Optimizing Patent Examination Management through Strategic Outsourcing of Prior Art Searches and Related Examination Processes as a means to Expedite the Patent Application Process and to Prepare for the Implementation of the Forthcoming Patent Act.

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This Report is a mandatory requirement of this study-cum-research fellowship program; views and findings are those of the author and do not necessarily reflect the views and policy of her organization or sponsor of this study.

Abstract

Thailand is undergoing significant legal and procedural reform in its intellectual property system, with the revised Patent Act marking a major step toward modernization. Key changes include reducing overlapping tasks between the preliminary and substantive examinations and shortening the time limit for requesting substantive examination from five years after publication to three years from filing. Experience from Japan's 2001 amendment suggests that similar procedural changes may substantially increase the number of applications entering substantive examination, making effective examination management and resource planning increasingly important. Outsourcing Prior Art Searches to qualified external organizations is one strategy for maintaining examination quality and timeliness. However, Thailand's previous outsourcing efforts have been limited. Only 516 outsourcing requests have been submitted, many search results required supplementary examiner searches, and although 18 organizations were designated by the Department of Intellectual Property, only a few remain active. These circumstances highlight the need for a more structured and sustainable outsourcing framework to support the anticipated increase in workload while also reducing accumulated backlogs and stabilizing long-term examination capacity.

This study examines how outsourcing, particularly for Prior Art Searches, can be strategically incorporated into Thailand's patent examination system in the context of ongoing reforms. Insights from Japan's long-standing outsourcing model, developed under the Act on Special Provisions for Procedures related to Industrial Property Rights, guide the analysis of task allocation, qualification requirements, quality control mechanisms, and accountability structures. By tracing Japan's progression from early pilot initiatives to a fully institutionalized national framework, the study provides policy recommendations for designing an outsourcing system that is efficient, credible, and sustainable. The analysis focuses on the scope of outsourceable tasks, criteria for selecting and certifying external organizations, mechanisms for ensuring quality and examiner integration, and incentive structures that promote reliable and high-performing search work.

The findings indicate that successful adoption of outsourcing in Thailand will require a phased and carefully designed institutional approach. Lessons from Japan highlight the importance of clear functional boundaries between searchers and examiners, competency-based training and accreditation, structured quality evaluation, secure IT infrastructure, and stable financial support. Challenges such as limited technical personnel, confidentiality requirements, and examiner engagement must be addressed through sound governance and quality controls. Based on these insights, the study proposes a three-phase implementation strategy beginning with strengthening the capacity of existing external agencies, followed by the establishment of regulatory and institutional foundations covering qualification criteria, quality assurance, IT requirements, and financial frameworks, and ultimately full institutionalization supported by competitive procurement and comprehensive quality management. Implemented progressively, this framework can help Thailand reduce backlog sustainably and build a credible outsourcing ecosystem that supports long-term modernization of the patent examination system. It also ensures readiness for the future implementation of the new Patent Act while providing an additional structural mechanism, beyond routine workload management, to reinforce the overall examination process.

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List of Abbreviations

APIC	Asia-Pacific Industrial Property Center
DIP	Department of Intellectual Property, Thailand
FA	First Office Action
FY	Fiscal Year
INPIT	National Center for Industrial Property Information and Training
IPCC	Industrial Property Cooperation Center
IT	Information Technology
JIPII	Japan Institution for Promoting Invention and Innovation
JPO	Japan Patent Office, Japan
KPIs	Key Performance Indicators
NPL	Non-Patent Literature
PCT	Patent Cooperation Treaty
PDCA	Plan–Do–Check–Act
QM	Quality Management
RSO	Registered Search Organization
SRSO	Specified Registered Search Organization
WIPO	World Intellectual Property Organization

1. Introduction

1.1. Identification of research problem

As global economies evolve through innovation and technological advancement, competitiveness has become a key indicator of national progress. Thailand was ranked 30th in the IMD World Competitiveness Yearbook 2025, a decline from 25th in 2024 (IMD, 2025). Rather than being a setback, this shift highlights the importance of strengthening the foundations of competitiveness, wherein intellectual property protection plays a crucial role. In this context, the patent system serves as a cornerstone for supporting Thailand's innovation capacity. Although the current patent examination procedure faces challenges such as an increasing number of patent applications and lengthy pendency periods, these challenges also present opportunities to explore new approaches that can enhance efficiency, transparency, and credibility. In addition, the forthcoming Patent Act amendment providing fresh momentum, this is an opportune moment to reinforce Thailand's patent examination management through strategic measures such as outsourcing Prior Art Searches and improving related processes.

Thailand is currently undergoing significant legal reform. The revised draft of the Patent Act represents a milestone in modernizing the nation's intellectual property system. One key amendment is the integration of the preliminary examination into the substantive phase, thereby eliminating redundant steps and reducing procedural overlap. Another major change is that applicants will now be required to request substantive examination within three years from the filing date, replacing the previous provision that allowed such requests within five years from the date of publication (Office of the Council of State, 2024). This adjustment may reflect a situation once experienced by Japan, when the Patent Act was amended in 2001 to shorten the time limit for requesting examination from seven years after filing to three years. That legislative change led to a substantial increase in pending applications awaiting substantive examination, and the number of unexamined cases reached nearly 900,000 by 2007 (JPO, 2015). The Japan Patent Office (JPO) subsequently introduced comprehensive reforms to address this backlog and improve examination efficiency.

As Thailand prepares for similar procedural changes, it is essential to ensure that patent examination management and resource allocation are strategically aligned with the anticipated increase in substantive examination workloads. To effectively manage this transition, a robust and well-coordinated system for handling patent applications must be established. Among potential strategies, outsourcing Prior Art Searches to qualified external organizations represents a vital approach to maintaining examination quality and timeliness. However, Thailand's past experience with outsourcing has yielded limited results. Only 516 Prior Art Search requests have been recorded to date, of which approximately 80 percent were handled by domestic public agencies and 20 percent by international organizations. Although 18 entities were officially designated by the Department of Intellectual Property (DIP), only a few have remained operational (DIP, n.d.). Building on this experience, Thailand is now seeking to enhance and institutionalize its outsourcing mechanism to ensure effectiveness, transparency, and quality assurance.

1.2. Aims and objectives of the research

This study aims to explore how outsourcing arrangements, particularly for Prior Art Searches and related tasks, can be strategically integrated into Thailand's patent examination management. The experience of the JPO, which has long employed a structured and legally grounded outsourcing system under the Act on Special Provisions for Procedures related to Industrial Property Rights, provides a valuable model for analysis. By examining Japan's legal framework, operational mechanisms, and management practices, this study seeks to identify insights that may inform Thailand's forthcoming reform, especially in determining the scope of outsourced tasks, establishing qualification and registration systems for search organizations, developing quality control and feedback mechanisms, and ensuring accountability between the patent office and external entities.

The research also aims to contribute to the broader discourse on institutional learning within intellectual property administration. By analyzing Japan's long-term experience in managing outsourced search operations, from its early experimental phase to the present legally institutionalized framework, this study intends to draw lessons relevant to Thailand's transition under the new Patent Act. Ultimately, the findings are expected to support policy recommendations for the DIP on how to design an efficient, credible, and sustainable outsourcing framework that enhances examination quality while supporting national competitiveness.

To achieve these objectives, the research focuses on five interrelated areas of inquiry:

- Scope of Work: Identifying the range of tasks that can be outsourced to external agencies, beyond Prior Art Searches, and evaluating their compatibility with Thai law and examination practice.
- Agency Qualification: Determining appropriate criteria for selecting, certifying, and monitoring external search organizations to ensure technical competence, integrity, and accountability.
- Quality Assurance: Exploring mechanisms to monitor and evaluate the quality of outsourced searches, including examiner feedback, evaluation forms, and follow-up processes.
- Incentive Structure: Investigating compensation schemes and performance-based incentives that motivate external agencies to deliver efficient and high-quality work.
- Integration and Workload Management: Examining how patent examiners utilize and verify outsourced search results, how such cases are prioritized in the examination queue, and how outsourcing contributes to balancing examiner workload and overall process efficiency.

The ultimate objective of this research is to develop a practical and legally compliant management framework for outsourcing Prior Art Searches and other relevant operations to external agencies that can be implemented under the forthcoming Patent Act.

2. Basic information and Previous studies

Ensuring an efficient and credible patent examination system is essential for promoting innovation and strengthening a country's intellectual property infrastructure. In Thailand, the patent examination process has undergone gradual development, yet significant structural and operational challenges remain. These involve examination procedures, legislative constraints, examiner workload, quality management systems, and the limited use of outsourcing mechanisms for Prior Art Searches. This chapter provides a comprehensive overview of the current patent examination framework in Thailand, including application trends, resource capacity, legal provisions, and existing quality assurance initiatives. It also identifies key issues that continue to impede examination efficiency and highlights areas where systemic improvement is required. The analysis serves as a foundation for subsequent chapters, which will examine Japan's long-established outsourcing model and explore implications for Thailand's ongoing reform efforts.

2.1. Overview of Thailand's Patent Filing and Registration System

Patent protection plays a vital role in promoting innovation and technological advancement worldwide. It grants inventors exclusive rights to their creations and encourages continuous research and development across various industries (Kings-Nwosu Princewill, 2024). Among the stages involved in obtaining a patent, the substantive examination is one of the most critical and resource-intensive steps. This stage requires specialized technical and legal expertise to assess whether an invention meets the statutory requirements of novelty, inventive step, and industrial applicability, based on an extensive Prior Art Search. Because of the depth and complexity of this process, as well as the large volumes of technical information involved, it often determines how quickly or efficiently a patent application can be granted (Ali et al., 2024). The speed and quality of substantive examination therefore have a direct impact on the timeliness of patent grants and the overall credibility of the patent system. Managing this process effectively, both in terms of technical accuracy and operational efficiency, is essential for maintaining confidence in intellectual property administration. This section provides an overview of the procedure for obtaining patent rights in Thailand with particular attention to patents for invention, for which substantive examination and Prior Art Searches form the core of the registration process.

In the process of obtaining intellectual property protection for inventions in Thailand, two forms of protection are available: patents for invention and petty patents. The fundamental differences between these two types mainly lie in the conditions for protection, the examination procedures, and the duration of rights. A patent for invention provides protection for twenty years from the filing date, whereas a petty patent is initially granted for six years and may be renewed twice, each time for an additional two years. In procedural terms, patent applications are subject to substantive examination before registration, while petty patents are examined only upon request by an interested party after registration (DIP, 1999). However, this section focuses on patents for invention, which undergo a full substantive examination process before registration. This procedure includes a Prior Art Search to determine whether the invention meets the requirements of novelty, inventive step, and industrial applicability, forming the basis for assessing patentability.

Under the Patent Act B.E. 2522 (1979) and its subsequent amendments, the process of obtaining patent rights in Thailand is administered by DIP. As illustrated in Figure 1, the process begins when the applicant files a patent application with the DIP. The application first undergoes a preliminary examination to verify the completeness of the documents, the clarity and precision of the description and claim, and compliance with the "first-to-file" principle. If no irregularities are found, the application proceeds to publication. During this publication stage, any person may file an opposition within ninety days from the date of publication.

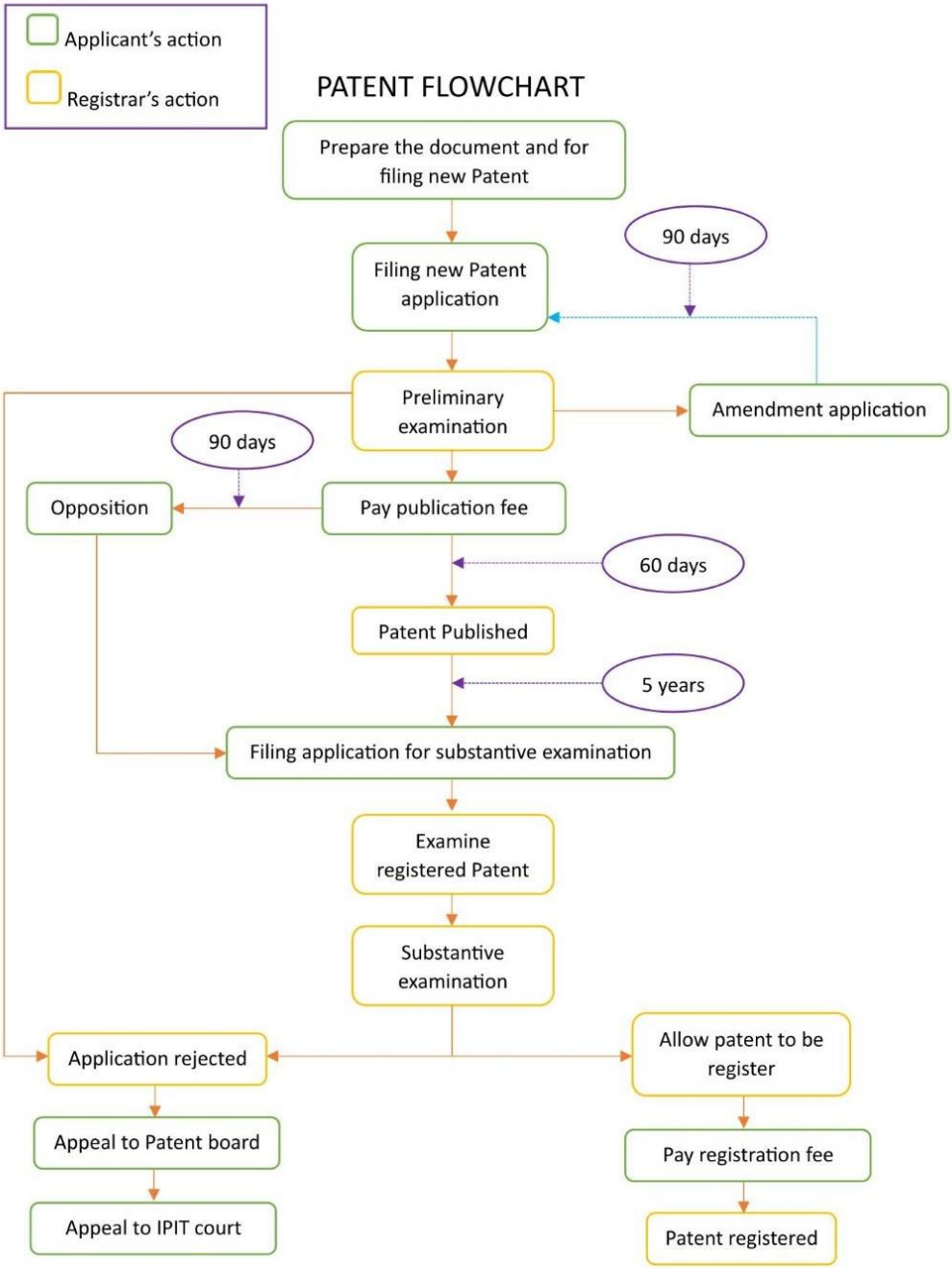


Figure 1: Procedure for Obtaining Patent Rights in Thailand
(Professional corporate services, n.d.)

After publication, the applicant must request a substantive examination within five years from the date of publication. The substantive examination is conducted by a patent examiner, who performs a Prior Art Search to determine whether the invention fulfills the legal conditions for patentability. If the invention meets the statutory requirements, the patent is granted and registered. If the examiner finds that the invention does not satisfy the requirements, a notification is issued to the applicant, who is given an opportunity to submit arguments or amendments. If the objections are not overcome, a decision of refusal is made.

Applicants dissatisfied with a refusal decision may appeal. In addition, if a patent is granted in violation of the law, an interested party may file a lawsuit with the court to request revocation after registration (DIP, 2019).

2.2. Application Trends and Patent Examination Workload in Thailand

This section provides an overview of patent examination workload and application trends. It presents statistical data on patent filings, requests for substantive examination, granted patents, refusals, and abandoned applications, organized by fiscal year. It also illustrates the typical timing at which applicants file requests for examination after publication. To provide contextual understanding, the general scale of examination backlog is briefly described as a basis for subsequent analysis.

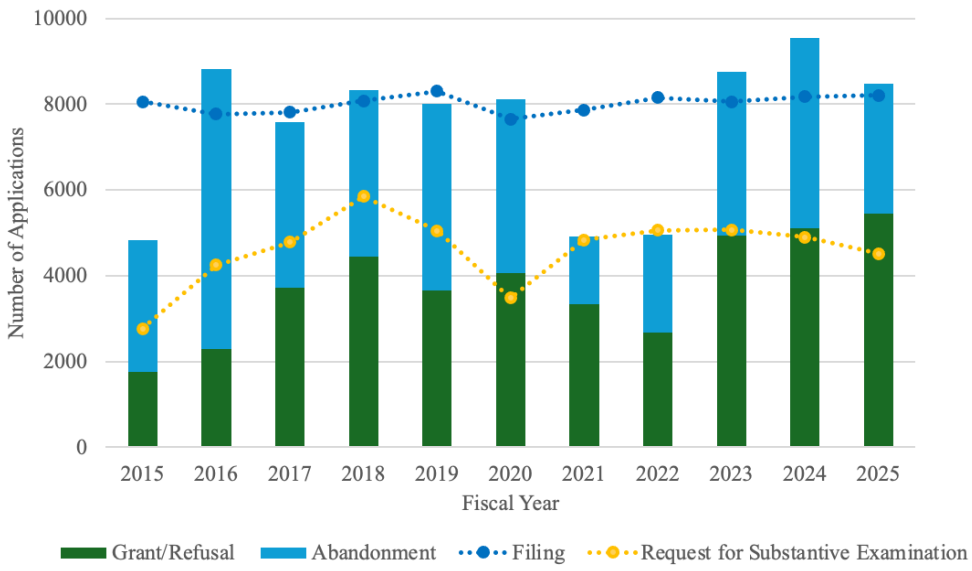


Figure 2: Trends in patent filings, requests for substantive examination, and examination outcomes in Thailand by fiscal year (2015–2025).[1]

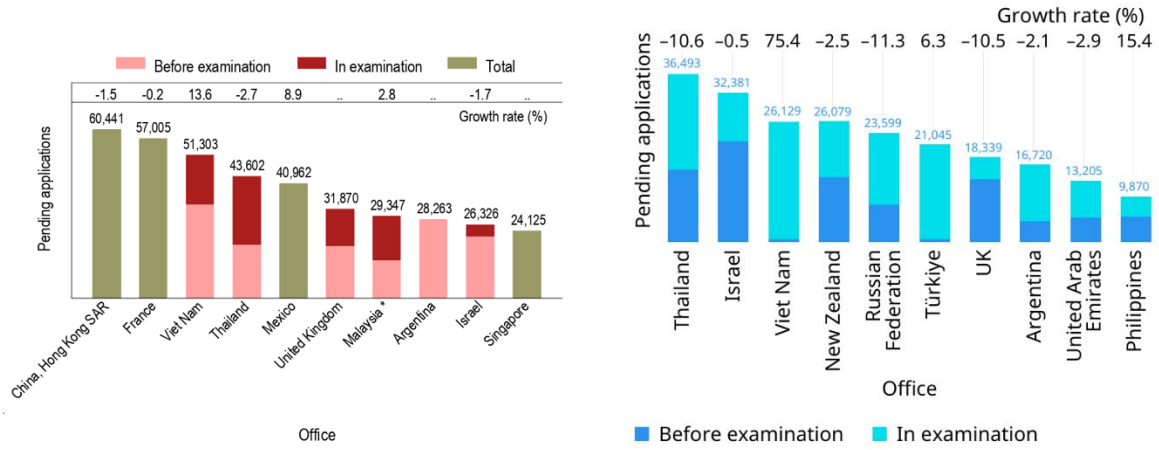
Figure 2 shows the annual trends in patent application filings, requests for substantive examination, and examination outcomes from fiscal year 2015 to 2025. The number of new filings remained relatively stable, fluctuating between approximately 7,500 and 8,500 applications per year, reflecting a consistent level of inventive activity in Thailand. Requests

[1] Author's compilation from internal DIP statistics database combined with publicly available data from the DIP website, https://www.ipthailand.go.th/th/patent-012.html, accessed October 2025.

for substantive examination have shown moderate variation across the years, generally ranging between 3,000 and 6,000 per year.

The number of granted and refused applications has gradually increased over the years, with a slight decline observed in fiscal years 2021 and 2022. Since 2023, however, the volume of granted and refused applications has risen significantly, reaching levels comparable to or even exceeding the number of substantive examination requests. Consequently, when combined with the number of abandoned applications, this trend indicates a steady reduction in the backlog of pending patent applications awaiting substantive examination. This improvement is attributed to the DIP's ongoing initiatives to enhance patent examination efficiency through digital transformation, including the adoption of AI-assisted Prior Art Search tools, big data analytics, and tele-consultation systems[2]. In addition, the implementation of the new e-Filing system in 2022 has provided applicants with a more convenient and transparent process for submitting and tracking their applications, as well as for receiving examiner communications and notifications more promptly.

Despite these improvements, the backlog of applications awaiting substantive examination remains a persistent challenge for Thailand. As illustrated in Figure 3, the number of potentially pending applications exceeded 20,000 in 2014 (left panel). Although the backlog has gradually declined over the past decade, a substantial volume still remains, totaling approximately 19,000 applications in 2024 (right panel). When compared with the average annual number of requests for substantive examination shown in Figure 2, the backlog remains roughly three times larger. It is also considerably higher than the number of applications granted or refused each year. This imbalance reflects the ongoing gap between examination capacity and accumulated pending workload. Overall, these trends highlight the need for further procedural enhancements and new operational standards to ensure timely and high-quality patent examination.



Remark: Pending applications are defined as all patent applications, at any stage in the process, awaiting a final decision by a patent office, including those applications for which applicants have not filed a request for examination (where applicable).

[2] Source: DIP website, "DIP e-Service", retrieved from https://eservice.ipthailand.go.th, accessed November 2025.

Figure 3: Potentially pending applications at the top 20 offices, 2014 (left) and 2024 (right) (WIPO, 2015 & 2025)

Figure 4: Proportion of Patent Filings by Resident and Non-Resident Applicants[3]

In addition, when focusing more closely on the ratio of patent applications filed during the same period, it is observed that most filings originate from non-resident applicants, while only a smaller portion are submitted by Thai residents. Figure 4 illustrates the proportion of patent filings classified by resident and non-resident status between 2015 and 2025. Throughout this period, non-resident filings consistently accounted for around 85 to 90 percent of total applications each year, whereas resident filings remained stable at about 10 to 15 percent (DIP, 2024). This proportion indicates that a substantial share of patent applications in Thailand is submitted by foreign entities, many of which may already include Prior Art Search results or examination reports from international systems such as the PCT or other foreign patent offices. As a result, although such applications constitute a smaller proportion in numerical terms, they account for a large share of the substantive examination workload due to higher key performance indicators (KPIs) or workload weighting, typically at a ratio of approximately 3:1 to 4:1 compared with foreign applications, depending on the technology field.

Moreover, when examining the timing of requests for substantive examination, it can be seen that most applicants tend to submit their requests soon after publication. Figure 5 shows the distribution of requests for substantive examination by year after publication. The majority, about 41 percent of total requests, are filed within the first year after publication, followed by 32 percent in the fifth year. Only a small portion of requests, around 3 to 5 percent, are submitted in the third and fourth years. This pattern suggests that while many applicants proceed promptly with examination, a considerable number strategically delay their requests until the final allowable period. Understanding this behavior is important for planning examination workloads and anticipating future backlogs. Based on this observed trend, if future legislative amendments shorten the time frame for requesting substantive examination to three

[3] Author's compilation from publicly available data from the DIP website, https://www.ipthailand.go.th/th/patent-012.html, accessed October 2025.

years from the filing date (Office of the Council of State, 2024), nearly 40 percent of applicants would need to file their requests earlier. Such a change could result in a sharp and immediate rise in examination workload, requiring careful management and capacity planning.

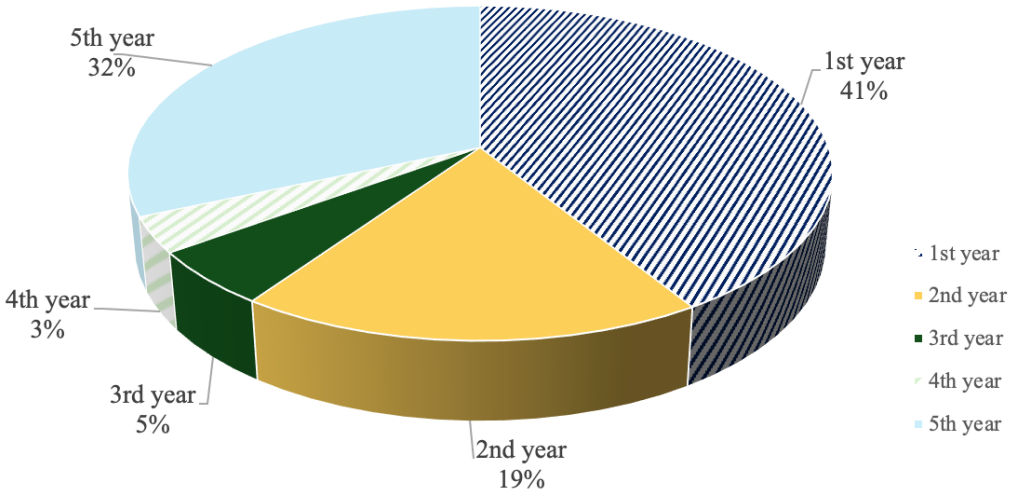


Figure 5: Distribution of Requests for Substantive Examination by Year after Publication[4]

2.3. Patent Examiner Workload and Examination Capacity in Thailand

The efficiency of the patent examination process depends not only on the number of incoming applications but also on the human resources available to handle them. Understanding the staffing composition and workload distribution among examiners is therefore essential for assessing examination capacity and identifying potential areas for improvement.

Figure 6 illustrates the current composition of examination staff at the Patent Office, DIP. Out of a total of 190 officers, 106 are patent examiners responsible for the examination of invention patent applications, 26 are petty patent examiners, and 58 serve as general administrative or support staff[5]. This distribution shows that a major share of human resources is allocated to invention examinations.

When this number of patent examiners is compared with the average annual volume of patent applications filed (approximately 7,500-8,500 applications per year, as shown in Section 2.2), it indicates an average incoming workload of around 70-80 applications per examiner per year, excluding the accumulated backlog, which remains under ongoing examination. If only the substantive examinations are considered, which amount to about 5,000 requests for examination per year as referenced in Section 2.2, the average effective examination load is approximately 47 applications per examiner per year. Furthermore, if the backlog of pending substantive examinations, estimated at around 19,000 applications shown in Figure 3, is also

[4] Author's compilation from internal DIP statistics database, accessed October 2025.
[5] Source: internal DIP statistics

taken into account, the overall workload could amount to 226 cases per examiner per year that need to be processed to achieve grant or refusal decisions. This figure, however, does not distinguish between domestic patent applications that require a full substantive examination without prior examination results and foreign-origin applications for which examination results are already available from other patent offices.

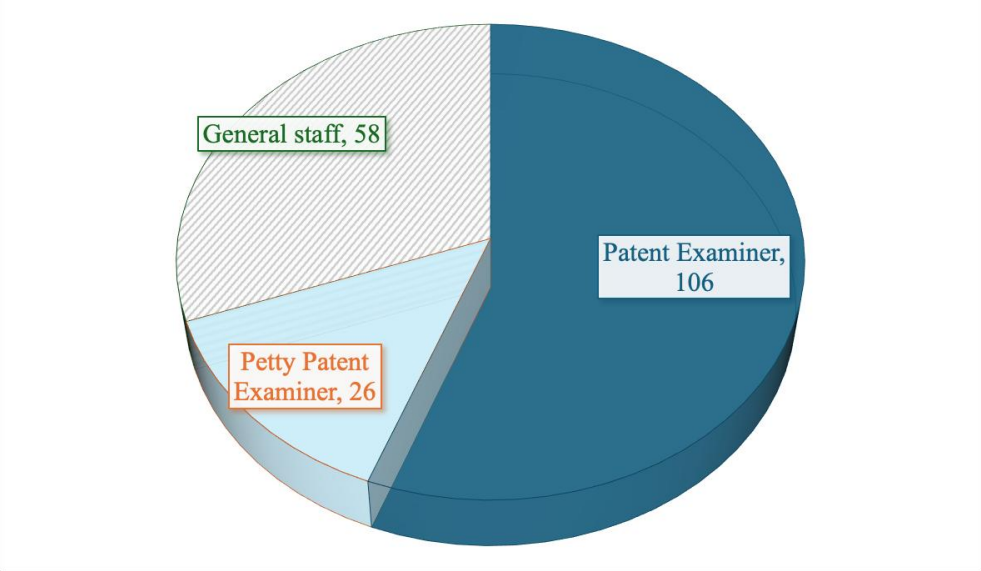


Figure 6: Number of Patent Office Staff Composition[6]

2.4. Legislative Reform and Policy Context in Thailand

The efficiency and effectiveness of the patent examination system are not determined solely by operational capacity or examiner workload but are also deeply influenced by the legal and policy framework governing patent administration. Legislative reforms play a critical role in shaping the timelines, procedures, and quality standards of patent examination, ensuring that the system remains responsive to technological advancement and global best practices.

In this context, Thailand is undertaking significant reforms to its Patent Act with the objective of improving examination timeliness and transparency. The ongoing amendment seeks to modernize the examination process, reduce procedural redundancy, and introduce clearer mechanisms for outsourcing Prior Art Searches and substantive examination support. A major procedural revision concerns the period for filing a request for substantive examination, which will be shortened from the current five years after publication to three years from the filing date. This change is expected to encourage earlier requests, support more predictable workflow planning, and contribute to long-term backlog reduction (Office of the Council of State, 2024).

To illustrate the current legal framework governing the substantive examination process and the role of external examination support in Thailand, Sections 25 and 29 of the Patent Act B.E. 2522 (1979) and its amendments are summarized below. Section 25 provides the statutory basis for requesting Prior Art Searches or substantive examination assistance from external

[6] Author's compilation from internal DIP statistics database, accessed November 2025.

organizations, both domestic and foreign. Section 29 establishes the time limits and procedural requirements for filing a request for substantive examination, as well as the consequences of non-compliance. Presenting these provisions together highlights the legal context within which outsourcing mechanisms currently operate and the constraints that may influence future reform (DIP, 1999).

Section 25 *In order to facilitate the examination of a patent application, the Director-General may request any government department, unit or organization or any foreign or international patent office or organization, to examine the application as to its conformity with Section 5, 6, 7, 8, and 9, or the detailed description of the invention as to its conformity with Section 17 (3). The Director-General may treat such examination as having been done by the competent officer.*

Section 29 *After the publication of the application under Section 28, the applicant may request the competent officer to proceed with the examination as to its conformity with Section 5 either within five years after the publication of such application or, in cases where there is an opposition and an appeal is taken, within one year after the final decision has been made, depending on which period expires last. If the applicant fails to make such a request within said period, he shall be deemed to have abandoned his application.*

If the Director-General requests any governmental department, unit or organization or any foreign or international patent office or organization to examine the application under Section 25, and there is some expense derived from such examination, such expense shall be paid by the applicant within sixty days after he has been notified by the competent officer. If the applicant fails to pay the expense within the said period, he shall be deemed to have abandoned his application.

Section 25 provides the legal foundation for Thailand's ability to outsource or delegate part of the substantive examination to external entities. This mechanism allows the Director-General of the DIP to request technical examination assistance from domestic government departments or public organizations, foreign patent offices, and international patent organizations. The scope of permissible outsourced examination includes conformity with the core patentability requirements under Sections 5 to 9, covering novelty, inventive step, industrial applicability, and exceptions to patentability. It also includes an assessment of the specification in accordance with the sufficiency and clarity requirements under Section 17(3). Importantly, the examination conducted by these external entities may be treated as equivalent to an examination performed by DIP examiners, giving the results formal procedural effect. This provision reflects Thailand's long-standing policy intention to incorporate external search and examination support into its domestic patent examination system (DIP, 1999).

Under the current Patent Act B.E. 2522 (1979) and its amendments, the timeline and conditions for filing a request for substantive examination are primarily governed by Section 29. The provision establishes the period within which an applicant must request examination after the patent application has been published. This provision outlines the applicant's obligation to request a substantive examination after publication. The current law provides:

1) A five-year period from the date of publication for the applicant to file the request.

2) An extended period in cases where an opposition is filed, allowing the request to be made up to one year after the final decision on the opposition or appeal, whichever is later.
3) Failure to submit the request within the prescribed period results in abandonment of the application.

(DIP, 1999)

To support the modernization of Thailand's patent examination system, the revised draft of the Patent Act introduces several important changes that directly affect the workflow of patent examination, publication, and outsourcing of substantive examination. These amendments aim to reduce procedural redundancy and accelerate examination timelines. One of the most significant revisions is the shortening of the time limit for filing a request for substantive examination from five years after publication to three years from the filing date, which is expected to expedite the examination process and improve overall pendency management (Office of the Council of State, 2024). Key provisions relevant to this study are summarized below in an English machine translation prepared for reference.

Section 28 *The Director-General may request a government agency, another agency as prescribed by the Director-General, or a patent office of a foreign state or international organization to conduct examinations under Section 27. The Director-General may also deem such examinations to be performed by competent officers.*

Section 32 *The publication of a patent application under Section 31 shall be carried out without delay after the expiration of eighteen months from the filing date of the patent application in the Kingdom or from the date of the first filing under Section 22.*

The applicant may request that the application be published before the expiration of the period specified in the first paragraph. In such case, the competent officer shall examine the patent application in accordance with Section 31 and order the publication without delay.

Section 33 *The patent applicant shall file a request for substantive examination with the competent officer within three years from the filing date of the patent application in the Kingdom. If the applicant fails to file such a request within the prescribed period, the application shall be deemed to have been abandoned.*

In the case where the applicant has already filed a patent application outside the Kingdom, the applicant may submit the examination results of that foreign application to the competent officer for consideration before the Director-General issues an order for patent registration under Section 35, in accordance with the rules and procedures prescribed by the Director-General.

If the applicant wishes to have the invention examined by an agency, office, or organization under Section 28, a request shall be filed with the competent officer together with the payment of expenses as prescribed by the Director-General.

Section 160 *An applicant who has already filed a patent application for an invention under the Patent Act B.E. 2522 (1979) but has not yet filed a request for examination of the invention shall file such request under Section 33 within the following periods:*

(1) In the case where the Director-General has not yet ordered the publication of the patent application under the Patent Act B.E. 2522 (1979), the request for examination shall be filed within three years from the date on which this Act comes into force.

(2) In the case where the Director-General has already ordered the publication of the patent application under the Patent Act B.E. 2522 (1979), the request for examination shall be filed within the period prescribed under Section 29 of the Patent Act B.E. 2522 (1979), but in no event later than three years from the date on which this Act comes into force.

Section 28 establishes a formal legal basis for outsourcing examination tasks to external agencies. It authorizes the Director-General to request examination assistance from domestic public bodies, designated agencies, or foreign and international patent offices. Examinations carried out by these external entities may be treated as if performed by competent officers of the DIP.

Section 32 revises the publication procedures by requiring that publication be carried out without delay after the expiration of eighteen months from the filing date or the first filing date, with an option for early publication upon the applicant's request. This ensures timely public disclosure and facilitates Prior Art Searching.

Section 33 introduces a significant procedural reform by shortening the time limit for filing a request for substantive examination to three years from the filing date. The section also formalizes the process through which applicants may submit foreign examination results or request examination by an external agency, together with prescribed fees. This provision strengthens the legal clarity of outsourcing mechanisms and aligns Thailand's examination timeline more closely with international practice.

Section 160 provides transitional rules for applications filed under the current Patent Act. The transitional period is designed to ensure a manageable shift from the five-year request period to the new three-year requirement and to prevent procedural disruptions during implementation. Under this provision, two scenarios are specified:

1) For applications that have been filed but have not yet been ordered for publication, the applicant must file a request for substantive examination within three years from the date on which the amended Act enters into force.
2) For applications that have already been ordered for publication under the current Patent Act, the applicant must file a request for substantive examination within the period prescribed in Section 29 of the current Act, but in any case, no later than three years from the effective date of the amended Act.

(Office of the Council of State, 2024)

2.5. Quality Management Framework in Thailand's Patent Examination System

Quality assurance plays a central role in maintaining the reliability, consistency, and credibility of patent examination systems. As patent offices face increasing technical complexity and increasing expectations from applicants and global stakeholders, structured quality management frameworks have become essential for supporting examiner performance,

enhancing transparency, and ensuring uniform interpretation of patentability criteria. Thailand has introduced various quality management initiatives that aim to strengthen examination quality and align national practices with international standards.

An effective quality management system is therefore essential for achieving a sustainable reduction in the backlog. Relying solely on outsourcing or faster search activities is unlikely to resolve the issue if examination outcomes continue to require multiple rounds of office actions. Strengthening internal quality control enables examiners to issue clearer, more accurate, and well-reasoned examination results from the outset, reducing the need for repeated re-examinations and lowering the overall pendency. In this way, examination quality management becomes a complementary mechanism to outsourcing, helping ensure that both internal and external examination processes contribute meaningfully to backlog reduction and to the issuance of high-quality, reliable patent rights.

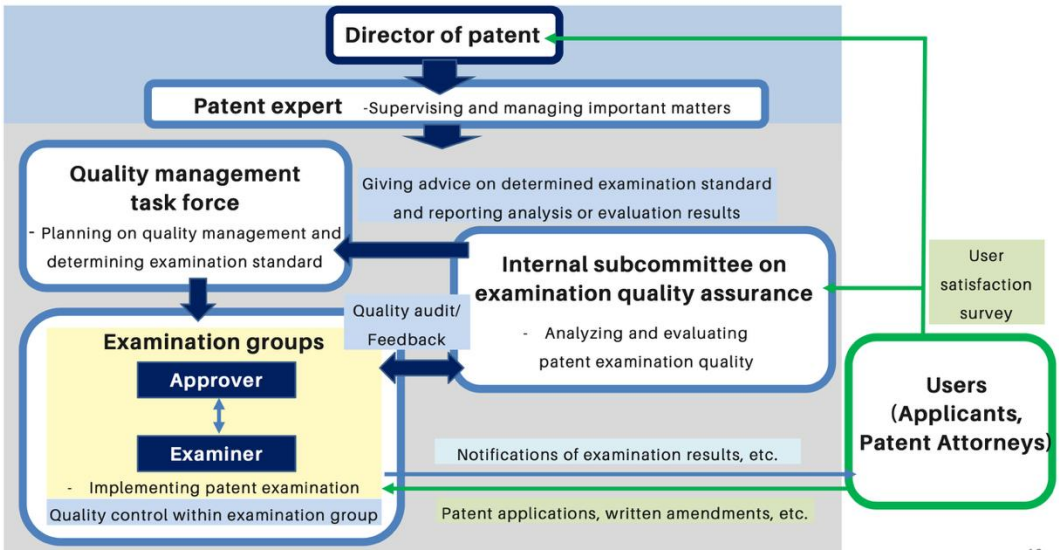


Figure 7: Proposed Quality Management Framework for Patent Examination in Thailand[7]

Figure 7 summarizes the planned quality management framework of the Thai Patent Office. The Patent Office aims to strengthen its quality control system through a multi-layered structure. Oversight and strategic guidance will be carried out by the Director of Patents and Patent Experts. A Quality Management Task Force, which has already been established, is responsible for planning, developing, and harmonizing examination standards across all examination units. An Internal Subcommittee will also be created to evaluate examination quality and provide systematic feedback for continuous improvement. In addition, the Office plans to incorporate user satisfaction surveys to ensure that the evaluation of examination quality reflects both internal performance and external user perspectives. Although the complete quality management system described in the plan has not yet been fully implemented, several components are already in practice, including internal supervision within each

[7] Source: Internal quality management task force materials, Patent Office, Department of Intellectual Property

examination group and mechanisms that allow users to submit comments or feedback directly to the DIP.

Figure 8 illustrates the key elements that the Internal Subcommittee intends to evaluate as part of the future quality audit process. The assessment focuses on ensuring that both preliminary and substantive examinations meet consistent quality standards. The quality evaluation will emphasize three main aspects:

1) Clarity:
   Whether examination notices, reasoning, and conclusions are stated in a manner that is clear, coherent, and easy for applicants to understand.
2) Compliance:
   Whether the patent examiner's judgment is fully consistent with the Patent Act, examination guidelines, and relevant procedural rules, including proper application of legal concepts such as novelty, inventive step, unity, and exceptions to patentability.

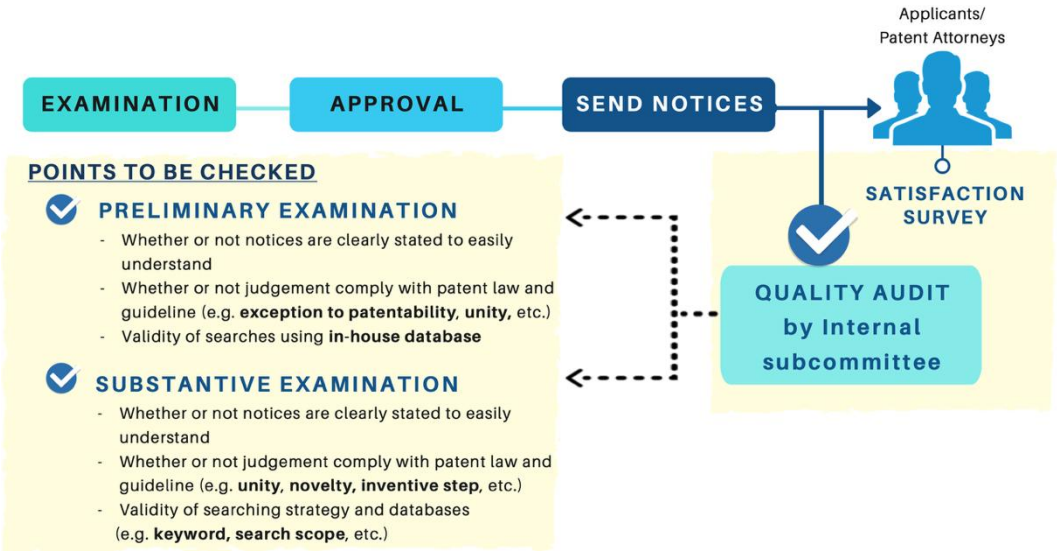


Figure 8: Internal Subcommittee Quality Checkpoints[8]

3) Validity of Search:
   Whether the Prior Art Search was conducted appropriately and sufficiently, including correct use of search strategies, relevant databases, and suitable keywords or search scope to ensure the accuracy and reliability of examination results.

These quality checkpoints are designed to reinforce consistency in examination practices, promote transparency, and strengthen overall confidence in the patent system. The framework also integrates user satisfaction surveys to capture external feedback and support continuous improvement.

[8] Source: Internal quality management task force materials, Patent Office, Department of Intellectual Property

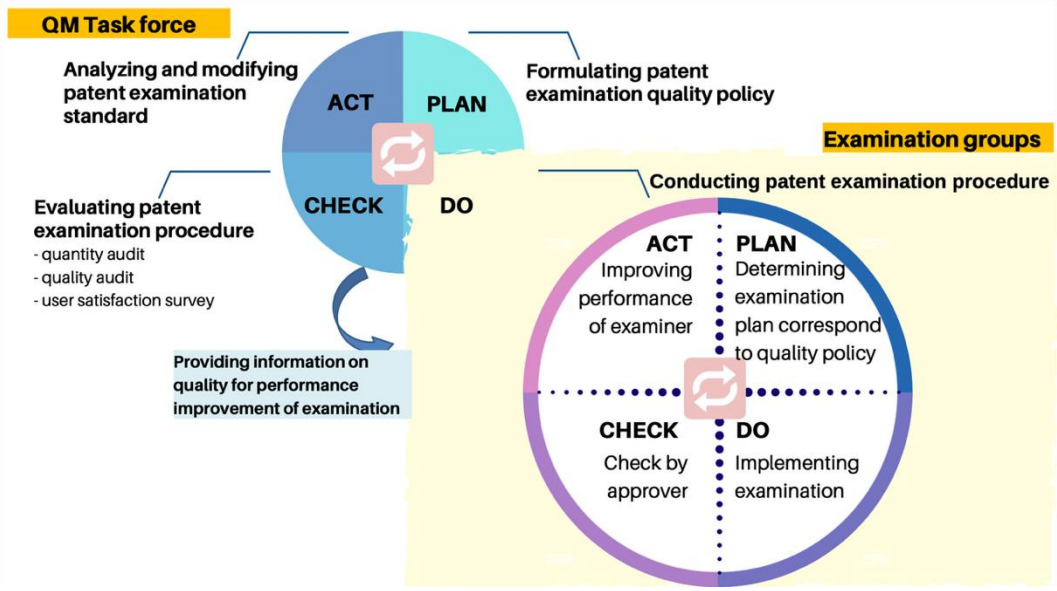


Figure 9: PDCA Cycle in Patent Examination Quality Management[9]

Figure 9 illustrates the planned application of the PDCA (Plan–Do–Check–Act) cycle within Thailand's patent examination quality management framework. The model is designed to promote continuous improvement through coordinated actions between the Quality Management (QM) Task Force and the examination groups.

Under this framework:

- Plan – Examination standards, quality policies, and performance goals are formulated by the QM Task Force. Examination groups develop examination plans that align with these policies.
- Do – Examiners implement the examination procedures, while the QM Task Force carries out planned quality management activities according to established guidelines.
- Check – Both the QM Task Force and examination groups review outcomes through mechanisms such as quality audits, quantity audits, and user satisfaction surveys. Approvers within the examination groups also verify examination results to ensure compliance with standards.
- Act – Findings from the review stage are used to improve examiner performance, refine examination standards, and enhance the overall quality system. The QM Task Force integrates feedback to revise policies and procedures for the next cycle.

By embedding the PDCA approach into routine examination workflows, the Patent Office aims to establish a sustainable system of quality assurance and continuous improvement, ensuring that examination practices evolve in line with legal requirements, operational needs, and user expectations.

2.6. Outsourcing of Prior Art Searches in Thailand

The increasing volume and complexity of patent applications worldwide have led many patent offices to adopt outsourcing mechanisms for Prior Art Searches as a means to improve

[9] Source: Internal quality management task force materials, Patent Office, Department of Intellectual Property

examination efficiency and maintain examination quality. Outsourcing allows patent offices to leverage external technical expertise, reduce the burden on examiners, and accelerate the examination process without compromising legal standards. In Thailand, outsourcing is formally incorporated into its patent system through Section 25 of the Patent Act, which enables the DIP to request external agencies to support substantive examination. Although the scale and implementation of outsourcing remain limited in practice, it continues to serve as an important supplementary mechanism for easing examiner workload and improving examination capacity (Latsch, V. L., 2018). This section provides an overview of Thailand's current outsourcing mechanisms and operational trends.

Thailand currently allows the use of external organizations to support substantive examination through the legal mechanism provided under Section 25 of the Patent Act B.E. 2522 (1979). This provision authorizes the DIP to request examination assistance from domestic public agencies, foreign patent offices, or international patent organizations. The external examination results may also be treated as equivalent to examination conducted by internal patent examiners (DIP, 1999).

Figure 10 presents the annual number of requests for outsourced Prior Art Searches compared with the total number of requests for substantive examination from fiscal years 2015 to 2025. Substantive examination requests generally range between 3,000 and 6,000 per year. In contrast, the number of requests for outsourced Prior Art Searches remains very low, consistently below 100 requests per year throughout the period shown. While the volume fluctuated modestly between 2015 and 2018, it has steadily declined thereafter. Since 2019, the number of outsourced search requests has continued to decrease, reaching only around 20 requests per year in recent fiscal years. The data suggests that while outsourcing is legally available, its practical use remains limited compared with the overall examination workload.

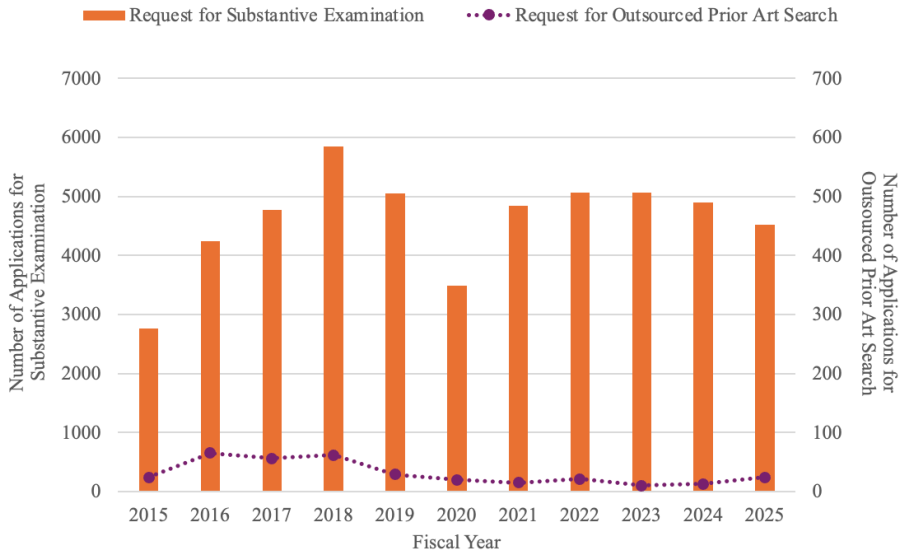


Figure 10: Requests for Substantive Examination and Outsourced Prior Art Searches in Thailand (2015–2025)[10]

[10] Author's compilation from internal DIP statistics database, accessed November 2025.

2.7. Summary of Critical Issues Requiring Strategic Reform

Thailand's patent examination system is currently facing a combination of structural constraints and emerging pressures that highlight the urgent need for strategic improvements. Although progress has been made in reducing pendency and upgrading internal processes, several critical challenges remain.

First, the backlog of pending substantive examinations continues to be substantial, with approximately 19,000 applications still awaiting examination. This backlog persists despite a steady inflow of new patent applications each year, resulting in a level of examination demand that consistently exceeds available capacity. Second, the number of patent examiners remains limited, and while the overall staffing level has remained stable, the average years of experience among examiners is moderate (WIPO, 2025). This has implications for examination speed, consistency, and the ability to handle the applications. Third, Thailand is now undergoing a major legislative reform. The draft amendment to the Patent Act proposes to shorten the time limit for filing a request for substantive examination from five years after publication to three years from the filing date. Because applicants predominantly file examination requests either in the first year or the last possible year under the current system, the expected shift in timing under the new law is likely to cause a significant surge in examination requests within a shorter period. Without appropriate preparation, this could lead to a sharp increase in the backlog. Finally, although Section 25 of the current Patent Act provides a legal basis for outsourcing Prior Art Searches and examination support, the mechanism remains underutilized in practice. Annual requests for outsourced searches are very low, and examiners often need to conduct additional searches even after receiving external search reports. This indicates that the existing outsourcing model may not yet be fully aligned with operational needs.

Taken together, these challenges underscore the necessity of identifying effective approaches to improve examination efficiency, manage growing workloads, and prepare for the implementation of the new Patent Act. Designing a more effective outsourcing framework will require deeper examination of key operational factors, including the appropriate scope of outsourced tasks, mechanisms for quality evaluation of external search reports, coordination procedures between examiners and external organizations, and alignment with Thailand's forthcoming legal reforms. At the same time, strengthening quality management is especially critical, as a robust and well-structured quality management system can help ensure that examiners issue clear, consistent, and well-grounded decisions, thereby reducing unnecessary rounds of office actions and contributing to a sustainable reduction in the backlog. This research therefore aims to investigate these issues in depth and provide insights that can inform Thailand's strategic development of its patent examination system moving forward.

3. Methodology of the study

This study employed a multi-method qualitative research design aimed at examining the feasibility, design considerations, and operational implications of outsourcing Prior Art Searches in the Thai patent system. The methodological approach integrates documentary analysis, institutional process review, cross-country comparison, and stakeholder interviews. These methods were selected to ensure a comprehensive understanding of both the Thai and Japanese systems, enabling the formulation of evidence-based policy recommendations for Thailand.

3.1. Reviewing academic literature and policy reports

The study began with an extensive review of academic literature, policy papers, and official reports related to patent examination, outsourcing models, search quality management, and institutional reform. Key sources included:

- scholarly literature on patent system efficiency and backlogs
- studies on examination management, search outsourcing, and quality assurance
- policy documents and operational manuals published by the JPO and international bodies (e.g., WIPO)
- prior analyses of DIP's challenges in patent examination management

This review established the conceptual and theoretical foundation for evaluating outsourcing options and identified recurring international best practices relevant to Thailand.

3.2. Studying and gathering data on the DIP's process of outsourcing Prior Art Searches

The study examined existing procedures within DIP relating to the outsourcing of Prior Art Searches. This included:

- reviewing DIP notifications and Memoranda of Understanding (MOUs)
- analyzing current fee structures and operational requirements
- mapping existing workflows for transmitting applications to external agencies
- studying internal constraints such as human resources, IT capabilities, backlog structure, and examiner workload

Primary and secondary data were collected to identify gaps between current practice and international models, particularly regarding scope of work, quality control, and institutional readiness.

3.3. Investigating JPO's management system for outsourcing Prior Art Searches

A detailed investigation of the JPO's outsourcing framework was conducted to understand the institutional mechanisms that enable effective and high-quality outsourced search operations. The investigation focused on:

- the statutory and regulatory foundations of the Registered Search Organization (RSO) and Specified Registered Search Organization (SRSO) systems
- the JPO's case-scoring model for workload management
- contractual arrangements, quality evaluation forms, and feedback loops
- budgeting and cost-allocation practices
- IT system requirements and information-security controls

- the historical development of the JPO's outsourcing system from its early phase to its current mature structure

This analysis provided practical benchmarks and models that could be adapted for the Thai context.

3.4. Interviewing key stakeholders including registered outsourcing organization and patent examiner

Interviews were conducted with stakeholders directly involved in examination management and outsourcing practices. Interviewees included:

- representatives from Registered Search Organizations (RSOs)
- Former patent examiner
- JPO management-level officials engaged in examination planning and policy implementation responsible for search infrastructure

Interview topics covered search operations, examiner-searcher communication, workload allocation, training requirements, system access, security controls, and historical evolution of outsourcing practices. The perspectives gathered were essential for understanding operational realities, institutional cultures, and potential barriers to reform.

3.5. Conducting comparative data analysis

A comparative analysis was undertaken to synthesize findings from the Thai and Japanese systems. The analysis considered:

- differences in legal frameworks
- organizational structures and workload models
- resource allocation and budgeting
- IT capabilities and security requirements
- training systems and qualification criteria
- quality-management mechanisms and performance evaluations

This comparative approach enabled the identification of structural gaps and potential areas for institutional adaptation in Thailand.

3.6. Identifying success factors and challenges

Drawing on documentary analysis, process mapping, interview data, and cross-country comparison, the study distilled a set of success factors and challenges relevant to implementing effective outsourcing in Thailand. These include:

- technical capacity and training requirements
- scope of assignable work within the legal framework
- digital and information-security readiness
- examiner–searcher integration and feedback mechanisms
- sustainable incentive and budgeting structures
- workload-management systems capable of reducing pendency

These findings directly informed the policy recommendations presented in later chapters.

4. Results and Analysis

4.1. Insights from the JPO's actions to deal with the backlog

4.1.1. Historical Development of Outsourced Prior Art Searches in Japan[11]

Japan's experience in addressing patent backlogs has evolved through a series of structured policy, legislative, and operational reforms as shown in Figure 13. The earliest foundation was laid in 1985 with the establishment of IPCC, which launched Japan's first pilot program for outsourced Prior Art Searches. This initiative was supported by the legal authority under Patent Act Article 194, which allows the JPO to request external agencies or organizations to conduct examinations or investigations necessary for patent examination (Japanese Law Transition, 2019).

Patent Act, Article 194:

(1) The Commissioner of the Japan Patent Office or an examiner may request a party to submit documents or other materials that are necessary for procedures other than those relating to an opposition to a granted patent, a trial, an appeal, or a retrial.

(2) The Commissioner of the Japan Patent Office or an examiner may request a relevant administrative agency, educational institution, or other organization to conduct an investigation necessary for the examination.

From 1989, the IPCC began full-scale search services, and in the early 2000s, Japan faced a critical backlog of 600,000–800,000 pending applications, with First Action pendency at about 26 months, as shown in Figure 11 (left). Furthermore, the amendment to the Patent Act in 2001, which shortened the period for filing a request for examination from seven years to three years from filing (JPO, 2001, September), resulted in a surge of the number of examination requests. This situation prompted Japan to expand outsourcing capacity. Alongside outsourcing, Japan pursued a deliberate expansion of examiner capacity. As shown in Figure 11 (right), the number of patent examiners increased steadily by approximately 100 per year between 2004 and 2008. Correspondingly, Figure 11 (left) demonstrates that from around 2008 onward, the backlog of FA pending applications declined significantly, while the timeliness of First Actions improved markedly.

A turning point occurred in 2004, when the JPO introduced its ambitious "FA11" goal, to issue the First Action within 11 months, and simultaneously amended the Act on Special Provisions for Procedures related to Industrial Property Rights to allow private-sector participation as registered search organizations. Under this system, the IPCC became the first registered search organization, and search fields were divided into 39 technical categories with minimum staffing requirements (at least 10 searchers and 1 technical category) to ensure specialization and quality.

Japan's outsourcing framework continued to expand thereafter. In 2013, the JPO successfully achieved the FA11 target. In 2014, the JPO set new strategic goals to reduce total

[11] Source: JPO, *About Registered Search Organizations*;
Tokugikon No. 288, P.124-133;
Tokugikon No. 308, P.18-28;
JPO, *Annual Reports 2025*.

examination pendency to 14 months and the FA pendency to 10 months by FY2023. In 2015, the IPCC was designated as a Specified Registered Search Organization, further strengthening its institutional role. As shown in Figure 12, the scope of outsourced searches also broadened to include foreign-language documents, initially English, and later Chinese, Korean, and German, reflecting increasing globalization and evolving examination needs.

Most recently, in 2024, the JPO established a new long-term goal to reduce total pendency to 14 months or less on average by FY2033, signaling a continued commitment to maintaining both speed and quality in patent examination.

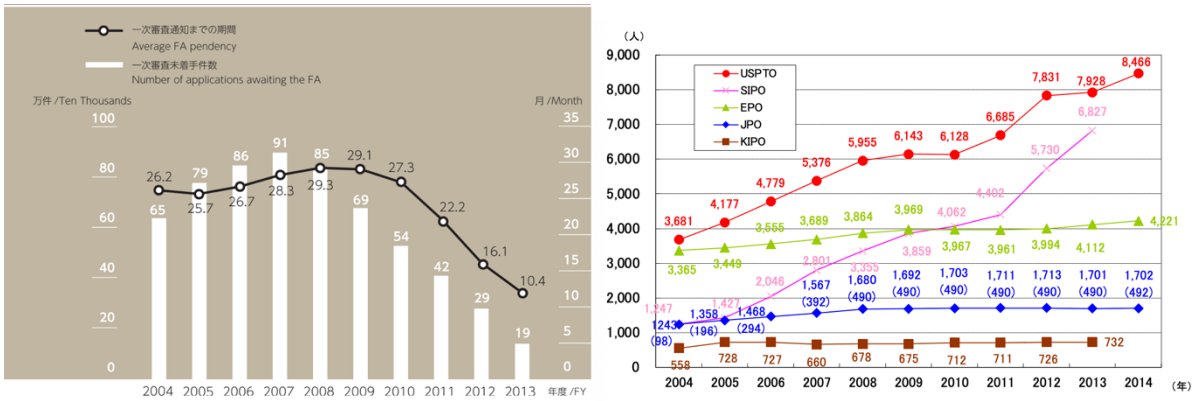


Figure 11: Changes in the number of applications awaiting the FA and the average FA pendency (left) (JPO, 2015) and number of JPO patent examiners (right) (JPO, 2024, December 9)

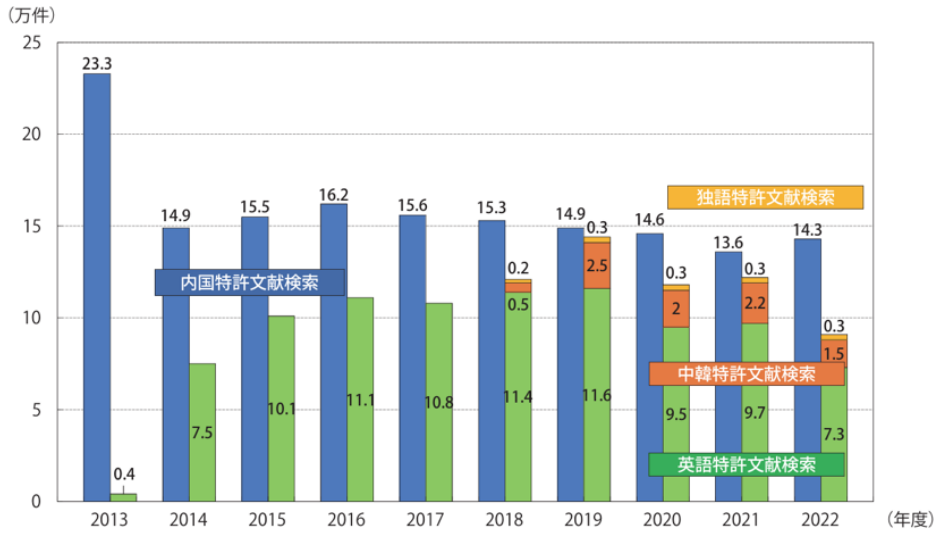


Figure 12: Trends in Outsourced Patent Document Searches by Language (2013–2022) (Tokugikon, 2023).

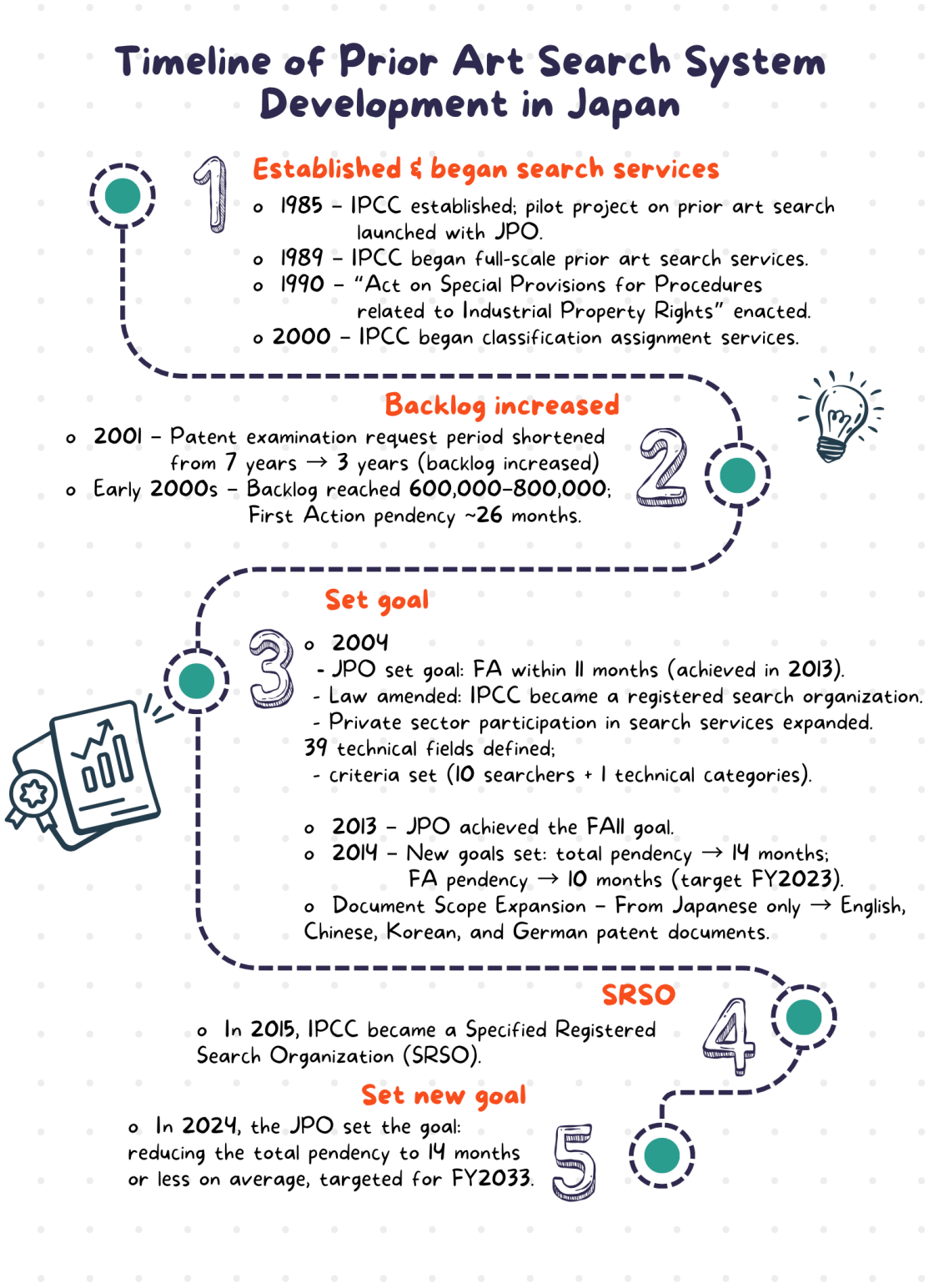


Figure 13: Timeline of Prior Art Search System Development in Japan[12]

[12] Author's compilation based on the research discussed in this section.

4.1.2. Early Implementation of Outsourcing: Insights from the IPCC Pilot Project[13]

The analysis in this section draws upon qualitative insights obtained through an interview with Mr. Tetsuo Tsukanaka, a former JPO official seconded to the IPCC during the initial implementation period. A detailed summary of the interview is provided in Appendix A.

These insights help to explain how the outsourcing framework was first introduced in practice, how operational challenges were addressed, and how the system gradually evolved before formal regulations and institutional mechanisms were fully established.

During the 1980s, the JPO began considering outsourcing as a response to mounting examination backlogs. The IPCC, established in 1985 as a small public-interest corporation, emerged as the only organization capable of conducting Prior Art Searches at that time. Between 1986 and 1988 the JPO conducted a three-year pilot project to evaluate the feasibility of outsourcing search work. Following positive results, full implementation began in 1989 with an initial target of approximately 10,000 applications per year, supported by a dedicated budget specifically allocated for outsourced searches.

To build the necessary search capacity, the IPCC significantly expanded its operations. Approximately thirty additional searchers were recruited, and several JPO officials were seconded to the IPCC to provide technical instruction and ensure alignment with JPO examination standards. Four senior examiners served as leaders and instructors, delivering intensive induction training over one to two months and providing close on-the-job supervision. Although most new searchers had scientific or engineering degrees, many had limited knowledge of the patent system. Dedicated search terminals and personal computers were used exclusively for search work, reflecting the technological context of the period.

Despite these institutional measures, skepticism existed within both organizations. Many doubted whether inexperienced searchers could produce 10,000 search reports within a year, and some examiners were hesitant to rely on external search results. Continued coordination between the seconded JPO examiners and IPCC teams, together with a shared organizational commitment to making outsourcing work, played a critical role in overcoming these initial uncertainties.

In the early years, formal quality-management systems were not yet established. There were no structured retraining programs, standardized skill assessments, or institutional frameworks for evaluating the IPCC. Quality assurance instead relied heavily on case-by-case feedback. For each search report, examiners completed a simple feedback form containing a numerical score and brief comments (for example, “very useful” or “many mistakes”). These were returned to the IPCC, where both searchers and team leaders, seconded from the JPO, reviewed the feedback and used it as a basis for internal guidance and corrective instruction. Rather than functioning as a sanctioning mechanism, this feedback system served primarily as a learning tool that helped to progressively improve search quality.

From a financial perspective, outsourcing costs were borne entirely by the JPO. Applicants paid only the ordinary filing and examination fees, part of which was allocated to fund outsourced searches. Many early searchers were mid-career or post-retirement engineers

[13] Information obtained from an interview with Mr. Tetsuo TSUKANAKA, Executive Technical Officer, Patent Attorney, held on October 21, 2025.

who viewed their work as contributing to the national interest, and organizational efforts to cultivate a collegial workplace culture further supported morale and motivation.

Conflict-of-interest management was incorporated from the outset. Searchers were not assigned to applications connected to their former employers or to parties with whom they had prior relationships. Allocation of cases was therefore handled carefully to avoid potential conflicts, and cultural norms among searchers often led to especially rigorous scrutiny of applications with any indirect link to their prior work environments.

Regarding examiner performance, there were no specific KPIs linked directly to outsourcing during the pilot period. The JPO initially allocated outsourced cases to examiners who were supportive of the initiative and had strong management capabilities, in order to reduce internal resistance and facilitate coordination. Furthermore, relatively simple cases were selected for outsourcing in the early phase to allow searchers to gain experience before gradually moving to more complex applications. As outsourcing later expanded to cover a wider range of technologies and multiple registered search organizations, the JPO introduced more formal evaluation and allocation mechanisms, but these developments occurred only after the basic model had proven workable.

Overall, this highlights several features that are particularly relevant for Thailand:

- outsourcing began with a small, focused pilot targeting a manageable number of cases;
- embedded JPO examiners played a crucial role in training and supervising external searchers;
- simple feedback tools were used to drive quality improvement before complex evaluation systems were established;
- financial arrangements were kept straightforward, with costs covered from the JPO budget and searchers paid on a salary basis; and
- the outsourcing framework evolved gradually over time, with stricter monitoring and diversification of providers introduced only after the system had matured.

These lessons suggest that, for a country at an earlier stage of outsourcing such as Thailand, a phased and collaborative approach may be more effective than imposing highly rigid control mechanisms from the beginning.

4.1.3. Current Practices and Operational Mechanisms of Outsourced Prior Art Searches in Japan

Building upon the historical development and early experiences of outsourcing, Japan has now established a highly structured and mature system for managing outsourced Prior Art Searches. The contemporary framework is governed not only by administrative practice but also by explicit legal provisions under the Act on Special Provisions for Procedures related to Industrial Property Rights, which define the registration, operation, and oversight of registered search organizations. Within this legal foundation, the JPO administers a detailed set of operational rules, standardized quality-management tools, and transparent budget-allocation mechanisms that together enable the outsourcing of approximately half of all applications for which an examination request has been filed.

Insights obtained from discussions with experts from the JPO and the IPCC illustrate how, under the current system, applications eligible for outsourcing are identified, search

reports are produced and transmitted, examiners provide structured feedback using designated evaluation forms, and performance results are incorporated into annual bidding and contract-allocation processes. These mechanisms demonstrate how Japan's outsourcing model has evolved into a coordinated, deadline-driven, and legally anchored system that supports examination efficiency while maintaining high and consistent search quality.

4.1.3.1. Procedure for Obtaining Patent Rights in Japan

In Japan, the process of obtaining a patent right is administered by the JPO under the Patent Act of Japan. The procedure ensures that only inventions meeting the legal requirements of novelty, inventive step, and industrial applicability are granted patent protection. It consists of several stages, beginning with the filing of an application and ending with the registration of the patent right.

As shown in Figure 14, the procedure begins with the filing of a patent application at the JPO. Japan applies the first-to-file principle, meaning that when two or more parties file for the same invention, the first applicant to submit the application is entitled to the patent. Therefore, inventors are encouraged to file promptly and to avoid disclosing their inventions publicly before filing. After the application is submitted, the JPO conducts a formality examination to confirm compliance with procedural and documentary requirements. If deficiencies are found, such as missing information or incomplete sections, the applicant is invited to correct them. Once the formality check is completed, the unexamined application is published in the Patent Gazette after eighteen months from the filing date, making the application publicly accessible and ensuring transparency.

An application will proceed to substantive examination only if a request for substantive examination is filed. The applicant must submit this request within three years from the filing date and pay the required examination fee. If no request is made within this period, the application is regarded as withdrawn and cannot proceed further. This three-year period applies to patent applications filed on or after October 1, 2001, whereas the previous seven-year time limit applied to applications filed before September 30, 2001. When a request is filed, a JPO examiner conducts the substantive examination to determine whether the invention satisfies the legal requirements for patentability. In this process, the examiner performs a Prior Art Search to identify existing publications, patents, and other technical disclosures that may affect the novelty and inventive step of the claimed invention. The examiner verifies that the invention is based on a technical idea using a law of nature, has industrial applicability, is new and non-obvious to a person skilled in the art, and does not violate public order or morality. The specifications and claims are also reviewed for conformity with the prescribed formal standards. If reasons for refusal are identified, the examiner issues a notification to the applicant, who may respond with written arguments or amendments to overcome the objections. When the examiner determines that the reasons have been resolved, a decision to grant a patent is issued. If not, a decision of refusal is made, and the applicant may appeal to a collegial body of appeal examiners within the JPO. Once a decision to grant becomes final and the patent registration fee is paid, the right is entered into the Patent Register and takes effect. Post-grant procedures include opposition, which allows any person to challenge a granted patent within six months of publication, and a trial for invalidation, which may be initiated by an interested

party. Both procedures are examined by a panel of appeal examiners, ensuring continued fairness and legal soundness in the Japanese patent system (JPO, 2019).

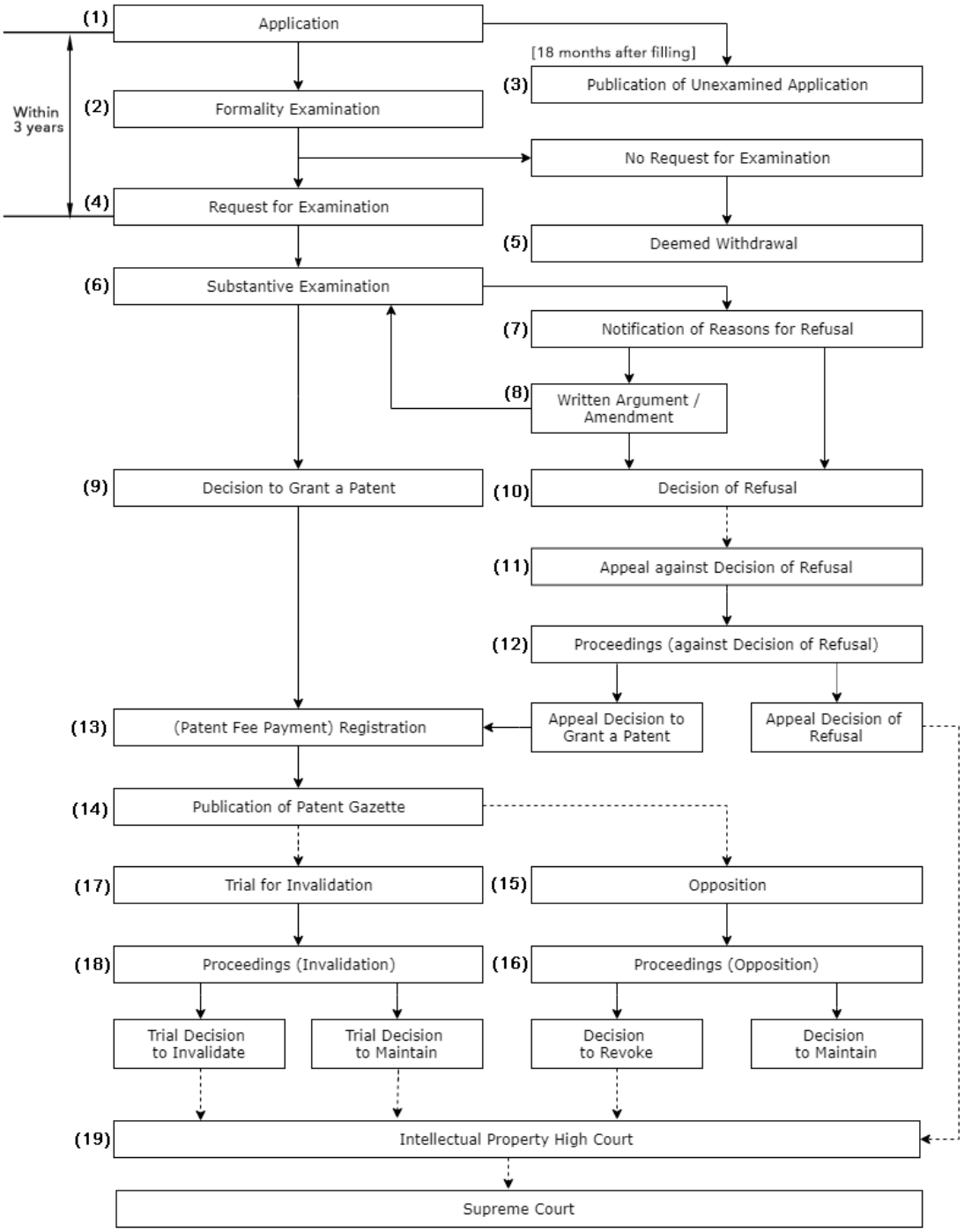


Figure 14: Procedure for Obtaining Patent Rights in Japan (JPO, 2019)

4.1.3.2. Legal Framework Governing Patent Examination

Japan implemented a major amendment to its Patent Act in 2001, which shortened the period for filing a request for substantive examination from seven years to three years from the filing date, a change that has had a long-term impact on examination management and backlog control (Ryuka, A., & Smith, P., 2002).

Japan's patent examination system is grounded in the Patent Act, which establishes clear timelines for substantive examination and provides mechanisms for patent examiners to obtain technical information from both applicants and external organizations. Two provisions, as shown in Table 3, are particularly relevant to understanding Japan's approach to examination management and its long-standing practice of utilizing external expertise for Prior Art Searches. This provision forms the statutory foundation for the JPO's cooperation with external entities such as the IPCC, which has supported the JPO by conducting Prior Art Searches since 1989 (JPO, 2025, October). While Article 194 does not explicitly use the term "outsourcing," it provides the legal permission necessary for the JPO to delegate specific technical tasks, including Prior Art Searching, to qualified organizations. This statutory flexibility has allowed Japan to develop a highly structured, quality-controlled outsourcing system that now plays a critical role in managing the examination workload and ensuring timely processing of applications (Japanese Law Transition, 2019).

Article 48-3 *When a patent application is filed, any person may request the Commissioner of the Japan Patent Office to examine the application within three years from the date of filing.*

Article 194 (1) *The Commissioner of the Japan Patent Office or an examiner may request a party to submit documents or other materials that are necessary for procedures other than those relating to an opposition to a granted patent, a trial, an appeal, or a retrial.*

(2) The Commissioner of the Japan Patent Office or an examiner may request a relevant administrative agency, educational institution, or other organization to conduct an investigation necessary for the examination.

Article 48-3 of the Patent Act stipulates that, after the filing of a patent application, any person may request the Commissioner of the JPO to examine the application within three years from the filing date. This provision ensures that examination resources are allocated only to applications for which applicants or third parties have a confirmed interest, thereby reducing unnecessary examination and stabilizing the examination workload (JPO, 2001).

Article 194 provides an important legal basis supporting Japan's structured use of external organizations for Prior Art Searching and examination-related investigation. It contains two key paragraphs:

1) Article 194(1) allows the JPO Commissioner or an examiner to request applicants to submit documents or materials needed for examination procedures.
2) Article 194(2) expands this authority by enabling the Commissioner or examiner to request a government agency, educational institution, or other organization to conduct an investigation necessary for examination.

This provision forms the statutory foundation for the JPO's cooperation with external entities such as the IPCC, which has supported JPO by conducting Prior Art Searches since 1989 (IPCC, n.d.).

4.1.3.3. Registration Criteria for External Search Organizations

The legal foundation for outsourcing Prior Art Searches in Japan is established under the Act on Special Provisions for Procedures related to Industrial Property Rights, particularly Articles 36 and 37, which set out the framework for registering external organizations authorized to conduct search work on behalf of the JPO. These provisions define the types of search services that may be outsourced, the registration process, and the minimum standards that organizations must meet in order to qualify as Registered Search Organizations (RSOs). The full translated text of the relevant statutory provisions is provided in Appendix C.

Under Article 36, the Commissioner of the JPO may delegate Prior Art Searches to external organizations for specified technical fields, as designated by Cabinet Order. These searches include those necessary for patent examination as well as searches relevant to the publication of applications. Registration is granted only upon application and is categorized by technical field, with each field separately designated under ministerial ordinance.

Article 37 sets out the substantive criteria that an applicant must satisfy in order to be registered. The requirements fall into three main areas.

First, the organization must employ at least ten qualified searchers for each technical category in which registration is sought. The statute defines minimum qualifications for searchers, which include a university-level degree in science or engineering, a specified period of professional experience in science- and technology-related work, and successful completion of training provided by the National Center for Industrial Property Information and Training (INPIT) (INPIT, 2025, April 15). Individuals with equivalent knowledge or experience may also qualify. The INPIT training program, as shown in Table 1, is structured as a multi-stage curriculum designed to ensure that searchers possess both legal and technical competencies before performing search work. The program includes lectures on patent law, written examinations, practical training on search techniques, group discussions, Prior Art Search exercises, seminars on interactive screening, and the preparation of a full search report. Participants are also required to complete two interview-based evaluations. Completion of the program is determined through a comprehensive assessment combining written test results and interview performance, and both the applicant and the applying organization are formally notified of whether the training requirements have been satisfied. This requirement ensures that each technical field is supported by a sufficiently staffed and professionally trained search team.

Second, the applicant must possess the necessary computing systems and software required to conduct patent searches. This reflects the centrality of electronic search infrastructure in modern examination practice and ensures that registered organizations have the technical capability to conduct searches consistent with JPO standards.

Third, the applicant must be organizationally independent. The law prohibits registration where the organization is controlled by a specific company or person, such as being a subsidiary or having a majority of its officers drawn from a single entity. These restrictions are designed to prevent conflicts of interest and to ensure neutrality in the search process.

Upon successful registration, the organization is recorded in the official register maintained by the JPO, which includes the registration number, date of registration, name and address of the organization, the representative's name (in the case of a corporation), the categories of search work for which the organization is authorized, and the location of its search facilities.

Overall, the statutory framework establishes a robust gatekeeping mechanism that ensures only technically competent, adequately staffed, and organizationally independent bodies are permitted to perform outsourced Prior Art Searches. This legal structure forms the foundation upon which Japan's broader outsourcing system is built.

Table 1: List of teaching materials used by INPIT training and training subjects (INPIT, 2021, December)

Training subject name	Text Name	Author
Introduction to patent law	Introduction to patent law [PDF:4.4MB]	Industrial Property Information and Training Center
Judging criteria	Examination Guidelines Parts I to VI [PDF: 181MB] Examination Guidelines - Case Studies (Examination Handbook Appendix A) [PDF: 100MB]	Industrial Property Information and Training Center
Search concepts and report creation	Search Concepts and Report Creation [PDF: 15.5MB]	Industrial Property Information and Training Center
Introduction to classification	Introduction to Classification [PDF: 9.6MB]	Industrial Property Information and Training Center

In addition to the statutory requirements under Articles 36 and 37 of the Act, further procedural obligations are set out in the Enforcement Regulations for the Law Concerning Special Provisions on Procedures Related to Industrial Property Rights, particularly Articles 55 and 56. Article 55 specifies the documents and information that must accompany a registration application, such as the name and address of the organization and its offices, the technical categories for which registration is sought, the planned start date of operations, certificates of registered matters, resumes of search personnel and corporate officers, and documentation demonstrating compliance with the statutory eligibility criteria and the absence of disqualifying conditions. Article 56 provides the official list of technical classifications for which registration may be granted, as set forth in Appendix 2 of the Ordinance. These regulatory provisions ensure that the JPO can systematically verify an applicant's organizational capacity, staffing, and legal compliance before granting registration. Further excerpts of the relevant statutory provisions are provided in Appendix D.

4.1.3.4. Obligations of Registered Search Organizations

In addition to the registration criteria set out in Articles 36 and 37, the Act on Special Provisions for Procedures related to Industrial Property Rights also imposes explicit operational obligations on registered search organizations. Article 38 establishes the duty of timely cooperation with the JPO and sets requirements regarding who may carry out the investigation work. The full translated text of the relevant statutory provisions is provided in Appendix C.

Under Article 38 paragraph 1, once the JPO Commissioner requests a registered search organization to undertake a Prior Art Search, the organization is required to conduct the work without delay. This obligation ensures that outsourced searches are seamlessly integrated into the examination workflow and supports the JPO's policy objective of issuing the first office action within the prescribed examination period. A registered organization may refuse only when there is a *justifiable reason*, reflecting the expectation that participation in the outsourcing system entails a continuous readiness to accept and process assignments.

Article 38 paragraph 2 further stipulates that all investigation work must be performed by qualified personnel who meet the criteria set out in Article 37 paragraph 1(i). This requirement reinforces workforce competence by ensuring that all searches are conducted by individuals who possess the requisite technical background, years of experience, and completion of specialized training provided by INPIT. The provision thereby links operational practice directly to the statutory qualification requirements and serves as a legal safeguard for maintaining the quality and reliability of outsourced search outputs.

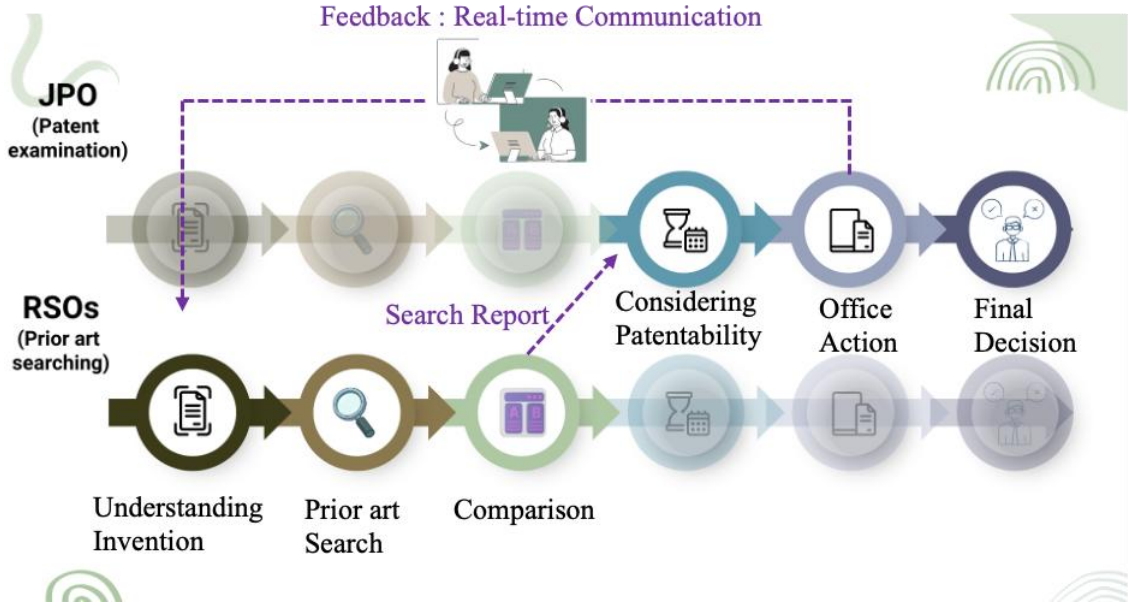


Figure 15: Workflow of Outsourced Prior Art Searches[14]

[14] Author's compilation based on information from https://www.jpo.go.jp/system/patent/gaiyo/sesaku/toroku/touroku_chousa.html and https://www.ipcc.or.jp/about/registered-search-organization/

The current workflow between the JPO and registered search organizations, particularly the IPCC, follows a structured division of tasks that supports both efficiency and examination quality. Figure 15 illustrates the interaction between the two entities. At the initial stage, search organizations are responsible for understanding the invention, conducting the Prior Art Search, and comparing the retrieved documents with the technical features of the claimed invention. IPCC searchers access JPO's internal patent-document search systems to identify prior art that may affect novelty or inventive step[15]. Once the search and comparison are completed, the findings are compiled into a search report and provided to the JPO examiner.

The JPO examiner then reviews the search report and verifies the cited documents, search strategy, and comparative analysis. After confirming the contents, the examiner incorporates the results into the substantive examination process, including the assessment of patentability and the drafting of office actions. While examiners may issue multiple communications to applicants during substantive examination, the interaction between the examiner and the search organization typically occurs only once per case. This single feedback loop is designed to keep the workflow streamlined while still enabling quality review.

4.1.3.5. Evolution of Communication Practices

Communication methods between searchers and examiners have evolved significantly. In the earlier years of outsourcing, IPCC submitted search results solely in written form. More recently, face-to-face reporting has become the standard practice. Searchers commonly meet directly with examiners to present the findings, explain search strategies, and clarify technical points. This in-person discussion facilitates mutual understanding and allows examiners to provide immediate feedback, such as identifying overlooked aspects or suggesting additional search directions. These interactions contribute not only to examination efficiency, but also to the continuous professional development of searchers. Face-to-face reporting was temporarily suspended during the COVID-19 pandemic, when the system returned to written-only submissions. The reporting method has shifted again to a hybrid model during the post-pandemic period, with online meetings increasingly replacing in-person sessions. Virtual discussions now allow real-time communication, while also offering flexibility and safety. Regardless of format, the objective remains consistent: ensuring clarity, accuracy and effective coordination.

Figure 16: Fostering trust between JPO examiner and Searcher (JPO, 2025, December 12)

[15] Source: JPO, *Application Guidelines for Registered Search Organizations*

Together, these operational practices illustrate a well-integrated workflow wherein search organizations perform foundational search tasks while the JPO focuses on examination and decision making, as shown in Figure 16. The evolution from document-based communication to interactive and hybrid reporting underscores the adaptability of Japan's outsourcing system, and its emphasis on quality and professional exchange.

4.1.3.6. Selection of Patent Applications for Outsourcing[16]

The selection of patent applications for outsourcing in Japan follows an operational logic tied closely to pendency management. As explained by JPO officials, the primary criterion is the principle of processing applications based on the earliest examination request date. All technical fields are eligible for outsourcing, and approximately half of all applications for which examination has been requested during a given fiscal year are outsourced in practice to registered search organizations.

Only applications that remain within ten months from the examination request date, however, are considered candidates for outsourcing. This operational threshold reflects the 14-month internal target for issuing the first office action (FA). Because search organizations generally require around two months to complete a Prior Art Search, sending cases that are already more than ten months old could result in exceeding the 14-month FA benchmark. For this reason, such applications are retained for internal processing.

In addition to age-based exclusions, certain types of applications are categorically not outsourced. Patent applications that have not yet been published (i.e., pre-publication applications) are not eligible for outsourcing due to confidentiality constraints. Likewise, international applications for which an international search report or other work-sharing results are already available are excluded from outsourcing. Together, these conditions ensure that only suitable applications are directed to external search organizations while maintaining the JPO's overall pendency and quality objectives.

4.1.3.7. Scope of Prior Art Searches Conducted by RSOs[17]

To enhance the overall quality of substantive examination, the scope of Prior Art Searches conducted by RSOs, including the IPCC, extends beyond domestic patent documents. When required, searchers review foreign-language patent literature to ensure that relevant prior art is not overlooked due to linguistic or jurisdictional limitations. This approach reflects the increasingly global nature of technological development and patent filings.

In addition to patent literature, non-patent literature (NPL) such as academic theses, scientific journals, and research publications are examined when warranted by the subject matter of the invention. The JPO provides specific instructions for such cases, and within the 39 technological fields used for outsourcing, the JPO may designate certain categories—particularly in chemistry or biotechnology—as requiring searches that include foreign-language sources or NPL. These directions are typically informed by observed filing trends, such as high volumes of foreign-origin patent applications in specific technical areas.

[16] Information obtained during an interview with JPO officials on November 26, 2025.

[17] Source: Tokugikon No. 308, P. 18-28, Fig. 10

Statistical trends since 2013 indicate a substantial increase in the use of foreign-language documents in outsourced searches. English-language documents constitute the largest number, followed by Korean, Chinese, and German materials.

4.1.3.8. Information Security, System Access, and Database Requirements[18]

Information security constitutes a core element of Japan's outsourcing framework for prior art searches. Beyond the structural requirements set out in the Act on Special Provisions for Procedures related to Industrial Property Rights, additional security obligations apply to registered search organizations through both statutory provisions and contractual arrangements with the JPO.

From a legal standpoint, confidentiality obligations apply mutatis mutandis to registered search organizations through Article 39 of the Act, which incorporates the provisions of Article 26. Under this rule, officers and employees of a registered search organization must not disclose or misuse any confidential information obtained through the course of conducting search work. The law further provides that for the purposes of the Penal Code and other penal statutes, such personnel are treated as individuals engaged in public service. This classification underscores the seriousness of the duty of confidentiality in handling unpublished patent information. Authority's inspection is also established through Article 27, which is similarly applied by Article 39. The JPO may require registered organizations to submit reports concerning their business activities or accounting records. In addition, JPO officials may enter the premises of a registered search organization to inspect business operations, books, records, and related materials, or to interview relevant personnel. Officials conducting on-site inspections are required to present identification. The inspection authority is also explicitly limited in scope, and may not be used for criminal investigative purposes. Together, these provisions provide a statutory basis for monitoring compliance and preventing unauthorized disclosure or misuse of sensitive information.

On the technical side, registered search organizations must use search tools and database systems approved by the JPO. These include JPO's internal search system, commercial patent databases, and J-PlatPat. Access to subscription-based or restricted databases is funded and centrally managed by the JPO, allowing registered organizations to conduct searches without incurring separate licensing costs. Access to internal search systems is controlled by an IC-card authentication mechanism assigned individually to authorized searchers. This ensures that only qualified personnel may access confidential search environments, while also allowing the JPO to monitor system usage in order to protect data integrity. Although not required by law, some organizations have obtained ISO-based information security certification on a voluntary basis, reflecting adherence to internationally recognized standards and supplementing the safeguards imposed by statute and contract.

[18] Source: JPO, *Commentary: Act on Special Provisions for Procedures Concerning Industrial Property Rights,* https://www.jpo.go.jp/system/laws/rule/kaisetu/kogyoshoyu/document/chikujokaisetsu22/koug you.pdf*;*
JPO, *Procedures for determining outsourcing contractors, a number of outsourcing and contract amounts*, https://www.jpo.go.jp/system/patent/gaiyo/sesaku/toroku/document/touroku_chousa/04.pdf ;
& an interview with JPO Officials, held on November 26, 2025.

Overall, the combination of legal provisions, contractual requirements, technical access controls, and supervisory mechanisms forms a comprehensive security framework designed to protect confidential patent information and ensure the reliable execution of outsourced Prior Art Searches.

4.1.3.9. Content and Structure of Search Reports Submitted by RSOs

A key output of the outsourcing system is the Prior Art Search report, which serves as the primary document enabling JPO examiners to proceed efficiently with substantive examinations. Although the detailed presentation format may vary across organizations, the structure and minimum required content of the report are regulated under the Act on Special Provisions for Procedures related to Industrial Property Rights and its Enforcement Regulations. These legal provisions, together with JPO's operational requirements, ensure uniformity, completeness, and traceability of outsourced search results.

For Specified Registered Search Organizations (SRSOs), Article 60-2 of the Enforcement Regulations prescribes the mandatory components that must appear in every investigation report. These include identification information for the organization and the searcher, information about the application and claims searched, and details of the search conditions and results. Specifically, the report must include the following:

- Investigation report number
- Name and registration number of the specified registered research organization
- Category of registration for the organization
- Technical field in which the Prior Art Search was conducted
- Date of the search
- Name of the person who performed the search
- Application number of the patent application concerned
- Scope of claims reviewed in the search
- Search conditions and results
- Date of report issuance
- Any other necessary matters

Although Article 60-2 applies directly to SRSOs, registered search organizations generally follow similar content requirements in practice. These mandatory elements ensure traceability, transparency of search methodology, and adequate information for examiner review. (See Appendix D for the full legal text)

While the legal requirements define the essential items to be included, actual search reports also follow standardized technical formats developed through JPO practice. An illustrative example drawn from materials of INPIT. The sample demonstrates three commonly used presentation styles—text, matrix and eclectic formats—each of which includes the core analytical components required for effective examination.

Search reports generally include the following sections:

- Invention features: A summary of the main technical features extracted from the claims, which are used as the basis for formulating the search strategy

- Search logic table: A structured presentation of search strategies, including keywords, classification codes, logical combinations, and databases used
- Results of screening search: A list of retrieved documents that have been screened as potential prior art, usually including bibliographic data and brief relevance notes
- Comparison of the present invention and prior art: A comparative analysis of the invention's claimed features against the disclosures of the identified documents, highlighting similarities and differences relevant to novelty and inventive step

Although the format may differ across organizations (e.g., narrative vs. matrix-based layouts), these sections share the same functional purpose: to provide examiners with a clear, systematic, and comprehensive overview of the search procedure and its results.

The search report serves as the foundation for the examiner's substantive assessment. After receiving the report, the examiner reviews the search logic, evaluates the cited documents, and determines whether they are relevant for issuing the First Action. The examiner must also indicate in the standardized evaluation form whether each cited document was actually used in drafting the First Action, which will be explained further in the next topic. This ensures that outsourced search results remain tightly integrated into the examination process, and provides critical input for assessing the quality and future contract eligibility of search organizations.

4.1.3.10. Feedback and Examiner Review Process[19]

Figure 17 illustrates the workflow between registered search organizations and the JPO, highlighting the sequence of interactions from search request to feedback and First Action issuance. Examiners are required to review the search results submitted by registered search organizations using a standardized evaluation form. The form records basic identification details and evaluates several aspects of the search work, including the clarity and adequacy of the searcher's explanation, the sufficiency and relevance of the cited documents, and the accuracy of the comparison between the application and prior art. Examiners must also indicate whether the cited documents were actually used in issuing the First Action, reflecting the substantive value of the outsourced search results. The form further includes sections for noting particularly positive points, as well as deficiencies.

With regard to timing, the JPO places strong emphasis on clearly defined and strictly observed operational timeframes, emphasizing not only the completion of tasks, but also their completion within the prescribed deadlines. Examiners are expected to provide feedback no later than the end of the month following the month in which the search report was received. Although many examiners provide feedback immediately, this internal timeframe ensures consistency and prevents prolonged delays. The same general timeline applies to the issuance of the First Action. Timely feedback is encouraged, because delays increase the risk that examiners may forget the detailed content of search results.

Although examiners are required to complete the evaluation form, the act of providing feedback is not treated as a direct KPI item. The primary KPI for examiners is the timely

[19] Information obtained during an interview with JPO officials on November 26, 2025.

issuance of the First Action. Because this must be issued within two months after receiving the outsourced search report, the feedback process is effectively tied to this same two-month window. In practice, this means that feedback must be completed within the two-month period, even though the feedback itself is not measured as a stand-alone KPI. If feedback is delayed, search organizations may contact the JPO to inquire about its status; but there is no penalty for late feedback.

Instead of serving as a performance metric for examiners, feedback fulfills an institutional function within the outsourcing system. For the JPO, accumulated feedback scores are used as part of the technical evaluation of search organizations during the next fiscal year's public bidding process. For search organizations, the examiner's comments provide important insights into areas for improvement. In competitive bidding, quality (reflected in technical scores derived from examiner feedback) and cost are both considered. Search organizations with higher technical evaluations are more likely to secure contracts, meaning that examiner feedback indirectly shapes incentives and helps to maintain search quality across different providers.

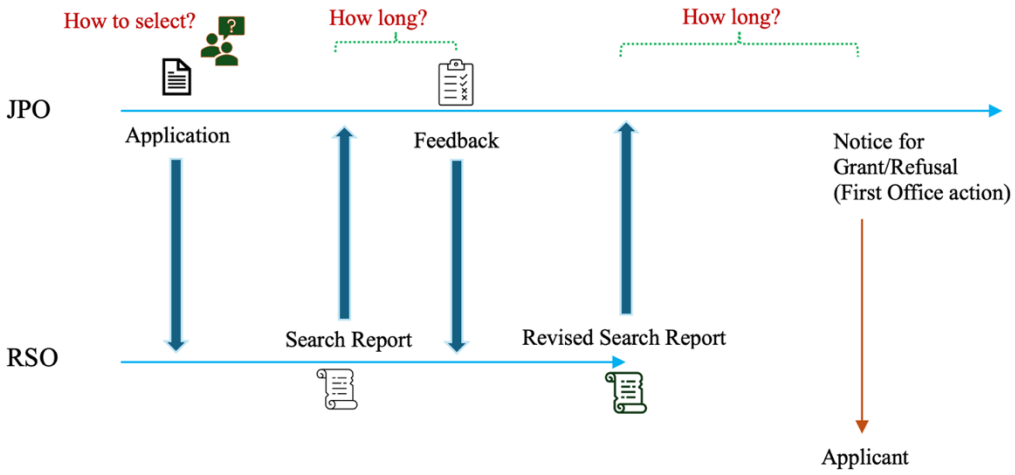


Figure 17: Workflow between registered search organizations and the JPO, highlighting the sequence of interactions from search request to feedback and First Action issuance[20]

4.1.3.11. Incentive and Performance Evaluation Mechanisms for RSOs[21]

The JPO employs a structured incentive framework to ensure that registered search organizations maintain high levels of efficiency and search quality. Central to this framework is the technical evaluation derived from examiners' feedback forms. Each outsourced search report is assessed by the examiner, and the resulting scores constitute a primary input into determining whether a search organization will secure contracts for the following fiscal year.

Technical evaluation plays a decisive role during the JPO's annual public bidding process, wherein both cost and quality factors are considered simultaneously. Organizations that consistently obtain high evaluations are more likely to receive the volume of contracts they

[20] Author's compilation created for use in discussions and interviews with JPO officials
[21] Information obtained from an interview with JPO officials on November 26, 2025

seek in the next fiscal cycle, while those that repeatedly receive poor evaluations may lose eligibility for future contracts. In this way, the evaluation system functions not only as a feedback mechanism for quality improvement; but also as an implicit penalty-and-reward structure that shapes long-term contract allocation.

Monetary incentives are thus tied indirectly to quality, rather than to the number or complexity of searches completed. And while there are no per-case bonuses or direct penalties, an organization's future workload—and therefore its revenue—depends on its prior-year evaluation results. This structure ensures competition in both search quality and cost, without requiring formal financial sanctions.

In addition to contractual incentives, the JPO and INPIT provide training programs that serve as non-monetary incentives. These programs support skill development among searchers and enhance the capability and consistency of search organizations. Access to such training is viewed as a valuable resource that contributes toward institutional capacity-building.

Overall, the integration of quality-based technical evaluation into the competitive bidding system, combined with training-based non-monetary incentives, enables the JPO to balance cost efficiency with stringent quality assurance in outsourced Prior Art Search operations.

4.1.3.12. Management of Examiner Workloads and Examination Queues[22]

The JPO manages examiner workloads using a structured case-scoring system designed to reflect differences in examination effort among various types of applications. Each application type is assigned a numerical score that corresponds to the level of analytical work required. Different types of applications—those without Prior Art Searches, those making use of international work-sharing or foreign search results, those accompanied by search results from RSOs, and those accompanied by search results from Specified Registered Search Organizations (SRSOs)—are each assigned different score weights. Examiners are given monthly performance targets based on the total score accumulated from processed cases, ensuring that workloads are aligned with both quantity and complexity rather than simple case counts.

The examination queue is organized according to the "oldest request first" principle. All technical fields are eligible for outsourcing in principle, and about half of all applications for which substantive examination has been requested are outsourced during a typical year. Only applications that remain within ten months from the examination request date are selected for outsourcing, however, because outsourced searches generally require about two months. This scheduling allows examiners to meet the overall target of issuing the First Action within fourteen months from the examination request.

Different categories of applications follow distinct internal timelines. Applications without Prior Art Searches must receive the First Action within fourteen months, while those utilizing international work-sharing results are expected to receive the First Action within approximately three months from filing. For applications accompanied by RSO search reports, the search must be completed within roughly two months; and the examiner must issue the First Action by the end of the month following receipt of the report. Applications accompanied

[22] Information obtained during an interview with JPO officials on November 26, 2025

by search reports prepared by SRSOs, which are commissioned by applicants, follow the standard fourteen-month timeframe. Collectively, these scheduling rules support timely examination across all application categories.

4.1.3.13. Budget Planning and Cost Allocation for Outsourced Searches[23]

The JPO fully finances all costs associated with outsourced Prior Art Searches, with applicants not required to pay any additional fees beyond those for statutory filing and examination. The outsourcing budget is planned annually based on the projected number of applications expected to be outsourced, and the anticipated need for foreign-language searches (particularly in English, Chinese, Korean and German), which constitute a significant portion of relevant prior art in several technical fields.

Outsourcing expenditures account for a substantial share of the JPO's overall financial resources. The cost of outsourced Prior Art Searches has represented approximately twenty percent of the JPO's total annual budget, with the average cost per outsourced search being almost equivalent to the statutory substantive examination fee. When compared with the basic filing fee, the statutory examination fee itself is typically more than ten times higher, as illustrated in Figure 18 presenting the JPO's filing and examination fee schedule. Approximately 110,000 applications are outsourced each fiscal year, representing about half of all cases for which an examination request has been filed. This budgeting structure underscores the central role of outsourced search services in Japan's patent examination system, and highlights the significant financial commitment required to sustain both examination timeliness and high-quality search practices.

1 Application／出願料

(1) Patents／特許	
Patent application／特許出願	¥14,000
Application in foreign language／外国語書面出願	¥22,000
Entry into the national phase in Japan (under the PCT) 特許法第184条の5第1項の規定による手続	¥14,000

2 Request for Examination／審査請求料等

(1) Patents／特許	
(a) Request for examination／出願審査請求	¥138,000 + (¥4,000 per claim／¥4,000×請求項数)
(b) -where the international search report has been established by the JPO (under the PCT) (特許庁が国際調査報告を作成した国際特許出願)	¥83,000 + (¥2,400 per claim／¥2,400×請求項数)
(c) -where the international search report has been established by an International Searching Authority other than the JPO (under the PCT) (特許庁以外が国際調査報告を作成した国際特許出願)	¥124,000 + (¥3,600 per claim／¥3,600×請求項数)
(d) -where the search report has been established by a designated searching organization (特定登録調査機関が交付した調査報告書を提示した場合)	¥110,000 + (¥3,200 per claim／¥3,200×請求項数)

Figure 18: Schedule of fees for Patent Application (JPO, 2022, April 1)

[23] Information obtained during an interview with JPO officials on November 26, 2025.

4.1.3.14. Additional Statutory Obligations Applicable to RSOs

In addition to the core registration requirements set out in Articles 36 and 37, a wider set of statutory obligations applies to registered search organizations through Article 39 of the Act, which incorporates a number of provisions mutatis mutandis. These provisions define conditions for maintaining registration, operational responsibilities, reporting duties, confidentiality obligations, and the circumstances under which corrective measures or sanctions may be imposed. The key components can be summarized as follows:

Article 18 (Disqualification): Specifies grounds that disqualify an organization or its officers from eligibility, including prior violations of patent-related laws leading to criminal penalties, or past revocation of registration.

Article 19-2 (Registration Renewal): Requires renewal every three years. Failure to renew results in automatic lapse of registration.

Article 21 (Notification of Changes): Obliges organizations to notify the JPO in advance of changes to their name or business address.

Article 22 (Business Regulations): Requires each registered search organization to establish internal business regulations and obtain approval from the JPO. The JPO may order amendments if the regulations become inappropriate for ensuring fair and proper conduct of search operations.

In addition, the content of the business regulations that each registered search organization must establish under Article 22 is further detailed in Article 58 of the Enforcement Regulations. These provisions specify the minimum elements that must be included to ensure that search operations are carried out in a structured, transparent, and properly supervised manner. The required elements include the following: classification of search work handled by the organization; working hours and holidays applicable to search activities; methods and procedures for conducting searches; rules necessary to ensure the proper performance of search work; procedures for appointing and dismissing search implementers; requirements for the preservation of books, documents, and search-related materials; confidentiality obligations; and provisions governing the preparation and inspection of financial statements. The regulations also include a residual category for any additional matters necessary to ensure proper implementation of search operations (JPO, n.d.). For approval, organizations must submit an application together with a full draft of their business regulations to the JPO Commissioner. Any subsequent amendment to these regulations likewise requires prior approval. The application must also clearly state the items to be changed, the intended effective date, and the reasons for the revision. These requirements ensure that the JPO maintains oversight of both the operational structure and the internal governance systems of registered search organizations. (See Appendix D for the full text of Article 58.)

Article 23 (Suspension or Termination of Operations): Prohibits suspension or discontinuation of search services without prior permission from the JPO

Article 24 (Financial Statements and Inspection): Requires preparation and retention of annual financial statements and grants stakeholders the right to inspect or obtain copies

Article 25 (Appointment and Dismissal of Officers): Requires notification to the JPO when officers are appointed or dismissed

Article 26 (Confidentiality Obligations): Imposes strict confidentiality requirements, with officers and employees treated as public officials for purposes of penal sanctions

Article 27 (Reports and On-site Inspections): Authorizes the JPO to request reports or conduct on-site inspections to ensure compliance

Article 28 (Conformity Orders): Allows the JPO to order corrective action where an organization no longer satisfies the statutory requirements for registration

Article 29 (Improvement Orders): Enables the JPO to order improvements in business operations when necessary to ensure proper implementation of search work

Article 30 (Cancellation of Registration or Suspension): Sets out grounds for revocation or suspension, including statutory violations, disqualification, breach of business regulations, or fraudulent registration

Article 31 (Record-Keeping): Requires organizations to maintain specified business records in accordance with ministerial ordinance

Article 32 (Hearing Procedures): Provides for public hearings prior to the imposition of sanctions under Article 30

Article 34 (Public Announcement): Requires publication in the Official Gazette of registrations, changes, permissions, and cancellations affecting registered search organizations

Article 35 (Supplementary Provisions): Delegates additional operational matters to Cabinet Order

Together, these provisions form an extensive compliance framework governing the conduct and accountability of registered search organizations in Japan. These statutory requirements, together with the detailed application procedures and classification rules set out in the Enforcement Regulations, define the legal foundation upon which outsourcing operations are supervised and maintained. Further details of these provisions are provided in Appendix C (Act) and Appendix D (Enforcement Regulations).

4.1.4. Specified Registered Search Organizations (SRSOs)

Japan's patent system incorporates a unique mechanism that allows patent applicants to obtain high-quality Prior Art Search reports before submitting a request for substantive examination. This mechanism is implemented through Specified Registered Search Organizations (SRSOs), which are a legally defined subset of RSOs authorized under the Act on Special Provisions for Procedures related to Industrial Property Rights.

4.1.4.1. Overview and Current Practices

SRSOs differ from ordinary RSOs in that they are permitted to provide search reports directly to patent applicants, while using the same official JPO search system that is employed for examination. As a result, SRSO search reports maintain the same quality standards as those used internally by JPO examiners. A general overview of the SRSO system is illustrated in Figure 19.

Among the registered search organizations, a limited number are designated as SRSOs and authorized to issue applicant-commissioned search reports. Historically, ten RSOs have been registered with the JPO. Among these, three to four have served as SRSOs in any given period. Examples include IPCC, Technology Transfer Service Corporation, and Pasona Group.

These organizations conduct searches using the JPO's secure internal search system, ensuring alignment with the search methodologies used during examination.

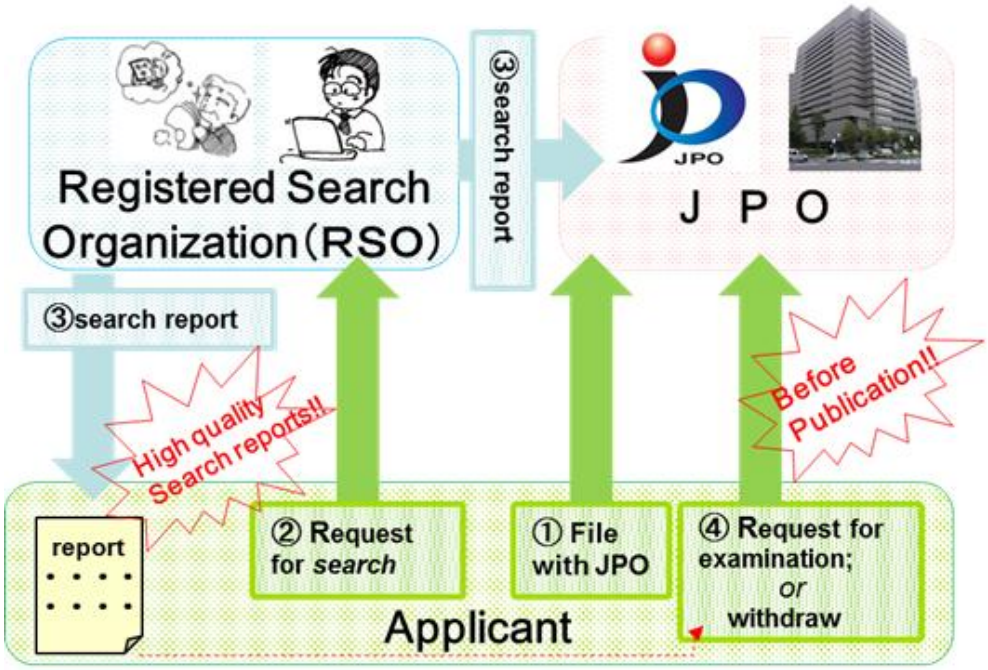


Figure 19: Specified Registered Search Organizations (SRSOs) System (JPO, 2017, January 19).

The SRSO system was introduced to encourage applicants to assess the patentability of their inventions at an early stage, and to reduce unnecessary examination workloads. After filing a patent application, but before submitting a request for substantive examination, applicants may commission an SRSO to conduct a Prior Art Search using the same JPO search system and search standards applied in outsourced searches performed under JPO contract. This arrangement enables applicants to obtain a high-quality search report that can guide strategic decisions, including whether to proceed with examination, amend claims, or withdraw the application before publication. Use of an SRSO report also allows applicants to request accelerated examination and provides eligibility for a 20 percent reduction in the statutory examination fee.

The SRSO system operates within a defined procedural window: the patent application must already have been filed with the JPO, and the applicant must not yet have filed a request for examination. This ensures that the search results can meaningfully inform claim drafting before substantive examination begins. The fees for SRSO searches are borne by the applicant and are separate from the JPO's outsourcing budget. Table 2 presents an illustrative example of the investigation fees applied by the IPCC, one of the SRSOs. In this example, a typical domestic search costs approximately 95,000 yen and covers invention understanding, prior art identification, and the preparation of the search report. When foreign-language literature such as English, Chinese, Korean, or German is required, additional fees of roughly 50,000 yen per language may apply—thereby reflecting the added technical complexity of multilingual prior art review.

SRSO searches form only one part of the broader range of services offered by RSOs. For example, the IPCC provides three kinds of services: private searches conducted before filing or for business analysis using commercial databases; SRSO searches conducted under statutory authorization using the JPO's internal search system; and private searches for purposes such as infringement risk assessment or competitor monitoring. Among these categories, only SRSO searches are performed pursuant to legal authority and produce reports that may be submitted to the JPO.

Although SRSO searches are operationally distinct from searches conducted under JPO outsourcing contracts, the two systems function in parallel. The JPO finances only the searches performed under its own outsourcing scheme, whereas SRSO services are paid for directly by applicants. Nevertheless, SRSO search reports are transmitted automatically to the JPO, and may be consulted by examiners during substantive examination in cases where the applicant files a request for a fee reduction—thereby integrating applicant-commissioned search results into the overall information base used for patent examination.

For RSO searches conducted under JPO contract, annual work allocation is determined through a public procurement process in which search organizations compete based on both price and technical evaluation scores. The technical scores incorporate examiner feedback from the prior fiscal year, and influence how much contract work each organization receives. By contrast, SRSO services operate outside this bidding framework; and follow fee structures determined directly between the organization and applicant.

Table 2: Investigation fee under the SRSO System at IPCC (IPCC 2025)

Investigation fee (excluding tax)

Domestic patent document search	95,000 yen + additional fee for the number of claims (2,500 yen x number of claims)
English patent document search	Starting at 50,500 yen + additional fee for the number of claims (2,500 yen x number of claims)
Chinese and Korean patent document research	Starting at 63,000 yen + additional claim number (2,500 yen x number of claims)
German patent document search	Starting at 44,000 yen + additional claim number (2,500 yen x number of claims)

4.1.4.2. Legal Framework Governing SRSOs

The establishment, operation, and oversight of SRSOs are governed by Section 3 of the Act on Special Provisions for Procedures related to Industrial Property Rights, together with the corresponding provisions in its Enforcement Regulations. A detailed reproduction of the statutory text is provided in Appendix C and D.

Statutory Framework under the Act on Special Provisions

- Authorization to Conduct Prior Art Search Services (Article 39-2)

Under Article 39-2, an RSO may receive specific registration from the Commissioner of the JPO that allows it to conduct Prior Art Searches at the request of patent applicants. These searches must relate to inventions within the same technical categories prescribed by Cabinet Order, and must result in a search report prepared in accordance with Ministry Ordinance. This provision forms the legal foundation for the SRSO system, enabling applicants to obtain high-quality search results before requesting substantive examination.

- Fee Reduction Mechanism (Article 39-3)

Article 39-3 establishes a financial incentive for applicants to utilize SRSO search reports. When a search report issued by an SRSO is submitted together with a request for examination, the examination fee may be reduced under Cabinet Order. This fee reduction mechanism is a central policy tool designed to promote early assessment of patentability, and to encourage applicants to refine their claims before examination begins.

- Registration Procedures (Article 39-4)

Article 39-4 provides that registration as an SRSO is conducted per technical category, based on application and review procedures specified in Ministry Ordinance. Only organizations meeting the requisite technical and operational standards may obtain SRSO status.

- Registration Criteria and Register Entries (Article 39-5)

Under Article 39-5, the Commissioner must grant SRSO registration to any applicant that meets the statutory criteria. Registered information is entered in the Designated Registered Investigation Organization Register, including registration date and number, name and address of the organization and its representative, technical classifications covered, and address of the office conducting SRSO activities. These requirements ensure transparency and public accountability for all designated organizations.

- Duty to Perform Searches (Article 39-6)

Article 39-6 imposes a legal obligation on SRSOs to conduct searches without delay unless justifiable reasons exist. Searches must be performed by qualified search service providers. This provision ensures reliability of service and timely delivery of search reports.

Regulatory Provisions under the Enforcement Regulations

The operational framework for SRSOs is further elaborated in the Enforcement Regulations, particularly Articles 60-2 to 60-4, which supplement the statutory provisions included in the Act. These regulations establish detailed requirements concerning the preparation of search reports, the application process for registration, and the classification of technological fields for which SRSOs may be authorized. The full text of the relevant provisions is reproduced in Appendix D.

Article 60-2 sets out the mandatory contents of an SRSO search report. Each report must include the report number, registration information of the issuing organization, applicable technical classification, date on which the search was conducted, and name of the searcher

responsible for the work. It must also specify the patent application number, scope of claims examined, search conditions applied, and resulting prior art identified, together with the date of issuance. These standardized requirements ensure that search reports maintain a consistent structure and can be relied upon by JPO examiners during substantive examination.

Article 60-3 governs the application process for obtaining SRSO registration. Organizations seeking designation must submit essential identification details, including their name, address, and the location of the office where the search work will be conducted. They must also specify the categories of search work they intend to undertake, and the date on which they plan to commence SRSO operations. Applications must be accompanied by a certificate of registered matters to verify the legal status of the organization. These requirements collectively ensure that only qualified and properly constituted entities are eligible to perform SRSO services.

Finally, Article 60-4 provides that the technological classifications applicable to SRSO registration are defined in Appendix 3 of the Enforcement Regulations. These classifications correspond to the technical fields used throughout the JPO's outsourcing system, including the 39 categories that structure RSO registration and search allocation. Aligning SRSO classifications with the broader JPO framework ensures consistency in the technical domains for which organizations may be authorized and supports coherent administration across all outsourcing-related mechanisms.

4.1.5. Patent Examination Quality Management

Japan places strong emphasis on maintaining a highly reliable and transparent patent examination system. Under the *Quality Policy on Patent Examination* and *Quality Management Manual for Patent Examination*, the JPO implements a comprehensive quality management framework designed to ensure world-class examination standards. This framework consists of three core components:

1) Quality Assurance
   Examination managers review all decisions and notices prepared by examiners before they are issued to applicants, ensuring both substantive and formal accuracy. Examiners also consult with supervisors and colleagues to share search techniques, and promote consistent judgment across examination groups.
2) Quality Verification
   A portion of office actions is randomly selected for audit by quality management officers who check compliance, clarity, and validity before official documents are issued. The JPO additionally gathers user feedback through interviews, case-based comments, and satisfaction surveys.
3) External Evaluation
   The Subcommittee on Examination Quality Management, comprising external experts, has provided independent assessments and recommendations since 2014. The JPO incorporates these findings into its continuous quality improvement efforts.

This multi-layered structure reflects Japan's longstanding commitment to maintaining high examination quality and ensuring confidence in its patent system (JPO STATUS REPORT 2025).

Figure 20 presents an overview of the quality management system implemented by the JPO. The system is overseen by the Commissioner and Deputy Commissioner, who are responsible for ensuring that quality management principles are properly maintained and carried out. For design-related examinations, the Director-General of the Patent and Design Examination Department also participates in this oversight role; while for trademark examinations, the Director-General of the Trademark and Customer Relations Department assumes responsibility in place of the Deputy Commissioner (Subcommittee on Examination Quality Management, Intellectual Property Committee, Industrial Structure Council, 2025).

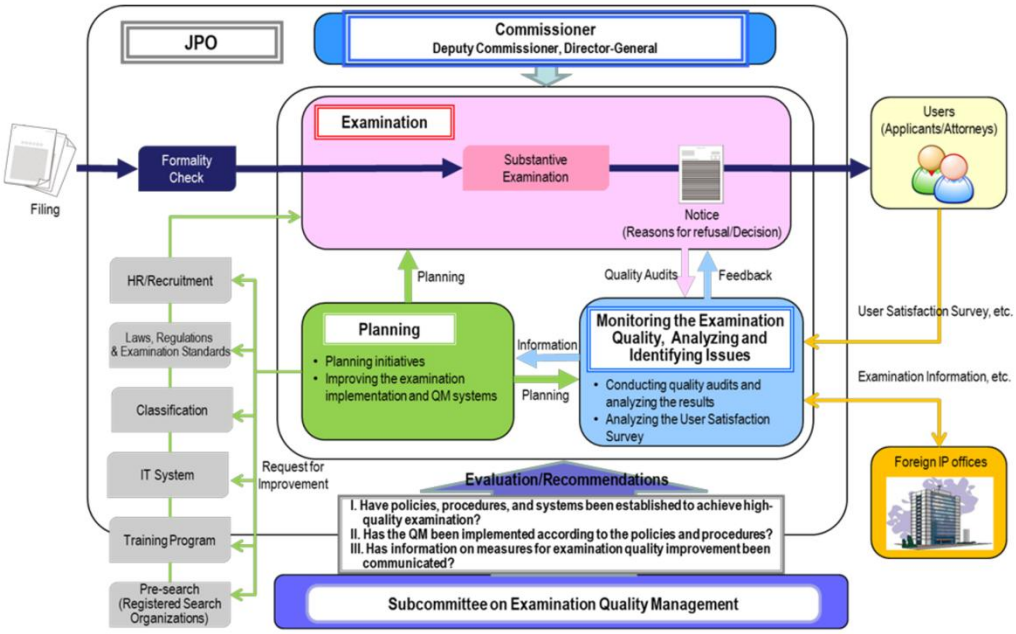


Figure 20: Overall picture of the quality management system at the JPO
(Subcommittee on Examination Quality Management, Intellectual Property Committee, Industrial Structure Council, 2025)

The JPO's quality management framework is supported by several key bodies that operate collaboratively and yet independently. These include the examination units responsible for conducting substantive examinations, the planning units responsible for developing quality initiatives and improving examination-related processes, and the monitoring units responsible for auditing examination quality and analyzing results. Each of these components contributes essential functions within the system. To promote continuous improvement, all units follow the Plan–Do–Check–Act (PDCA) cycle. Through this iterative process, examination standards are reviewed; feedback is incorporated; and corrective actions are implemented to enhance the accuracy, consistency, and reliability of patent examination outcomes. The structure ensures that quality assurance, quality verification, and external evaluation are systematically integrated into the JPO's overall examination workflow.

The Subcommittee on Examination Quality Management provides external oversight to complement the JPO's internal PDCA-based quality management cycle. As shown in Figure 21, the Examination Departments implement annual planning, examination, and review processes which are then assessed by the Subcommittee through formal reports. Based on this evaluation, the Subcommittee issues recommendations for improvement, which the JPO integrates into the next cycle. This structure ensures continuous enhancement of examination quality through both internal review and independent expert evaluation.

Japan's experience demonstrates that sustainable backlog reduction depends not only on strengthening search capacity, but also on establishing a comprehensive quality management system across the entire examination process. In the JPO, this system operates through coordinated functions: the examination units responsible for substantive examinations, the planning units responsible for developing quality initiatives and improving examination workflows, and the monitoring units responsible for auditing examination quality and analyzing outcomes. These mechanisms ensure that examination actions are accurate and consistent, and that they require minimal rework. By improving the quality of office actions at the outset, the JPO is able to reduce repeated actions, shorten pendency times, and prevent the re-accumulation of backlogs. This integration of enhanced search capacity with systematic quality controls has been central to Japan's long-term efficiency gains in patent examination.

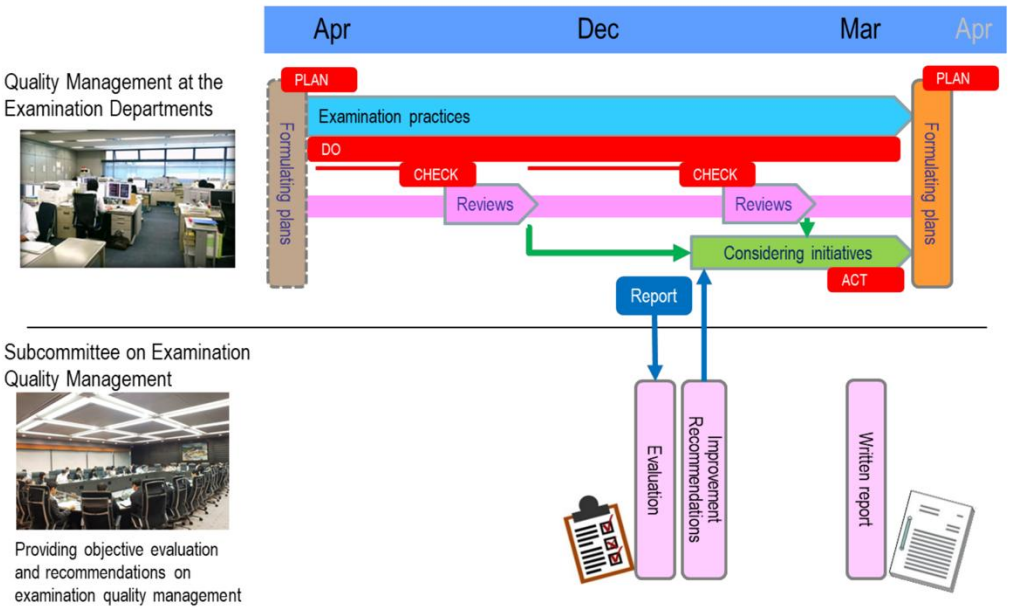


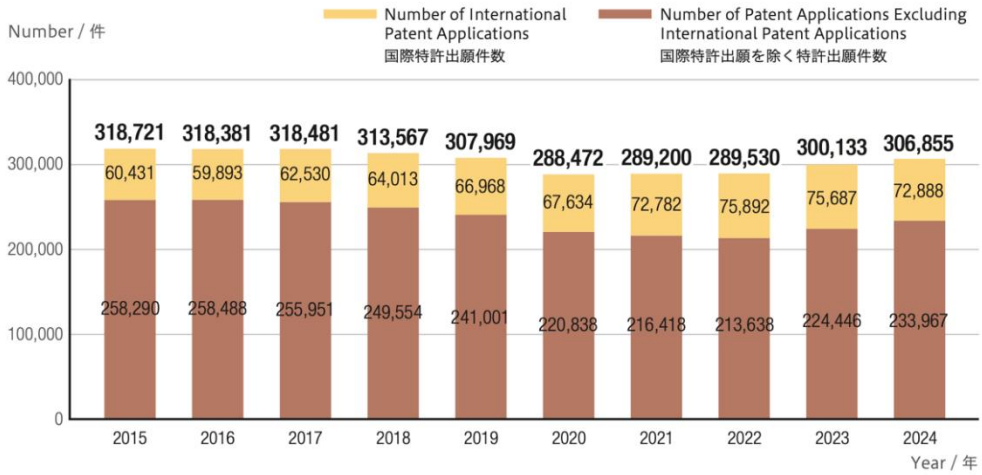
Figure 21: Relation between quality management within the JPO and the Subcommittee on Examination Quality Management
(Subcommittee on Examination Quality Management, Intellectual Property Committee, Industrial Structure Council, 2025)

4.2. Outcomes of Japan's Backlog-Reduction Efforts

4.2.1. Patent Examination Workload and Trends

Japan maintains one of the largest and most sophisticated patent examination systems in the world, handling hundreds of thousands of applications each year. The JPO plays a central role in ensuring both the efficiency and quality of examination, supported by well-established procedures and extensive use of external search organizations. To better understand the examination workload and operational trends, it is useful to examine the relationship between patent filings, requests for examination, registrations, and pending cases over time (JPO STATUS REPORT 2025).

Figure 22 presents the number of patent applications filed with the JPO between 2015 and 2024, distinguishing between international patent applications submitted under the Patent Cooperation Treaty (PCT) and domestic applications filed directly in Japan. The total number of patent applications has remained relatively stable over the past decade, ranging between approximately 280,000 and 320,000 per year. Among these, international applications account for around 60,000 to 75,000 annually, representing roughly 21 to 23 percent of total filings, while domestic applications make up the majority share. A gradual decline can be observed from 2015 to 2020, with the lowest point recorded in 2020 at around 288,000 applications. Since then, the number of filings has shown a modest recovery, reaching about 306,000 applications in 2024. According to the JPO's note, these figures also include applications for the registration of an extension for patent duration, while international applications represent those entering the national phase in Japan under the PCT framework (JPO STATUS REPORT 2025).



Note: ・The number of patent applications includes the number of applications for registration of extension of the duration of a right.
・An international patent application is an international application under the Patent Cooperation Treaty (PCT) that includes Japan as one of the designated countries and for which documents to enter the national phase were submitted to the JPO (patent applications only). The number of applications was counted according to the date when documents to enter the national phase were received.

Figure 22: Trends in patent filings in Japan by fiscal year (2015–2024)
(JPO STATUS REPORT 2025)

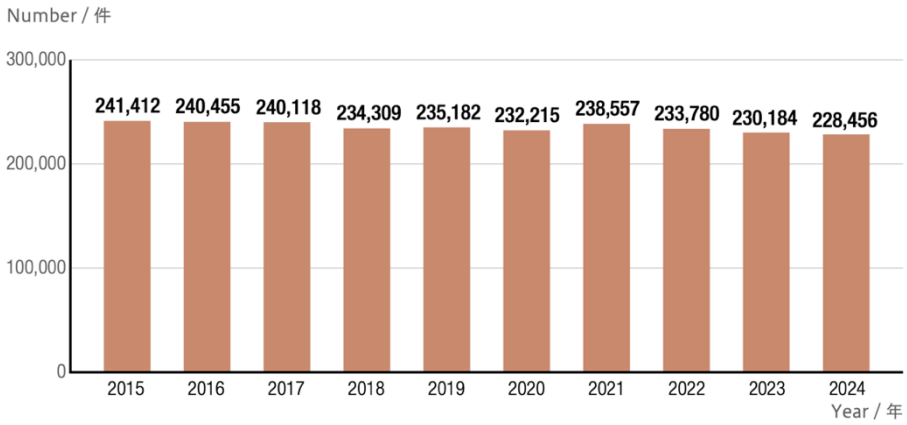


Figure 23: Number of Requests for Substantive Examination in Japan (2015–2024) (JPO STATUS REPORT 2025)

Figure 23 shows the number of requests for substantive examination filed with the JPO between 2015 and 2024. The data reveals a relatively stable trend, with annual requests ranging between approximately 228,000 and 241,000 throughout this period. Such stability suggests that applicants consistently seek substantive examination for a large portion of their patent filings each year. While the total number of requests shows minor year-to-year fluctuations, the overall volume remains high—thereby reflecting Japan's strong and sustained demand for patent protection. The consistency of examination requests also indicates the JPO's capacity to manage a large and steady workload, supported by its structured examination scheduling and the effective utilization of external search organizations to conduct Prior Art Searches (JPO STATUS REPORT 2025).

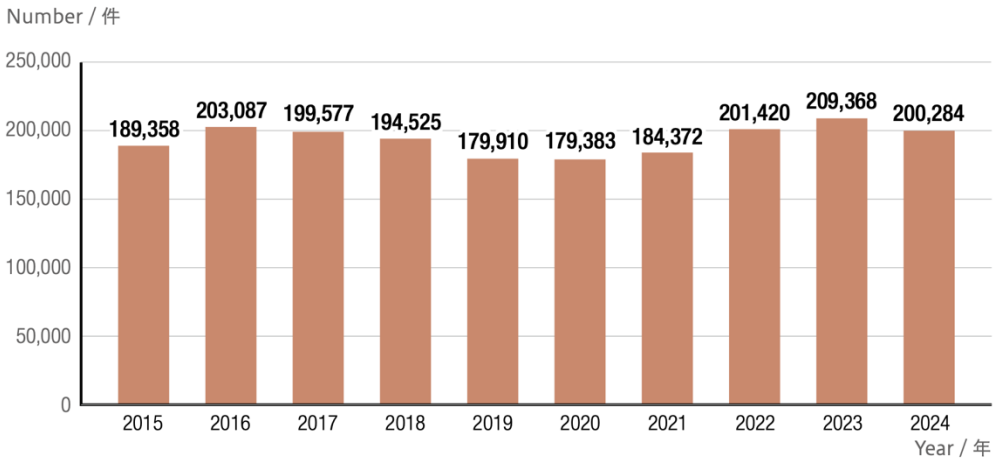


Figure 24: Number of Patent Registrations in Japan (2015–2024) (JPO STATUS REPORT 2025)

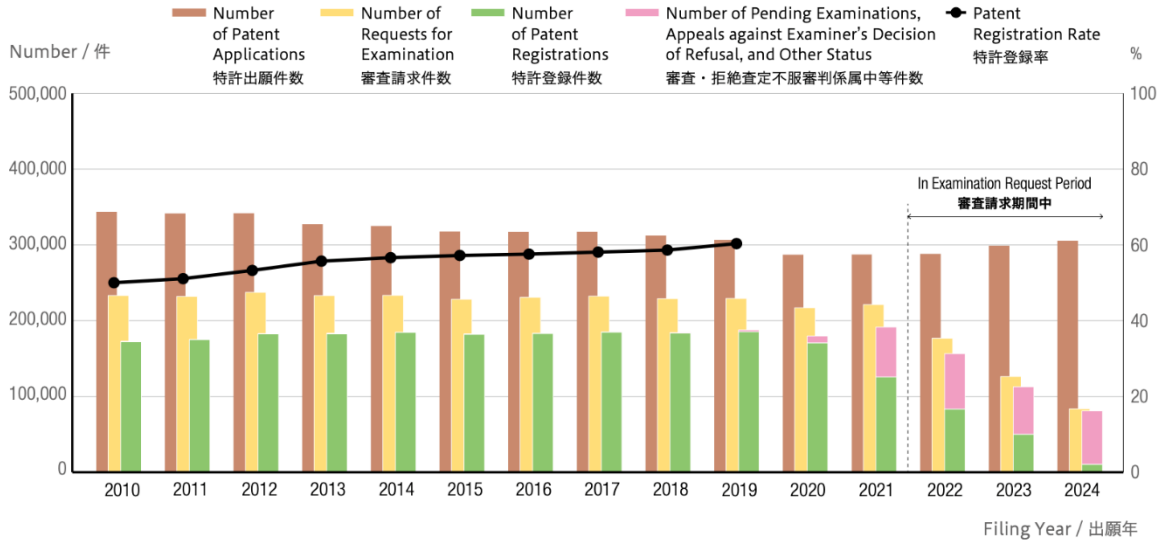
Figure 24 presents the number of patent registrations in Japan between fiscal years 2015 and 2024. The overall trend shows moderate fluctuations, ranging from approximately 179,000

to 209,000 patents per year. After a noticeable decline during 2019–2020, the number of granted patents rebounded to reach over 200,000 per year beginning in 2022. This upward trend indicates that the JPO has maintained strong examination and granting capacity, despite variations in annual filings. The increase in registrations in recent years also reflects the JPO's continued efforts to enhance operational efficiency through measures such as examination quality improvement, digitalization of procedures, and the effective use of external search organizations to support Prior Art Searches (JPO STATUS REPORT 2025).

Figure 25 shows the trends in patent applications, requests for examination, and patent registrations at the JPO from 2010 to 2024. The number of patent applications has remained consistently high, ranging from around 287,000 to 344,000 per year. Requests for substantive examination follow a similar trend, typically representing about 65–70 percent of total filings each year. The number of patent registrations also demonstrates relative stability, with an average of around 171,000-186,000 registrations per year during 2010–2020. However, a noticeable decline occurred in 2022 and onward, as applications filed in later years were still within the examination request period. The data for 2022–2024 remain provisional, since many of those applications are yet to be examined or registered. The patent registration rate, illustrated by the black line, has remained steady at approximately 50-60 percent over the observed period. This suggests a consistent quality and acceptance level among examined applications. Meanwhile, the number of pending examinations and appeal cases appears lower for the most recent filing years, mainly because many of those applications are still within the examination request period. Overall, the chart highlights how Japan has maintained a large but stable examination workload, supported by systematic management processes and the long-established use of outsourcing arrangements for Prior Art Searches (JPO STATUS REPORT 2025).

Figure 26 shows the composition of JPO staff by position at the end of each fiscal year from 2015 to 2024. The total number of personnel has remained around 2,800 throughout this period. Among these, patent examiners constitute the largest group; accounting for approximately 60 percent of total staff, followed by general staff, administrative judges, trademark examiners, and design examiners. A comparison of the number of patent examiners (around 1,660 to 1,700 in recent years) with the annual volume of patent applications and requests for substantive examination (about 300,000 and 230,000 respectively, as shown in this section), suggests an average incoming workload of roughly 135 applications per examiner per year. This indicates that the JPO maintains a relatively stable workforce capable of efficiently managing its large and consistent volume of patent applications and examination requests (JPO STATUS REPORT 2025).

Optimizing Patent Examination Management through Strategic Outsourcing of Prior Art Searches and Related Examination Processes as a means to Expedite the Patent Application Process and to Prepare for the Implementation of the Forthcoming Patent Act.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Number of Patent Applications 特許出願件数	344,397	342,312	342,589	328,138	325,688	318,345	317,922	318,030	313,028	307,232	287,747	288,402	288,855	299,630	306,267
Number of Requests for Examination 審査請求件数	233,780	232,471	237,906	233,708	233,963	228,917	231,357	232,911	229,747	229,998	217,585	221,714	177,199	126,708	84,003
Number of Patent Registrations 特許登録件数	173,310	175,937	183,572	183,856	185,461	183,167	184,033	185,819	184,533	186,400	171,600	126,607	84,141	50,698	10,910

Note: ・The number of patent registrations, etc. by filing year does not include the number of applications for registration of extension of the duration of a right.
・The number of patent registrations by filing year is a provisional figure as of March 3, 2025.
・The numbers of requests for examination by filing year in applications from 2022 to 2024 are provisional figures as of March 3, 2025.

Figure 25: Trends in patent applications, requests for substantive examination, and patent registrations at the Japan Patent Office (JPO) by filing year (2010-2024)
(JPO STATUS REPORT 2025)

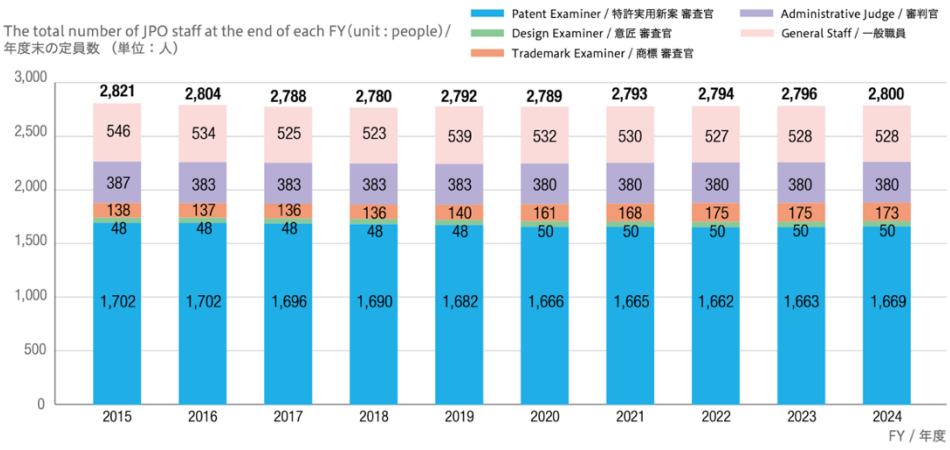


Figure 26: Number of JPO Staff Composition at the end of each fiscal year
(JPO STATUS REPORT 2025)

4.2.2. Outsourcing of Prior Art Searches in Japan

Japan has one of the most well-established and comprehensive outsourcing frameworks for Prior Art Searches in the world. Since the late 1980s, the JPO has systematically incorporated external search organizations into its patent examination system as a way to enhance search quality, expand technical coverage, and manage the growing volume of applications. As the primary organization entrusted with conducting outsourced searches, the IPCC has become an integral part of Japan's examination infrastructure, supporting examiners across all technical fields. Over time, outsourcing has evolved from a supplementary measure into a core operational component of the JPO's examination process.

Figure 27 presents the long-term cumulative trend in the number of outsourced Prior Art Searches conducted by the IPCC from 1987 to 2023. The cumulative data shows a steady and continuous increase over more than three decades. Beginning with only a few thousand accumulated searches in the late 1980s, the total grew rapidly throughout the 1990s and 2000s as the outsourcing framework became more established and the JPO expanded its reliance on external search organizations. The cumulative number of outsourced searches rose sharply between 2003 and 2013, increasing from just over one million to more than three million. This substantial rise reflects Japan's strategic integration of outsourced search capacity into the patent examination system, and the increasingly central role of the IPCC in supporting the JPO's search operations. This upward trajectory has continued in subsequent years, with cumulative searches surpassing four million in recent periods (IPCC, n.d.).

As this figure illustrates the overall long-term expansion of Japan's outsourcing system, further discussion on operational implications, efficiency outcomes, and quality-management practices will be provided in Chapter 4 as part of the research analysis.

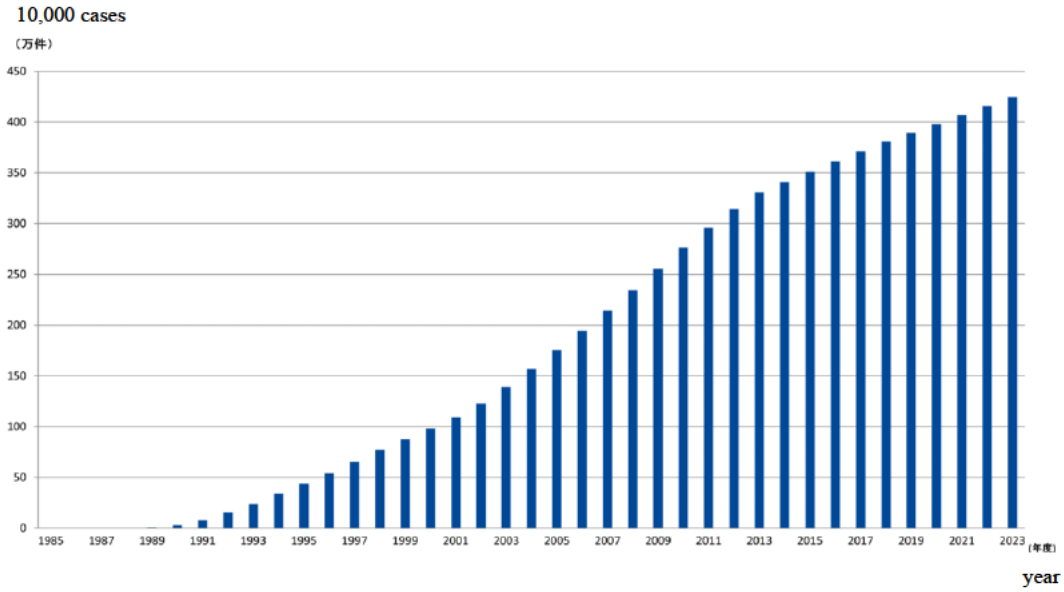
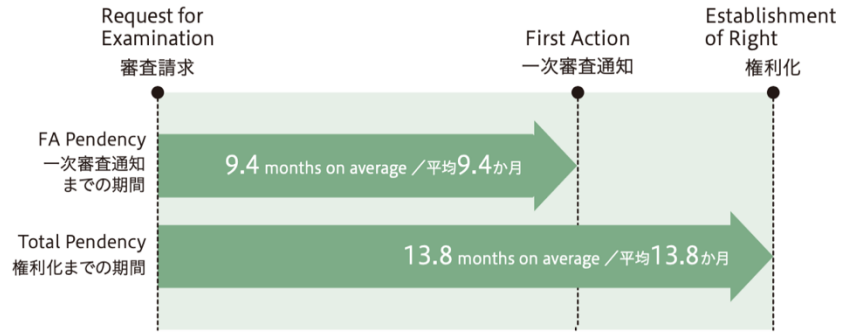


Figure 27: Number of Outsourced Prior Art Searches Conducted by the IPCC (1987–2023)[24]

[24] Source: IPCC's website, *BUSINESS AS A REGISTERED SEARCH ORGANIZATION*

4.2.3. First Action Pendency and Total Pendency for Patent Examinations in FY2023



Note: ・The first action pendency (FA pendency) is the period from the date of examination request until the JPO sends the first notice of examination results to the applicant, etc. (for the most part, either a notice of patent grant or a notice of reasons for refusal).
・The total pendency (also called the "standard pendency") is the period from the date of examination request to withdrawal or abandonment or until a final disposition (excluding cases where the JPO requests an applicant to respond to the second notice of reasons for refusal due to the amendments submitted by the applicant, and where the applicant performs procedures they are allowed to use, such as requests to the JPO for extension of the period of response and for an accelerated examination).

Figure 28: First Action Pendency and Total Pendency for Patent Examinations in FY2023 (JPO STATUS REPORT 2025)

Figure 28 illustrates Japan's patent examination pendency in FY2023. The average First Action (FA) pendency was 9.4 months, and the average total pendency from examination request to final disposition was 13.8 months. These outcomes reflect the cumulative effect of Japan's long-term examination reforms, including the large-scale use of outsourced Prior Art Searches.

By assigning Prior Art Search tasks to Registered Search Organizations (RSOs), the JPO receives complete and high-quality search reports before substantive examination begins. This reduces the time that examiners need to devote to the most labor-intensive stage of examination, which is identifying and assessing relevant prior art—thereby enabling examiners to issue the first action more quickly. Improvements in the FA stage lead directly to shorter total pendency, because the examination process can proceed without search-related delays.

This figure demonstrates the practical impact of Japan's outsourcing framework. Timely and reliable search reports support faster first-action issuance and help to reduce overall pendency, resulting in a more efficient and predictable patent examination system.

4.3. Considerations for outsourcing Prior Art Searches and related processes in Thailand

4.3.1. Scope of Work: Which range of tasks can external agencies perform beyond Prior Art Searches?

The determination of which tasks may appropriately be outsourced is shaped by the legal framework, as well as the practical considerations of technical expertise, workflow

efficiency, and examination integrity. Under the current Thai Patent Act[25], Section 25 authorizes the Director-General to request external agencies—whether domestic governmental units or foreign patent offices—to examine applications with respect to Sections 5, 6, 7, 8, and 9, as well as the detailed description under Section 17(3). In practice, this provision has enabled DIP to outsource Prior Art Searches to external organizations for the purpose of supporting substantive examination.

The ongoing draft amendment further expands this authority. Draft Section 28 allows for external organizations to assist in both the preliminary examination and substantive examination stages, without specifying a narrow or exclusive subset of tasks. Although this broader authorization grants substantial flexibility, the determination of an appropriate outsourcing scope cannot rest solely on what the law permits. It must also consider which tasks external agencies are technically equipped to perform, and which tasks must remain with examiners due to their statutory responsibilities or interpretative nature.

International experience, most notably Japan's long-established outsourcing system[26], highlights the importance of defining the scope of outsourced work in a way that reinforces examination efficiency while preserving examiner accountability. When Japan first explored outsourcing in the 1980s, extensive internal studies were conducted to identify tasks for which external agencies possessed comparative advantage. Prior Art Searching emerged as a suitable activity, because it requires strong technical and scientific literacy rather than legal interpretive authority. Searchers with backgrounds in science or engineering are often well-positioned to understand the technical features of an invention, and to retrieve relevant prior art efficiently. Meanwhile, evaluative tasks such as determining novelty, assessing inventive step, or drafting office actions remain the exclusive responsibility of patent examiners, reflecting the legal and administrative decision-making functions assigned to them.

This division of labor illustrates a key principle: Outsourcing is most effective when limited to technically intensive, time-consuming tasks that do not involve legal judgment. Prior Art Searching fits this model and has been the primary focus of Japan's outsourcing efforts for more than three decades. Early Japanese pilot projects demonstrated that high-quality external search work can meaningfully reduce examiner workload, support faster First Action issuance, and limit the growth of backlogs. Thailand faces similar structural challenges, especially concerning the extensive time required for Prior Art Searching within substantive examination. Strengthening the outsourced search system is therefore a logical first priority, as it directly targets the bottleneck most responsible for pendency.

Beyond Prior Art Searching, Japan also outsources patent classification work—which helps route applications accurately to examiners specializing in particular technical fields. At present, DIP continues to perform classification internally. If Thailand were to outsource classification, or support it through AI-assisted tools, examiner time could be freed for tasks requiring legal expertise, while resource allocation could be optimized across technical fields. This is particularly relevant in an environment where the number of specialized examiners is limited.

[25] Patent Act B.E. 2522 (1979), Section 25; Draft Patent Act (Revision), Section 28

[26] Analysis informed by interviews with officials from the JPO

In sum, while both current and forthcoming Thai law permits a broad range of tasks to be supported by external agencies, international evidence suggests that the most appropriate scope for outsourcing is one grounded in the technical capacities of external agencies and the administrative duties of examiners. Prior Art Searches represent the most impactful starting point for reducing pendency, easing examiner workload, and preventing the future accumulation of backlogs. Additional tasks such as patent classification may also be suitable candidates, either for outsourcing or for technological augmentation. Clearly defining this scope is essential for ensuring that outsourcing delivers measurable efficiency gains while preserving the legal integrity of the examination process.

4.3.2. Agency Qualifications: Which criteria should external agencies meet in order to be eligible for conducting patent search and examination tasks?

The qualifications imposed on external search organizations directly influence the credibility and reliability of outsourced Prior Art Searches. Japan's regulatory framework provides a detailed illustration of how statutory and administrative standards can be used to maintain high levels of technical competence among search agencies. Under the Japanese model, registered organizations must demonstrate sufficient staffing per technical field, meet minimum educational and professional requirements for searchers, ensure the completion of structured training programs, and maintain institutional independence from specific applicants or commercial interests. These requirements help maintain consistency in technical expertise and reduce the risk of biased or inadequate search practices.

Similar principles may serve as the foundation for establishing qualification standards in Thailand. A comprehensive framework would typically include a minimum team size for each technical field, required scientific or engineering education, demonstrated proficiency in patent searching techniques, and ongoing training obligations administered or certified by DIP or an affiliated institution. Independence criteria that prevent control by applicants or private firms are also important in order to ensure impartiality and public trust.

International experience suggests, however, that qualification standards should not be introduced from the outset at full stringency. During the early phase of Japan's outsourcing program, the system relied heavily on close collaboration between JPO and the external search organization, shared responsibility, and practical learning rather than on rigid formal requirements. Overly strict qualification criteria at the initial stage could discourage capable organizations from participating, or delay the formation of a functioning outsourcing system. Instead, the Japanese model shows that standards can gradually evolve as institutional capacity grows. Over a period of more than two decades, Japan expanded its evaluation mechanisms, strengthened its monitoring framework, and refined competency requirements; eventually supporting more than 100,000 outsourced searches per year.

A phased approach for Thailand would therefore be appropriate. Initial qualifications may focus on essential technical competencies and basic training requirements, with more stringent standards introduced gradually as experience accumulates. Early success is likely to depend on collaboration, structured feedback from examiners, and the embedding of experienced examination personnel within search organizations. As the system matures, Thailand may progressively incorporate more demanding performance indicators, formal audit mechanisms, and advanced training requirements.

Lastly, modern patent systems increasingly rely on digital tools and artificial intelligence to enhance search efficiency and consistency. Incorporating such technologies, together with a long-term strategy for continuous training, can support sustainable improvements in quality and productivity. By combining phased qualification standards with institutional learning and technological advancement, Thailand can develop a credible and scalable outsourcing framework that aligns with international best practices.

4.3.3. Quality Assurance: Which systems are effective in monitoring and maintaining the quality of outsourced work?

Quality assurance is a central element of any outsourcing framework, and is especially critical in the context of Prior Art Searches. International experience shows that outsourcing can improve pendency only when effective mechanisms exist to monitor, evaluate, and strengthen the quality of search outputs. Japan's system provides a clear example of how legal requirements, standardized reporting practices, structured training, and continuous examiner–searcher communication work together to ensure reliability and consistency.

A foundation of the Japanese model is the standardized structure of search reports produced by registered organizations. These reports constitute the primary basis upon which examiners proceed with substantive examination. The minimum content is prescribed by Article 60-2 of the Enforcement Regulations, which requires identification information for the organization and searcher, details of the application and claims searched, and a complete description of search conditions and results. This ensures transparency, traceability, and comparability across reports. In practice, both RSOs and SRSOs employ technical formats developed through JPO practice. These typically include sections describing the invention's features, search logic table with keywords and classifications, results of the screening, and a structured comparison between the claimed invention and identified prior art. These standardized elements help examiners understand the basis of the search, and verify the relevance and completeness of cited documents.

The evaluation of search reports is another core instrument of quality assurance. After reviewing outsourced search results, JPO examiners complete structured evaluation forms that assess the appropriateness of cited documents, clarity of explanations, and usefulness of the report for preparing the First Action. The resulting evaluations are used to guide improvements within search organizations and form a key input for the allocation of contracts in subsequent fiscal years. This system ensures that performance outcomes are directly linked to future opportunities, creating incentives for continuous quality enhancement.

In addition to formal evaluations, Japan's model emphasizes workforce competence. During the early phase of outsourcing, search organizations expanded their personnel and relied on the secondment of experienced examiners who provided intensive induction training and daily supervision. Although most new searchers held scientific or engineering degrees, many lacked familiarity with patent practices. As outsourcing matured, these early informal practices evolved into a structured national training system administered by INPIT. This program includes legal instruction, search methodology, written examinations, practical exercises, group discussions, and interview-based assessments. Completion is determined through a comprehensive evaluation, ensuring that searchers possess both the technical and procedural competencies required for producing high-quality reports. Article 38 reinforces this model by

mandating that all search work must be conducted by qualified personnel who satisfy the criteria set out by law.

Legal mechanisms further strengthen quality assurance. Article 26 imposes strict confidentiality requirements, treating officers and employees of registered organizations as public officials for purposes of penal sanctions. Article 27 authorizes the JPO to require reports, conduct on-site inspections, and examine records where necessary to ensure compliance. These provisions help maintain the integrity and security of examination-related information.

Communication between searchers and examiners is also integral to maintaining quality. Historically, reporting occurred in written form only; but was later supplemented by face-to-face sessions to clarify technical issues. During the pandemic, communication returned temporarily to written submissions before evolving into a hybrid model that incorporates online meetings. This flexibility allows for real-time discussion, while preserving the evidentiary function of written reports. Regardless of format, the objective remains to promote clarity, correctness, and coordinated understanding.

For Thailand, several lessons emerge. A quality assurance framework should incorporate standardized report formats with required elements, structured evaluation forms, feedback loops that support improvement, and periodic audits for verification. Competency requirements for search personnel should be paired with systematic training programs administered or certified by DIP. In the early phase of outsourcing, a flexible and collaborative approach may be more effective than strict control. As demonstrated by Japan's gradual development over more than two decades, quality mechanisms can be strengthened progressively as institutions gain experience and search capacity expands.

A well-designed quality assurance system will reduce the need for revisions, minimize repeated actions, and support faster and more consistent examination outcomes. This ensures that outsourcing contributes meaningfully to reducing pendency and sustaining long-term improvements in the patent examination process.

4.3.4. Incentive structures: Which forms of compensation best motivate external agencies to deliver efficient and high-quality services?

An effective incentive structure is essential for ensuring that external search organizations deliver services that are both efficient and of consistently high-quality. International experience, particularly from Japan, demonstrates that well-calibrated incentive mechanisms can support the sustainability of an outsourcing system and foster the development of specialized search expertise. Japan employs a dual incentive system comprising monetary compensation through search contracts, and non-monetary incentives tied to technical evaluations conducted by examiners. Under the public bidding framework, both cost and quality scores determine whether an organization secures contracts for the following fiscal year. Organizations that receive consistently high evaluations tend to receive a larger volume of work, while those with lower performance risk losing contract allocations. This approach creates a continuous incentive for quality improvement without relying on punitive sanctions.

Thailand can apply similar principles by designing compensation structures that balance with performance orientation. Unlike Japan, however, where outsourcing fees are funded from the JPO's institutional budget, Thailand currently operates under a legal framework wherein applicants bear the cost of Prior Art Searches conducted by external

agencies. The applicable service fees are specified in notifications issued by DIP, but the most recent fee schedule was established in 2009 and no longer reflects the actual cost structure or technological demands of modern search work. Revising the fee levels to align with current economic conditions and the complexity of contemporary patent searches will be necessary to ensure both financial viability and provider participation.

Although applicants pay the search fees, the DIP remains responsible for transmitting examination requests to the external agency and overseeing the quality of the outsourced work. This institutional role opens the possibility to adopt elements of Japan's performance-based contract allocation model, wherein quality evaluations influence the distribution of work in subsequent periods. Such a mechanism could serve as an incentive for external agencies to maintain high standards of search performance.

To complement quality-linked incentives, additional motivational factors may be needed to ensure that external agencies continue to participate actively in the system. These may include fee levels that adequately reflect the effort required, recognition of academic or professional contributions, opportunities to participate in DIP-led training or collaborative IP initiatives, and the reputational benefits associated with supporting national innovation policy objectives. A balanced combination of financial and non-financial incentives would help to cultivate a sustainable and competitive ecosystem of external search providers, while also advancing the broader goal of improving the efficiency and quality of patent examination in Thailand.

Beyond compensation, non-monetary incentives can strengthen the ecosystem of external search providers. In Japan, access to training programs administered by institutions such as INPIT enhances the skills and professional standing of searchers. Opportunities for long-term cooperation with the patent office and recognition of high-performing organizations contribute toward stability and capacity building. For Thailand, incorporating similar elements could help to establish a professionalized search community with strong technical expertise and shared expectations of quality.

For Thailand, the design of an incentive framework may need to evolve across different phases of implementation. In the early stage, a flexible and collaborative approach may be more effective than strict performance-based systems. As capacity grows and operational practices become more standardized, the introduction of structured evaluations and performance-linked contract mechanisms can be implemented gradually.

A transparent, multi-dimensional incentive system that combines appropriate financial compensation, opportunities for professional development, and recognition of high-quality work will help to cultivate a sustainable and high-performing ecosystem of external search organizations. Ultimately, such a framework supports the broader objectives of reducing pendency, maintaining examination quality, and ensuring efficient management of the patent system.

4.3.5. Integration with Examiners: How should patent examiners utilize and validate results obtained from external agencies?

Effective integration of outsourced search results into the substantive examination workflow is essential to ensure that outsourcing leads to real efficiency gains rather than procedural fragmentation. Japan's experience demonstrates that even when large volumes of

Prior Art Searches are conducted externally, patent examiners retain full responsibility to verify the accuracy, sufficiency, and relevance of the search outputs. This division of roles preserves the legal and technical integrity of examination, while allowing examiners to benefit from the specialized technical capacity of search organizations.

A central feature of Japan's system is the structured feedback process through which examiners review every outsourced search report using a standardized evaluation form. The form requires examiners to assess the clarity of the searcher's explanation, the relevance and sufficiency of cited documents, and the accuracy of the comparative analysis between the claims and the retrieved prior art. Examiners must also record whether the cited documents were actually used in preparing the First Action, thereby linking search quality directly to the substantive examination outcome. Additional sections allow examiners to identify strengths, note deficiencies, or provide narrative comments when predefined categories do not adequately capture their assessment. This systematic feedback mechanism ensures that examiners actively engage with the outsourced work, rather than treating it as a definitive or unquestioned assessment.

Timing mechanisms reinforce this integration. Examiners are expected to complete their review and submit feedback no later than the end of the month following receipt of the search report. Although many complete their feedback earlier, this internal deadline prevents excessive delays and ensures that examiners evaluate the report while its technical content remains fresh. The same general timeframe applies to the issuance of the First Action, which must be completed within two months after the search report is received. While the provision of feedback is mandatory, it is not treated as a KPI in and of itself. Instead, the primary examiner KPI remains timely issuance of the First Action. The feedback process is effectively embedded within this two-month period, meaning that although feedback is not a stand-alone performance target, it must be completed to enable the on-time First Action.

For Thailand, these insights highlight the importance of establishing clear guidelines on how examiners should review and incorporate outsourced search results. Such guidelines should specify review timelines, required checks for completeness and accuracy, and procedures for integrating search findings into the preparation of First Actions. Examiner training will be essential, particularly in interpreting and validating technical search outputs and determining when supplementary searching is required. Structured mechanisms for interaction between examiners and search organizations, including virtual consultations or reporting meetings, can further strengthen mutual understanding and support accuracy and consistency in search practices. Adopting these practices would help to ensure that outsourced searches complement rather than replace examiner judgment, contribute toward more predictable examination timelines, and reinforce overall examination quality.

4.3.6. Workload Management: How should applications with external search results be prioritized compared to those without?

Effective workload management is fundamental to sustaining timely patent examination and preventing the accumulation of backlogs. Japan provides a well-documented example of how the integration of outsourced search results into the examination queue can directly enhance pendency outcomes. The JPO employs a structured case-scoring system that assigns numerical values to different categories of applications based on the expected

examination effort. Applications that do not have Prior Art Searches, that make use of international work-sharing results, that are accompanied by RSO search reports, and that have SRSO search reports each carry different score weights. Examiners are given monthly performance targets based on total accumulated scores rather than the raw number of cases, ensuring that workloads reflect case complexity while encouraging a balanced distribution of examination tasks.

Japan's examination queue is organized according to the principle of processing the oldest examination requests first, while still allowing differentiated internal timelines depending on the examination pathway. In practice, roughly half of all applications for which examination has been requested are outsourced each year. However, only applications still within ten months of their examination request date are eligible for outsourcing, since an outsourced search typically requires about two months to complete. This scheduling structure enables examiners to issue the First Action within Japan's overall target of fourteen months from the time of the examination request. Applications supported by international work-sharing results follow an even shorter timeline, with the First Action targeted within approximately three months. For applications accompanied by RSO search reports, the examiner must issue the First Action by the end of the month following receipt of the report, while applications using SRSO search reports commissioned by applicants adhere to the standard fourteen-month time frame. These differentiated internal deadlines ensure that the availability of external search results translates into meaningful gains in timeliness across all categories of applications.

The Japanese model suggests several principles for integrating outsourced search work into examination-queue management in Thailand. First, applications accompanied by high-quality external search reports could be channeled into accelerated or simplified internal pathways. This would allow examiners to focus their analytical efforts on legal evaluation rather than initial prior art retrieval, thereby reducing pendency and easing resource constraints. Second, Thailand may consider adopting a case-scoring or tiered workload system that accounts for differences in examination complexity, ensuring a more equitable distribution of workloads across examiners. Third, the establishment of clear internal rules defining how applications are sorted, how timelines differ across categories, and how examiners must process outsourced search results will be essential to prevent inconsistencies and protect administrative fairness. If designed carefully, workload management that incorporates outsourced search outputs can significantly reduce pendency, prevent future backlogs, and improve predictability in examination workflows. Such a framework would enable Thailand to leverage external technical capacity, while ensuring that examination quality and fairness remain firmly within the responsibility of patent examiners.

Thailand's current situation differs significantly from Japan's mature outsourcing environment, however. With a substantial backlog and limited examiner resources, the initial phase of implementation may require a more adaptive and strategically phased approach. Japan's early experience offers valuable guidance in this regard. During the initial outsourcing rollout, the JPO deliberately assigned outsourced cases to examiners who were supportive of the initiative and demonstrated strong managerial capability. This selective approach helped to reduce internal resistance, and facilitated smoother coordination between examiners and the IPCC. Moreover, because performance indicators tailored to outsourcing had not yet been developed, early implementation relied largely on the management discretion and professional

responsibility of cooperative examiners, rather than rigid KPI structures. Japan also began by outsourcing relatively simple cases to allow search organizations to gradually build operational capacity and minimize the risk of early-stage errors. This incremental strategy proved essential for establishing mutual understanding, refining communication processes, and developing confidence in the system before expanding to more complex applications.

Drawing from these early-phase lessons, Thailand may benefit from adopting a similarly gradual and structured introduction of outsourced searches. Prioritizing simpler cases in the initial period, assigning them to examiners who are open to innovation and collaboration, and avoiding overly stringent performance metrics at the outset may help to ensure a smoother uptake. Such an approach would allow external agencies to develop technical proficiency and operational routines, while giving the DIP the opportunity to refine workflow integration and quality assurance mechanisms. In a context where significant backlogs already exist, a phased implementation strategy grounded in early successes can help build institutional trust and set the foundation for broader and more effective workload redistribution over time.

4.3.7. IT System Requirements: Which features must an electronic system possess to effectively support outsourced examination processes?

A robust and secure IT infrastructure is indispensable to support an outsourcing framework for Prior Art Searches. Japan's experience illustrates how technical, legal, and managerial safeguards must work together to ensure that external search organizations can operate effectively while protecting sensitive unpublished patent information. Registered search organizations in Japan access the same search systems used by JPO examiners, and system entry is strictly controlled through individually assigned IC-card authentication. This arrangement ensures consistent search methodologies, maintains uniform database coverage, and provides the JPO with real-time visibility into system usage. It also minimizes the risk of information leakage, and strengthens integration between external search work and the internal examination process.

Japan's legal framework further reinforces information security for external search agencies. Through the mutatis mutandis application of Article 26, officers and employees of registered search organizations are prohibited from disclosing or misusing confidential information obtained through the course of their duties. For purposes of penal statutes, such personnel are treated as individuals engaged in public service—thereby highlighting the seriousness of confidentiality obligations. Article 27 (also applied mutatis mutandis) authorizes the JPO to request reports, conduct on-site inspections, review records, and interview relevant personnel. These inspection powers are administrative rather than criminal in nature, but they provide a statutory mechanism to monitor compliance and prevent unauthorized use of unpublished application data.

Beyond statutory duties, contractual arrangements between the JPO and registered search organizations impose additional operational requirements. These contracts include detailed technical and procedural security rules, including system-level protections against unauthorized access, mandatory adherence to security protocols, and periodic audits conducted by JPO officials. On the technical side, registered search organizations must use JPO-approved search tools and databases, including the JPO's internal search system, commercial patent databases, and J-PlatPat. Access to subscription databases is centrally funded by the JPO,

ensuring that all organizations can conduct comprehensive searches without additional licensing burdens. Some search organizations voluntarily obtain ISO-based information security certifications, which further enhance their internal governance and align their practices with international standards.

For Thailand, these elements highlight the essential features that a future digital infrastructure must incorporate. At a minimum, the system should include secure access gateways for external search organizations, controlled authentication mechanisms, audit and logging functions, encrypted data-transmission channels, standardized electronic templates for search reports, and seamless integration with the DIP's internal examination management system. Information security protocols should be aligned with confidentiality obligations under Thai administrative law and relevant data-protection statutes. The system must also support user-friendly workflows to facilitate efficient searching while ensuring high reliability, traceability, and security. A well-designed IT infrastructure will serve as the backbone of Thailand's outsourcing framework, thereby enabling consistent search practices, safeguarding confidential information, and supporting scalable expansion as search volumes grow. Ultimately, the integration of legal safeguards, contractual controls, and technical security measures is essential to maintain public trust and ensure that outsourced Prior Art Searches contribute effectively to examination timeliness and quality.

4.3.8. Other Important Processes Involved in Outsourcing

Budget Planning and Fee Structure for Outsourced Prior Art Searches

Japan's long-established outsourcing framework demonstrates that sustainable Prior Art Search outsourcing requires stable and predictable budget allocation. The JPO fully finances outsourced searches from its institutional budget, meaning that applicants do not bear additional costs beyond the statutory filing and examination fees. The JPO estimates the volume of cases to be outsourced each year, and allocates funds accordingly. This includes anticipated expenditures for foreign-language searches in major jurisdictions such as English, Chinese, Korean, and German. Outsourced searches represent approximately twenty percent of the JPO's total annual budget, reflecting the centrality of outsourcing to Japan's examination capacity. The average cost per outsourced search is roughly seventy percent of the statutory examination fee. Over 110,000 applications per year—approximately half of all examination requests—receive outsourced searches. This budget structure underscores that reducing pendency and sustaining examination quality require substantial and recurring financial investment.

In adapting these insights to Thailand, several distinctive features of the Thai legal and financial framework must be considered. Unlike Japan, where outsourcing is funded by the patent office budget, Thailand currently operates under a system wherein the applicant bears the cost of external searches. Applicable service fees are defined by departmental notifications, yet the most recent fee schedule was issued in 2009 and does not reflect present economic conditions, labor costs, or the increasing technical complexity of modern patent searches. Updating the fee levels will therefore be necessary to ensure that external search organizations can provide high-quality services while maintaining operational viability.

Because applicants are required to pay search fees, the DIP must consider how to create incentives that would encourage applicants to participate voluntarily in any expanded outsourcing scheme. One logical option is to link participation with procedural benefits, such as accelerated examination or prioritized placement in the examination queue for applications supported by high-quality outsourced search reports. Such incentives would increase applicant uptake, while simultaneously enabling the DIP to reduce its internal workload burden.

Beyond applicant-funded models, Thailand may also evaluate whether a portion of the substantive examination fee could be allocated (either directly or indirectly) to support outsourcing activities. Given that examination pendency in Thailand remains lengthy, and that backlogs continue to accumulate, channeling fee revenue to subsidize outsourced searches—at least for specific categories of applications—could yield substantial system-wide benefits. Even partial public financial support could enhance early-stage implementation.

Over the long term, a hybrid funding structure may offer the most sustainable model. This could include a combination of applicant-paid fees, government-allocated budget contributions, and potential reinvestment of examination fee revenue into outsourcing workflows. Such a model would more closely resemble international best practices. Ultimately, effective budget planning will be essential to ensure that outsourcing becomes a meaningful tool for reducing backlogs, shortening pendency, and improving examination quality.

Applying an SRSO-Type Mechanism in Thailand to Reduce Future Backlogs

Japan's SRSO system offers a valuable model for strengthening the patent examination pipeline by encouraging applicants to assess patentability before entering the formal examination stage. In Japan, SRSOs provide high-quality Prior Art Search reports—prepared using the same search infrastructure employed by JPO examiners—which enable applicants to make informed decisions about whether to request examination, amend claims, or withdraw applications. This mechanism effectively filters out applications lacking patentability, thereby reducing the future examination burden on the JPO.

For Thailand, which continues to face a substantial backlog of unexamined applications and anticipates additional workload increases following procedural reforms, an SRSO-like system could serve as an important preventive tool. Such a mechanism would help limit the number of low-potential or unviable applications that enter the examination queue, and thus reduce long-term pendency growth.

Adapting this model to the Thai context would require several conceptual and institutional adjustments. First, the system could be designed to allow applicants to obtain a high-quality search report from an approved external search organization, after filing but before requesting substantive examination. The report would provide applicants with an early assessment of relevant prior art, enabling more strategic decisions regarding examination requests. Applicants could be incentivized to use the system through procedural benefits, such as faster processing for applications accompanied by approved search reports or through reduced examination fees (similar to Japan's twenty-percent reduction for SRSO users).

Second, adopting an SRSO-like framework would support the sustainability of outsourcing in Thailand by creating a steady demand for search services independent of DIP's budget constraints. Under Thailand's current legal structure, applicants already bear the cost of outsourced searches, which aligns well with the SRSO model.

Third, an SRSO mechanism can serve as a built-in quality filter. By encouraging applicants to review patentability early, fewer non-viable applications would proceed to examination—thereby lowering the volume of cases requiring full examiner review. In a system like Thailand's, where examiner capacity is limited, this preventive effect can contribute significantly toward managing future workloads. Moreover, search reports prepared under an authorized system could be shared directly with DIP examiners, which would enhance transparency and reduce duplication of effort—particularly for well-searched cases.

Finally, implementation should take into account Japan's early-phase lessons. When Japan introduced outsourcing and later the SRSO system, initial uptake and system stability depended on gradual development, close collaboration between examiners and search organizations, and the selection of manageable case types in the early stage. Thailand could adopt a phased approach by first allowing SRSO searches for specific technical fields or simpler cases, monitoring outcomes, and gradually expanding coverage as external capacity strengthens.

In summary, incorporating an SRSO-type mechanism into Thailand's patent system could serve dual objectives: improving applicant decision-making before examination, and reducing long-term examination burdens. With appropriate incentives and phased implementation, such a system could help Thailand to prevent backlog accumulation, improve pendency outcomes, and align procedural efficiency with international best practices.

Adapting a Quality Management Framework for Thailand's Patent Examination System

Japan's long-term success in reducing patent pendency and preventing the re-accumulation of backlogs demonstrates that effective outsourcing alone is insufficient. Rather, this must be complemented by a comprehensive quality management system that ensures accuracy, consistency, and efficiency at every stage of the examination process. The JPO's model incorporates multiple layers of quality assurance, quality verification, and external evaluation, all functioning within an institutionalized PDCA cycle. Examination units focus on substantive examination; planning units design quality initiatives and refine examination workflows; and monitoring units conduct systematic audits and evaluate outcomes. This coordinated structure minimizes the need for revisions, enhances the reliability of office actions, and improves the overall predictability of examination timelines.

For Thailand, developing an analogous quality management framework is essential if outsourcing of Prior Art Searches is to produce durable reductions in pendency. Thailand presently faces significant backlogs, and any gains from outsourcing will be limited unless paired with mechanisms that ensure high-quality examination outputs. Without structured quality controls, examiners may issue office actions that require multiple rounds of correction; thereby prolonging pendency and undermining the benefits of enhanced search capacity.

Adapting Japan's model to the Thai context would involve three primary elements. First, quality assurance mechanisms should be embedded within the examination workflow. This may include standardized templates for office actions, internal guidelines on examination reasoning, and peer or supervisory review procedures to ensure consistency across examiners. Second, an internal monitoring unit, analogous to Japan's quality audit functions, could perform periodic evaluations of examination results, including assessments of legal reasoning,

the appropriateness of cited prior art, and compliance with internal procedures. Such audits would generate data-driven insights for examiner training and process improvement. Third, a form of external evaluation, whether through an advisory committee or periodic independent review, could enhance transparency and support alignment with international examination standards.

Japan's experience also highlights the critical connection between quality control and the efficiency of outsourced searches. High-quality search outputs reduce examiner workload only when examiners are able to recognize, verify, and effectively incorporate those results. A quality management system that integrates both internal examination performance and outsourced search quality, supported by structured feedback loops, shared search standards, and clear expectations for examination depth, would enable Thailand to achieve similar operational synergies. The reduction of repeated office actions, one of the major drivers of pendency, depends heavily on such integration. Ultimately, a sustained backlog reduction requires a system in which high-quality search work, examiner competence, and institutional oversight operate cohesively. By embedding PDCA-based quality management into the examination process, Thailand can reduce the need for revisions, shorten pendency times, and prevent future backlogs even as application volumes rise. Integrating outsourcing with rigorous quality controls therefore represents a central strategy for achieving long-term efficiency and strengthening the overall effectiveness of the patent system.

5. Implications and IP office recommendations

5.1. Identification of success factors and challenges

Japan's experience in outsourcing Prior Art Searches provides a valuable reference point for jurisdictions such as Thailand that are seeking to enhance the efficiency, quality, and timeliness of their patent examination. The Japanese model illustrates how outsourcing can serve as a structural tool to expand search capacity, reduce pendency, and improve examination quality; but it also demonstrates that successful implementation requires careful institutional design. The following section synthesizes the key success factors and challenges observed from Japan's system, and evaluates their implications for Thailand as it prepares to introduce similar mechanisms under the forthcoming Patent Act.

5.1.1. Success Factors

1) Clear Functional Division Between Searchers and Examiners

One of the foundational success factors in Japan is the well-defined division of responsibilities between external search organizations and JPO examiners. Registered Search Organizations (RSOs) perform technical tasks requiring scientific and engineering expertise, whereas examiners retain full authority over legal evaluation, including novelty and inventive step determinations. This delineation preserves the integrity of the examination process while allowing external agencies to contribute meaningfully to workload reduction.

As Thailand faces a significant volume of pending applications, establishing such a division is essential to ensure that outsourcing reinforces rather than displaces the statutory responsibilities of patent examiners.

2) Strong Institutional Structures for Training and Competency Certification

Japan's system is underpinned by a rigorous training and credentialing framework managed by INPIT. Searchers undergo structured training, examinations, and supervised practice before performing search work. These mechanisms ensure technical competency and uniformity across organizations.

This approach demonstrates that the quality of search outputs depends not only on the individual capabilities of searchers, but also on standardized and institutionalized training requirements. The development of a competency-based accreditation system in Thailand, which is potentially linked to DIP training programs, would be a key component of building a reliable outsourcing ecosystem.

3) Quality Assurance Through Continuous Feedback and Performance Evaluation

Japan's feedback and evaluation system has been a major contributor to sustained search quality. Examiners complete standardized reports evaluating the clarity, relevance and sufficiency of outsourced search work. These evaluations influence subsequent contract allocations through the technical scoring component of the annual bidding process.

This integration of evaluation into procurement creates a performance-driven ecosystem, while ensuring continuous improvement. It also reduces the need for punitive measures by linking high performance to increased contract volume.

4) Integrated Examination Management and Structured Workload Allocation

The JPO uses a case-scoring system to reflect differences in examination complexity, and to allocate examiner workloads proportionately. Applications with outsourced search reports move through accelerated internal pathways, with examiners expected to issue the First Action by the end of the month following receipt of the search report. The accelerated handling of outsourced cases therefore contributes directly toward meeting Japan's unified pendency targets, which state that all applications must receive a First Action within fourteen months from the examination request date. These workload management mechanisms ensure that outsourced results translate into measurable impacts on pendency reduction.

This demonstrates that outsourcing alone does not reduce backlogs; but that this must be embedded within a coordinated examination management structure.

5) Secure and Standardized IT Infrastructure

A decisive success factor is Japan's robust IT system, which provides RSOs with secure access to the same search system used internally at the JPO. Stringent access controls, IC-card authentication, and detailed logging ensure data integrity and confidentiality. This system enables uniform search quality and systematic oversight.

For Thailand, where a significant portion of patent records is now available digitally, building comparable secure access infrastructure will be essential for scalability and trust in outsourced processes.

6) Availability of Pre-Examination Search Services (SRSO System)

Japan's SRSO system provides an incentive for applicants to screen patentability before requesting examination. By enabling applicants to obtain high-quality search reports using the JPO system, SRSOs help reduce unnecessary examination requests and prevent future backlog accumulation.

A similar mechanism in Thailand could support better filtering of applications, reduce examination workload, and encourage more strategic filing behavior.

7) Financial Commitment and Long-Term Investment

Outsourcing in Japan is backed by substantial and predictable budget allocations. Around 20 percent of the JPO's annual budget is dedicated to outsourced searches. This sustained investment forms a critical foundation for maintaining the volume and quality of outsourced work, supporting stable RSO operations, and ensuring that examiner capacity is sufficiently supplemented.

8) Gradual Adaptive Development During the Early Phase

Japan's early success did not rely on rigid control systems or sophisticated evaluation metrics. During the first phase, the JPO selected supportive examiners to pilot outsourced work, assigned simpler cases to RSOs, and focused on building trust and operational capability. Only later were formal KPIs, technical evaluations, and bidding mechanisms introduced.

This indicates that successful outsourcing requires flexibility, institutional learning, and iterative refinement rather than immediate reliance on strict regulation.

5.1.2. Challenges and Constraints

While Japan's model is widely regarded as successful, several challenges emerged during its development—many of which hold relevance for Thailand as the country prepares to implement a similar framework.

1) Ensuring Consistency and Avoiding Over-Reliance on External Searches

A key challenge is balancing efficiency gains with examiner responsibility. Over-reliance on external search results risks diminishing examiner analytical skills, while insufficient integration may reduce the value of outsourcing. Japan mitigated this by mandating examiner review and requiring feedback forms, but maintaining this balance remains an ongoing challenge.

2) High Cost of Outsourcing and Financial Sustainability

Japan's financial model relies on stable JPO budget funding. Since applicants in Thailand currently bear the cost of external searches, however, this creates potential barriers to adoption, reduces applicant willingness to participate, and constrains the system's capacity to scale. Additional government funding or hybrid support schemes may be required to achieve Japan-level impact.

3) Developing a Sufficiently Skilled Search Workforce

Japan's RSOs benefit from a steady supply of experienced engineers and scientists. In Thailand, the availability of technically trained personnel with patent-search expertise is more limited. Developing a competency pipeline, training curriculum, and accreditation framework will be essential; but this may take several years.

4) Administrative Readiness and Inter-Agency Coordination

Outsourcing requires strong coordination between the patent office, external agencies, IT units, and legal oversight bodies. Inconsistencies in work quality, reporting delays, or operational disputes may arise without clear governance structures or communication channels, and Thailand's current administrative fragmentation may pose early challenges.

5) Building Secure IT Infrastructure and Data Governance Systems

Providing external searchers with access to unpublished patent applications requires robust digital protections, auditability, and secure authentication protocols. Developing such systems will demand significant investment and organizational adaptation, while weak or fragmented IT structures could undermine trust and introduce confidentiality risks.

6) Managing Examiner Perceptions and Institutional Culture

In Japan's early phase, some examiners resisted outsourcing due to concerns over reliability or perceived loss of professional autonomy. The JPO addressed this matter by assigning initial outsourced cases to supportive examiners and gradually expanding the system. A similar challenge is likely in Thailand and requires careful change-management strategies.

7) Preventing Quality Decline and Maintaining Accountability

Ensuring quality consistency across multiple search organizations is inherently complex. Without strong evaluation systems, training standards, and audit processes, disparities in search accuracy may arise. Japan's mechanism linking feedback to contract

allocation mitigates this risk, but Thailand will need to develop its own context-appropriate equivalent.

8) Ensuring Long-Term Backlog Reduction Without Re-Accumulation

Even when outsourcing effectively increases search capacity, backlogs can re-emerge if examination quality is inconsistent or early actions require repeated corrections. Japan addressed this matter through a comprehensive quality management system, but Thailand will need to implement similar mechanisms in order to achieve durable results.

5.1.3. Implications for Thailand

The combined analysis of success factors and challenges reveals that the introduction of outsourcing into Thailand's patent examination system will require the following:

- A phased implementation strategy, beginning with simpler cases and supportive examiners
- Clear functional boundaries between searchers and examiners
- Investment in technical training and accreditation mechanisms
- A secure and integrated IT system enabling external access
- Performance-based evaluation systems adapted to Thailand's legal and administrative context
- Financial mechanisms that balance applicant participation with state support
- Quality management frameworks that prevent revisions and repeated actions
- Complementary reforms such as SRSO-like pre-examination searches to reduce unnecessary examination requests

These elements collectively form the institutional foundation for a sustainable outsourcing system that is capable of reducing backlog, improving examination quality, and supporting long-term innovation growth in Thailand.

5.2. Formulation of policy recommendations

A Three-Phase Implementation Strategy for Thailand

Drawing from Japan's mature outsourcing framework and the empirical findings of this study, the introduction of an outsourcing system for Prior Art Searches in Thailand should follow a phased, adaptive approach. Japan's experience demonstrates that attempting to implement a fully-developed outsourcing system from the outset is neither feasible nor desirable. Instead, success depends on progressive capability building, institutional learning, and incremental regulatory development. To ensure long-term sustainability and minimize operational risks, the following "Three-Phase Implementation Strategy" is recommended for Thailand as illustrated in Figure 29.

1) Phase 1: Capacity Building and Pilot Strengthening (Short Term: 1–2 years)

Focus: Strengthening existing mechanisms, developing human capital, and preparing institutional foundations

The first phase should prioritize strengthening the institutions and processes which are already in operation, particularly the external agencies that DIP currently engages for Prior Art

Searches. Thailand can capitalize on existing structures while avoiding premature system-wide commitments. This phase mirrors Japan's early outsourcing period, where success was driven by collaboration, supportive examiners, and manageable early workloads rather than fully-developed regulations.

1.1) Intensive Training and Skill Development

To enhance search quality, DIP should implement structured training programs for external searchers, modeled after INPIT's multi-stage curriculum:

- patent law fundamentals
- search methodologies and classification systems
- use of advanced search databases
- supervised search exercises
- mock reporting and evaluation

1.2) Adoption of Standardized Search Report Templates

Before increasing outsourcing volume, Thailand should introduce uniform search report templates for all external agencies, modeled on Japan's regulated structure (features of invention, search logic table, screening results, comparative analysis). Standardization ensures consistency, and helps examiners review reports efficiently.

1.3) Pilot-Phase Integration with Examiner Workflow

During this early phase:

- outsource simple, technically straightforward cases
- assign them to examiners who are supportive of outsourcing
- establish a pilot feedback loop mirroring Japan's early informal but consistent review system

This reduces internal resistance, and allows DIP to refine workflows before scaling operations.

1.4) Initial IT Preparations

In the early phase, the IT component should focus on enabling external agencies to perform Prior Art Searches using accessible patent and non-patent literature resources. External agencies should emphasize searches in international patent databases and commercial non-patent literature platforms, while using the Thai patent database only for published applications to avoid confidentiality concerns. At this stage, access to unpublished Thai patent documents should remain internal to DIP.

In parallel, DIP should initiate foundational studies on the design of a future restricted-access virtual search environment for confidential data, including feasibility assessments of secure remote-access models and multi-factor authentication mechanisms. To support pilot outsourcing activities, DIP should also establish secure electronic channels for transmitting search reports, and adopt standardized digital templates. This approach allows Thailand to immediately improve search capacity while developing the technological and institutional infrastructure needed for more advanced integration in later phases.

1.5) Early Communication Framework

A clear communication protocol between patent examiners and external agencies should be established (e.g., virtual discussion sessions following search completion mirroring Japan's early collaborative approach).

Outcome of Phase 1:

Thailand establishes a baseline of trained searchers, standardized search processes, predictable workflows, and the administrative confidence necessary for system expansion

2) Phase 2: Regulatory, Financial, and Structural Consolidation (Medium Term: 2–4 years)

Focus: Revising regulations, establishing qualification standards, and creating a financial model that supports scalability

Once technical and operational capacity has strengthened, Thailand should formalize outsourcing through regulatory instruments, financial reforms, and structural alignment. This corresponds to Japan's intermediate phase, where institutional structures matured and rules became more formal and binding.

2.1) Revision of DIP Notifications, MOUs, and Fee Structures

To ensure that Thailand's outsourcing framework functions effectively and remains aligned with current operational realities, the following regulatory and administrative updates are recommended:

2.1.1) Revise the DIP Notification on external search agencies by updating the list of organizations authorized to conduct Prior Art Searches, thereby ensuring that only agencies with demonstrated technical capacity, appropriate staffing, and adequate digital infrastructure remain eligible

2.1.2) Update existing Memoranda of Understanding (MOUs) with external agencies to specify clear operational responsibilities, including the following:

- required qualifications and competencies of search personnel
- standards for conducting Prior Art Searches
- mandatory structure and content of search reports
- procedures for revising search reports following examiner feedback
- expected timelines for completing search work

2.1.3) Establish explicit quality-management obligations within MOUs, including feedback response protocols and continuous-improvement requirements for search agencies

2.1.4) Revise the fee schedule for outsourced searches to reflect current economic conditions and the actual cost of performing high-quality Prior Art Searches

2.1.5) Introduce a fee structure that balances incentives and affordability, ensuring the following:

- compensation is sufficiently attractive to motivate participation by competent external agencies
- fees do not become so high that they discourage applicants from requesting external searches
- differentiated fees (e.g., by technical complexity or language requirements) may be considered where appropriate

2.2) Establishment of Formal Qualification and Accreditation Criteria

Inspired by Japan's Article 37 requirements, a possible policy direction is for Thailand to require external agencies to demonstrate the following:

- minimum staffing levels per technical field
- required education (STEM fields) and search competency
- completion of DIP-certified training
- operational independence from applicants
- adequate IT infrastructure and data-security capacity

Such criteria could be enacted through DIP regulations or ministerial notifications.

2.3) Strengthening the Feedback and Evaluation System

DIP may consider rolling out a standardized evaluation framework, including:

- examiner scoring of search quality
- assessment of relevance, completeness, clarity, and methodological soundness
- a database of evaluation scores for longitudinal tracking

While performance-based bidding comes later, these metrics will help calibrate system readiness.

2.4) Formalizing Confidentiality and Oversight Mechanisms

- establish obligations parallel to Japan's Articles 26 and 27
- confidentiality duties enforceable by administrative or criminal penalties
- authority for DIP to conduct on-site inspections
- compliance audits for security standards

2.5) Preparing Financial and Budgetary Instruments

Two possible models for Thailand:

- Model A—Applicant-Funded System (Current Legal Model): Provide incentives for applicants to participate, such as accelerated examination for cases with external search reports
- Model B—Hybrid State-Supported Model: Dedicate part of the examination fee revenue to fund outsourced searches and establish a revolving outsourcing fund for backlog reduction

2.6) Regulatory Foundation for Future Structures

During this phase, Thailand may draft provisions to support the following:

- future competitive bidding frameworks
- formal recognition categories (e.g., "Qualified Search Institutions")
- pre-examination search services similar to Japan's SRSO system

Outcome of Phase 2:

A clear regulatory framework, financially sustainable fee structure, and formal qualification standards that elevate outsourcing from a pilot program to an institutionalized system

3) Phase 3: Full-Scale Institutionalization and Quality-Driven Expansion (Long Term: 4–7 years)

Focus: Establishing a mature, competitive, and quality-assured outsourcing ecosystem similar to Japan's current model

In this final phase, Thailand transitions from a transitional outsourcing model to a fully mature system with competitive procurement, secure IT integration, SRSO-like mechanisms, and comprehensive quality management. This stage mirrors Japan's contemporary framework, which supports over 110,000 outsourced searches annually.

3.1) Implementing Competitive Bidding and Performance-Based Contract Allocation

Once external agencies reach sufficient maturity, DIP can implement the following:

- public bidding for outsourcing contracts
- technical scoring tied to examiner feedback
- transparent weighting between price and quality
- annual performance review cycles.

This ensures quality improvement through competition, not punitive oversight.

3.2) Establishment of a Thai Equivalent to SRSOs

Thailand could establish Applicant-Commissioned Search Organizations:

- high-quality searches using official or certified search systems
- early filtering of low-patentability applications
- reduced examination fee for applicants submitting search reports
- eligibility for accelerated examination

This mechanism would reduce unnecessary examination requests and prevent backlog accumulation over the long term.

3.3) Integration of Secure IT Infrastructure

Here, systems would be deployed with:

- controlled external access portals
- IC-card or multi-factor authentication
- encrypted data channels
- real-time audit logs
- standardized submission and workflow automation

This system will also support T-SRSO operations and competitive bidding.

3.4) Adoption of Comprehensive Quality Management Systems

An advanced quality system should incorporate:

- independent quality monitoring units
- PDCA cycles across search and examination workflows
- external evaluation committees analogous to JPO's Subcommittee on Examination Quality Management
- statistical performance indicators (e.g., citation adoption rate, rework incidence)

Such frameworks ensure that outsourcing reduces, not increases, examiner workload.

3.5) Reform of Examiner KPI and Workload Systems

Thailand may gradually adopt a case-scoring model, adjusting examiner KPIs to reflect the following:

- differing complexity levels
- the presence of external search reports
- expected time-to-First Action

This supports fair workload distribution and consistent pendency outcomes.

3.6) Securing Long-Term Funding

To sustain the system, Thailand should plan for:

- dedicated annual outsourcing budgets
- periodic revision of fee schedules
- long-term financial modeling based on projected application volumes

Outcome of Phase 3:

Thailand establishes a mature, quality-driven outsourcing ecosystem supported by transparent governance, competitive participation from qualified external agencies, and a fully integrated digital and quality-management infrastructure. The system becomes capable of sustaining timely patent examination, preventing backlog re-accumulation, and ensuring consistent, high-quality search outputs across all technical fields.

Conclusion of Recommendations

The path toward a mature outsourcing system requires institutional patience, phased development, and continuous calibration. Japan's experience demonstrates that durable success is achieved not by rapid implementation, but by building the system gradually, while allowing human capacity, regulatory frameworks, IT infrastructure, and organizational culture to evolve in parallel.

By following the recommended three-phase strategy, Thailand can develop an outsourcing ecosystem capable of:

- reducing backlog sustainably
- improving search and examination quality
- supporting innovation policy
- strengthening public trust in the patent system

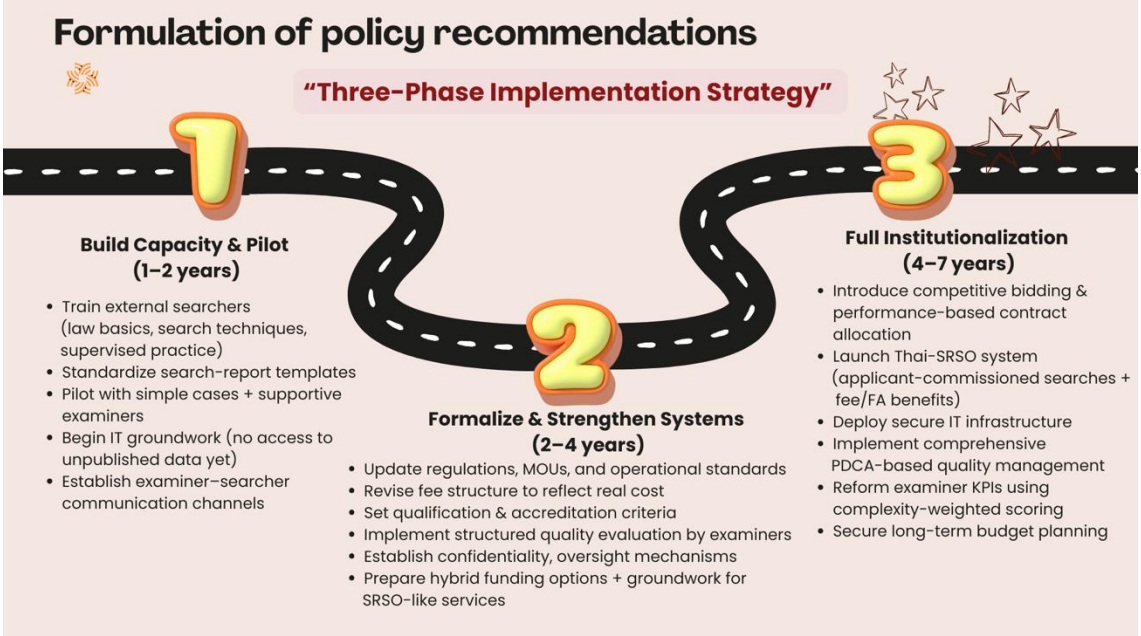


Figure 29: Three-Phase Implementation Strategy: Formulation of Policy Recommendation for Thailand[27]

[27] Author's compilation based on the findings of this study.

Acknowledgements

The author would like to express her deepest gratitude to the Japan Patent Office (JPO) and the Asia-Pacific Industrial Property Center (APIC) for organizing the Study-Cum-Research Fellowship Program, and for providing comprehensive academic support throughout the research period. The research environment, generous facilitation, and professional guidance offered under this program were fundamental to the successful completion of this study.

The author is also sincerely grateful to the Department of Intellectual Property (Thailand) (DIP for nominating and assigning her to participate in this fellowship. This opportunity enabled the author to undertake an in-depth and practice-oriented study aimed at exploring effective approaches to enhancing the efficiency, quality, and long-term sustainability of Thailand's patent registration and examination system.

The author wishes to express her profound appreciation to Dr. Yorimasa SUWA, who served as the Supervisor of this research. His continuous encouragement, thoughtful guidance, and broad institutional perspective provided invaluable support at every stage of the research process, and greatly contributed to shaping the study into its present form.

The author is also deeply indebted to her academic advisors, Professor Michiko TSUBAKI, who offered invaluable academic guidance in defining the research scope and direction, as well as profound insights into patent examination quality management systems and their application across examination processes. Ms. Mai MUKOHYAMA also provided extensive practical guidance and shared a wealth of knowledge, enabling the author to gain deep and meaningful insights into the operational and managerial aspects of outsourced Prior Art Search systems. The author would also like to extend sincere thanks to Ms. SAGANE Tami for her detailed explanations and continuous support throughout the research period. Without the guidance and cooperation of these individuals, this research would not have been possible.

Furthermore, the author gratefully acknowledges the valuable contributions of interviewees and information providers who generously shared their time and expertise. Special thanks are extended to Mr. Tetsuo TSUKANAKA, Executive Technical Officer and Patent Attorney at SUGIMURA & Partners, as well as officials from the Administrative Affairs Division, Patent and Design Examination Department, JPO, whose insights provided important perspectives on examination practice, institutional design, and policy implementation.

The author would also like to express sincere appreciation to Mr. Masanori FUSHIMOTO, Deputy Director General, APIC-JIPII, and Mr. Takashi MURAMATSU, Director, Asia-Pacific Training Group, APIC, for their valuable advice and management perspectives on patent examination systems and institutional operations, which offered rare and highly insightful viewpoints.

In addition, heartfelt thanks are extended to Mr. Takao OGIYA, Director General, APIC, Mr. Minoru NITTA, Director, International Cooperation Division, and Ms. Yuki OBINATA, Deputy Director, Developing Country Cooperation Section, as well as colleagues at the JPO, for their warm hospitality, kindness, and support throughout the research stay in Japan.

The author is especially grateful to Mr. Takayuki SHIBATA and Ms. Rie FUJITA for their unwavering support and assistance in both academic and daily matters during the

fellowship period. Their dedication and care made the research experience not only productive, but also deeply memorable.

The author would like to express her sincere appreciation to all APIC staff members, whose kindness, daily encouragement, and welcoming atmosphere made her first long-term stay in Japan both comfortable and enriching. Special thanks are extended to Ms. Mineko MIURA for generously sharing her knowledge and experiences related to Japanese culture and traditions, which added a meaningful personal dimension to this research journey.

Finally, the author would like to express her heartfelt gratitude to her family, especially her mother and her beloved elder sister, for their unwavering love, understanding, and encouragement throughout the period of study and research abroad. The author is also deeply thankful to her close friends, whose constant support, kindness, and words of encouragement provided strength and reassurance during challenging moments away from home. Their presence, even across distance, was an essential source of motivation.

Above all, the author would like to acknowledge herself, for her perseverance, dedication, and determination in carrying this research through to completion. The commitment to learning, continuous effort, and resilience throughout this journey made the successful completion of this study possible.

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APPENDICES

APPENDIX A: Minutes of Interview with Mr. Tetsuo TSUKANAKA

Date: October 21, 2025

Time: 3:00 – 5:00 PM

Venue: SUGIMURA & Partners, Common Gate West Tower Kasumigaseki 36th Floor

Interviewee: Mr. Tetsuo TSUKANAKA, Executive Technical Officer, Patent Attorney

Mr. Tetsuo TSUKANAKA served at the Japan Patent Office (JPO) from 1977 to 2010, holding several key leadership positions, including:

- Director of the Medical Division
- Director of the Examination Standards Office
- Deputy Director-General of the Chemical Examination Department
- Leader of the review of the JPO Examination Standards regarding genetic, protein-structure, and pharmaceutical inventions

Interviewer: Ms. Rungrawee IMPIEW, Patent Examiner, Department of Intellectual Property, Ministry of Commerce, Thailand

Purpose of Interview: The purpose of this interview was to gain insights into how the JPO ensured the quality, reliability, and coordination of Prior Art Searches during the early phase of outsourcing, prior to the enactment of the Act on Special Provisions for Procedures related to Industrial Property Rights. At that time, the outsourcing system was still in a developmental or pilot stage, and understanding the mechanisms through which the JPO maintained effectiveness and accountability during this formative period can offer valuable lessons for Thailand. The information obtained from this discussion is expected to contribute to the development of a sustainable and efficient outsourcing framework for Prior Art Searches under the Thai patent examination system.

List of Interview Questions:

1. During the initial phase of outsourcing the Prior Art Searches pilot project, before the enforcement of the Act on Special Provisions for Procedures related to Industrial Property Rights, how did the JPO ensure the quality and reliability of search results conducted by external agencies in practice?
   a. How were the qualifications or eligibility criteria for external search organizations initially determined at that time?
   b. What kind of training or orientation programs were provided to the searchers before they began conducting Prior Art Searches, and who was responsible for those trainings?
   c. Was there any system for periodic re-training, skill evaluation, or follow-up sessions to ensure continuous quality improvement among searchers?
   d. How did the JPO monitor or evaluate the performance of the external search organizations on an ongoing basis? In case a search organization failed to meet the expected quality standards, were there any measures such as revocation or suspension of authorization?

e. Concerning the cost and budgeting aspect, does the JPO fully cover the search fees paid to the registered search organizations from its own budget, meaning that applicants do not pay any additional fee for those searches?

Summary of Responses (a–e)

Mr. Tsukanaka emphasized that his comments reflected his personal experience.

He explained that the JPO began exploring outsourcing in response to severe examination backlogs during the 1980s. The Industrial Property Cooperation Center (IPCC), a small public-interest corporation founded in 1985, was selected as the sole body capable of conducting searches.

Between 1986 and 1988, the JPO conducted a three-year trial to assess the feasibility of outsourcing. As a result, it concluded that the search function could be outsourced. Full implementation began in July 1989, targeting about 10,000 applications annually. The JPO secured sufficient budget to outsource searches for 10,000 applications to the IPCC within fiscal 1989.

At that time, the IPCC expanded its operations significantly. Around 30 new searchers were recruited, in addition to approximately 30 members who had already been engaged before full implementation. Several JPO staff members were also seconded to the IPCC to support and supervise the work. Mr. Tsukanaka was seconded from the JPO to assist in managing search operations. Another senior JPO official was in charge of human resource recruitment, and four senior patent examiners were seconded from the JPO as leaders and instructors responsible for guiding search practices and maintaining quality. In addition, and unlike current practice, dedicated search terminals and search PCs were used for conducting searches during that period.

Concerning the workplace atmosphere at the outset, many staff members were skeptical because most newly recruited searchers had little or no prior experience in patent searching. There was a prevailing doubt that completing 10,000 searches in a year would be achievable. Despite this, both the JPO and the IPCC shared a strong determination to make outsourcing work. Close collaboration and day-to-day coordination between the two organizations were used to mitigate inexperience and to set the foundation for a mature outsourcing system.

a. Qualification of search organizations:

Since IPCC was the only viable organization at the time, there were no comparative eligibility criteria. It served as the exclusive external body for JPO’s searches.

b. Training and responsibility:

Most searchers had technical backgrounds as graduates from university faculties in science and technology, but they had little prior understanding of the patent system. An induction program was therefore established to explain the patent system and expected duties of a searcher. The training was led by Mr. Tsukanaka, together with four other JPO patent examiners who were seconded to the IPCC. It consisted of intensive instruction over one to two months, followed by ongoing on-the-job guidance. Additional support from the JPO was also provided at the outset, and the arrangement was implemented in a collaborative manner rather than as a simple handover to an external organization

c. Re-training and skill evaluation:

There was no formal system during the initial phase for periodic re-training, standardized skill evaluation, or scheduled follow-up sessions. Capacity-building relied on close day-to-day supervision by the four JPO patent examiners seconded to the IPCC, as well as practical feedback generated from the review of completed search reports. According to Mr. Tsukanaka, the present framework at JPO now includes well-established retraining and evaluation mechanisms, although these were not in place at the outset.

d. Monitoring and evaluation:

In the initial phase, there was no formal institutional system for ongoing monitoring or organizational evaluation of the external search provider. The arrangement operated in a collaborative mode, with JPO patent examiners and the IPCC working toward a shared outcome and addressing problems jointly. At the same time, patent examiners reviewed each search report submitted by the IPCC, and completed a simple feedback form that included a numerical score and brief comments (i.e., noting that a report was very useful or that it contained many mistakes). These scores and comments were returned to the IPCC, and read by individual searchers and group leaders who had been seconded from the JPO. The leaders provided detailed explanations to clarify deficiencies and guide corrective action, with such case feedback functioning as a learning device to drive quality improvement rather than as a formal sanctioning mechanism. According to Mr. Tsukanaka, the current framework is different. Today the JPO applies stricter monitoring and evaluation across multiple registered organizations, and if outcomes are not satisfactory the JPO may decide not to allocate further work to that organization.

e. Cost and budget:

The JPO financed outsourcing costs from its own budget, and applicants did not pay any additional fee beyond those for ordinary filing and examinations. A portion of those statutory fees was allocated by the JPO to pay the outsourced searches.

Conflict of interest management:

From the outset, the IPCC applied measures to avoid conflicts of interest between searchers and applicants. A searcher was not assigned to cases filed by his or her former employer, or by parties with whom the searcher had a relevant interest. Case assignment was managed with care to prevent such situations.

Mr. Tsukanaka added an informal observation from discussions with searchers. When a searcher happened to review an application linked to a former employer, there was a tendency to apply stricter scrutiny in locating prior documents. This reflected the professional culture of many searchers, who had previously worked as engineers in private R&D departments. In those settings, seniors often felt a duty to review work produced by their juniors rigorously.

2. How were key performance indicators (KPIs) for patent examiners designed to ensure that outsourcing actually reduced their workload while maintaining examination quality?
   a. What types of KPIs were commonly applied to examiners at that time (e.g., the number of cases processed, timeliness, or quality metrics)?
   b. When outsourcing was introduced, how were examiner KPIs adjusted to reflect the reduced search workload?
   c. Were there any KPIs that specifically measured how effectively examiners utilized the outsourced search results?

d. How did the JPO balance between quantitative KPIs (such as output numbers) and qualitative KPIs (such as accuracy or consistency of examination)?
e. From a policy perspective, which mechanisms were in place to ensure that outsourcing truly led to workload reduction rather than creating additional administrative burdens for examiners?

Summary of Responses (a–e)

Mr. Tsukanaka clarified at the outset that he was seconded from the JPO to the IPCC during the relevant period, and therefore did not serve as a patent examiner. Accordingly, his responses were based on personal observations rather than direct experience in examiner performance evaluation. He explained that at the early stage of outsourcing, patent examiners' attitudes toward the new system varied considerably. Some patent examiners strongly supported the initiative because they recognized its potential to alleviate workload, while others were skeptical about relying on external searches. In practice, the JPO sought to assign the initial outsourced cases to patent examiners who were supportive of outsourcing, and who demonstrated strong managerial capability. This selection helped to minimize internal resistance, and ensure smoother coordination between the JPO and IPCC during the pilot phase.

Because of this selective assignment, there were no major difficulties concerning patent examiner performance evaluation at that time. Formal key performance indicators specific to outsourcing had not yet been introduced. The early phase relied more on management discretion, and on the professional responsibility of cooperative patent examiners. To further ensure success in the initial implementation, the JPO deliberately outsourced simpler cases that were easier to search and less complex in content, which allowed the IPCC to build operational experience. In later years, as outsourcing expanded to cover most types of applications, patent examiners with differing attitudes toward outsourcing inevitably became involved. As outsourcing later scaled up, day-to-day operations became more demanding for the JPO. Managing search orders, scheduling, and the intake and distribution for a large volume of reports required continuous coordination and tighter operational controls. Nevertheless, both the JPO and the IPCC shared a strong commitment during the initial phase to making the search outsourcing program successful, which helped offset the absence of formal KPI mechanisms.

3. How were compensation systems designed to motivate external search agencies to deliver efficient and high-quality search results?
   a. Was the compensation mainly based on the volume of searches, complexity of cases, or fixed contractual arrangements?
   b. Were there any penalty or incentive mechanisms tied to the quality or timeliness of the outsourced work?
   c. How did the JPO balance cost-efficiency with maintaining high quality in the outsourced searches?
   d. Did non-monetary incentives such as formal recognition, preferential access to long-term contracts, or training support play any role in motivating these agencies?
   e. Were there any best practices or lessons learned during that time in terms of designing effective incentive structures for external search organizations?

Summary of Responses (a–e)

Mr. Tsukanaka explained that during the initial stage of outsourcing, the IPCC paid searchers on a uniform salary basis. Compensation did not vary by the number of searches or case complexity. Most early searchers were over 50 years old and had left large private companies, often with strong technical backgrounds from research and development roles. The IPCC offered them an opportunity to remain engaged in work related to technology.

He noted that many searchers viewed their new roles with pride. After years of contributing to private corporate profit, they regarded service at a government-related body as a contribution to the national interest. This sense of public purpose, together with professional dignity, was a significant source of motivation beyond financial incentives.

Organizational leadership also invested in workplace culture. The Director General prioritized creating a supportive environment for employees who had joined from diverse corporate backgrounds, and did not previously know one another. Community-building was encouraged through a monthly all-hands morning meeting, and a variety of after-work club activities such as painting, music, and traditional singing. These initiatives strengthened morale and cohesion.

As search volume grew, the number of personnel expanded as well—eventually reaching approximately 100 to 200 members during Mr. Tsukanaka's tenure. Even without performance-based pay or explicit incentive mechanisms, intrinsic motivation together with an intentional organizational culture helped to sustain productivity in the early outsourcing phase.

4. In practice, how did examiners review and verify the search results provided by external agencies before proceeding with substantive examination?
   a. Was there a standardized evaluation form or quality metric used for reviewing the outsourced search results, or was this handled on a case-by-case basis depending on each examiner's judgment?
   b. Regarding the feedback process, did examiners usually provide feedback immediately after receiving and reviewing the search results, or only when the corresponding application reached its turn for substantive examination?
   c. From the examiners' perspective, did this feedback process increase their workload, or was it designed to be integrated efficiently into their normal examination schedule?
   d. How were patent applications that included external search results prioritized compared to those without such results, in terms of examination scheduling or workload management?
   e. How was consistency maintained across different technical fields or divisions when multiple external search organizations were involved in providing search results?

Summary of Responses (a–e)

Mr. Tsukanaka explained that during the early phase of outsourcing, patent examiners at the JPO reviewed search results submitted by the IPCC using an official feedback form that included a numerical score and brief comments. Because many IPCC leaders had been seconded from the JPO as experienced patent examiners, they could readily interpret the scores and provide targeted guidance to individual searchers.

Regarding timing, examiners typically returned feedback immediately after receiving the search report, since outsourced searches were requested only for applications that were

about to enter substantive examination. This practice ensured prompt use of the results, and integrated the feedback step into the normal examination workflow.

At that time, the JPO faced significant backlogs. It often took two to three years after the request for substantive examination before a case was actually examined. Once such "sleeping" applications were assigned for outsourcing, the IPCC was required to conduct the search without delay and return the report promptly. The examiner then proceeded with substantive examination, and completed the evaluation form at the same time.

He contrasted this with the current system, wherein examination has been greatly accelerated. Applications now move quickly from filing to examination, and searches are outsourced soon after the examination request. This creates a continuous, high-speed operational cycle, with search requests and results exchanged daily. While this efficiency is, in his words, "a beautiful, unstoppable circle," it also requires substantially more complex day-to-day management than in the early years.

Supplementary Discussion and Advice

During the discussion, Mr. Tsukanaka explained that in the early stage of outsourcing, the patent examiner in charge of each application was responsible for selecting which cases to send to the external search organization. He suggested that this process may now be automated, though confirmation from the JPO would be required. Regarding workload, each searcher handled about 300 applications per year, which was slightly more than one case per working day. In fiscal year 1989, a team of thirty searchers worked for approximately nine months to achieve a target of 10,000 searches. At the outset, the JPO deliberately assigned simpler applications to build the organization's operational experience before gradually expanding to more complex cases.

The structure of search organizations in Japan has since evolved considerably. The IPCC remains the largest provider, employing about 1,000 searchers and several dozen instructors or team leaders. In addition to IPCC, the JPO also works with nine registered search organizations. Each organization is required to appoint instructors or leaders to ensure that search results are aligned with JPO's examination standards and practices.

In terms of incentives and quality discipline, JPO contracts offer stable work and reliable payment, but they are paired with strict quality evaluation systems. If the quality of a search report is deemed unsatisfactory, the organization may lose its eligibility to receive further assignments. This system has encouraged private providers to recruit former JPO examiners as leaders, ensuring that their internal standards meet JPO expectations.

Mr. Tsukanaka also emphasized the increasing importance of digital tools and artificial intelligence to enhance search efficiency and consistency. He noted that experienced patent professionals and modern technologies can together support a sustainable system that balances quality and productivity.

From a governance perspective, he advised against imposing overly strict control measures at the beginning. According to his experience, the JPO's current robust evaluation framework was not established immediately, but developed gradually over more than 20 years, during which the outsourcing program grew to handle over 100,000 searches annually. In its early phase, success relied more on close collaboration and mutual understanding between JPO and IPCC than on rigid control systems.

From a governance perspective, he advised that the establishment of an outsourcing framework should follow a gradual, adaptive process rather than an overly rigid regulatory approach. He was concerned that imposing excessively strict evaluation systems in the early stages might discourage capable organizations from participating. Japan's current comprehensive management and evaluation system, he explained, was not introduced abruptly; but rather evolved over more than 20 years of institutional learning. The success of the early phase rested largely on collaboration, mutual trust, and shared responsibility between the JPO and the IPCC rather than on formalized control structures.

In conclusion, he recommended beginning with manageable cases, establishing a consistent and efficient feedback process between examiners and searchers, embedding experienced examination leaders within search organizations, and introducing performance indicators and audit mechanisms gradually as the system matures. Continuous training, together with digital and AI infrastructure, should also be integral to sustaining long-term quality and institutional learning.

APPENDIX B: Minutes of Interview with officials of the Japan Patent Office (JPO)

Date: November 26, 2025

Time: 3:00 – 5:00 PM

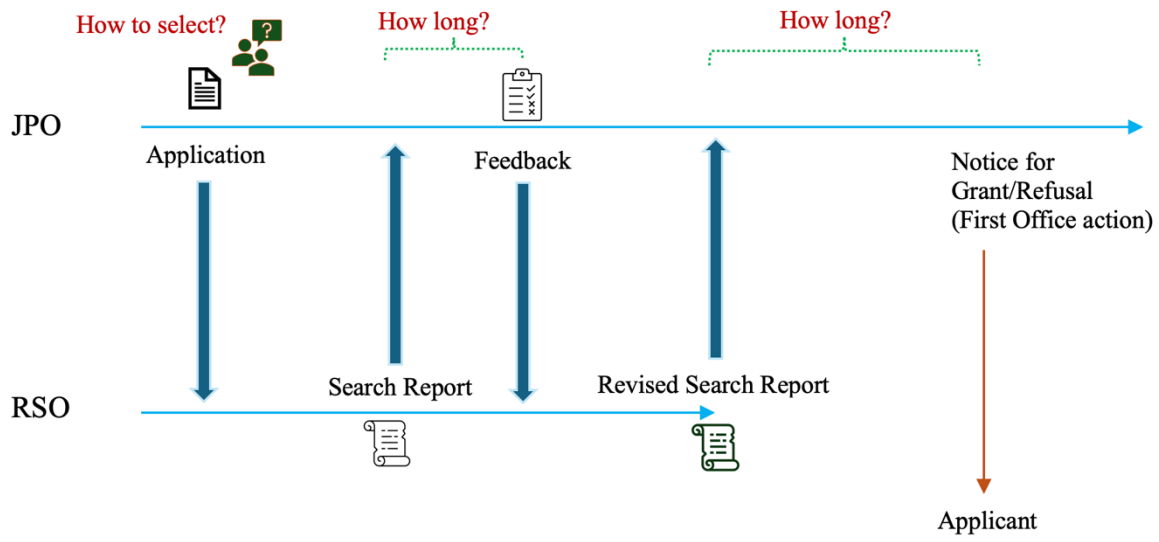
Venue: Japan Patent Office (JPO), 9th Floor

Interviewee: JPO officials from the Administrative Affairs Division, Patent and Design Examination Department, Japan Patent Office (JPO)

Interviewer: Ms. Rungrawee IMPIEW, Patent Examiner, Department of Intellectual Property, Ministry of Commerce, Thailand

Purpose of Interview: The purpose of this interview was to obtain a deeper understanding of Japan's internal management practices related to outsourcing Prior Art Searches, focusing on how the JPO supervises, evaluates, and utilizes the search results produced by registered external organizations. The discussion aimed to clarify operational procedures, quality control mechanisms, and examiner-side practices in order to identify effective management approaches that could inform the design of Thailand's future outsourcing framework under the forthcoming Patent Act.

List of Interview Questions:



1. To understand how patent examiners review, verify, and utilize the search results conducted by registered search organizations
   a. How are patent applications selected for outsourcing? What criteria or considerations are used in choosing which applications to send to external search organizations (for example by technical field, complexity, or examination priority)? Are all applications subject to outsourcing, or only certain categories?
   b. Is there a standardized evaluation form or quality metric used by examiners when reviewing outsourced search results, or is the review conducted based on each examiner's individual judgment?

c. How soon do examiners typically provide feedback to the external search organization after receiving the search results?
d. On average, how long after receiving the outsourced search report does the examiner issue the first office action?
e. From the examiner's perspective, does the feedback process add to their workload, or is it integrated efficiently within their normal examination schedule?

Summary of Responses (a–e)

JPO officials explained that applications are generally selected for outsourcing based on the principle of examining the oldest requests first. Patent applications for which a request for substantive examination has been filed are prioritized according to the earliest examination request date. In principle, all technical fields are eligible for outsourcing. In practice, roughly half of all applications for which an examination request has been filed are outsourced to registered search organizations in any given year. However, only those applications that are still within ten months from the examination request date are considered candidates for outsourcing. This is because outsourced searches typically require about two months to complete, and the JPO aims to issue the first office action (FA) within 14 months from the examination request. To keep within this 14-month target, cases that have already passed the 10-month mark are not sent for outsourcing.

With respect to how examiners review outsourced search results, the officials stated that examiners use a standardized evaluation form rather than relying solely on individual discretion. The form begins with basic identification information for the examiner and for the searcher or search organization. It then includes sections assessing the clarity and adequacy of the searcher's explanation, the suitability and sufficiency of the cited documents, and the accuracy of the comparison between the application and the prior art. In evaluating the cited literature, examiners must also indicate whether the cited documents were actually used in issuing the First Action, which is an important element reflecting the practical relevance of the outsourced search results to the substantive examination. The form additionally provides sections to record particularly positive aspects, as well as any deficiencies or problematic points.

As for timing, examiners are expected to submit their feedback using the evaluation form no later than the end of the month following that in which the search report was received. Although some examiners provide feedback immediately, this internal deadline ensures that reviews are not excessively delayed. The same timeline generally applies to the issuance of the first office action, wherein examiners are expected to issue the first action by the end of the following month after receiving the investigation report. Officials noted that timely feedback is preferred because long delays increase the risk that examiners will no longer remember the details of the application and the search results.

Regarding workload, the feedback process is treated as part of the examiner's ordinary duties, and is counted toward monthly performance expectations. The evaluation criteria and format of the feedback form have been designed so that feedback can be provided efficiently, minimising additional administrative burden while still generating information that can be used to assess and improve the performance of search organizations.

2. How does the JPO manage patent examiners' workloads and organize the examination queue among different types of patent applications, and how is the budget for outsourcing Prior Art Searches planned and allocated to support these operations?
   a. Do patent examiners typically handle a fixed number of pending applications at a given time?
   b. How is the examination queue generally organized or prioritized among different types of applications?
      - Applications filed directly with the JPO without prior search results
      - Applications under international work-sharing programs (for example, PPH or utilization of foreign search results)
      - Applications accompanied by search reports conducted by registered search organizations under the JPO's outsourcing scheme
      - Applications accompanied by search reports from specified registered search organizations for which applicants paid the search fees, and attached the results when filing a request for substantive examination
   c. When outsourcing is used, how are patent examiner KPIs or performance targets adjusted to reflect the reduced workload?
   d. Concerning the cost and budgeting aspect, does the JPO fully cover the search fees paid to the registered search organizations from its own budget, meaning that applicants do not pay any additional fee for those searches? Approximately what proportion or percentage of the substantive examination request fee does this search outsourcing cost represent? Could you share a general estimate to provide insight into how budgeting is managed?

Summary of Responses (a–d)

Officials explained that the JPO manages examiner workloads using a case-scoring system. Each type of application is assigned a specific score that reflects the relative amount of effort required to examine it. Applications without prior searches, applications with prior searches by registered search organizations, applications in which foreign search or work-sharing results are available, and applications at later examination stages (after the second action) are all given different scores. Applications that are expected to require more intensive examination work receive higher scores. Examiners are assigned monthly numerical targets based on the total score of cases they handle, rather than a simple raw count of cases.

In terms of deadlines, JPO has set internal targets to ensure that different categories of applications are addressed within specified time frames. The key benchmark is to issue the first office action within 14 months from the examination request date for all applications. For applications without Prior Art Searches, examiners must issue the First Action within this 14-month period. For applications processed under international work-sharing programmes like PPH, the expected timeframe is significantly shorter, with First Action issuance targeted within three months from the PPH request date. For applications accompanied by a search report prepared by a Registered Search Organization (RSO) under the outsourcing scheme, the operational rule is that the search report must be returned within approximately two months, and the examiner must issue the First Action by the end of the month following receipt of the report. For applications accompanied by search reports submitted by a Specified Registered Search Organization (SRSO) (that is, applicant-commissioned reports), the timing standard

aligns with ordinary applications, meaning that the First Action must still be issued within fourteen months from the examination request date. Overall, these deadlines function collectively to ensure that examination queues are managed so that the 14-month First Action target can be achieved consistently across all categories of applications.

Regarding budgeting, officials confirmed that the JPO fully bears the cost of investigations conducted by registered search organizations. Applicants do not pay any additional fee beyond the statutory filing and examination fees. The budget for outsourcing is planned based on the expected number of applications to be outsourced, and the anticipated need for searches in foreign-language documents such as English, Chinese, Korean, and German. In recent years, outsourcing expenses have represented roughly 20 percent of the JPO's overall annual budget. On a per-case basis, the officials estimated that the average outsourcing cost per application corresponds to about 70 percent of the examination fee. In a typical year, around 110,000 applications are outsourced (equivalent to about half of all cases for which examination has been requested).

3. How does the JPO design compensation and incentive structures to ensure that external search organizations deliver efficient and high-quality search services?
   a. Is compensation determined primarily by the volume of searches completed, the complexity of the cases, or through fixed-value contractual arrangements?
   b. Are there any penalty or bonus mechanisms linked to the quality, timeliness, or accuracy of the outsourced search work?
   c. How does the JPO balance cost efficiency with maintaining a high standard of search quality?
   d. Do non-monetary incentives such as formal recognition, opportunities for long-term contracts, or access to training and capacity-building programs play any role in motivating external search organizations?
   e. Are there particular best practices or lessons learned from Japan's experience in designing and refining effective incentive mechanisms for outsourced search organizations?

Summary of Responses (a–e)

The officials stated that quality evaluation plays a central role in the JPO's incentive framework for registered search organizations. Search agencies that consistently provide high-quality search results receive favorable technical evaluations. These evaluations, which are derived from the examiners' feedback forms, directly influence whether and to what extent a given organization is able to secure contracts in subsequent fiscal years. During the annual public bidding process, both cost-related factors and quality-related evaluation scores are considered. Agencies with higher technical evaluations are more likely to obtain the number of contracts they desire.

The examiners' evaluation forms thus serve a dual purpose. On one hand, they provide feedback to searchers for continuous improvement; on the other, they constitute concrete input into the next year's contract allocation. If an organization repeatedly receives negative evaluations, this can result in its failure to secure contracts for the following fiscal year, effectively functioning as a penalty for poor performance. Conversely, positive evaluations may allow an organization to expand its volume of contracted work.

Beyond monetary compensation, the officials noted that access to JPO and INPIT training programs contributes to motivation and skill development among searchers. Participation in such programs improves technical and procedural knowledge and is regarded as a non-monetary incentive. Overall, the JPO seeks to strike a balance between cost efficiency and quality assurance by using a competitive bidding process in which both price and quality scores are evaluated together, thereby fostering competition on quality as well as on cost among registered search organizations.

4. What kinds of databases are used for outsourced Prior Art Searches, and how is access to these databases managed?
   a. Which patent databases are officially provided to outsourced searchers (e.g., J-PlatPat, internal JPO databases, commercial patent databases)?
   b. How is access to paid or restricted databases (e.g., subscription journals, commercial tools) arranged and funded?
   c. Are there any technical or security limitations (for example access only from secure facilities or through virtual private network connections)?

Summary of Responses (a–c)

Officials explained that registered search organizations use a combination of databases and search tools when conducting Prior Art Searches. These include JPO's internal search systems, commercial patent databases, and the public J-PlatPat platform. Access to paid or restricted databases is arranged and funded by the JPO as part of the outsourcing framework, so search organizations do not bear additional subscription costs for the databases required to perform searches under contract.

To ensure information security and confidentiality, the JPO has established detailed security regulations that registered search agencies must comply with. The JPO also conducts on-site security audits at each registered search organization on an annual basis. During these audits, JPO staff visit the agency's premises to verify compliance with security requirements and ensure that no information leaks or unauthorized access occur. The combination of centrally-funded database access and strict security oversight is intended to support both effective searching and robust protection of confidential application information.

5. Has the JPO ever considered outsourcing other parts of the patent examination process, such as preliminary examination or procedural support tasks? If so, how were these possibilities addressed in policy discussions and in actual practice?
   a. Have there been any pilot studies, policy discussions, or internal reviews evaluating the feasibility of outsourcing tasks beyond Prior Art Searches?
   b. What factors or policy considerations influenced the decision to limit or expand outsourcing to specific parts of the examination process?
   c. Are there any procedural or administrative functions currently supported by external contractors, such as data entry, document formatting, or translation services?
   d. How does the JPO ensure that core examination responsibilities remain consistent with statutory requirements and examiner accountability, while still leveraging external resources for efficiency?

Summary of Responses (a–d)

The officials clarified that their division is primarily responsible for the examination process and outsourcing of Prior Art Searches, and therefore they could not provide detailed information on all policy discussions concerning outsourcing beyond search activities. However, based on their understanding, the principal additional task currently outsourced is classification or categorization of patent applications. This work involves assigning applications to appropriate technical fields so that they can be allocated to examiners with matching expertise. Such classification support is carried out by external entities, and the budget for this work is included within the same overall outsourcing budget, which constitutes roughly 20 percent of JPO's total budget.

Supplementary Discussion and Advice

During the discussion, the officials clarified that although examiners are required to complete the evaluation form for each outsourced search report, the act of providing feedback is not treated as a direct KPI item. The primary performance indicator for examiners is the timely issuance of the First Action. Because this must be issued within two months from receiving the outsourced search report, the feedback process is tied to this same period. In practice, examiners must provide feedback within this two-month window. If the feedback is delayed, the search organization may contact the JPO to ask about the status. However, there is no penalty mechanism for late feedback, and the completion of feedback is not counted as a measurable KPI target.

The officials explained that feedback serves a different institutional purpose. For the JPO, the feedback scores form part of the technical evaluation used to determine whether a search organization will receive contracts in the following fiscal year. For search organizations, examiner comments are an important source of information for improving the quality of their work. In the public bidding process for the next fiscal year, search organizations are evaluated on both cost and technical factors. The technical score reflects how well a search organization performed when compared with other organizations in the same fiscal cycle. The selection process takes into account both quality and cost, and both are used to determine whether an organization will secure new contracts.

The officials also noted that outsourcing in Japan includes the task of categorizing patent applications. All applications, regardless of technical field, are sent to external agencies for classification. Examiners then review the assigned classifications and provide feedback if the categorization is incorrect. The examiner also explains why the classification is inappropriate. Outsourcing is limited to patent applications, and does not extend to designs or trademarks.

The officials also discussed the financial structure that supports outsourcing activities in Japan. Approximately 20 percent of the JPO's total annual budget is allocated to outsourcing search and classification work. Although this is a significant portion of the budget, it is considered necessary for maintaining examination efficiency and reducing pendency. The JPO operates under a self-funded model that uses revenue from filing fees, examination fees, registration fees, and annuities. Its outsourcing budget does not rely on general tax funds.

APPENDIX C: Act on Special Provisions for Procedures related to Industrial Property Rights

Article: 36-39, 42-45 and other relevant provisions

Remark: *The following translation was generated using machine translation and has not been formally verified for legal accuracy (for research reference only).*

Section 2 Registered Investigation Organizations

(Registration of Registered Investigation Bodies)

Article 36 *The Commissioner of the Japan Patent Office may have a registered person (hereinafter referred to as a "registered search organization") conduct the following searches necessary for the examination of a patent application: those related to inventions or devices that belong to the same technical field as the invention related to the patent application and that are specified by Cabinet Order; and those necessary for the publication of an application, such as whether the descriptions in the abstract attached to the application comply with the provisions of Article 36, paragraph 7 of the Patent Act (hereinafter referred to as "search services").*

2 *The registration set forth in the preceding paragraph shall be made upon application by a person who intends to carry out investigation work, as provided for by an Ordinance of the Ministry of Economy, Trade and Industry, for each category specified by an Ordinance of the Ministry of Economy, Trade and Industry.*

(Registration Criteria)

Article 37 *The Commissioner of the Japan Patent Office must register a person who has applied for registration pursuant to the provisions of paragraph (2) of the preceding Article (hereinafter in this Article referred to as the "applicant for registration as a research institution") if the person meets all of the following requirements: In this case, the procedures required for registration shall be prescribed by Ordinance of the Ministry of Economy, Trade and Industry.*

one *The investigation work shall be carried out by persons who fall under any of the following categories, and the number of such persons shall be ten or more for each category in Paragraph 2 of the preceding Article.*

(a) *A person who has graduated from a university (excluding junior colleges) based on the School Education Act (Act No. 26 of 1947) or a university based on the former University Ordinance (Imperial Ordinance No. 388 of 1918), has experience of working in science and technology-related affairs (including research; the same applies in (b)) for a total of four years or more, and has completed training provided by the National Center for Industrial Property Information and Training, an independent administrative institution.*

(b) *A person who has graduated from a junior college (including the early stage of a professional university based on the School Education Act) or a technical college based on the former Professional School Ordinance (Imperial*

Ordinance No. 61 of 1903), or a vocational school based on the former Professional School Ordinance (Imperial Ordinance No. 61 of 1903), (or has completed the early stage of a professional university based on the same Act), has experience of working in science and technology affairs for a total of six years or more, and has completed the training in (a).

(c) *Those who have knowledge and experience equivalent to or greater than those listed in (a) and (b).*

two *Possession of a computer and the programs necessary for research work.*

three *The applicant for registration as a research organization must not be controlled by any specific person and must not fall under any of the following categories:*

(a) *The applicant for research institution registration is a subsidiary of another corporation.*

(b) *The proportion of officers or employees of the same person (including those who have been officers or employees of the same person within the past two years) among the officers (or, in the case of a limited liability company, members who execute business) of the applicant for registration as a research institution exceeds one-half.*

2 *The registration under paragraph (2) of the preceding Article shall be made by entering the following items in the investigation agency register:*

one *Registration date and registration number*

two *Name or title and address of the person who registered, and in the case of a corporation, the name of its representative*

three *The classification of the survey work carried out by the registered person*

four *Name and address of the establishment where the registered person conducts the investigation work*

(Obligation to carry out investigation work, etc.)

Article 38 *When a registered search organization is requested by the Commissioner of the Japan Patent Office to perform search work, it must perform the search work without delay, unless there is a justifiable reason not to do so.*

2 *When a registered investigation body carries out investigation work, it must have the work carried out by a person specified in item 1 of paragraph 1 of the preceding Article (hereinafter referred to as the "investigation work implementer").*

(Applies mutatis mutandis)

Article 39 *The provisions of Articles 18, 19-2, 21 to 32, 34 (excluding item 5), and 35 shall apply mutatis mutandis to registered research organizations. In this case, "laws and regulations related to patents, etc." in Article 18 shall be read as "the Patent Act, the Utility Model Act, or this Act, or orders thereunder," "the preceding three Articles" in Article 19-2, paragraph 2 shall be read as "Article 18 as applied mutatis mutandis in Article 36, paragraph 2, Article 37, and Article 39," "information processing work" in Articles 21, 22, paragraphs 1 and 3, 23, 26, 29, 30, 31, paragraph 1, 34, and 35 shall be read as "search work," " person who has carried out designated specific procedures, etc." in Article 24,*

paragraph 2 shall be read as "patent applicant, " "officer" in Article 25 shall be read as "officer or search work implementer," and "each item of Article 19, paragraph 1" in Article 28 shall be read as "each item of Article 37, paragraph 1."

Section 3 Specified Registered Investigation Organizations

(Prior Art Search services)

Article 39-2 *A registered search organization may, upon being specifically registered by the Commissioner of the Japan Patent Office, conduct, at the request of a patent applicant or other person, a search relating to an invention or device in the same technical field as the invention claimed in the patent application, as specified by Cabinet Order, and issue to the person a search report detailing the results of the search in accordance with the provisions of an Ordinance of the Ministry of Economy, Trade and Industry (hereinafter referred to as "Prior Art Search operations").*

(Special provisions regarding fees)

Article 39-3 *When a person requesting the examination of a patent application submits a search report issued under the preceding Article by a person registered under the preceding Article (hereinafter referred to as a "specified registered search organization") , the Commissioner of the Japan Patent Office may, pursuant to a Cabinet Order, reduce the fee for the request for examination of an application that must be paid pursuant to the provisions of Article 195, paragraph 2 of the Patent Act .*

(Registration)

Article 39-4 *Registration under Article 39-2 shall be made, as provided for by Ordinance of the Ministry of Economy, Trade and Industry, upon application by a person who intends to conduct Prior Art Search services for each category specified by Ordinance of the Ministry of Economy, Trade and Industry.*

(Registration Criteria)

Article 39-5 *If a person who has applied for registration pursuant to the provisions of the preceding Article is registered as a registered search organization for the category to which the application relates, the Commissioner of the Japan Patent Office must register under Article 39-2 .In this case, the procedures required for registration under the same Article shall be prescribed by Ordinance of the Ministry of Economy, Trade and Industry.*

2 *Registration under Article 39-2 shall be made by entering the following items in the designated registered investigation organization register:*

one *Registration date and registration number*

two *Name or title and address of the person who registered, and in the case of a corporation, the name of its representative*

three *The classification in which the registered person performs Prior Art Search work*

four *Name and address of the establishment where the registered person conducts Prior Art Search services*

(Obligation to Conduct Prior Art Searches, etc.)

Article 39-6 *When a designated registered search organization is requested to carry out Prior Art Search services, it must carry out the Prior Art Search services without delay, unless there is a justifiable reason not to do so.*

2 *When a designated registered search organization conducts Prior Art Searches, it must have the searches carried out by a search service provider.*

(Prior Art Search Operational Rules)

Article 39-7 *A designated registered search organization must establish regulations regarding Prior Art Search operations (hereinafter referred to as the "Prior Art Search operation regulations") and submit them to the Commissioner of the Japan Patent Office before commencing Prior Art Search operations. The same applies when you try to change this.*

2 *The matters to be specified in the Prior Art Search Operational Rules shall be determined by Ministry of Economy, Trade and Industry Ordinance.*

(Notification of suspension or termination of business)

Article 39-8 *When a designated registered search organization intends to suspend or discontinue all or part of its Prior Art Search services, it must notify the Commissioner of the Japan Patent Office in advance, as provided for by an Ordinance of the Ministry of Economy, Trade and Industry.*

(Cancellation of registration, etc.)

Article 39-9 *When the registration of a specified registered research organization is revoked pursuant to the provisions of Article 30 as applied mutatis mutandis by Article 39 for a category in which the organization has been registered under Article 39-2, the Commissioner of the Japan Patent Office must revoke the registration under Article 39-2.*

2 *If a designated registered research organization falls under any of the following items, the Commissioner of the Japan Patent Office may revoke its registration under Article 39-2 or order it to suspend all or part of its prior art research activities for a specified period.*

one *When the provisions of this section are violated.*

two *When the case falls under Article 18, item 3, as applied mutatis mutandis by Article 39-11.*

three *When a person violates an order issued pursuant to the provisions of Article 29 as applied mutatis mutandis by Article 39-11.*

Four *When the registration under Article 39-2 has been obtained by fraudulent means.*

(Public announcement)

Article 39-10 *The Commissioner of the Patent Office must publish a notice to that effect in the Official Gazette in the following cases:*

one *When registration is made under Article 39-2.*

two *When a notification is made pursuant to the provisions of Article 39-8 or Article 21 as applied mutatis mutandis in the following Article.*

three *When the registration under Article 39-2 is revoked pursuant to the provisions of paragraph (1) or (2) of the preceding Article, or when an order is issued to suspend all or part of Prior Art Search operations pursuant to the provisions of the same paragraph.*

(Applies mutatis mutandis)

Article 39-11 *The provisions of Article 18 (excluding item 1), Article 19-2, Article 21, Article 27, Article 29, Article 31, Article 32 and Article 35 shall apply mutatis mutandis to designated registered investigation organizations. In this case, "any of the preceding two items" in Article 18, paragraph 3 shall be read as "the preceding item," "the preceding three Articles" in Article 19-2, paragraph 2 shall be read as "Article 18 (excluding item 1) as applied mutatis mutandis in Articles 39-4, 39-5, and 39-11," and "information processing work" in Articles 21, 29, Article 31, paragraph 1, and 35 shall be read as "Prior Art Search work."*

Chapter VI Penalties

Article 42 Any person who violates the provisions of Article 26, paragraph 1 (including when applied mutatis mutandis in Article 39) shall be punished by imprisonment for not more than one year or a fine of not more than 500,000 yen.

Article 43 If an order to suspend information processing or search operations pursuant to the provisions of Article 30 (including when applied mutatis mutandis in Article 39) or an order to suspend Prior Art Search operations pursuant to the provisions of Article 39-9, paragraph 2 is violated, the officer or employee of the registered information processing organization, registered search organization or specified registered search organization that committed the violation shall be punished by imprisonment for not more than one year or a fine of not more than 500,000 yen.

Article 44 If any of the following applies, the officer or employee of a registered information processing organization, registered investigation organization, or specified registered investigation organization that commits the violation will be punished by a fine of not more than 200,000 yen.

one When the information processing business or the investigation business is completely abolished without obtaining the permission under Article 23 (including when applied mutatis mutandis in Article 39).

two When a person fails to make a report or makes a false report pursuant to the provisions of Article 27, paragraph 1 (including when applied mutatis mutandis in Article 39 or Article 39-11; the same applies hereinafter in this item), or refuses, obstructs, or evades an inspection pursuant to the provisions of the same paragraph, or fails to make a statement or makes a false statement in response to a question pursuant to the provisions of the same paragraph .

three When a person fails to prepare books, fails to make entries in books, or makes false entries in books in violation of the provisions of Article 31, paragraph 1 (including when applied mutatis mutandis in Article 39 or Article 39-11), or fails

to preserve books in violation of the provisions of Article 31, paragraph 2 (including when applied mutatis mutandis in Article 39 or Article 39-11).

four When a notification pursuant to the provisions of Article 39-8 is not made or a false notification is made.

Article 45 Any person who, in violation of the provisions of Article 24, Paragraph 1 (including when applied mutatis mutandis in Article 39), fails to prepare financial statements, etc., fails to state matters that should be stated in financial statements, etc., or makes a false statement, or who, without justifiable grounds, refuses a request pursuant to the provisions of any item of Article 24, Paragraph 2 (including when applied mutatis mutandis in Article 39), shall be punished by a non-penal fine of not more than 200,000 yen.

.....

(Disqualification clause)

Article 18 *Any person who falls under any of the following items shall not be eligible for registration under Article 9, paragraph 1.*

one *A person who has violated the provisions of patent-related laws and regulations and has been sentenced to a fine or more severe punishment, and for whom two years have not yet passed since the date on which the sentence was completed, or the sentence was no longer subject to execution.*

two *A person whose registration has been revoked pursuant to the provisions of Article 30 and for whom two years have not yet passed since the date of revocation.*

three *A corporation whose officers perform business operations and fall under either of the preceding two items.*

(Registration renewal)

Article 19-2 *The registration under Article 9, paragraph 1 shall lose its validity upon the expiration of the period unless it is renewed every three years as specified by Cabinet Order.*

2 *The provisions of the preceding three Articles shall apply mutatis mutandis to the renewal of registration under the preceding paragraph.*

(Notification of changes)

Article 21 *When a registered information processing organization intends to change its name or the address of the office where it conducts information processing services, it must notify the Commissioner of the Japan Patent Office at least two weeks prior to the intended date of change.*

(Business regulations)

Article 22 *A registered information processing organization must establish regulations regarding information processing operations (hereinafter referred to as "operation regulations") and obtain approval from the Commissioner of the Japan Patent Office. The same applies when you try to change this.*

2 *The matters to be specified in the operational regulations shall be determined by an Ordinance of the Ministry of Economy, Trade and Industry.*

3 *(2) When the Commissioner of the Japan Patent Office finds that the operational rules approved under paragraph (1) have become inappropriate for the fair performance of information processing business, he/she may order the registered information processing organization to change the operational rules.*

(Suspension or termination of business)

Article 23 *A registered information processing organization may not suspend or discontinue all or part of its information processing operations without the permission of the Commissioner of the Japan Patent Office.*

(Keeping and Inspection of Financial Statements, etc.)

Article 24 *A registered information processing organization must prepare, within three months after the end of each business year, an inventory of assets, a balance sheet, a profit and loss statement or income and expenditure statement, and a business report for that business year (including electromagnetic records in cases where these are prepared in electromagnetic form or have been prepared in lieu of such preparation; in the following paragraph and Article 45 , these will be referred to as "financial statements, etc."), and must keep them at its place of business for five years.*

2 *Any person who has carried out a designated specific procedure, etc. or any other interested party may make the following requests at any time during the business hours of the registered information processing organization: However, to make a claim under item 2 or 4, the fee set by the registered information processing agency must be paid.*

one *If financial statements, etc. are prepared in writing, a request to inspect or copy said documents*

two *Request for a copy or extract of the document in the preceding paragraph*

three *If financial statements, etc. are prepared in electromagnetic form, a request to inspect or copy the matters recorded in said electromagnetic form as provided for in the Ministry of Economy, Trade and Industry Ordinance.*

four *Requests for the provision of the matters recorded in the electromagnetic records set forth in the preceding paragraph by electromagnetic means or requests for the issuance of a document containing such matters*

(Appointment and dismissal of officers)

Article 25 *When a registered information processing organization appoints or dismisses an officer, it must notify the Commissioner of the Japan Patent Office of this without delay.*

(Obligation to maintain confidentiality, etc.)

Article 26 *An officer or employee of a registered information processing organization, or a person who has held such a position, must not divulge or misuse any secret that he or she has come to know in the course of information processing work.*

2 *For the purpose of applying the Penal Code (Act No. 45 of 1907) and other penal provisions, officers or employees of a registered information processing*

organization engaged in information processing operations shall be deemed to be employees engaged in public service pursuant to laws and regulations.

(Reports and On-site Inspections)

Article 27 *The Commissioner of the Japan Patent Office may, to the extent necessary for the enforcement of this Act, require a registered information processing organization to report on the status of its business or accounting, or have his/her officials enter the office of a registered information processing organization to inspect the status of its business or books, documents and other items, or question relevant persons.*

2 *When an employee enters premises pursuant to the provisions of the preceding paragraph, he/she must carry a certificate of identity and present it to the relevant persons.*

3 *The authority to conduct on-site inspections provided for in paragraph 1 shall not be construed as being granted for the purpose of criminal investigation.*

(Conformity Order)

Article 28 *If the Commissioner of the Japan Patent Office finds that a registered information processing organization no longer complies with any of the items of Article 19, paragraph 1, he/she may order the registered information processing organization to take the necessary measures to comply with these provisions.*

(improvement order)

Article 29 *When the Commissioner of the Japan Patent Office finds that a registered information processing organization is in violation of the provisions of Article 20, or when he otherwise finds it necessary to ensure the proper implementation of information processing operations, he may order the registered information processing organization to perform information processing operations or to take necessary measures to improve the methods of performing information processing operations or other business methods.*

(Cancellation of registration, etc.)

Article 30 *If a registered information processing organization falls under any of the following items, the Commissioner of the Japan Patent Office may revoke its registration or order it to suspend all or part of its information processing operations for a specified period of time.*

one *When the provisions of this section are violated.*

two *When the case falls under Article 18, item 1 or 3.*

three *When information processing operations are carried out without complying with the business regulations approved under Article 22, paragraph 1.*

four *When an order issued pursuant to the provisions of Article 22, paragraph 3 or the preceding two Articles is violated.*

five *When registration is obtained by fraudulent means.*

(Entry in the books)

Article 31 *A registered information processing organization must keep books and record the matters specified by Ministry of Economy, Trade and Industry Ordinance regarding information processing business.*

2 *The books referred to in the preceding paragraph must be kept as prescribed by Ordinance of the Ministry of Economy, Trade and Industry.*

(Special provisions regarding hearing procedures)

Article 32 *The hearing on the date for a disposition under Article 30 shall be held in public.*

2 *The chairperson of the hearing referred to in the preceding paragraph must grant permission to any person with an interest in the disposition to participate in the hearing procedure if such person requests to do so pursuant to the provisions of Article 17, paragraph 1 of the Administrative Procedure Act (Act No. 88 of 1993)*

(Public announcement)

Article 34 *The Commissioner of the Patent Office must publish a notice to that effect in the Official Gazette in the following cases:*

one *When registration is made under Article 9, paragraph 1.*

two *When a notification is made pursuant to the provisions of Article 21.*

three *When permission is granted under Article 23.*

four *When the registration is revoked or the suspension of all or part of information processing operations is ordered pursuant to the provisions of Article 30*

Article 35 *In addition to the provisions of this Section, necessary matters concerning the information processing operations performed by a registered information processing organization shall be prescribed by Cabinet Order.*

APPENDIX D: Enforcement Regulations for the Law Concerning Special Provisions on Procedures, Etc. Concerning Industrial Property Rights (Ministry of International Trade and Industry Ordinance No. 41 of 1990)

Article: 55-60 and other relevant provisions

Remark: *The following translation was generated using machine translation and has not been formally verified for legal accuracy (for research reference only).*

(Application for registration)

Article 55 *Any person who wishes to apply for registration pursuant to the provisions of Article 36, paragraph 2 of the Act must submit an application to the Commissioner of the Japan Patent Office containing the following information:*

one *Name or title and address, and in the case of a corporation, the name of its representative*

two *Name and address of the office that will be conducting the investigation*

three *Category of the investigation work to be carried out*

four *The date on which the investigation work is to begin*

2 *The application form referred to in the preceding paragraph must be accompanied by the following documents or copies thereof:*

one *Certificate of registered matters or equivalent*

two *Name and resume of the person conducting the survey, and if the applicant is a corporation, the names and resumes of its officers*

three *A document explaining that the applicant does not fall under any of the provisions of Article 18 of the Law as applied mutatis mutandis by Article 39 of the Law.*

four *Documents explaining that the applicant complies with the provisions of Article 37, Paragraph 1 of the Law*

(Classification of registration)

Article 56 *The classifications prescribed by the Ordinance of the Ministry of Economy, Trade and Industry under Article 36, paragraph 2 of the Act shall be as set forth in Appendix 2.*

Article 57 *delete*

(Business regulations)

Article 58 *The matters to be specified in the operational regulations under Article 22, Paragraph 2 of the Act, as applied mutatis mutandis by Article 39 of the Act, are as follows:*

one *Classification of research work*

two *Matters concerning the hours and holidays for conducting investigation work*

three *Matters concerning the method of conducting investigation work*

four *Matters necessary for the proper implementation of the investigation work*

five *Matters concerning the appointment and dismissal of survey implementers*

six *Matters concerning the preservation of books, documents and materials related to investigation work*

seven *Matters concerning confidentiality of information learned in the course of investigation work*

eight *Matters concerning the preparation and inspection of financial statements*

nine *In addition to the above, any other matters necessary for the investigation*

2 *When a registered research organization seeks approval of its business regulations pursuant to the provisions of Article 22, paragraph 1 of the Act, as applied mutatis mutandis by Article 39 of the Act, it must submit an application to that effect, together with a draft of the business regulations, to the Commissioner of the Japan Patent Office.*

3 *When a registered research organization seeks approval to change its business regulations pursuant to the provisions of Article 22, paragraph 1 of the Act , as applied mutatis mutandis by Article 39 of the Act, it must submit an application to the Commissioner of the Japan Patent Office containing the following information:*

one *Items to be changed*

two *The date you want to change*

three *Reasons for the change*

(Entry in the books)

Article 59 *The matter to be specified by the Ordinance of the Ministry of Economy, Trade and Industry under Article 31, paragraph 1 of the Act, as applied mutatis mutandis by Article 39 of the Act, shall be the number of patent applications relating to the search work conducted pursuant to the provisions of Article 36, paragraph 1 of the Act in each month.*

2 *The books set forth in Article 31, paragraph 1 of the Act, as applied mutatis mutandis by Article 39 of the Act , must be preserved until the investigation business is discontinued.*

(Storage by electromagnetic means)

Article 59-2 *When the matters set forth in Paragraph 1 of the preceding Article are recorded by electromagnetic means and the records are stored in such a way that they can be displayed immediately using a computer or other device as necessary, the preservation of the records may be substituted for the preservation of books in which the matters are entered as provided for in Article 31, Paragraph 2 of the Act , as applied mutatis mutandis by Article 39 of the Act .*

2 *When preserving information pursuant to the provisions of the preceding paragraph , efforts must be made to ensure that the standards set by the Minister of Economy, Trade and Industry are met.*

(Applies mutatis mutandis)

Article 60 *The provisions of Article 42-2, Article 43, Articles 45 to 48, and Article 54-2 shall apply mutatis mutandis to registered research organizations. In this case, "the preceding Article" in Article 42-2 shall be read as "Articles 55 and 56, " "information processing*

business" in Articles 43 and 45 shall be read as "investigation business, " "scope" in Article 45, item 1 shall be read as "category," "officer" in Article 47 shall be read as "officer or investigative business implementer," and " Articles 42 to 47" in Article 54-2 shall be read as "Article 55, Article 58, paragraphs 2 and 3, and Article 42-2, Article 43, Article 45, and Article 47 as applied mutatis mutandis in Article 60."

Section 3 Specified Registered Investigation Organizations

(Investigation report)

Article 60-2 *The matters to be included in the investigation report under Article 39-2 of the Act shall be as follows:*

one *Investigation report number*

two *Name and registration number of the specified registered research organization*

three *Classification of registration of specified registered research organizations*

four *Field of technology in which Prior Art Search work was carried out*

five *Date of Prior Art Search*

six *Name of the searcher who conducted the Prior Art Search*

seven *The patent application number to which the search report pertains*

eight *The scope of claims of the patent application related to the search report*

nine *Conditions and results of the technology search conducted during the Prior Art Search*

ten *Date of issuance of the investigation report*

eleven *Other necessary matters*

(Application for registration)

Article 60-3 *Any person who wishes to apply for registration pursuant to the provisions of Article 39-4 of the Act must submit an application to the Commissioner of the Japan Patent Office containing the following information:*

one *Name or title and address, and in the case of a corporation, the name of its representative*

two *Name and address of the office that will be conducting the Prior Art Search*

three *Category of Prior Art Search work to be carried out*

four *Date on which Prior Art Search work is to begin*

2 *The application referred to in the preceding paragraph must be accompanied by a certificate of registered matters or an equivalent document, or a copy thereof.*

(Classification of registration)

Article 60-4 *The classifications prescribed by the Ordinance of the Ministry of Economy, Trade and Industry under Article 39-4 of the Act shall be as set out in Appendix 3.*

(Prior Art Search Operational Rules)

Article 60-5 *The matters to be specified in the Prior Art Search operational rules under Article 39-7, paragraph 2 of the Act shall be as follows:*

one *Classification of Prior Art Search services*

two *Matters concerning the hours and holidays for conducting Prior Art Search work*

three *A statement that the company will not conduct Prior Art Searches for patent applications filed by the company or its subsidiaries.*

four *Matters concerning the method of conducting Prior Art Searches*

five *Matters necessary for the proper implementation of Prior Art Search operations*

six *Matters concerning fees for Prior Art Searches*

seven *Matters concerning the preservation of books, documents and materials related to Prior Art Search operations*

eight *Matters concerning the submission of search reports to the Commissioner of the Japan Patent Office*

nine *In addition to the above, any other matters necessary for Prior Art Search operations*

2 *When a designated registered search organization notifies its Prior Art Search business regulations pursuant to the provisions of Article 39-7, paragraph 1 of the Act , it must submit a notification to that effect, together with the Prior Art Search business regulations, to the Commissioner of the Japan Patent Office no later than two weeks before the day on which it intends to commence Prior Art Search business.*

3 *When a designated registered search organization notifies a change to its Prior Art Search business regulations pursuant to the provisions of Article 39-7, paragraph 1 of the Act , it must submit a notification form to the Commissioner of the japan patent office containing the following items:*

one *Items to be changed*

two *The date you want to change*

three *Reasons for the change*

(Notification of suspension or termination of business)

Article 60-6 *When a designated registered search organization notifies the suspension or termination of all or part of its Prior Art Search services pursuant to the provisions of Article 39-8 of the Act, it must submit a notification form to the Commissioner of the Japan Patent Office containing the following information:*

one *Category of Prior Art Search services to be suspended or discontinued*

two *Date of suspension or abolition*

three *If you intend to suspend the service, the period*

four *Reasons for suspension or abolition*

(Entry in the books)

Article 60-7 *The matters to be specified by the Ordinance of the Ministry of Economy, Trade and Industry under Article 31, paragraph 1 of the Act, as applied mutatis mutandis by Article 39-11 of the Act , shall be the number and numbers of patent applications relating to Prior Art Search work conducted pursuant to the provisions of Article 39-2 of the Act, and the search report numbers of the search reports issued.*

2 *The books under Article 31, paragraph 1 of the Act, as applied mutatis mutandis by Article 39-11 of the Act , must be kept until all Prior Art Search operations are discontinued.*

(Storage by electromagnetic means)

Article 60-8 *When the matters set forth in Paragraph (1) of the preceding Article are recorded by electromagnetic means and the records are stored in such a way that they can be displayed immediately using a computer or other device as necessary, the preservation of the records may be substituted for the preservation of books in which the matters are entered as provided for in Article 31, Paragraph (2) of the Act , as applied mutatis mutandis by Article 39-11 of the Act.*

2 *When preserving information pursuant to the provisions of the preceding paragraph , efforts must be made to ensure that the standards set by the Minister of Economy, Trade and Industry are met.*

(Submission of investigation report)

Article 60-9 *When a designated registered search organization has conducted a Prior Art Search, it must submit a search report to the Commissioner of the Japan Patent Office without delay.*

(Applies mutatis mutandis)

Article 60-10 *The provisions of Articles 42-2, 43, 48 and 54-2 shall apply mutatis mutandis to designated registered investigation organizations. In this case, "the preceding Article" in Article 42-2 shall be read as "Article 60-3 and Article 60-4", "information processing work" in Article 43 shall be read as "Prior Art Search work", and "Articles 42 to 47 (excluding Article 44, paragraph 1, and Article 46)" in Article 54-2 shall be read as "Article 60-3, Article 60-5, paragraphs 2 and 3, Article 60-6, Article 60-9, and Article 42-2 and Article 43 as applied mutatis mutandis in Article 60-10".*

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(Procedures for renewal of registration)

Article 42-2 *When a registered information processing organization seeks to renew its registration pursuant to the provisions of Article 19-2 of the Act, the provisions of the preceding Article shall apply mutatis mutandis.*

(Notification of changes)

Article 43 *When a registered information processing organization intends to make a notification pursuant to the provisions of Article 21 of the Act, it must submit a notification form to the Commissioner of the Japan Patent Office containing the following items:*

one *Name after change or address of office conducting information processing business*

two *The date you want to change*

three *Reasons for the change*

(Suspension or termination of business)

Article 45 *When a registered information processing organization wishes to obtain permission under Article 23 of the Act, it must submit an application to the Commissioner of the Japan Patent Office containing the following information:*

one *Scope of information processing operations to be suspended or discontinued*

two *Date of suspension or abolition*

three *If you intend to suspend the service, the period*

four *Reasons for suspension or abolition*

(Methods of Displaying Matters Recorded in Electromagnetic Records, etc.)

Article 46 *The method to be prescribed by the Ministry of Economy, Trade and Industry Ordinance under Article 24, Paragraph 2, Item 3 of the Act shall be the method of displaying the matters recorded in the electromagnetic record on paper or on the image screen of an output device.*

(Appointment and dismissal of officers)

Article 47 *When a registered information processing organization intends to make a notification pursuant to the provisions of Article 25 of the Act, it must submit a notification form to the Commissioner of the Japan Patent Office containing the following items:*

one *Names and brief biographies of the officers appointed or dismissed*

two *Date of appointment or dismissal*

three *Reasons for appointment or dismissal*

(Identification for on-site inspection)

Article 48 *The certificate referred to in Article 27, Paragraph 2 of the Act shall be in accordance with Form 41.*

(Submission by electromagnetic means)

Article 54-2 *Documents pursuant to the provisions of Articles 42 to 47 may be submitted by electromagnetic means.*

2 *If a document is submitted by electromagnetic means pursuant to the provisions of the preceding paragraph, it shall be deemed to have reached the Patent Office at the time it is recorded in the file.*