



A BULLETIN
FROM
TIFAC

INTELLECTUAL PROPERTY RIGHTS (IPR)

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Herbs Related Patents

Kantkari (*Solanum xanthocarpum*)

Kantkari (*Solanum Xanthocarpum*) is one of the members of the dasamula (ten root) of the Ayurveda. It is a very spiny diffuse herb up to 1.2 m tall, commonly found throughout India. The juice of berries is used in sore throat. Roots and seeds are administered as an expectorant in asthma and cough and pain in chest. Stem flowers and fruits are bitter and carminative and are prescribed for relief in burning sensation in the feet. Leaves are applied locally to relieve pain. The drug is collected mainly from the wild plants, as there is no systematic cultivation of the herb. They are 3-5cm long and 1.6-6 mm thick, dull grayish in colour with a soft fibrous structure. Pharmacological studies on this herb have shown that aqueous and alcoholic extracts of the plant possess hypotensive effect, which is partly inhibited by atropine (The Wealth of India).

The herb is known as Kantakari and Nidigadhika in Sanskrit, in Hindi it is known as Kateli, Katai and Ringani, in Bengali Kantakari, in Marwari

Bhuiringani, in Gujarati Bhoaringani, in Telugu Pinnamulaka, Nelamulaka and Vankuda, in Tamil and Malayalam Kandankattiri, in Oriya Bhejibegun and Ankranti. In Punjab it is known as Kandyali, Mahori and Warumba and in Bihar Rengnie, Bhat-khataya and Rangaini Janum. English name is yellow berried nightshade.

A total of four patents have been located; two patents granted in US, one in Russia and one application filed in India.

US Patents

One patent titled "Freeze-dried ginseng berry tea" had 108 herbs in one of the claims; kantkari is one of them. This was granted to E. Excel International Inc, USA in April 2001 and inventor is Jau-Fei Chen. This patent was discussed earlier also in the series of patents related to different herbs covered in one of the earlier issues of IPR (Vol 7 No. 5, May 2001).

Second US patent entitled "Blood flow amount-improving agent comprising steroid derivative and cosmetic using same" is granted to Pola Chemical Industries of Japan and Mr. Kuniro Tsuji of Japan jointly. Kantkari is referred in

one of the animal and plant origins of various steroid derivatives used for the purpose of the patent.

Russian Patent

Interestingly one Russian Patent RU2157226 entitled "Anticoughing preparation and method of its preparing" has been located. This has been granted to DZH B Kemikals Ehnd Farmas Jut, an Indian company. Inventors of the patent are Dr. Milind Dattaraja Joshi, Shri Shirish Bkhagvangel Modi and Dr. Madkhukant Mansukhlal Doshi; all Indians. This describes the invention as an ayurvedic medicinal preparation of plants taken among *Solanum xanthocarpum* (kantkari), *Curcuma longa*, *Glycyrrhiza glabra*, *Adhatoda vasika*, *Zingiber officinale*, *Terminalia bellerica*, *Solanum indicum*, *Ocimum sanctum*, *Saussurea lappa*, *Piper cubeba*, *Aloe barbadensis*, *Inula racemosa* and *Piper longum*.

Indian Patent

JB Chemicals & Pharmaceuticals Ltd had also filed one patent application in India on kantakari entitled "An improved process for the manufacture of the extract obtained from ayurvedic medicinal plant viz kantkari".

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Case Study

A patent specification imparts new knowledge on innovative products and associated processes, often not known to many researchers. The researchers may spend many days or years to discover/hit upon such new processes essential to convert science into technology. Thus, precious time may be lost and opportunities missed. Very fine powder technology opens up door for many new applications in a wide variety of areas; the key to utilize this technology is to be able to produce fine powders in large quantities. PFC has picked up a patent granted by the USPTO entitled "Sulfur-containing phosphor powders, methods for making phosphor powders and devices incorporating same" to Superior Micro Powders LLC in November 2000 to bring home the point mentioned above.

Prior Art

Phosphors emit useful quantities of radiation in visible/ultraviolet spectrum upon excitation. Therefore they are used in cathode ray tube (CRT) display devices. Typically, such compounds include a host material doped with a small amount of an activator ion. There are other types of displays such as liquid crystal displays (LCD) using low power electric field, plasma displays (PDP) utilizing a gas trapped between two transparent panels that emit

ultraviolet light, thick film and thick film electroluminescent displays (TFEL) utilizing phosphorescent material trapped between glass plates and field emission displays (FED).

Phosphor powders should have high purity, high crystallinity, small particle size, narrow particle size distribution, spherical morphology, controlled surface chemistry, homogenous distribution of activation ion, good dispersibility and low porosity.

There are many methods currently adopted for production of phosphor powder. The solid state method involves reaction of precursors in solid state at high temperature. It is difficult to produce a uniform and homogenous powder. Liquid precipitation methods involve precipitation of phosphor powder through chemical treatment. The precipitated compounds are calcined at an elevated temperature to produce the final material. Oxysulfide phosphor powder having particle size of 1 micron or less are produced by heating hydroxycarbonates in oxygen to form oxide and then heating these oxides in sulfur containing flask. In yet another method a solution of precursor nitrates is atomized and heated at 400° F to dry the particles which are then passed through a flame to react. Particles of zinc sulfide have been fabricated by ultrasonic spray pyrolysis of an aqueous solution.

Present Invention

This invention relates to production of sulfur containing phosphor powders as well as devices incorporating powders. The host material used for the purpose is a metal sulfide, oxysulfide or thiogallate. A feed of liquid containing flowable medium, including at least one precursor is converted into an aerosol form with droplets of the medium being dispersed in and suspended by a carrier gas. Liquid from the droplets in the aerosol is then removed to permit formation in a dispersed state of the desired particles. Typically, the feed precursor is pyrolyzed in a furnace to make the particles. Particles, while still in dispersed state, are also subject to structural and compositional modification (if necessary). Structural modification includes crystallization, recrystallization or morphological alterations. Compositional modification may include coating of particles.

In addition to control over particle size and size distribution, the invention provides significant flexibility for producing particles of varying composition, crystallinity and morphology. *For example, the present invention may be used to produce homogenous particles involving only a single phase or multi phase particles.*

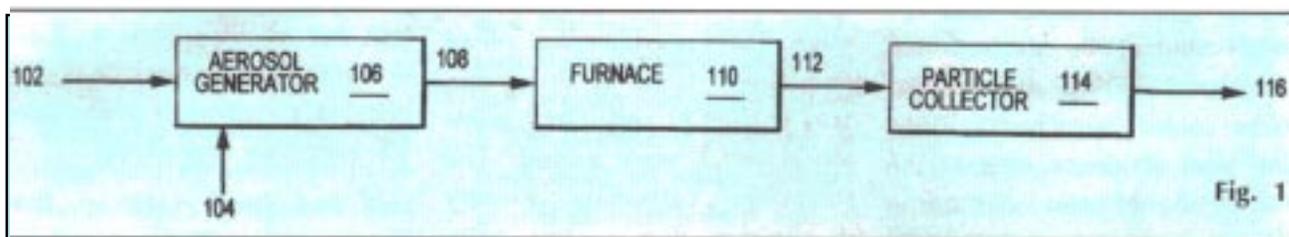
Fig 1 depicts the basic concept of the invention. A liquid feed 102 including at least one precursor and a carrier gas 104

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are fed to an aerosol generator 106 where an aerosol 108 is produced. The aerosol is then fed to a furnace 110 to remove liquid from the aerosol and produce particles 112 that are dispersed in and suspended by a gas exiting the furnace 110. The particles are then collected in collector 114 to produce a particulate product 116. The



suspended particles if any, in the liquid feed should typically be smaller than almost 1 micron. These particles should be no greater than 25 to 50 weight percent of the liquid feed. The aerosol generator, which is one of the key elements of the invention, is capable of producing aerosol of high loading or high concentration. The concentration could easily be attained between 1×10^6 droplets per cc to 5×10^7 droplets per cc. The volumetric ratio of liquid feed 102 to carrier gas 104 in the aerosol is larger than 0.4 millilitres of liquid feed 102 per litre of carrier gas. The inside temperature of the furnace may be between 500°C to about 1400°C and the residence time in the furnace should be shorter than 2 seconds, preferably 0.2 seconds.

The furnace will be a tube

shaped furnace so that aerosol while moving in the furnace does not encounter any sharp edges on which droplets could collect. The tube material may be a ceramic material like silica, alumina or mullite. The tube may also be metallic which is made of high nickel content steel or a nickel based super alloy. The flow characteristics in the furnace is critical for manufacturing

spacing of the ultrasonic transducer discs of about 4 cm is often adequate. The generator includes 49 transducers in 7×7 array. The transducers vibrate at a frequency from 1 MHz to about 5 MHz, the preferred frequency is between 1.5 MHz to 3 MHz. All the transducers should operate at substantially the same frequency. Transducer's thickness is an important

particulate materials. The maximum Reynold number should be high, typically in excess of 500 but it should not exceed 5000. The maximum temperature of the wall of the furnace is kept at a temperature that is below the temperature at which a desired component of the final particles would exert a vapor pressure of not more than 200 million.

Proper sealing of ceramic tube is essential and very crucial. The choice of gasket material may be from silicone, teflon, graphite, ceramic paper, thin metal sheet and their combination.

Fig 2 shows the design of the aerosol generator 106. It includes plurality of ultrasonic transducer discs 120 that are each mounted in a transducer housing 122. Center to center

parameter in this regard. Efficient use of carrier gas is an important aspect of the aerosol generator. Two gas exit ports per atomization cone 162 are used. The separator 126 which protects transducer discs from direct liquid feed 102 is another important element. The height of the separator above the transducer discs 120 should be about 1 cm. The top of the liquid feed 102 above the top of the ultrasonic discs is about 3 to 4 cm. Suitable material for the separator includes polyamides (such as Kapton membranes from Dn Port) and other polymer materials, glass and plexiglass. The temperature of the liquid feed 102 has been found to play a critical role in deciding the loading. The preferred temperature would be between

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30° C and 45° C. For large scale applications the number of ultrasonic transducers may go up to 1000.

In order to reduce the thermophoretic losses, the heating zone of the furnace is operated such that the maximum stream temperature is not attained until near the end of the heating zone. The maximum average temperature of the stream would be around 800° C and this has to be cooled (quenched) quickly. The total residence time of the aerosol between attaining maximum temperature in the furnace and final collection of particles should be less than 2

seconds. To avoid undesirable liquid build up in the system and its entry into the furnace, a drain is provided after the aerosol generator as close as possible to the furnace inlet such that the stream temperature is less than 80° C.

As an example production of phosphor powder of SrS: Mn has been described. 1 gram of strontium carbonate (SrCO_3) was added to 20 ml of deionized water. The suspension was stirred and about 1 ml of thioacetic acid (HS(O)CR) and 0.003 grams MnC1.sub.2 were added. The strontium carbonate rapidly dissolved to form a clear, pale-yellow solution.

The solution was placed into

contact with an ultrasonic nebulizer operating at a frequency of about 1.6 MHz to produce an aerosol of solution droplets. A nitrogen carrier gas was used to carry the droplets into an elongate tubular furnace heated to a temperature of 600-1500° C. The resulting powder was a substantially phase-pure SrS with Mn.Sup.2+ incorporated as an activator ion, a green phosphor. The average particle size was about 1.0.mu.m. X-ray diffraction indicated that the particles consisted of phase pure SrS with high crystallinity.

It has been claimed that many metal sulfide phosphors such as CaS: Eu; SrS: Eu, BaS: Ce, BaS: Tb, CaS: Ce etc cannot be

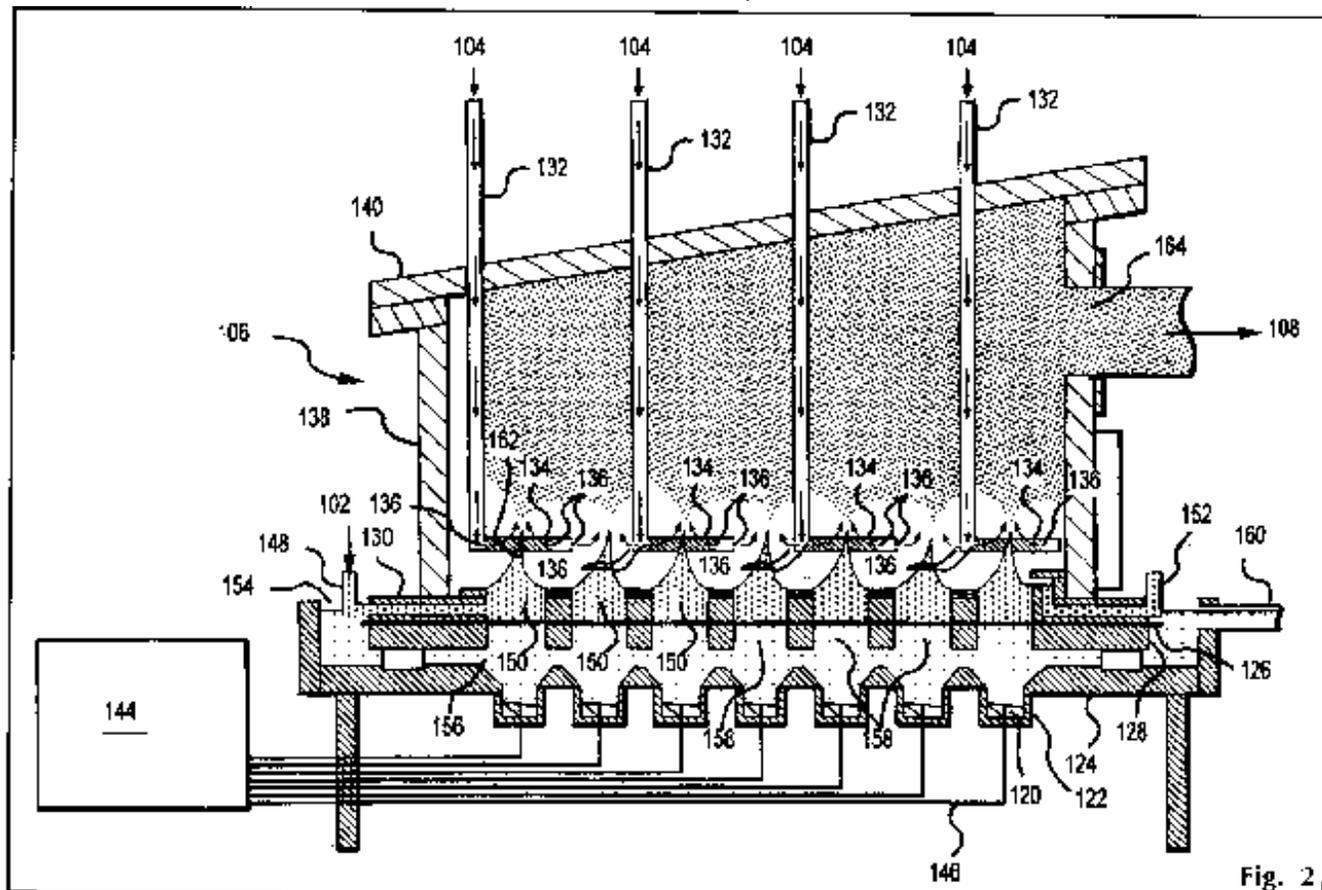


Fig. 2

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produced through the techniques already known.

The patent document consists of more than 110 pages including 63 diagrams. It consists of 102 claims covering the process of making phosphor powder and devices. The claims related to devices include flat panel display, field emission display and electroluminescent device. Some claims are reproduced below:-

1. A powder batch comprising thiogallate phosphor particles comprising a thiogallate host material, wherein said phosphor particles have a weight average particle size of not greater than about 5 μm and where in said powder batch comprises no greater than about 1 atomic percent impurities.
2. A powder batch as recited in claim 1, wherein said average particle size is from about 0.3 μm to about 3 μm .
3. A powder batch as recited in claim 1, wherein said particles have a particle size distribution wherein at least about 90 weight percent of said particles are not larger than twice said average particle size.
4. A powder batch as recited in claim 1, wherein said phosphor particles further comprise from about 0.02 to about 15 atomic percent of an activator ion.
5. A powder batch as recited in claim 1, where in said

phosphor particles comprise crystallites having an average crystallite size of at least about 25 nanometers.

6. A method for the production of sulfur-containing phosphor particles, comprising the steps of :

- a) generating an aerosol of droplets from a liquid wherein said liquid comprises a sulfur-containing phosphor precursor and wherein said droplets have a size distribution such that at least about 80 weight percent of said droplets have a size of from about 1 μm to about 5 μm and no greater than about 20 weight percent of said droplets in said aerosol are larger than about twice the weight average droplet size;

7. A flat panel display, comprising:

- a) an excitation source adapted to stimulate phosphor; and
- b) a viewing panel proximate to said excitation source, comprising a transparent substrate having disposed thereon a sulfur-containing phosphor powder defining pixels, wherein said phosphor powder comprises substantially spherical particles having a weight average particle size of not greater than about 10 μm wherein said flat panel display is a plasma display.

Patent Laws in Bhutan

The Industrial Property Act of the Kingdom of Bhutan came into existence in the year 2001. This Act gives provisions related to Patents, Industrial Designs and Marks, Collective Marks, Trade Names and Acts of Unfair Competition. A summary of the patent laws is presented below.

Patentable Inventions

An invention is patentable if it is new, involves an inventive step and is industrially applicable.

(a) An invention is new if it is not anticipated by prior art.

(b) Prior art shall consist of everything disclosed to the public, anywhere in the world, by publication in tangible form or by oral disclosure, by use or in any other way, prior to the filing.

(c) An invention shall be considered as involving an inventive step if, it is not obvious to a *person having ordinary skill in the art*. (The most common expression is 'a person skilled in the art'. The Bhutanese law is a little different in this sense.)

(d) An invention shall be considered industrially applicable if it can be made or used in any kind of industry. Industry shall be understood in its broadest sense and also covers in particular, handicraft, agriculture, fishery and services.

Inventions not Patentable

The following, inventions shall

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be excluded from patent protection:

(i) discoveries, scientific theories and mathematical methods;

(ii) schemes, rules or methods for doing business, performing purely mental acts or playing games;

(iii) methods for treatment of the human or animal body by surgery or therapy, as well as diagnostic methods practised on the human or animal body;

(iv) Inventions, the commercial exploitation of which would be contrary to public order or morality.

Duration

A patent shall expire 20 years after the filing date of the application for the patent.

Rights Conferred

(a) When the patent has been granted in respect of a product:

(i) making, using, offering for sale, selling or importing that product;

(ii) stocking such product for the purposes of offering for sale, selling or using;

(b) When the patent has been granted in respect of a process:

(i) using the process;

(ii) doing any of the acts referred to in paragraph (a) in respect of a product obtained directly by means of the process.

The owner of the patent shall, in addition to any other rights, remedies or actions available to him, have the right, to institute court proceedings against any

person who infringes the patent or who performs acts which make it likely that infringement will occur.

Patent Application

The application for a patent shall be filed in the prescribed manner with the Registrar and shall contain a request, a description, one or more claims, one or more drawings (where required), and an abstract. It shall be subject to the payment of the prescribed application fee. The request shall contain a petition to the effect that a patent be granted, the name of and other prescribed data concerning the applicant, the inventor and the agent, if any, and the title of the invention. The description shall disclose the invention in a manner sufficiently clear and complete for the invention to be carried out by a person having ordinary skill in the art, and shall, in particular, indicate at least one mode known to the applicant for carrying out the invention. The claim or claims shall define the matter for which protection is sought. The description and the drawings may be used to interpret the claims. Claims shall be clear and concise. They shall be fully supported by the description. Drawings shall be required when they are necessary for the understanding of the invention. The abstract shall merely serve the purpose of technical information; in particular, it shall not be taken into account for the purpose of interpreting the scope of the protection. The applicant may withdraw the application at any time during its pendency.

Examination and Grant

The Registrar shall accord as the filing date the date of receipt of the application. If the Registrar finds that the application did not, at the time of receipt, fulfill the necessary requirements, he shall invite the applicant to file the required correction and shall accord as the filing date the date of receipt of the required correction, but if no correction is made, the application shall be treated as if it had not been filed. Where the application refers to drawings which in fact are not included in the application, the Registrar shall invite the applicant to furnish the missing drawings. If the applicant complies with the said invitation, the Registrar shall accord as the filing date the date of receipt of the missing drawings. Otherwise, the Registrar shall accord as the filing date the date of receipt of the application and shall treat any reference to the said drawings as non-existent. After according a filing date, the Registrar shall examine the application for other important sections of the Act. Where the Registrar finds that the all conditions are fulfilled, he shall grant the patent. Otherwise, he shall refuse the application and notify the applicant of that decision. When he grants a patent, the Registrar shall publish a reference to the grant of the patent. In order to maintain the patent or patent application, an annual fee shall be paid in the prescribed manner in advance to the Registrar for each year, starting one year after the filing date of the application for grant of the patent.

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Case Law

Use of tune as ring tone for mobile phones: Is it an offence under copyright. Just find out!

With the coming of the mobile phones towards the end of the last millennium, the markets all over the world have been flooded by different kinds of sets of the cellular phones. These mobile phone sets are offering various kinds of ring tones in a particular set, out of which the user according to his wish can select any ring tone and keep it operational; unlike the ring tones of landline telephone sets which are standard in nature. To make the ring of one's mobile set easily distinguishable from the ring tone of another mobile set, the manufacturers have made use of small tunes of famous musical works usually without the permission of the copyright holder of that musical work.

Will making use of famous tunes, as ring tones for mobile phones without proper licensing rights from the owner of the copyright of the musical work constitute copyright infringement? Answer to this question can be found out in a recent case decided in the Higher Regional Court of Hamburg, Germany in February 2002 in favour of the mobile phone manufacturers making use of tunes as ring tone.

In this case, the defendant did not use the original recording as performed by the pop group 'Rednex', but rather a monophonic synthesizer version

as ring tone for mobile set. The case first went to Regional Court, which gave the opinion that from the point of substantive law, the use of a song or melody as a ring tone without the express authorization of the author and/or the respective music publisher violates the owner's copyright rights.

However, the Higher Regional Court considered use of tune as ring tone as a new and independent type of use. The court based its decision on several factors.

Firstly, the court opined that the defendant could not validly obtain the right to use the musical work as a mobile ring tone from the copyright collecting society GEMA, since the contract entered into between the author and GEMA authorising the collecting society to grant licenses on author's behalf did not cover the use of the work as a mobile ring tone. The reason being that the use of a composition as a ring tone for mobile phones has to be regarded as a new, formerly unknown, type of use, which under German Copyright Act, may not be validly granted under a copyright contract.

GEMA gave the argument that they had updated its older author's agreements in 1997, covering the modern use of musical works through electronic storage. However, the court emphasized that the specific use of the composition as a ring tone would not be covered by the author's agreements since in 1997 it was a new, unknown

type of use and not expressly mentioned in author's agreement.

The court also opined that it was not the entertaining function, which was predominant in a ring tone, but merely the signal function to distinguish one's ring tone from the mobile phone of another. In contrast to the traditional purpose of a composition, the purpose of a ring tone was that the melody would not be played in its entirety, but rather interrupted by taking the phone call or directing it to voicemail similar to the ring tone of an alarm clock.

Based on the above arguments, the court terminated the case against the defendant and allowed them to make use of the tunes as ring tones for mobile phones.

International News

- With the addition of Tajikistan, INPADOC now covers bibliographic and family data of patent documents and utility models from 71 patent-issuing authorities, including the European Patent Office. INPADOC also covers legal status data from 40 patent-issuing authorities.

(World Patent Information, Vol 24, No 4)

- The European Patent Organization membership has now reached 27. The member states include : Austria, Belgium, Bulgaria, Cyprus, the Czech

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Litigation Watch

- Hewlett-Packard (HP) has filed a patent infringement lawsuit against EMC. Through this lawsuit HP has targeted seven separate features in EMC's Symmetrix, Clariion and TimeFinder products. HP is seeking monetary damages for infringement as well as an injunction prohibiting EMC from selling the specific named products.

- The AIDS Access Foundation and two individuals living with HIV-AIDs are trying to force pharmaceutical giant Bristol-Myers Squibb Co to withdraw the patent on one of its anti-AIDS drug after a landmark court decision against the firm. Thailand's Intellectual Property Court had ruled that Bristol-Myers only has the exclusive right to produce the drug didanosine in certain doses, enabling other parties to make it in different quantities.

- US District Court in New Jersey has ruled against Dr Reddy's Laboratories and other generic drug makers in a patent infringement case over the antibiotic Cipro. Several drugmakers, led by Schien Pharmaceutical Inc, Myland Laboratories and Dr Reddy's US subsidiary, Reddy Cheminor Inc, had challenged the validity of Bayer's patent on Cipro expiring in December 2003. Due to this ruling, Dr Reddy's Laboratories would be unable to launch its antibiotic drug ciprofloxacin until December 9, 2003.

(Ahuja's Patent & Trademark News, Vol 5 No. 2)

- *An inventor, Shuji Nakamura while working in a company called Nichia Corporation had invented blue LEDs and obtained patents for them. Because of this invention the sales of Nichia quadrupled. The inventor then filed suit against the company for his share. However, the Tokyo District Court ruled in favour of Nichia as the invention had been done while the inventor was an employee of the company. Mr Nakamura was awarded a bonus of just 20,000 yen although he was expecting larger gains as his invention had raised the profit levels of the company to a large extent.*

- The Delhi high Court has restrained Aggarwal Dresses and other small companies in the Gandhinagar area of Delhi from selling goods with the 'Nike' mark. Nike had alleged that the defendants were not only infringing their trademark and copyright, they were also trying to pass off their goods as those of Nike International.

- In a copyright infringement lawsuit between Microsoft and Able System Development (a computer retailer), the judge has ordered the latter to pay Microsoft the equivalent of \$ 4.5 million in damages for the retailer's unlicensed use of the company's products. Able System Development, a licensed Microsoft retailer, had illegally preloaded unlicensed copies of the Office and Windows programs onto computers it sold between 1996

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International News....

Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary (as from 1 January, 2003), Ireland, Italy, Liechtenstein, Luxembourg, Monaco, the Netherlands, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

- It shall now be possible under European Community Design Registration to register a design in all countries of the EU using one application. This system does not limit the selection of countries. The application always covers all EU countries. The design has to be registered with the European Office for Design Registration. The registration will be valid for 5 years from the date of application and may be renewed for 5-year periods up to a maximum of 25 years. *The special feature of the new legislation is that it allows unregistered design to enjoy a certain protection valid for 3 years and also allows action against third parties that copy a design in bad faith.*

- Australian Patent Law has been amended primarily to achieve conformity with the Patent Law Treaty (PLT), harmonize patent office requirements globally and streamline the procedures for obtaining and maintaining a patent. One of the important changes introduced by the Act is that the prior art base has

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Patents for Opposition

The following patent applications have been accepted by the Patent Office and published in the Gazette of India. These can now be opposed by filing opposition applications within a period of four months from the dates given. Six digit numbers allotted after acceptance by the Patent Office are given before the applicant names and patent application numbers given in brackets. Names of the branches of the Patent Office are denoted in the application number, e.g. 'Bom' for Bombay branch. An opposition application should be submitted at the appropriate office where the concerned application was originally filed.

PATENT APPLICANTS

INVENTION

A. 19 October, 2002

188561. Koninklijke Philips Electronic NV, Netherlands (1704/Cal/95)	A digital magnetic tape recording/ reproducing apparatus of the "helical scan" type
188562. Indian Institute of Technology, Kharagpur (663/Cal/96)	An improved process for the preparation of ethanol from starchy material
188563. LG Electronics Inc, Korea (840/Cal/96)	A microwave oven with improved air flow arrangement
188564. Keystone Retaining Wall Systems Inc, USA (972/Cal/96)	A retaining wall block and a retaining wall constructed from such blocks
188565. Institutchemii Przemyslowej, Poland (1000/Cal/96) solvent and an aqueous solution of alkali solution	A method of obtaining a solution of organic acids in an organic extraction metal carbonates from an aqueous solution of the salts of said organic acids
188566. LG Electronics Inc, Korea (1091/Cal/96)	A structure for locking a heater terminal with a heater in microwave ovens
188567. Alstom Power Inc, USA (1976/Cal/96)	A circulating fluid bedsteam generator having NOX control
188568. Alza Corp, USA (44/Cal/2000)	A method for preparing stable nucleic acid compositions
188569. Mcneil-Ppc Inc, USA (380/Cal/2000)	A nonwoven fabric
188570. Eli Lilly & Co, USA (506/Cal/2000) acid derivative	A process for preparing n-(6-amino-(pyrrolo(2,3-d) pyrimidin-3-ylacyl)-glutamic
188571. The Procter & Gamble Co, USA (951/Del/93)	A process for producing a particulate detergent material
188572. The Procter & Gamble Co, USA (1066/Del/93) elasticized thigh panels	A disposable absorbent article with dynamic elastic leg feature comprising
188573. GEC Alsthom & DSA, France (1133/Del/93)	Connecting apparatus for interconnecting envelopes of two devices
188574. Bhagwat Kundalik Dhonde, New Delhi (1182/Del/93)	An improved contour marker
188575. The Procter & Gamble Co, USA (1207/Del/93)	A disposable pull-on diaper
188576. Motorola Inc, USA (1247/Del/93)	A battery powered portable communication receiver
188577. CSIR, India (1263/Del/93)	A process for the manufacture of non

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International News....

been expanded to include documentary publication anywhere in the world. Previously, prior disclosure by use was only relevant if it occurred within Australia.

- An agreement has reached between Korean and Australian Patent Office to mutually use patent examination results from 2004. It is expected that this will speed up the process for Korean applicants who want to obtain Australian patents; will also ease KIPO's examination burden with reference to applications which have already been filed in Australia.

- The Australian Patent, Trade- mark and Design Registry is now updating patent information on more regular basis with regular supplements to its Australian Official Journal of patents. The first supplement listing Australian patent filings since July 5, 2002 released in September 2002 included information about applications which have been withdrawn, innovation patents which have been granted, and applications which have become open for public inspection.

- FIZ Karlsruhe has released an improved version of JAPIO patent database giving information about Japanese patents. A number of new features will allow patent searchers to pinpoint relevant patent documents more effectively and efficiently. The new version of the file has been enhanced with bibliographic data

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188578. Motorola Inc, USA (1267/Del/93)	compatible nitride carbide composite A selective call receiver
188579. Exxon Chemical Patents Inc, USA (1269/Del/93)	A refrigeration working fluid composition containing trifluoroethane
188580. CSIR, India (1463/Del/93) toughened and flexible board	A process for the production of solid
188581. Vinayak Rajaram Barge, Maharashtra (617/Bom/96)	An improved mosquito net
188582. Elias Marshal D'souza & Richard D Souza, Maharashtra India (406/Bom/97)	A device for storing and dispensing liquid in poultry framing
188583. Elias Marshal D'souza & Richard D Souza, Maharashtra India (407/Bom/97)	An improved device for lifting and lowering of curtains
188584. Tukaram Mugutrao Kame, Pune (410/Bom/97)	An improved saturated steam water separating purifying & drying device
188585. Prakash Krishna Ratna Parkhi, Maharashtra (440/Bom/97)	Hydraulically operated machine
188586. Narendra Sancheti, Maharashtra (457/Bom/97)	A device for measuring the flow rate of urine
188587. Khushroo Rustomji Ghadiali, Maharashtra (477/Bom/97)	A disposable razor with movable counter means
188588. Smurfit Carton Y Patel De Mexico Jaime Balmes, Poland (511/Bom/97)	Under felt inclined flat former
188589. Birla Research Institute For Applied Sciences, Madhya Pradesh (519/Bom/97)	A process for the production of regenerated cellulosic fibre
188590. Suhas Narhari Patki, Mumbai (530/Bom/97)	Electronic multi sound tuner for a single horn
188591. Sasol Chemical Industries Ltd, South Africa (1086/Mas/94)	An emulsion explosive
188592. Urea Casale SA, Switzerland (131/Mas/95) pressure and temperature	A reactor for two phase reactions in particular for urea synthesis at high
188593. Mannesmann Aktiengesells- chaft, Germany (212/Mas/95)	A roller for a strand guiding rack
188594. Southern Petrochemical Industries Corp, Tamil Nadu (254/Mas/95)	A process for the preparation of water soluble polymers for use in the inhibition of water soluble polymers for use in the inhibition of scale formation and the
dispersion of iron oxide in aqueous systems	
188595. Asea Brown Boveri Ag, Switzerland (826/Mas/95)	Device for fastening turbochargers
188596. Montel North America Inc, USA (1013/Mas/95)	A process for the polymerization of alpha- olefins
188597. Mitsubishi Denki Kabushiki Kaisha, Japan (1113/Mas/95)	Engine starter
188598. Soremartec SA, Belgium (2525/Mas/98)	A package for products such as food products
188599. Sumitomo Chemical Co Ltd, Japan (105/Mas/99)	A method for producing optically active chrysanthemis acid
188600. F Hoffmann La Roche Ag,	A process for the manufacture of a

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International News....

European Patent Office's INPADOC records. Many records now include images from the front page of patent documents. Coverage starts from October 1976 to the present date. The database is updated monthly with around 25,000 new records added each time. The database can be accessed from <http://stneasy.fiz-karlsruhe.de>.

- A new design act of Switzerland has come into force in July 2002. By adopting this law, Switzerland will be able to ratify the Hague Agreement Concerning the International Deposit of Industrial Designs. According to the new law, a design will now be considered to be a creation of goods or parts of goods characterized by the layout of lines, outlines, colours and surfaces, or by the material used. The registration costs for the first design is Swiss Francs 200, plus Swiss Francs 100 for each additional design that is registered simultaneously, if six or more designs are registered at the same time, the registration costs amount to Swiss Francs 600. The maximum protection period has been extended from 15 to 25 years by offering five protection periods of five years.

- The Bill of Small Web Caster Amendments Act of 2002 has been passed by the US House of Representatives. This bill would allow small web casters to pay for streaming songs with a percentage of their

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Switzerland (783/Mas/99)	symmetrical terminally ring-substituted polyene
188601. Borealis A/S, Denmark (737/Cal/96)	Process for manufacturing ethylene copolymers
188602. Dystar Japan Ltd, Japan (778/Cal/96)	A disperse dye composition
188603. Celanese Gmbh, Germany (794/Cal/96)	A process for the preparation of hydroxy biarylphosphines
188604. Fico Cables SA, Spain (874/Cal/96)	A sheath for control cables and a process for its manufacture
188605. Ga-Tek Inc, USA (987/Cal/96)	Multi-layer structure containing a silane adhesion promoting layer
188606. Engelhard Corp, USA (1069/Cal/96)	A process for preparing a shaped catalyst
188607. Matsushita Electric Industrial Co Ltd, Japan (1478/Cal/96)	A switchable microwave signal mixing circuit
188608. Pannevis BV, USA (2108/Cal/96)	A device for filtering washing and drying a solid material liquid mixture
188609. Encomech Engineering Services Ltd, England (942/Cal/96)	A heat shelf arrangement for hot rolling mills
188610. American Home Products Corp, USA(577/Cal/2000)	A process for the production of 6beta hydroxy 6 alpha 17 alpha dimethylpregn-4-ene-3, 20-dione
188611. Low Han Sin, Malaysia (1275/Del/93)	Wall mounting appliance such as a wash basin
188612. Polymer Papers Ltd, New Delhi (1308/Del/93)	A lubricating oil filter
188613. Havell's India Ltd, Delhi (1398/Del/93)	An improved thermal overload relay device
188614. Norsk Hydro AS, Norway (1422/Del/93)	A pneumatic metering device for metering accurate doses of powdered material
188615. Southwire Co, USA (1438/Del/93)	A burner apparatus for a metal processing furnace
188616. CSIR, India (1482/Del/93)	An improved process for the production of sterilised spices particularly black pepper
188617. LML Ltd, Uttar Pradesh (1491/Del/93)	Dual seat with sliding back rest
188618. The Procter & Gamble Co, USA (62/Del/94)	An absorbent article
188619. The Procter & Gamble Co, USA (0065/Del/94)	An extensible absorbent article
188620. Hari Shankar Singhania Elastomer & Tyre Research Institute, Rajasthan (100/Del/94)	A green tyre lubricant composition and a process for the manufacture thereof
188621. Elias Marshal D'souza & Richard Marshal D'souza, Maharashtra (400/Bom/97)	A chick drinker set
188622. Noell Stahl-Und Maschinenbau Gmbh, Germany (536/Bom/97)	A container transport device
188623. Eskay Enterprises, Maharashtra (551/Bom/97)	An improved traffic barrier cum road divider
188624. Filterwerk Mann Hummel Gmbh, Germany (573/Bom/97)	Apparatus for liquid return to gas flows
188625. Hindustan Lever Ltd, India (579/Bom/97)	Improved toothbrush
188626. Filterwerk Mann Hummel	Apparatus for folding material webs

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International News....
annual revenues. As per the bill the small web casters (with revenue under \$ 6 million (US)) will have to pay between 7 and 12% of their revenues as royalties. Bigger companies like Yahoo, AOL, Clear Channel will pay per-song, per-listener rate.

- Mexico's congress is working on a draft bill aimed at preventing 'genetic piracy' on the part of international biotechnology companies. The bill aims to prevent foreign companies from patenting germ plasma native to Mexico.
- DE Technologies Inc has been awarded a US patent for its Borderless Order Entry System (BOES). BOES enables multi-national businesses and entrepreneurs to export and import products from any country via the internet. The economic efficiencies of this patented business-to-business (B2B) and business-to-consumer (B2C) technology are said to allow small and medium-size companies to effectively compete in the international marketplace and significantly expand their market share. This technology is also patented in the New Zealand (No. 505284) and Singapore (No. 74390). Additional patents are pending in more than twenty countries.
- A US patent on methods of culturing and encapsulating pancreatic islet cells has been awarded. The patent covers processes to effectively culture and transplant functional and

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Gmbh, Germany (580/Bom/97)	
188627. Natvarial Popatlal Sachania, Mumbai (592/Bom/97)	An improved device for setting of parison discharge orifice of cup & cone in plastic blow moulding
188628. Gujarat State Fertilisers & Chemicals Ltd, Vadodara (606/Bom/97)	A process for recovery of sulphur from sulphur waste of a sulphuric acid plant
188629. Outokumpu Oyj Lansituulentie, Finland (621/Bom/97)	Method and apparatus for cleaning a filter surface
188630. Hindustan Lever Ltd, India (684/Bom/97)	A cosmetic composition for darkening of the skin or hair
188631. Indian Institute of Technology, Tamil Nadu (262/Mas/95)	A process for obtaining a silicon substrate with a uniform and adherent deposit of palladium or other metal thereon
188632. Primetech Electroniques Inc, Canada (303/Mas/95)	A communication link for permitting communications between adjacent cars of a multi car vehicle
188633. Duraipandian Mathuram Charles, Tamil Nadu (373/Mas/95)	An improved plant for producing sugar from raw sugar cane juice
188634. Maschinenfabrik Rieter Ag, Switzerland (476/Mas/95)	Spinning frame
188635. Sharp Kabushiki Kaisha, Japan (483/Mas/95)	Solar cell and a method of manufacturing the same
188636. Janatics India Private Ltd, Tamil Nadu (546/Mas/95)	Modular mounted filter regulator lubricator assembly for being fitted in an air line for use with pneumatic equipment
188637. The Purifiner Inc, USA (547/Mas/95)	An oil filter and a method of preparing the same
188638. The Pillsbury Co, USA (579/Mas/95)	A dough cutting and packing apparatus
188639. Mannesmann Aktiengesellschaft, Germany (592/Mas/95)	A process for producing identical individual rings and a device thereof
188640. Somar Corp, Japan (628/Mas/95)	A film peeling device
B. 26 October, 2002	
188641. Kimberly Clark Worldwide Inc, USA (834/Cal/95)	A method of preparing a polymer film
188642. Trimat S R L, Italy (1616/Cal/95)	Method for reducing containers and an apparatus therefor
188643. Cycolor Inc, USA (555/Cal/96)	A rinting device for use in rinting an image onto an imaging media
188644. ABB Research Ltd Switzerland (548/Cal/96)	An improved method for obtaining reactivated sorbent containing unreacted CaO
188645. Siemens Aktiengesellschaft Germany (692/Cal/96)	Chip cover assembly
188646. Emitec Gesellschaft Fur Emissionstechnolo -Gie Mlbh, Germany (924/Cal/96)	Catalytic converter arrangement with two or multiple-line exhaust conduction
188647. Tateho Chemical Industries Co Ltd, Japan (1333/Cal/96)	A flame retardant polyolefin composition having low smoking and toxicity
188648. Siemens Aktiengesellschaft, Germany (1524/Cal/96)	Chip module for incorporation in a basic card body of a chip card
188649. Emami Ltd, India	Process for preparing cough syrup which

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International News....

viable islet cells, the major insulin- secreting cells, into people with insulin – dependent diabetes mellitus. The patent is exclusively licensed to the company Microislet Inc under its agreement with Duke University.

- The Council of Scientific and Industrial Research (CSIR), South Africa has developed, patented and licensed an appetite suppressant dubbed P 57, from an indigenous plant that the San Community of Africa first used to quench their thirst and stave off hunger on hunting trips. US based pharmaceutical giant Pfizer has been granted a sub-license to produce and manufacture the drug, which has an estimated market potential of more than \$ 3 billion.

- Electrolux Kelvinator Ltd. has applied for a patent for the latest 'washy talky' technology for its washing machines. The technology works on an interactive voice response system, which guides the user of the washing machine through the complete wash process by voice instructions in English and Hindi.

- The European Patent Office has added restrictions to a controversial patent granted in 1999 to Edinburg University on altering animal cells so that it could not be used to clone humans. Edinburg University and an Australian biotech firm StemCell Sciences were awarded the patent to genetically alter the cells of mammals, which could then be used to create embryos.

(629/Cal/2000)	can be used for treatment of cold and body energy
cough and to provide restoration to the	
188650. American Home Products Corp, USA (277/Cal/2000)	A process for the manufacture of encapsulated pharmaceutical formulation
188651. Kuldip Singh, Maharashtra (692/Bom/97)	An improved stretch blow moulding machine
188652. Eder Maschinenfabrik GmbH & Co Kg, Germany (695/Bom/97)	Apparatus for separating fluids and/or solid matter or gases with a different specific weight from a gas flow
188653. Kolon Industries Inc, Korea (713/Bom/97)	A process for the production of benzene derivatives
188654. Ina Walzlager Schaeffler, Germany (729/Bom/97)	Pressure roller for textile machines
188655. Kishore Kanthikar of Kanthikar Enterprises, India & Mathew Boissevain, USA (742/Bom/97)	An improved solar water heater
188656. Sardar Patel Renew Able Energy Research Institute, Gujarat (745/Bm/97)	A down draft gasifier
188657. Winter CVD-Technik GmbH, Germany (747/Bom/97)	Grinding/abrasive tools
188658. Hindustan Lever Ltd, India (749/Bom/97)	Process for obtaining triacetin
188659. Outokumpu Technology Oy, Finland (756/Bom/97)	A roller screen
188660. Outokumpu Technology Oy, Finland (757/Bom/97)	An apparatus for conducting gas through material to be sintered
188661. CSIR, India (872/Del/94)	An improved process for the production of high purity magnesia from magnesite
188662. BP Chemicals Ltd, England (139/Del/95)	A process for the gas phase manufacture of elastomeric copolymers
188663. CSIR, India (548/Del/95)	An improved process for the preparation of partially hydrolyzed polyacrylamide useful for enhanced recovery of oil
188664. Life Natural Mineral Water Co, USA (635/Del/95)	A process for enriching water with oxygen and apparatus thereof
188665. The Procter & Gamble Co, USA (786/Del/95)	A process for preparing cleaning composition using subtilisin 309 enzyme variants
188666. CSIR, India (1097/Del/95)	An improved process for the preparation of 2-hydroxy quinoxaline
188667. CSIR, India (1100/Del/95)	A process for the isolation of an active fraction containing phenolic glycoside from azadirachta indica (neem) useful for ulceration
controlling gastric hyperacidity and gastric	
188668. The Secretary of State for Defence in Her Britannic Majesty's Government of the United Kingdom of Great Britain & Northern Ireland Defence Evaluation & Research Agency, UK (1315/Del/95)	Apparatus for determining the presence and/or amount of a microorganism and/or its intracellular material
188669. Rohm GmbH, Germany (1612/Del/95)	A process for the preparation of a copolymer
188670. Fresenius Ag, Germany (1699/Del/95)	Process for the manufacture of starch break down products

Domestic News

- NRDC has been issued a US and an EP patent for isolating a novel blood clot dissolving agent from a bacillus. The Vector Control Research Centre, Pondicherry was involved in identifying, isolating and purifying thrombinase, the agent. The experiments on rabbits and toxicological studies on dogs have been completed. Clinical trials are also being initiated.

- The Anna University in Chennai has filed five US patents for molecules isolated from medicinal plants for its anti-cancer, anti-diabetes and immunomodulatory properties. The anti-diabetic end points will be insulin secretion, glucose transporters, glycogen synthase and glycogen phosphorylase

- Hydro Drive System & Controls has filed a patent in India and other countries for an indigenous exhaust catalytic convertor. The hydrodrive electronic catalytic convertor offers an alternative to expensive CNG conversion kits. The convertor is a pre-engine device fitted in the fuel line and is powered by the vehicle's battery.

Hindustan Lever Ltd has filed a patent for a new technology called Alphos which is a substitute for oil based soaps.

- According to the Indian Drug Manufacturer's Association (IDMA), the draft patent Rules 2002 published recently have been faulted by both Indian and MNC pharmaceutical companies. IDMA has told the Commerce & Industry Ministry that MNCs would gain at the cost of the national interest as the draft

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188671. Amoco Corp, USA (32/Del/99)	A process for the preparation of purified aromatic polycarboxylic acid
188672. The Standard Oil Co, USA (385/Del/99)	A synergistic catalyst composition for process of ammoxidation
188673. Pushpa Khanna, New Delhi (560/Del/99)	An improved process for preparation of highly effective hypoglycaemic polypeptide from seeds of momordica charantia
188674. Department of Science & Technology, New Delhi (604/Del/99)	A process of producing enzymes with enhanced catalytic activity
188675. The Procter & Gamble Co, USA (606/Del/99)	A method for producing a polymeric foam composition
188676. L Air Liquide Societe Anonyme Pour L Etude Et Exploitation, France (918/Del/99)	Process for the production of impure oxygen
188677. The Gillette Co, USA (1098/Del/99)	A replaceable safety razor cartridge
188678. Rathi Ashok Kumar, Jodhpur (1227/Del/99)	Process for making core of the seeds of the fruit tumba fit for edible purposes
188679. Zeneca Ltd, England (1257/Del/99)	A process for preparing an alkyl ester of 3(2chloro-3,3,3 trifluoro-prop-1-en-yl) ₂
188680. Rhone Poulenc, France (419/Del/2000)	Process for the preparation of a taxoid
188681. Imperial Chemical Industries, England (97/Del/94)	A method of producing a purified terephthalic acid
188682. Haari Shankar Singhania, India (0101/Del/94)	An apparatus for determining the steel cord rubber adhesion property during dynamic conditions
188683. CSIR, India (125/Del/94)	An improved process for the preparation of magnesium phosphate
188684. Paul Wurth SA, Luxembourg (156/Del/94)	Device for blowing preheated air into a shaft furnace
188685. Shrish Shantilal Pandia, India (263/Del/94)	A stapling machine
188686. Waarman International Ltd, Australia (274/Del/94)	A centrifugal seal assembly
188687. De La Rue Giori, Switzerland (0303/Del/94)	Wiping device for an intaglio printing machine
188688. CSIR, India (0312/Del/94)	A process for the preparation of a new catalyst useful for the preparation of carboxylic acids
188689. CSIR, India (321/Del/94)	An improved process for the preparation of a magnesium alloy
188690. CSIR, India (347/Del/94)	An improved process for the preparation of monochlorophthalic anhydride
188691. Australian Water Purification Ltd, Australia (222/Bom/98)	Apparatus for purification of a contaminated liquid such as water
188692. U S Steriles, Maharashtra (251/Bom/98)	The manufacture of a concentrate for the maintenance and upkeep of cooling towers heat exchangers central air-conditioning plant
188693. U S Steriles, Maharashtra (252/Bom/98)	Process for preparing a water purifier disinfectant deodorants

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Domestic News....

rules have restricted the meaning of the term 'public interest' to national emergency and extreme urgency. This according to IDMA is a deviation from the patents (Second Amendment Act) 2002. The proposed Rule 24 (D) contravenes Supreme Court's position that public interest shall be defined on a case-to-case basis.

(Economic Times, 14 Nov 2002)

• National Physical Laboratory (NPL) has filed the following patents during 2000-2001 in India:

1. An improved constant temperature bath (610/Del/2000)
2. An improved cold discharge ion atom beam source useful for micro-milling & material modification (908/Del/2000)
3. A device for monitoring ion beam etching process (208/Del/2001)
4. A novel apparatus useful for slip gauge calibration and a technique for slip gauge calibration therefrom (402/Del/2001)
5. Method for making reusable heat pack

The following two US Patents were granted to NPL during the year 2000:

1. Conducting polymer membranes and a process for preparation of the same membrane ((US Patent No. 6,156,202)
2. A device useful as master/slave clock for transmitting standard time over a telephone network and a telephone network incorporating the device for transmitting and receiving standard (US Patent No. 6,091,804)



188694. Vasu Tech Ltd, India
(297/Bom/98)

188695. Vasu Tech Ltd, India
(298/Bom/98)

188696. Mdeisim Ltd, Israel
(303/Bom/98)

188697. Citurgia Biochemicals Ltd,
Mumbai (357/Bom/98)

188698. Oskar Moser Technische
Edelstene GmbH, Germany
(407/Bom/98)

188699. Walchandnagar Industries
Ltd, India (412/Bom/98)

188700. Sanjay Madhav Dandekar,
India (450/Bom/98)

188701. IT Altel SPA, Italy
(604/Cal/96)

188702. Degussa-Huls Aktiengesells-
chaft, Germany (922/Cal/96)

188703. The Regents of the
University, USA (926/Cal/96)

188704. Phillips Petroleum Co,
USA (1129/Cal/96)

188705. Va-Teknik & Vattenvard,
Sweden (1419/Cal/96)

188706. Stork Screens BV,
Netherlands (1404/Cal/96)

188707. Samsung Electronics Co Ltd,
Korea (1762/Cal/96)

188708. Mcneil Ppc Inc, USA
(1857/Cal/96)

188709. Genesis Research, New
Zealand (231/Cal/2000)

188710. Degussa Huls Aktiengesells-
chaft ,Germany (582/Cal/2000)

C. 2 November, 2002

188711. Whirlpool Corp,
USA (361/Del/94)

188712. CSIR, India (377/Del/94)

188713. Udai Pratap Singh, Jaipur
(450/Del/94)

188714. Procter & Gamble Co,
USA (612/Del/94)

188715. CSIR, India (698/Del/94)

188716. CSIR, India (699/Del/94)

Electronic thermostat control unit

Electronic multi temperature controller for
refrigeration and heating systems

A high speed accurate temperature
measuring device

A process for preparing mixed structured
precipitated calcium carbonate (PCC) for
dentifrice and a device for carrying out
the process

A rotor axle bearing for electric meter and
an electric meter comprising the same

A self driven counterbalancing and crop
orienting and pushing three wheeler
harvester

An improved semi automatic envelope
making machine

A system for the acquisition of the
information of the primary receiver scan
carrier number (PSCN) starting from the
multiframe number (MFN) in a dect
cordless telephone system

A process for producing precipitated silica

A method of preparing a wound dressing

A method of preparing a solid group viii
metal and chloring catalyst composition

Device and method for digestion of sludge

Screen material in particular suitable for
use in flat screen and rotary screen
printing

Optical disc player

A protected child proof blister package

A method for manufacturing a protein

Process for preparing esterified chroman
compounds

An electronic control device

An improved device for continuous casting
of steel

A novel method for extraction for
potassium as potassium chloride from
polyhalite $k_2m_2ca(se)_2h_2o$ for its
commercial use as fertilizer

An absorbent article for wearing in a
panty

A process for the recovery of sulphur

An improved preparation of pyridine
derivatives from ethanol

PFC on the move

PFC organised 6 patent awareness workshops in the month of November 2002. First workshop at S.J. College of Engineering, Mysore on November 18, 2002 was attended by about 90 delegates from research, academia



(Workshop at S.J. College of Engineering)

and industry. Second workshop at Institute of Engineers & Technology, Alwar was organised in association with PIC, Jaipur on November 20, 2002. 110 participants attended this workshop. Third workshop was organised at Kurukshetra University,



(Workshop at Alwar)

Kurukshetra on November 25, 2002 in association with PIC, Chandigarh; same was attended by about

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188717. CSIR, India (954/Del/94)	An improved process for the preparation of 5 formyl 1-1 3 dioxpenes
188718. CSIR, India (1198/Del/94)	A process for the preparation of a novel molecular sieve catalyst
188719. Pancea Biotec Ltd, India (2532/Del/97)	Process for the preparation of a homogenous substantially alcohol free transparent stable flowable easily measurable composition of cyclosporin
188720. Panacea Biotec Ltd, India (3185/Del/97)	A process for the preparation of a novel anti preparation of a novel antileukotriene anti histaminic anti allergic and anti inflammatory composition
188721. The Ensign Bickford Co, USA (69/Bom/96)	Surface connector for blasting initiation system
188722. Indian Oil Corp Ltd, India (506/Bom/96)	A process for cracking a heavy hydrocarbon feed and an apparatus therefor
188723. Abhay Mangaldas, Maharashtra (28/Bom/97)	A two in one device for oral hygiene
188724. Vivek Monteiro, Maharashtra (67/Bom/97)	Flexible connectors
188725. Indian Petrochemicals Corp, India (150/Bom/97)	A process for the preparation of a molecular sieve adsorbent for selectively adsorbing methane from a gaseous mixture
188726. Indian Oil Corp, India (164/Bom/97)	A process for the production of high yield of LPG and light olefines
188727. Hindustan Lever Ltd, India (197/Bom/97)	Cosmetic composition containing ascorbic acid
188728. Hindustan Lever Ltd, India (204/Bom/97)	A process for cleaning of a substrate
188729. Innomedia Technologies Pvt Ltd, India (245/Bom/97)	A set top device to integrate digital/ analogue cable TV, VCR & telephone in interactive manner
188730. Hindustan Lever Ltd, India (253/Bom/97)	Detergent composition

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PFC on the move...

120 scientists, technologists and academicians. Fourth one was organised at MJP Ruhelkhand University, Bareilly on November 27, 2002 in association with PIC, Lucknow and had participation of about 125 scientists. Fifth workshop was organised with PIC, Kolkata at B E College of Engineering, Shivapur on November 27, 2002. Sixth workshop was organised at Raipur, Chhattisgarh on November 30, 2002 in association with Chhattisgarh Council of Science & Technology, Raipur. This workshop focussed on protection of traditional knowledge keeping in view large pool of traditional knowledge of state of Chhattisgarh. A lecture on protection of traditional knowledge was also delivered during the workshop.

Please send us questions and topics you would like to see in the coming issues

NEXT ISSUE

- **Case Study**
- **Case Law**
- **Patents for Opposition**

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