CHAPTER II

PATENTS ON MEDICINAL PROPERTIES OF INDIAN PLANTS ASSOCIATED WITH TRADITIONAL KNOWLEDGE IN INDIA AND FOREIGN COUNTRIES

INTRODUCTION

Another type of bio-piracy requires serious scrutinyhappening. It occurs within and outside India. According foregoing discussions there are basically two categories of bio-piracy in foreign countries from India's traditional knowledge. Even if there is prior art and the traditional knowledge in public domain on the claimed patent application, it is just suppressed and denied and without proper and effective search of the prior art by the Patent Offices, and the process is completed and patent is granted. The patentees start exercising their rights aggressively worldwide. Needless to point out such patents are not novel because it not only draws upon but also consists of the traditional knowledge. The original holders of knowledge do not get any recognition and benefit. Though the present generations have not invented the medicinal values of the plants but preserving, protecting and developing, innovating and transmitting them to the next generations are also great intellectual exercises, on equal footing with inventions. Invention is not mere intellectual effort as is perceived by present criterion. Sometimes the claimants refuse to accept and acknowledge prior art documents. Consedered it is not 'document' according to their national laws of patent. This is due to the reason that the 'document' is not published according to their own system, procedure, and language or is not understandable etc. On other occasions prior art i.e. prior use of the herbal-medicine in foreign country is not admitted. This type of patent is on non-original invention for product or process though fulfilling the criteria of novelty or non-obviousness but is built upon public domain traditional knowledge. Traditional knowledge often provides researchers with a lead to isolate valuable active compounds within the medicinal plants. Such genetic or biological resources are associated with the age old traditional knowledge and practices through the utilization and conservation of the resources, occurred over generations. This type of invention and subsequent granting of patent has raised controversy and has become a major issue of debate in different national, regional or international fora since it is not original and pure invention as such. There is a need to understand the distinction between the patents granted based on modern research and patents categorized as traditional knowledge based. The grant of patents on non-original inventions of traditional herbal medicines based upon existing traditional knowledge of the developing world is causing a great concern, as such existing traditional intellectual property is not protected and commercialisation of public domain knowledge after developing it without giving moiety of benefit to the holders of knowledge, is taking place. That invention would not have been possible by the so-called inventors unless he had access to prior art and studied, researched and understood prior art. There is vast difference between original invention and non-original invention. It is an example of unreasonable classification where two qualitatively different and distinct categories of inventions are treated equally and get equal protection. This non-original inventions and granting of patents for them is 'white

colour bio-piracy.' WIPO and CBD and other national and international NGOs are all against this sort of bio-piracy and are seriously negotiating and struggling to explore ways to stop it by imposing some terms and conditions. One disturbing fact is that Indians researchers, scientists or research institutes and companies have also obtained this sort of patents on non-original inventions depriving Indian traditional knowledge its rightful protection and in initiation of the foreigners of foreign institutes and companies. Certain instances are recorded in the following three schedules to demonstrate the foregoing instances of exploitation. First Schedule is about the list of foreign patents on non-original inventions based on Indian traditional knowledge and the Second Schedule is on Indian patents based on own country's traditional knowledge. The paradox is that India has been fighting against this kind of bio-piracy against those developed countries in the regional and international forum and it itself is granting patents on non-original patents by totally disregarding CBD or Bio-Diversity Act. Moreover, the novel and non-obvious contents of their inventions as are claimed by the inventers have to be verified and verification is also needed to find out about the originality of the non-original inventions.

SCHEDULE I

U.S.A. PATENTS ON THE MEDICINAL PROPERTIES OF INDIAN PLANTS ASSOCIATED WITH TRADITIONAL KNOWLEDGE IN THE NAME OF INVENTION INCLUDING THE PROCESSES THEREOF[1]

1.

COUNTRY	USA
PATENT NO.	7,033,620
DATE & YEAR	25th april, 2006
TOPIC	Product and process for stabilizing aloe vera zel.
MEDICINAL PLANTS	Aloe-vera
ABSTRACT	A product and process for stabilizing Aloe vera gel is disclosed. The process includes the steps of rapidly heating the Aloe vera gel to a temperature in the range of from about 35^0 C. to about 80^0 C., adding to the heated Aloe vera zel one or more stabilizing antioxidants and rapidly cooling the heated aloe vera zel to a temperature in the range of from about 20^0 C. to about 30^0 C.The stabilizing antioxidants may be a tocotrienol/tocopherol blend, rosmarinic acid, polyphenols or any combination thereof.
INVENTOR	Rex. C. Manghan, Roger. A. Poore and Ben. V. Phan

2.

COUNTRY	USA
PATENT NO.	6,124,268

[1] Available at http://www.freepatentsonline.com/search.html , http://www.uspto.gov/patents/process/search/, -http://patft.uspto.gov/netahtml/PTO/search-adv.htm. http://www.uspto.gov/patents/index.jsp.

DATE & YEAR	2000
TOPIC	Natural antioxidant compositions, method for obtaining same and cosmetic, pharmaceutical and nutritional formulations thereof.
MEDICINAL PLANT	Amla
ABSTRACT	A natural antioxidant blend in the form of an amphorous powder was obtained by extraction from Emblica officinalis fruit. In this process, the finely pulped fruit was treated with a dilute aqueous salt solution at hot water temperature to provide an extract-containing solution, which was filtered and dried to provide the desired antioxidant blend powder. Cosmetic, pharmaceutical and nutritional use formulations thereof also are described.
INVENTOR	Shibnath Ghoshal

3.

COUNTRY	USA
PATENT NO	7,829,124
DATE & YEAR	9th November, 2010
TOPIC	Use of Phyllanthus constituents for treating or preventing infections caused by Hepatitis B-viruses
MEDICINAL PLANT	Jar-amla-Phyllanthus niruri
ABSTRACT	The disclosure relates to a method of inhibiting synthesis of viral DNA in a mammal infected with a hepatitis B virus. This method includes administering at least one Phyllanthus component or substance to a mammal infected with hepatitis B virus. It also includes inhibiting hepatitis B viral DNA synthesis in the mammal using the Phyllanthus component or substance. The disclosure also relates to a method of inhibiting viral gene expression in a mammal infected with hepatitis B virus.This method includes administering at least one Phyllanthus component or substance to a mammal infected with the hepatityis B virus. It also includes inhibiting expression of at least one hepatitis B viral gene in the mammal using the Phyllanthus component or substance. These methods may form part of a method of preventing or treating hepatitis B infection.
INVENTOR	Michael Ott and Michael. P. Mannss

4.

COUNTRY	USA
PATENT NO	4,946,681
DATE & YEAR	7th August, 1990
TOPIC	Method to prepare an improved storage stable neem seed extract
MEDICINAL PLANT	Azadirachta indica
ABSTRACT	A process for the production of stable azadirachtin solutions comprising extracting ground neem seeds with a solvent having azadirachtin solubility to produce an aqueous-containing azadirachtin extract solution and then adding an effective amount of 3-4 Angstrom molecular sieves to selectively remove water from the extract to yield a storage-stable

	azadirachtin solution having less than 5% water by volume.
INVENTOR	James F. Walter

5.

COUNTRY	USA
PATENT NO	5,124,349
DATE & YEAR	23rd June,1992
TOPIC	Storage stable azadirachtin formulation
MEDICINAL PLANT	Azadirachta indica
ABSTRACT	Storage stable pesticide compositions comprising neem seed extracts which contain azadirachtin as the active pesticidal ingredient wherein the compositions are characterized by their non-degrading solvent systems. In a first embodiment, the pesticide compositions contain solvent systems characterized as having greater than 50% by volume aprotic solvents and less than 15% by volume water. In a second embodiment, the pesticide compositions contain solvent systems characterized as having greater than 50% by volume alcohol and less than 5% by volume water. The pesticide compositions contain surfactant concentrations of at least about 1.0%, up to 10%.
INVENTOR	Charles G Carter, Clifford J, Hull, Narender P Luthra and James F Walter.

6.

COUNTRY	USA
PATENT NO	5,420,318
DATE & YEAR	30th May,1995
TOPIC	Preparation for high purity neem seed extracts
MEDICINAL PLANT	Azadirachta indica
ABSTRACT	A new process has been developed for preparing high purity neem seed extract by adsorving aqueous solutions of neem seed extract containing azadirachtin onto a macroporous polymeric adsorvent followed by desorption using a solvent. The resulting extract, optionally formulated is a useful insecticide for the control of foliar pests.
INVENTOR	Zev Lidert, Craig G. Overberger and James S. Clovis

7.

COUNTRY	.USA
PATENT NO.	5,391,779
DATE & YEAR	21st February, 1995
TOPIC	Stable extracts from neem seeds
MEDICINAL PLANT	Azadirachta indica-neem
ABSTRACT	A neem seed extract containing azadirachtin with improved stability has been developed using a process involving dissolution of the crude neem seed extract in a polar solvent and removal of impurities by precipitation and/or treatment of the extract with an oxidizing agent. The resulting extract, optionally formulated as a wettable powder, is a useful insecticide for the control of foliar pests.
INVENTOR	Zev Lidert

8.

COUNTRY	USA
PATENT NO	4,556,562
DATE & YEAR	3rd December, 1985
TOPIC	Stable anti-pest neem seed extract
MEDICINAL PLANT	Azadirachta indica-neem
ABSTRACT	Storage stable composition effective as a biorational agent for protection against pests, e.g. Japanese beetles, is a diluted ethanol neem seed extract comprising from about 2000 to about 4000 ppm azadirachtin and having a plt ranging from about 3.5 to about 6.0.
INVENTOR	Robert o. Larson

9.

COUNTRY	USA
PATENT NO	6,977,089
DATE & YEAR	20th December, 2005
TOPIC	methods of using pomegranate extracts for causing regression in lesions due to arteriosclerosis in humans
MEDICINAL PLANT	Anar(Pomegranate)
ABSTRACT	Methods using pomegranate extracts of the present invention for treating patients with atherosclerosis or increased intima-media thickness of an artery are provided. The methods comprise the step of administering to the patient a composition comprising a therapeutically effective amount of an extract from pomegranate. The methods of the present invention may also be used to decrease the incidence of stroke or heart attack in a patient.
INVENTOR	Michael Aviram and Leslie Dornfeld

10.

COUNTRY	USA
PATENT NO	6, 387, 418
DATE & YEAR	14th May, 2002
TOPIC	Pomegranate extracts and methods of using thereof
MEDICINAL PLANT	Anar (Pomegranate)
ABSTRACT	Pomegranate extracts and methods of use thereof are provided. Particularly, an antioxidative composition comprising an extract from pomegranate is provided. A method of reducing lipid peroxidation, aggregation or retention, HDL oxidation in a sample and a method of alleviating atherosclerosis in a patient are also provided.
INVENTORS	Michael Aviram and Leslie Dornfeld

11.

COUNTRY	USA
PATENT NO	6,855,547
DATE & YEAR	15th February, 2005
TOPIC	Methods and compositions for rapid in vitro propagation of Swertia chirata

MEDICINAL PLANT	Chirata-Swertia chirata
ABSTRACT	The present invention relates to methods and compositions for in vitro cultivation of species of Swertia chirata. The disclosure provides culture media comprising Murashige and Skoog (MS) basal culture medium, plant hormones preferably selected from the group consisting of benzyladenine (BAP), gibberellic acid (GA_3), and auxins and other additives, e.g. sucrose and agar. Preferably, auxins are selected from the group consisting of indoleacetic acid (IAA), indole butyric acid (IBA) and naphthalene acetic acid (NAA). Individual plant hormone concentrations are preferably from about 0.5 mg/L to about 5.0 mg/L. The disclosure provides methods of in vitro cultivation of Swertia chirata comprising contacting preferably axillary bud and/ or shoot apex explants with an initiation medium comprising a modified MS basal culture medium, BAP, IAA, IBA and NAA to produce a primary explant, contacting the primary explant with a shoot propagation medium comprising a modified MS basal culture medium, BAP, GA_3 and IAA to produce a modified MS basal culture medium, BAP, GA_3 and IAA to produce a secondary explant contacting a secondary explant with a rooting medium comprising a modified MS basal culture medium, IAA, IBA and NAA. The methods and compositions of the invention are capable of inducing extra-ordinarily rapid in vitro propagation of Swertia chirata. The methods and compositions of the disclosure may be useful for conservation of this threatened species as well as producing bulk quantities of plant material for medical application.
INVENTORS	Ashok Ahuja, Sushma Kaul, B.L.Kaul, N. K. Verma, M.K.Kaul, R. K. Raina and G.N.Qazi.

12.

COUNTRY	USA
PATENT NO.	6,787,161
DATE & YEAR	7th September, 2004
TOPIC	Anti-cancer compounds
MEDICINAL PLANT	Dudhi-Euphorbia hirta
ABSTRACT	This invention relates to a compound or group of compounds present in an active principle derived from plants of species-Euphorbia peplus, Euphorbia hirta and Euphorbia drummondii and to pharmaceutical compositions comprising these compounds. Extracts from these plants have been found to show selective cytotoxicity against several different cancer cell lines. These compounds are useful in effective treatment of cancer, particularly malignant melanomas and squamous cell carcinomas (SCCs). In a preferred embodiment of the invention, the compound is selected from the group consisting of jatrophanes, pepluanes, paralianes and ingenanes and pharmaceutically acceptable salts or esters thereof and more particularly jatrophanes of Conformation II.
INVENTOR	James Harrison Aylward

13.

COUNTRY	USA
PATENT NO.	7, 914, 824
DATE & YEAR	29th March, 2011
TOPIC	Herbal extract for renal disorders
MEDICINAL PLANTS	Guruchi-Tinospora cordifolia
ABSTRACT	The present invention relates to the use of standardised extract of Tinospora cordifolia as an immunoadjuvant in the treatment of renal disorders such as nephrotic syndrome and chronic recurrent urinary tract infections, both complicated and uncomplicated. The present invention also relates to pharmaceutical compositions comprising the standardised extract of Tinospora cordifolia. The present invention further relates to a method of treatment of renal disorders such as urinary tract infection particularly occurring due to relapsing E.coli, Klebsiella and other gram negative infections and to a method of treatment of nephrotic syndrome using standardised extract of Tinospora cordifolia as an immunoadjuvant with conventional therapy.
INVENTOR	Vidya Narayan Acharya, Tripti Kumar Mukhopadhyay and Swati Ajay Piramal

14.

COUNTRY	USA
PATENT NO.	4,937,074
DATE & YEAR	26th June, 1990
TOPIC	Method of treating Retrovirus infection
MEDICINAL PLANTS	Jar amla-Phyllanthus niruri
ABSTRACT	Method of treating retrovirus infection by administering extract of phyllanthus niruri.
INVENTOR	P.S venkateswaran, Irving Millman and Baruch. S. Blumberg

15.

COUNTRY	USA
PATENT NO.	7,070,817
DATE & YEAR	4th July, 2006
TOPIC	Herbal composition for treating or alleviating vascular headaches, neurological conditions and neurodegenerative diseases.
MEDICINAL PLANTS	Gol marich-piper nigrum
ABSTRACT	The invention relates to an herbal composition comprising extract of plant Moringa oleifera, plant Piper nigrum and plant Nicotiana tabacum, for treating or alleviating of vascular headaches, neurological conditions and neurodegenerative diseases. The invention also reveals a method of preparing and using the composition.
INVENTOR	Chandrasekhara Rao Kuppan

16.

COUNTRY	USA
PATENT NO.	6,964,786
DATE & YEAR	15th November, 2005
TOPIC	Oil from Momordica charantia, its method of preparation and uses.
MEDICINAL	Karela- Momordica charantia

PLANTS	
ABSTRACT	The present invention relates to a novel oil extracted from the seeds of Momordica charantia L. for topical application to a body of mammal and used as anti-inflammmatory, anti arthritic, vasculodilatory and wound healing agent, said oil essentially comprising capric acid 0.7-1.2% by wt., lauric acid 0.6-1% by wt., palmitic acid 4.2-5.0% by wt., stearic acid 59-62% by wt., oleic acid 13-15% by wt., archid acid 3-5% by wt., linoleic acid 8-10% by wt and other undected minor acids 6-8% by wt., and a process for producing such oil.
INVENTOR	Pushpa Khanna

17.

COUNTRY	USA
PATENT NO.	5,929,047
DATE & YEAR	27th July, 1999
TOPIC	Anti-viral agent prepared by basic and acidic extraction of mangoves.s
MEDICINAL PLANTS	Karela- Momordica charantia
ABSTRACT	An anti-viral agent comprising as the effective component, an alkali extract of mangroves-Momordica charantia and Aspalathus linearis. The effective component is essentially consists of acidic polysaccharides and shows an anti-oxidant activity and free radical (reactive oxygen species)-scavenging activity. The agent is effective against retrovirus such as human immuno deficiency virus (HIV) with no side effects on human and/or animals.
INVENTOR	Mosatoshi Nakano

18.

COUNTRY	USA
PATENT NO.	6,248,343
DATE & YEAR	19th June, 2001
TOPIC	Therapeutic antimicrobial compositions
MEDICINAL PLANTS	Shallaki-s
ABSTRACT	Antimicrobial alcohol-containing compositions and methods of using the compositions to disin fect surfaces and provide therapeutic benefits are disclosed.
INVENTOR	Hanuman B. Jampani and Jerry L. Newman

19.

COUNTRY	USA
PATENT NO.	3,878,197
DATE & YEAR	15th April, 1975
TOPIC	Process for preparing extracts of aloe vera.
MEDICINAL PLANTS	Aloe vera
ABSTRACT	Disclosed is a process for extracting and stabilizing juice from leaves of the Aloe vera plant. The gel is removed by trimming the rind and aloin layer from the leaf and the remaining gel digested under ultra-violet radiation at ambient temperature to produce a biologically sterile and chemically stable extract of composition having characteristics similar to

	fresh aloe vera juice.
INVENTOR	Ray H. Maret

20.

COUNTRY	U SA
PATENT NO.	5,529,778
DATE & YEAR	25th June, 1996
TOPIC	Ayurvedic composition for the prophylaxis and treatment of AIDS, FLU, TB and other immune-deficiencies and the process for preparing the same
MEDICINAL PLANTS	Phyllanthus niruri, Tinospora cordifolia, Swertia chirata, Phyllanthus emblica etc
ABSTRACT	An ayurvedic composition for prophylaxis and treatment of AIDS, flu, TB and other immune-deficiency conditions and for liver diseases such as hepatitis and sclerosis includes prescribed doses of extracts or isolates of two multi-component drugs in selected proportions. The first multi-component drug, LIVZON consists of Phyllanthus niruri (292-310 mg.), Tinospora cordifolia (190-210 mg.), Phyllanthus emblica (90-110 mg.), Terminalia belerica (90-110 mg.), and Terminalia chebula (290-310 mg.); and second multi-component drug IMMINEX, consists of Holarrhena antidysenterica (40-60 mg.), Picrorhiza kurrooa (40-60 mg.) and Swertia chirata (15-35 mg.). The beneficial composition may be administered in the form of aqueous extracts, hard gelatine capsules or mixed with syrup. The process of making the composition requires the basic ingredients to be cleaned, washed, dried and separated from all extraneous matter after which they are powdered and extracts obtained therefrom with distilled water.The extracted material may be concentrated, granulated and dried at low temperature before the various ingredients are mixed in their selected proportions to form the necessary pharmaceutical dosage. Hard gelatine capsules or syrup are other optional forms for dispensing the composition to patients.
INVENTOR	Surendra Rohatgi

21.

COUNTRY	USA
PATENT NO.	6,989,160
DATE & YEAR	24th January, 2066
TOPIC	Therapeutic/edible compositions comprising herbal ingredients and methods for treating hyperglycemia.
MEDICINAL PLANTS	Azadirachta indica, Ocimum sanctum, Prunus amygdales, Aegle marelose and Vitus vinefera.
ABSTRACT	A therapeutic or an edible composition comprising at least three of the five herbs selected from Azadirachta indica, Ocimum sanctum, Prunus amygdales, Aegle marelose and Vitus vinefera, is provided for the treatment of hyperglecemia, especially for non-insulin dependent diabetic subjects and the herbal composition has significantly reduced the blood glucose levels in both diabetic and non-diabetic experimental subjects having elevated blood glucose levels.
INVENTOR	A.S. Chauhan, K.B.Chalasani, S.Surapanini, S.K.Yandrapu and others

22.

COUNTRY	USA
PATENT NO.	5,653,981
DATE & YEAR	5th August, 1997
TOPIC	Use of Nigella sativa to increase immune function
MEDICINAL PLANTS	Nigelia sativa
ABSTRACT	A pharmaceutical composition for treatment of cancer and other conditions and the prevention of side effects of anti-cancer chemotherapy and increasing the immune function contains an extract of the plant Nigella sativa.
INVENTOR	Rajko D. Medenica

23.

COUNTRY	USA
PATENT NO.	7,172,772
DATE & YEAR	6th February, 2007
TOPIC	Herbal composition for gastrointestinal disorders
MEDICINAL PLANTS	Magnifera indica, Cinnamomum sp, Buchanania lanzam and Cissampelos pareria
ABSTRACT OF INVENTION	The invention provides a novel herbal antidiarrhoeal dosage form for the treatment of functional gastrointestinal disorders such as irritable bowel syndrome and diarrhea. The antidiarroheal herbal formulation comprises the decoction of Magnifera indica, Cinnamomum sp, Buchanania lanzam, and Cissampelos pareria, with the conventional additives to form the oral dosage forms, which include syrup, tablets and powders ready for suspension.
INVENTOR	P. Pushpangadan, C.V.Rao, Rajat A.Kumar, Shanta Mehrotra and others

24.

COUNTRY	USA
PATENT NO.	5,536,506
DATE & YEAR	16th July, 1996
TOPIC	Use of piperine to increase the bio-availability of nutritional compounds
MEDICINAL PLANTS	Piper nigrum-Black pepper
ABSTRACT	A new composition and method for the improvement of gastrointestinal absorption and systemic utilization of nutrients and nutritional supplements, wherein the composition comprises an extract from the fruit of piper containing a minimum of 98% of pure alkaloid piperine. The method comprises oral, topical or parenteral administration of the compositions of the invention. A new process for the extraction and purification of piperine is also disclosed.
INVENTOR	Muhammed Majeed, Vladimir Badmaev and R.Rajendran

25.

COUNTRY	USA
PATENT NO.	6,572,897
DATE & YEAR	3rd July,2003
TOPIC	Insulin sensitivity maintenance and blood sugar level maintenance formulation for the prevention and treatment of diabetes.

MEDICINAL PLANTS	Momordica charantia-karela
ABSTRACT	A composition that contains the most potent combination of nutrients with clinical studies proven to assist in the maintenance of insulin sensitivity and healthy blood sugar levels. The formulation contains essential amounts of Alpha Lipoic Acid, Chromium, Lutein, Bioflavonoids (quercetin and rutin), Momordica charantia extract, Corosolic acid and Gymnema Sylvestre Extract as well as other ingredients and healthy filler ingredients.
INVENTOR	Wayne F. Gorsek

26.

COUNTRY	USA
PATENT NO.	7,923,045
DATE & YEAR	12th April, 2011
TOPIC	Composition for alleviating inflammation and oxidative stress in a mammal.
MEDICINAL PLANTS	Brahmi-Bacopa monniera, Ashwagandha-Withania somnifera, Turmeric-Curcuma longa, Aloe vera-Aloe barbadensis etc
ABSTRACT	An antioxidant-promoting composition that increases anti-oxidant defense potential in a subject is disclosed comprising bacopa monniera extract, milk thistle extract, ashwagandha powder, green tea extract, Gotu kola powder, Ginko biloba leaf extract, aloe vera powder, turmeric extract; and N-acetyl cysteine. The anti-oxidant promoting composition of the invention safely induces cellular antioxidant potential to achieve an overall net decrease in oxidative stress without the undesirable side effects associated with the individual components of the antioxidant-promoting composition. Also disclosed is a method for reducing the undesirable side effects of free radicals in a subject by administering to a subject in need of such anti-oxidants an effective amount of anti-oxidant-promoting composition of the invention.
INVENTOR	Paul R. Myhill and William J. Driscoll

27.

COUNTRY	USA
PATENT NO.	7,455,860
DATE & YEAR	25th November, 2008
TOPIC	Dietary supplement for controlling inflammation and cancer.
MEDICINAL PLANTS	Salai-Boswellia serata
ABSTRACT	This invention relates to a dietary supplement which is a phytochemical composition. This composition is capable of controlling inflammatory conditions and preventing and curing cancer in mammals. The composition comprises a synergistic mixture of standardised Boswellia extract, salts of glucosamine and curcuminoids optionally containing bromelain, chondroitin, methylsulphonylmethane, resveratrol, extracts of white willow and ginger and quercetin.
INVENTOR	G.R. Gokaraju, R.R.Gokaraju and others

28.

COUNTRY	USA
PATENT NO.	7,582,314
DATE & YEAR	1st September

TOPIC	Compositions and methods for the management of hyperproliferative dermatological conditions.
MEDICINAL PLANTS	Salai-Boswellia serrata
ABSTRACT	The invention describes compositions and methods for the management of hyperproliferative skin conditions such as psoriasis. The preferential composition contains a natural leukotriene inhibitor selected from Boswellia serrata gum resin, its extractives, isolates or derivatives in combination with a bioavailable organic selenium nutritional supplement. These compositions are administered orally and topically to the individual human or animal in need of treatment at optimal levels to manifest the desired benefits, with no untoward side effects.
INVENTOR	Muhammed Majeed and Subbalakshmi Prakash

29.

COUNTRY	USA
PATENT NO.	7,014, 874
DATE & YEAR	21st March, 2006
TOPIC	Compositions and methods containing Allum sativum Linn. (Garlic) naturally enriched with organic selenium compounds for nutritional supplements.
MEDICINAL PLANTS	Garlic-Allum sativum
ABSTRACT	The invention discloses a method to prepare concentrates from Allium sativum (Garlic) bulbs naturally enriched with a unique composition of organic selenium compounds and the use of such concentrates in nutritional supplement compositions for human and animal use. The resulting compositions provide a safe and efficacious means of providing supplemental amounts of the essential trace mineral nutrient selenium for diverse health benefits.
INVENTOR	M.Majeed, R.K. Bammi, V. Badmaev, Subbalakshmi Prakash and N.Kalyanam

30.

COUNTRY	USA
PATENT NO.	6,713,092
DATE & YEAR	30th March, 2004
TOPIC	Withania somnifera composition, method for obtaining same and pharmaceutical, nutritional and personal care formulations thereof.
MEDICINAL PLANTS	Ashwagandha-Withania somnifera
ABSTRACT	The invention relates to a composition of the plant Withania somnifera and more particularly to a high purity extract composition with advantageous levels of withanolide glycosides and oligossccharides, a minimum of polysaccharides and substantially low levels of free withaferin A and equivalents (withanolide aglycones) , which composition provides enhanced cognition-enhancing effects for the user and an extraction process for obtaining such composition as well as pharmaceutical, nutritional and personal care products thereof.
INVENTOR	Shibnath Ghosal

31.

COUNTRY	USA
PATENT NO.	6,224,871
DATE & YEAR	1st May, 2001
TOPIC	Dietary supplement for nutritionally promoting healthy joint function
MEDICINAL PLANTS	Boswellia serrata, Ashwagandha, Piper nigrum, Turmeric etc
ABSTRACT	A dietary supplement for nutritionally promoting healthy joint function in human subjects is disclosed. The supplement includes as a major ingredient a protein derived from the enzymatic hydrolysis of collagen in combination with lesser proportions of glucosamine sulphate, ginkgo, biloba, borage oil powder, turmeric, boswellia serrata, ashwagandha, piper nigrum extract and herbal blend.
INVENTOR	David J. Barnes, Carl W. Hastings and Christine A. Daley

32.

COUNTRY	USA
PATENT NO.	6,153,197
DATE & YEAR	28th November, 2000
TOPIC	Topical treatment of psoriasis
MEDICINAL PLANTS	Garlic-Allium sativum
ABSTRACT	A pharmaceutical composition for treatment of psoriasis is a mixture of garlic (Allium sativum) and seeds of the radish plant (Raphanus sativus) in dilute acetic acid, preferably in the form of white wine vinegar, which is pulverized and blended into a paste. For maximum potency, the composition is preferably prepared immediately before use from fresh ingredients in an amount sufficient for a single treatment. Alternatively, the composition may be prepared ahead of time and stored in a sealed, refrigerated container or otherwise preserved. In the method of treatment, the paste like composition is applied topically directly to psoriatic plaques on the patient. The composition is allowed to dry on the patient's skin and is left in place for a period of approximately 24 to 72 hours after which the composition is washed off. The composition is repeatedly applied at intervals of approximately one week over a three to six week period until the desired results are obtained. Typically, the patient's skin will begin to show signs of improvement after the first application of the composition and after the course of the treatment,the plaque-like lesions will be replaced by healthy, normal skin. The method of treatment is effective on new cases of psoriasis and on long-standing intractable cases of psoriasis, which have not responded to other methods of treatment. Lomgterm follow-up of patients has shown relatively complete remission of the disease and restoration of normal skin growth for extended periods without recurring symptons.
INVENTOR	Rakhi Albazi and Hermiz Albazi

33.

COUNTRY	USA
PATENT NO.	3,470,109
DATE & YEAR	30th September, 1069

TOPIC	Method of making reconstitutable aloe gel in crystalline form
MEDICINAL PLANTS	Aloe vera
ABSTRACT	The method of making reconstitutable aloe gel and particularly aloe vera gel in dry crystalline form in which the gel is removed from the leaves, mercerized, screened, frozen to between 0^0 C. and -120^0 C., and while frozen having a vacuum administered thereto for a period of 6 to 12 hours, until anhydrous crystals remain and storing the dry crystals in sealed containers. Later, by the addition of water, the crystals may be reconstituted into gel having the same physical and chemical properties as fresh gel.
INVENTOR	Joseph R. Marsh and Fort Lauderdale

34.

COUNTRY	USA
PATENT NO.	3,362,951
DATE & YEAR	9th January, 1968
TOPIC	Polysaccharide product derived from the juice of the aloe plant and methods for preparing the same.
MEDICINAL PLANTS	Aloe vera
ABSTRACT	A process for producing a highly pure aloe derivative comprising mixing aloe gel with an aqueous solution of phosphomolybdic acid, separating the insoluble precipitate, precipitating the aloe derivative with a water soluble aliphatic solvent and clearing it with hypochlorous acid. Adding a measured amount of water to the solvent produces the hydrate while withholding it produces the anhydrous derivative.
INVENTOR	Alexandar Farkas and Robert A. Mayer

35.

COUNTRY	USA
PATENT NO.	5,980,902
DATE & YEAR	9th November, 1999
TOPIC	Compositions for treating and preventing diabetes, impaired glucose tolerance and related symptons and methods for preparing and using such compositions.
MEDICINAL PLANTS	Gurmara-Gymnema sylvestre
ABSTRACT	Compositions derived from Gymnema sylvestre leaf materials are disclosed. Methods for isolating such compositions are also disclosed. The compositions may be administered orally, intravenously, subcutaneously or transdermally and are useful for treating patients having diabetes, impaired glucose tolerance and various conditions associated with or symptons of diabetes. Additionally the compositions reduce polydipsia, polyuria and polyphagia, regenerate the pancreatic islets of Langerhans including beta cells, increase endogenous insulin, lipase and amylase levels, increase production of proinsulin and c-peptide and lower blood lipids and triglycerides and free fatty acids.
INVENTOR	E.R.Bhavani, Shanmugasundaram, K.R.S, Rolland Hebert, Sohail Malik and Michael Baker

36.

COUNTRY	USA
PATENT NO.	6,274,177
DATE & YEAR	14th August,2001
TOPIC	Method of preparing an extract potent in anti-inflammation and anti-platelet aggregation from Zingiber officinale and pharmaceutical compositions containing said extract.
MEDICINAL PLANTS	Ginger-Zingiber officinale
ABSTRACT	A method of preparing an extract from Zingiber officinale which is potent in anti-inflammation and anti-platelet aggregation includes the following steps: (a) preparing a crude liquid from rhizomes of ginger by extraction with an organic solvent or by distillation with steam; (b) introducing the crude liquid to a reverse phase chromatography column, and eluting the column with water, a first eluent and a second eluent, having a polarity weaker than that of the first eluent but stronger than that of chloroform, so that a first eluate resulting from elution of the first eluent and a second eluate resulting from elution of the second eluent are obtained; (c) removing the first eluent from the first eluate by evaporation so that a first concentrated eluate is obtained and is able to used as the potent extract; and (d) removing the second eluent from the second eluate by evaporation so that a second concentrated eluate is obtained and is able to used as the potent extract.
INVENTOR	Tian-Shung Wu, Sheng-Chu Kuo, Che-Ming Teng and Feng-Nien Ko.

37.

COUNTRY	USA
PATENT NO.	6,455,077
DATE & YEAR	24th September, 2002
TOPIC	Herbal composition and method of manufacturing such composition for the management of gynaecological disorders.
MEDICINAL PLANTS	Emblica officinalis, Terminalia chebula, Zingiber officinale, Cuminum cyminum, Adhatoda vasica etc.
ABSTRACT	A herbal composition enriched with Plant coagulate for the management of Gynecological disorders is envisioned. Also disclosed is a process which involves selective solvent extraction of crude herbs in contrast to conventional aqueous extraction to improve the efficacy. The extract prepated by this method, enriched with plant coagulate is useful in the management of Gynecological disorders and to prevent/treat anaemia due to excessive bleeding associated with menstrual disorders. The composition comprises Saraca indica, Emblica officinalis, Terminalia chebula, Terminalia belerica, Zingiber officinale, Cyperus rotundus, Pterocarpus santalinus, Berberis aristata, Cuminum cyminum, Adhatoda vasica, Nelumbo nucifera, Piper longum, Symplocos racemosa, Woodfordia fruticosa, Mangifera indica, Spinacia oleracea, Amaranthus, Trifolium alaxandrum and Vigna sinensis.
INVENTOR	C.K.Katiyar, Kumar Duggal and B.V.J.Rao

38.

COUNTRY	USA
PATENT NO.	6,946,153
DATE & YEAR	20th September, 2005

TOPIC	Anti-fungal pharmaceutical compositions comprising an active ingredient prepared from Zingiber officinale.
MEDICINAL PLANTS	Zingiber officinale
ABSTRACT	A method of treating a patient suffering a disease associated with Trichophyton mentagrophytes or Pityrosporum ovale by applying topically an anti-fungal pharmaceutical composition which is prepared from Zingiber officinale includes the following steps: preparing a crude liquid from rhizomes of ginger by extraction with an organic solvent or super-critical CO_2, or by distillation with steam; introducing the crude liquid to a reverse phase chromatography column and eluting the column with water, a first eluent and a secsond eluent having a polarity weaker than that of the first eluent but stronger than that of chloroform, so that a first eluate resulting elution of the first eluent and a second eluate resulting from elution of the second eluent are obtained; removing the first eluent and the second eluent from the first eluate and the second eluate by evaporation, respectively, so that a first concentrated eluate and a second concentrated eluate are obtained as the potent extract.
INVENTOR	Tian-Shung Wu, Sheng-Chu Kuo, Che-Ming Teng and Feng-Nien Ko

39.

COUNTRY	USA
PATENT NO.	6,949,261
DATE & YEAR	27th September, 2005
TOPIC	Composition for diabetes treatment and prophylaxis.
MEDICINAL PLANTS	Gurmara- Gymnema sylvestre
ABSTRACT	An isolate from the leaves of Gymnema sylvestre, having a specified molecular weight, is useful for the treatment of diabetes. The isolate has a molecular weight at least about 3000 Daltons as determined by molecular weight cut-off filtration. Glucose metabolism in a human patient is regulated by dosage forms that contain the aforesaid isolate from the leaves of Gymnema sylvestre, optionally in combination with a non-matobilizable polysaccharide such as the exudate of Sterculia urens.
INVENTOR	Arun. K. Chatterjee

40.

COUNTRY	USA
PATENT NO.	7,482,031
DATE & YEAR	27th January, 2009
TOPIC	Development of an anti-cough, anti-tussive and throat soothing herbal formulation.
MEDICINAL PLANTS	Ginger- Zingiber officinale
ABSTRACT	An anti-cough, anti-tussive and throat soothing synergistic herbal formulation comprising of an extract of Piper cubeba, Glycyrrhiza glabra, Acorus calamus, Alpinia galanga, Zingiber officinale and pharmaceutically acceptable additives as a syrup, lozenges or chewable tablets for preventing cracking of voice, dryness of mouth and toning of voice, vocal cord; the present inventation also provides a method of preparation of this formulation.
INVENTOR	P. Pushpangadam, G. Raghavan, V.Madhavan, Shanta Mehrotra and

	others

41.

COUNTRY	USA
PATENT NO.	7,514,105
DATE & YEAR	7th April, 2009
TOPIC	Bioavailability/Bioefficiency enhancing activity of Cuminum cyminum and extracts and fractions thereof.
MEDICINAL PLANTS	Cuminum cyminum
ABSTRACT	The present invention relates to a bioenhancing/bioavailability-facilitating composition comprising: an effective amount of an extract and/or at least one bioactive fraction from Cuminum cyminum; one or more additive selected from drugs, nutrients, vitamins, nutraceuticals, herbal drugs/ products, micro nutrients, antioxidants along with pharmaceutically acceptable additives/excipient and optionally, an effective amount of piperine or extract/fraction of piper nigrum or piper longum; and a process for the preparation of such extracts and active fractions from plant Cuminum cyminum.
INVENTOR	G.N.Qazi, K.Lal Bedi, Kamal Johri, M.K.Tikoo and others

42.

COUNTRY	USA
PATENT NO.	7,842,318
DATE & YEAR	30th November, 2010
TOPIC	Use of a potent product extracted from rhizomes of Zingiber officinale in treating a disease associated with Helicobacter pylori.
MEDICINAL PLANTS	Ginger-Zingiber officinale
ABSTRACT	The present invention discloses a new use of a potent product extracted from rhizomes of Zingiber officinale in treating a disease associated with Helicobacter pylori such as gastritis, gastric ulcer or duodenal ulcer in a patient.The potent product is prepared by a process including the steps of (a) preparing a crude extract from rhizomes of Zingiber officinale, said crude extract comprising 6-gingerol and 6-shogaol; (b) introducing the crude extract to a reverse phase chromatography column, and eluting the column with a first eluent having a polarity lower than water to obtain a first potent fraction or a second eluent having a polarity lower than that of the first eluent to obtain a second potent fraction. Preferably, the second potent fraction is substantially free of both 6-gingerol and 6-shogaol.s
INVENTOR	Jen-Wei Chen, Feng-Nien Ko, Mo-Chi Cheng and Chen-Ko Liu

43.

COUNTRY	USA
PATENT NO.	6, 048, 533
DATE AND YEAR	11th April, 2000

TOPIC	Turmeric for treating health ailments
MEDICINAL PLANTS	Turmeric
ABSTRACT	The present invention relates to the administration of an effective amount of turmeric for the treatment of various health ailments and also as a food supplement to promote health and vitality.The turmeric is especially useful for the treatment of skin disorders, such as acne, when administrated orally. It can also be applied topically as a whitened or bleached composition. It can also be used to treat liver and stomach disorders, skin discoloration, constipation and hemorhoids.
INVENTOR	Van Bich Nguyen

44.

COUNTRY	USA
PATENT NO.	6, 982, 099
DATE AND YEAR	3rd January, 2006
TOPIC	Composition and method for smoke detoxification
MEDICINAL PLANTS	Turmeric
ABSTRACT	A method is provided for effecting smoke detoxification in a human by using a composition that is made of effective amount of supercritical extract and hydroalcoholic extract of turmeric.
INVENTOR	Thomas Newmark and Paul Schulick

45.

COUNTRY	USA
PATENT NO.	6,162,438
DATE AND YEAR	19th December, 2000
TOPIC	Herbal compositions and their use as agents for control of Hypertension, Hypercholesterolemia and Hyperlipidemia.
MEDICINAL PLANTS	Terminalia arjuna, Zingibar officinale, Curcuma longa etc
ABSTRACT	Edible herbal compositions for use as agents for the control of hypertension, hypercholesterolemia and hyperlipidemia in mammals. The edible composition is a mixture of at least three, preferably at least six, herbs selected from the group consisting of Terminalia arjuna, Cynara scolymus, Zingibar officinale, Allium sativum, Crataegus oxycantha, Curcuma longa, Boerhaavia diffusa and Trigonella foenumgraecum. The composition preferably contains the herbs in approximately equal amounts.
INVENTOR	Onkar S. Tomer, Peter Glomski and Kripanath Borah

46.

COUNTRY	USA
PATENT NO.	6,264,998
DATE AND YEAR	24th July, 2001
TOPIC	Extracting betulinic acid from Ziziphus jujube
MEDICINAL PLANTS	Ziziphus jujube
ABSTRACT	A process for isolating betulinic acid from Ziziphus jujube is disclosed.

	The process involves the steps of: (a) extracting bark of Ziziphus jujuba in a solvent to obtain an extract containing betulinic acid, (b) semi-concentrating the extract containing betulinic acid, (c) chilling said semi-concentrated extract overnight to obtain a solid in the extract, (d) separating the solod from the extract by filteration or centrifugation, (e) dissolving the separated solid from step (d) in hot methanol, refluxing with activated charcoal and filtering through a celite bed to obtain a methanolic solution, (f) partially concentrating the methanolic solution of step (e), adding halogenated hydrocarbon solvent and chilling overnight to obtain a solid in the solution, (g) separating the solid of step (f) by filtration or centrifugation and drying the solid to obtain a solid enriched in betulinic acid, (h) dissolving the dried solid step (g) in a solvent containing pyridine and acetic anhydride, separating an organic layer and drying to obtain a crude 3-acetoxy betulinic acid, (i) washing the crude solid 3-acetoxy betulinic acid obtained in step (h) with an alcohol to yield pure solid 3-acetoxy betulinic acid obtained in step (i) in an aqueous alcoholic alkali solution to yield pure betulinic acid.
INVENTOR	Sunder Ramadoss and M.J.A.Siddiqui

47.

COUNTRY	USA
PATENT NO.	6,277,881
DATE AND YEAR	21st August, 2001
TOPIC	Turmeric as an anti-irritant in compositions containing hydroxyl acids or retinoids.
MEDICINAL PLANTS	Curcuma longa
ABSTRACT	Compositions containing hydroxy acids and/or retinoids and further containing turmeric extract as an anti-irritant/anti-sting agent.
INVENTOR	Uma Santhanam, Ronni Lynn Weinkauf and Laura Rose Palanker.

48.

COUNTRY	USA
PATENT NO.	6,827,945
DATE AND YEAR	7th December, 2004
TOPIC	Nutritional supplements and methods of using same.
MEDICINAL PLANTS	
ABSTRACT	A nutritional supplement for providing, and for promoting the health of salivary glands and/or supporting normal or healthy swallowing includes ingredients obtainable from turmeric, ginger and horseradish. The nutritional supplement may also be used to treat symptoms such as symptoms of a common cold, sore throat, congestion, mucositis, laryngitis, mucous membrane inflammation and sialorrhea, as well as inflammation and viral infection or to inhibit or exterminate a virus. This nutritional supplement can be orally administered a person. The nutritional supplement may further include optional ingredients such as ingredients obtainable from slippery elm bark powder and green tea, as well as other optional ingredients. This nutritional supplement may further include a pharmaceutically acceptable carrier for oral administration. Also disclosed are methods of providing nutrition, for promoting the

	health of salivary glands and/or supporting normal or healthy swallowing, as well as methods for treating symptoms of a common cold, sore throat, congestion, mucositis, laryngitis, mucous membrane inflammation and sialorrhea. Methods of treating inflammation, and viral infections as well as inhibiting or exterminating viruses are also disclosed.
INVENTOR	Richard A. Rosenbloom

49.

COUNTRY	USA
PATENT NO.	7,341,748
DATE AND YEAR	11th March, 2008
TOPIC	Crude extracts from Andrographis paniculata
MEDICINAL PLANTS	Andrographis paniculata
ABSTRACT	This invention relates to a method of inhibiting TNF or IL- 1 expression with an extract of Andrographis paniculata. The extract contains andrographolide, 14-deoxy-an-drographolide, 14-deoxy-11, 12-dehydrogen-andrographolide and neoandrographolide.
INVENTOR	Xiaoqiang Yan, Tao Wang, Zhiming Ma, Weihon Zhang and others

50.

COUNTRY	USA
PATENT NO.	7,470,440
DATE AND YEAR	30th December, 2008
SUBJECT	Methods for treating prostrate cancer with herbal compositions.
MEDICINAL PLANTS	Ginger, Turmeric etc
ABSTRACT	The inventive subject matter relates to methods for treating prostrate cancer, comprising administration of a composition comprising therapeutically effective amounts of supercritical ectracts of rosemary, turmeric, oregano and ginger; and therapeutically effective amounts of hydroalcoholic extracts of holy basil, ginger, turmeric, Scutellaria baicalensis, rose-mary, green tea, huzhang, Chinese goldthread and barberry.
INVENTOR	Thomas Newmark, Paul Schulick and Aaron Katz

51.

COUNTRY	USA
PATENT NO.	7,780,996
DATE AND YEAR	24th August, 2010
SUBJECT	Composition to enhance HDL cholesterol and to decrease intima-media thickening in animals and humans and a method for its preparation.
MEDICINAL PLANTS	Emblica officinalis s
ABSTRACT	A method of producing a product to correct hypercholesterolemi including pulping fruits of Emblica officinalis with demineralised water t create a slurry. The slurry is treated with pectinase. The pectinase-treate slurry is filtered to create a solution. The solution is concentrated to creat a product. A product having an extract of Emblica officinalis f

	prophylactic and for therapeutic treatment of coronary diseases, atherosclerosis, hypothyroidism and hyperthyroidism.
INVENTOR	Benny Antony

52.

COUNTRY	USA
PATENT NO.	7,993,683
DATE AND YEAR	9th August, 2011
SUBJECT	Composition for the treatment of chronic degenerative inflammatory conditions.
MEDICINAL PLANTS	Andrographis paniculata
ABSTRACT	Compositions comprising: saligenin or derivatives thereof or Salix ssp extracts containing from 10 to 50% of saligenin; substantially pure andrographolide or andrographolide enriched Andrographis paniculata extract containing from 5 to 30% of andrographolide; optionally N-acetyl-glucosamine and/or glucuronic acid or glucuronolactone.
INVENTOR	Ezio Bombardelli

EPO PATENTS ON TRADITIONAL KNOWLEDGE ASSOCIATED WITH INDIAN MEDICINAL PLANTS[2]

Followings are some of the examples of patents granted by European Patent Office. These patents are either regarding the medicinal properties of the Indian medicinal plants or the processes thereof. These inventions are claimed as being novel and non-obvious and not covered by the formal and informal prior art. The following nomenclatures of the patented subject matters give the prima facie impression that there is Indian traditional knowledge on them. This is just a tip of the iceberg. If searched and analysed thoroughly, more such patents on the medicinal values of the Indian plants would be found out.

1. EP 1133992 B1: Novel pharmachological activities of Curcuma longa extracts.
2. EP 1844786 B1: Extracts of Curcuma longa and their cosmetic and dermalogical uses.
3. EP 1526860 B1: Bioavailability/efficiency enhancing activity of Cuminum cyminum and extracts and fractions thereof.
4. EP 0810868 B1: Use of Piperine as a gastrointestinal absorption enhancer.
5. EP 1284744 B1: Antimigraine combination comprising Sapindus and Emblica extracts.
6. EP 1333848 B1: Phyllanthus derived compounds for the prevention and/or treatment of diseases associated with a retrovirus.
7. EP 1326624 B1: Methods of producing Phyllanthus extracts.

[2] Available at -http://www.epo.org/searching.html.

8. EP 2044849 B1: Process for the manufacture of an Amla composition.

SCHEDULE II

INDIAN PATENTS ON MEDICINAL PROPERTIES OF THE PLANTS ASSOCIATED WITH TRADITIONAL KNOWLEDGE[3]

It is undenying that West is not sensitive to the traditional knowledge protection and indulging in unfair commercialization of traditional knowledge of India and other countries. They always try to prevent any attempt to stop this kind of TK exploitation for one reason or the other. Grabbing other's property and forceful taking has entered into their business mindset in such a way that it is very difficult to neutralize. But what is India's role? But does India do it fairly? The facts establish something contrary to what India preaches and what does it practice. There is dubious role of India in protecting the traditional knowledge and prevent unfair commercialisation. The patent documents regarding the following medicinal plants are taken from the website of the Indian Patent Office: http://www.ipindia.nic.in/ipirs1/patentsearch.htm.

1. INDIAN PATENT ON ALOE VERA

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
247035	1349/MUM/2004	16/12/2004	A PROCESS OF MANUFACTURING CLEAR JUICE FROM THE LEAVES OF THE ALOE VERA PLANT	AGASHE MANDAR DNYANESHWAR
246847	565/CHE/2006	29/03/2006	AN EMULSION FROM ALOE VERA	NAGARATHINAM PONNIAH
237838	3548/CHENP/2007	14/08/2007	ALOE VERA EXTRACT, METHOD OF PRODUCING ALOE VERA EXTRACT, AND HYPERGLYCEMIA IMPROVING AGENT	MORINAGA MILK INDUSTRY CO., LTD
232277	1585/CHENP/2005	11/07/2005	CAMOMILE/ALOE VERA TREATED GLOVE	ANSELL HEALTHCARE PRODUCTS, LLC
209391	1423/CHENP/2004	24/06/2004	NEGATIVELY CHARGED POLYSACCHARIDE DERIVABLE FROM ALOE VERA AND A	2QR RESEARCH BV

[3] Available at http://www.ipindia.nic.in/ipirs1/patentsearch.htm.

			PROCESS FOR PREPARING THE SAME	

2. INDIAN PATENT ON ARJUNA

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
242333	735/CHE/2003	16/09/2003	ANTI OXIDATIVE ASCORBATE PEROXIDASE SEQUENCE FROM TERMINALIA ARJUNA CONFERRING INCREASED STRESS TOLERANCE	M/S AVESTHA GENGRAINE TECHNOLOGIES PRIVATE LIMITED
241636	774/CHE/2003	24/09/2003	PROCESS OF ISOLATING NUCLEIC ACID SEQUENCE DIACYLGLYCEROL KINASE FROM TERMINALIA ARJUNA & ITS USES THEREOF	Avestha Gengraine Technologies Pvt Ltd
239699	736/CHE/2003	16/09/2003	DIHYDROFLAVONOL -4-REDUCTASE NUCLEOTIDE SEQUENCE FROM TERMINALIA ARJUNA CONFERRING PROTECTION AGAINST PATHOGENS AND ULTRA VIOLET RAYS	M/S AVESTHA GENGRAINE TECHNOLOGIES PRIVATE LIMITED
237613	781/CHE/2003	24/09/2003	"NOVEL PROTOCOL FOR ISOLATION AND PURIFICATION OF NUCLEIC ACIDS FROM TERMINALIA ARJUNA"	M/S AVESTHA GENGRAINE TECHNOLOGIES PVT LTD
237254	777/CHE/2003	24/09/2003	PROCESS OF ISOLATING GLUTATHIONE PEROXIDASE NUCLEIC ACID SEQUENCE FROM TERMINALIA ARJUNA AND USES THEREOF	AVESTHA GENGRAINE TECHNOLOGIES PVT. LIMITED

3. INDIAN PATENT ON GINGER

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
244783	1397/DELNP/2004	25/05/2004	" STABLE GINGER EXTRACT PREPARATION"	FINZELBERG GMBH & CO. KG
195687	44/DEL/2001	19/01/2001	"A PROCESS FOR THE PRODUCTION OF OIL	COUNCIL OF SCEINTIFIC

			AND OLEORESIN FROM FRESH GINGER RHIZOMES "	AND INDUSTRIAL RESEARCH

4. INDIAN PATENT ON KARELA

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
81887	81887	23/04/1962	A PROCESS FOR THE ISOLATION OF BLOOD-SUGAR LOWERING ACTIVE PRINCIPLE FROM THE FRUITS OF MOMORDICA CHARANTIA (VAR : KERALA)	MOSALE RAGHUPATHIAH RAJARAMA RAO
234274	2191/DEL/1996	08/10/1996	"AN ANTI-INFLAMMATORY, ANTIARTHRITIC AND A VASCULODILATOR HERBAL OIL FROM MOMORDICA CHARANTIA L. (BITTER GOURD)"	DR. PUSHPA KHANNA
183780	2192/DEL/1996	08/10/1996	"A PROCESS FOR MANUFACTURE OF AN ANTI-INFLAMMATORY, ANTIARTH-RITIC AND VASCULODILATOR HERBAL OIL FROM MOMORDICA CHARANTIA L.,(BITTER QOURD)"	DR. (MS.) PUSHPA KHANNA

5. INDIAN PATENT ON NEEM

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
241478	293/CHE/2004	31/03/2004	"AN IMPROVED GRANULAR FORMULATION OF NEEM SEED EXTRACT AND ITS PROCESS THEREOF"	E.I.D PARRY (INDIA) LIMITED
234081	657/CHE/2006	10/04/2006	A PHYTOPESTICIDAL FORMULATION 'PONNEEM' FOR CONTROLLING INSECT PESTS	SAVARIMUTHU IGNACIMUTHU
26213	1116/DEL/2004	14/06/2004	A PROCESS OF FORMULATION OF NEEM (AZADIRACHTA INDICA) ROOT BASED NATURAL	

			FUNGICIDAL PRODUCT	
226204	1126/DEL/2003	09/09/2003	"EFFICIENT PROCESS FOR THE PREPARATION OF NEEM BASED REDUCED AZADIRACHTIN(S) PESTICIDES"	INDIAN COUNCIL OF AGRICULTURAL RESEARCH
225764	442/MUM/2006	27/03/2006	A NEEM BASED COMPOSITION FOR COATING NITROGENOUS FERTILISER	GODREJ AGROVET LIMITED
222010	261/MUM/2005	10/03/2005	A NEEM OIL BASED WOUND HEALING OINTMENT OR CREAM	GODREJ AGROVET LIMITED
213607	488/MUM/2004	27/04/2004	A PROCESS FOR PREPARING A NEEM OIL BASED WOUND HEALING OINTMENT OR CREAM	GODREJ AGROVET LIMITED
207868	486/MUM/2004	27/04/2004	A PROCESS OF PREPARING A NEEM OIL AND TURPENTINE OIL BASED WOUND HEALING OINTMENT OR CREAM	GODREJ AGROVET LIMITED
201371	200/KOL/2003	04/04/2003	PROCESS FOR REMOVAL OF HEAVY METAL IONS AND DYES IN WATER WITH NEEM LEAF POWDER AS AN ADSORBENT	ARUNIMA SARMA
198109	116/MAS/2002	12/02/2002	PESTICIDE FORMULATION CONTAINING AZADIRACHTIN (NOT LESS THEN 300 PPM) AND SALANIN IN A FORMULATED PRODUCT WITH NEEM OIL	T. STANES & COMPANY LIMITED
196692	48/DEL/2003	20/01/2003	PROCESS FOR PREPARATION OF NEEM OIL WATER EMULSION COATED UREA PRILLS,CAPABLE OF BEING INTEGRATED AT FERTILIZER PLANTS FOR A LARGE SCALE & CONTINUOUS COATING PROCESS	A.K. DAS
188667	1100/DEL/1995	14/06/1995	" A PROCESS FOR THE ISOLATION OF AN ACTIVE FRACTION CONTAINING HENOLIC GLYCOSIDE FROM AZADIRACHTA INDICA (NEEM) USEFUL FOR CONTROLING GASTRIC HYPERACIDITY AND GASTRIC ULCERATION"	COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH
185068	487/BOM/1998	30/07/1998	"A PROCESS FOR PREPARING AN IMPROVED DENTAL TOOTH PASTE WITH GREEN NEEM LEAVES AS A MAJOR INGREDIENT FOR MEDICINAL EFFECT"	PRIYAL KHANDERAO KULKARNI
184305	1919/DEL/1995	19/10/1995	"A PROCESS FOR THE PREPARATION OF AN EXTRACT CONTAINING UPTO 88% OF AZADIRACHTIN FORM NEEM	COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH,

			SEEDS/KERNELS, AS A DRY POWDER"	
83722	1855/MAS/1997	22/08/1997	" PROCESS FOR PREPARING UPGRADED AZADIRACHTIN CONTAINING NEEM PRODUCTS"	E.I.D.PARRY (INDIA)LTD.
183719	463/BOM/1997	01/08/1997	A NOVEL METHOD FOR THE STERLIZATION OF NEEM SEEDS FOR BETTER SHELF LIFE AND FUNGS PROOF.	M/S. SYNIT DROGS,PVT.LTD.,
183056	758/DEL/1993	20/07/1993	"A PROCESS FOR THE PREPARATION OF STORAGE STABLE NEEM SEED EXTRACT"	ROHM AND HAAS COMPANY
182919	1513/DEL/1994	24/11/1994	"A PROCESS FOR THE PREPARATION OF EMULSIFIABLE CONCENTRATE OF DRY AZADIRACHTIN POWDER HAVING PURITY UP TO 88 % PREPARED FROM NEEM SEEDA/KERNELS"	COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH
182788	121/BOM/1996	04/03/1996	A PROCESS OF ISOLATION AND EXTRACTION OF AZADIRACHTIN FROM NEEM SEED POWDER	SRI BANOO PRASAD G. BHAT
181845	1445/MAS/1995	08/11/1995	A PROCESS OF PREPARING A BIO-PESTICIDE NEEM EXTRACT	E.I.D. PARRY (INDIA) LTD
153415	869/DEL/1979	06/03/1981	PROCESS FOR THE ISOLATION FROM NEEM OIL OF ACTIVE PRINCIPLES EVINCING OVIPOSITION DETERRENT ACTIVITY IN INSECTS	COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH

6. INDIAN PATENT ON HALDI

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
231051	215/DEL/2001	28/02/2001	A PROCESS FOR THE ISOLATION OF ARONATIC TURMERONE OIL FROM TURMERIC OLEORESIN INDUSTRY WASTE	COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH
230571	401/DEL/2001	29/03/2001	A PROCESS FOR THE PREPARATION OF WATER SOLUBLE TURMERIC COLOURANT FORMULATIONS USEFUL AS YELLOW COLOURANT IN FOODS AND BEVERAGES.	COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH
205792	971/MUM/2004	10/09/2004	PROCESS OF RECOVERY OF PURE CURCUMINS FROM TURMERIC	GODAVARI SUGAR MILLS LIMITED

			RHIZOMES	
199734	506/DEL/1998	26/02/1998	A PROCESS FOR THE PREPARATION OF TRANSLUCENT PAPERS FROM TURMERIC PLANT (CURCUMA LONGA LINN)	COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH

7 (A) INDIAN PATENT ON KRISHNA TULSI

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
184300	1543/DEL/1996	11/07/1996	"AN IMPROVED PROCESS FOR PREPARATION FLAVONOIDS FROM OCIMUM SANCTUM (KRISHNA TULASI)"	THE CHIEF CONTROLLER RESEARCH & DEVELOPMENT
217878	418/DEL/2002	28/03/2002	A HERBAL OPHTHALMIC FORMULATION OF OCIMUM SANCTUM FOR DELAYING THE ONSET AND PROGRESSION OF CATARACT"	All INDIA INSTITUTE OF MEDICAL SCIENCES

8. INDIAN PATENT ON AMLA AND OTHERS

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
220708	1524/DEL/2003	09/12/2003	"A HERBO-MINERAL FORMULATION"	
204225	487/MAS/2001	18/06/2001	A NOVEL HERBAL DRUG COMPOSITION AND PROCESS THE PREPARATION THEREOF	DR. POTHURAJU SURYA VENKATA SATYANARAYANA
196916	123/DEL/2001	01/02/2001	"A PROCESS FOR THE PREPARATION OF A HEARBO MINERAL PREPARATION FOR GENERAL IMMUNITY AND STRENTHENING OF CHILDREN"	CENTRAL COUNCIL FOR RESEARCH IN AYURVEDA AND SIDDHA

9. INDIAN PATENT ON BRAHMI

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
78014	78014	10/08/1961	A PROCESS FOR OBTAINING A THERAPEUTICALLY ACTIVE TRANQUILLISING PRACTION FROM THE PLANT HERPESTIS MONNIERA LINN (BRAHMI).	INDIAN COUNCIL OF MEDICAL RESEARCH
185704	1089/DEL/1996	23/05/1996	"A PROCESS FOR PRODUCING AN EXTRACT OF BRAHMI FOR EXHANCEMENT OF METAL CAPABILITIES"	DALMIA CENTRE FOR BIO-TECHNOLOGY

10. INDIAN PATENT ON GARLIC

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
40890	40890	14/07/1949	PROCESS OF PRODUCING STABLE GARLIC PREPARATION.	DOLNI KRE
190148	2376/DEL/1998	13/08/1998	A PROCESS FOR THE PREPARATION OF A FLAVOUR-ENRICHED GARLIC POWDER"	COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH
144278	344/BOM/1975	27/11/1975	PROCESS FOR THE PREPATION OF INSECTICIDAL PRINCIPLES OF GARLIC	BHABHA ATOMIC RESEARCH CENTRE
134964	134964	09/03/1973	IMPROVEMENTS IN OR RELATING TO THE MANUFACTURE OF GARLIC POWDER	COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

11. Kalo Zeera- Nigalla Sativa

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
243225	585/DEL/2004	24/03/2004	A PROCESS FOR THE	COUNCIL OF

			PREPARATION OF ANTIOXIDENT FROM BLACK CUMIN (NIGELLA SATIVA.) SEEDS	SCIENTIFIC & INDUSTRIAL RESEARCH

12. Daya-Woodfordia Floribunda

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
36677	**36677**	**25/01/1947**	AN IMPROVED METHOD OF AND COMPOSITION FOR PREPARING MAKARADWAJ OR CHANDRODAYA, A WELL KNOWN AYURVEDIC MEDICINE.	PROF. MAHADEVA LALL SCHROFF

13. Anar-Punica Granatum

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
238970	392/DEL/2001	29/03/2001	"A PROCESS FOR THE EXTRACTION OF THE ANTIOXIDANTS FROM POMEGRANATE PEELS (PUNICA GRANATUM)"	COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH
220096	896/DEL/2003	14/07/2003	"A PROCESS OF PREPARATION OF ANTICOAGULANT AND ANTIPLATELET AGGREGATION AGENT FROM THE EPICARP, PULP AND SEED WITH PULP OF POMEGRANATE (PUNICA GRANATUM).	SINGH UDAI PRATAP
220096	896/DEL/2003	14/07/2003	"A PROCESS OF PREPARATION OF ANTICOAGULANT AND ANTIPLATELET AGGREGATION AGENT FROM THE EPICARP, PULP AND SEED WITH PULP OF POMEGRANATE (PUNICA GRANATUM).	SINGH UDAI PRATAP
220096	896/DEL/2003	14/07/2003	"A PROCESS OF PREPARATION OF ANTICOAGULANT AND	UDAI PRATAP SINGH

			ANTIPLATELET AGGREGATION AGENT FROM THE EPICARP, PULP AND SEED WITH PULP OF POMEGRANATE (PUNICA GRANATUM).	
220096	896/DEL/2003	14/07/2003	"A PROCESS OF PREPARATION OF ANTICOAGULANT AND ANTIPLATELET AGGREGATION AGENT FROM THE EPICARP, PULP AND SEED WITH PULP OF POMEGRANATE (PUNICA GRANATUM).	UDAI PRATAP SINGH

14. Amaltas-Cassia Fistula etc

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
240422	1330/DEL/2004	19/07/2004	"A HERBAL COMPOSITION FOR THE TREATMENT OF HIV AND A PROCESS OF PREPARING THE SAME"	PANDEY , SANTOSH KUMAR

15. Ashwagandha- Withania Somnifera

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
248562	3016/KOLNP/2006	18/10/2006	AN ANTIOXIDANT-PROMOTING COMPOSIsTION	LIFELINE NUTRACEUTICALS CORPORATION
244612	794/DEL/2005	31/03/2005	"AN IMPROVED PROCESS FOR THE ISOLATION OF WITHAFERIN-A FROM PLANT MATERIALS"	COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH
243835	922/MUM/2006	13/06/2006	HERBAL COMPOSITION FOR RELIEVING PAIN FROM JOINTS AND BONES AND METHOD THEREOF	BABULAL BHAWARLAL JAIN
236009	1253/MUM/2003	08/12/2003	A KIT CONTAINING A VACCINE AND AN IMMUNOLOGICAL ADJUVANT	SERUM INSTITUTE OF INDIA LTD.
234928	1246/MUM/2003	05/12/2003	A NOVEL PROCESS FOR PREPARATION OF	SERUM INSTITUTE OF

			AQUEOUS EXTRACTS OF MEDICINAL PLANTS	INIDA LTD.
226242	662/DEL/2002	18/06/2002	"A HERBAL PREPARATION AND A PROCESS FOR THE PREVENTION AND TREATMENT OF HYPERCHOLESTEROLEMIA AND HYPERTRIGLYCERDIEMIA"	RAVI PATODIA
220688	665/DEL/2002	18/06/2002	"A HERBAL COMPOSITION HAVING ANTI-STRESS AND ADAPTOGENIC PROPERTIES AND A PROCESS FOR THE PREPARATION THEREOF"	RAVI PATODIA
210052	384/CHE/2004	27/04/2004	TREATMENT AND MANAGEMENT OF OBESITY AND OBESITY RELATED DISORDERS/SYMPTOMS USING CARALLUMA EXTRACTS	RAMASWAMY RAJENDRAN
190439	619/DEL/1998	11/03/1998	"A PROCESS FOR THE PREPARATION OF A HERBAL COMPOSITION FOR USE FOR THE TREATMENT FO RHEUMATOID ARTHRITIS"	DINESH BOTHRA

16. Gurmara-Gymnema Sylvestre

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
246537	1653/CHE/2007	30/07/2007	A PROCESS FOR PREPARATION OF A NOVEL COMPOUND GYMNEMIC TRIACETATE FROM GYMNEMA SYLVESTRE R. Br. LEAVES WITH ANTIDIABETIC ACTIVITY	PITCHAI DAISY

17. Guruchi-Tinospora Cordifolia

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
246537	1653/CHE/2007	30/07/2007	A PROCESS FOR PREPARATION OF A NOVEL COMPOUND GYMNEMIC TRIACETATE FROM GYMNEMA SYLVESTRE R. Br. LEAVES WITH ANTIDIABETIC ACTIVITY	PITCHAI DAISY

18. Kalomegh- Andrographis Paniculata

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
233817	543/DEL/2003	31/03/2003	"AN IMPROVED PROCESS FOR THE ISOLATION OF ANDROGRAPHOLIDES FROM ANDROGRAPHIS PANICULATA"	COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH

19. Acorus Calamus[4]

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
199804	382/DEL/2002	28/03/2002	"A PROCESS FOR THE PREPARATION OF PHARMACOLOGICALLY ACTIVE α-ASARONE FROM TOXIC β-ASARONE RICH ACORUS CALAMUS OIL"	COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

20. Glycyrrhiza Glabra[5]

PATENT NUMBER	APPLICATION NUMBER	DATE OF FILING	TITLE OF INVENTION	APPLICANT NAME
236432	771/KOL/2005	23/08/2005	A PROCESS FOR ISOLATING AND PURIFYING	BOSE INSTITUTE

[4] http://www.ipindia.nic.in/ipirs1/patentsearch.htm visited on 18th September, 2011 at 6.45 PM

[5] http://www.ipindia.nic.in/ipirs1/patentsearch.htm visited on 18th September 2011 at 6.55 PM

			GLYCYRRHIZIC ACID (GLYCYRRHIZA GLABRA) ROOTS EFFECTIVE AGAINST LEISHMANIASIS AND COMPOSITION CONTAINING THE SAME	

NEW THREAT TO TRADITIONAL KNOWLEDGE: INNOVATIVE OR PETTY PATENTS

Nowadays many countries grant new type of patent as intellectual property right. This is on some other types of new products and processes. These can not be strictly called as inventions and are not same to patentable inventions. It is not supposed to fulfill the standard patentability requirements of patent i.e. novelty and non-obviousnes. The requirements are short of this criterion. It is called petty patent in one country, innovative patent or utility model in another country and petty patent in some other countries. This is also a grant of wrong patent linked to traditional medicines which is a minor variation of the existing part of traditional knowledge, likely to the other biopirated patents. It has been causing a great concern to the TK enriched developing world. With the emergence of this, bio-piracy has got a new form dimension. If it is not checked, it is going to be another major problem for the traditional knowledge protection. Just a small development from the 'prior art', this non-original innovation is also not violation of patent law. Apprehending that in future there might be invalidation of patent on non-original invention where TK exists, these countries are trying to find an escape route and finding newer methods for the fulfilling of the same objects-making money from bio-piracy. Many countries have this kind of pettey patents in their legal frameworks. The countries are: Australia, Germany, Argentina, Brazil, China, France, Italy, Japan, Ireland, Denmark, Spain, Turkey, Finland, South Africa, Netherlands Etc. Japan has this system of patents-utility model, Auatralia has innovative patents, and India is seriously contemplating to have petty patent in near future. In Germany a utility model is considered to be new if it does not form part of the state of the art. The state of the art comprises any knowledge made available to the public by means of a written description or by use within Germany before the date relevant for the priority of the application. In Spain, the novelty requirement for obtaining a utility model is relative, i.e. only public written disclosure of the invention in Spain is prejudicial against the novelty of the invention claimed in the utility model. This is in sharp contrast with Spanish patents for which absolute novelty is required.

CONCLUSION

The above mentioned patent documents show that there are traditional knowledge of India on those subject matters. If judged against TKDL documents and informal traditional knowledge base in public use in India, it is amply clear that there exists "prior art" or "existing knowledge" on the subject matter of those patents and many others not specifically mentioned in the foregoing discussions. Yet patents were granted by accepting the inventions to be novel and non-obvious. These patents are granted either by violating law of patent of the countries granting the patent or the countries do not consider them as violation at all. The latter is due to the reason that informal 'prior art' or foreign public use is not a bar for USPTO to grant patents.

The patent documents which are shown in the foregoing pages are justa tip of the iceberg. If the patent documents of the medicines of U.S.A., EPO, India and other countries are analysed, it will be found that there are innumerable of wrongful patents on the traditional knowledge associated with medicinal plants. These patents are examples of biopiracy, for which India's traditional knowledge is misappropriated. Hence it is suggested that initiative should be taken to examine how many of the patents obtained on the medicinal plants involving traditional knowledge in the public domain are genuine inventions and how many of them are the incidences of bio-piracy. Having ascertained that the process of revocating such patents should begin.

Same is true regarding innovative patents or petty patents. At the time of struggling with biopiracy through patents, another form of biopiracy has arisen for India and other TK enriched countries. This problem is a new challenge to be dealth with same seriousness.