oral proceedings and refusals. The tool also allows individuals and examiner teams

to compare their objection rates with anonymised data relating to their peers and other teams.

The tool has now been in service long enough for us to track progress on harmonisation over the past two years. In the areas where we have focused our harmonisation actions in examination, we observe a visible impact, showing increased convergence of approach within teams and between teams in related technical fields.

Figures 19 and 20 show how harmonisation and the impact of harmonisation actions can be monitored. In figure 19, examiners who are outliers compared to their peers when it comes to raising non-unity objections at search (green) or issuing more summonses to oral proceedings (grey) than other team members in 2023 were more aligned with their colleagues in 2024.

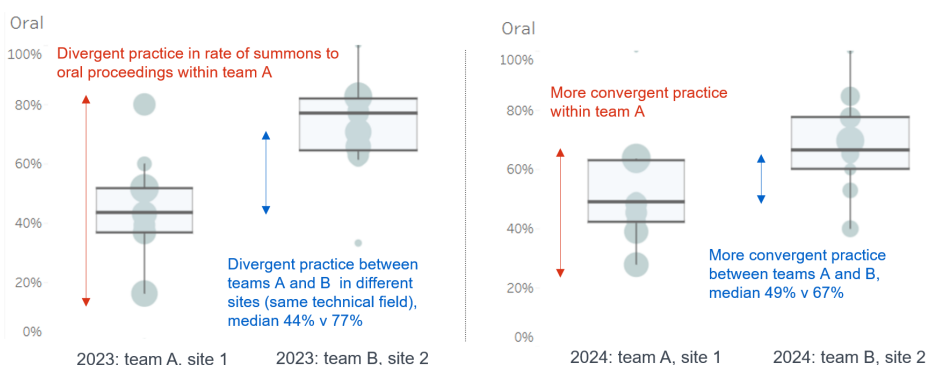
Figure 19 – Progress visible in practice harmonisation dashboard: non-unity objections and summonses to oral proceedings



Source: EPO

Figure 20 compares the outcomes of harmonisation efforts focused on teams from the same technical fields at different sites. As can be seen, the volume of summonses to oral proceedings was more aligned in 2024 than in 2023.

Figure 20 – Progress visible in practice harmonisation dashboard: summonses to oral proceedings



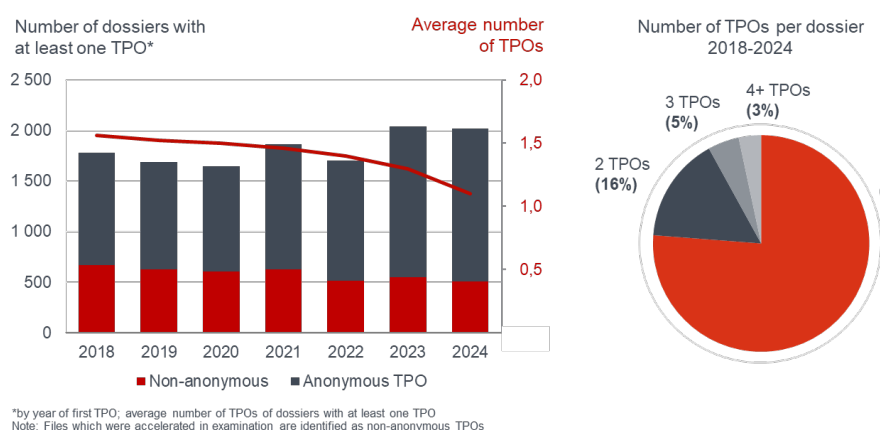
Source: EPO

Improved consistency in handling third-party observations

Following publication of the European patent application, any person may present observations concerning the patentability of the invention¹⁸ during the patent granting process. This can be done using an online form¹⁹. Although lack of novelty and/or inventive step are the most common observations, third-party observations may also be directed to clarity, sufficiency of disclosure, patentability and unallowable amendments.

Third-party observations, including those filed anonymously, become part of the file and are available to the public. They are communicated to applicants or proprietors, who may comment on them. The outcome of the evaluation by the competent division is briefly indicated in the subsequent office action from the EPO and thus becomes public. The filing of well-reasoned and substantiated third-party observations can improve the quality of granted European patents and may reduce the overall length of the procedure.

Figure 21 – Third-party observations (TPOs)



Source: EPO

Feedback from users suggested that we could improve the consistency of EPO's handling of third-party observations. To assess this concern, we carried out a comprehensive study to identify any areas for improvement.

The study was conducted on all applications finalised in 2023 (i.e. granted, refused or withdrawn) which had received third party observations. This covered 1 422 applications which received 2 115 observations that had been submitted during the search and/or examination phases. Of these, 135 (6%) were submitted in the search phase and 1 980 (94%) were submitted in the examination phase. 27 were submitted after the decision to grant had been handed over to the EPO postal service and, in such circumstances, no action is expected from the examining division. The focus of the study was on the consistency of EPO

¹⁸ https://www.epo.org/en/legal/guidelines-epc/2024/e_vi_3.html

¹⁹ <https://www.epo.org/en/searching-for-patents/legal/observations>

practice in handling the observations and the feedback provided by the examining divisions.

Figure 22 – EPO study on third-party observations

Scope	Findings	Key takeaways
<ul style="list-style-type: none"> ■ All applications finalised in 2023 with TPOs <ul style="list-style-type: none"> ■ 1 422 applications ■ 2 115 TPOs ■ Observations filed during search or examination procedure ■ Focus on consistency of EPO feedback by divisions 	<ul style="list-style-type: none"> ■ Feedback provided as requested by the Guidelines <ul style="list-style-type: none"> ■ in 73% of cases – search ■ in 81% of cases – exam ■ Search: 69% found (partly) relevant by division ■ Exam: 54% found (partly) relevant by division 	<ul style="list-style-type: none"> ■ Third parties invest considerable effort in filing observations: new documents, detailed arguments, effort often comparable to opposition ■ In most cases divisions examined TPOs thoroughly, provided clear assessment, delivered timely feedback

Source: EPO

The findings show that in most cases, the third-party observations were examined thoroughly with clear and timely assessments provided as stipulated in the Guidelines for Examination. However, in some 20% of cases, feedback was not provided in the public part of the file as required. In the vast majority of this 20%, the division had considered the observations and recorded their opinion in the internal notes but had not made that feedback visible to the public.

To address these areas for improvement, the following steps have been taken:

- Examiners have been reminded to provide timely feedback visible to the public (GL-E-VI.3), even in cases where the division considers the observations are not relevant.
- Cases where the division overlooked third-party observations are being analysed to determine the reasons for this and enable action to be taken.
- All directors were provided with the cases from their technical area which were part of the study. This will support targeted training and learning for teams where there is room to improve. Concrete examples of best practice are being used to harmonise practice in providing a concise and clear assessment of third-party observations.
- The relevant parts of instructions to examiners are being reviewed to ensure clarity.

These actions will continue throughout 2025 and a follow-up study will be conducted in 2026 to assess their impact.

First SQAPs session on refusal decisions

In response to feedback that there are opportunities to improve the quality of our refusal decisions, we held the first dedicated SQAPs sessions on this topic in 2024. This was greatly appreciated by our users and the findings (see results section below and SQAP annex) are helping us improve the quality of the written

decisions and ensure we deliver the most appropriate outcome for every patent application.

Analysis of Boards of Appeal decisions on appealed refusals (ex-parte)

As part of our learning from Boards of Appeal (BoA) decisions, we conducted an analysis of ex parte cases settled in 2023. The study was restricted to cases under the Rules of Procedure 2020. This was done to increase comparability with first instance decisions, as the decisions are more likely to have been based on the same requests and submissions.

Among the 745 cases assessed, 4.8% resulted in the Boards granting a patent previously refused by the examining division. The main ground for differences in opinion between the BoA and examining divisions was inventive step. This analysis also enabled us to set a new KPI for examination based on BoA outcomes which can be found in our [quality dashboard](#).²⁰

5.2 Examination data and outcomes

Intermediate communications

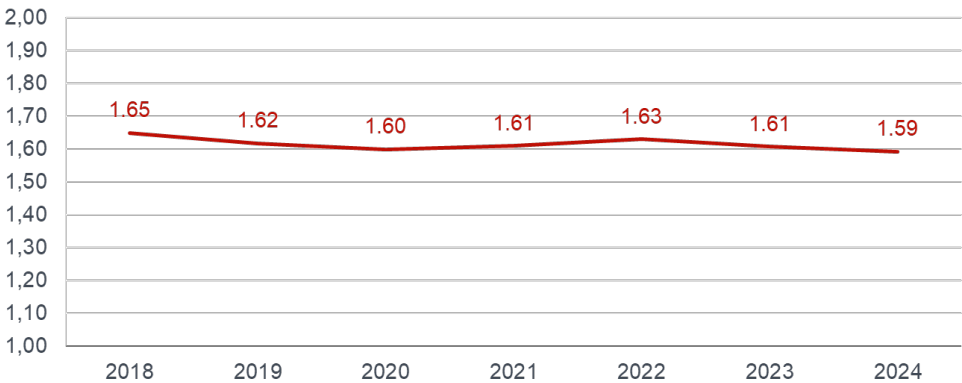
Clear and constructive dialogue between the applicant and the examining division is important for high quality patents.

In 2024, 146 922 intermediate communications were issued by the Office. The division and applicant can opt for various forms of dialogue to reach a resolution on the outstanding issues, including informal interviews, minuted telephone calls, interactions via MyEPO shared area or oral proceedings before the examining divisions.

For grants issued in 2024 following an intermediate communication (i.e. excluding cases where a grant was issued as the first action in examination), an average of 1.59 intermediate communications were issued prior to the grant. This figure has remained steady, varying between just 1.59 and 1.65 in the 2018-2024 period.

²⁰ <https://www.epo.org/en/about-us/services-and-activities/quality/quality-dashboard>

Figure 23 – Average number of intermediate communications per granted application (by year of grant)



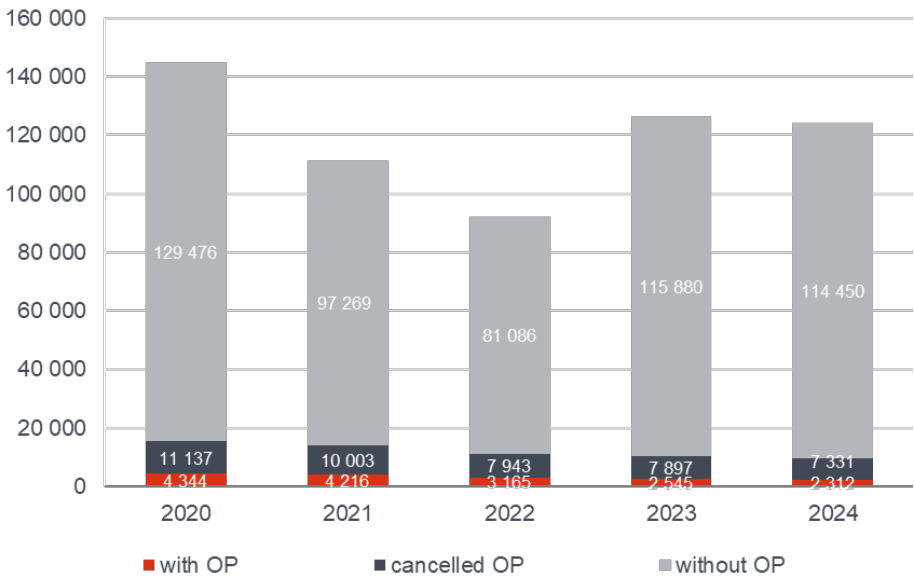
Average number of communications: arithmetic average of intermediate communications needed for all non-direct published grants (EPPU02) in respective year.

Source: EPO

Oral proceedings

Some 9 600 summons to oral proceedings were issued in 2024, representing almost 8% of examination cases finalised that year. For oral proceedings which were scheduled for 2024, 2 312 took place, while 7 331 were cancelled or rescheduled.

Figure 24 – Final examination actions 2020-2024, with and without a summons to oral proceedings



Source: EPO

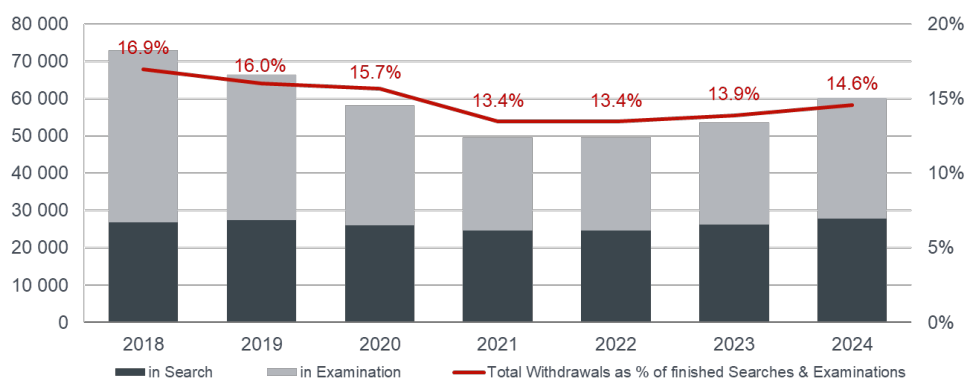
Although summons to oral proceedings are generally issued for cases where the written procedure is not bringing progress, a summons in itself is not indicative that a refusal is to be expected. In 2024, 59.7% of all cases that were subject to a summons for oral proceedings were granted and 40.3% were refused.

Often, dialogue between examiners and representatives results in acceptable arguments or amendments being filed before the date of oral proceedings. In such cases, a patent is granted and the oral proceedings is cancelled. In cases where a summons was issued and the oral proceedings were cancelled, 70.9% of applications were granted. However, even when oral proceedings do take place and amendment and arguments are presented to the examining division, applications can still be refused. These decisions can be appealed. Of cases where a summons was issued and oral proceedings took place, 42.3 % of the applications were granted and 57.7% were refused.

Withdrawals

Various factors can influence the levels of withdrawals of applications. Withdrawal rates have varied slightly in recent years.

Figure 25 – Withdrawals (by year of withdrawal)



Source: EPO

Grants

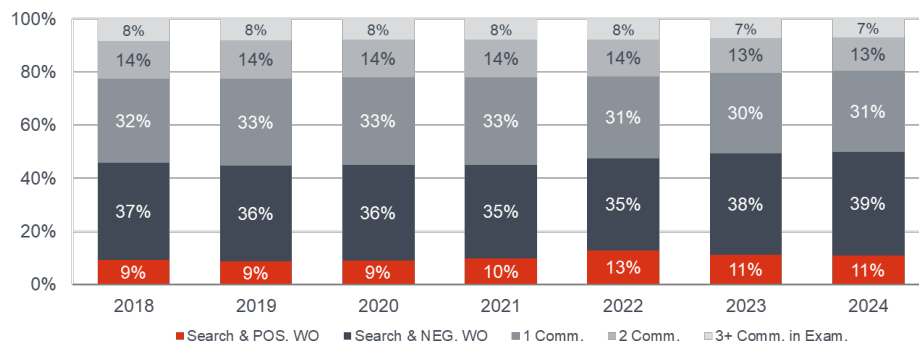
Almost all granted applications are amended during the patent granting process – only around 7% of grants have the same scope of protection as claimed in the application as originally filed. As presented in the previous chapter, 7% of applications receive a positive search opinion and are deemed ready for grant at the search stage. For these cases a proposal for grant could be the first action in examination. However, even here the examining division will conduct a top-up search and review the application thoroughly before the proposal to grant is issued.

Applicants are required to respond to a negative written opinion, and many amend their applications to overcome the objections. An amendment or argument that overcomes the division's objections can also result in a proposal for grant as

the first action in examination. The figure below shows that 50% of the patents granted in 2024 were granted as the first action in examination and this number has remained stable over the years.

In the remaining portion of granted patents, at least one intermediate communication was issued. Depending on the complexity of an application and the applicant's behaviour, some cases require more dialogue during the examination phase. 20% of grants in 2024 required two or more communications in the substantive examination phase. These more complex cases receive the time and attention they require from examiners.

Figure 26 – Number of communications required prior to grant 2018-2023



Definition: Break-down of all published grants (EPPU02) in respective year by required number of interactions, i.e. grants after Search & neg. or pos. WO, after 1, 2 or 3+ intermediate communications in examination; based on first grant action and most recent written opinion available per application. All figures are rounded.

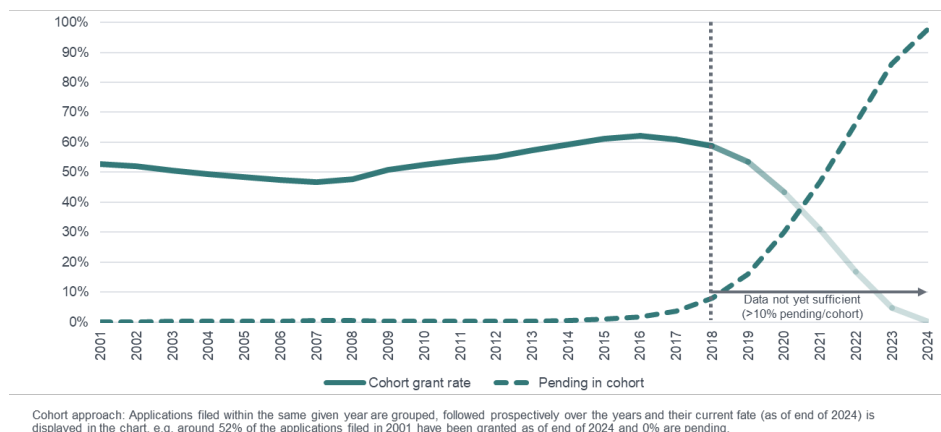
Source: EPO

Grant rates

In calculating grant rates, the EPO uses what is known as a "cohort" approach that involves tracking the outcome of applications filed in a particular year. According to this approach, applications filed within the same given year are grouped, followed over the years, and their fate is displayed in the chart. The grant procedure has been completed for 99% of all applications for a European patent filed up until the end of 2018. For these applications the grant rate was 57% (see CA/F5/24²¹).

²¹ <https://link.epo.org/ac-document/CA/F%205/24%20-%20En.pdf>

Figure 27 – Grant rate as calculated according to the cohort approach

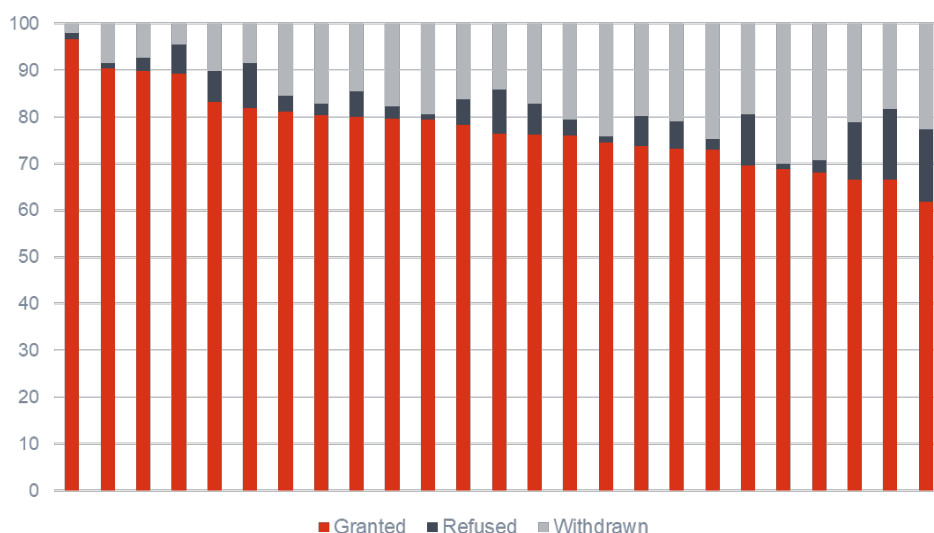


Source: EPO

Grant rates are also influenced by the quality of the incoming applications and the way they are prosecuted. The role of a patent office is to examine the applications submitted to it and to grant those that comply with the requirements under the applicable law and refuse (after ensuring the right to be heard) those that cannot be brought into line with the law. Its role is not – and should not be – to grant a certain percentage of the applications it receives. Therefore, the grant rate is not, and cannot be, an indicator of EPO quality.

Grant rates vary significantly between applicants, as can be seen from the graph below which shows application outcomes in 2024 for 25 large applicants. Is it also apparent that there is a broad spread in outcomes for these large applicants, with between 3.4% to 38% of applications not resulting in a granted patent. Naturally, business considerations may play a significant role in the levels of withdrawals.

Figure 28 – Outcomes in 2024 for applications from 25 large EPO applicants

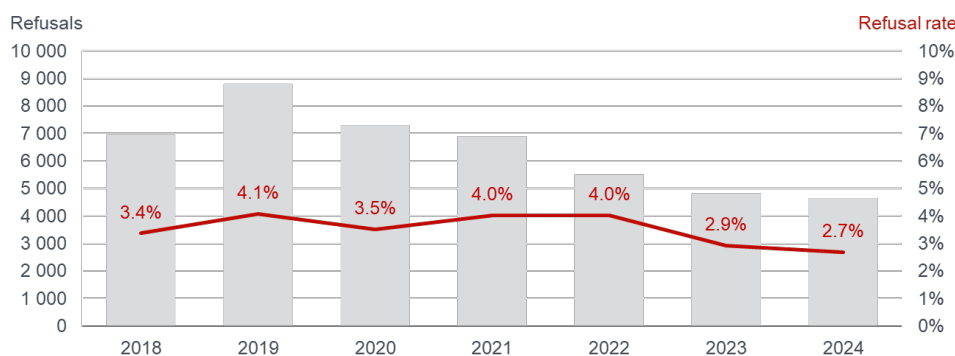


Source: EPO

Refusals

Refusal rates have remained remarkably consistent over time. The decline in the refusal rate since 2022 mirrors the increase in withdrawals in examination during the same period.

Figure 29 – Refusal rates 2018-2024 (by year of refusal)



Refusal rate: Ratio of refusals over all final actions in respective year (i.e. total sum of published grants (EPPU02), refusals, withdrawals, ADWIs and dead files).
Note: In 2014 examiners started to receive 2 points instead of 1 point per refusal; as of 2016 examiners received again 1 point per refusal.
Source: Query on Epasys

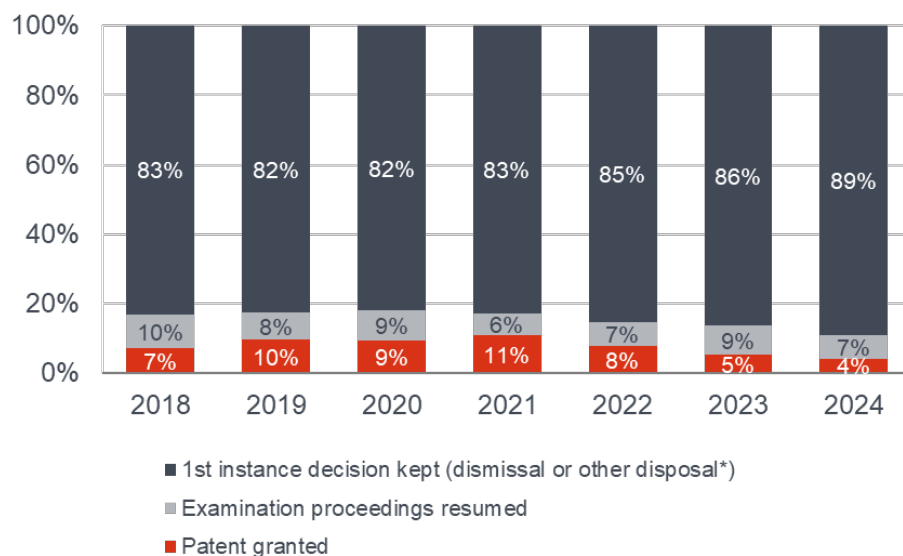
Source: EPO

Appealed refusal decisions (ex parte)

Approximately 12% of refusal decisions are appealed, representing 0.3% of the applications filed at the EPO. In 2024, a total of 946 ex parte cases were settled, of which 322 were settled by a decision on the merits. Of these 322 cases, 40 were granted by the Boards of Appeal (see figure 1 of the Annual Report of the Boards of Appeal 2024²²). As can be seen from figure 30 below, patents granted by the Boards of Appeal represent only 4.2% of all ex parte cases settled in 2024.

²² [epo.org/web/case-law-appeals/annual-reports/en-Annual-report-of-the-BoA-2024.pdf](https://www.epo.org/web/case-law-appeals/annual-reports/en-Annual-report-of-the-BoA-2024.pdf)

Figure 30 – Outcomes of the 946 ex parte cases settled in 2024



*Other disposals are e.g. withdrawal, inadmissibility cases
 Note: Figures are rounded; based on all BoA disposals
 Source: Report on Appealed Decisions

Source: EPO

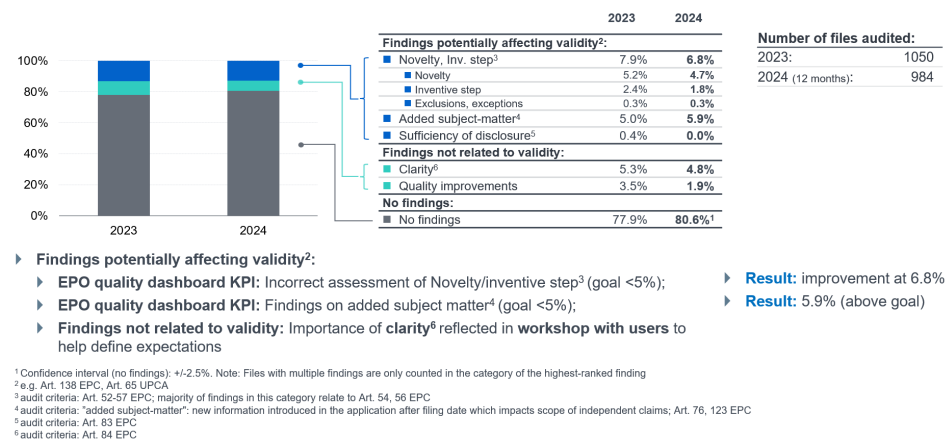
5.3 Examination quality results

DQA results

DQA auditors carry out thorough assessments of sampled grant files, checking compliance with the EPC, the Guidelines for Examination, and internal instructions, based on very strict audit criteria. Their review goes beyond assessing the overall validity of grants to cover all key quality aspects and allows detailed monitoring performance against defined KPIs. Direct dialogue about the audit findings between auditors and examiners – both in writing and in live discussions – support learning, fosters a shared understanding of quality, and help translate findings into concrete improvement actions.

In 2024, a statistically relevant improvement was found in the number of grant files without any findings over 2023 results, which increased from 77.9% (2023) to 80.6% (2024).

Figure 31 – Grant quality audit



Source: EPO

Contributing to this positive evolution at grant is a better assessment of novelty or inventive step, with incorrect assessments decreasing from 7.9% of sampled files in 2023 to 6.8% in 2024. Auditors also observed improvements in the assessment of dependent claims ("quality improvements") and clarity aspects, which do not necessarily impact patent validity, but are important for our users. In 2024, the total percentage of granted files with no findings related to validity in our quality audits was 87.3%

SP2028	Result 2023	Result 2024	Goal 2024	2024
Quality dashboard KPI				Overall sample size
Grant KPI 1: Incorrect assessment of novelty or inventive step	7.9%	6.8%	< 5.0%	984
Grant KPI 2: Incorrect assessment of added subject-matter	5.0%	5.9%	< 5.0%	984

Boards of Appeal outcomes (ex parte)

A new KPI on examination based on Boards of appeal ex parte decisions was published on the Quality Dashboard in March 2025. This KPI is updated annually.

KPI	Result 2023	Result 2024	Goal 2026	Goal 2028
Decision of the Board to grant a patent, which sets aside a decision of an examining division to refuse a patent	4.8%	4.3%	<4%	<3%

User satisfaction survey

KPI	Result 2022/2023	Goal 2024/25
Users rating our examination products as good or very good	78.0%	>= 80%

The 2022/2023 user satisfaction survey (USS) results showed strong satisfaction with all stages of the patent granting process. 78% of respondents rated our examination performance as good or very good. The latest survey was launched in 2024 and the results will be published on the EPO's website when they are available.

SQAPs key findings in granted patents and refusals

In 2024, there were two SQAPs sessions on examination outcomes: one on grants and the first ever session on refusals. EPO experts and European patent attorneys who acted as panellists in the SQAPs jointly assessed 36 files for each outcome. As with the search and written opinion SQAPs, their findings largely mirrored the feedback we have received from other users, as well as internal data and studies.

Key findings in grants:

- High level of consensus in assessments by EPO experts and attorneys
- requirements of EPC were met
- attorneys urge caution adapting description, especially deletion
- more consultation and reasoning requested on amendments at grant stage

Key findings refusals:

- decisions to refuse were mostly justified
- right to be heard was respected
- decisions were consistent with prior communications
- mixing different grounds for refusal should be avoided
- more dialogue during examination would prevent applications with patentable subject-matter being refused

For more information, please refer to the annex of this report which provides more detail on the 2024 SQAPs.

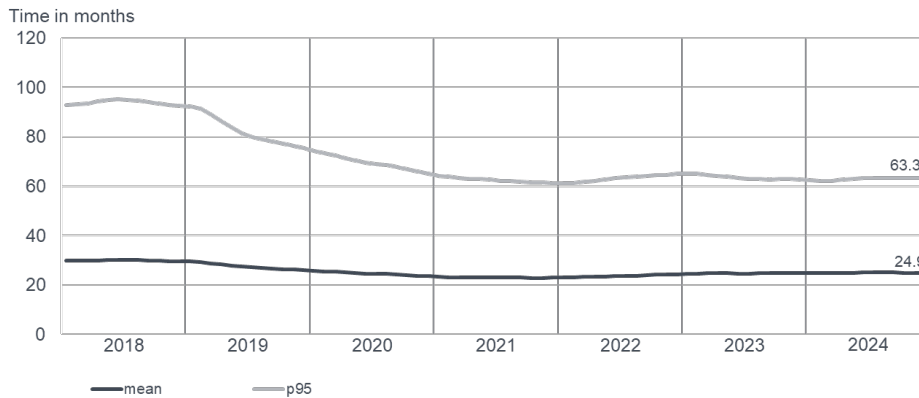
Timeliness

KPI	Result 2024	Goal 2028
Timeliness of examination	76.0%	>= 70%
Timeliness of divisional applications	79.3%	>= 80%
End-to-end timeliness	75.2%	>= 75%

Examination timeliness has been relatively stable since 2020, after years of improvements as historical backlogs were cleared. The mean duration of a

standard examination procedure²³ (from request for examination to issuing the intention to grant) for applications granted in 2024 was 24.9 months (unchanged from 2023). In terms of our targets for the examination phase, we aimed to deliver at least 70% of grants within 36 months. In 2024 we achieved 76% (down slightly from 77.2% in 2023). In 2024, 95% ("p95" in Figure 32) of examinations were granted in around 63 months, which is 30 months faster than in 2018.

Figure 32 – Examination timeliness



Note: p95 is the 95th percentile and means that 95% of the data within the period is lower than this value and 5 percent of the data is higher than this value. Standard cases only

Source: EPO

Overall end-to-end timeliness (from filing to intention to grant) remained strong, with an average duration of 38.1 months for all cases. In response to user feedback, our work has focused on dealing with the oldest files in our examination stock, and in 2024 this meant taking action on applications with a valid request for examination in 2019 or before. At the start of 2024, around 22 000 of these files were pending before the EPO or with the applicant in examination.

To prevent unacceptable delays and a growth in the backlog of old files, we will continue to reduce the numbers of these older files in 2025 by:

1. moving forward the applicable cut-off year by one year to focus on pre-2020 examination requests; and
2. decreasing the number of examination files awaiting examiner action for more than 30 months at around 1 000

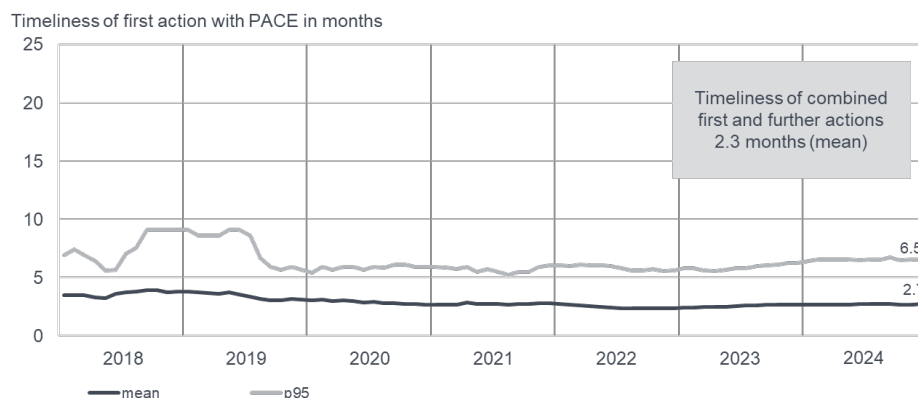
Accelerated examination (PACE) at the EPO²⁴ is free of charge and must be requested online using EPO Form 1005²⁵. The EPO strives to issue the first examiner action within three months of receiving a PACE request, and our timeliness in this respect has improved in the last five years. Under SP2028, the PACE programme will be updated to fit the digital age and relaunched as a new service.

²³ Standard examinations exclude cases with (1) more than one request for extension to reply, (2) more than one late fee payment and (3) rescheduling of oral proceedings.

²⁴ epo.org/en/service-support/faq/applying-patent/practical-advice/there-are-number-different-ways-expediting

²⁵ https://link.epo.org/web/1005_form-editable_12_15.pdf

Figure 33 – PACE timeliness



Note: p95 is the 95th percentile and means that 95% of the data within the period is lower than this value and 5 percent of the data is higher than this value.

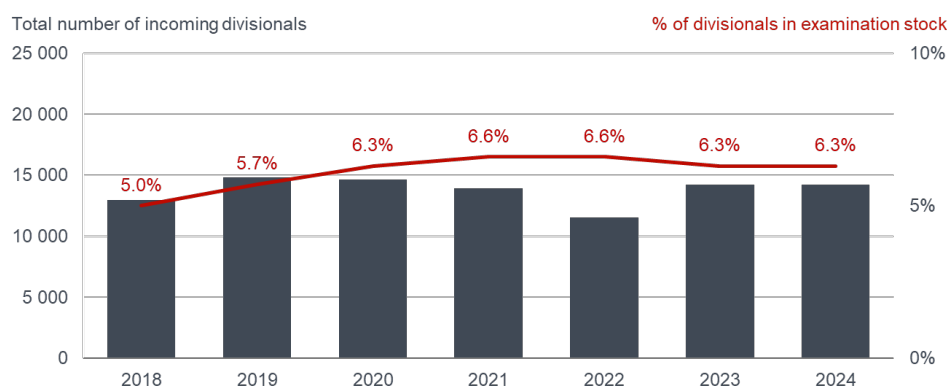
Source: EPO

Treatment of divisional applications

A divisional application may be filed relating to any pending earlier European patent application. The divisional application is accorded the same filing date as the parent application and benefits from any priority right of the parent application. These applications have their legal basis in Article 76 EPC and Rule 36 EPC, as well as Article 4G of the Paris Convention. They may be filed to overcome an objection of non-unity (i.e. mandatory divisionals) or on the applicant's own initiative (i.e. voluntary divisionals).

At present, pending divisional applications represent about 6.3% of the total volume of EP examination stock. In recent years, around 85% of divisional applications have been filed on a voluntary basis. The remaining 15% are filed following an objection of lack of unity. Divisionals are not filed in limited technical fields or solely by large applicants. Most divisionals are "first generation": 85.4% of divisionals finished in 2024 had only one parent.

Figure 34 – Number of incoming divisional applications and the percentage of examination stock made up of divisionals



Note: Incoming search files (EP and E-PCT bis) and divisionals based on date of receipt

Source: EPO

The EPO has implemented measures to ensure the swift processing and legal certainty of divisional applications, including the following:

- Since 2023 we applied the option for the examination division to summon to oral proceedings as a first action in cases where the parent application was refused or withdrawn. So far, this measure has only been used on rare occasions: out of 11 272 first actions in examination on divisional applications only 26 were summons to oral proceedings.
- On 1 November 2022, the EPO changed its practice and now publishes divisional applications as soon as possible after the formalities are completed. This proposal addresses a longstanding request from users and provides early transparency for third parties. As a result, the time taken from receipt of a divisional application to its publication fell from 5.8 months in 2022 to 2.7 months in 2024
- In 2014 a generation-specific fee was introduced to prevent sequences of divisionals.

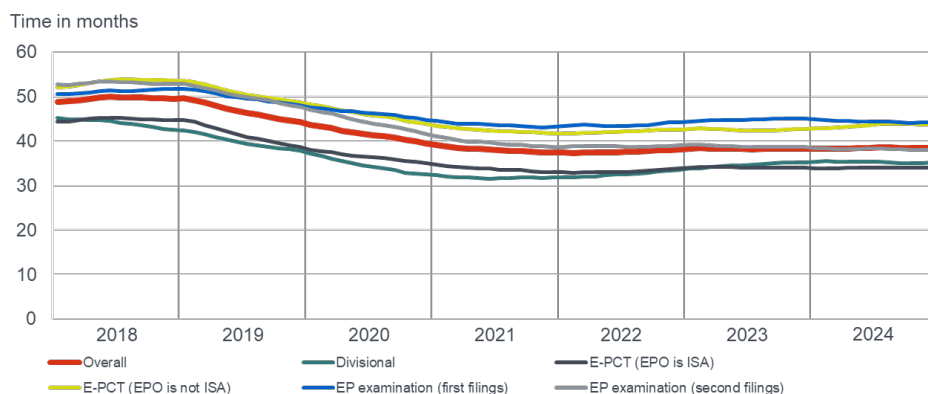
These measures are proving effective, with the processing time from date of receipt to finalisation consolidating the positive trend of the previous year. We will aim to issue at least 80% of the decisions to grant within 48 months from the filing of the divisional application. Acceleration is used in divisional applications (3.2% accelerated) clearly more often than in regular applications (2.4% accelerated), both as PACE (acceleration by the applicant) and as ex officio acceleration following a non-anonymous, substantiated third party observation. In response to requests from users, we will monitor and report on the use of divisional applications and in particular multi-generational divisionals in the different technical areas.

Figure 35 – Generations of divisionals finished in 2024 (not being parents themselves)

Technology Community	Count	Divisionals with only 1 parent	Divisionals with only 1 parent (in %)	Divisionals with 2 parents	Divisionals with 2 parents (in %)	Divisionals with 3 parents or more	Divisionals with 3 parents or more (in %)
Sum	9 461	8 062	85.2%	1 101	11.6%	298	3.1%
Agri-food	218	186	85.3%	29	13.3%	3	1.4%
Digital	2 384	1 965	82.4%	318	13.3%	101	4.2%
Electronics & Physics	1 104	995	90.1%	88	8.0%	21	1.9%
Energy	312	279	89.4%	30	9.6%	3	1.0%
Health	2 677	2 155	80.5%	391	14.6%	131	4.9%
Infrastructure & Mechanics	805	716	88.9%	81	10.1%	8	1.0%
Materials & Production	1 328	1 180	88.9%	121	9.1%	27	2.0%
Mobility & Space Technologies	612	567	92.6%	41	6.7%	4	0.7%
Not applicable	21	19	90.5%	2	9.5%	0	0.0%

Source: EPO

Figure 36 – Evolution in the average time from filing to grant for applications following different filing routes (in months)



Note: The EPO completes the grant for divisional applications faster than non-divisional applications. 79.3% of standard cases are completed within 48 months.²⁶

Source: EPO

²⁶ Standard cases (divisionals) exclude cases with (1) more than one request for extension to reply, (2) more than one late fee payment and (3) rescheduling of oral proceedings.

6. High-quality, timely products and services: opposition



KEY STRENGTHS

- **Procedural fairness:** Strong focus on reasoned decisions, addressing all arguments and safeguarding the right to be heard.
- **Continuous learning culture:** Regular training, workshops and feedback loops help opposition examiners stay aligned with evolving legal and procedural standards.



KEY ACHIEVEMENTS

- **Strengthened training:** On communication, procedural handling and minute writing, workshop on handling of auxiliary requests
- **Analysed BoA outcomes:** Pinpointed learning opportunities for opposition divisions, developed and published new KPIs
- **Reduced backlog:** Finalised 2 600 cases; backlog down to 3 500 files, showing commitment to legal certainty and procedural efficiency



RESULTS

- **BoA KPIs:**
 - 2.9% revoked by Boards due to lack of novelty (goal 2028 <3%).
 - 10.6% revoked by Boards due to lack of inventive step (goal 2028 <3%).
- **High user satisfaction:** 70% of respondents in the 2022/2023 user satisfaction survey rated the opposition procedure as good or very good.
- **Opposition timeliness:**
 - **20.5 months** mean duration (target: 18 months).
 - **38.4%** of cases finalised within 18 months (target: 75% by 2028).

The aim of the EPO's opposition procedure is to act with the utmost impartiality, provide fair and transparent opposition proceedings and deliver legally valid decisions on time. Each case is dealt with by an opposition division composed of three highly experienced examiners, who can be joined by a legal member if required. During opposition procedures, the chair of the division is always different from the chairperson involved in granting the opposed patent. This ensures objectivity and brings additional expertise into this phase of the patent granting process.

6.1 Actions taken to improve quality of our opposition

Role-based training for opposition division members

A focal point of 2024 concerned improving the skill sets of examiners involved in the opposition procedure. Opposition divisions consist of three experienced examiners:²⁷ a first member, a second member and a chairperson. Each has a distinct role, with the first examiner performing most of the analysis and drafting for oral proceedings summonses and written decisions, the second examiner writing the minutes of oral proceedings and the chairperson guiding the oral

²⁷ An additional legal member can be included, if deemed necessary.

proceedings correctly and efficiently. However, all members take decisions jointly.

The aim of efforts in 2024 was to maximise the effectiveness of both the EPO's opposition divisions, as well as the roles carried out by each member of these divisions. We reinforced the role of second members by providing them with a follow-up on basic training which emphasised their roles, as well as the expectations of second members. This included reminding staff of the minimum requirements for minutes which amongst other includes the need for harmonised minute writing.

We also developed advanced training for chairpersons in opposition in close collaboration with the group of instructors responsible for opposition training. This new training focuses on impactful communication and moderation skills, collaboration within the division, challenging opinions in a constructive manner and refreshers for important procedural and legal aspects.

Opposition first members and chairpersons were also trained in the use of LiquidText software to harmonise the work in the divisions. LiquidText enables improved organisation, retrieving, sharing and annotation of documents before, during and after oral proceedings in opposition, ensuring even smoother collaboration. This training will be extended to second members in 2025. In addition, several workshops were given by senior experts in the area of materials and production to harmonise and provide further guidance on the handling of large amounts of auxiliary requests in opposition. The content included refresher training on the legal framework and practical guidance using real examples.

To ensure that the right to be heard is respected, opposition divisions take a three-step approach as follows:

- 1) the divisions provide reasoned decisions
- 2) record disagreeing parties' arguments
- 3) provide reasoned arguments in response to the disagreeing parties' arguments

To maintain adherence to this approach, the examiners involved in opposition work were also reminded that that decisions must always take account of higher-ranking requests and that decisions for rejection or acceptance must be substantiated. They were also reminded that it is important to check and address the admissibility of late submissions. In addition, opposition divisions were reminded that the completeness of the summonses to oral proceedings in opposition is essential and that they should address all objections and all auxiliary requests (down to the first acceptable one).

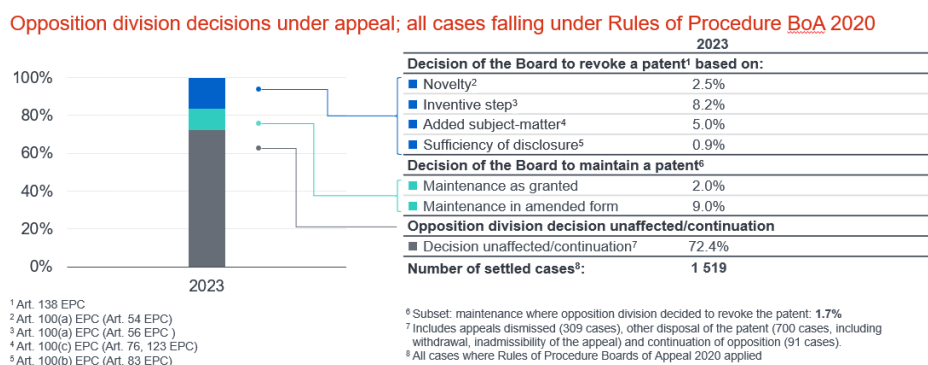
Analysis of inter partes cases settled by Boards of Appeal in 2023, development of new opposition KPIs

BoA decisions offer a rich source of learning for the opposition divisions. It was in this context that an in-depth analysis of BoA decisions was undertaken with the dual aims of creating enhanced input for continual improvement and creating new KPIs to help track progress. The analysis was conducted on a restricted set

of data: those decisions falling under the Rules of Procedure for the BoA 2020. This was done to increase the comparability with first instance decisions as the decisions are more likely to have been based on the same requests and submissions.

A total of 2 110 inter partes proceedings were settled in 2023 where 1 519 of the settled proceedings fall under the Rules of Procedure of the Boards of Appeal (RoP) 2020. The outcomes have been visualised in this chart providing a granular breakdown:

Figure 37 – Boards of Appeal outcomes: inter partes cases settled in 2023



Source: EPO

The results reveal a high level of alignment between first instance decisions and BoA outcomes, with 72.4% of appealed opposition decisions remaining unaffected (this includes 6% of cases where opposition was continued). Moreover, EPO examiners' assessment of novelty is very aligned, with only 2.5% opposition decisions being set aside due to lack of novelty. The results also show room to align opposition divisions more closely with the boards in their assessment of inventive step. This is consistent with feedback from our users who perceive a need for more harmonised and correct application of the problem-solution approach, an action we are taking forward in our quality action plan 2025.

The analysis led to the development of four new KPIs for opposition based on BoA outcomes which can be found in our [quality dashboard](#)²⁸.

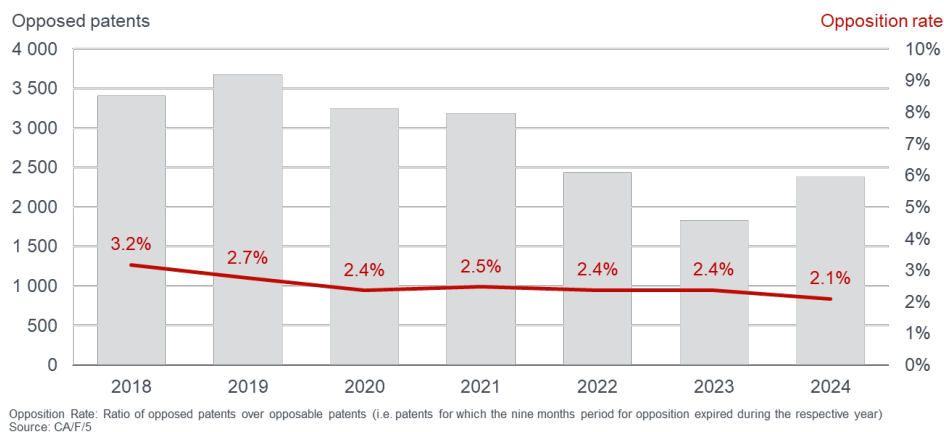
6.2 Opposition data and outcomes

Falling opposition rates

The percentage of granted patents that were opposed dropped from 2.4% in 2023 to 2.1% in 2024. As in previous years, the 2024 opposition cases were not evenly distributed across technical fields, as shown in the table below.

²⁸ <https://www.epo.org/en/about-us/services-and-activities/quality/quality-dashboard>

Figure 38 – The number of opposed granted patents and the opposition rate 2018-2024



Source: EPO

Opposition rate per technology community:

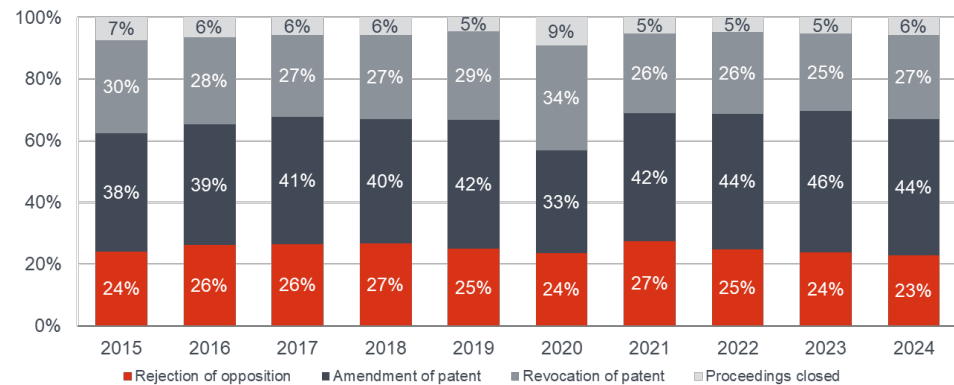
Technology community	Opposition rate 2024
Agri-food	7.0%
Materials & Production	3.5%
Health	3.2%
Infrastructure & Mechanics	2.1%
Energy	1.9%
Mobility & Space Technologies	1.7%
Electronics & Physics	1.3%
Digital	0.4%
Average	2.1%

Source: EPO

Outcomes of Opposition

As shown in the graph below, the outcome of opposition proceedings has been consistent over the years in terms of the proportion of patents revoked, amended or upheld. The fluctuation in the outcome breakdown observed in 2020 was a result of the measures implemented during the SARS CoV2 pandemic, as only a limited number of the most straightforward cases were finalised in 2020.

Figure 39 – Opposition outcomes 2018-2024



Note: Figures are rounded

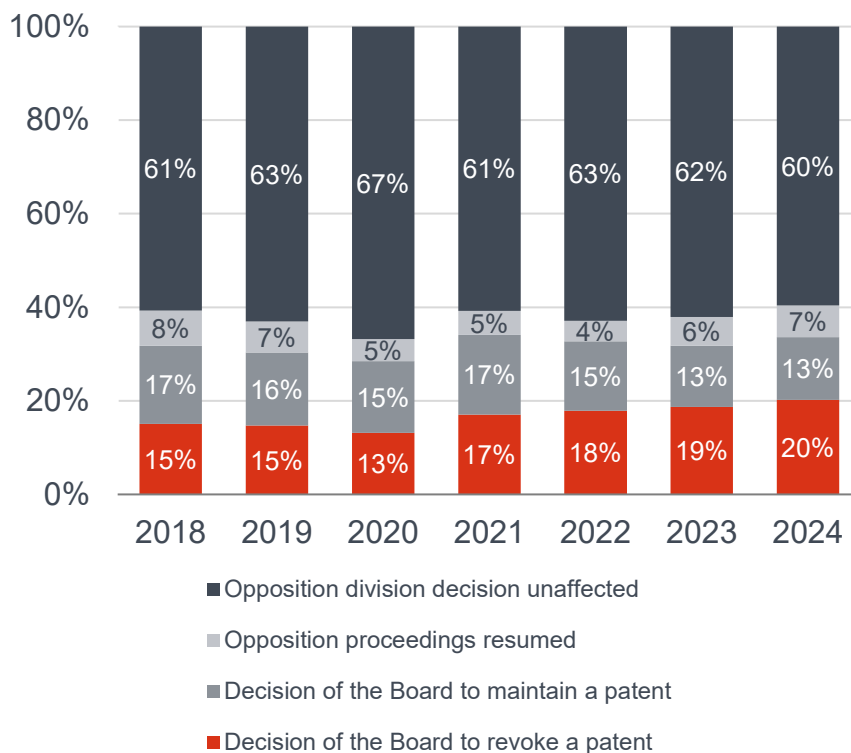
Source: EPO

Outcomes of appealed opposition decisions (inter partes)

An appeal against an opposition division's decision can be filed by the proprietor, one or more opponents or even both parties. Around 45% of opposition decisions are appealed, representing 0.7% of applications filed at the EPO. This figure has remained stable over the years and is a logical consequence of the fact that some files are highly contested for commercial and strategic reasons.

A total of 2 071 inter partes cases were settled in 2024, of which 1 320 were settled by a decision on the merits. The Annual Report of the Boards of Appeal 2024 provides a breakdown of the outcomes for cases which were settled by a decision on the merits. Figure 40 (below) shows the outcomes as a percentage of all cases settled. These outcomes have remained consistent over time.

Figure 40 – Outcome of the 2071 inter partes cases settled in 2024



Source: EPO

6.3 Opposition quality results

New opposition KPIs based on Boards of Appeal outcomes (inter partes)

Four new KPIs on opposition based on Boards of appeal inter partes decisions were published on the Quality Dashboard in March 2025. The 2028 targets reflect

the time needed for current quality actions to impact future appeal outcomes. These KPIs are updated annually.

KPI	Result 2023	Result 2024	Goal 2028
Decision of the Board to revoke a patent based on novelty, which sets aside an opposition decision to maintain a patent	2.5%	2.9%	<3%
Decision of the Board to revoke a patent based on inventive step, which sets aside an opposition decision to maintain a patent	8.2%	10.6%	<3%
Decision of the Board to revoke a patent based on added subject-matter, which sets aside an opposition decision to maintain a patent	5%	5%	<3%
Decision of the Board to maintain a patent, which sets aside an opposition decision to revoke a patent	1.7%	1.9%	<2%

User satisfaction survey

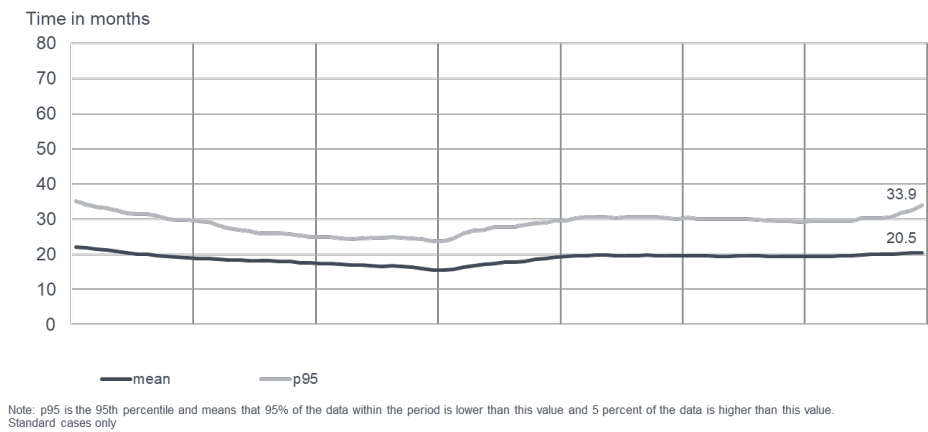
Our end-to-end user satisfaction surveys (USS) regularly show high levels of satisfaction throughout the patent granting process. The 2022/2023 user satisfaction survey results again showed strong satisfaction along the PGP. 70% of respondents rated our opposition procedure as good or very good. The latest USS was launched in 2024 and its results will be published on the EPO's website when they are available.

Opposition timeliness

In 2024 around 2 600 oppositions were finalised. We have continued to reduce the opposition backlog, which is now around 3 500 files. The mean average duration of a standard opposition action takes 20.5 months, which is only slightly above the 18-month target. In 2024, 38.4% of opposition cases were completed within 18 months. Our target for 2028 is 75%.

Oppositions are strongly driven by economic and/or strategic factors. As the Unitary Patent is in force, infringement or revocation proceedings of a European patent with unitary effect (a Unitary Patent) may take place before the Unified Patent Court in parallel to opposition proceedings before the EPO. The EPO is committed to concluding the EPO parallel opposition proceedings swiftly, to foster legal certainty and procedural efficiency, as well as high quality and uniformity in the European patent system. This is in the interest of parties to the proceedings, the authorities and courts involved, as well as the public.

Figure 41 – Opposition timeliness



Source: EPO

7. Partnerships: sharing responsibility for high quality



KEY STRENGTHS

- **Shared responsibility:** Patent quality is a collaborative effort within the EPO and between the EPO, applicants and representatives, guided by a jointly developed quality charter.
- **Multiple lenses to assess quality:** Internally through DQA, jointly with our users through stakeholder quality assurance panels, our independent user satisfaction survey and through TOSC with our member states. These are all underpinned by ISO 9001 certification.
- **Professional training and knowledge sharing:** EQE, EPAC, conferences and user day initiatives promote accessibility and professional excellence.



KEY ACHIEVEMENTS 2024

- **Expanded SQAPs programme:** Assessed search, grant and refusals across 108 patent files; programme developed with users and praised for professional collaboration and transparency.
- **Launched the user satisfaction survey 2024/2025:** With new questions proposed by SACEPO members.
- **Hosted Clarity workshop:** With 72 stakeholders from industry, litigators, EPO, Boards of Appeal and UPC to develop recommendations for EPO, representatives and applicants to overcome challenges with patent clarity.
- **Held 88 meetings with users and associations:** Engaged with 22 major applicants covering 10% of filings; feedback used to shape quality priorities.
- **Held public user consultation:** To update the Guidelines for Examination and develop first Unitary Patent Guidelines incorporating user and expert comments.



RESULTS

- **168 complaints closed:** 53% justified or partially justified.
- **72 547 customer enquiries handled:** 97% resolved within time limits (target: 95%).

Patent quality as a shared journey and responsibility between the EPO, applicants and representatives. It starts with a common understanding of what patent quality means, as captured in the quality charter co-developed with users and staff. The journey continues through close collaboration between all stakeholders to improve quality from the initial drafting of a patent application and across the entire patent granting process. To this end, we encourage early dialogue with users e.g. via the shared area (in MyEPO) as an effective way to achieve a smooth patent granting process.

Open dialogue is essential to identifying where all parties can improve. The EPO provides multiple channels to gather user feedback and supports applicants and representatives in enhancing their understanding of our patent granting process. In meetings with applicants, we share quality indicators relating to their applications to highlight areas where they can improve. The shared journey also involves tackling complex topics from different perspectives, as we did during a workshop on clarity with applicants, EPO colleagues, members of the Boards of Appeal and UPC judges. We must also assess quality from many different angles and remain transparent about our performance, goals and progress.

7.1 Building on the EPO's Patent Quality Charter: refining our shared understanding of patent quality and assessing quality together with users

The term "a high-quality patent" can mean different things to different constituents in the patent system. To address this, the EPO initiated a series of consultations with its staff, member states and users in 2019 that resulted in the Patent Quality Charter²⁹. Published in October 2022, the Patent Quality Charter recognises the importance of high-quality patents to industry, competitors and society, as well as the EPO's commitment to excellence (for more information see the EPO Quality Report 2022³⁰). It also recognises that quality is a shared responsibility, and that European patent attorneys, and the applicants they represent, play a pivotal role in ensuring quality at the start and during the entire patent granting journey.

Throughout 2024, the focus was placed on refining our joint understanding of patent quality. Initiatives such as the stakeholder quality assurance panels (SQAPs) and user outreach programme have been expanded to give us a more diverse perspective of what constitutes patent quality at different stages of the process.

The Technical and Operational Support Committee (TOSC) provides the EPO's Administrative Council with opinions on operational matters. To reflect the importance of patent quality, the mandate of the TOSC was updated in November 2024 to make it clear that it serves as forum for the development of patent quality standards within the European Patent Network and the common understanding of quality built on the Patent Quality Charter.

Assessing quality through multiple lenses: a comprehensive framework for assessing quality and continual improvement

To ensure a 360-degree assessment of the quality of our products and services, we gather information about the quality of EPO products and services both from internal sources and from users.

Figure 42 – 360-degree quality assessment and analysis at the EPO



²⁹ epo.org/about-us/services-and-activities/quality/policy.html

³⁰ link.epo.org/web/general/annual-review-2022/en-data-protection-report-2022.pdf

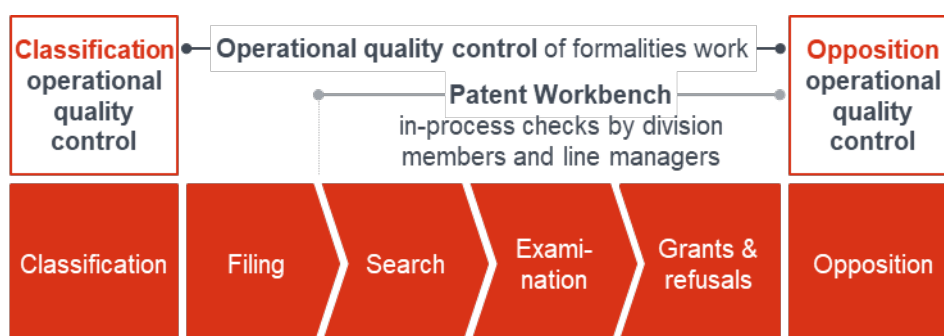
Source: EPO

All this information is routinely assessed and cross-referenced with other data and feedback and provides us with an indication of how we are performing and where we can improve. This enables us to set clear goals for our key performance indicators (KPIs), so we can track our progress and measure the impact of our quality actions. This is an essential part of our quality management system which has been fully certified under ISO 9001 since 2014.

Operational quality controls

On top of our three-member divisions, operational quality controls are a key mechanism for analysing our quality. With support from senior experts, these are performed by directors and team managers on a regular basis across the patent granting process. This work is enabled by patent workbench, which was designed to support and document collaboration between the division members. In addition, the work of our formalities officers is monitored through checks done by quality officers, which are also reviewed by quality experts. The work of our opposition divisions undergoes a further operational quality check that is carried out by the directors of the opposition area.

Figure 43 – Quality assessments carried out by our operational teams



Source: EPO

Quality audit (DQA)

In addition to the in-process operational quality control checks conducted on every file, quality audits are undertaken by a dedicated internal unit within Principal Directorate Internal Audit and Professional Standards. This quality audit practice is confirmed to be in line with international standards.

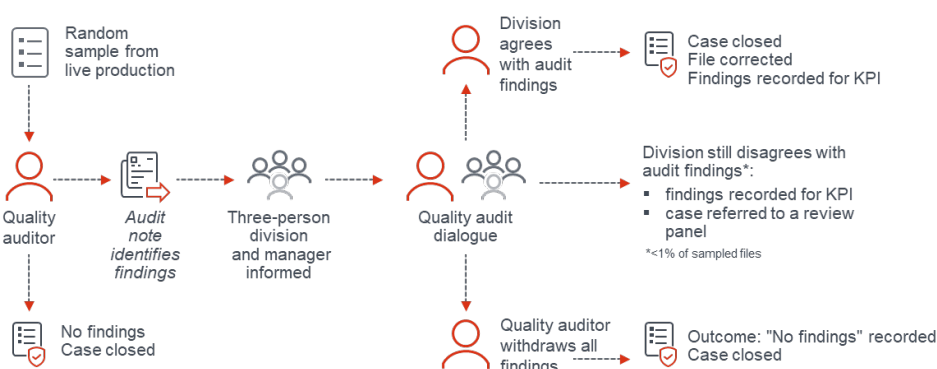
Trained auditors – who are independent of our operational teams – audit the quality of classification, search, examination and opposition work, as well as the work of formalities officers. This ensures regular and independent evaluation of how the divisions and formalities officers are applying the regulations. Findings are used for the continuous quality improvement of our products and services. In response to user feedback, checks were also expanded to cover written opinions at search and increase the granularity of data gathered at grant stage. In view of the importance of Unitary Patent protection since 2023, audits in 2024 focused on issues potentially impacting the validity of the patents granted by the EPO.

In 2024, 12 full-time auditors and seven auditors on 50% partial mobility assignments carried out search and examination product audits. They are all highly experienced examiners; most having passed the EQE and with experience of opposition work; some having further qualifications in patent law. All have a solid track record in delivering high-quality products and are appointed for three-year assignments to DQA following a tough internal recruitment competition. To ensure that our auditors consistently apply best practice and continually refresh their knowledge of practice and procedure, their rigorous development programme includes soft skills training, which supports the audit dialogue process, complemented by dedicated coaching and continuous knowledge transfer (CKT) sessions. Auditors participate as experts in SQAP exercises, organised within the framework of the SACEPO Working Party on Quality, to ensure they are aware of user quality expectations, and in 2024 further contributed to the EPO clarity workshop.

The random sampling of search products and proposals for grant is in-process and integrated into the operational electronic workflow, patent workbench. Sampled files are routed to auditors immediately after checks by the division and line manager, and any corrective actions are taken before the products are dispatched.

With 312 operational teams across eight technology communities in 2024, each search and examination auditor covered a broad range of applications. In the past, interaction between the auditors and examiners took place mainly in writing, with around 10% of cases leading to disagreements between the expert examiner divisions and the auditors. In 2020, we introduced face-to-face meetings to increase the effectiveness of feedback in such disputed cases. These informal discussions on specific findings, which could potentially impact the validity of a future patent, enable divisions to receive direct feedback on their work and provide opportunities for learning and knowledge exchange for auditors and divisions alike. As a result, the agreement rate on the final audit outcomes between auditors and divisions after the audit dialogue process was above 96% of audited files in search and 97% in examination at the end of 2024, giving us high confidence in the accuracy of audit findings.

Figure 44 – Internal search and examination quality audit process



Source: EPO

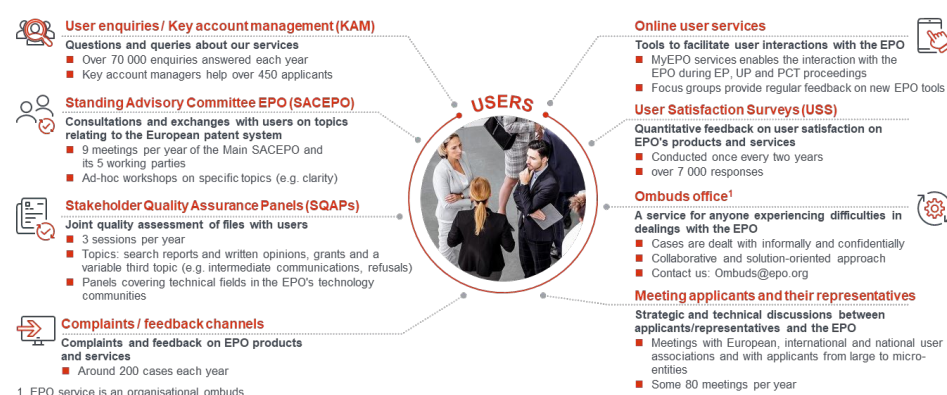
The increased granularity of the issues recorded at both the search and grant stages provided deeper insights into the various findings as inspiration for quality actions. Auditors contributed to the EPO's clarity workshop involving the

SACEPO Working Party on Quality in 2024. Work towards creating a shared understanding of quality in this area will continue in 2025.

The EPO gathers user feedback via multiple channels

An overview of the channels available for users to exchange with the EPO on quality topics is summarised in the infographic below. These channels provide an array of opportunities for dialogue at various levels, either relating to specific cases, general observations, an exchange of perspectives or developments, trends and strategies. Input submitted through each channel provides creates valuable learning opportunities for us. The feedback gathered is collated, together with internal quality assessments, and used as a basis for developing our quality action plan and to measure the impact of ongoing quality initiatives.

Figure 45 – EPO user feedback channels³¹



Source: EPO

The Standing Advisory Committee before the EPO

The Standing Advisory Committee before the EPO (SACEPO) was set up in 1978 and is the EPO's main forum for exchanges with user representatives. The SACEPO is consulted on all major initiatives relating to the development of the European patent system. Five working parties have been set up to address the following specific areas:

- e-Patent Process
- Guidelines
- Quality
- Rules
- Patent documentation and information

Since its creation in 2018, the SACEPO Working Party on Quality has been the EPO's main consultative body for all matters relating to the quality of the patent granting process. Membership comprises 75 user representatives from industry, the patent profession, public research institutions and Small and Medium Enterprises (SMEs). Members come from 38 countries across four geographical

³¹ epo.org/en/service-support/contact-us

areas of the world and represent all fields of technology. The Working Party on Quality, which meets twice a year, is given detailed updates on the EPO's performance and new initiatives. Input and feedback from members enable in-depth discussions on how to improve substantive quality. Acting on feedback from this body, a study on third party observations was carried out in 2024 (see section 5.1) and a workshop with industry on clarity was held (see section 7.3). In addition, the annual SQAPs sessions in 2024 addressed searches and written opinions, granted patents and refusals (see the annex to this report).

Stakeholder quality assurance panels

The stakeholder quality assurance panels (SQAPs) are an important component of the EPO's user outreach programme as they provide European patent attorneys with the opportunity to work together with EPO experts to jointly assess the quality of work done by the EPO for selected cases.

The SQAPs have been developed and expanded in recent years in consultation with our users and have therefore evolved to increasingly meet stakeholders' needs. The 2024 SQAP programme included three sessions on searches and written opinions, grants and, for the first time, refusals.

Several improvements were implemented based on user feedback. In particular, the search reports and written opinions session was expanded to include withdrawn and refused cases, responding to users' requests for a broader focus beyond cases which led to granted patents. The addition of a dedicated session to assess the quality of selected refusal decisions and the process that led to refusal of the application was also greatly appreciated by users.

Each of the panels comprised two European patent attorneys and two EPO specialists. The attorneys were nominated by epi, BusinessEurope, and the SACEPO Working Party on Quality (SACEPO WP/Q), while the EPO assessors were senior examiners and auditors from its quality audit department. In total, 61 assessors participated, 36 of whom were European Patent Attorneys and 25 EPO specialists. They jointly reviewed and evaluated 108 patent files across 18 technical panels, covering the fields of digital technologies; electronics and physics; health and agri-food; infrastructure and mechanics; energy, mobility and space technologies, as well as materials and production.

Observer participation was also broadened, increasing awareness of the SQAP programme and its outcomes. While SACEPO WP/Q and EPO representatives have traditionally attended, in 2024 invitations were extended to epi and BusinessEurope, resulting in 70 observers across the sessions.

The SQAPs were praised for their professional and constructive discussions, as well as for the strengthened collaboration between experienced practitioners and EPO staff.

For more information on the 2024 SQAPs sessions and their findings, please see the annex to this report.

Regular, independent and comprehensive user satisfaction surveys

Since 2007 user satisfaction surveys (USS) have proven an essential instrument for gathering feedback on our products and services, evolving in their format over the years. In 2020, the survey cycle was adjusted to a new biennial end-to-end format to enable a more in-depth assessment of user perceptions. Launched last year, the 2024/2025 USS is the third end-to-end survey within this new concept. The results from the latest survey will be published on the EPO's website when they become available.

USS findings provide valuable insights into user satisfaction, identifying both strengths and areas for improvement which guide targeted actions through the quality action plan, ensuring continuous enhancement to our products and services.

In November 2023, the SACEPO Working Party on Quality was invited to suggest questions for inclusion in the 2024/2025 User Satisfaction Survey. As a result, the 2024 survey, included new questions on:

- new developments in the field of digital services offered by the EPO.
- the Unitary Patent (included in the EPO website and the filing services surveys).
- Formalities services (last formalities services survey was conducted in 2018).

The confidential Ombuds Office service

The EPO's Ombuds Office is there to resolve exceptional cases in an informal, confidential, collaborative and solution-focused way. Launched in April 2022 at the request of users, the service resolves difficulties in dealings with the European Patent Office, getting stalled procedures back on track through dialogue. The service is available to anyone. The EPO Ombuds Office is not a legal instance. The Ombuds Office can be contacted from the EPO's "contact us" website or via e-mail: Ombuds@epo.org. Positive feedback indicated that its services were appreciated.

Figure 46 – Ombuds Office 2024



117 External Consultations

External Consultations since launch of the service:

Year	Cases received	Cases closed
2022	47	43
2023	79	75
2024	117	117

Source: EPO

Key account management

As part of our Strategic Plan, the European Patent Office (EPO) set an ambitious goal to transition to a fully paperless environment by April 2027. To support this transformative journey, we are continually enhancing our services and implementing a range of initiatives to guide and empower our users every step of the way.

Among these services, a dedicated team of six key account managers (KAMs) provide direct, personalised support to applicants that file regularly with the EPO. KAMs provide support to IP professionals, in particular companies filing directly with the EPO, patent attorneys, paralegals and IP support staff. Their expertise ranges from procedural to tool related aspects, and they are also the first point of contact for other matters.

In 2024, a key priority was promoting the EPO's online services such as MyEPO, Mailbox, Online Filing 2.0, as well as the two-factor authentication methods replacing the EPO smart cards. The KAM team accompanied users in this journey individually with customised training or by replying to enquiries, as well as through tailored 21 public seminars (in all three official EPO languages) and 25 tailored workshops. These seminars reached over 5 443 participants and recordings of them were released on the EPO's website.

7.2 Global partnerships

The EPO supports EQE and EPAC candidates in partnership with epi

The European Patent Academy provides online training materials and support for EPAC and EQE candidates to help prospective professional representatives, paralegals, patent administrators and EPO formalities officers prepare for these demanding examinations.

Since the launch of the EPAC in 2022, more than 1 100 candidates have sat the exam. Approximately 80% work in industry or a private attorney practice, 7% at patent offices and 13% in other roles, including in academia and technology transfer. The certification upholds the highest standards in patent administration, not just in Europe but worldwide. This reach is underscored by the diversity of its candidates: in just three years, the EPAC has attracted participants from 60 nations, with 87% from EPC member states and 13% from Asia, Australia and America. These milestones reflect the EPO's ongoing efforts to advance professional standards in patent administration.

The EQE is a mark of excellence for the European patent system, the patent attorney profession and for all those who pass the examination, including many EPO examiners. Since the EQE's launch in 1979, more than 14 000 patent professionals have been entered on the list of professional representatives before the EPO after successfully completing the qualifying exam. In total, some 2 000 candidates of 58 nationalities participated in the 2024 examination, of which 40% were women. Since the introduction of the fully digital EQE in 2021, candidates have been able to sit the papers in the location of their choice from anywhere in the world. This, in turn, has significantly increased the EQE's

accessibility, improving candidates' work-life balance and contributing to sustainability.

The EPO plays a key role in the Patent Cooperation Treaty

The EPO is a trusted partner for applicants seeking global protection via the Patent Cooperation Treaty (PCT). There are numerous advantages to using the EPO's PCT services. Firstly, the EPO's PCT searches and written opinions are conducted with the same high levels of completeness and thoroughness as those we prepare under the EPC. Using the EPO as a PCT authority can also speed up the process of obtaining a European patent. Where the EPO has drawn up the international search report, and an application is then made to enter the European phase, the application progresses directly to examination, without the need for a full new search. This saves applicants both time and money because they will not have to pay for and await the results of a new search. In addition, on entry to the European phase of prosecution, PCT-route applications, including PCT direct³² applications, are generally dealt with by the same examiners who were responsible for them during the international phase. This results in a consistent approach to an application.

In 2024, 66% of European users chose the EPO as the receiving Office for filing their PCT applications. Globally, the EPO was responsible for 31% of all international search reports in 2024, as well as 55.8% of all international preliminary examinations.

The EPO's strong reputation for quality facilitates our close co-operation with other patent offices throughout the world

The EPO is recognised as providing world-class search quality, as evidenced by the growing number of national patent offices in Europe which entrust parts or all of their national procedure search work to the EPO. By the end of 2024, the EPO had signed working agreements on search co-operation with 21 of its member states. In 2024, the EPO carried out a total 262 842 search actions, of which over 27 000 were national searches. In addition, the EPO performs international-type searches under Article 15(5) PCT (without a written opinion) for 8 member states.

The importance of quality and co-operation stretches well beyond our member states. For example, under the Patent Prosecution Highway (PPH) programme, applicants may request the accelerated processing of a European application if at least one claim has been deemed patentable/allowable by one of the EPO's PPH partner offices. At the same time, it enables the EPO to re-use the work done at other offices. Likewise, users may also take advantage of EPO work products to obtain expedited processing at EPO PPH partner offices.

Currently, the EPO maintains PPH programmes with all IP5 Offices, i.e. JPO (Japan), KIPO (Republic of Korea), CNIPA (P.R. of China) and the USPTO (United States). Further PPH partner offices are IPA (Australia), INPI (Brazil), CIPO (Canada), INAPI (Chile), SIC (Colombia), ILPO (Israel), MyIPO (Malaysia),

³² <https://www.epo.org/en/applying/international/accelerating-application>

IMPI (Mexico), IPONZ (New Zealand), INDECOPI (Peru), IPOPHL (the Philippines), IPOS (Singapore) and SAIP (Saudi Arabia). The PPH programmes with the Eurasian Patent Office (EAPO) and ROSPATENT (Russia) are currently suspended. Participation in the PPH programme at the EPO is free of charge.

7.3 Actions taken

Clarity workshop with users

Clarity is a topic which recurs in the EPO's meetings with users and feedback channels. The challenges in ensuring patent clarity were also raised by the SACEPO Working Party on Quality. SQAPs assessors identified challenges with the assessment of clarity, such as whether formulations are ambiguous or clear in a particular technical area. In response, in November 2024, the EPO gathered a diverse group of 72 diverse stakeholders together to discuss the importance of clarity at every stage of the procedure: from the drafting of applications, through the patent granting process and in post-grant procedures.

Attendees included representatives from industry and private practice working in a variety of technical fields. Members of the SACEPO Working Party on Quality (WP/Q), contributors to the EPO's Stakeholder Quality Assurance Panels (SQAPs) and members of the European Patent Litigators Association (EPLIT) were also present, as well as members of the EPO Boards of Appeal and judges of the Unified Patent Court (UPC).

The workshop underscored the importance of clarity for a robust patent system and the shared responsibility of both applicants and the EPO in meeting clarity requirements. Recommendations emerged for both the EPO and for applicants and their representatives.

Figure 47 – Recommendations from the clarity workshop held with users

For applicants and representatives	For the EPO
<ul style="list-style-type: none">■ Work with experienced representatives and ensure non-European applicants understand EPC requirements■ Prepare high-quality applications with clear, consistent terminology, strong supporting data, and fallback wording to anticipate clarity objections■ Proactively engage with examiners on clarity issues and respond appropriately to objections	<ul style="list-style-type: none">■ Raise awareness of the importance of clarity, including post-grant and for third parties■ Ensure consistent, well-substantiated clarity assessments and raise necessary objections early in the procedure, with proposals for resolution where possible■ Improve the Guidelines, develop a structured methodology for clarity and enhance collaboration with applicants

Source: EPO

Quality dialogue with the Boards of Appeal

Regular quality dialogue meetings between Boards of Appeal Chairpersons and senior EPO senior quality representatives have been established as a valuable forum for both sides to discuss topics of mutual interest. In 2024, agenda items included:

- the Guidelines revision cycle
- auxiliary requests
- clarity
- Quality action plan and the quality dashboard
- the implementation of the Enlarged Board of Appeal Decision G1/19

These meetings also led to the development of a new data collection form which the Boards complete when finalising their decisions. This provides statistical data on the grounds for appeal decisions to support learning for examining and opposition divisions and facilitates annual updating of the new quality KPIs on opposition and examination developed in 2024.

Meeting with users

In 2024 the EPO met with key stakeholders across the world, including business associations, patent professionals and various user groups. This encompassed 33 exchanges with the epi, BusinessEurope, international user associations such as the AIPPI and FICPI, as well as national user associations from China, Germany, Italy, Japan, Korea, The Netherlands, the United Kingdom and the USA.

We also held meetings with large applicants representing different geographical regions and technology fields. Overall, we met 22 applicants which accounted for approximately 10% of total European filings received in 2023. From the 26 user meetings held, 19 were virtual and seven in hybrid mode. Additionally, as part of our ongoing user engagement, we launched an interview series called *"The Voice of Our Users"*³³ where delegations' representatives shared their insights and feedback on the EPO's products and services.

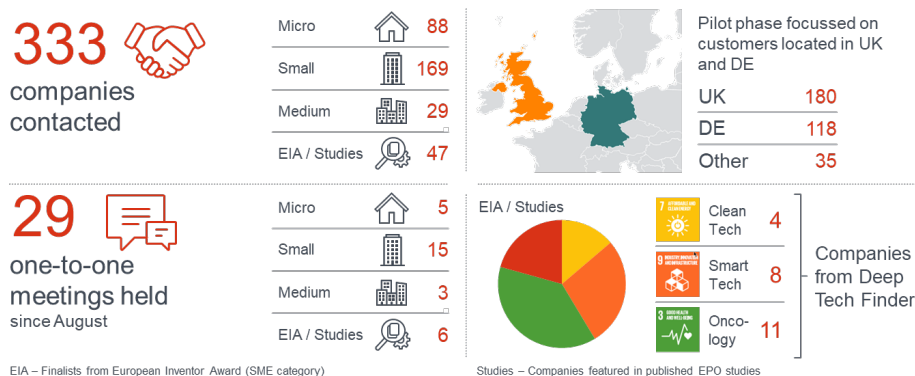
The agenda of each meeting was the result of multiple exchanges with the user prior to the meeting. Some of the topics generating high interest in 2024 were:

- Quality
- Communication with examiners and use of shared area in MyEPO
- Unitary Patent and UPC
- Timeliness
- EPO approach to CII/AI
- Operational matters related to EPC and EPO Guidelines
- EPO digital transition and MyEPO

In 2024 the EPO increased its outreach activities to encompass the categories of micro entity and SME customers. The outreach programme pilot started with companies based on Germany and the UK. Initially the objective was to hold ten one-to-one meetings for the period August and December 2024. In the end, 29 meetings were held with executives, mainly founders, CEOs and CTOs from micro-entities and SMEs, including four finalists of the European Inventor Award network. The Deep Tech Finder (DTF) served as the main tool for identifying customers. In total, these 29 customers hold 120 patent applications with the EPO (see section 2.1).

³³ <https://www.epo.org/en/news-events/news/epo-meets-philips>

Figure 48 – Overview of the EPO's SME user outreach programme 2024



Source: EPO

User day 2024

The EPO's annual user day event focuses on the EPO's online tools and gives participants expert insights aimed at helping applicants to get the most out of the resources we have to offer. The third digital edition of the user day took place in June 2024. The event was very well attended with 8 419 viewers from over 50 different countries.

During the two-day event, the latest developments in digital services such as MyEPO (Mailbox, portfolio, the shared area), Online Filing 2.0 and two-factor authentication methods were demonstrated. Panel discussions took place on the Unitary Patent, quality as a shared effort between the EPO and the user community, quality in digital services and how the EPO is supporting the needs of SMEs, micro entities and private applicants.

Conferences

In 2024 the EPO also hosted the following conferences on key aspects of quality in the patent granting process:

- **Opposition Matters** is designed to keep patent professionals abreast of the latest and most relevant developments in opposition proceedings, with EPO examiners and lawyers presenting key topics alongside senior European patent attorneys.
- **Litigation Matters** is devoted to the latest practices of patent litigation in Europe, with a focus on UPC litigation. The conference is held over two consecutive mornings and is of interest to judges, lawyers and patent attorneys and litigators.
- A combined **Search and Examination Matters** took place over four days in February 2025. Catering for patent professionals, a broad range of topics were addressed by EPO and European patent attorney speakers.

EPO talks

Launched in 2024, EPO talks is a series of open conversations that provide a platform for internal and external speakers to discuss key strategic topics, thereby keeping EPO staff informed about important issues in the world of IP.

In the inaugural episode, EPO Vice President Steve Rowan and epi President Peter R. Thomsen explored quality from several angles and examined various user perceptions. In view of the rapidly evolving innovation landscape, the growing use of IP and the participation of an increasing number of players, several questions were raised: do all players have the same expectation of quality? Why is patent quality critical for companies today? What role do users play in shaping quality? The episode was moderated by Joff Wild, Sisvel's Head of Content and Strategic Communications and former Editor-in-Chief of IAM magazine. The participants also recorded a discussion on the same topics for the public for the EPO's podcast "Talk Innovation"³⁴.

Updating the Guidelines for Examination – adapting to the changing patent landscape

The interpretation of the EPC continues to evolve in response to developments in technology and the case law of the Boards of Appeal. EPO Guidelines for Examination³⁵ provide a useful reference point for interpretation and are developed taking into account user feedback.

The Guidelines' revision cycle is constantly developed further to enable broad consultation and transparency. The change proposals and respective reactions following discussions in the SACEPO³⁶ Working Party on Guidelines can be found on a dedicated website³⁷ and the contracting states receive annual reports on the consultation and revisions in the Guidelines.

During the public online user consultation on the Guidelines in 2024, 168 comments were received on the EPC Guidelines and 23 comments were made on the PCT-EPO Guidelines. These comments covered a wide range of topics, such as oral proceedings held by videoconference (VICO), adaptation of the description, antibodies, amino acid sequence listings and the new Rule 56a³⁸ EPC.

In addition, during the 2024 consultation with the SACEPO Working Party on Guidelines on the draft Guidelines, 167 comments were received for the EPC and PCT-EPO Guidelines. A further 247 comments were received from SACEPO on the first draft of the Unitary Patent Guidelines³⁹. Another 100 comments were

³⁴ https://open.spotify.com/episode/7zmPz5wreQoKmsWTKvT3OF?si=G_GBL-_FSwy_KAPo1gsZFQ&nd=1&dlsi=b9ce08966e1b4998

³⁵ epo.org/en/legal/guidelines-epc

³⁶ Standing Advisory Committee before the EPO, epo.org/en/about-us/services-and-activities/Consultingourusers/sacepo/members

³⁷ epo.org/en/legal/guidelines-epc

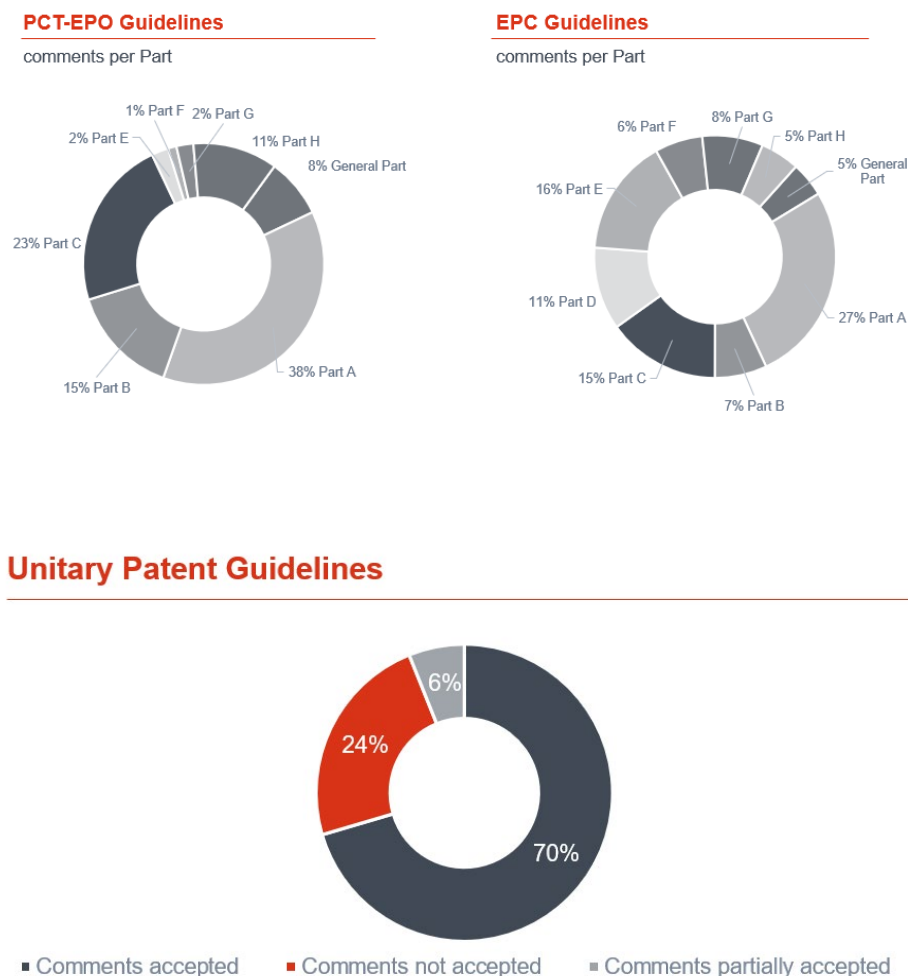
³⁸ epo.org/en/legal/epc/2020/r56a.html

³⁹ epo.org/en/legal/guidelines-up

received from EPO-internal experts. Many of these were taken on board in the latest revision of the Guidelines.

The latest version entered into force in April 2025 instead of March to accommodate a request from users to align with the European qualifying examination (EQE). In 2025 the EPO issued the first edition of Unitary Patent Guidelines to provide a coherent source of information concerning the processes for registration of unitary effect, or requests for entry in the Unitary Patent Register.

Figure 49 – Comments submitted on PCT-EPO guidelines, EPC guidelines and UP guidelines



Source: EPO

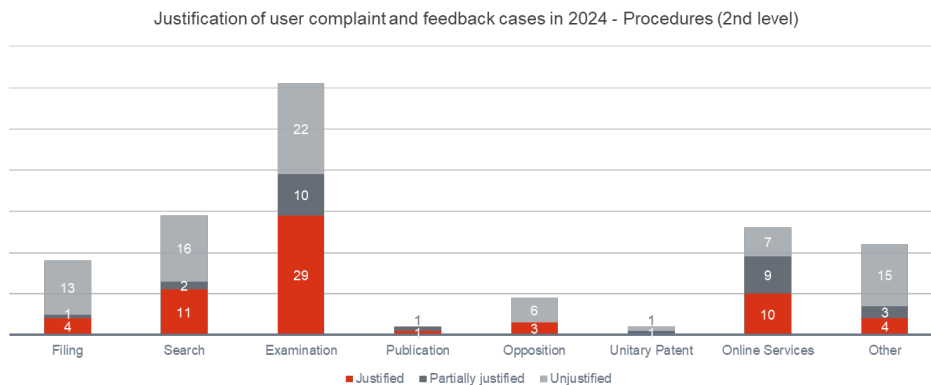
7.4 Results

Complaints and feedback

EPO examiners issued some 555 340 actions in 2024 (2023: 543 000 actions). Of the 198 complaints and feedback cases closed in 2024 (204 in 2023), 168 were complaints, of which 53% (60% in 2023) were deemed justified or partially justified. 60% of all complaints and feedback cases related to the patent granting process.

All complaints and feedback cases are thoroughly analysed, usually in consultation with the operational units concerned. In 92.4% of cases (12 month rolling average), and in 100% of the complaints closed since May 2024, users received a detailed reply within 20 working days. Approximately 45% of all complaints were initiated by professional representatives, with 72% found to be justified or partially justified. 55% were complaints filed from users without legal representation, of which 22% were individuals and 23% were companies.

Figure 50 – Breakdown of 2024 complaints and justification status according to procedural step or service



Source: EPO

Customer enquiries

In 2024, the EPO handled 72 547 enquiries. The EPO resolved 97.1% of all cases within the set internal time limits, surpassing our KPI target of 95%. The bulk of the enquiries concerned the following areas (category's percentage share of all enquiries in brackets):

- Online services 25 168 (34%)
- file-related queries for the Receiving Section 8 857 (12%)
- file-related queries in examination 9 488 (13%)
- general EPO information 3 571 (5%)

Upon case closure, customers receive an email inviting them to provide feedback on our handling of their enquiry. Overall, there was a high rate of satisfaction (94.6%).

8. Conclusions and outlook for 2025

This is the EPO's ninth annual Quality Report, outlining our quality performance, the measures taken to improve quality in 2024, and the results achieved. In response to user feedback, several sections of the report have been expanded to provide more detail on quality targets, data and activities.

For example, this edition provides the results of the study on our handling of third-party observations, recommendations from the clarity workshop, and an analysis of Boards of Appeal decisions. This analysis led to the development of new KPIs

which are now published on our quality dashboard⁴⁰. The annex provides a comprehensive account of the 2024 Stakeholder Quality Assurance Panels (SQAPs), an initiative which is highly appreciated by users.

As a knowledge-based organisation, the journey towards high-quality patents begins with our people – and in 2024, we continued to invest in them. We developed our AI capabilities and tools further, to support examiners in identifying the most relevant technical and legal information and to provide enhanced user services. We intensified consultation within examining divisions and between experts to improve alignment and quality at all stages of the patent granting process. In-depth studies and broader user engagement helped us gain new perspectives on quality and identify areas for further improvement. These combined investments in people, technologies, practice harmonisation, and user dialogue are positively impacting our results, as can be seen from this report.

Our targeted actions for 2025, as set out in this year's Quality Action Plan⁴¹, build directly on the insights gained in 2024, the outcomes of our studies, and analysis of data and audits. These actions will ensure that we continue our journey towards excellence throughout the patent granting process.

Figure 51 – Quality action plan 2025



Source: EPO

In 2025, the EPO will build on the achievements of 2024 by reviewing successful initiatives and refining them for even greater impact. Continued investment in people, technologies, and tools remains central to this effort, with special technical training programmes for examiners who transfer to high-growth fields, new AI initiatives to support examiner work and enhanced online user services. A key focus will be on harmonising and aligning the interpretation of the EPC, particularly in the assessment of inventive step - and clarity to follow up on recommendations from the 2024 clarity workshop. Further efforts will address the appropriate limitation of claim scope, ensuring a balanced and consistent approach. The EPO will deepen its learning from opposition outcomes, Boards of Appeal decisions, and UPC case law, while striving for greater consistency in the handling of third-party observations. Early collaboration with applicants during examination and consultation before amendments by the division will be actively promoted. Above all, we will continue to engage in dialogue at all levels, listening

⁴⁰ <https://www.epo.org/en/about-us/services-and-activities/quality/quality-dashboard>

⁴¹ <https://www.epo.org/en/news-events/news/quality-action-plan-2025>

and responding to user feedback as a cornerstone of our commitment to excellence in quality.

9. Annex – SQAPs

Executive summary

The stakeholder quality assurance panels (SQAPs) are an important component of the EPO's user outreach programme, as they provide European patent attorneys with the opportunity to work together with EPO experts to jointly assess the quality of work done by the EPO. SQAPs also provide the EPO with valuable and actionable feedback on the quality of its products and services.

In 2024, the SQAPs programme consisted of three sessions: on refusals (new in 2024), searches and written opinions (as in 2023) and grants (as in 2022 and 2023). The programme was very well received by the SACEPO Working Party on Quality (SACEPO WP/Q), the Institute of Professional Representatives before the EPO (epi), BusinessEurope and the SQAPs assessors.

In their findings, the panels identified examples of best practices and opportunities for improvement. Feedback from the 2024 SQAPs provided valuable input for the EPO quality action plan 2025.

Key takeaways from SQAPs in 2024:

- **Search reports and written opinions:** EPO searches trusted by users, relevant documents cited with precise references to passages; independent claims addressed in written opinions; constructive suggestions offered to overcome objections; problem-solution approach in inventive step assessments could be more consistent; lengthy standard clauses should be avoided
- **Grants:** High level of agreement in assessments of EPO experts and attorneys; requirements of EPC were met; attorneys urge caution adapting description, especially deletion; more consultation and reasoning requested on amendments at grant stage
- **Refusals:** mostly justified; right to be heard was respected; decisions were consistent with prior communications; more dialogue during examination would prevent applications with patentable subject-matter being refused

Format of SQAPs programme in 2024

Each of the three SQAP sessions held in October 2024 consisted of six panels of four experts (two European patent attorneys and two EPO experts i.e. senior experts/internal quality auditors). The European patent attorney assessors were members of the SACEPO WP/Q, nominees from the epi and BusinessEurope. Each panel was specialised in a different technical field aligned with the EPO's technology communities: digital, electronics and physics, health, agri-food, energy, mobility and space technologies, materials and production and infrastructure and mechanics. In total, 61 attorneys and EPO experts assessed the quality of 108 files. The patent attorneys from each panel selected six files for

assessment from a random pool of 100 patent files provided by the EPO. For all files assessed, the procedures before the EPO were complete.

The programme for 2024 incorporated feedback from the previous SQAP sessions including:

- Expanded scope of search reports and written opinions session to cases beyond those which led to the grant of a patent, i.e. those which did not enter examination, were withdrawn or refused.
- New dedicated session on refusals
- New opportunities to observe SQAPs: the epi and BusinessEurope invited as observers in addition to SACEPO WP/Q members. In total, 70 observers attended the SQAPs sessions in 2024.

The panel discussions were conducted in a professional, open-minded and constructive atmosphere. Panellists presented their findings at the SACEPO WP/Q meeting in November 2024.

SQAPs findings on search reports and written opinions

The 2024 SQAPs session on search reports and written opinions was the second time a session was held on search reports and written opinions. To allow for comparison with previous results, the assessments focused on the same aspects of quality assessed in 2023. These were: relevance of cited documents, correctness of citation categories, assessment of independent claims and fallback positions from dependent claims or description, consistency of the written opinion with the search report, correctness and clarity of objections, and whether smooth examination had been facilitated. Searching for prior art was not covered in this session.

Best practices observed by panels

- Search report has references to precise passages in cited documents
- Overview of objections provided at the beginning of the written opinion
- Thorough claim analyses that address both independent and dependent claims
- Correct assessment of patentability with respect to the cited prior art to help applicants make early informed decisions
- Constructive suggestions to overcome objections offered in the written opinion

Areas where views differed within panels

- Interpretations of some prior art documents varied
- Whether clarity issues should be addressed at the beginning of the written opinion or at the end
- Whether inventive step objections should strictly follow the problem-solution approach when features not present in closest prior art are trivial or known from common general knowledge
- Extent of reasoning considered sufficient for dependent claims.

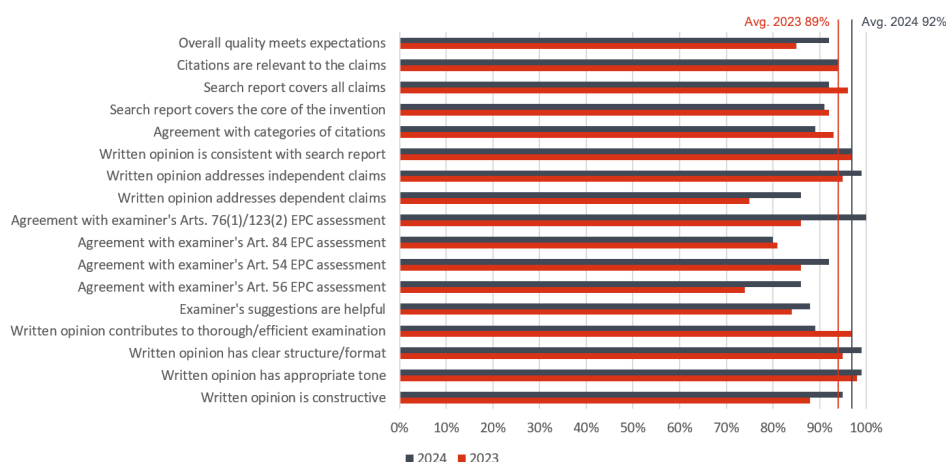
Consensus on opportunities for improvement

- Before issuing a partial search report, consider more carefully whether it is justified
- Provide more acknowledgement and analysis of prior art cited in International Search Reports when the EPO was not the International Searching Authority (ISA)
- Address dependent claims more completely
- Apply the problem-solution approach correctly and consistently
- Justify patentability clearly when citing only A-documents
- Avoid long lists of standard clauses, especially at the end of written opinions

SQAPs assessors' responses to questionnaire on assessed searches and written opinions

The chart below visualises the aggregate responses given by each of the 24 assessors for each of the six files they assessed (36 files in total). The bars represent the percentage of responses which agreed with the statements below "to a very large extent", "to a large extent" or "to some extent". The percentages are not statistically significant, however, the patterns that emerge from these results resemble those seen in user satisfaction surveys, DQA audit results and feedback in user meetings.

Figure 52 – SQAPs survey results on search reports and written opinions



Source: EPO

SQAPs on granted patents

In 2024, grants were assessed for the third time in the SQAPs. To facilitate comparison with previous results, assessments focused on the same aspects of quality that were addressed in 2022 and 2023, namely the EPC requirements under Articles 76(1)/123(2), 52(1)/54, 52(1)/56, 83 and 84 EPC, adaptation of the description and amendments proposed by the examining division at the grant stage.

Best practices observed by panels

- High level of agreement between assessment of EPO experts and attorneys that the requirements for patentability were met
- Top-up searches at grant stage to ensure any further relevant prior art is considered before grant
- Telephone discussions at grant stage to resolve outstanding issues
- Examining divisions open to reviewing their opinions, especially in cases involving non-technical features

Areas where views differed within panels

- How strictly to apply Article 123(2), particularly in borderline cases
- Whether clarity requirements should extend to non-technical features that aren't considered for inventive step
- The level of detail applicants should provide when indicating the basis for amendments
- Whether examiners should explain at grant stage why objections have been overcome
- Whether certain amendments by the division are considered formal or substantive and whether consultation with applicant is needed before proposal to grant is sent

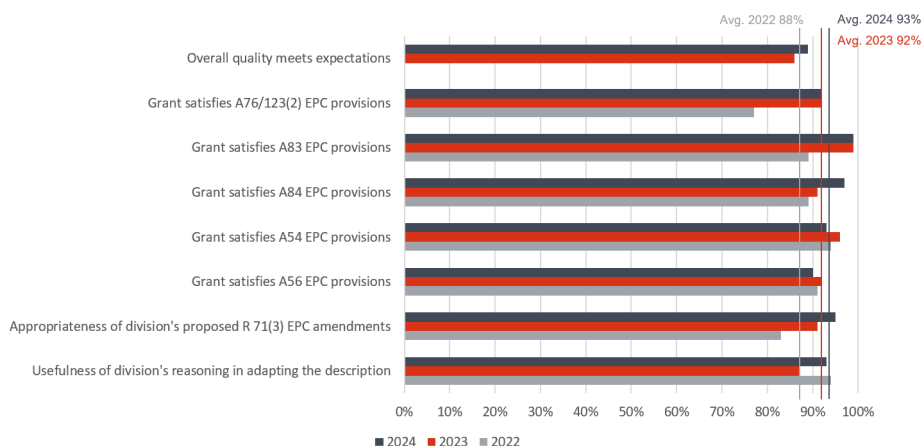
Consensus on opportunities for improvement

- Discuss any substantive claim amendments at grant stage with applicant and provide clear justification
- Consult applicant before deleting passages from the description and provide justification
- Resolve clarity issues before issuing the proposal to grant (R. 71(3) EPC communication)
- Persevere with objections for low quality applications where requirements of EPC are not met

SQAPs assessors' responses to questionnaire on assessed grants

The chart below visualises the aggregate responses given by each of the 24 assessors for each of the six files they assessed (36 files in total). The bars represent the percentage of responses which agreed with the statements below "to a very large extent", "to a large extent" or "to some extent". The percentages are not statistically significant, however, the patterns that emerge from these results resemble those seen in user satisfaction surveys, DQA audit results and feedback in user meetings.

Figure 53 – SQAPs survey results on grants



Source: EPO

SQAPs on refusals

The 2024 session on refusals was the first time the quality of refusal decisions was assessed by the SQAPs. The assessments focused on the procedure and communications leading to the decision to refuse the application and the quality of the reasoning in the decision to refuse. The evaluation covered the completeness of the facts and submissions, adherence to the right to be heard under Article 113(1) EPC, and the substantiation and comprehensibility of the decision.

Best practices observed by panels

- Decision to refuse justified, requirements of EPC not met
- Applicant's right to be heard respected
- Decision consistent with prior communications
- Well-structured facts and submissions sections that include complete and concise overview of facts and correct application documents
- Clear, well-reasoned decisions, with consideration of applicant's arguments

Areas where views differed within panels

- Whether appropriate to refuse on grounds lack of clarity or insufficient disclosure, without further assessments of novelty and inventive step
- Whether technical effects of features should be assessed in isolation or within the claim as a whole
- Whether the burden of proof lies with applicant or examiner for intermediate generalisation objections
- Interpretation of unclear claims sometimes differed between assessors

Consensus on opportunities for improvement

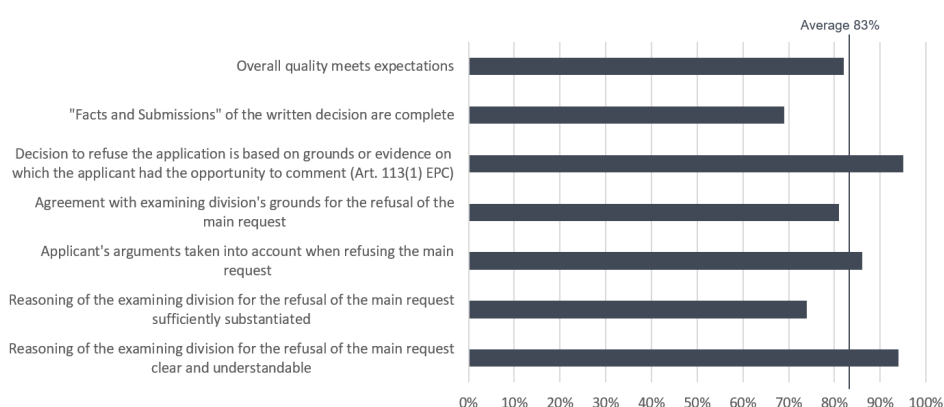
- Decisions should provide clear and unambiguous grounds for refusal. This also applies to decisions according to the state of the file. Clarity and sufficiency of disclosure are separate grounds and should not be mixed.

- Apply the problem-solution approach rigorously in decisions to refuse based on lack of inventive step. For mixed-type cases, ensure correct application of the COMVIK approach.
- Better quality dialogue between applicants and examiners during the procedure prior to decision could prevent applications with patentable subject matter being refused e.g.
 - use neutral tone and avoid emotive language
 - early dialogue to avoid dead ends with clarity and added subject-matter
 - provide clear precise basis when filing amendments
 - be proactive and make contact with suggestions if grant seems possible
 - establish real dialogue not two monologues

SQAPs assessors' responses to questionnaire on assessed refusals

The chart below visualises the aggregate responses given by each of the 24 assessors for each of the six files they assessed (36 files in total). The bars represent the percentage of responses which agreed with the statements below "to a very large extent", "to a large extent" or "to some extent". The percentages are not statistically significant, however, the patterns that emerge from these results resemble those seen in user satisfaction surveys, DQA audit results and feedback in user meetings.

Figure 54 – SQAPs survey results on refusals



Source: EPO

Actions following up on SQAPs findings

Over the past three years, we have noted an increased level of convergence in the assessment of the panel members, indicative of the value of SQAPs in strengthening mutual understanding of patent quality between the EPO and our users.

The discussions within the panels also highlighted the shared responsibility of applicants, professional representatives and the EPO in achieving the best outcome for each application. Assessors acknowledged that high quality work from all parties led to a more effective patent granting process and higher quality decisions. Attorneys have reported that their work in SQAPs has deepened their understanding of what examiners need in order to deliver high patent quality,

which has, in turn, improved the way they draft applications, replies and amendments.

The detailed findings of the SQAPs panels as presented by the assessors to the SACEPO working party on quality in November 2024 were shared with our examiner teams and their managers. This facilitates local action and improvement at team and directorate level based on findings for specific technical fields, such as:

- scope of claims in the chemical/biotechnology fields
- the use of product-by-process arguments in the materials and productions area
- treatment of (unusual) parameters in the health and agri-food area
- patentability of mixed-type claims in CII applications

In keeping with previous years, the outcomes of the SQAPs assessments have been taken on board in the EPO's quality action plan 2025. In particular, we are actively promoting early and high-quality dialogue between examining divisions and applicants, based on the importance the SQAPs assessors place on dialogue for a smooth patent granting process and the best outcome for the application.

Further evolution of SQAPs

The SQAPs were established at the EPO in 2019 within the framework of SACEPO WP/Q. Since then, they have provided a forum for in-depth, file-specific exchanges with users on substantive quality. The first joint assessment of quality by European patent attorneys took place in 2022 and since then the programme has been expanded significantly to assess quality at more stages of the patent granting process. The 2025 SQAPs sessions will take place in the autumn and, as in previous years, will comprise three sessions. Feedback and suggestions from the SQAPs 2024 programme are being considered for inclusion in the 2025 programme.

Figure 55 – Evolution of the SQAPs initiative



Source: EPO