WIPO
WORLD
INTELLECTUAL PROPERTY
ORGANIZATION

# PATENT COOPERATION TREATY (PCT)

# Common Quality Framework for International Search and Preliminary Examination

## INITIAL REPORT ON QUALITY MANAGEMENT SYSTEMS

*prepared by [Korean Intellectual Property Office]*

*The Authority should provide general background information relevant to the quality management system (QMS) as set forth in this template.*

*The descriptions below each main heading of this template should be considered examples of the type and arrangement of information that should be included under each heading. Each Authority may provide additional information beyond that set forth in this template as desired.*

## INTRODUCTION (PARAGRAPHS 21.01 - 21.03)

*If applicable, the Authority may at this point indicate any recognized normative reference or basis for their quality management system besides Chapter 21, such as ISO 9001, under the heading "Normative Reference for QMS"*

*For example: "Normative reference for QMS: ISO 9001, EQS (European Quality System)"*

*Each authority should then provide at least the information indicated in the descriptive boxes, under the following headings*

Korean Intellectual Property Office (KIPO) has set improvement of patent examination quality in parallel with faster examination as one of its organizational objectives. To achieve the above goals, various activities at KIPO have been organized under the following four initiatives: customer-oriented management; Six Sigma management; knowledge management; and performance-based management. The customer-oriented management focuses on listening to customers and improving customer service. To keep our customers satisfied, we have checked the patent examination process and redesigned our work process.

The Six Sigma management is a method of improving our work process so that we can eliminate defects in our work process with respect to filing applications and conducting examinations. With Six Sigma, we can effectively handle problems that caused complaints from customers.

The knowledge management is a means of expanding the knowledge capability of our staff by sharing knowledge. Through the knowledge management system, work efficiency in patent examinations has been improved.

We have also enforced activities for improving the quality of patent examination by reflecting examination quality-related indicators such as examination error rate and observance rate of deadline for submitting examination reports on the performance evaluation of each individual and each team.

Regarding the quality management system of PCT examination, KIPO additionally established a PCT Quality Committee to effectively develop and plan appropriate activities in 2004, and we, as a PCT ISA/IPEA, made annual plans to improve the quality of our activities.

In May 2008 at Korean Intellectual Property Office, we began running the second phase of our self-financing business operations and shifted the emphasis of our patent policy from faster examinations to higher quality examinations.

We also introduced a three-track examination system in tandem with the patent policy shift. The examination period used to be determined on a uniform principle for all applications. However, the three-track examination system enables applicants to choose among an accelerated, regular and customer-deferred examination.

The number of examinations per examiner was decreased for better performance, and we fine-tuned our examination scoring system following an analysis of the examiner workload and examination processing period of patent and PCT applications.

Another initiative is the EXCEL Plan (also known as the Examination and Trial Excellence Plan). The EXCEL Plan aims to enhance the capability of patent and trial examiners and improve the overall quality of their results.

## 1. LEADERSHIP AND POLICY

*21.04  Confirm that the following are clearly documented, and that this documentation is available internally:*

> *(a)     The quality policy established by top management.*
>
> *(b)     The roles and names of those bodies and individuals responsible for the QMS, as delegated by top management.*
>
> *(c)     An organisational chart showing all those bodies and individuals responsible for the QMS.*

The QMS for PCT is controlled by the PCT Quality Committee, which is organized for controlling PCT quality. The ad-hoc committee consists of the KIPO deputy commissioner, the director generals of four patent examination bureaus and six directors from the following ad-hoc QM divisions: the PCT Policy QM division (comprising of the Patent Examination Policy Division and the Patent Examination Support Division); the Quality Assurance QM Division (consisting the Examination Quality Assurance Officer); the IT Resources QM Division (consisting the Information Development Division and the Information Management Division); the Administration and Communication Channel QM Division (consisting the International Application Division); the International Feedback QM Division (consisting the International Cooperation Division); and the Human Resources QM Division (consisting the IP Human Resource Management Division). The director of the PCT Policy QM Division is the leader of the six QM divisions.

The main role of the PCT Quality Committee is to supervise the overall plans and performance of the relevant divisions, to coordinate activities between the QM divisions, and to conduct internal review of all the divisions. The detailed roles of the QM divisions are as follows:

The PCT Policy QM Division establishes policies on PCT-related education and training for examiners, makes examination manuals, revises national PCT-related regulations, and manages the system of PCT examiners; The Quality Assurance QM Division builds a system for reviewing the quality of PCT reports, conducts reviews, elicits feedback, and plans customer satisfaction surveys; The IT Resources QM Division establishes the examination IT infrastructure, such as system development and database management; The Administration and Communication Channel QM Division trains staff who are in charge of PCT-related public affairs, distributes guidelines for applicants, helps examiners to observe report deadlines, and fosters communication between examiners and applicants; The International Feedback QM Division monitors PCT-related public inquiries on KIPO's English Web site and fosters effective communication with other intellectual property offices; The Human Resources QM Division establishes a human resources infrastructure for PCT examinations and PCT quality management.

## Organigram of the PCT Quality Committee
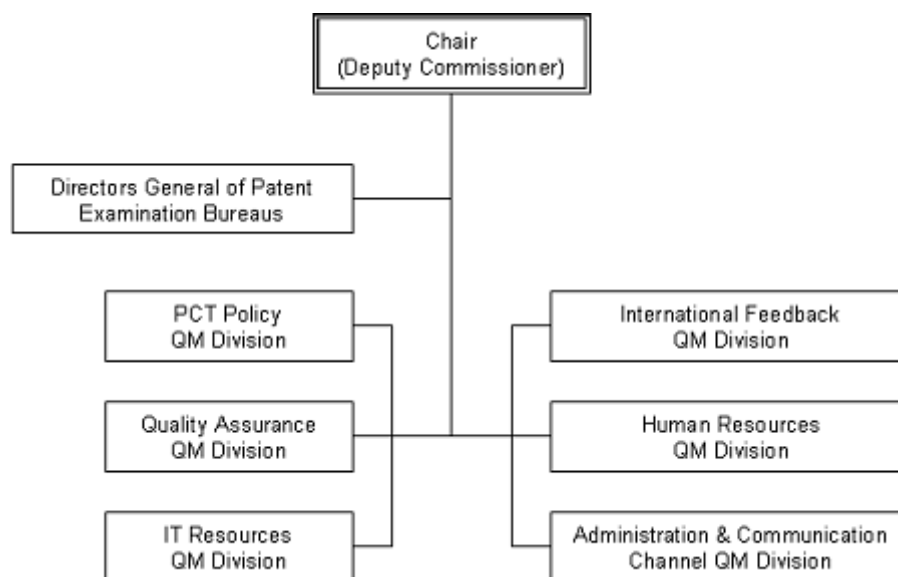


21.05  Indicate (e.g. by means of a table) the extent of compatibility between the Authority's QMS and the requirements of Chapter 21 of these International Search and Preliminary Examination Guidelines. Alternatively, indicate where the Authority is not yet compliant with these requirements.

[Sample table, to be amended as necessary]

| Chapter 21 requirement | | | Extent of compliance | | |
|---|---|---|---|---|---|
| | | | full | part | no |
| 21.04 | (a) | Quality policy available | ✓ | | |
| | (b) | Identified roles and names for QMS responsibility | ✓ | | |
| | (c) | Organisational chart available | ✓ | | |
| 21.05 | | Established compatibility of QMS with Chapter 21 | ✓ | | |
| 21.06 | (a) | Mechanisms to ensure effectiveness of the QMS | ✓ | | |
| | (b) | Control of the continual improvement process | ✓ | | |
| 21.07 | (a) | Communication of management about this standard to staff | ✓ | | |
| | (b) | The PCT Guidelines are in line with the Authority's QMS | ✓ | | |
| 21.08 | (a) | Management reviews take place | ✓ | | |
| | (b) | Quality objectives are reviewed | ✓ | | |
| | (c) | Communication of quality objectives throughout the Authority | ✓ | | |
| 21.09 | (a) | Performance of a yearly internal review of the QMS in/to | ✓ | | |

| Chapter 21 requirement | | | Extent of compliance | | |
|---|---|---|---|---|---|
| | | | full | part | no |
| | (b) | (i) determine the extent to which the QMS in based on Chapter 21 | ✓ | | |
| | | (ii) determine the extent to which S&E complies with PCT Guidelines | ✓ | | |
| | (c) | an objective and transparent way | ✓ | | |
| | (d) | using input incl. information according paragraph 21.17 | ✓ | | |
| | (e) | recording the results | ✓ | | |
| 21.10 | | Assurance to monitor and adapt to actual workload | | | |
| 21.11 | (a) | Infrastructure in place to ensure that a quantity of staff | ✓ | | |
| | | (i) sufficient to deal with the inflow of work | ✓ | | |
| | | (ii) which maintains tech. qualifications to S&E in all technical fields | ✓ | | |
| | | (iii) which maintains the language facilities to understand languages according to Rule 34 | ✓ | | |
| | (b) | Infrastructure to provide a quantity of skilled administrative staff | ✓ | | |
| | | (i) at a level to support the technically qualified staff | ✓ | | |
| | | (ii) for the documentation records | ✓ | | |
| 21.12 | (a) | (i) Ensuring appropriate equipment to carry out S&E | ✓ | | |
| | | (ii) Ensuring documentation accord. to Rule 34 | ✓ | | |
| | (b) | (i) Instructions to help staff understand and act accord. the quality criteria and standards | ✓ | | |
| | | (ii) Instructions to follow work procedures accurately and they are kept up-to-date. | ✓ | | |
| 21.13 | | (i) L&D program to ensure and maintain necessary skills in S&E | ✓ | | |
| | | (ii) L&D program to ensure awareness of staff to comply with the quality criteria and standards. | ✓ | | |
| 21.14 | (a) | System in place for monitoring resources required to deal with demand | ✓ | | |
| | (b) | System in place for monitoring resources required to comply with the quality standards in S&E | ✓ | | |
| 21.15 | (a) | Control mechanisms to ensure timely issue of S&E reports | ✓ | | |
| | (b) | Control mech. regarding fluctuations in demand and backlog | ✓ | | |
| 21.16 | (a) | Internal quality assurance system for self assessment | ✓ | | |

| Chapter 21 requirement | | | Extent of compliance | | |
|---|---|---|---|---|---|
| | | | full | part | no |
| | | (i) for compliance with S&E Guidelines | ✓ | | |
| | | (ii) for channelling feedback to staff | ✓ | | |
| | (b) | A system for measurement of data and reporting for continuous improvement | ✓ | | |
| | (c) | System for verifying the effectiveness of actions taken to correct deficient S&E work | ✓ | | |
| 21.17 | (a) | Contact person helping identify best practice between Authorities | | ✓ | |
| | (b) | Contact person fostering continual improvement | | ✓ | |
| | (c) | Contact person providing for effective comm. with other Authorities for feedback and evaluation | | ✓ | |
| 21.18 | (a) | (i) Appropriate system for handling complaints | ✓ | | |
| | | (ii) Appropriate system for taking preventive/corrective actions | ✓ | | |
| | | (i) Appropriate system for offering feedback to users | ✓ | | |
| | (b) | (i) A procedure for monitoring user satisfaction & perception | ✓ | | |
| | | (ii) A procedure for ensuring their legitimate needs and expectations are met | ✓ | | |
| | (c) | Clear and concise guidance on the S&E process for the user | ✓ | | |
| | (d) | Indication where and how the Authority makes its quality objectives publicly available | ✓ | | |
| 21.19 | | Established comm. with WIPO and desig. + elected offices | ✓ | | |
| 21.20 | | QMS of Authority clearly described (e.g. Quality Manual) | | | |
| 21.21 | (a) | Documents making up the Quality Manual have been prepared and distributed | ✓ | | |
| | (b) | Media available to support the Quality Manual | ✓ | | |
| | (c) | Document control measures are taken | ✓ | | |
| 21.22 | (a) | Quality policy of the Authority and commitment to QMS | ✓ | | |
| | (b) | Scope of QMS | ✓ | | |
| | (c) | Organizational structure and responsibilities | ✓ | | |
| | (d) | the documented processes are carried out in the Authority | ✓ | | |
| | (e) | Resources available to carry out processes | ✓ | | |
| | (f) | a description of the interaction between the processes and the procedures of the QMS. | ✓ | | |

| Chapter 21 requirement | | | Extent of compliance | | |
| --- | --- | --- | --- | --- | --- |
| | | | full | part | no |
| 21.23 | (a) | Records which documents are kept and where they are kept | ✓ | | |
| | (b) | Records of results of management review | ✓ | | |
| | (c) | Records about training, skills and experience of staff | | | ✓ |
| | (d) | Evidence of conformity of processes | ✓ | | |
| | (e) | Results of reviews of requirements relating to products | ✓ | | |
| | (f) | Records of the S&E process carried out on each application | ✓ | | |
| | (g) | Record of data allowing individual work to be tracked | ✓ | | |
| | (h) | Record of QMS audits | ✓ | | |
| | (i) | Records on actions taken re. non-conforming products | | | ✓ |
| | (j) | Records on actions taken re. corrective actions | | | ✓ |
| | (k) | Records on actions taken re. preventive actions | ✓ | | |
| | (l) | Records referring to search process documentation | | | ✓ |
| 21.24 | (a) | (i) Recording of the databases consulted during search | ✓ | | |
| | | (ii) Recording of keywords, combination of words and truncations during search | ✓ | | |
| | | (iii) Recording of the languages used during search | ✓ | | |
| | | (iv) Recording of classes and combinations thereof consulted during search | ✓ | | |
| | (b) | Records about other information relevant to the search | ✓ | | |
| | (c) | (i) Records about limitation of search and its justification | | | ✓ |
| | | (ii) Records about lack of clarity of the claims | | | ✓ |
| | | (iii) Records about lack of unity | | | ✓ |
| 21.25 | | Report on its own internal review processes | ✓ | | |
| 21.26-21.28 | | Additional information on further inputs to its internal reviews | ✓ | | |
| 21.29 | | Initial report called for by paragraph 21.19 | ✓ | | |

> *21.06 Indicate with reference to the organizational chart those bodies and mechanisms management uses to ensure:*
>
> *(a)     the effectiveness of the QMS;  and*
>
> *(b)     that the process of continual improvement progresses.*

The deputy commissioner, who heads the PCT Quality Committee, is responsible for convening and chairing meetings every year to review the tasks of each division. The director generals of

the four examination bureaus are responsible for suggesting projects and collecting and reporting on the opinions of examiners. Each of the six divisions aims to develop and work on its own project.

> 21.07  Indicate how management of the Authority communicates to its staff the importance of meeting treaty and regulatory requirements including:
>
> (a)     those of this standard;  and
>
> (b)     complying with the Authority's QMS.

As an effort to keep work manuals up-to-date, we translated Patent Cooperation Treaty (PCT), regulation under the PCT, administrative instructions and PCT examination guideline that were published by WIPO into Korean and distributed the translated version of PCT-related manuals to PCT examiners. Along with them, we published the Manual for PCT International Search Reports and International Preliminary Examination Reports, which presents detailed work processes, contains PCT regulations and rules, and offers guidelines for PCT examinations related to specific processes.

Because a director in each examination division is responsible for all ISRs and IPERs that are established by examiners in each division, the director identifies that ISRs and IPERs comply with the quality standard set out by PCT guideline. If deficiencies in ISRs or IPERs are found, they are ordered to be corrected by a director. And some necessary measures are taken to prevent those deficiencies from recurring. Also one PCT quality manager is designated in each examination division and manages to prevent any errors from recurring and to answer the questions that other examiners in that division ask.

> 21.08  Indicate how and when top management of the Authority or delegated officers:
>
> (a)     conducts management reviews and ensures the availability of appropriate resources;
>
> (b)     reviews quality objectives;  and
>
> (c)     ensures that the quality objectives are communicated and understood throughout the respective Authority.

To maintain the high quality of examinations, the Quality Management System (QMS) for PCT at KIPO has been established and maintained by many divisions. The system includes 30 examination divisions of our four examination bureaus, the International Application Division, the Examination Quality Assurance Officer, the International Cooperation Division, the Information Development Division and the Information Management Division, the Patent Examination Policy Division and the Patent Examination Support Division.

The 30 examination divisions conduct international searches and preliminary examinations and prepare the International Search Report (ISR) and the International Preliminary Examination Report (IPER). The drafted ISRs and IPERs are monitored under the responsibility of directors of examination divisions. The International Application Division is responsible for receiving international applications, sending ISRs or IPERs to applicants and International Bureau, distributing guidelines of PCT procedure for applicants, and promoting international applications for applicants. The Customer Support Division conducts customer satisfaction surveys on our examination procedure and takes action to eliminate the problems identified by customers.

The Examination Quality Assurance Officer has established the standards for the quality review of PCT examinations. The officer has performed a quality review of ISRs and IPERs sampled in the second half of 2005 to check whether examiners collectively observe the regulations and examination guidelines of the PCT. Since 2007, the quality review has been performed every six months.

The Information Development Division and the Information Management Division are responsible for maintaining IT system and collecting prior arts that are required to underpin search and examination. The Patent Examination Policy Division and the Patent Examination Support Division produce examination manuals and revise national PCT-related regulations. The two divisions are also responsible for a quality assurance of ISRs and IPERs by monitoring whether they are complied with PCT Guideline.

> 21.09   Indicate whether top management or delegated officers of the Authority perform an internal review of the QMS in accordance with paragraphs 21.25-21.28:
>
>    (a)      at least once per year (cf. paragraph 21.25);
>
>    (b)      in accordance with the minimum scope of such reviews as set out in Section 8, namely:
>
>        (i)       to determine the extent to which the QMS is based on Chapter 21 (cf. paragraphs 21.25, 21.27(a));
>
>        (ii)      to determine the extent to which Search and Examination work complies with PCT Guidelines (cf. paragraphs 21.25, 21.27(a));
>
>    (c)      in an objective and transparent way (cf. paragraph 21.25);
>
>    (d)      using input including information according to paragraphs 21.27 (b)-(f);
>
>    (e)      recording the results (cf. paragraph 21.28).

At the annual meeting of the PCT Quality Committee, which is chaired by the KIPO deputy Commissioner, an internal review is conducted to determine the extent to which we comply with the requirements of our QMS and the extent to which we comply with PCT/GL/ISPE.

As another activity for quality management (QM), we have held a weekly executive meeting, which has been chaired by commissioner and attended by all director generals. At this meeting, major activities regarding quality management are reported, and when a special issue on PCT quality management arises, the issue is discussed.

Since 2007, every six months the Examination Quality Assurance Officer has performed a quality review of ISRs and IPERs to check whether examiners collectively observe the regulations and examination guidelines of the PCT. Besides the quality review of the Examination Quality Assurance Officer, the Patent Examination Policy Division and the Patent Examination Support Division continuously monitor if search and examination activities meet the PCT guidelines. The Examination Policy Division and the Examination Support Division make and distribute checklists and FAQs that are related to establishing ISRs and IPERs.

## 2. Resources

21.10 *Explanatory note: The granting of ISEA status means that the Authority has demonstrated it has the infrastructure and resources to support the search and examination process. Chapter 21 calls for assurance that the Authority can continually support this process while accommodating changes in workload and meeting QMS requirements. The responses to Sections 21.11 to 21.14, below, should provide this assurance.*

21.11 *Human resources:*

    (a) *Provide information about the infrastructure in place to ensure that a quantity of staff:*

        (i) *sufficient to deal with the inflow of work;*

        (ii) *which maintains the technical qualifications to search and examine in the required technical fields; and*

        (iii) *which maintains the language facilities to understand at least those languages in which the minimum documentation referred to in Rule 34 is written or is translated*

    *is maintained and adapted to changes in workload.*

    (b) *Describe the infrastructure in place to ensure that a quantity of appropriately trained/skilled administrative staff is maintained and adapted to changes in workload:*

        (i) *at a level to support the technically qualified staff and facilitate the search and examination process;*

        (ii) *for the documentation of records.*

As of October 2010, the number of PCT examiners of KIPO is 543, and they are in charge of various tasks pertaining to international searches and international preliminary examinations, as well as examination tasks for domestic applications. The number of PCT examiners has been continually increased for the fast and accurate examinations.

To be a patent examiner, technical educational background is required. As of October 2010, 285 PCT examiners (52.5% of total PCT examiners) have PhD degrees in the technical field, and lots of them have field experience in research and development at private companies and research institutes.

Besides our efforts to recruit capable examiners, KIPO has intensified the continuing education of examiners in their respective fields of technology through specialized lectures and seminars. For instance, KIPO outsourced the education of examiners to universities or educational institutes to present tailored lectures and to encourage examiners to continually learn state-of-the-art knowledge in specialized fields of technology. Also patent examiners can obtain new technology knowledge by joining a voluntarily organized study group, as well as with experts being invited to give presentations on new technology at various seminars.

PCT examiners, who carry out international searches and preliminary examinations, have language skills enough to comprehend foreign PCT minimum documents and prepare ISRs and IPERs in English.

To improve the language skills of examiners and to help examiners with international searches and international preliminary examinations, KIPO has an in-house language program for English, Japanese, Chinese and Spanish. Examiners also take foreign language courses at various universities.

In addition, KIPO supports a translation of foreign patent documents by implementing the machine translator in the searching system. Currently, we provide a Japanese-Korean machine translation and plan to gradually implement Chinese-Korean and Russian-Korean machine translation systems from 2010.

The main role of the International Application Division is to provide administrative PCT procedures. The administrative staff consists of seven formality examiners and four assistants, who are responsible for tasks related to the international phase of PCT applications.

The formality examiners all constantly endeavor to improve their capacity by undertaking on-the-job training and participating in training programs offered by the International Intellectual Property Training Institute of KIPO.

*21.12  Material resources:*

> *(a)   Describe the infrastructure in place to ensure that*
>
> > *(i)    appropriate equipment and facilities such as IT hardware and software to support the search and examination process are provided and maintained;*
> >
> > *(ii)   at least the minimum documentation referred to in Rule 34 is available, accessible, properly arranged and maintained for search and examination purposes.  State whether it is on paper, in microform or stored on electronic media, and where.*
>
> *(b)   Describe how instructions*
>
> > *(i)    to help staff understand and adhere to the quality criteria and standards, and*
> >
> > *(ii)   to follow work procedures accurately and consistently*
>
> *are documented, provided to staff, kept up-to-date and adapted when necessary.*

To support the search and examination process, all staffs' personal computers are linked to examination system and the search system. Based on a gigabit Ethernet system, examiners can prepare ISA/IPEA reports on their personal computers.

We have developed our own PCT International Search and Preliminary Examination System, which is operating under the KIPOnet II (A computerized system to automate administrative procedures in KIPO). Through the system, all PCT related procedure from filing a PCT application to drafting and issuing ISR/IPERs is processed electrically.

PCT examination guidance is a system to support to write a PCT written opinion and an international search report, thereby improving the efficiency of examiner works and offering examiners convenience. The system automatically inputs the cited documents searched by using a search system, after setting up basic information and pages of an international search report, and supports to verify writing errors and to write how closely documents are related to each other. With this system, even all the information on patent family members inputting into a search system is automatically input, and some information, which can be used in a written opinion, among all used in writing an international search report, are automatically input in a written opinion. PCT examiners can minimize errors, which could possibly be caused in writing a written opinion and a search report, and reduce the amount of time spent in writing, by taking advantage of the PCT examiner guidance.

The KIPO Patent Search System (called 'KOMPASS'), which is developed by KIPO, enables patent examiners to conduct full text searches of patent documents from Korea, Japan, the USA and Europe. It also enables us to conduct reserved search requests, and to deliver the results to customers through after-hours batch work. Using 'non-patent literature unified meta searches' for electronic journals, including IEEE and Sciencedirect, this system can search multiple Internet

sites and show the results on the same screen. Furthermore, various commercial search services on the Internet, such as thomsoninnovation.com and stn.com, are available to patent examiners in KIPO.

Currently, KIPO has more specialized search systems such as the Business Model Search System, Biotech Search System. Our Biotech Search System enables us to manage and retrieve information on nucleic and amino acid sequences by using an internal sequence-listing database. With our Business Model Search System, we can promptly search Internet databases of business models and business methods, including those featured in gazettes, technology abstracts and electronic documents from Korea and the USA.

To provide the minimum documentation supporting S&E for PCT, we have documented the patent documents from 29 countries and organizations in the form of books, microfilm, CD-ROMs, and databases. Moreover, 536 kinds of non-patent literature, such as scientific journals, books, Web databases, and electronic journals, are provided. Our digital library has 32,000 volumes of relevant books that can be directly accessed. All these materials are available at any time to examiners

The Manual for PCT International Search Reports and International Preliminary Examination Reports, which presents detailed work processes, contains PCT regulations and rules, and offers guidelines for PCT examinations related to specific processes. In particular, the manual details the mistakes that examiners frequently tend to make in their reports. It also gives various examples from other international authorities and checklists that describe things to identify when establishing their reports. Also the manual is updated whenever PCT or regulation under the PCT is revised.

The PCT Formality Examination Manual, which is published by the International Application Division, contains images and charts to describe all the steps of substantive tasks to give examiners a better understanding of the examination process.

The inclusion of Korean as an official language of publication under the PCT became effective on January 1, 2009. In preparation for this, we revised the Patent Act and produced the following PCT forms in Korean: application forms, international search reports, written opinions, and requests for an international preliminary examination. We also updated our instructions and manuals for PCT examination and adjusted the rating of examinations for PCT applications prepared in Korean.

Other systems related to PCT examinations were updated to improve our work process and eliminate systemic defects, especially with respect to the filing of PCT application forms in Korean and dealing with changes in the PCT system.

To help examiners more efficiently prepare written opinions for PCT examinations, we produced a writing manual, which offers clear guidelines on how to write the "reasoned statements on patentability (Box V)". The manual has alleviated the burden of examiners with regard to writing opinions in English. We also compiled the most frequently used expressions in the written opinions and applied pattern expressions into the system so that examiners can conveniently refer to these expressions.

The commonly used patterns of expression are applied to the following types of reasoned statements: independent or dependent claims that are considered to involve novelty and inventive step; independent or dependent claims that are considered to lack novelty and inventive step; and claims that are considered to involve novelty but lack inventive step.

> *21.13  Training resources:*
>
> *Describe the training and development infrastructure and program which ensures that all staff involved in the search and examination process:*
>
> *(i)        acquire and maintain the necessary experience and skills;  and*
>
> *(ii)       are fully aware of the importance of complying with the quality criteria and standards.*

Recognizing the importance of maintaining a high quality of PCT examinations, we have intensified our training and development program for PCT examiners. The International Intellectual Property Training Institute offers the following PCT-related training courses: Training Course for New Examiners, which provides basic training for newly appointed examiners; PCT Basic Examination Course and PCT Advanced Examination Course for designated and potential PCT examiners.

The PCT Examination Course uses the Manual for PCT International Search Reports and International Preliminary Examination Reports to cover the following subjects: an outline of PCT applications, on-the-job training for preparing PCT international search reports, written opinions, and international preliminary examination reports.

In addition, KIPO holds a seminar for patent examiners, provided that examination procedures are revised. We also established an electronic bulletin board (called "Knowledge Management

System"), which not only enables PCT experts to answer questions related to PCT examinations but also keeps examiners informed of important changes in the PCT system.

KIPO has intensified the continuing education of examiners in their respective fields of technology through specialized lectures and seminars. For instance, KIPO outsourced the education of examiners to universities or educational institutes to present tailored lectures and to encourage examiners to continually learn state-of-the-art knowledge in specialized fields of technology. Also patent examiners can obtain new technology knowledge by joining a voluntarily organized study group, as well as with experts being invited to give presentations on new technology at various seminars.

To improve the language skills of examiners and to help examiners with international searches and international preliminary examinations, KIPO has an in-house language program for English, Japanese, Chinese and Spanish. Examiners also take language courses at various universities.

The formality examiners constantly endeavor to improve their capacity by undertaking on-the-job training and by participating in training programs offered by the International Intellectual Property Training Institute of KIPO.

> *21.14  Oversight over resources:*
>
> *Describe the system in place for continuously monitoring and identifying the resources required:*
>
> *(a)      to deal with demand;  and*
>
> *(b)      comply with the quality standards for search and examination*

To deal with demand and comply with quality standards for S&E, we continuously monitor and identify the resources required for S&E. Namely, the number of PCT applications that require international searches and preliminary examinations is investigated simultaneously at the International Application Division, the Patent Examination Policy Division and the Patent Examination Support Division. The Information Development Division and the Information Management Division monitor equipments and facilities to support S&E. When discussion or cooperation between the related divisions is required to take a measure, appropriate solution is taken at meeting of the PCT Quality Committee or the weekly executive meeting chaired by the Commissioner.

### 3.  Management of administrative workload

> 21.15  *Indicate how the following practices and procedures for handling search and examination requests and performing related functions such as data-entry and classification are implemented:*
>
> (a)  *Effective control mechanisms regarding timely issue of search and examination reports to a quality standard as set by the respective Authority;  and*
>
> (b)  *Appropriate control mechanisms regarding fluctuations in demand and backlog management.*

KIPO has increased the motivation of examiners, who submit reports on time, by connecting the observance of deadlines to the work performance of each examiner. To make the process clearer, the International Application Division, which is in charge of dispatching ISRs and IPERs to WIPO and individual applicants, manages due dates for the preparation of such reports and informs examiners of missing reports. Moreover, the patent examination bureaus themselves notify the examiners of the due date ahead of particular deadlines.

Fluctuations in demand and backlog are monitored and when the number of PCT applications increases, more examiners are designated as PCT examiners to cope with the demand. And a director in each examination division adjusts to distribute all work evenly to each examiner in that division.

### 4.  Quality assurance

> 21.16  *The following are required quality assurance measures for timely issue of search and examination reports of a quality standard in accordance with the Guidelines. Indicate how the following are implemented:*
>
> (a)  *An internal quality assurance system for self assessment, involving verification, validation and monitoring of searches and examination work:*
>
> (i)      *for compliance with these Search and Examination Guidelines;*
>
> (ii)     *for channelling feedback to staff.*
>
> (b)  *A system of measurement and collection of data and reporting. Show how the Authority uses the system to ensure the continuous improvement of the established processes.*
>
> (c)  *A system for verifying the effectiveness of actions taken to correct deficient S&E work, eliminate the causes, and to prevent issues from recurring.*

Recognizing the importance of QM, KIPO has put more priority on the high quality of ISRs and IPERs. The performance of QMS is measured and analyzed at the meeting of the PCT Quality Committee or the executive meeting chaired by the Commissioner. At the annual meeting of the PCT Quality Committee, which is chaired by the KIPO deputy Commissioner, the committee members discuss and establish substantial and effective plans to improve the quality of PCT examinations.

Before issuing an ISR or IPER, the drafted ISR or IPER is reported to a director of each examination division to ensure that our searches and examinations comply with the guidelines. After issuing an ISR or IPER, a quality control is conducted by extracting a sample of the issued ISRs or IPERs, and the sample is checked against the established standards by the Examination Quality Assurance Officer. Because a director in each examination division is responsible for all ISRs and IPERs that are established by examiners in the division, the director identifies that ISRs and IPERs comply with the quality standard set out by PCT guideline. If deficiencies in ISRs or IPERs are found, they are ordered to be corrected by a director. And some necessary measures are taken to prevent those deficiencies from recurring. Also one PCT quality manager is designated in each examination division and manages to prevent any errors from recurring and to answer the questions that other examiners in that division ask. At present, we have 6 English consultants who are responsible for editing and correcting the PCT examination reports of our examiners.

The Examination Quality Assurance Officer has established the standards for the quality review of PCT examinations and has performed a quality review of ISRs and IPERs sampled in the second half of 2005 to check whether examiners collectively observe the regulations and examination guidelines of the PCT. Since 2007, every six months the Examination Quality Assurance Officer has performed a quality review of ISRs and IPERs and given a training to examiners to solve recurring problems.

Besides the quality review of the Examination Quality Assurance Officer, the Patent Examination Policy Division and the Patent Examination Support Division continuously monitor if search and examination activities meet the PCT guidelines and decide necessary follow-up measures, such as revising and reforming relevant regulations, and changing policy. The Examination Policy Division and the Examination Support Division make and distribute checklists and FAQs that are related to establishing ISRs and IPERs.

## 5. Communication

*21.17  Inter-Authority communication:*

> *Provide the name, job title and contact details of the Authorities designated quality contact person who will take responsibility for:*
>
> *(a)     helping  identify and disseminate best practice among Authorities;*
>
> *(b)     fostering continual improvement;  and*
>
> *(c)     providing for effective communication with other Authorities to allow for prompt feedback from them so that potential systemic issues can be evaluated and addressed.*

To prevent recurring deficiencies of reports of our PCT examinations, we use a feed back system where every PCT examination report should be reported to the division director before issuing the report. If deficiencies in ISR or IPER are found, they are ordered to be corrected by a director. After issuance of the report, the Examination Review Team performs a quality review of ISRs and IPERs sampled in every six months and analyzes the results of reviews. The results include patterns and the error rate of deficiencies found on the sampled reports. The review results are informed to each examination bureau to help examination bureaus identify the errors and implement corrective action.

Since 2007, the Examination Quality Assurance Officer has published an annual casebook on the results of examination reviews and uses the casebook as an educational material for examiners. The annual casebook could help examiners to prevent the same faults from recurring and remove the causes of the faults.

The International Application Division exchanges e-mail regarding formality examination of PCT international applications with WIPO and each national patent office and promptly replies to each office's request.

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21.18   Communication and guidance to users:

Describe the system in place for monitoring and using customer feedback including at least the following elements:

(a)     An appropriate system for

(i)      handling complaints and making corrections;

(ii)     taking corrective and/or preventative action where appropriate;  and

(iii)    offering feedback to users.

(b)     A procedure for:

(i)      monitoring user satisfaction and perception;  and

(ii)     for ensuring their legitimate needs and expectations are met.

(c)     Clear, concise and comprehensive guidance and information to users (particularly unrepresented applicants) on the search and examination process, giving details of where it is to be found e.g. link to Authority's web site, guidance literature.

(d)     An indication of where and how the Authority makes its quality objectives publicly available for the users.

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All examiners in KIPO must write their name and contact details on their reports so that applicants can contact them directly and easily. Even applicants may ask for an interview with patent examiners to discuss the concerned matters. Specialized PCT counselors working at a Call Center, run by KIPO, deal promptly with enquires made by applicants.

The International Application Division has published the PCT International Application Guide to introduce PCT system. The guidebook provides a better understanding of the procedures related to international searches and preliminary examinations. KIPO provide applicants with useful information, including announcement and change of PCT system, PCT regulations, over KIPO's website. All these materials are provided in Korean so that applicants easily understand the PCT system. In addition, we try to directly give applicants explanation on PCT filing procedures by holding PCT seminars, as well as by publishing "PCT Newsletter" on a monthly basis. KIPO conducts a survey to measure user satisfaction and perception twice a year.

The International Application Division meets with counselors working at the Call Center and accepts applicants' complaints by listening to the opinion of specialized PCT counselors of the center. In addition, the division offers appropriate guidance to specialized PCT counselors by enabling them to communicate with the examiners. Last but not least, the International Application Division holds a seminar with the Information Development Division and a system operator on a quarterly basis in order to advance a PCT data processing system, as well as listens to complaints from representatives for PCT international applications and then collects their opinions by holding a seminar twice a year.

Whenever the International Application Division receives an error notice from users, it requests the corresponding division, which issued the notice, to correct the error. The responsible division then resends the corrected documents to the applicants or relevant agencies.

KIPO endeavors to meet the needs and expectations of users by the following means: conducting a patent customer satisfaction survey; visiting various companies and offices to find out the problems that need to be addressed in patent administration; collecting innovative ideas and suggestions for improving our procedures; and meeting with other departments, such as the Call Center, to determine which regulations or systems need to be revised.

> *21.19   Communication with WIPO and designated and elected Offices:*
>
> *Describe how the Authority provides for effective communication with WIPO and designated and elected offices.  In particular describe how the Authority ensures that WIPO feedback is promptly evaluated and addressed*

The International Application Division exchanges e-mail regarding formality examination of PCT international applications with WIPO and each national patent office and promptly replies to each office's request.

## 6.  Documentation

21.20  *Explanatory note:  The QMS of the Authority needs to be clearly described and implemented so that all processes in the Authority and the resulting products and services can be monitored, controlled, and checked for conformity.  This is done in the documents that make up the Quality Manual of the Authority (see paragraph 21.21).*

*(Note: This point is informative.  No response is required by the template to paragraph 21.20)*

21.21  *The documents that make up the Quality Manual serve to document the procedures and processes affecting the quality of work, such as classification, search, examination and related administrative work.  In particular, the Quality Manual indicates where to find instructions on the procedures to be followed.*

*For the purposes of this report indicate:*

*(a)      the documents making up a Quality Manual that have been prepared and distributed;*

*(b)      the media on which it is supported (e.g. Internal Publication, Internet, Intranet); and*

*(c)      document control measures taken e.g. version numbering, access to latest version.*

Patent Cooperation Treaty (PCT), regulation under the PCT, administrative instructions and PCT examination guideline that are published by WIPO were translated into Korean, and KIPO distributed the translated version of PCT-related manuals to PCT examiners. Along with them, the Manual for PCT International Search Reports and International Preliminary Examination Reports was published, the presents detailed work processes, contains PCT regulations and rules, and offers guidelines for PCT examinations related to specific processes.

The PCT formality examination manual is a guideline to improve the quality of formality examination, to pursue consistent examination and to give training to newly employed examiners. The PCT International Application Guidebook provides a better understanding of the procedures related to international searches and preliminary examinations.

The Examination Quality Assurance Officer has published an annual casebook on the results of examination reviews and uses the casebook as an educational material for examiners and the PCT ISR/IPER Review Guidelines for implementing the procedures and for the evidence of conformity of processes.

The Examination Policy Division and the Examination Support Division make and distribute checklists and FAQs that are related to establishing ISRs and IPERs.

KIPO assigns document numbers to all published documents and make all staffs get access to all files published over KIPO internet called KOASIS.

*21.22   Indicate whether the documents making up the Quality Manual include the following:*

*(a)      the quality policy of the Authority including a clear statement of commitment to the QMS from top management;*

*(b)      the scope of the QMS, including details of and justification for any exclusions;*

*(c)      the organizational structure of the Authority and the responsibilities of each of its departments;*

*(d)      the documented processes carried out in the Authority such as receipt of incoming applications, classification, distribution, search, examination, publication and support processes, and procedures established for the QMS, or references to them;*

*(e)      the resources available for carrying out the processes and implementing the procedures;  and*

*(f)      a description of the interaction between the processes and the procedures of the QMS.*

The Examination Quality Assurance Office makes a plan to control examination quality annually, based on a quality policy of the chief manager, and the plan includes the scope of QMS, the organizational structure of the Authority and the responsibilities of each division.

PCT international search·preliminary examination manual, manual of formality examination of PCT designated office, PCT international application guidance and manual of PCT examination guidance describe a process to handle PCT international applications, such as a process to receive domestic applications, classification, division, search, examination, publication and support procedures, all of which are executed by international Authority, an established procedure for QMS, references, as well as available resources needed to follow any established procedures and to prosecute any processes. The standards for the quality review of PCT examination and the annual case book on the results of PCT examination review describe the interaction between QMS processes and procedures.

*21.23  Indicate which types of records the Authority maintains, such as:*

*(a)      a definition of which documents are kept and where they are kept;*

*(b)      results of management review;*

*(c)      training, skills and experience of personnel;*

*(d)      evidence of conformity of processes, resulting products and services in terms of quality standards;*

*(e)      results of reviews of requirements relating to products;*

*(f)      the search and examination processes carried out on each application;*

*(g)      data allowing individual work to be tracked and traced;*

*(h)      records of QMS audits;*

*(i)      actions taken re. non-conforming products, e.g. examples of corrections;*

*(j)      actions taken re. corrective action;*

*(k)      actions taken re. preventative action;  and*

*(l)      search process documentation as set out in Section 7.*

In order to improve the quality of examination, several divisions of KIPO publish and manage a variety of documents, and as for published papers, they are published over the intranet called KOASIS, thereby making all staffs get an access to them.

A paper on quality review and the standards for the quality review of PCT examination, which are published and managed by an official in charge of examination quality, disclose (b) results of review of management, (d) an evidence of any processes being followed and end products and service in accordance with quality standard, (h) records of QMS test, (k) reactions to any preventive actions. In addition, an official in charge of examination quality publishes a collection of cases on examination assessment (f) recording examination processes and search for each patent application by (g) tracking each examiner's works (e) reviewing requirements related to end products.

Patent Examination Support Division publishes and manages PCT international search·preliminary examination manual; International Application Division publishes and manages a manual on formality examination carried out by PCT designated offices, guidance on PCT international application, a collection of complaint counseling cases related to international applications; Information Development Division publishes and manages manual of PCT examination guidance. KIPO homepage(www.pct.go.kr) describes PCT systems or general processes.

## 7. Search process documentation

<table>
<tr><td colspan="3">

*21.24  For internal purposes the Authority should document its search process.*

*The Authority should indicate*

*(a)      which of the following are included in this record:*

    *(i)       the databases consulted (patent and non patent literature);*

    *(ii)      the keywords, combinations of words and truncations used;*

    *(iii)     the language(s) in which the search was carried out;*

    *(iv)     the classes and class combinations searched, at least according to the IPC or equivalent;*

    *(v)      a listing of all search statements used in the databases consulted.*

*(b)      which other information relevant to the search itself is included in this record e.g. a statement of the subject of search;  details of special relevance to internet searching;  a record of documents viewed;  on-line thesaurus, synonym or concept databases, etc.*

*(Explanatory note:  The IA is requested to list other information it may collect to monitor and improve the search process)*

*(c)      which special cases are documented and whether records are kept denoting any:*

    *(i)       limitation of search and its justification*

    *(ii)      lack of clarity of the claims;  and*

    *(iii)     lack of unity.*

</td></tr>
</table>

Korean Multifunctional Patent Search System (KOMPASS) provides Patent Database (DB) of fifteen countries, including five IP offices, non-patent DB related to National Digital Science Links (NDSL) serviced by Korea Institute of Science and Technology Information (KISTI) and search services for DB of an examiner's notice of submission of opinion and a trial examiner's decision. In addition, KOMPASS enables Korean, Japanese and English patent documents to be retrieved and provides Japanese-Korean/English-Korean mechanical translation services. With the system, the search of classification codes of IPC, FI F-Term, US Class and ECLA is possible as well. As search query languages, "AND", "OR", "NOT", and operators such as Boolean search, proximity search, and backward truncation are used, a user can store used search expressions selectively and use them in writing an examination report.

KOMPASS supports "search by item category" of numbers, dates, and other items, and "free search" based on keywords. KOMPASS provides 28 non-patent documents, including Kirk Othmer, CCD, CA on CD, ThomsonInnovation, and search services for bioengineering DB, such as DDBJ, EMBL and NCBI, through links, as well as NDSL. On top of that, the system supports search by setting up thesaurus DB created based on 560,000 key words for 1,800,000 related words.

## 8.  Internal review

*21.25  Explanatory note:  The Authority should report on its own internal review arrangements. These reviews determine the extent to which it has established a QMS based on the model of Chapter 21 and the extent to which it is complying with the QMS requirements and the Search and Examination Guidelines. The reviews should be objective and transparent to demonstrate whether or not those requirements and guidelines are being applied consistently and effectively and should be undertaken at least once a year.  With reference to point 21.08 of this template, the Authority may provide additional information on its internal review arrangements under this section if it so wishes.*

*21.26-21.28   These arrangements are reported according to this template in Section 1, above, at points 21.04 - 21.09.  The Authority may provide additional information on further inputs to its internal reviews under this section, if it so wishes*

At the annual meeting of the PCT Quality Committee, which is chaired by the KIPO deputy Commissioner, an internal review is conducted to determine the extent to which we comply with the requirements of our QMS and the extent to which we comply with PCT/GL/ISPE.

In addition, through the biannual quality review done by the Examination Quality Assurance Officer and the weekly executive meeting, we examine if we consistently and effectively meet the requirements of the QMS and PCT/GL/ISPE.

## 9.  Arrangements for Authorities to Report to the MIA

*21.29   There are two stages in the reporting arrangements.  The document up to this point relates to the initial report called for by paragraph 21.29.  It will be supplemented annually by further reports in accordance with paragraph 21.30.*

[End of document]