

## Intellectual Property: CSIR-TKDL – A juggernaut story!

📅 AUGUST 22, 2015   👤 SINAPSE STAFF   ➡ BUSINESS / INTELLECTUAL PROPERTY (IP) / SCIENCE/ENVIRONMENT / TRADITIONAL KNOWLEDGE



**Department of AYUSH**  
Department of Indian Systems of  
Medicine & Homoeopathy

**CSIR** armed with the **TKDL** appears to be on a rampage like an unstoppable juggernaut, successfully foiling bid after bid, made by companies seeking to patent traditional knowledge. Few weeks ago, the media was abuzz with news that **CSIR** had successfully foiled a bid by Colgate-Palmolive to patent a Mouthwash formula containing “nutmeg”. This successful thwarting of the patent was soon followed by another victory when India foiled UK’s Bid to patent the “Use of Turmeric for Treating Hair Loss”. The back to back victory has added another feather to **TKDL**’s Cap.

So what is TKDL really?

In 1999, the Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy-(AYUSH), erstwhile Department of Indian System of

Medicine and Homoeopathy (ISM&H) constituted an inter-disciplinary Task Force, for creating an approach paper on establishing a Traditional Knowledge Digital Library (TKDL). The project TKDL was initiated in the year 2001.

TKDL provides information on traditional knowledge existing in the country, in languages and format understandable by patent examiners at International Patent Offices (IPOs), so as to prevent the grant of wrong patents. TKDL thus, acts as a bridge between the traditional knowledge information existing in local languages and the patent examiners at IPOs.

TKDL is a collaborative project between Council of Scientific and Industrial Research (CSIR), Ministry of Science and Technology and Department of AYUSH, Ministry of Health and Family Welfare, and is being implemented at CSIR. The project TKDL involves documentation of the traditional knowledge available in public domain in the form of existing literature related to Ayurveda, Unani, Siddha and Yoga, in digitized format in five international languages which are English, German, French, Japanese and Spanish. Traditional Knowledge Resource Classification (TKRC)

### **Story 1 – India Foils Colgate-Palmolive Bid to Patent Nutmeg Mouthwash**

In 2010, a patent application was filed by Colgate-Palmolive Company titled "Oral compositions containing extracts of *myristica fragrans* and related methods". The company claimed an oral composition comprising a combination of extracts including an extract from *Myristica fragrans* and a natural extract other than the extract from *Myristica fragrans*.

The prime issue with this application by Colgate-Palmolive is that *Myristica fragrans* (nutmeg) has been traditionally used in the Indian system of medicines and is used almost every single day by an average

Indian, especially those residing in the country side. The patent application by Colgate-Palmolive itself describes that *Myristica fragrans* (nutmeg) is known as a headache cure and a gastrointestinal drug in the Indian ancient Ayurveda, and has been used in the treatment of dyspepsia, bellyache, diarrhea and vomiting in the traditional Chinese medicine. *Myristica fragrans* has reportedly been used as a fruit paste and applied to teeth. An important claim of this application is "A composition according to any preceding claim, wherein the composition is a dentifrice in a form selected from the group consisting of: powder; toothpaste or dental gel; a periodontal gel; a liquid suitable for painting a dental surface; a chewing gum; a dissolvable, partially dissolvable or non-dissolvable film or strip; a bead, a wafer, a wipe or towelette; an implant; a mouthrinse, a foam, and dental floss."

CSIR-TKDL submitted proof in the form of references from an ancient book, which said that the herb and its extracts were used for oral diseases in Indian systems of medicine. In addition, other third party observations also made submissions against the claims and the patent application was shot down. The status of the application [EP2689806](#) now stands cancelled.

### **Story 2 – India wins patent war on hair loss formula**

Pangaea Laboratories Limited, a UK based company had filed a patent application in February, 2011 titled "Hair building solid agent" ([EP2361602](#)). On a first reading of the patent application, it appears that the ruckus is all over nothing. In fact it almost seems that the patent application has no relation to the issues raised by CSIR. However on a close reading of the application, we come across two important pieces of information viz, the description section of the application which reads:

"The hair building solid spray agent may include one or more pharmacologically active ingredient for treating one or more of hair loss,

thinning hair and skin conditions.

The pharmacologically active ingredient may be one or more of finasteride, dutasteride, spironolactone, minoxidil, nitric oxide donators, Beta-glucan, saw palmetto, resveratrol, curcumin, marine extracts, polycyanidins, superoxide dismutase, superoxide dismutase mimetics, taurine, plant sterols, pine bark extract, melatonin, green tea, caffeine, copper peptides, copper PCA, EUK-134, copper(II) 3,5-dispropylsalicylate, dimethoxy chromanol, catalase, catalase mimetics and hydrolysed lupine protein."

As can be observed from a reading of the paragraph, there is clearly a mention of use of curcumin, pine bark and green tea among others as a pharmacologically active ingredient in the preparation of the hair loss formula.

Similarly claim 9 of the application reads:

"The use of electrostatic binding agent according to claim 8, wherein the pharmacologically active ingredient is one or more of finasteride, dutasteride, spironolactone, minoxidil, nitric oxide donators, Beta-glucan, saw palmetto, resveratrol, curcumin, marine extracts, polycyanidins, superoxide dismutase, superoxide dismutase mimetics, taurine, plant sterols, pine bark extract, melatonin, green tea, caffeine, copper peptides, copper PCA, EUK-134, copper(II) 3,5-dispropylsalicylate, dimethoxy chromanol, catalase, catalase mimetics and hydrolysed lupine protein."

Thus CSIR filed an objection to the application by providing the EPO with evidence from the TKDL citing the traditional use of curcumin, pine bark and green tea in the treatment of hair loss. The third party observations submitted by CSIR can be accessed [here](#).

Based on India's evidence, the patent application was finally "deemed to be withdrawn" by the applicant on 29 June 2015.

### Story 3 – “Over 1500 yoga asanas shortlisted to thwart patenting by foreign parties”

Another news piece making rounds these days, indicating that the CSIR-TKDL juggernaut plans to roll on, is that TKDL is in the process of documenting over 1500 yoga postures in order to stop patenting of these postures by foreign parties. TKDL is said to believe that as many as 2,000 applications were being made internationally every year for patents on Indian systems of medicine including yoga postures, which was nothing but misappropriation of traditional Indian knowledge. But with India providing evidence to the contrary, patent applications have had to be withdrawn in countries as varied as USA, Japan, UK, Italy, Germany, Australia, China, Cyprus, Kenya, Spain, South Korea, Bulgaria, the Netherlands and New Zealand.

It is estimated that up to 300 million people practice yoga across the globe, with the US being the world's largest yoga industry worth over \$27 billion. Yet more than half of global yoga enthusiasts are Indians, in a country that until now lacked any organizational approach to the \$80bn global industry. Lacking brand names, yoga training in India is mainly run through small independent businesses.

News sources indicate that a mind-boggling 249 patents were taken on yoga in 2004 and 2,300 in 2005 at various international patent offices, thus implying the urgent need to incorporate these yoga asanas into TKDL

To conclude, the CSIR-TKDL is undeniably similar to a knight of the medieval times. The above three instances are only some of the success stories of TKDL. As published by the Press Information Bureau of India,

CSIR-TKDL unit till date has achieved success in about 200 cases and more, like the ones listed here, without any cost.

Besides major companies like Colgate-Palmolive and Pangaea, the other big players who have been hit by the TKDL bullets include Nestle, L'Oreal, Avasthagen, Ranbaxy, BASF and Unilever.

Authored by Gaurav Mishra.