

Republic of Korea

(i) a draft reference document on the exception regarding the use of articles on foreign vessels, aircrafts and land vehicles

○ **National/regional laws**

Korean Patent Act(KPA) Article 96(Limitations on Effects of Patents) (1) The effects of a patent shall not extend to the following:

2. Ships, aircraft, vehicles merely passing through the Republic of Korea, or machines, instruments, equipment, or other articles used therein;

(ii) a further study on the sufficiency of disclosure (Part II), relating to inventions having an experimental nature in unpredictable art, such as chemistry and biotechnology, and any other areas that deserve special attention

○ **KIPO, Guidelines for Examination (2021.12.)**

- Chemistry field

When describing a description of the invention concerning a substance invention in the chemical field, it is insufficient to disclose a substance itself as a name of the chemical substance or its chemical structural formula, because even chemical reactions that seem to be naturally induced may not actually be carried out due to unexpected reactions; and it is hard to grasp the substance of the invention without direct experiment, confirmation and analysis; and the technical effect is unpredictable. Therefore when it comes to a substance invention in the chemical field, it is necessary for a certain process to be disclosed, besides expressing a substance itself, so as to easily reproduce a chemical substance (except the case where a skilled person in the art can easily understand a chemical reaction disclosed in the specification based on the common technical knowledge at the time of filing the application) [Patent court decision 99Heo3177, 2000Heo6370]. As for a substance invention in the chemical field, to easily implement the invention, a description of the invention should disclose a certain reaction condition, such as specific starting materials, temperature, pressure, inflow and outflow, etc., necessary to manufacture the substance invention and a result of an experiment directly carried out under the condition as an embodiment. The same criteria is applied to a substance(a medicine, etc.) developed in silico experiment.

- Use invention(pharmaceuticals)

In case of a mechanical device, etc., its working effect can be easily understood and reproduced from features of the invention. On the other hand, as for an invention in the chemical field, even though it depends on the subject matter of the invention and its technological level, if an experimental case for presenting experimental data is not described, a skilled person in the art cannot be deemed to clearly understand the effect and easily reproduce the invention as the invention in the chemical field is far from predictable and feasible [Supreme court decision 2000Hu2958, 2003Hu1550, 2005Hu1417].

Therefore when it comes to a chemical use invention, only when a description of the invention discloses the effect of the invention is it deemed that the invention is completed and at the same time the sufficiency of the description is satisfied. Especially, a pharmaceutical use invention should disclose an example of a trial that "such a pharmacological effect is identified in a substance related to the invention" represented with pharmacological data, etc. or provide a specific description enough to replace the said trial, except in certain cases where the mechanism of action representing pharmacological effect described in the specification is clearly identified prior to the filing of the invention.

(iii) a document compiling information relating to the expedited examination programs of IP offices, including information on Prioritized Examination of COVID-19 related patent applications.

○ **National/regional laws**

KPA Article 61(Accelerated Examinations) In either of the following cases, the Commissioner of the Korean Intellectual Property Office may instruct an examiner to examine a patent application in preference to other patent applications

1. Where it is found that any person, other than the patent applicant, is practicing for business purposes the invention claimed in the patent application after it is laid open under Article 64;
2. Where it is deemed necessary to urgently process a patent application prescribed by Presidential Decree;
3. Where a patent application prescribed by Presidential Decree is deemed necessary for disaster prevention, response, recovery, etc.

Korean Enforcement Decree Of The Patent Act Article 9 (Cases Eligible for Expedited Examination)

"Patent application prescribed by Presidential Decree" in subparagraph 2 of Article 61 of the Act means a patent application designated by the Commissioner of the Korean Intellectual Property Office, among the following patent applications:

1. A patent application in the area of the defense industry;
2. A patent application directly related to green technology under the Framework Act on Carbon Neutrality and Green Growth For Coping with Climate Crisis;
- 2-2. A patent application utilizing technologies related to the fourth industrial revolution such as artificial intelligence (AI) and the Internet of Things (IoT);
3. A patent application directly related to export promotion;
4. A patent application concerning the official duties of the State or local governments (including any patent application concerning the duties of the national and public schools provided for in the Higher Education Act, which is filed by the organization in charge of the technology transfer and industrialization established within the national and public schools pursuant to Article 11 (1) of the Technology Transfer and Commercialization Promotion Act);
5. A patent application filed by an enterprise confirmed as a venture business under Article 25 of the Act on Special Measures for the Promotion of Venture Businesses;
- 5-2. A patent application filed by an enterprise selected as a technology-innovative small and medium enterprise under Article 15 of the Act on the Promotion of Technology Innovation of Small and Medium Enterprises;
- 5-3. A patent application filed by an enterprise selected as an exemplary company in terms of the employee invention compensation system under Article 11-2 of the Invention Promotion Act;
- 5-4. A patent application filed by a small or medium enterprise with the certification for management of intellectual property under Article 24-2 of the Invention Promotion Act;
6. A patent application concerning the results of national research and development programs under subparagraph 1 of Article 2 of the National Research and Development Innovation Act;
7. A patent application which serves as a basis of a priority claim under treaties (limited to cases where a patent is being processed by a foreign patent office, upon a priority claim based on the relevant patent application);
- 7-2. An international patent application on which the Korean Intellectual Property Office conducts international search, as an international search agency under the Patent Cooperation Treaty pursuant to Article 198-2 of the Act;
8. A patent application under which an invention is being practiced or being prepared to be practiced by the patent applicant;
10. A patent application on which the Commissioner of the Korean Intellectual Property Office has agreed with the commissioner of any foreign patent office to preferentially examine;
11. A patent application regarding which a person who intends to file an application for an expedited

examination requested a specialized agency designated and publicly notified as a specialized agency for search and classification to conduct a search for prior art with respect to the invention pending in patent application and has requested the specialized agency to notify the Commissioner of the Korean Intellectual Property Office of the search results;

12. A patent application filed by any of the following persons:

(a) A person aged 65 years or older;

(b) A person whose health problem is likely to incapacitate him or her from following the procedure relating to a patent until a decision is rendered as to whether to grant a patent or to reject a patent application unless he or she undergoes an expedited examination.

(2) "Patent application prescribed by Presidential Decree" in subparagraph 3 of Article 61 of the Act means any of the following patent applications:

1. Any of the following patent applications determined and publicly notified by the Commissioner of the Korean Intellectual Property Office:

(a) A patent application directly related to goods for medical treatment and disease control under subparagraph 21 of Article 2 of the Infectious Disease Control and Prevention Act;

(b) A patent application directly related to disaster safety products certified under Article 73-4 of the Framework Act on the Management of Disasters and Safety;

2. A patent application subject to public notice given by the Commissioner of the Korean Intellectual Property Office for a specified period of applying for an expedited examination to respond to an emergency situation caused by a disaster.

○ **Prioritized Examination of COVID-19 related patent applications**

COVID-19 related applications are fall under Korean Enforcement Decree Of The Patent Act Article 9(2)2 'A patent application subject to public notice given by the Commissioner of the Korean Intellectual Property Office for a specified period of applying for an expedited examination to respond to an emergency situation caused by a disaster', so prioritized examination is available.

1st public notice(June 23, 2021 ~ June 22, 2022): applications regarding **COVID-19 vaccines**

2nd public notice(June 23, 2022 ~ June 22, 2023): applications regarding **COVID-19 vaccines and medicines**

Applicants can receive a first office action within 3 months after grant of an accelerated examination for COVID-19 related application.

- Fee: 200,000 KRW for patent applications, 100,000 KRW for the utility model applications. Startups within 3 years of its founding can have 70% discount on fee within 10 cases on a yearly basis.

(iv) a compilation on how jurisdictions around the world address the issue of artificial intelligence (AI) inventorship through jurisprudence, legislation and practice.

1. AI inventorship

○ National/regional laws

KPA Article 33 Persons Entitled to Patent

(1) A person who makes an invention or his or her successor shall be entitled to a patent under this Act

(2) If at least two persons jointly make an invention, they are jointly entitled to a patent thereon.

KPA Article 42 Patent application

(1) A person who intends to obtain a patent shall file a patent application stating the following information, with the Commissioner of the Korean Intellectual Property Office:

4. The name and the domicile of an inventor

KPA Article 203 Submission of Documents

(1) An international patent applicant shall submit to the Commissioner of the Korean Intellectual Property Office, the following matters in writing within the period for submitting domestic documents.

4. The name and domicile of the inventor;

○ Practice

A natural person only is accepted as a valid inventor under the Korean Patent Act, so it is not permitted to name AI as an inventor in a specification. When a person ordered to make an amendment under Article 46 fails to do so within a specified period, Such an application is dismissed, and therefore the application is deemed not to have been filed.

2. Joint inventors

○ National/regional laws

KPA Article 33 Persons Entitled to Patent

(2) If at least two persons jointly make an invention, they are jointly entitled to a patent thereon.

KPA Article 44 Joint Applications

Where the entitlement to a patent is jointly held by at least two persons, all entitled persons shall jointly file a patent application.

KPA Article 62 Determinations to Reject Patent Applications

An examiner shall determine to reject a patent application if the patent application falls under any of the following grounds for rejection (hereinafter referred to as "grounds for rejection"):

1. If an invention is unpatentable under any provision of Articles 25, 29, 32, 36 (1) through (3), and 44;

KPA Article 133 Trial on Invalidity of Patents

(1) In any of the following cases, an interested party (limited to those who have the right to obtain a patent in cases of the main clause of subparagraph 2) or an examiner may file a petition for trial to seek invalidation of a patent. If the application contains two or more claims, a petition for trial for invalidation may be filed for each claim

2. If the patentee has no right to obtain the patent under the main clause of Article 33 (1) or violates Article 44:

3. employee inventors

○ National/regional laws

Korean Invention Promotion Act(KIPA) Article 10 (Employee's Inventions) (1)If an employee, etc. acquires a patent or completes registration of a utility model or design (hereinafter referred to as "patent, etc."), or succeeds to the right to acquire a patent, etc., for an employee's invention, the employer, etc. shall have a non-exclusive license in the right to a patent, utility model, or design (hereinafter referred to as "patent right, etc."): Provided, That the same shall not apply to an employer, etc. which is an enterprise other than a small and medium business under Article 2 of the Framework Act on Small and Medium Enterprises unless it concludes or prepares, in advance, any of the following contracts or employment regulations subject to consultation with an employee, etc.

1. A contract or employment regulations that makes the employer, etc. succeed to the right to acquire a

patent, etc. or a patent right, etc. for an employee's invention made by the employee, etc.;

2. A contract or employment regulations that requires the grant of an exclusive license to the employer, etc. for an employee's invention made by the employee, etc.

(2) Notwithstanding paragraph (1), the State or a local government may succeed to the rights to an employee's invention created by a public official or a non-public official belonging to the State or a local government (hereinafter referred to as "public official, etc.") and patent right, etc. of a public official, etc. to such employee's invention, to which the State or a local government succeeds, shall be State property or public property: Provided, That an exclusively responsible organization under the latter part of Article 11 (1) of the Technology Transfer and Commercialization Promotion Act (hereinafter referred to as "exclusively responsible organization") may succeed to the rights of a teaching staff member, who works at a national or public school under Article 3 of the Higher Education Act (hereinafter referred to as "national or public school"), to an employee's invention, and thus the patent right, etc. of a teaching staff member of a national or public school to an employee's invention, to which the exclusively responsible organization succeeds, shall be owned by the exclusively responsible organization.

(3) A provision of a contract or employment regulations shall be void, if the provision makes an employer, etc. succeed to the right to acquire a patent, etc., or a patent right, etc., in advance, for an invention made by an employee, etc. other than an employee's invention or requires an employee, etc. to grant an exclusive license in the patent right, etc. to the employer, etc.

(4) Notwithstanding Article 8 of the State Property Act, the disposal and management (including waiver of patent rights, etc.) of patent rights, etc. that become State property pursuant to paragraph (2) shall be under the jurisdiction of the Commissioner of the Korean Intellectual Property Office, and matters necessary for the disposal and management thereof shall be prescribed by Presidential Decree.

KIPA Article 12 (Notice of Completion of Employee's Invention) An employee, etc. who completes an employee's invention shall notify the employer, etc. of his or her completion in writing without delay. Where an employee's invention is completed jointly by two or more employees, etc., such notice shall be given jointly by the employees, etc.

KIPA Article 13 (Notice of Whether Employer Succeeds to Rights to Invention)

(1) Upon receipt of a notice under Article 12, an employer, etc. shall notify the employee, etc. as to

whether the employer, etc. succeeds to rights to the invention within the period specified by Presidential Decree: Provided, That no employer, etc. (excluding the State or a local government; hereafter in this paragraph the same shall apply) may assert his or her succession to rights to an invention against the intent of an employee, etc. if there is no provision in a contract or employment regulations that makes the employer, etc. succeed to the right to acquire a patent, etc., or a patent right, etc., in advance, or requires the employee, etc. to grant the exclusive license in the patent right, etc. to the employer, etc.

(2) An employer, etc. shall be deemed to have succeeded to rights to an invention as at the time he or she gives notice of his or her intent to succeed to the rights to the invention within the period under paragraph (1).

(3) If an employer, etc. does not give notice of whether succeeding to rights to an invention within the period under paragraph (1), the employer, etc. shall be deemed to have given up the succession to the rights to the invention. In such cases, the employer, etc. shall not be entitled to a non-exclusive license without consent of the employee, etc. who made the invention, notwithstanding Article 10 (1).

KIPA Article 14 (Succession to Rights to Joint Invention)

Where an employee's invention has been made jointly by an employee, etc. and a third party and the employer, etc. succeeds to rights to the invention in accordance with a contract or employment regulations, the employer, etc. shall acquire the share of the rights of the employee, etc. to the invention.

KIPA Article 15 (Compensation for Employee's Inventions)

(1) An employee, etc. shall be entitled to fair compensation where the employer, etc. succeeds, under a contract or employment regulations, to the right to acquire patent, etc., or a patent, right, etc., for an employee's invention, or are to be granted an exclusive license in the patent right, etc.