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Code	Title of patent	Application No.
EE 1	A novel mechanical energy storage and release device	607/MUM/2004
EE 2	Absorption module	155/MUM/2002
EE 3	An improved process for water treatment to remove Arsenic, Iron and Phosphate by zero valent Iron and a reactor therefore	2336/MUM/2008
EE 4	Biological treatment of aqueous effluents containing non aqueous phase liquid pollutants	2177/MUM/2006
EE 5	Contacting device	153/MUM/2002
EE 6	Cryogen free superconducting transformer	1401/MUM/2008
EE 7	Energy efficient regeneration process	767/MUM/2002
EE 8	Freeze concentration system	1000/MUM/2002
EE 9	Hybrid cooling system	154/MUM/2002
EE 10	Multi utility vapour compressing system	613/MUM/2003
EE 11	Porous gas diffusion for fuel cell and related electrochemical applications	959/MUM/2006
EE 12	Process for energy efficient conditioning of air using liquid dessicant	272/MUM/2003
EE 13	Reactor for reductive conversion reactions using palladized bacterial cellulose	691/MUM/2007
EE 14	Refrigeration cum water heating system	151/MUM/2002
EE 15	Switchable heat pipe	152/MUM/2002
EE 16	Tube - tube heat exchanger	1082/MUM/2002
EE 17	1,3-Di-naphthalimide conjugate of calix[4]arene as a fluorescence sensor for the recognition of polycyclic aromatic hydrocarbons (PAHs) and their derivatives	730/MUM/2011
EE 18	A solar cell having three dimensional junctions and a method of forming the same	3467/MUM/2010
EE 19	Counter flow heat exchanger for a Joule-Thomson cryocooler	2133/MUM/2010
EE 20	Freeze concentration system with tubular heat exchanger	1915/MUM/2010
EE 21	Heat exchanger	2501/MUM/2010
EE 22	Heat pipe based solar collector	1606/MUM/2011
EE 23	Method and device for forming an electrical contact pattern on a solar cell	1787/MUM/2010
EE 24	Method and system for the remediation of sites contaminated with hazardous substances and wastes	2475/MUM/2010
EE 25	Method for forming metal contact on a surface of a solar cell covered by an anti-reflective coating (ARC) layer	3506/MUM/2010
EE 26	Solar fluid heater	2502/MUM/2010
EE 27	Sun tracking mechanism with automated cleaning arrangement	1838/MUM/2010
EE 28	Versatile flow field design for fuel cells	2762/MUM/2010
EE 29	A system for extracting water from air for drinking and cleaning purposes and a method thereof	2408/MUM/2011
EE 30	An optimum emulator of the dynamic characteristics of a wind turbine	2409/MUM/2011

Code	Title of patent	Application No.
HC 1	A clinical electrodiagnostic digital instrument for electromyography (EMG) and/or nerve conduction measurement	14/MUM/2001
HC 2	A dry method for surface modification of SU-8 for immobilization of biomolecules using a hotwire induced pyrolytic process	1267/MUM/2004
HC 3	A exogenous protein free pulmonary surfactant composition for adult respiratory distress syndrome and a process for preparing the same	1223/MUM/2005
HC 4	A facile and efficient synthesis of α -hydrazine- α , β -unsaturated nitroalkenes via Morita-Baylis-Hillman reaction	1410/MUM/2005
HC 5	A mechanical device for harvesting energy from a joint movement	1167/MUM/2008
HC 6	A nanoparticle exogenous protein free micronutrient added pulmonary surfactant composition for neonatal respiratory distress syndrome (NRDS) and a process for preparing the same	1222/MUM/2005
HC 7	A novel approach to stabilize Fluvastatin drug with improved properties	2093/MUM/2008
HC 8	A novel process for the extraction of nutraceutical concentrate enriched with active ingredients using supercritical fluids	545/MUM/2004
HC 9	Head mounted device for semantic representation of the user surroundings	133/MUM/2006
HC 10	Novel anticancer hydrazino derivatives of Curcumin and process for preparation thereof	1568/MUM/2008
HC 11	Novel ferrofluid preparation	475/MUM/2004
HC 12	Pharmaceutical composition for therapeutic or prophylactic treatment of bacterial infections and associated diseases	2345/DEL/2008
HC 13	A nucleic acid construct for gene expression	1426/MUM/2011
HC 14	A protein free surfactant composition for pulmonary diseases and a process for preparing the same	3370/MUM/2010
HC 15	An interface circuit between a sensor and a signal conditioning circuit	2384/MUM/2010
HC 16	Antioxidative composite polysulfone hollow fiber membrane with enhanced biocompatibility and improved separation performance	2697/MUM/2010
HC 17	Antiproliferative activity of dinuclear copper(i) complexes containing cyclodiphosphazane derivatives towards human cervical breast cancer cells	2458/MUM/2010
HC 18	Apparatus and method for orthopedic surgery	2883/MUM/2010
HC 19	Conjoined lipid based multi compartment nanovesicles for drug delivery	672/MUM/2011
HC 20	Glucose based naphthyl imino conjugate of formula I	1653/MUM/2011
HC 21	Layer by layer self assembled magnetic PLGA-CHITOSAN nanoparticles for dual drug delivery and hyperthermia applications	811/MUM/2011
HC 22	Lipopolymeric nanocapsules for drug delivery	266/MUM/2011
HC 23	Anthracenyl terpyridine Cu(II) complex as anticancer agent	1819/MUM/2011
HC 24	Towards the development of an impedimetric biosensor based on magnetic nanoparticles for early detection of cervical cancer	1898/MUM/2011
HC 25	A nanocoelate-nanosphere complex	2190/MUM/2011
HC 26	A method and a system for producing thermolabile nanoparticles with controlled properties and nanoparticles matrices made thereby	2213/MUM/2011
HC 27	A method and apparatus for synthesizing vesicles by interdiffusion of stationary phases	2324/MUM/2011

Code	Title of patent	Application No.
ICT 1	A bidirectionally accessible mobile wireless communication system	1111/MUM/2002
ICT 2	A device and method for automatically recreating a content preserving and compression efficient lecture video	386/MUM/2009
ICT 3	Architectural framework of communication network and a method of establishing QoS connection	2471/MUM/2007
ICT 4	Communication system with novel bus shorting	386/MUM/2004
ICT 5	Device and method for advertising through video display system	1338/MUM/2006
ICT 6	Method and apparatus for the encoding and decoding of speech at bit rates below 2kbps	273/MUM/2003
ICT 7	Nonvolatile floating gate analog memory cell	2217/MUM/2008
ICT 8	Stylus based device for text and command input	273/MUM/2004
ICT 9	A method and system for providing a content adaptive and legibility retentive display of a lecture on a miniature video device	2474/MUM/2010
ICT 10	A tunable distributed voltage controlled oscillator for generating high frequency microwave signals	81/MUM/2010
ICT 11	Distributed fault tolerance for WSNs with routing tree overlays	3403/MUM/2010
ICT 12	Distributed oscillator for generating a high frequency microwave signal	1452/MUM/2010
ICT 13	Distributed oscillator for generating a high frequency third harmonic microwave signal having high power output	1451/MUM/2010
ICT 14	High gain wideband FPC antenna	1626/MUM/2011
ICT 15	Low power analog FM transceiver for bio-telemetry applications	1473/MUM/2011
ICT 16	Methods for characterizing high speed DAC multi level signals	725/MUM/2011
ICT 17	Opportunistic channel access scheme for cognitive radio system based on residual white space distribution	2231/MUM/2010
ICT 18	Parent selection algorithms to repair faults for TDMA based wireless sensor networks with tree overlays	3400/MUM/2010
ICT 19	Selector device for bipolar RRAM	1727/MUM/2011
ICT 20	TREEFP: A TDMA-based Reliable and Energy Efficient Flooding Protocol for WSNs	352/MUM/2011
CT 21	Tunable distributed harmonic voltage controlled oscillator for generating second and third harmonic microwave signals	2392/MUM/2010
ICT 22	Wide range mixer in 0.18 μm technology	826/MUM/2011
ICT 23	Frequency to voltage converter	1936/MUM/2011
ICT 24	Parallel metal plated split U-shape omnidirectional UWB antenna	2792/MUM/2011

Code	Title of patent	Application No.
MC 1	A method of making nanocarbon structures from cashew nut shell pyrolysis vapours	899/MUM/2008
MC 2	A compact drive machine of a reciprocating machine	480/MUM/2000
MC 3	A method and a scanner for three dimensional focused laser beam spot scanning	1847/MUM/2007
MC 4	A method for coating steel components with daimond by chemical vapour deposition (CVD) and steel components obtained thereby	377/MUM/2000
MC 5	A novel method for design process using sheet metals	474/MUM/2004
MC 6	A novel process for production of nanoparticles using subcritical carbon dioxide	544/MUM/2004
MC 7	A novel process for sterilizing of bio-materials using supercritical fluid	543/MUM/2004
MC 8	A process for cyclic supercritical fluid (SCF) CO ₂ extraction of fragrances (absolute or essential oils) from jasmine flowers	72/BOM/1996
MC 9	A process for selection of material specification for sheet metal products	808/MUM/2006
MC 10	An improved protective coating composition for hot dip galvanization of steel	247/MUM/2008
MC 11	Asymmetric synthesis of γ -nitrophosphonates in the absence of any other chiral catalysts	2359/MUM/2007
MC 12	Clays as cell openers in polyurethane foam	1213/MUM/2004
MC 13	Device and method for mitigating magnetic core saturation in a current transformer	592/MUM/2008
MC 14	Flyer for a jute spinning machine	661/MUM/2006
MC 15	Functionalised bis homocubyl systems as novel ligands and catalysts in asymmetric reactions	98/MUM/2008
MC 16	Malonic acid based monomers and polymers	664/MUM/2006
MC 17	Method for improving particulate mixing and heat transfer in tumbling mixers and rotary kiln	809/MUM/2003
MC 18	N-alkylation of amino acids and its application in designer functional biopolymers	775/MUM/2006
MC 19	Novel 3,4-propylenedioxythiophene derivatives with pendant functional groups	302/MUM/2005
MC 20	Novel polymers of 3,4-propylenedioxythiophene derivatives with pendant functional groups	347/MUM/2005
MC 21	O-alkylation of bis-methyl propionic acid and its application	776/MUM/2006
MC 22	Reinforced industrial type woven fabric	162/MUM/2005
MC 23	Sterling coolers	299/MUM/2006
MC 24	Wharve assembly for a jute spinning machine	115/MUM/2009
MC 25	A condenser heat recovery based distilling process and apparatus	418/MUM/2011
MC 26	A process for preparing poly (3,4-alkylenedioxythiophene) derivatives	2977/MUM/2010
MC 27	A simple method for the synthesis of biocompatible 3-pyrrolyl boron-dipyrromethenes	1443/MUM/2011
MC 28	An Inpack semiconductor module and a method of manufacturing the same	298/MUM/2010
MC 29	Aqueous dispersible polymers of 3,4-alkylenedioxythiophene and process for the preparation thereof	2840/MUM/2010
MC 30	Aqueous formulation of water dispersible polymers of 3,4-alkylenedioxythiophene and process for the preparation thereof	2845/MUM/2010
MC 31	Mechanism for producing woven (interlaced) and noobed (non-interlaced) three dimensional fabrics	689/MUM/2011
MC 32	Method and device for generating laser beam of variable intensity distribution and variable spot size	442/MUM/2011
MC 33	Production of highly polar pvdf films for electrical applications	1258/MUM/2011
MC 34	Process for preparing polyarylated boron-dipyrromethenes	2468/MUM/2011
MC 35	Composition and method of generation of hydrogen by thermal decomposition of ammonia borane (AB) using silicon nanoparticles as catalyst	2533/MUM/2011

Other Technologies

Code	Title of patent	Application No.
OT 1	A constant long period vibration-protective pendulum isolator for structures	15/MUM/2001
OT 2	A diagnostic method for determining deformations in a transformer or reactor winding	1893/MUM/2007
OT 3	A hybrid transmission system	1075/MUM/2004
OT 4	A method of depositing an amorphous-SiC:H barrier layer on a low dielectric material layer	4/MUM/2006
OT 5	A method of making a fluid separation material such as membrane of nanopore structure	12/MUM/2001
OT 6	A method of treating a low k dielectric material	5/MUM/2006
OT 7	A novel method for multiple object tracking	1278/MUM/2003
OT 8	A variable period vibration protective pendulum isolator for structures	867/MUM/2001
OT 9	An environment and user friendly and efficient method and formulation for cleaning cloths	24/MUM/2001
OT 10	An on-line diagnostic method for health monitoring of a transformer	1700/MUM/2009
OT 11	Colored thermal imaging using uncooled opto-thermo mechanical device without electronics or electric	541/MUM/2005
OT 12	Inverted switched reluctance motor as hub drive for electric vehicle	365/MUM/2007
OT 13	Lipoxygenase inactivated and sterilised legumes and cereal products	540/MUM/2005
OT 14	Method for calculating capacitance value and magnetizing inductance value for smooth sustained voltage build up in an induction generator	2286/MUM/2008
OT 15	Novel device to aid learning of fractions and mathematical operations	1167/MUM/2003
OT 16	Novel strength enhancing insert assemblies	496/MUM/2004
OT 17	Reticulated vitreous carbon controlled pore size and enhanced electrical conductivity	1111/MUM/2005
OT 18	Text input device for Indic languages	720/MUM/2003
OT 19	A mechanical manipulator arm	174/MUM/2010
OT 20	A system and method for electricity price forecasting	236/MUM/2011
OT 21	A triaxial geocomposite testing apparatus for simultaneously calibrating multiple pressure transducers	223/MUM/2011
OT 22	Colorimetric sensing of bisulphate ion (HSO_3^-) by calix[4]-conjugate protected Ag-nanoparticles	1089/MUM/2011
OT 23	Micro deformation device	306/MUM/2011
OT 24	Process for synthesis of TB doped ZnO nanoparticles for total control over the UV to green luminescence (GL) intensity ration and the tunability of UV luminescence (UVL)	2103/MUM/2010
OT 25	Wall mounted speed regulator for a BLDC motor driven ceiling fan	542/MUM/2011
OT 26	Yaw rate control in motor vehicles	785/MUM/2011
OT 27	AC current driven open-bridge configuration for measuring impedance variations of a sensor	2205/MUM/2011
OT 28	Method and injector for controlling gas flow in a duct	2206/MUM/2011

Games

Code	Title of Games	Design / Copyright / Know-how
G 1	Game Board set - Feel Fill Fit	Design No. 229050
G 2	Game Board set - Lumino Trapz	Design No. 229051
G 3	Game Board set - Magneteyez	Design No. 229052
G 4	Game Board set - Roll it Green	Design No. 229053
G 5	Game Board set - Wobble	Design No. 229054
G 6	Game set - Chuno Chunao	Design No. 222970
G 7	Game set - Cri-Tric	Design No. 222971
G 8	Game set - Delta Attack	Design No. 222972
G 9	Game set - Over the top	Design No. 222973
G 10	Game set - PugPloy	Design No. 222974
G 11	Game set - UltiPolity	Design No. 222975
G 12	Game set - Trade Raid	Copyright
G 13	Haptic based virtual snooker game	Know-how



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November 2011



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

INFORMATION REGARDING IITB TECHNOLOGIES AVAILABLE FOR LICENSING

ORGANISATION DETAILS

1. Name:

2. Area of interest (in brief):

3. Contact person name:

4. Telephone no.

5. Email:

6. Technologies interested in

(Please include category and technology number from the list)

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