

Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore

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JOINT RECOMMENDATION ON THE USE OF DATABASES FOR THE DEFENSIVE PROTECTION OF GENETIC RESOURCES AND TRADITIONAL KNOWLEDGE ASSOCIATED WITH GENETIC RESOURCES

Document submitted by the Delegations of Japan, the Republic of Korea and the United States of America

1. On May 16, 2023, the International Bureau of the World Intellectual Property Organization (WIPO) received a request from the Permanent Mission of Japan to the International Organizations in Geneva, on behalf of the Delegations of Japan, the Republic of Korea and the United States of America, to resubmit the “Joint Recommendation on the Use of Databases for the Defensive Protection of Genetic Resources and Traditional Knowledge Associated with Genetic Resources”, as contained in document WIPO/GRTKF/IC/46/12, with amendments, for discussion by the Forty-Seventh Session of the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC).

2. Pursuant to the request above, the Annex to this document contains the proposal referred to.

3. *The Committee is invited to take note of and consider the proposal in the Annex to this document.*

[Annex follows]

JOINT RECOMMENDATION ON THE USE OF DATABASES FOR THE DEFENSIVE PROTECTION OF GENETIC RESOURCES AND TRADITIONAL KNOWLEDGE ASSOCIATED WITH GENETIC RESOURCES

The Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore and the General Assembly of the World Intellectual Property Organization,

Considering the decision of the 55th Session of the WIPO General Assembly to convene a Diplomatic Conference to conclude an International Legal Instrument Relating to Intellectual Property, Genetic Resources and Traditional Knowledge Associated with Genetic Resources, to be based on document WIPO/GRTKF/IC/43/5 in addition to any other contributions by Member States;

Reaffirming the important economic, scientific and commercial value of genetic resources and traditional knowledge associated with genetic resources;

Acknowledging the important contribution of the patent system to scientific research and development, innovation and economic development;

Recognizing the complementarity between the patent system and the Convention on Biological Diversity;

Stressing the need for Member States to prevent the erroneous grant of patents for inventions related to genetic resources and traditional knowledge associated with genetic resources;

Recommend that each Member State and the WIPO International Bureau consider the use of this Recommendation adopted by the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore as guidelines for the establishment, improvement and use of databases for the defensive protection of genetic resources and traditional knowledge associated with genetic resources.

I. INTRODUCTION

1. The erroneous granting of patents has been identified as an important issue in discussions in the WIPO and the WTO.

2. The erroneous granting of patents can be effectively addressed by improving databases¹ for storing genetic resources and non-secret traditional knowledge associated with genetic resources that are used for prior art searches, as well as through utilizing certain existing institutional systems, such as information provision systems and the invalidation trial system more efficiently.

3. A one-click database search system would help examiners conduct searches more efficiently for prior art concerned with genetic resources and non-secret traditional knowledge associated with genetic resources, while preventing inappropriate access to and/or use of its contents by third parties.

¹ For example, the Traditional Knowledge Digital Library (TKDL) in India has been used by various patent offices to help prevent the erroneous granting of patents.
https://www.wipo.int/wipo_magazine/en/2011/03/article_0002.html

II. STRUCTURE OF THE ONE-CLICK DATABASE SEARCH SYSTEM

4. As described in Figure 1 below, searchable databases under the proposed system should be in the possession of, and maintained by, each participating Member State. The database will be composed of a WIPO portal site as well as databases of Member States, which are linked to this portal site. WIPO may provide technical assistance to Member States that are unable to develop such searchable databases².
5. Each participating Member State will, as it deems necessary, collect information on genetic resources and non-secret traditional knowledge associated with genetic resources within its territory and store this information in its database/databases (either adapted from an existing database or newly created). Assigning the responsibility of the development of national databases to each Member State will allow each Member State adequately take into account various sensitive issues, such as considerations for customary law, the identification of interested parties concerned and their willingness and condition for providing information, and coordination amongst multiple interested parties who claim entitlement to common genetic resources and/or non-secret traditional knowledge associated with genetic resources. In developing national databases, Member States should consult with relevant indigenous stakeholders, such as indigenous peoples and local communities, in the territory prior to putting indigenous traditional knowledge and genetic resources from tribal lands into the databases.
6. With regards to the format of a database, a basic format for registering data to the database should be developed by the WIPO, taking into account that the allowable format of prior art (e.g. written/oral form) may vary depending on each national patent law and practice. For example, entries to the database would have to include the name and a brief description of the genetic resource and/or non-secret traditional knowledge associated with genetic resources, as well as a code number to identify them. For genetic resources and non-secret traditional knowledge associated with genetic resources that have been referenced in a publication, such as a book or journal, the bibliographic data of the said publication should also be included in the database. Further work of the IGC may include the development of a uniform and interoperable format for information contained in the database.
7. A simple text search function should be provided in the databases of each participating Member State. For countries that are not able to develop such search programs, technical assistance can be provided. For example, technical assistance in the form of a common program for conducting searches can be provided by the WIPO.
8. The WIPO portal site will be equipped with two basic functions: (i) a function which enables an examiner to directly access the databases of the participating Member States and (ii) a function which enables an examiner to retrieve data from the accessed databases.
9. Simply by accessing the WIPO portal site and entering a search formula, an examiner can instantaneously obtain search results derived from the databases of all participating Member States. (see Figure 2) This search result can be used as prior art for a patent application, enabling an examiner to determine more easily whether the subject matter of a patent application lacks novelty. As an examiner need only point to the necessary information in the database when rejecting an application under examination, the danger of information leakages would be minimal.
10. While the languages used in databases differ, there are some possible solutions to the language barrier problem. For instance, the name and a brief description of each genetic resource in a database could (and should) be translated into English and registered in the

² The creation of databases within WIPO based on data voluntarily provided by Member States and linking them to the WIPO portal site may also be an option, subject to the availability of resources.

database as keywords. The development of a multi-language glossary of technical terms is another possible solution. With a multi-language glossary of technical terms, an examiner is able to have a search keyword entered in certain language translated automatically into multiple languages and, then, using the translated keywords, can conduct a one-click multilingual search of the databases of the participating Member States. Machine translation technology, such as WIPO Translate which specializes in translating patent documents, can also be used to overcome the language barrier. To better utilize machine translation technology, language information for the original content should be stored in databases.

III. SAFEGUARDING DATA ACCESS

11. In order to prevent inappropriate/unauthorized access to data via the WIPO portal site, the WIPO portal site should have a number of data access safeguarding mechanisms. To prevent third party access, the WIPO portal site will be made accessible only from registered IP (Internet Protocol) addresses. Specifically, an IP (Internet Protocol) Address Authentication System (IPAAS) will be incorporated into the WIPO portal site. Then, access will be provided only to registered IP (Internet Protocol) addresses. (See Figure 1.)

12. IP Offices that conduct examinations have specific IP (Internet Protocol) addresses. Therefore, by restricting access to the WIPO portal site to specific IP (Internet Protocol) addresses, we can limit users of the site to those IP Offices that have registered their unique IP (Internet Protocol) addresses with WIPO.

13. On the other hand, there is some truth in that stakeholders can contribute to preventing erroneous granting of patents, by conducting a prior art search for their own or interested patent applications. Given that, the possibility of allowing limited public access to the WIPO portal site should not be entirely excluded before a careful consideration is given to this issue.

14. As for the prevention of leakage of information, the following approach (2-level approach) may also be used for certain data: (1) only bibliographic data may be retrieved when searching the WIPO portal site, (2) remaining data may be retrieved from the database after the authorization, e.g. by e-mail, as appropriate. This approach may be useful to prevent data from being mechanically collected, e.g. by AI.

15. It should also be noted that the use of the information contained in the database is limited to the patent examination procedure. In order to prevent unauthorized use of its contents, it would be useful to add a warning indicating that information in the database is not necessarily in public use.

IV. REGISTRATION OF CITED/REFERENCE INFORMATION

16. When an examiner accesses the WIPO portal site, he might come across a relevant piece of information on genetic resources and/or non-secret traditional knowledge associated with genetic resources that would serve as prior art for a patent application under examination. In such a case, it would be valuable for the WIPO portal site to have a function enabling an examiner to add any data concerned with such an application (e.g. the application number) under the code number of a relevant genetic resource and/or non-secret traditional knowledge associated with genetic resources. In this way, a code number attached to a genetic resource and/or non-secret traditional knowledge associated with genetic resources and a relevant patent application number can be linked. Such data on patent applications linked with genetic resources and/or non-secret traditional knowledge associated with genetic resources could be used by interested parties to explore where patent applications related to the resources in question are filed with specific IP Offices. The interested parties,

(e.g., indigenous people) who provided information on the genetic resources and/or non-secret traditional knowledge associated with genetic resources concerned might be allowed through the examining authority or other competent authority to have access to such data on the relevant patent applications.

17. It should be noted, however, that the data in a certain patent application being cross-referenced with certain genetic resources and/or non-secret traditional knowledge associated with genetic resources in a database has no relevance to whether the invention in the application was made in compliance with CBD or not.

V. APPLICATION

18. The establishment, improvement and use of databases will be subject to the availability of resources.

19. Member States should provide adequate and effective legal, policy or administrative measures, as appropriate and in accordance with national law, to facilitate the application of this Recommendation. This should include guidance to examiners on the use of the database and the confidentiality of documents contained in it.

VI. FUTURE WORK

20. Member States are invited to consider and share their views and experiences on the following key issues:

- (1) Structured data to be stored in databases (e.g., genetic resources and non-secret traditional knowledge associated with genetic resources) with a view to conducting effective prior art search,
- (2) Interoperability standards between the information systems in Member States, such as standards for (i) data formats (e.g., XML, data fields, etc.), (ii) content data (e.g., characterization, function, classification, taxonomy or scientific name of genetic resources, language information, etc.), (iii) rights metadata (e.g., right holder, subject matter, date of documentation, date of publicly known, etc.) or (iv) structures of the information systems and services (e.g., APIs, etc.);
- (3) Allowable format of prior art (e.g., written form and oral form) in accordance with each national law and practice;
- (4) The accessibility to the WIPO portal site (e.g., IP Offices and authorized stakeholders);
- (5) The impact the national database has on genetic resources and non-secret traditional knowledge associated with genetic resources protected under tribal or IP laws (e.g., third party unlawfully accesses a national database or the WIPO portal site); and
- (6) The process used to populate a national database (e.g., consulting with indigenous stakeholders).

21. The WIPO International Bureau should consider exploring the development of the WIPO portal site without prejudice. Given the complexity of the technical, legal and operational issues related to the establishment and maintenance of databases on genetic resources and non-secret traditional knowledge, a Technical Task Force should be established by the IGC. The Task Force, in cooperation with the WIPO International Bureau, should conduct the feasibility studies, which should include, but are not limited to, the following:

- (1) Technical requirement(s) for an effective connection between the WIPO portal site and databases of Member States taking into account the key issues identified in paragraph 21,
- (2) Feasibility (including cost-effectiveness and sustainability) of creating databases within

- WIPO based on data voluntarily provided by Member States and linking these databases to the WIPO portal site,
- (3) Efficient and effective methods for searching databases on genetic resources and non-secret traditional knowledge associated with genetic resources, taking into account the utilization of cutting-edge technologies such as AI,
 - (4) Consideration of development of the guidelines relating to safeguards,
 - (5) Based on the above studies (1) to (4) in this paragraph, creating a prototype of the WIPO portal site and a draft guideline on the use and function of DB,
 - (6) Consideration of technical assistance to member states on the development of national database.
22. Member States are also invited to consider the development of information systems related to traditional knowledge and traditional cultural expressions with the involvement of indigenous peoples and local communities, and to address the technical, legal and operational issues related to such information systems, referring, as appropriate, to the information contained in this document.

Figure 1: Overview of One-Click Database Search System for individual Databases of WIPO Member States

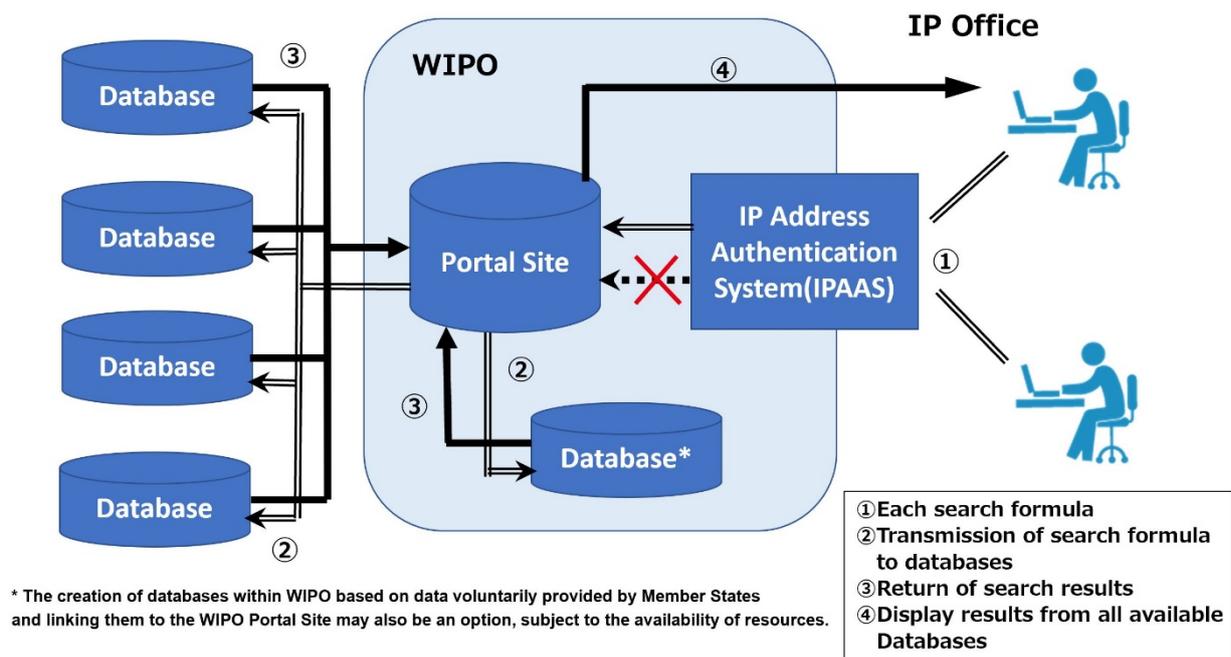


Figure 2: Image of a retrieval screen

Your Search Formula: . . .

Search Results: 8

No.	Code Number	Title	Source Name	. . .	Reference
1	1-000001	. . for . .	India		0
2	1-000005	. . for . .	India		0
3	1-000006	. . .	India		2
4	2-000002	. . for . .	Peru		0
.
8	2-000013	. . for . .	Peru		0

Reference Information

Code Number:1-000006
Application Number: PCT . . .
JP20 . . .

[End of Annex and of document]