Relevance of Databases for Protecting Traditional Knowledge: Evidence from India

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Protection of Traditional Knowledge

The two facets

- Positive protection - assignment of rights to the holders of traditional knowledge, using a sui generis system of protection
- Defensive protection to prevent misappropriation of the traditional knowledge and/or grant of “bad” patents
  - Use of traditional knowledge databases is one option
Use of Databases for Protecting TK

Two competing views

- Databases like India’s TKDL that documents TK available in published works provides adequate protection to TK
- TKDL is an important first step for protecting TK, but is not sufficient to respond to the substantive interests of the holders of TK

✓ Incentivising the knowledge holders for their efforts for not only keeping the knowledge system alive, but to also help it grow
Traditional Knowledge Digital Library (TKDL)

- Being developed as a collaborative project of two departments of the Government of India since 2001
  - Council of Scientific and Industrial Research (CSIR) and the Ministry of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy (AYUSH)
What is TKDL?

- A representative database containing 2,90,000 formulations selected from various classical texts of Indian systems of medicine, namely, Ayurveda, Unani and Siddha

- Most of these formulations belong to the larger of the two systems, Ayurveda and Unani
  - Formulations use biodiversity as ingredients, namely plants and animals, but also minerals
  - These formulations are in turn used to treat a wide variety of diseases
Why is TKDL Useful?

- While examining a claim involving the use of TK, patent examiners used patent literature that have been captured in several databases and can be easily searched and retrieved.
- Prior art contained in non-patent literature is spread across diverse sources.
  - Patent examiners, in international patent offices, while examining the patentability of any claimed invention, use available sources of information for searching appropriate non-patent literature sources.
- TKDL is an easily accessible non-patent literature database on India’s traditional knowledge.
Components of the Facilitating Functions of TKDL

- Provides documentation of the traditional knowledge available in public domain in the form of existing literature relating to Ayurveda, Unani, Siddha and Yoga, in digitized format in five international languages, English, German, French, Japanese and Spanish.

- Traditional Knowledge Resource Classification (TKRC)
  - Structured classification system for the purposes of systematic arrangement, dissemination and retrieval for about 25,000 subgroups.

- Earlier version of the International Patent Classification (IPC), relating to medicinal plants, minerals, animal resources, effects and diseases, methods of preparations, mode of administration, provided only a few subgroups.
Utilization of the TKDL

- TKDL has been shared with 10 Patent Offices under a non-disclosure agreement
  - European Patent Office
  - United States Patent and Trademark Office
  - Canadian Intellectual Property Office
  - German Patent Office
  - Intellectual Property Office of the UK
  - Intellectual Property Australia
  - Japan Patent Office
  - Instituto Nacional de Propiedad Industrial (INAPI), Chile
  - Intellectual Property Corporation of Malaysia
  - Indian Patent Office

- Negotiations are on with the Russian Patent Office

- Process on for signing Access Agreement with World Intellectual Property Organization (WIPO) to include the TKDL under Patent Cooperation Treaty (PCT) Minimum Documentation to prevent the misappropriation of traditional knowledge through erroneous grant of patents in other countries
Terms of the Non-disclosure Agreement

Users
- Shall not disclose the content to third party
- Shall utilize for patent search & examiners, can give printouts to patent applicants for citation purposes
- No use other than search & examination
- Will provide non-confidential information received from applicant on usage to provider
- Will give feedback for enhancing the features of TKDL

Provider
- Shall provide uninterrupted access
- Training to users (as and when needed)
- Render assistance in search & examination (as & when needed)
- Free to utilize for itself & can grant access to others
TKDL’s Contribution towards Prevention of Misappropriation of TK

- Facilitating the process of challenging grant of patents on “non-patentable knowledge” (related to traditional medicines), which is either based on the existing traditional knowledge of the developing world, or are minor variations of such knowledge
- Prior to the establishment of the TKDL, India had to identify each case of misappropriation of TK thorough the grant of erroneously granted patents, but now the major patent offices have become a partner in preventing the grant of such patents
Preventing Misappropriation of TK using TKDL

- Global count of erroneously granted patents is difficult to gauge
  - Officials responsible for maintaining the TKDL had claimed in 2008 that 2000 patents were taken annually on Indian Systems of Medicine
  - Annual average growth rate between 2000 and 2008 was 200%
  - Of course, not all of the patents that use the Indian Systems of Medicine as the basis are erroneously granted

- TKDL’s record of preventing misappropriation needs to be seen in this context
  - 1400 cases of pre-grant opposition have been made till date using the TKDL and 222 patents have been revoked
Performance across Jurisdictions

- **European Patent Office**
  - Refusal / Setting aside of Intention to grant patent - 5 cases
  - Patent Applications Withdrawn / Deemed to be Withdrawn - 89 cases
  - Amendment / Modification of Claims by Applicants due to TKDL Prior Art Evidence – 36 cases

- **Canadian Intellectual Property Office (CIPO)**
  - Applications Declared 'Dead‘ - 37 cases

- **Intellectual Property Australia**
  - Amendment / Modification of Claims by Applicants due to TKDL Prior Art Evidence - 3 cases
  - Patent Applications Withdrawn - 1 case
Performance across Jurisdictions

- United States Patent and Trademark Office (USPTO)
  - Amendment / Modification of Claims by Applicants/Examiner due to TKDL Prior Art Evidence - 14 cases
  - Claims Rejected by the Examiner due to TKDL Prior Art Evidence - 11 cases

- United Kingdom Patent and Trademark Office (UKPTO)
  - List of Application(s) Terminated - 3
Assessment of the TKDL

- Has been an useful tool to challenge the grant of erroneous patents by facilitating prior art search
  - TKDL has helped in improving the quality of patents granted
  - Has brought down the cost of challenging by a fair measure
  - Normal route of opposition of an international patent - (10-15 years)
  - Challenging the grant of patents using TKDL has often yielded results in less than 12 Weeks

- Has its limitations in recognising the contributions made by the local communities in protecting and preserving TK
  - TKDL has been compiled from published sources
  - TKDL is essentially a database documenting traditional Indian medicines
  - Documentation of other forms of TK is not within the current scope of TKDL
Exploring other Options

TKDL falls short of meeting the objectives of protecting TK, and in keeping with the objectives of the IGC

- Preventing the erroneous grant of patents is just one of the objectives of IGC
- Incentivising the TK holders is the more substantive and challenging objective

Critically important to connect TK with the traditional communities that are the holders of the knowledge

- Effective protection to TK can be ensured by ensuring that the TK holders get incentivised for maintaining the knowledge system
The People’s Biodiversity Registers (PBRs)

- Developed as a part of implementing India’s Biological Diversity Act
- Biodiversity Management Committees (BMCs), the local institutions established under the Act, are required to document their biological resources and associated TK
- Nearly 38,000 BMCs have been established in 26 of the 29 States of India
  - This network of institutions would grow in the near future as several States, particularly those that are in the biodiversity-rich, are in the process of establishing the BMCs
Advantage of the PBRs

- These documents establish a direct link between the knowledge and the communities / individuals that hold the knowledge
- Covers a wide variety of TK, not limited to traditional medicines
- Would eventually have a critical role to play when the WIPO members are able to put in place effective instrument(s) for the protection of TK, with a view to providing incentives to the TK holders
Thank you