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.*

The 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 this, we have organized various activities under the following four initiatives: customer-oriented management; Six Sigma management; knowledge management; and performance-based management. Customer-oriented management focuses on improving customer service by listening to our customers. To keep our customers satisfied, we have checked our patent examination process and redesigned our work process.

Six Sigma management is a method of improving our work process so that we can eliminate deficiencies and effectively handle customer complaints with respect to filing applications and conducting examinations.

Knowledge management is a means of sharing knowledge to expand the capability of our staff and improve the efficiency of patent examinations.

Performance-based management focuses on improving the quality of patent examinations by evaluating teams and individual employees on examination quality-related indicators such as the examination error rate and observance rate of deadline for examination reports.

As a PCT/ISA/IPEA, we established a PCT Quality Committee to develop appropriate activities for the successful management of PCT examinations in 2004, and have made annual plans to improve the quality of those activities since then.

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

Along with the shift in our patent policy, we also introduced a three-track examination system which enables applicants to choose the examination track that best suits their patent strategy. Applicants can now choose from an accelerated, regular, or customer-deferred examination.

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

Another initiative is the EXCEL Plan (Examination and Trial Excellence Plan) which 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 organizational chart showing all those bodies and individuals responsible for the QMS*

The Quality Management System for PCT is controlled by the PCT Quality Committee. The ad-hoc committee consists of the deputy commissioner of KIPO, the directors general of four patent examination bureaus, and six directors from the following ad-hoc QM divisions: the PCT Policy QM division (comprised of the Patent Examination Policy Division and the Patent Examination Cooperation Division); the Quality Assurance QM Division (consisting of the Examination Quality Assurance Office); the IT Resources QM Division (consisting of the Information Development Division and the Information Management Division); the Administration and Communication Channel QM Division (consisting of the International Application Division); the International Feedback QM Division (consisting of the Multilateral Affairs Division); and the Human Resources QM Division (consisting of the Human Resource Development Division and the Patent Examination Policy Division). The director of the PCT Policy QM Division oversees 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 an 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 website and fosters effective communication with other intellectual property offices; and The Human Resources QM Division establishes the human resources infrastructure for PCT examinations and PCT quality management.

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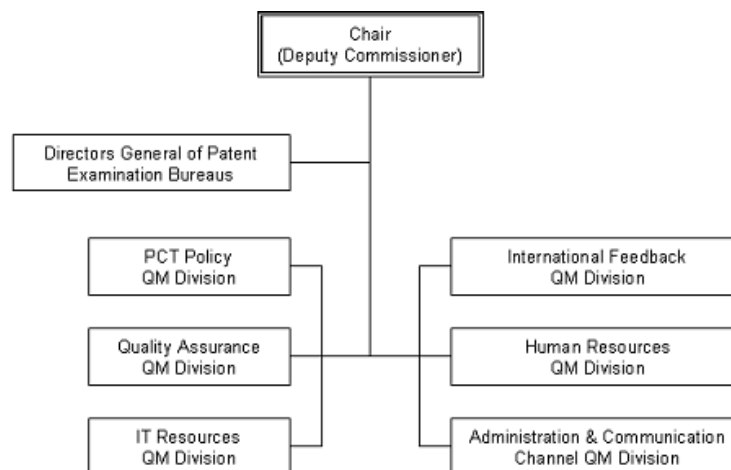
*21.05 Indicate (e.g. by means of a table) the extent of compatibility between the Authority's QMS and the requirements of Chapter 21 of these International Search and Preliminary Examination Guidelines. Alternatively, indicate where the Authority is not yet compliant with these requirements.).*

[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 | ✓ | | |
| | (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 | ✓ | | |

| Chapter 21 requirement | | | Extent of compliance | | |
|---|---|---|---|---|---|
| | | | full | part | no |
| | | (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 | ✓ | | |
| | | (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 annual meetings to review the tasks of each division. The directors general of the four examination bureaus are responsible for suggesting projects and collecting and reporting on the opinions of the examiners. Each of the six divisions also develop and work on their own projects.

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> *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.*

In an effort to keep work manuals up-to-date, we translated PCT-related manuals published by WIPO into Korean including the Patent Cooperation Treaty (PCT), regulations under the PCT, administrative instructions, and PCT examination guidelines and distributed them to our PCT examiners. Along with those, we published the Manual for PCT International Search Reports and International Preliminary Examination Reports which present detailed work processes, PCT regulations and rules, and guidelines for PCT examinations related to specific processes.

In each examination division, the director oversees all ISRs and IPERs established by the examiners and confirms whether the ISRs and IPERs comply with the quality standards set by the PCT guidelines. If deficiencies in the ISRs or IPERs are found, they are ordered to be corrected by the director. Necessary measures are also taken to prevent those deficiencies from recurring. Each examination division also designates a PCT quality manager who works to prevent the recurrence of errors and responds to inquiries from the examiners.

> *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 high quality examinations, we have established and maintained the PCT Quality Management System (QMS) in 31 divisions under our four examination bureaus (the Machinery, Metals, and Construction Examination Bureau, the Chemistry and Biotechnology Examination Bureau, the Electric and Electronic Examination Bureau, the Information and Communications Examination Bureau) including the International Application Division, the Examination Quality Assurance Office, the Multilateral Affairs Division, the Information Development Division, the Information Management Division, the Patent Examination Policy Division, and the Patent Examination Cooperation Division.

The 31 examination divisions are responsible for conducting international searches and preliminary examinations. Beyond those divisions, the PCT International Search and Preliminary Examination Division has been newly created exclusively for international searches and preliminary examinations under the Chemistry and Biotechnology Examination Bureau.

The International Application Division is responsible for receiving international applications, sending ISRs or IPERs to applicants and the International Bureau, distributing PCT procedural guidelines to 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 Office establishes the standards for the quality review of PCT examinations. The office performed a quality review of a sample of ISRs and IPERs from the second half of 2005 to check whether examiners collectively observe the regulations, administrative instructions, WIPO standards, 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 the IT system and collecting prior arts that underpin search and examination.

The Patent Examination Policy Division and the Patent Examination Cooperation Division are in charge of producing examination manuals and revising national PCT-related regulations. The two divisions are also responsible for quality assurance of ISRs and IPERs by monitoring their compliance with the PCT International Search and Preliminary Examination Guideline.

<table>
<tr><td>

*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).*

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

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

To further monitor our quality management (QM), we hold a weekly executive meeting chaired by the commissioner and attended by all directors general to discuss major activities and special issues regarding PCT quality management.

In addition, through quarterly meetings of the Patent Examination Policy Division, the Patent Examination Cooperation Division, the director of examination quality, and various PCT examiners, we continuously strive to improve the efficiency of PCT examination works, discuss outcomes for all controversial issues regarding the establishment of ISR/IPERs, and generate subsequent results for the examination standard.

Beyond the quality review by the Examination Quality Assurance Office, the Patent Examination Policy Division and the Patent Examination Cooperation Division continuously check if search and examination activities meet the PCT guidelines. The Examination Policy Division and the Examination Cooperation Division make and distribute checklists and FAQs 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 November 2012, there are 708 PCT examiners at KIPO who are in charge of various tasks pertaining to international searches and international preliminary examinations, as well as examination tasks for domestic applications. We have been increasing our employment of PCT examiners with outstanding capacity and expertise to help promote fast and accurate examinations.

Expertise in natural sciences and engineering is required for all patent examiners.

To further develop the expertise of our examiners, we provide continuing education through specialized lectures and seminars. For example, we offer customized lectures at universities or other educational institutes where our examiners can continuously learn about state-of-the-art technology in their fields of expertise. We also encourage our patent examiners to stay up to date with new technology through voluntarily organized study groups and expert presentations at numerous seminars.

PCT examiners carrying out international searches and preliminary examinations must possess the necessary language skills to comprehend foreign PCT minimum documents and prepare ISRs and IPERs in English.

In an effort to improve the language skills of examiners for international searches and international preliminary examinations, we have an in-house language program for English, Japanese, Chinese, and Spanish. Examiners can also take foreign language courses at various universities.

In addition, KIPO currently provides both Japanese-Korean and English-Korean machine translations of foreign patent documents.

The International Application Division is responsible for providing administrative PCT procedures for tasks related to the international phase of PCT applications. The administrative staff consists of eight formality examiners and three assistants.

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 Human 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 where necessary.*

To support the search and examination process, we have developed our own PCT International Search and Preliminary Examination System operating under KIPO's 3rd generation office automation system, KIPOnet III. Our system allows all PCT-related procedures from filing an application to drafting and issuing ISR/IPERs to be processed electronically. Furthermore, all staff members' personal computers are linked to the search and examination systems (based on a gigabit Ethernet system) so they may prepare ISA/IPEA reports on their personal computers.

In an effort to improve the efficiency of our examiners and offer more convenience, we provide support through our PCT examination guidance system for PCT written opinions and international search reports. After entering the basic information and pages of an international search report, the system automatically inputs the cited documents, verifies writing errors, and determines how closely related the documents are to each other. The system also automatically inputs information on patent family members into search reports as well as information into written opinions. By taking advantage of the PCT examiner guidance system, PCT examiners can minimize errors in writing opinions and search reports while reducing the amount of time spent writing them.

'KOMPASS', KIPO's Patent Search System, enables patent examiners to conduct full text searches of patent documents from Korea, Japan, China, the US, and Europe. It also enables them 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 simultaneously and show the results on the same screen. Furthermore, various commercial search services on the Internet, such as ~~thomsoninnovation.com~~ Science Direct and STN, are available to patent examiners at KIPO.

The Biotech Search System enables examiners to manage and retrieve information on nucleic and amino acid sequences using an internal sequence-listing database.

To provide the minimum documentation supporting search and examination purposes, we supply our examiners with the patent documents of 29 countries and organizations in the form of books, microfilm, CD-ROMs, and databases as well as 546 kinds of patent-related literature including scientific journals, books, Web databases, and electronic journals. We also offer direct access to our digital library with 33,000 volumes of relevant books. All of these materials are available at any time to examiners.

The Manual for PCT International Search Reports and International Preliminary Examination Reports assists our examiners in keeping up with quality standards, guidelines, and work processes. Within the manual, examiners can find detailed work processes, PCT regulations and rules, and guidelines for PCT examinations related to specific processes. In particular, the manual highlights typical mistakes frequently made by examiners in their reports. It also includes examples from other international authorities as well

as checklists of items to identify when establishing their reports. The manual is updated whenever the PCT or a regulation is revised.

The PCT Formality Examination Manual, published by the International Application Division, contains images and charts describing substantive tasks to help examiners better understand the examination process.

The inclusion of Korean as an official PCT language became effective on January 1, 2009. In preparation of 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 "reasoned statements on patentability (Box V)." The manual has helped alleviate the burden of writing opinions in English. We also compiled a list of the most frequently used expressions and patterns of expression to further increase the convenience of examiners.

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.

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*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.*

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Recognizing the importance of maintaining high quality PCT examinations, we have intensified our training and development program for PCT examiners. The International Intellectual Property Training Institute offers a training course for new examiners, which provides basic training for newly appointed examiners, as well as basic and advanced examination courses for both 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: PCT applications, PCT international search reports, written opinions, and international preliminary examination reports.

In addition, we hold seminars for patent examiners to introduce the latest revisions to examination procedures. We also established the 'Knowledge Management System', an electronic bulletin board which enables PCT experts to answer questions related to PCT examinations and keeps examiners informed of important changes in the PCT system.

We have intensified the continuing education of examiners through specialized lectures and seminars. For example, we offer customized lectures at universities or educational institutes where examiners can continuously learn state-of-the-art technology in their specialized fields of expertise. We also encourage our patent examiners to stay up to date with new technology knowledge through voluntarily organized study groups and participation at numerous seminars.

To improve the language skills of examiners for international searches and international preliminary examinations, we have an in-house language program for English, Japanese, Chinese, and Spanish. Examiners can 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.

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*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.*

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To deal with demand and comply with quality standards for S&E, we simultaneously investigate the number of PCT applications that require international searches and preliminary examinations at the International Application Division, the Patent Examination Policy Division, and the Patent Examination Cooperation Division. The Information Development Division and the Information Management Division monitor equipment and facilities to support S&E. In the need of a discussion or cooperation between the related divisions, an appropriate solution is formulated at the 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.*

We have aimed to increase the motivation of examiners by connecting their work performance with their observance of deadlines. To help with this, the patent examination bureaus often notify the examiners of any patent filings with upcoming or overdue deadlines.

When fluctuations in demand and backlog occur and the number of PCT applications increases, more examiners are designated as PCT examiners to cope with the demand. The director of each examination division makes the necessary adjustments to distribute all work evenly among the examiners, and may designate certain examiners for only ISR/IPER work, if needed. In this case, the examiners do not have to examine domestic applications.

In June 2011, we created a new division exclusively for ISR/IPER-related works to deal with PCT work more effectively and will examine whether to create another similar 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 channeling 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 prioritized the high quality of ISRs and IPERs. The performance of QMS is measured and analyzed at the weekly meeting of the PCT Quality Committee or the weekly executive meeting chaired by the commissioner. At the meeting of the PCT Quality Committee, chaired by the deputy commissioner of KIPO, the committee members discuss and establish substantial plans to improve the quality of PCT examinations.

Before issuing an ISR/IPER, the drafted ISR/IPER is reported to a <u>part leader</u> and the director of each examination division to ensure that our searches and examinations comply with the guidelines. After issuing an ISR/IPER, a sample of the issued ISR/IPER <u>is extracted</u> and checked against the established standards by the Examination Quality Assurance Office <u>for quality control</u>. <u>Since</u> the director <u>of</u> each examination division is responsible for all ISR/IPERs established by <u>the</u> examiners, the director <u>confirms that</u> the ISR/IPERs comply with the quality standard set out by PCT guideline. If deficiencies in the ISR/IPERs are found, they are ordered to be corrected by <u>the</u> director and necessary measures are taken to prevent those deficiencies from recurring. <u>Each examination division also designates a</u> PCT quality manager <u>who works to prevent the recurrence of errors and responds to inquiries from the examiners</u>. At present, we have 6 English consultants who are responsible for editing and correcting the PCT examination reports of our examiners.

<u>The Examination Quality Assurance Office establishes the standards for the quality review of PCT examinations. The office performed a quality review of a sample of ISRs and IPERs from the second half of 2005 to check whether examiners collectively observe the regulations, administrative instructions, WIPO standards, and examination guidelines of the PCT. Since 2007, the Examination Quality Assurance Office has performed a quality review every six months and provided training for examiners to help solve recurring problems</u>.

Besides the quality review <u>by</u> the Examination Quality Assurance <u>Office</u>, the Patent Examination Policy Division and the Patent Examination Cooperation Division continuously <u>check</u> if search and examination activities meet the PCT guidelines and decide necessary follow-up measures, such as revising and reforming relevant regulations, and changing policies. The Examination Policy Division and the Examination Cooperation Division make and distribute checklists and FAQs 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 <u>in the</u> reports of our PCT examinations, we use a feedback system where <u>all</u> reports <u>are inspected by</u> the division director and a primary examiner <u>prior to</u> issuing the report.

If deficiencies in the report are found, they are ordered to be corrected by the director. The Examination Quality Assurance Office performs a quality review of ISR/IPERs sampled every six months. The results are analyzed in terms of the patterns and error rates of deficiencies in the sample reports which are then sent to each examination bureau to help implement corrective action.

Based on the quality reviews, the Examination Quality Assurance Office holds a biannual seminar to provide constructive feedback on the types of deficiencies frequently found for examiners.

Since 2007, the Examination Quality Assurance Office has published an annual casebook containing the results of quality reviews as educational material for examiners. The casebook aims to help prevent the recurring deficiencies by identifying their causes.

The International Application Division regularly communicates with WIPO and other national patent offices regarding formality examinations of PCT international applications and promptly replies to their requests.

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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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We are currently taking a number of steps to provide open communication and guidance for our applicants. For examinations, applicants are provided with the name and contact details of their examiner so they may contact him/her directly over matters of concern or to request an interview. Applicants with inquiries can also speak with a specialized PCT counselor working at our Call Center run by KIPO.

We also provide information on the PCT through different channels so our applicants can be well-informed of the procedures as well as any announcements or changes. The PCT International Application

Guide, published by the International Application Division, introduces the PCT system and provides a better understanding of the procedures related to international searches and preliminary examinations. We provide applicants with useful information including announcements and changes of the PCT system and PCT regulations through KIPO's website. All materials are provided in Korean so that applicants can easily understand the information. In addition, we hold seminars on PCT filing procedures for applicants and publish the "PCT Newsletter" on a monthly basis. We also conduct a survey to measure user satisfaction and perception twice a year.

The International Application Division also handles applicants' complaints based on the opinions of specialized PCT counselors of our Call Center. In addition, the division offers support and guidance for the counselors by enabling communication with the examiners. Finally, the International Application Division holds quarterly seminars with the Information Development Division and a system operator to advance the PCT data processing system and address complaints regarding PCT international applications and then collects their opinions by holding a seminar twice a year.

When the International Application Division receives an error notice from an applicant, it sends a request to the corresponding division to correct the error. The responsible division then resends the corrected documents to the applicant or relevant agency.

We are constantly endeavoring to meet the needs and expectations of our applicants by conducting patent customer satisfaction surveys; visiting various companies and offices to determine the most urgent problems; collecting suggestions to improve 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 regularly communicates with WIPO and other national patent offices regarding formality examinations of PCT international applications and promptly replies to their requests.

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## 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.*

We translated all PCT-related materials published by WIPO into Korean including the Patent Cooperation Treaty, regulations, administrative instructions, and examination guidelines and distributed them to our PCT examiners. Along with those, we published our Manual for PCT International Search Reports and International Preliminary Examination Reports which presents detailed work processes, regulations and rules, and guidelines for examinations related to specific PCT processes.

Our PCT formality examination manual aims to improve the quality and consistency of formality examinations and help train new examiners. Our PCT International Application Guidebook provides a better understanding of the procedures related to international searches and preliminary examinations.

The Examination Quality Assurance Office publishes a casebook on the results of quality reviews biannually as educational material for examiners. To further enhance the quality of examinations and assist examiners in establishing PCT reports, the Office has published the "Check point book to upgrade the quality of PCT application examination" analyzing the most common types of deficiencies from the past 5 years. PCT ISR/IPER Review Guidelines have also been published by the Office to implement procedures and encourage conformity of processes.

In May 2012, the PCT International Search and Preliminary Examination Division published a 'Correction of obvious errors based on PCT Rule 91' to help prevent problems that can occur when deciding to allow the correction of obvious mistakes in the process of filing a PCT application.

Based on administrative instructions designated for enforcement by July 2012, the International Application Division published the PCT Administrative Instructions in Korean in June 2012.

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

We assign document numbers to all published documents and provide all staff with access to all files published over the KIPO intranet called KOASIS.

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*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.*

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

The 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 the process to handle PCT international applications, such as receiving 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 casebook 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 distributed through the KOASIS intranet which is accessible by all staff.

The quality review and standards for the quality review of PCT examinations are published and managed by the Examination Quality Assurance Office. The paper on the quality review and standards discloses the following: (b) results of the management review; (d) evidence of the conformity of processes and end products/services in accordance with quality standards; (h) records of the QMS test; and (k) actions taken as preventative action. In addition, the Examination Quality Assurance Office publishes a collection of cases on examination assessment which (f) record the examination processes and searches of each patent application; (g) track the work of individual examiners; and (e) review the requirements related to end products.

The Patent Examination Cooperation Division publishes the PCT international search/preliminary examination manual; the International Application Division publishes a manual on formality examination carried out by PCT designated offices and guidance on PCT international applications; and the Information Development Division publishes a guidebook on PCT examinations. Information on the PCT system and its general processes is offered at www.pct.go.kr and KIPO has been publishing PCT information on its website (www.kipo.go.kr) under its integrated management system since January 2012.

## 7.    SEARCH PROCESS DOCUMENTATION

*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.*

The Korean Multifunctional Patent Search System (KOMPASS) provides Patent Databases (DB) of 12 countries including five IP offices, non-patent DBs related to National Digital Science Links (NDSL) serviced by the Korea Institute of Science and Technology Information (KISTI), and search services for DBs with notice of examiners' submission of opinion and trial examiners' decisions. In addition, KOMPASS enables patent documents in Korean, Japanese, and English to be retrieved and provides Japanese-Korean/English-Korean machine translation services. Under the KOMPASS system, the search of classification codes of IPC, FI F-Term, US Class and ECLA is possible as well. Since search query languages "AND," "OR," "NOT," and operators such as Boolean search, proximity search, and backward truncation are permitted, a user can store used search expressions selectively and use them in writing an examination report.

KOMPASS supports "searches by item category" based on numbers, dates, and other items, and "free searches" based on keywords. KOMPASS also provides the links to 24 patent-related sites including Science Direct, Springer eJournal, and search services for bioengineering DB, such as DDBJ, EMBL, and NCBI, as well as NDSL. On top of that, KOMPASS operates a thesaurus DB with 480,000 key words for 1,460,000 related words to further support searches.

## 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 deputy commissioner of KIPO, 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 performed by the Examination Quality Assurance Office and the weekly executive meeting chaired by the commissioner, we examine how consistently and effectively we 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 outlined in Chapter 21:  the initial report called for by paragraph 21.29, and supplementary annual reports in accordance with paragraph 21.30.  At the second informal meeting of the Quality Subgroup in Canberra on February 6 and 7, 2012, the Subgroup recommended that, instead of submitting full reports every five years and cumulative updates in the intervening years, Authorities should submit each report in the form of a full report, making the differences from the previous year's report clear, for example using "track changes" or other form of highlighting.  The template for the supplementary annual reports is therefore no longer used.*

[End of document]