



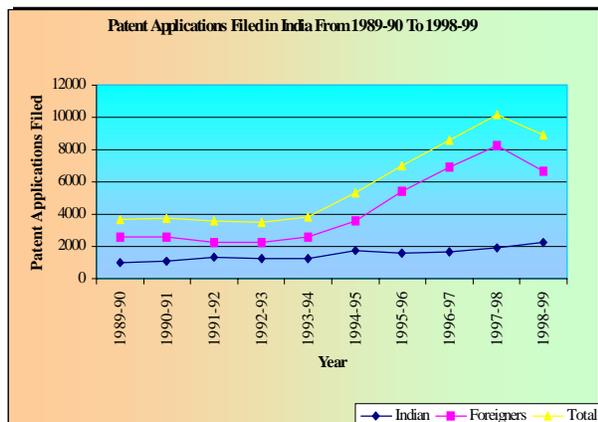
A BULLETIN  
FROM  
TIFAC

# INTELLECTUAL PROPERTY RIGHTS (IPR)

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## Indians Increase Share in Patent Filings by 17%

The 27th Annual Report of the Controller General of Patents, Designs and Trade Marks for the year 1998-99 reports that Indians filed 2,247 patent applications in 1998-99 as against 1,926 applications filed by Indians in 1997-98- an increase of about 17% has been recorded. This portends well for the innovative environment in the country. The graph below shows the patent applications filed in India during the last ten years.



A decrease in the number of patent applications filed during the year has also been reported. A total of 8,954 applications were filed as against 10,155 applications filed during 1997-98. The number of applications filed by foreigners stood at 6,707 in contrast to 8,229 in 1997-98. This decrease may be attributed

to the fact that many foreign applicants may have filed PCT (Patent Cooperation Treaty) applications designating India as one of the countries of interest rather than filing convention applications. A substantial increase in the number of applications filed is likely to take place when these applications come to the national phase. Other major highlights of the report are listed below:-

- 6,149 convention applications were filed. The number of convention countries has increased from 78 to 170 on and from 7th December, 1998 after India became a member of the Paris Convention.
- 33,230 applications were awaiting examination at the end of the year; 2,931 applications were examined during the year.
- Of the 1,800 patents sealed during the year, 645 were sealed in the names of Indians.
- Out of 155 patents sealed relating to food, drug or medicine, 114 patents were sealed in the names of Indians
- 2,088 patents out of 8,779 patents in force on March 31,

1999 were in the names of Indians.

- Maharashtra topped the list for filing patent applications having filed 695 applications as against 580 filed during the last year. It was followed by Delhi (581), West Bengal (196), Tamil Nadu (148), Andhra Pradesh (130) and Karnataka (125). No patent application had emanated from States of Madhya Pradesh, Orissa and Jammu and Kashmir during 1997-98. However 31, 23 and 3 applications respectively originated from these States during 1998-99.
- Highest number of foreign applications have been filed by USA (2807) followed by Germany (1912), Japan (1688), United Kingdom (401), France (351) and Switzerland (350).
- 47 oppositions to the grant of patent were entered during the year.
- 668 patents deemed to have been endorsed with the words "License of Right", while no application for the grant of compulsory license was filed.
- Mechanical sector with 2,125 applications topped the tally this year followed by chemicals (2023), Electrical (1778), drugs (1555), general (1333) and food (140).

## Case Study

### Biodegradable plastic material and a method for its manufacture

The present invention relates to a biodegradable plastics material comprising a polyvinylacetate/polyvinylalcohol copolymer and to a method for its manufacture. A patent (Patent No 5,948,848) on this invention was granted by the United States Patent and Trademark Office (USPTO) to Solplax Limited in 1999.

### Prior Art and Background

Commercially available biodegradable plastics do not fully degrade in the environment and retain a high degree of toxicity when partially degraded. Furthermore, such materials are expensive and generally only used for niche markets. The use of polyvinylacetate /polyvinylalcohol (PVA) copolymers for the manufacture of biodegradable plastics materials has been reported. While PVA is known as a biodegradable material, its use in the manufacture of plastic articles has up to now been limited as it is technically difficult to work with this material and to produce an acceptable product, therefore it is costly and commercially unsuccessful.

### Present Invention

The present invention seeks to provide an improved plastics material comprising a PVA copolymer which can readily be worked by known processes such as blow moulding, injection moulding, cast extrusion, etc. and which is suitable for the

manufacture of biodegradable articles.

The term PVA as used herein refers to a polyvinylacetate polymer which has been partially hydrolysed to convert a proportion of the acetate groups to the corresponding alcohol. Therefore, the term refers to a polyvinylacetate/polyvinylalcohol copolymer. The solubility of the PVA is dependent, inter alia, on the degree to which the PVA is hydrolysed. "Cold soluble" PVA denotes a copolymer which is generally referred to as "partially hydrolyzed" polyvinylacetate. Typically, the partially hydrolyzed copolymer comprises 70 to 85 wt % of the alcohol, with the remainder comprising residual acetate, and this material is soluble in "cold" water. It is generally readily soluble in water at 20°C. Further hydrolysis of the PVA to levels at which the alcohol comprises about 96 mol % or greater (usually referred to as "fully hydrolyzed" polyvinylalcohol, results in a marked decrease in solubility. While the fully hydrolyzed polymer is usually thought of as insoluble, it is in fact soluble in water at a temperature of about 50°C or greater. Such material is referred to herein as "hot soluble" PVA. Both hot and cold soluble PVA's, once dissolved, are fully biodegradable in nature to CO<sub>2</sub> and H<sub>2</sub>O. The undegraded copolymers and their partially degraded derivatives are non-toxic.

The present invention provides a method of manufacturing a biodegradable plastics material comprising mixing partially

hydrolysed, water soluble polyvinyl alcohol (PVA) co-polymer with a plasticizer and stabiliser at a temperature in the range of between 106 to 140°C, whereby the resultant material can readily be worked by known processes and is suitable for the manufacture of water soluble and biodegradable articles.

The method may comprise the following steps:

- a. mixing the stabiliser with the PVA; and
- b. adding the plasticiser to the mixture of stabiliser and PVA and mixing at a temperature between 106 to 140°C.

After the mixing stage, the method may include the steps of compounding and pelletising the resultant product to produce a useable, commercial pellet wherein the compounding is carried out at a temperature in the range 195-225°C.

The method may include processing the plastics material further by blow moulding, cast extrusion, injection moulding or any other suitable type of process currently in use.

The stabiliser may stearamide or a stearate and the plasticiser may comprise glycerol or glycerine solution or soya bean oil.

The mixing stage may be carried out at a temperature in the range of 123 to 129°C.

The method may include the step of applying a waterproofing agent to at least a portion of the surface of the plastics material

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### **Case Study**

so that at least a portion of the material is rendered resistant to water to prevent premature dissolution of the product on contact with water.

The waterproofing agent may be phenoxy resin. Waterproofing can also be achieved through crosslinking the copolymer by adding an ultra violet sensitiser for example sodium benzoate, benzoic acid or tetrazolium salts to the PVA during compounding. The article or surface thereof may also be coated with silane.

Other additives, well known in the art, may also be used in compounding the plastics material according to the invention. Such additives may include colouring compounds and fillers.

### **Example 1**

#### **Mixing Stage**

A Prism lab 6 high speed mixer was used (Henschel 50 kg mixer also used).

#### **Ingredients**

5 kg PVA (degree of hydrolysis of 76.7 to 79.3 mol %)

0.25 kg stearamide (5% w/w of stearamide to weight of PVA)

0.25 kg of glycerol (5% w/w of glycerol to weight of PVA)

A high speed forced action blender was used. The PVA and stearamide were added to the mixer and mixed for 1 minute. The glycerol was added slowly over a period of 30 seconds, with the mixer rotating at approximately 500 rpm. As a result of the agitation, the mix

became frothy ("fluffed up") and the mixer was stopped to push mixed material from the inside of the mixer. After 2-5 minutes, the mix had settled down and the mixer was turned up to full speed, from 1,500 rpm to 3,000 rpm. As a result of the kinetic energy generated by the agitation of the mix, the temperature increased to 123°C and went to 125°C in 8 to 20 minutes depending on the type of mixer used.

The temperature is a critical parameter to achieving high quality product.

A vacuum was created at the top of the mixer to draw off any moisture vapour which had formed at the top of the mixer and which would otherwise condense back into the mix.

The mix was allowed to cool to 60-70°C so that it was sufficiently cool to allow it to be bagged. The mix can be allowed to cool by itself or optionally a heating/cooling jacket can be included on the mixer vessel.

Alternatively mix can be transferred to another vessel to cool. The mixture was stirred occasionally to help cooling and break up any lumps which had formed. The product is in granular form and is bagged in air-tight bags.

#### **Compounding/Pelleting Stage**

A Prism TSE 16TC twin screw extruder with 41/2 mm die was used for the compounding stage.

The temperature range was 200°C-218°C. measured from the feed end of the screw to the die

end.

The extruder is vented along the screw to allow moisture vapour to exit the screw because otherwise bubbles occur in the strands. The product emerges from the extruder in the form of a strand which has elastic properties. The strands must be dried in air using air knives, for instance, and not in water. After cooling, the strands were cut into pellets using a Prism LPT 16 laboratory pelletiser. The pellets were then bagged in an air tight fashion.

Screens of 200/inch.sup.2 gauge size are used to soften the memory of the PVA and reduce the risk of any possible extraneous matter and gels. Further screens are also provided of 40/inch.sup.2, 60/inch.sup.2, 80/inch.sup.2, 100/inch.sup.2 and 120/inch.sup.2 secured to the 200/inch.sup.2 screen to give it strength.

Screens are located between the end of the screw and the die.

Spraying the Waterproofing Agent, Phenoxy Resin, Onto the Film.

#### **Mixing (Before Spraying)**

A 10% w/w solution of phenoxy resin was used for spraying a film of thickness 40 .microns. Alternatively 5% or 2.5% solution of phenoxy in MEK with water added was also be used depending on the thickness of the film to be sprayed. Lower concentrations of phenoxy resin in MEK with water may also be used.

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## Case Study

### Spraying

Spraying was carried out in dry conditions and preferably at a minimum temperature of 21°C. A Campbell Hausfeld Professional Turbo Spray (high volume/low pressure finishing system HV2,000) was used for spraying but conventional sprayers may also be used. The humidity of the atmosphere in which spraying is being conducted is a critical parameter. The film was sprayed so as to achieve good cover but without overspraying. Thin film below 40 .mu.m needs stretching so that no folds occur during spraying and must be held flat. Heavier plastics must also be held flat. Alternatively, heavier plastics (60 .mu.m+) can be dipped or use sponge or roller to apply.

### Claims

The patent has 14 claims. A few of them are reproduced below :

1. A method of manufacturing a biodegradable plastics material comprising the steps of mixing partially hydrolysed, water soluble polyvinyl alcohol (PVA) co-polymer feedstock with a stabiliser, adding a plasticiser to the mixture of stabiliser and PVA and mixing at a temperature in the range of 106 to 140°C, and compounding the resultant material at a temperature in the range of 195-225°C to produce a useable, commercial product which can readily be worked by known processes

## The Copyright (Amendment) Act, 1999

The Copyright Act has been recently amended through the Extraordinary Gazette Notification dated December 30, 1999. Section 52 of the Act existing before this date had stipulated some acts (actions), in respect of copyrighted computer programmes, which were not considered to be acts of infringement. These acts were :

“the making of copies or adaptation of a computer programme by the lawful possessor of a copy of such computer programme, from such copy-

- (i) in order to utilise the computer programme for the purpose for which it was supplied; or
- (ii) to make back-up copies purely as a temporary protection against loss, destruction or damage in order only to utilise the computer programme for the purpose for which it was supplied;”

Through this amendment following acts have been declared as non infringing acts along with those mentioned above :

- (i) the doing of any act necessary to obtain information essential for operating inter-operability of an independently created computer programme with other programmes by a lawful possessor of a computer programme provided that such information is not otherwise readily available;
- (ii) the observation, study or test of functioning of the computer programme in order to determine the ideas and principles which underline any elements of the programme while performing such acts necessary for the functions for which the computer programme was supplied;
- (ii) the making of copies or adaptation of the computer programme from a personally legally obtained copy for non-commercial personal use.

and is suitable for the manufacture of water soluble and biodegradable articles, the stabiliser comprising stearamide or stearate used in an amount in the range of 4 to 6% weight/weight PVA.

- 2. A biodegradable, plastics material produced by a method as claimed in claim 1.
- 3. An article produced by the

method as claimed in claim 1, wherein the article is fully or substantially biodegradable.

- 4. An article produced by the method as claimed in claim 1, wherein the biodegrading of the article commences on contact of the article with water.

## Fee Structure with Japan as a Designated/or Elected Office in a PCT Application

Under our series of publishing the fee structure and other requirements of various PCT Contracting States, this issue summarises the fee structure and requirements of Japanese Patent Office for entry into the national phase. A PCT application written in Japanese or English must reach the Japanese Patent Office within 20 months from the priority date if the applicant has decided to enter into the national phase after the search report or within 30 months from the priority date if the applicant has decided to enter into the national phase after the examination report. The patent application covering the description, claims, any text matter of drawings, abstract, amendment if any must be translated into Japanese. Where no transition of amendments is filed, the amendments are considered not to have been made. A copy of the international application is not required. However, if filed in Japanese, a copy of any amendments under PCT Article 19 may be required. No exemptions or refunds of the national fee are provided except in the care where an international search report has been established, the fee for request for examination is reduced.

Under the special requirement of the office, when the applicant is a legal entity, name of the officer representing the entity must be indicated. The name may not be required if the legal entity is represented by a patent attorney. An agent (patent attorney or attorney-at-law resident in Japan) is required if the applicant is not a resident in Japan.

A diskette containing coded date of the sequence listing for international applications disclosing nucleotide and/or amino and sequence must be furnished together with required documents. A change in name or residence of the applicant or the inventor during the international phase must be indicated to the Office on prescribed forms.

The Japanese Patent Office also accepts the filing of international application with request in PCT-EASY format. The Competent International

Searching Authority and International Preliminary Examining Authority for international applications filed are the Japanese Patent Office or European Patent office. The European Patent Office acts as competent International Preliminary Examining Authority if international search was also performed by the European Patent Office only. A patent application and a utility patent application can be converted into a utility or a design and a patent or a design application respectively by paying the required conversion fees. The fee structure is given as below:-

### National Fee in Yen

National fee	21,000
National fee for request for review	21,000
Fee for request for examination	For international applications filed on or after 1 January 1988
(a) Where no international search report has been established	84,300 plus 2,000 for each claim (hereinafter referred to as "per claim")
(b) Where the international search report has been established by the Japanese Patent Office	16,900 plus 400 per claim
(c) Where the international search report has been established by an International Searching Authority other than the Japanese Patent Office	67,400 plus 1,600 per claim
<b>Annual fees:</b>	
For the 1st to 3rd year (must all be paid at one and the same time)	Per year 13,000 plus 1, 100 per claim
For the 4th to the 6th year	Per year 20,300 plus 1,600 per claim
For the 7th to the 9th year	Per year 40,600 plus 3,200 per claim
For the 10th to the 25th year	Per year 81,200 plus 6,400 per claim
Fee for application for registration of extension of patent right	74,000
Fee for conversion	14,000 (of a utility model application) 16,000 (of a design application)

***(Source: PCT Applicant's Guide-Vol. II-National Chapter-JP, January 1998 and July 1999; Published by World Intellectual Property Organisation)***

## Patenting in Paper

Readers may recall that PFC had published an analysis entitled 'Patenting in Paper and Printing Technology' in the IPR bulletin of May 1997. This issue analyses 205 patent applications filed in this area in the last 4 years in India from 1995 to 1998. The study is based on the patent applications related to paper manufacture, method of paper pulp processing, tissue paper, treatments of wastes from paper mills and machines used in such processes. As shown in the **Table I** a gradual increase in the number of patents filed has been noted.

**Table I**

Year	Patent Applications Filed
1995	43
1996	50
1997	55
1998	57

The share of applications filed by Indians has been 13.6 percent in the total number of applications filed. Of the 177 applications by foreigners, 141 applications were convention applications. The highest number of applications emanated from USA (102) followed by United Kingdom (11), Germany (7), Japan (4), Finland (4), Italy (3). Important facts brought out by study are listed as below:

Total number of applications filed 205

Number of applications from Indian individuals/companies 28

Number of applications from Indian individuals 16  
 Number of applications by foreigners 177  
 Number of convention applications 141  
 No of companies/individuals filing 3 or more applications 12  
 Number of Indian companies/individuals filing 3 or more applications 1

**Table II** gives the list of Indian /foreign companies filing more than 3 applications.

**Table II**

Company	Patent Applications Filed
Procter & Gamble, USA	65
CSIR, India	8
Kimberly-Clark Worldwide Inc.	6
Minerals Technologies Inc., USA	6
Hercules Inc, USA	6
Allied Colloids Ltd	5
De La Rue Giori SA, Switzerland	4
Scott Paper Co	4
Beloit Tehnologies Inc.	3
Ahlstorm Machinery Corp	3
Kimberly-Clark Tissue Co	3
Windmoller & Holscher	3

### Patenting in Paper by Indians

Of the total 28 applications filed by Indians, 8 have been filed by Council of Scientific and Industrial Research (CSIR), two by the Chief Controller of

Research and Development, New Delhi and one each by Thapar Corporation, Ballarpur Industries Ltd and Indian Jute Industries Research Association. CSIR has focussed on areas like utilising wastes from paper mills, treatment of wastes of paper mills and preparing translucent paper from turmeric plant. An application on manufacture of high strength paper from bamboo pulp has been filed by Ballarpur Industries Ltd. Thapar Corporation. Research Centre has filed an application for a method for producing pulp for making paper. Individuals have concentrated on machine for pasting of paper in the corrugated sheets, hand made recycled wood free paper made from denim, separation of lignin from cellulose, catchel process for improving optical properties of paper, method for decolourisation of cellulose pulp-mill waste waters, chemically coated paper for packing of fruits and vegetables, method for separating wax from waste paper, paper board pallets and wettable toilet cum cleaning paper.

### Patenting in Paper by Foreigners

The Procter & Gamble Company (P & G) filed the highest number of applications (65). Most of the applications filed by P & G relate to tissue paper. These include applications like multiply paper product, temporary wet strength paper, process for making soft creped tissue paper, lotioned tissue paper, medicated tissue paper, wet pressed tissue paper, paper products containing biodegradable vegetable oil based chemical softening composition, method for

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### **Patenting in Paper**

making paper web having bulk and smoothness, method of applying curable resin to a substrate for use in paper making.

Kimberly-Clark Worldwide Inc has filed applications relating to modifying pulp for recycled newspapers, production of soft paper products from coarse cellulosic fibres and paper sheet with increased cross machine direction stretchability. Hercules Inc. has applications for chemicals used in paper processing and manufacturing. The applications mainly relate to additives for paper, paper surface sizing agents, resins for paper and method for surface sizing paper with 2-oxetanone and rosin and paper prepared thereby. Minerals Technologies Inc. has also concentrated on the area of chemical processing of paper. It has filed applications like bleaching of filled paper recycling of mineral filters from the residue of a paper deinking plant rosin-sized paper composition and method of making and dual surface treated filler material and method of preparation and its use in paper making. Allied Colloids Ltd has 2 applications entitled, "Manufacture of Paper". Other 3 applications relate to production of paper and paper board, process of reducing contamination of cellulosic liquors and process of making paper and materials used in the process.

Scott Paper Co has filed one application for production of soft paper products from old newspaper. Rest of the applications are for system and

method of dispensing coreless rolls of paper products and improved folded absorbent paper product and method. Ahlstorm Machinery Corporation's 2 applications are for a method and apparatus for cleaning a pulp washer from stickers and one for a method and apparatus for treating pulps.

Beloit Technologies have filed 3 patents in the fields of impact of temperature and alkali charge on pulp brightness, method of producing kraft pulps with improved bleachability and runability and, apparatus and method for treating mixed topical hardwood pulp. Kimberly-Clark Tissue Company has 3 applications relating to method of making improved absorbent paper product, production of soft paper products and improved recycled absorbent paper product. Windmoller and Holscher has 3 patent applications mainly for devices used in paper manufacture.

Patents have also been filed in areas such as apparatus for coating pulp products, apparatus for pulping wood, swollen starches as paper making additives, producing of multi-ply corrugated paper board, aramid papers of improved solvent resistance, method for determining organic content in pulp and paper, method for preparing paper strengthening agent, process binding lignocellulosic material, method for repairing paper defects during continuous manufactures and the like.

### **Domestic News**

A patent has been filed by Nimbkar Agriculture Research Institute at Phaltan in Maharashtra for developing a method to treat foul-smelling distillery wastes. Solar energy and a chemical catalyst have been used to achieve the process. By this method 100 litres of diluted distillery waste water can be detoxified within five days.

**(AIBA News Letter, Vol 6 No 5, Sept-Oct 99 )**

Foreseeing potential threat from foreign firms, the confectioners in West Bengal are demanding patent rights to traditional local sweets. The Paschim Bangiya Mistama Byabsayee Samiti (West Bengal Sweet Manufacturer's Association) said, the move was aimed at preserving local delicacies such as rossogolla, misthi doi or smoked yoghurt as there were reports that some foreign firms were trying to make bengali sweets or use the names.

**(Business Line, 21 Dec 99)**

The Indian Drugs Manufacturer's Association (IDMA) has cautioned the government against undue haste in bringing forth any changes in the patent laws. The Association feels that monopolistic practices by multinationals could lead to price escalation in medicines. IDMA has sought that government must keep in mind the protection of the public interest while complying with the pre-condition

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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. 4 December, 1999

183361. Goldstar Co Ltd, Korea (1016/Cal/94)	Electron guns for color picture tube.
183362. Kerr-Mcgee Chemical Corp, USA (76/Cal/95)	A method for making a finely divided powder such as ceramic magnetic or pigment powder.
183363. Terastore Inc, USA (77/Cal/95)	A data storage and retrieval device.
183364. O P Bhuwania, India (120/Cal/95)	An improved catalytic reduction process for manufacturing black iron oxide.
183365. Daewoo Electronics Co Ltd, Korea (252/Cal/95)	Optical projection system.
183366. Foster Wheeler USA Corp, USA (516/Cal/95)	A closure device adapted for rigid attachment on to the head of a drum.
183367. Saint-Gobain Vitrage, France (721/Cal/95)	Silica-soda-calcium glass composition notably used for the making of windows (glass).
183368. Thomson Tubes & Displays S A, France (928/Cal/95)	An inline electron gun having improved beam forming region.
183369. Kolbenschmidt Aktiengesellschaft, Germany (1034/Cal/95)	A method of manufacture of sliding surface bearing.
183370. Bina Metal Way Ltd, India (1357/Cal/95)	Improved toggle spring device.

#### B. 11 December, 1999

183371. Braun Aktiengesellschaft, Germany (351/Cal/94)	A tooth brush having separate fasteners as bristle carrier.
183372. Dupont Canada Inc, Canada (844/Cal/94)	A resin composition.
183373. Shaw Industries Ltd, suspension Canada (867/Cal/94)	A low distortion disc-shaped spring for geophone.
183374. Midrex International B V, Switzerland (297/Cal/95)	An improved process for producing iron carbide (Fe <sub>3</sub> C) in a shaft furnace and apparatus therefor.

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### Domestic News

that multiple compulsory licensing be granted to competitive producers.

**(Business Standard, 9 Dec 99)**

The Trade Marks Bill has been passed by the Rajya Sabha during the winter session. The bill is a comprehensive review of the 1958 Act in view of developments in trading and commercial practices. The bill provides for registration of trade marks for services, collective marks owned by associations and setting of an appellate board for disposal of applications before various high courts. Also, the period of registration and renewal has been increased from seven to ten years, trade marks offences made cognizable and jurisdiction of courts enlarged.

**(Financial Express, 17 Dec 99)**

The Bill on the Protection of Plant Varieties and Farmers' Right (PPV & FR) has been introduced in the Lok Sabha which seeks to provide for the establishment of an Authority to protect the rights of plant breeders and farmers through a sui generis system in line with the World Trade Organisation's Trade Related Intellectual Property Rights (TRIPS) Agreement. The Bill has been referred to a select Committee of the Lok Sabha.

**(Business line, 15 Dec 99)**

A 30-member joint committee of Parliament will study the WTO-obligated Patents (second amendment) Bill and present its

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183375. Tyco Flow Control Inc, USA (623/Cal/95) A quarter turn valve having a valve body with a through opening.
183376. Orthovita Inc, USA (699/Cal/95) A method for forming osseus tissue for filling an osseus defect in a site of reduced metabolic state.
183377. LG Electronics Inc, Korea (760/Cal/95) Microwave oven.
183378. Foster Wheeler Energy Corp, USA (845/Cal/95) An apparatus for discharging air or air fuel mixture into a furnace.
183379. Siemens Aktiengesellschaft, Germany (979/Cal/95) Continuous flow steam generator.
183380. Kerr-Mcgee Chemical, USA (1029/Cal/95) A method of producing a milled powder.
183381. BASF Corp, USA (1307/Mas/96) A process for preparing stable herbicidal composition with enhanced herbicidal activity.
183382. Novo Nordisk, Denmark (1661/Mas/96) A method of preparing food product such as soup paste jam sauce and the like.
183383. Novo Nordisk, Denmark (2337/Mas/96) A method of preparing an improved composition for making bread, pasta and the like.
183384. Societe Des Produits Nestle S A, Switzerland (163/Mas/97) A process for the production of the free flowing dispersible granular food product.
183385. Societe Des Produits Nestle S A, Switzerland (393/Mas/97) A process for the continuous production of chocolates and fat containing confectionery material.
183386. Panganamamula Venkata Surya Prakash Rao, India (722/Mas/97) Preservation of cooked rice/semolina/pasta/dhals and allied products in hermetically sealed packages and containers.
183387. Societe Des Produits Nestle S A, Switzerland (1591/Mas/97) A process for the production of a seasoning.
183388. F Hoffmann-La Roche AG, Switzerland (1743/Mas/97) A process for the manufacture of an optionally protected 4 8 8-trimethyl-1-oxaspiro (2.5) oct-4-en-6-ol.
183389. Societe Des Produits Nestle S A, Switzerland (1920/Mas/97) A process for producing a food seasoning.
183390. Chemferm, The Netherlands (2138/Mas/97) A process for purifying cephalixin.
183391. 12/18 Indian Association for the Cultivation of Science, India (501/Cal/94) A process for preparing highly conductive phosphorous doped n-type microcrystalline hydrogenated silicon thin film at low power by plasma enhanced chemical vapour deposition method.

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### Domestic News

report on the first day of the Budget session. The members of the committee from Rajya Sabha include TN Chaturvedi, LM Singh, both BJP, Suresh Keswani, MN Das, both Congress, Biplab Dasgupta, CPI (M), CP Thirunavukkarsu, DMK, J Chitharanjan, CPI, K Kalavenkata Rao, TDP, Satish Pradhan, Shiv Sena and Jayant Malhotra, Independent.

(Financial Express, 22 Dec 99)

### International News

For the seventh consecutive year, the International Business Machines Corporation (IBM) has topped list of private sector patent recipients for the year 1999. The top ten organisations along with their ranks and the number of patents obtained are listed below. Among these three are from US, six from Japan and one from Korea.

Rank in 1999	Patents in 1999	Organization
1	2, 756	International Business Machines Corporation
2	1, 842	NEC Corporation
3	1, 795	CanonKabushiki Kaisha
4	1, 545	Samsung Electronics Co, Ltd
5	1, 409	Sony Corporation
6	1, 200	Toshiba Corporation
7	1, 193	Fujitsu Limited
8	1, 192	Motorola Inc
9	1, 153	Lucent Technologies Inc.
10	1, 054	Mitsubishi Denki Kabushiki Kaisha

(www.uspto.gov)

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183392. B & J Manufacturing Co, USA (676/Cal/94) A tire rasp blade for use in a tire buffing machine.
183393. Varintelligent (BVI) Ltd, UK (927/Cal/94) An electro-optic apparatus for image display.
183394. Deutsche Thomson-Brandt Rom-ram disk. Gmbh, Germany (930/Cal/94)
183395. Novamont S P A, Italy (74/Cal/95) A process for producing foamed articles made of biodegradable plastic material.
183396. Montell Technology Co, USA (119/Cal/95) Process for the gas phase polymerization of olefins.
183397. Siemens Aktiengesellschaft, Germany (254/Cal/95) Combined feed and mixing device.
183398. Eaton Corp, USA (255/Cal/95) An electric circuit interrupting device for an electrical system.
183399. Tidal Electric Inc, USA (259/Cal/95) An apparatus for generating electrical energy from tidal movement of a body of water.
183400. Danieli & Co Officine Meccaniche SPA, Italy (573/Cal/95) Mold for the continuous casting of high carbon steels to produce thin slabs.
- D. 25 December, 1999**
183401. Windmoller & Holscher, Germany (443/Cal/95) Printing press such as a flexographic printing press having a mechanism for exchanging cylinders.
183402. General Electric Co, USA (484/Cal/95) A computerized tomography system.
183403. De Nora Permelec S P A, Italy (160/Cal/95) An electrolyzer for the production of sodium hypochlorite or sodium chlorate.
183404. Pates Technology Patentverwer-Tungsgesellschaft, Germany (282/Cal/95) A planar antenna.
183405. Daniel & C Officine Meccaniche SPA, Italy (607/Cal/95) Method and crystalliser for continuous casting of billets/blooms/slabs.
183406. Eaton Corp, USA (757/Cal/95) Apparatus for digitizing ac signals of unknown or changing frequency.
183407. Goldstar Co Ltd, Korea (126/Cal/95) Wind direction controlling apparatus for air conditioner.
183408. Kuraray Co Ltd, Japan (2130/Cal/97) A method for producing an optically active 3-hydroxy-alpha -butyrolactone.
183409. Vertex Pharmaceuticals Inc, USA (2147/Cal/97) A process for preparing a pharmaceutical composition for stimulating growth of neurites in nerve cells.
183410. Indian Aluminium Company Limited, India (2450/Cal/97) Method for the production of a new composition of matter suitable for use as flux in alloy steel refining process.
183411. The Procter & Gamble Co, USA (542/Del/88) Detergent /softening compositions.

*Contd from... 9*

**International News**

Secure and confidential access to patent application status of patent applications filed with the United States Patent and Trademark Office (USPTO) is now available on the internet under the recently launched Patent Application Information Retrieval (PAIR) system. The system makes it possible for applicants, and their designated agents or attorneys, to securely obtain up-to-the minute information on their pending or abandoned application. For accessing this facility, a requestor must either be the applicant or representative of the applicant, must have completed a PAIR access request form, have a customer number and have a Public Key Infrastructure (PKI) software installed on their computer. The software provides encryption and digital signature. More details can be accessed by contacting Terry Downey at 703-308-6845 or at site <http://pto-ebc.uspto.gov>.

**(www.uspto.gov)**

Consumers eager to know more about the genetically-modified crops can access the site recently launched by the US Agriculture Department. The site offers answers to some of the most frequently asked questions about the genetically modified crops. The address of the site is [www.aphis.usda.gov/biotechnology](http://www.aphis.usda.gov/biotechnology).

Trankaryotic Therapies Inc (TKT) has been recently awarded

*Contd on...11*

183412. Toa Nenryo Kogyo Kabushiki Kaisha, Japan (819/Del/88)	Method for the preparation of a catalyst composition for use in the polymerization of olefins.
183413. The Procter & Gamble Co, USA (1001/Del/88)	Detergent composition containing cellulase granulates.
183414. CSIR, India (1169/Del/89)	A process for the preparation of a novel porous crystalline material.
183415. CSIR, India (310/Del/90)	A process for the preparation of crystalline metallo-titanium silicate 1 catalyst composite material.
183416. CSIR, India (1177/Del/90)	An improved process for the extrusion of magnesium magnesium alloy billets.
183417. Basf Lacke+Farben Aktien-gesellschaft, Germany (10/Del/91)	A process for the production of coating compounds for exterior coating of packaging containers.
183418. Exxon Chemical Patents Inc, USA (225/Del/97)	Interstage separator.
183419. Rudoef W Gunnerman, USA (459/Del/91)	Novel aqueous fuel composition for internal combustion engine.
183420. SAIL, India (516/Del/91)	A device for optimising the length of short pieces cut from hot rolled products in a steel plant.

### PFC on the move...

Two patent awareness workshops were organised during the period. Both the workshops were organized in association with the Patent Information Centres (PIC) set up by the PFC at the state councils for science & technology of the respective states.

- \* The first one was held at Avadesh Prasad Singh University, Rewa on December 4. It had a participation of more than 200 scientists & technologists for the government sector and the industry.
- \* The second was held at Burdwan University, Burdwan on December 15. It was attended by 60 participants from various R & D institutes, government departments and the industry.



(Workshop held at Burdwan University on 15 December, 1999)

*Contd from... 10*

#### International News

a US patent (Pat No. 5, 994, 127) titled 'In vivo production and delivery of erythropoietin or insulinotropin for gene therapy'. Under this therapy, small sample of cells are removed from the patient in an outpatient procedure, are genetically engineered by TKT and are again injected into the patient.

**(Genetic Technology News, Vol 19 No 50, Dec 15 1999)**

A book on IPR titled 'The Making of Modern Intellectual Property Law' by Brad Sherman and Lionel Bently has been published by the Cambridge University Press. (ISBN 0 521 56363 1). The book costing 40.00 pounds charts the history of the patent law from its earliest origins. The book is written in an entirely unacademic fashion and is very readable and accessible.

**(Patent World, Iss 117, Nov 99)**

Certain changes have taken place as regards to the patent application requirements in Egypt. In addition to what is required for a patent application to be filed in Egypt as per Articles 15 and 16, the following shall also be required to be submitted:

#### Firstly

\* Full specification in Arabic language.

\* An abstract in Arabic and English of no more than 200 words accompanied by the invention filing fee.

*Contd on... 12*

Contd from... 11

**International News**

\* A copy of the detailed specification and its drawing and other foreign documents duly certified by the industrial property office if the application is based on Article 53 of law No 132 for the year 1990.

**Secondly**

Following documents shall be submitted duly certified and legalised when filling the application or within three months of the application date. The application will be regarded as if it had never been made if the documents are not filed in that period.

\* An extract of the commercial registry or an official extract from the memorandum or articles of incorporation.

\* A deed of assignment and its Arabic translation.

\* A power of attorney duly legalised.

\* A certificate of temporary protection.

**Thirdly:** The Arabic specification and drawings have to be filed in the Arabic language at the time of filing or within six months of that date based on an undertaking that the application will be regarded as if it had never been made if the documents are not submitted during that period, provided that the patent application is filed with the specification and drawings and other foreign documents duly certified by the Industrial Property Office and accompanied by the English or French translations if the application is based on the provisions of Article 53 of Law No 132 for the year 1949 and Article 4 of the Paris Convention. **(Patent World, Iss 117, Nov 99)**

Certain changes are taking place in the United States with regard to filing fees for patents. The patent fees charged by the USPTO has been decreased. Under the section 37 CFR 1-16, 1.20 and 1-492 effective from 29

December, 1999 the following patent fees will be charged :

37 CFR SEC.	Description	Current Amount	New Fee Amount (Effective 12/29/99)
1.16(a)	Basic filing fee - Utility	\$760	\$690
1.16(a)	Basic filing fee-Utility (Small Entity)	\$380	\$345
1.16(a)	Basic filing fee-Utility (CPA)	\$760	\$690
1.16(a)	Basic filing fee-Utility (CPA) (Small Entity)	\$380	\$345
1.16(h)	Reissue filing fee	\$760	\$690
1.16(h)	Reissue filing fee (Small Entity)	\$380	\$345
1.16(h)	Reissue filing fee (CPA)	\$760	\$690
1.16(h)	Reissue filing fee (CPA) (Small Entity)	\$380	\$345
1.20(e)	Maintenance fee-due at 3.5 years	\$940	\$830
1.20(e)	Maintenance fee-due at 3.5 years (Small Entity)	\$470	\$415
1.492(a)(2)	ISA - U.S.	\$760	\$690
1.492(a)(2)	ISA - U.S. (Small Entity)	\$380	\$ 3 4 5

(www.uspto.gov)

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

**NEXT ISSUE**

- **PCT Fee Structure for UK**
- **Case Study**
- **Patents for Opposition**

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